XEROX®

DocuMate™ *510*

DocuMate 510
scanner
installation guide

Table of Contents

Welcome

Installation

Scanning

Scanning Items

Maintenance

Welcome

Your new Xerox DocuMate 510 scanner can scan stacks of items or single items, and place their images on your computer.

WARNING: Do not plug in the USB cable until after you have installed the software. Carefully follow the steps and sequence described in the installation procedure beginning on page 5.

What's in the Box

Before proceeding, check the contents of the box. If items are missing or damaged, contact the dealer where you purchased the scanner.
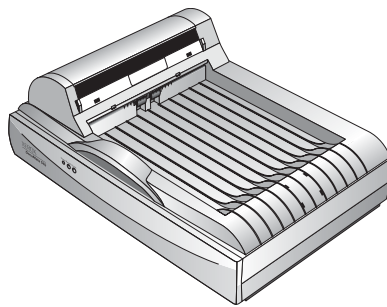
DocuMate 510 Scanner

USB Cable

AC Power Cable
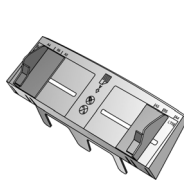
Paper Guide
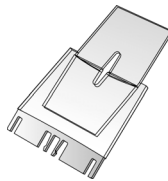
Paper Guide Extension

Paper Stop

Power Supply

Replacement ADF Pad

Installation CD

Installation Guide, Quick Install Card, and Technical Support Card

The Xerox DocuMate 510 Scanner

Document Cover

Document Pad

Glass

Reference Frame

Paper Stop

Paper Guide Extension

Paper Guide

Automatic Document Feeder

Power Ready Check

Status Lights

USB Port

ADF port

Power jack

Power On/Off Switch

ADF Cable
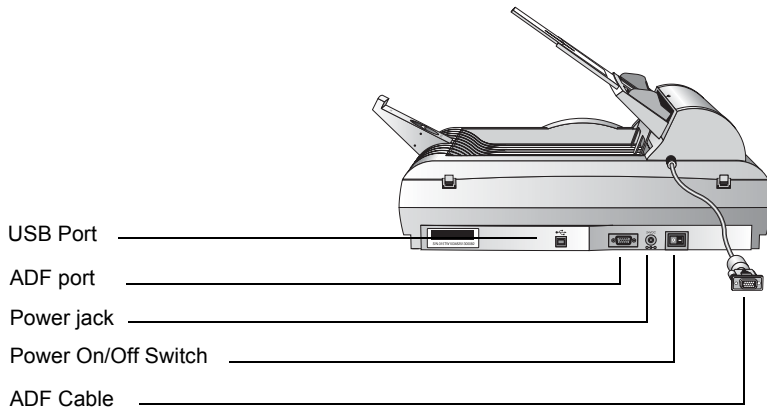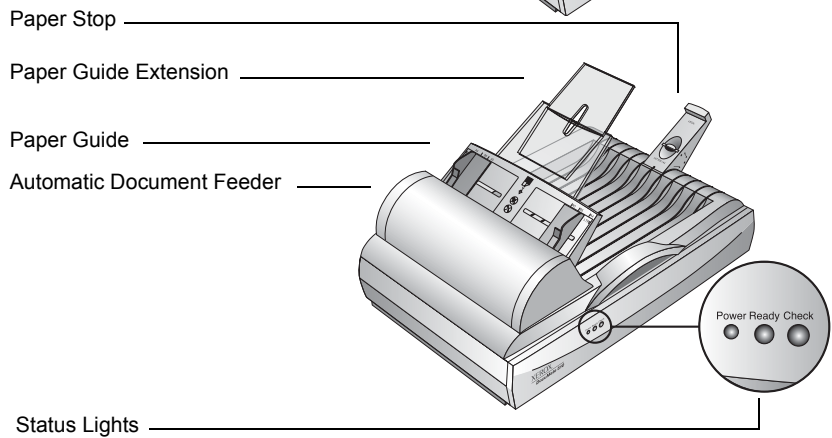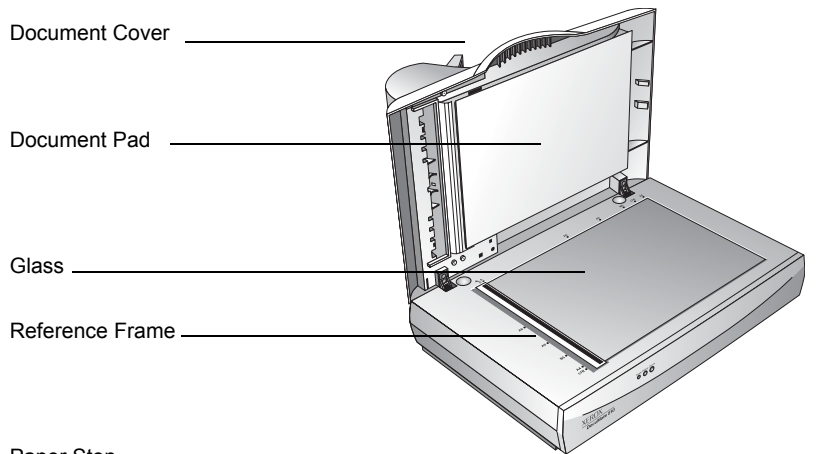
Document Cover—Protects the document from light and contamination during scanning.

Document Pad—Helps secure the document in place on the scanner glass.

Reference Frame—Provides markings that show where to align various paper sizes.

Glass—Items are placed face down at the upper left corner of the glass.

Paper Stop—Holds items in place as they are ejected from the Automatic Document Feeder. Adjust for letter-sized or legal-sized pages.

Paper Guide Extension—Unfolds to support multiple pages to scan.

Paper Guide—Holds pages in place. Adjust to fit the size of the paper to scan.

Automatic Document Feeder (ADF)—Feeds a stack of pages onto the glass for scanning.

Lock—Locks or unlocks the scanning head, located on the underside of the scanner.

Status Lights—Shows the scanner's status. Blinking green light: the scanner is preparing itself or the lamp is warming up. Steady green light: the scanner is on and ready to scan. See "Troubleshooting" on page 43 for additional details.

USB Port—Connects the scanner to the computer.

ADF Port—Connects the ADF cable from the Automatic Document Feeder to the scanner.

Power Jack—Connects the power cord to the scanner.

Power On/Off Switch—Turns the scanner's power on and off.

ADF Cable—Supplies power from the scanner body to the Automatic Document Feeder.

What You Need

An IBM-compatible Pentium PC with:

- A CD-ROM drive

- An available Universal Serial Bus (USB) port; 1.1 or 2.0

- Microsoft Windows operating system: 98SE, 2000, ME, or XP

- Available internal memory (RAM) as follows:

  - 64 MB or more

  - 128 MB recommended for Windows XP

- 200 MB of free hard disk space

A VGA or SVGA Monitor

Recommended settings for your monitor are as many colors as possible—High Color (16-bit), True Color (24-bit or 32-bit). Set the resolution to at least 800 by 600 pixels.

To set your monitor's colors and resolution, open the Windows Control Panel, double-click Display, and then click the Settings tab.

Documentation

Your scanner is delivered with the following documentation:

- Quick Install Card—abbreviated installation instructions.

- DocuMate 510 Scanner Installation Guide—on the Installation CD; contains detailed installation, scanning, configuration, and maintenance information.

- Online Help—for the scanner, Scan Manager, and PaperPort software applications.

Installation

NOTE: Do not plug in the USB cable until after you have installed the software. Complete the installation steps in the order described in the installation procedure below.

Installation is a quick, four-step process:

1. Assemble the scanner
2. Install the software
3. Connect and power on the scanner
4. Connect the USB cable to your computer

Step 1: Assemble the Scanner

All the components to assemble the scanner are included in the box.

To assemble the scanner:

1. Remove all shipping tape from the top and bottom of the scanner.
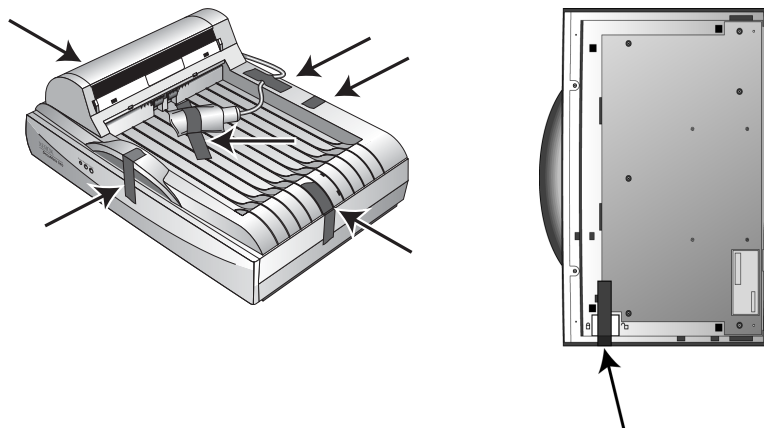
2. Slide the locking tab on the bottom of the scanner to its unlocked position.
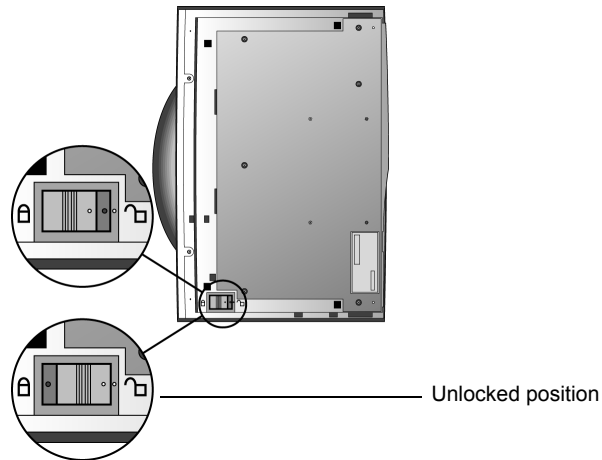
Unlocked position

NOTE: The locking tab protects the scanner's scan head by holding it securely in position. Lock the scanner when transporting it from one location to another, but always remember to unlock it before scanning. The scanner will not scan when locked.

3. Insert the slots (A) on the Paper Guide onto their tabs (B) on the scanner and slide the Guide down into place. The catch tabs (C) snap into place. Refer to the picture on page 2 to see the location of the assembled parts.
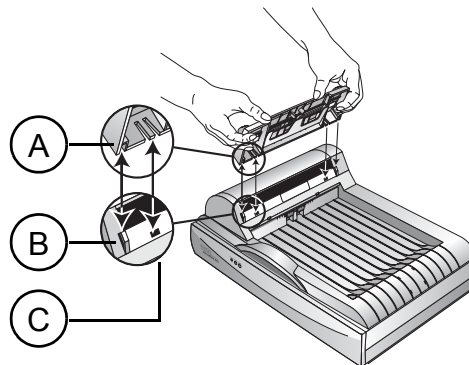
4. Insert the Paper Guide Extension into the Paper Guide and snap its tabs into place.
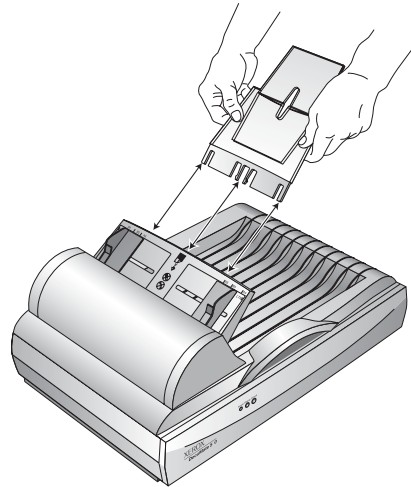
5. Insert the Paper Stop onto the back of the scanner and slide it downward to snap its tabs into place.
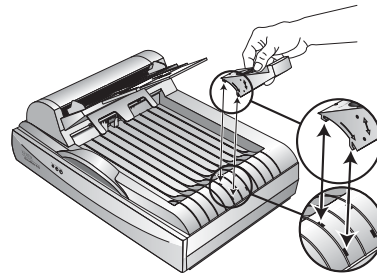
6. Proceed to "Step 2: Install the Software".

Step 2: Install the Software

The Installation CD includes all the necessary installation files, as well as the PaperPort software files and other software files.

To install the software:

1. Start Microsoft Windows and make sure that no other applications are running.

2. Insert the installation CD into your computer's CD-ROM drive.

    The CD automatically starts.
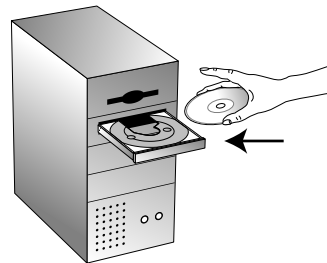
NOTE: If the CD does not automatically start, check the following:

•   Make sure the CD drive's door is completely shut.

•   Click the My Computer icon on your desktop. Double-click the icon for your CD-ROM drive. In the list of files on the CD, double-click the file named START32.EXE.

3. On the installation menu, select **Install Products**.

The next installation screen appears.

4. Click in the boxes for **Scansoft PaperPort** and **Scanner Driver**.

If you want to also install the other software, click their boxes as well.
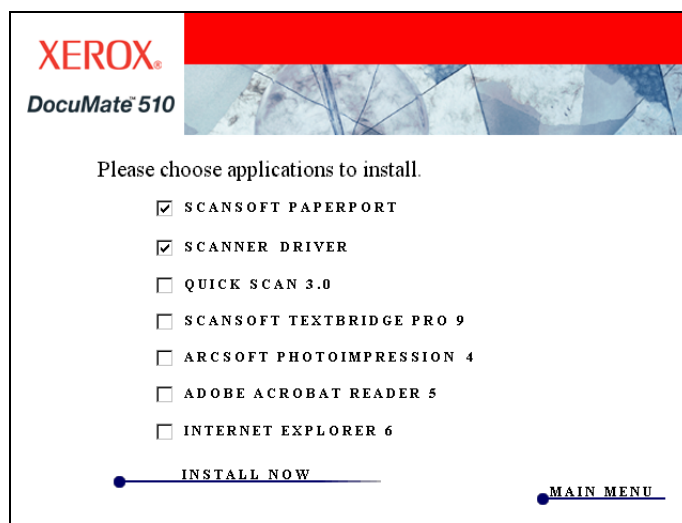
5. Click **Install Now**.

6. On the PaperPort 9.0 Welcome window, click **Next**.

Installing PaperPort 9.0 will uninstall any previous, existing version of PaperPort and install PaperPort 9.0 while retaining all of your PaperPort files.

7. On the License Agreement window, read the ScanSoft license agreement. If you accept the terms, select **I accept the terms in the license agreement**, and then click **Next**.

8. On the Customer Information window, accept the current values or enter new information, and then click **Next**.

9. On the Setup Type window, click **Next**.

10. Click **Install** to begin the installation.

11. On the Product Registration window, do one of the following:

   • Select **Register online**, click **OK**, and then follow the registration instructions.

   • Select **Print registration form**, click **OK**, and then follow the instructions to complete and print the registration form.

   • Select **Remind me in 7 days** and click **OK**.

12. At the Installshield Wizard Completed window, click **Finish**.

13. On the Xerox License Agreement window, read the license agreement. If you accept the terms, select **I Agree**, and click **Next**.

14. On the Xerox Scanner Registration window, complete the required information, and then click **Register**.

> Note that the serial number for your scanner is located on the side of the scanner body.

Serial Number
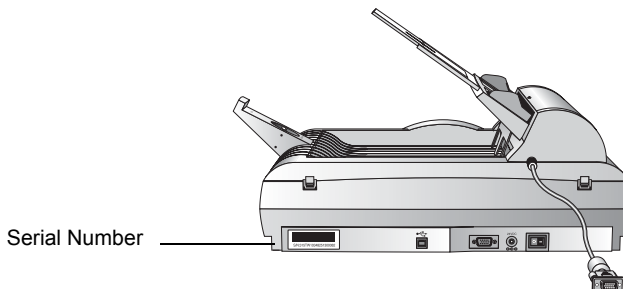
15. On the Welcome window, click **Next** to start the installation.

16. When you see the Connect Scanner window, **STOP**. Do **NOT** click Finish. Leave the window open and proceed to the next section,"Step 3: Connect and Power On the Scanner".
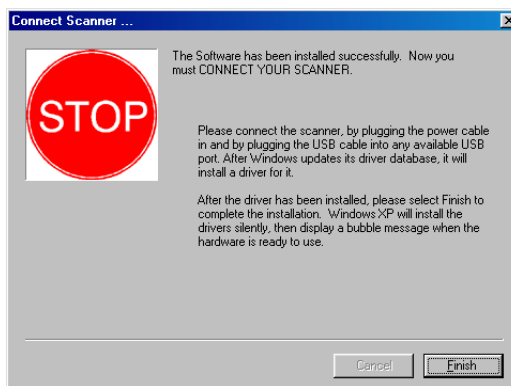
Step 3: Connect and Power On the Scanner

Connect the ADF cable, connect the scanner to a power source, and turn the power on.

To connect the scanner and turn the power on:

1. Plug the ADF cable into the ADF port on the body of the scanner.
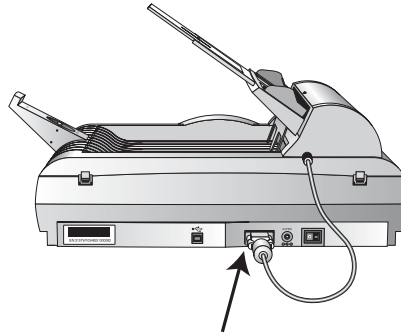
2. Plug the power supply into its power port on the scanner.
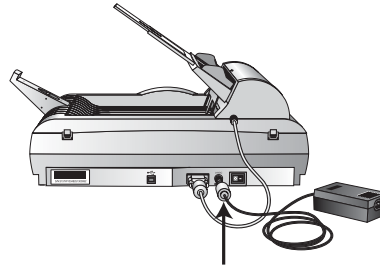
NOTE: Only use the power supply (ADP-20LB Rev. B made by Delta Electronics, Inc.) included with your scanner. Connecting any other type of power supply may damage your scanner and will void its warranty.

3. Plug the power cord into the power supply and then into a wall outlet.
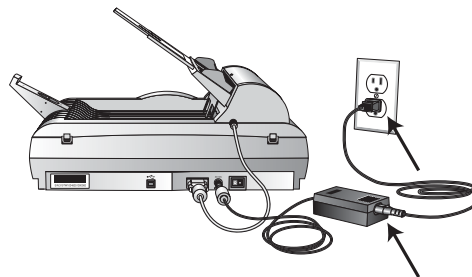
4. Turn on the power switch, located on the back of the scanner to the right of the power port.

    The status lights come on and flash indicating that the scanner is receiving power.

    Proceed to the next section, "Step 4: Connect the USB Cable".

Step 4: Connect the USB Cable

Your DocuMate 510 scanner connects to any available USB port. Check your computer's manual for the USB port locations.

NOTE: You do not have to shut off the power to your computer when connecting the scanner to a USB port.

1. Plug the USB cable into the USB port on the scanner. The USB port is identified by its USB symbol.
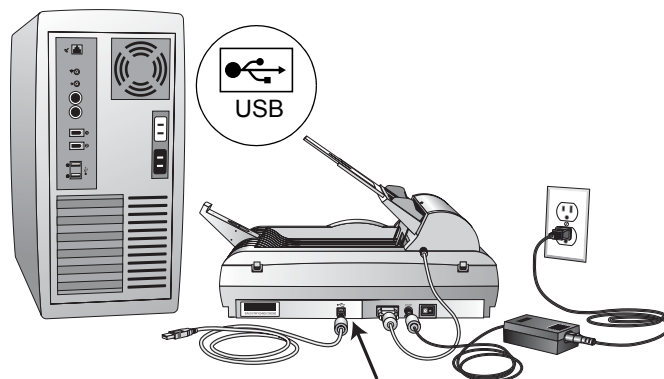
2. Plug the USB cable into a USB port on the computer, keyboard, or into a USB hub.

NOTE: If you have not installed the software, unplug the USB cable from the computer and install the software now. When the software installation is complete, a message tells you to connect the scanner.

Your computer recognizes that a scanner is plugged into the USB port and loads the appropriate software to run the scanner.

3. When the software is finished loading, return to the Connect Scanner window and click **Finish**.
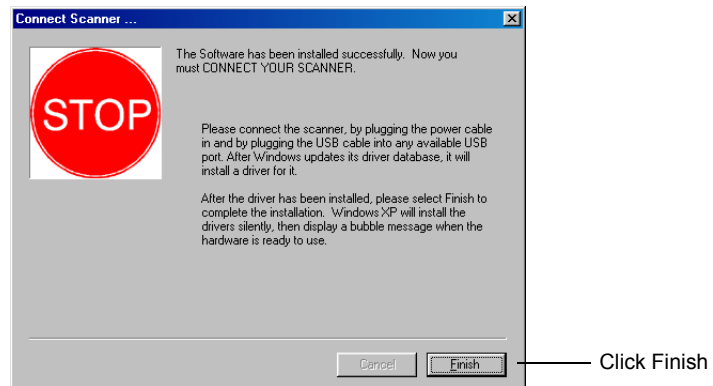
Click Finish

4. When installation is finished, click **Exit** on the Xerox DocuMate 510 window and restart your computer.

If you selected other software to install from the CD, leave the CD in the CD drive when you restart your computer.

If you removed the CD from the CD drive and want to install other software, reinsert the CD into the drive.

In addition to installing the other software from the CD, you can also view and print the User Guides and Installation Guide.

Scanning

This section explains how to scan documents with your DocuMate 510 scanner.

Loading Documents to Scan

Your scanner can scan a stack of documents or a single item.

To load a stack of documents in the Automatic Document Feeder:

1. Unfold the Paper Guide Extension and adjust the Paper Guide for the size of paper.
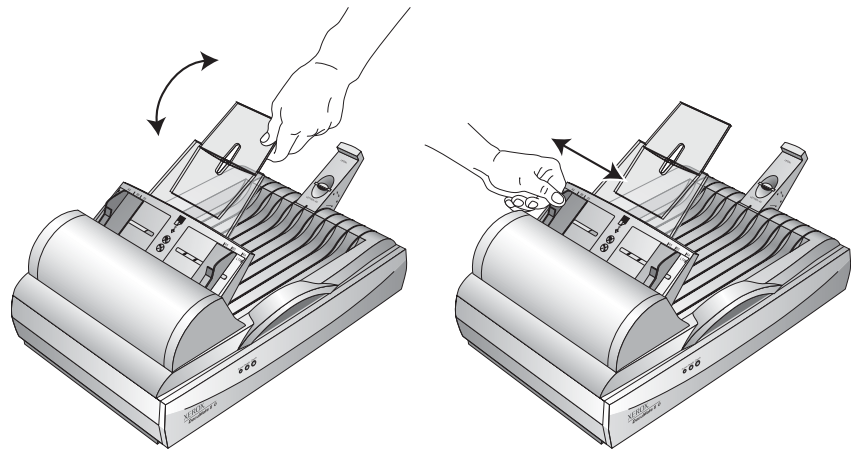
You can also adjust the Paper Stop at the back of the scanner for the size of the paper. Pull out the slide on the Stop for letter-sized pages. Push it in for legal-sized pages.

NOTE: Remove any staples or paper clips from the documents before loading them into the Automatic Document Feeder. Staples and paper clips can jam the feed mechanism and scratch the glass.

2. Load the stack of documents *face up*, with their tops into the Automatic Document Feeder.
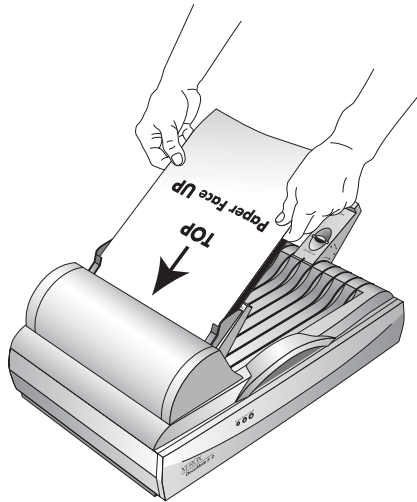
IMPORTANT: Items scanned using the Automatic Document Feeder must be a minimum of 5 x 7 inches (12.7 x 17.8 cm).

To load a single item:

1. Place the item on the scanner glass, face down.
2. Align the item with the arrow on the reference frame.
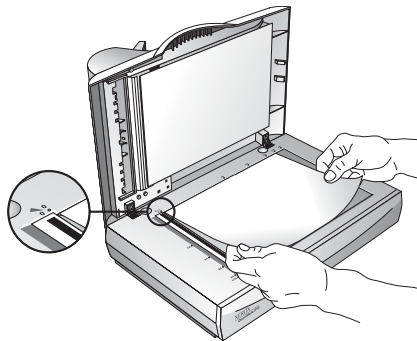
3. Close the cover.

Scanning Items

You can scan from the PaperPort software or other TWAIN software.

Your Scanner and the TWAIN Standard

Your XEROX DocuMate 510 scanner uses the TWAIN standard for scanning. TWAIN is a widely recognized procedure that computers use to receive images from scanners, digital cameras, and other digital devices. The PaperPort software application that you received with your scanner uses the TWAIN standard, and this guide shows how to scan with it. Many other graphics and imaging applications also comply with the TWAIN standard, so you can use your scanner with those applications too. To use your scanner with other TWAIN-compliant software, please refer to their user guides.

If Your Computer is Running Windows ME or XP

Instead of using the TWAIN standard, your scanner can also use Microsoft's Windows Image Application (WIA) standard for scanning, which is also available from other applications. Therefore, you can use your scanner with other applications on a computer running Windows ME or XP too. See "Scanning from Windows ME or XP" on page 35.

Scanning from Windows 98SE, ME, 2000, or XP

The instructions in this section are for scanning with the TWAIN software on computers running Windows 98SE, ME, 2000, or XP. If your computer is running Windows ME or XP and you want to use the WIA software, see "Scanning from Windows ME or XP" on page 35.

To scan an item:

1. Load a stack of documents in the Automatic Document Feeder, or place an item face-down on the glass and align it with the arrow on the reference frame. See "Loading Documents to Scan" on page 14 for details.

2. Open the PaperPort software. On the Windows taskbar, click **Start**, point to **Programs**, point to **ScanSoft PaperPort 9.0**, and then click **PaperPort**.

   The PaperPort desktop opens.

Scan icon
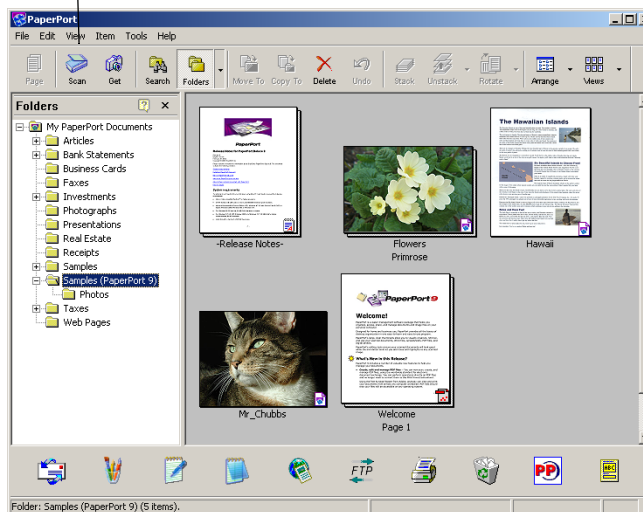
3. Click the **Scan** icon on the PaperPort command bar.

   The Folders pane (which shows folders for organizing your scanned images) is replaced by the Scan pane.

Scan pane
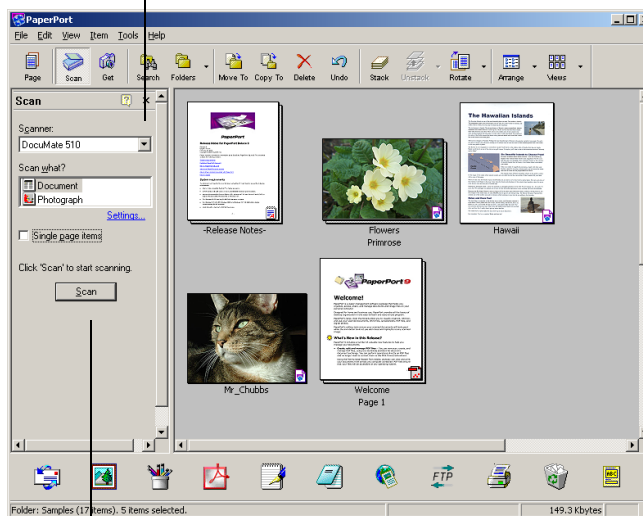
Click this Scan button to display the Scan Manager

4. From the Scanner drop-down list, select your **DocuMate 510** scanner, if it's not already selected.

---

5. In the "Scan what?" section, choose to scan a **Document** or **Photograph**.

6. Click **Settings** to view and change the format for the scanned item's file name and the file type. The default file type for documents is .pdf and the default for photographs is .jpg.

7. Use the **Single page items** check box as follows:

   • When the check box is selected, pages are scanned and placed on the PaperPort desktop.

   • When the check box is not selected, pages are scanned but are not placed on the PaperPort desktop until you close the Scan Manager and indicate the scanning job is finished.

8. Click the **Scan** button at the bottom of the Scan pane.

   The Scan Manager opens. Use the Scan Manager to select scanning options and to start the scanner.

9. From the Scan Method drop-down list, choose whether you are going to scan a single item (**Flatbed**) or a stack of items (**ADF**).

Choose **Flatbed** to scan a single item
Choose **ADF** to scan a stack of documents

Click **Preview** to check the image

Click **Scan** when you're ready to scan
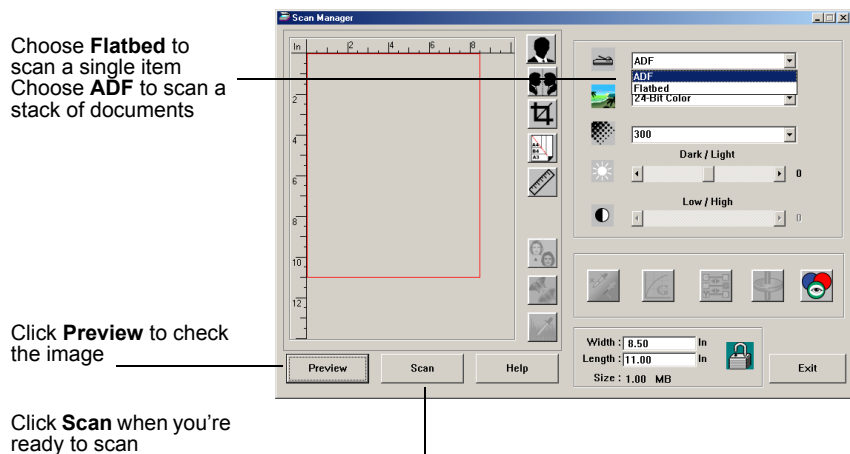
10. If you want to see what the scanned image will look like before scanning its final image, click the **Preview** button.

   The scanner scans a preview of the item and displays it in the Scan Manager. You can now use the options on the Scan Manager to fine-tune the image. For example, to adjust the brightness, drag the Dark/Light slider. For details on adjusting images, see "Adjusting the Image with the Scan Manager" on page 20.

NOTE: If you preview when scanning a stack of documents, the first page of the stack feeds through the ADF for the preview. After adjusting the scanner settings, replace that page on the stack so it is scanned with the rest of the pages.

11. To preview the item with the new settings, click the **Preview** button again on the Scan Manager.

12. When you are satisfied with the preview image, click **Scan**.

    If the **Single page items** check box is selected on the PaperPort desktop, the item appears as a thumbnail on the desktop.

13. If the **Single page items** check box is not selected, thumbnails do not appear until you indicate the scanning job is finished.

    •   Close the Scan Manager.

    •   On the PaperPort - Scan message box, click **Done**.

    NOTE: Refer to "The Single Page Items Check Box" on page 20.
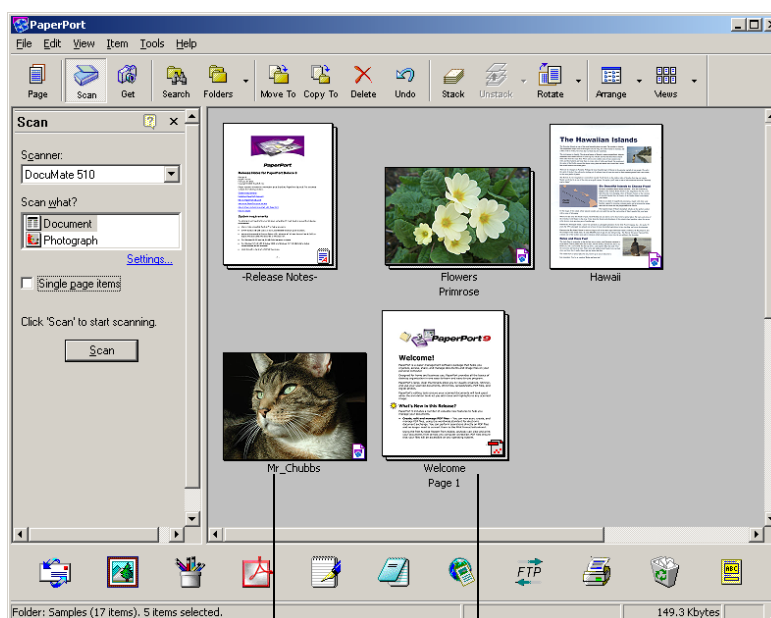
A thumbnail image of the scanned item appears on the PaperPort desktop

Thumbnail images of a stack of documents scanned with the ADF.

On the PaperPort desktop

•   By default, the name of the scanned image is the day, date, and number of scanned items that day. For example, the second item scanned on a day is followed by a (2), the third by a (3) and so on. To change a name, click it to select its text and type a new name.

•   The thumbnail images of the stack of documents has "go to page arrows" so you can click through the pages in the stack. The page counter next to the scroll arrows shows which page you're viewing and the total number in the stack.

The Single Page Items Check Box

The Single page items check box provides the option to add additional items to a scanning job and scan double-sided items. If the check box is selected, scanned items immediately appear on the PaperPort desktop. If the check box is not selected (this is the default), the following message box appears when you close the Scan Manager.

PaperPort - Scan

1 page scanned

If Item has more pages, continue scanning.

For 2-sided pages, scan side 1 of all pages. Then, flip the document over, and scan the other side of the pages.

Scan More Pages | Scan Other Side | Done
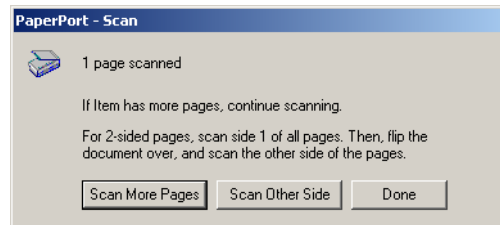
- Click **Scan More Pages** to scan additional pages and add them to the stack of items placed on the PaperPort desktop.

- Click **Scan Other Side** to reload and scan the other side of previously scanned pages. This option is only available once.

- Click **Done** if you are finished scanning. The scanned items are placed on the PaperPort desktop.

To learn more about the PaperPort software please see the *ScanSoft PaperPort User's Guide* on the Installation CD.

Adjusting the Image with the Scan Manager

The Scan Manager has a wide variety of options to adjust your scanned images. Using those options you can produce the best possible scan of your documents, color photos, magazine articles, business cards, or any other items you scan.

Adjusting the Image Type, Resolution, Brightness and Contrast

The Scan Manager's drop-down lists and sliders are used to adjust the image type, resolution, brightness, and contrast.

Image Type

Resolution

Brightness

Contrast

File size
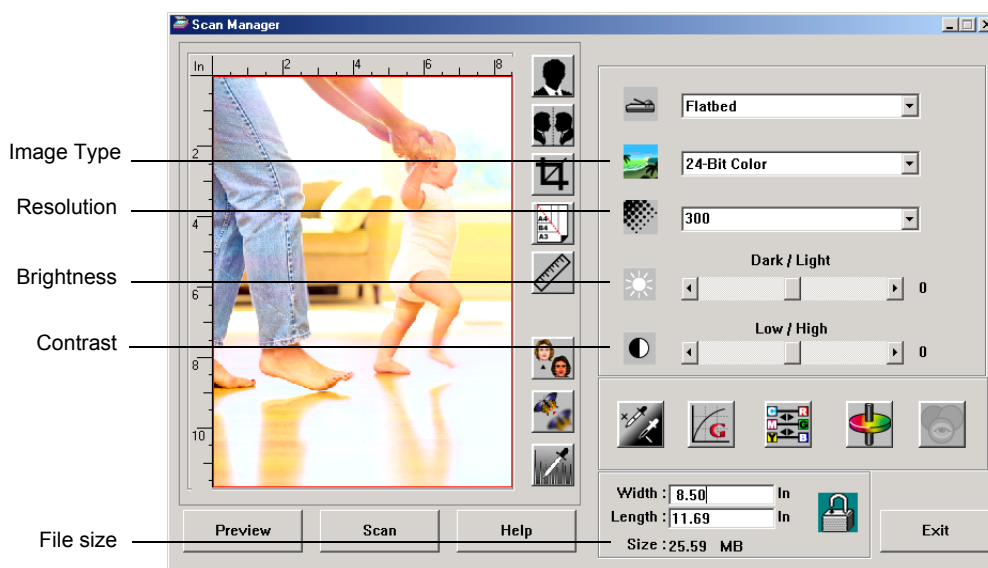
Image Type

From the **Image Type** drop-down list, select the appropriate image type for the item(s) you're scanning.

- **Black and White**—scans in black and white. The scanning pixels are all the same size and are either black or white. Use this setting for letters, memos, pen and ink drawings, and other black and white material. This setting produces the smallest file size for scanned items.

- **Halftone**—scans the image so it appears to consist of gray tones. A pop-up menu appears so you can choose one of the halftone options. Notice that the preview image changes as you select each option so you can see which one is best for scanning. Halftones produce simulated gray tones by using black and white pixels of different sizes and is often used to produce newspaper and magazine images. Use this setting for lower resolution black and white images. The halftone settings also produce small file sizes.

Halftone Example

- **8-Bit Gray**—scans the image using up to 256 true shades of gray. Use this setting to scan black and white photographs and other higher quality black and white images. You can also scan a color photo with this setting to turn its colors into gray shades. The file size is about one third the size of a color scan.

- **24-Bit Color**—scans the image in full color. Use this setting to scan color photographs and other color images. The file size is the largest of the image type options.

NOTE: You can see the file size at the bottom of the Scan Manager.

Resolution

Resolution determines the amount of detail you can see in the scanned image. The resolution setting for a scan is in dots-per-inch (dpi). The higher the resolution, the finer the details, however, higher dpi settings also take longer to scan and produce larger files sizes. Higher settings are typically used for precision work, such as photographs or fine artwork.

- Click the **Resolution** drop-down list and select a resolution.

  The resolution settings on your DocuMate 510 scanner range from 100 dpi to 2400 dpi.

Brightness and Contrast

Sometimes an item is scanned with the brightness and contrast set too light or too dark. For example, a note written with a light pencil may need to be scanned darker to improve legibility.

Brightness refers to the lightness or darkness of the image. Contrast is the range between the darkest and lightest portions of the image. The greater the contrast, the more the difference between the lighter and darker shades in the image.

- **Dark/Light slider**—adjusts the brightness of the scan. Drag the slider to the right or left to increase or decrease the brightness.

- **Low/High slider**—adjusts the contrast. Drag the slider to the right or left to increase or decrease the contrast.

Adjusting the Output Size

The output size is the width and height of the image after it is scanned. For example, if you plan to print the image on a piece of paper you can select the output size of 8.5 by 11.0 inches.

Preview Auto-Area

Paper Size

Units

Ruler Units

Output Dimensions
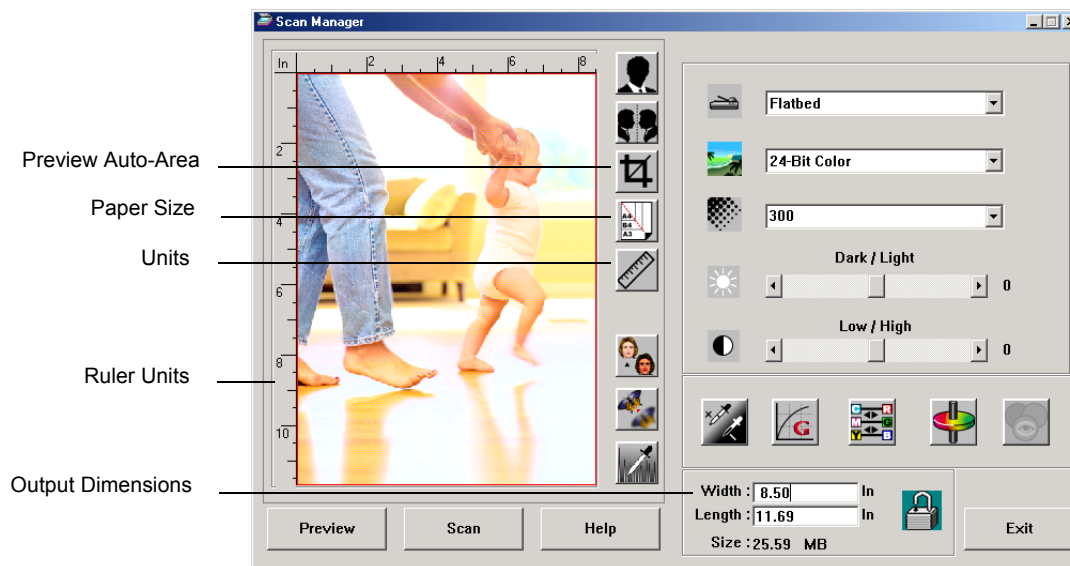
Preview Auto-Area

The item you're scanning may not fill the scanner glass. In that case you can preview the item and use the Preview Auto-Area button to automatically set the size of the scanned image.

• Click the **Preview Auto-Area** button to let the Scan Manager automatically determine the size of the item being previewed.

For example, if you preview the scan of a small photo, the Scan Manager automatically determines that the scan area is only where the photo is located on the glass.

You can manually adjust the scan area. For example, if you want the scan to include a border around the image, drag the edges of the scan area box.

Paper Size

If you know the size of the item(s) you're scanning, set the paper size. This automatically sets the scan size to the paper size.

• Click the **Paper Size** button and select the image's paper size from the list.

```
Card - 4 x 2.5 in
Photo - 5 x 3.5 in
Photo - 3.5 x 5 in
Photo - 6 x 4 in
Photo - 4 x 6 in
B5 - 18.2 x 25.7 cm
A6 - 10.6 x 14.8 cm
A5 - 14.8 x 21.0 cm
A4 - 21.0 x 29.7 cm
Letter - 8.5 x 11 in
Legal - 8.5 x 14 in
Scanner Maximum
```
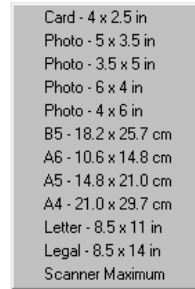
Units

The ruler around the edges of the image area and the output dimensions can be displayed in inches, centimeters, or pixels.

• Click the **Units** button to select the units for the ruler. Clicking the button toggles through the three choices. The ruler and output dimensions change to the new units.

Setting the Scan Area

You can manually adjust the output area to scan specific sections of an image. For example, if you're scanning a photograph and want to focus on one section, manually setting the output size removes the rest of the photograph from the final scanned image.

Move pointer
Manually set scan area
Resize pointer
Output Dimensions
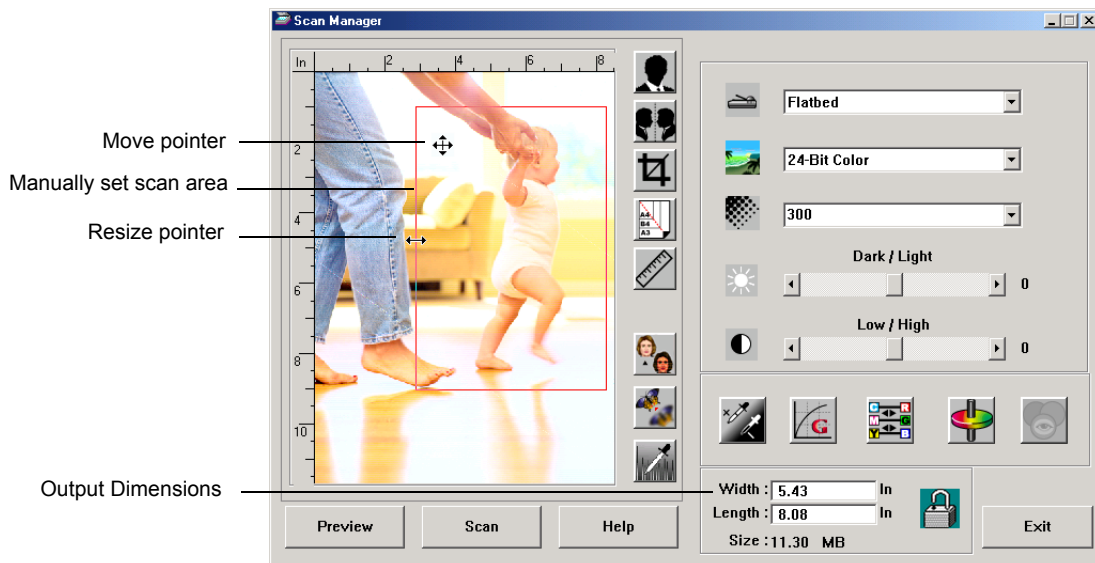
To manually set an output area:

1. Put the mouse pointer on an edge of the scan area box so it becomes a resize pointer (two-headed arrow) and then drag to set a new size for the box.

2. To move the box, put the mouse pointer inside the box so the pointer becomes a four-headed arrow. Drag to move the box to a new position.

3. The output dimensions change to reflect the new scan area size.

   Now, when you scan, only the area inside the scan area box is scanned to the PaperPort desktop.

NOTE: If you want to reset the scan area to the full size of the image again, click the **Preview Auto-Area** button.

Here's a sample of a manually selected output area:

This is the area manually selected for scanning.

This is the image that appears on the PaperPort desktop when the scanning is finished.

Lock Scaling
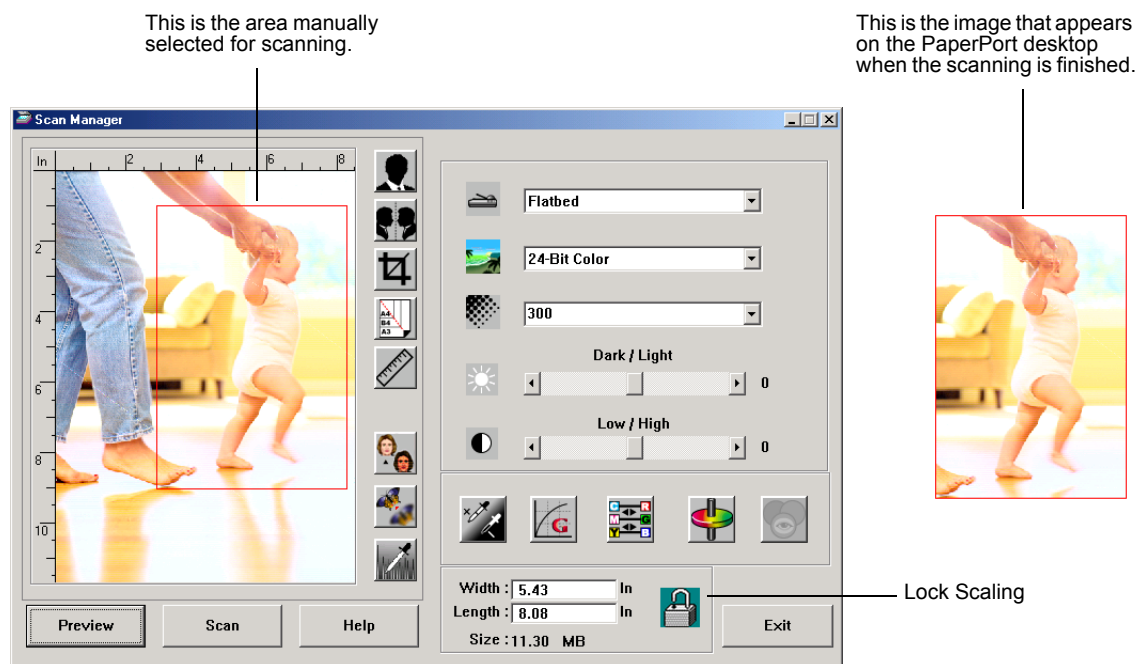
Manually Setting the Width and Length

The output dimensions at the bottom of the Scan Manager show the Width and Length of the scan area. You can set the area by typing numbers into those boxes.

To manually set the width and length:

1. Click in the **Width** or **Length** box and type a new dimension.

   The scan area box changes to reflect the new size.

2. To maintain the same width to length ratio, click the **Lock Scaling** icon next to the dimension.

   With the Lock Scaling locked, when you type a new width or length, the other setting changes so the relative size of the scan area remains constant.

Reversing the Image

The Scan Manager has an Invert button and a Mirror button for reversing the scanned image.
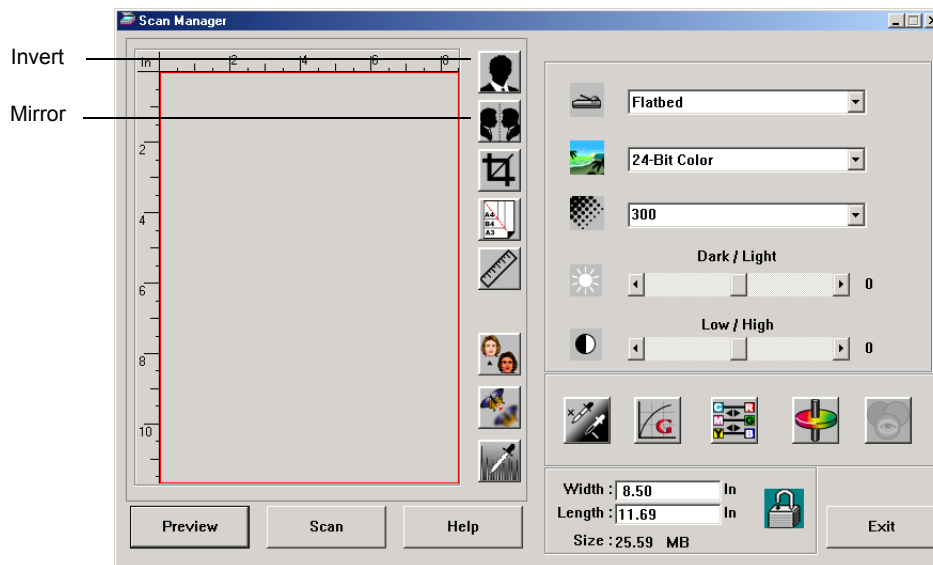
Invert reverses the black and whites or the colors of an image.

Mirroring flips the image 180 degrees.

- Click the **Invert** or **Mirror** button to see the image you want.

Original Image	Inverted Image	Mirrored Image
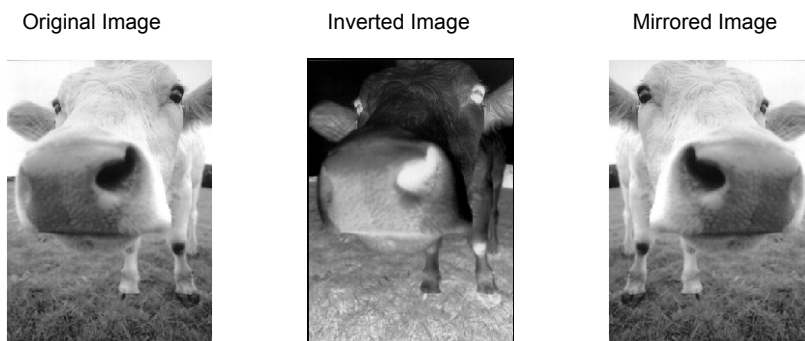
Adjusting Color and Gray Images

The Scan Manager has three buttons—Descreen, Sharpen, and Auto Level—for adjusting color and gray images. These buttons are available when the 24-Bit Color or 8-bit Gray Image types are selected.
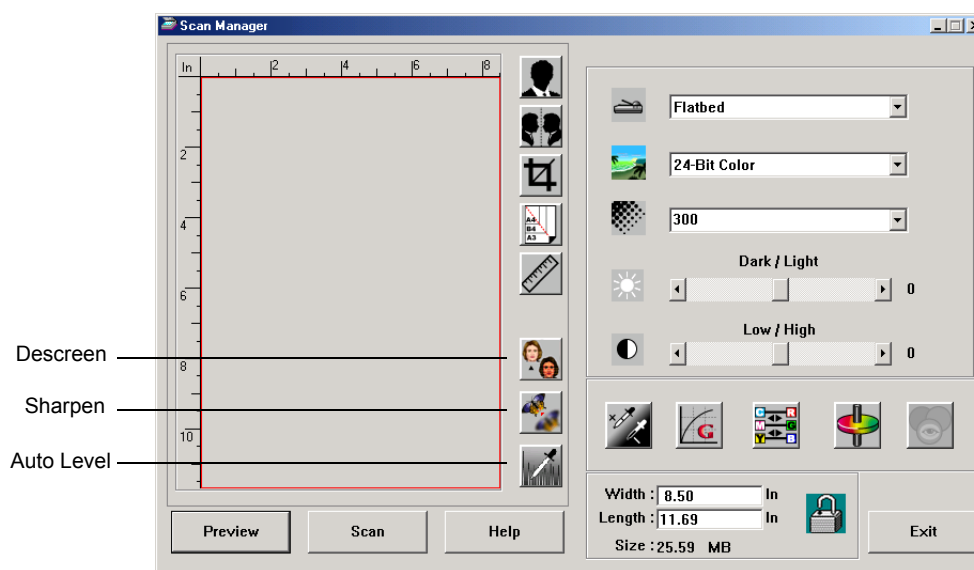
Descreen Image

Select this option when scanning a picture from a newspaper or magazine article, sales catalog, or other source that contains images with patterns or dots. Scans of patterns or dots sometimes have a distorted or wavy appearance. The scanner scans the item

to compensate for the patterns and dots, and produces a clearer image. The scanning may slow down a bit when this option is selected. You don't need to select this option when scanning photographs.
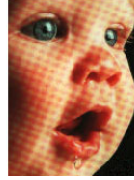
Original Image   Descreened Image

To descreen an image:

1. Click the **Descreen** button.

2. Choose the appropriate option from the list.
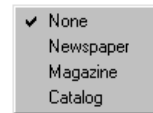
Watch the preview image as you select various options to see which one is best for your final scanned image.

Sharpen Image

Sharpness determines the amount of blur in an image. Your scanner can sharpen an original blurred image by adjusting the blurry edges in sections of the image.

To sharpen an image:

1. Click the **Sharpen** button.

2. Choose the appropriate option from the list.

| ✓ None |
| Light |
| More |
| Heavy |
| Extra Heavy |
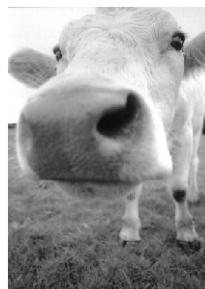
Original Image   Sharpened Image
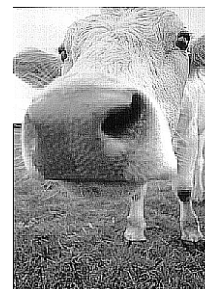
Auto Level

Your scanner can analyze a color image to automatically determine the best settings to match the colors of the original image. Click this button to let the scanner automatically adjust the color settings.

Original Image   Auto Level Adjusted

Adjusting Color Settings

The buttons for manually adjusting a preview image's color settings offer several advanced color options. The availability of each option is dependent upon the selected Image Type for the image.

Highlight/Shadow Levels

Curves

Color Balance

Hue/Saturation/Lightness

Color Drop-out
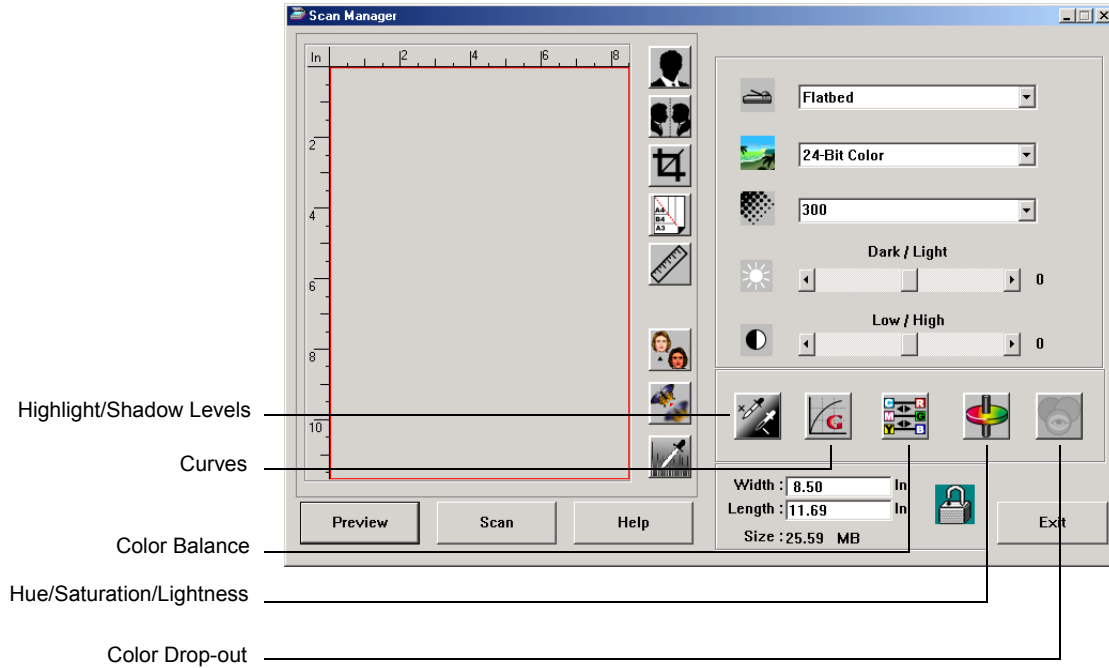
Highlight/Shadow Levels

Images have light and dark areas. The highlight is the lightest spot on an image; shadow is the darkest spot. The range of colors between the highlight and shadow determines the range of colors of the image. Using the Highlight/Shadow Levels features, however, you can extend the original range of colors between the highlight and shadow to reveal more details in the midrange colors.

To adjust the highlight and shadow levels:

1. Click the **Highlight/Shadow** button.

   The dialog box that opens shows a histogram of the saturation, gamma, and hue (S, G, H) of the range of colors for the highlight and shadow.
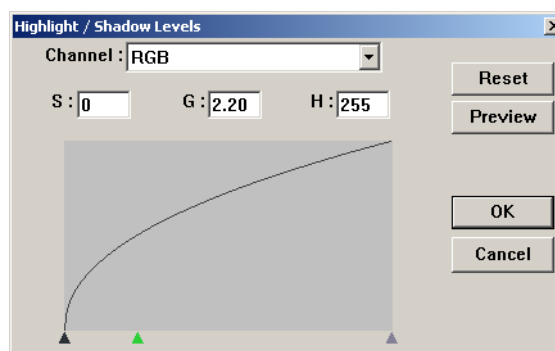
   Saturation is the strength or purity of a color, gamma controls the brightness of the midtones of the color, and hue is the color your eyes see as reflected from the image. The gamma setting in this dialog box is in conjunction with the hue and saturation but you can also set gamma by itself for an image. See the section "Curves," below for more information

2. From the Channel drop-down list, choose **RGB** to adjust all the channels together, or choose a single channel if available.

3. Enter new settings in the boxes for the three levels, or drag the small triangles at the bottom of the histogram.

   As you change the settings, the histogram changes to reflect the new levels.

4. Click **Preview** to see the effect of the new settings on the preview image.

5. Click **Reset** to reset the levels to their original values.

6. Click **OK** when the levels are what you want.

Curves

Like the Highlight/Shadow levels, the Curves feature also adjusts the range of midtone colors on an image. However, with the Curves feature you can set the gamma individually to adjust midtone levels without losing details from the lightest or darkest areas.

To adjust the gamma curve:

1. Click the **Curves** button.

   The dialog box that opens shows a plot of the gamma. The gamma of the original image is represented by a straight line from the lower left to upper right corners. Changing the straight line to a curve changes the gamma setting for the midtones on the original image.
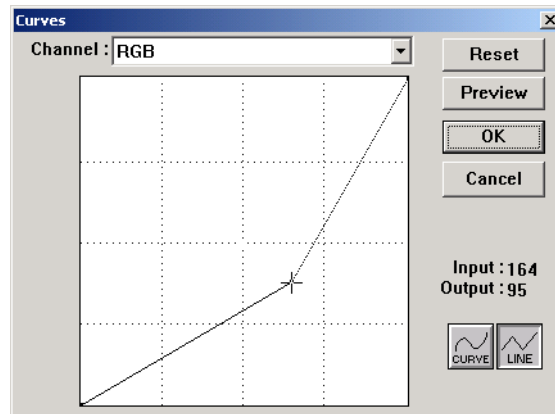
2. From the Channel drop-down list, choose **RGB** to adjust the gamma of all the channels together, or choose a single channel if available.

3. Drag the line up or down to set a new gamma.

   The input and output values represent values on the horizontal and vertical axes for the new gamma setting. Click the **Curve** or **Line** button to see the display as a smooth curve or a line. You can drag the line at multiple points.

4. Click **Preview** to see the effect of the new settings on the preview image.

5. Click **Reset** to reset the levels to their original values.

6. Click **OK** when the levels are what you want.

Color Balance

The color balance refers to the relative amounts of the three primary colors in an image. By adjusting the color balance you can sometimes compensate for an image with too much or too little of a color.

To adjust the color balance:

1. Click the **Color Balance** button.

    The settings in the dialog box are initially set to zero for each of the colors, indicating no change to the original image's color balance.
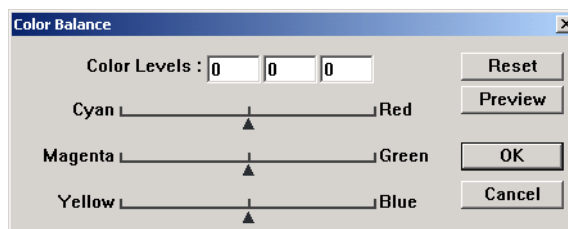
2. Type a number in one or more of the **Color Levels** boxes to set a new color level, or drag the triangles to the left or right.

    Each color is paired with its complementary color, so as you drag a triangle you are increasing a color while decreasing its complementary color.

3. Click **Preview** to see the effect of the new settings on the preview image.

4. Click **Reset** to reset the levels to their original values.

5. Click **OK** when the levels are what you want.

Hue/Saturation/Lightness

Hue is the color your eyes see as reflected from the image, saturation is the strength or purity of a color and determines whether a color is pale or rich, and lightness is the intensity of the color.

To adjust the hue/saturation/lightness:

1. Click the **Hue/Saturation/Lightness** button.

    The settings in the dialog box are initially set to zero, indicating no change to the original image's hue, saturation, or lightness.
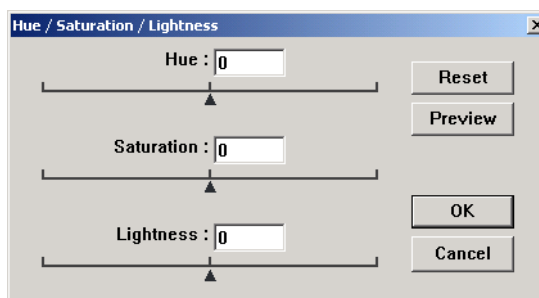
2. Type a number in one or more of the color boxes to set a new level, or drag the triangles to the left or right.

3. Click **Preview** to see the effect of the new settings on the image.

4. Click **Reset** to reset the levels to their original values.

5. Click **OK** when the levels are what you want.

Color Drop-out

Color drop-out is the ability of your scanner to automatically remove one color from a scanned item. For example, if you are scanning a letter with a red watermark, you can choose to drop-out the color red (the R Channel) so the scanned letter just shows the text and not the red watermark.

Color drop-out applies when you select the scanning image types of Black and White, Halftone, 8-Bit Gray or 16-Bit Grayscale. It does not apply to the image types of 24-Bit Color.

Here are some examples of color drop-out:

The original with black text on a blue background
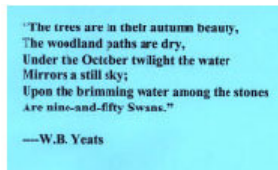
The scanned item with the B Channel (Blue) dropped out
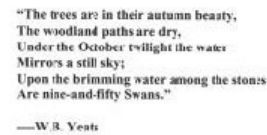
The original with a red watermark over black text
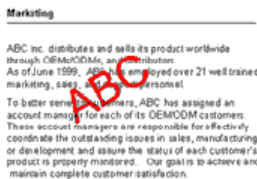
The scanned item with the R Channel (Red) dropped out
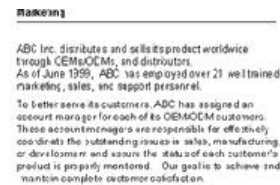
To drop the color out of a black and white, or grayscale image:

1. From the Image Type list, choose **Black and White**, **Halftone**, or **8-Bit Gray**.

2. Click the Color Drop-out icon.
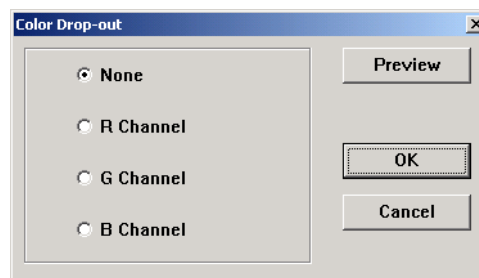
3. On the Color Drop-out dialog box, choose one of the colors to drop out (Red, Green, Blue).

4. Click **OK**.

   Now when you scan the black and white or gray item, the selected color is removed.

Scanning from Windows ME or XP

If your computer is running the Windows ME or XP operating system, you have a choice of scanning using the TWAIN-compliant DocuMate software as just described (see "Scanning from Windows 98SE, ME, 2000, or XP" on page 16) or scanning using the Microsoft Windows Image Application (WIA) standard as described below.

NOTE: The screen captures in this section show the WIA-standard screens as they appear in the Windows XP operating system. If you are using Windows ME, the screens will look slightly different, but will function in the same manner.

To scan an item:

1. Load a stack of documents in the Automatic Document Feeder, or place an item face-down on the glass and align it with the arrow on the reference frame. See "Loading Documents to Scan" on page 14 for details.

2. On the Windows taskbar, click **Start**, point to **All Programs**, point to **ScanSoft PaperPort 9.0,** and then click **PaperPort**.

3. Click the **Scan** icon on the PaperPort command bar.

The Folders pane is replaced by the Scan pane.

Scan pane
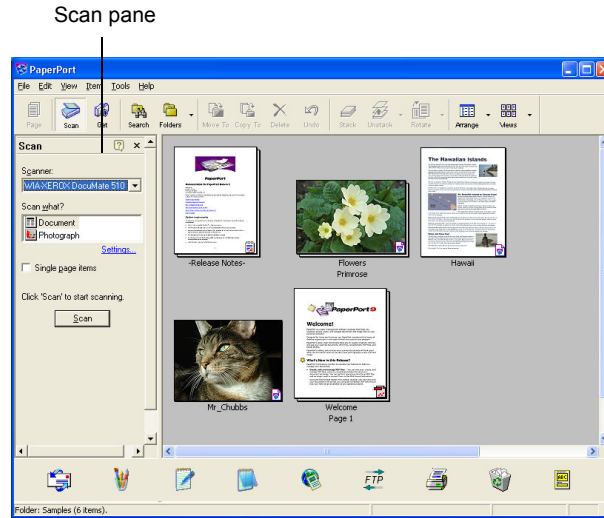
4. From the Scanner drop-down list, select **WIA-XEROX DocuMate 510**.

5. In the "Scan what?" section, choose to scan a **Document** or **Photograph**.

6. Click **Settings** to view and change the format for the scanned item's file name and the file type. The default file type for documents is .pdf and for photographs is .jpg.

7. Use the **Single page items** check box as follows:

   • When the check box is selected, pages are scanned and placed on the PaperPort desktop.

   • When the check box is not selected, pages are scanned but not placed on the PaperPort desktop until you indicate the scanning job is finished.

8. Click the **Scan** button on the Scan pane.

   The scan window opens. Use this window to select scanning options and start the scanner.
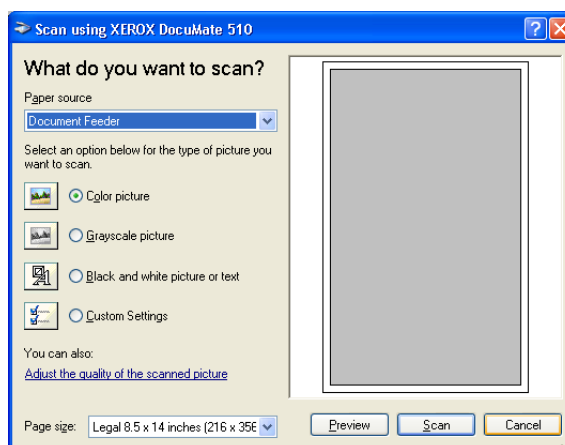
9. From the Paper Source drop-down list, select Flatbed or Document Feeder (if you are going to use the ADF).

   If you selected Document Feeder, select a paper size from the Page size drop-down list.

   NOTE: If your computer is running Windows ME, the ADF can scan only one page at a time.

10. Click the button most appropriate for the item you're scanning.

11. Click **Preview** if you want to preview the image before scanning.

    The image is displayed on the right side of the window.

    NOTE: If you preview when scanning a stack of documents, the first page of the stack feeds through the ADF for the preview. After adjusting the scanner settings, replace that page on the stack so it is scanned with the rest of the pages.

12. Adjust settings of the previewed image as desired:

    • Change the button selection for the type of image.

    • Adjust the custom settings; refer to the next section, "Fine Tuning Your Scans".

    • Change the size of the scanned image. To do this, click and hold the mouse pointer over one of the four sizing-boxes on the corners of the previewed image. Then drag the box to increase or decrease the size of the image.

13. Preview the image again. When you are satisfied with the image, click the **Scan** button.

If the **Single page items** check box is selected on the Scan pane, the scanned item appears as a thumbnail on the PaperPort desktop.

14. If the **Single page items** check box is not selected, thumbnails do not appear until you indicate the scanning job is finished.

• On the PaperPort - Scan message box, click **Done**.

NOTE: Refer to "The Single Page Items Check Box" on page 20.

Fine Tuning Your Scans

You can select new settings before you scan an item to fine tune exactly how you want to scan a particular item.

To select the scanner settings before you scan:

1. On the scan window, click **Adjust the quality of the scanned picture**.
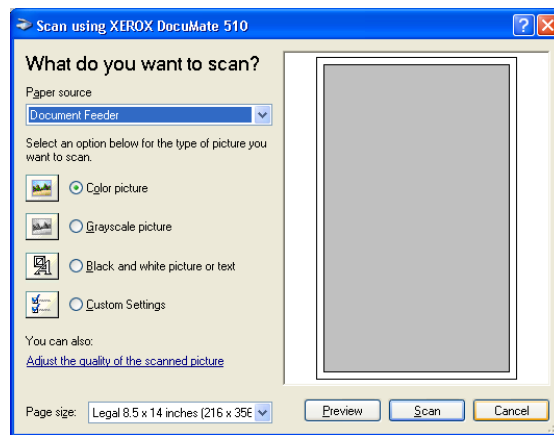
The Advanced Properties dialog box opens.
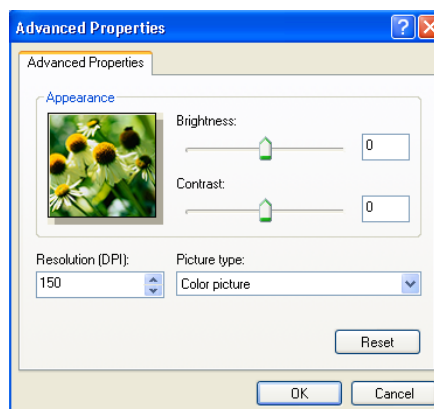
2. Select the options for scanning.

   Brightness and **Contrast**—Drag the sliders to the right or left to adjust the brightness and contrast of the scanned image. The Contrast setting does not apply to the setting **Black and White picture or text**.

   Resolution (DPI)—Click the up and down arrows to choose the dots per inch (dpi) of the resolution. The maximum resolution is 600 dpi; the minimum is 100 dpi. The higher the dpi setting, the sharper and clearer the scanned image. However, higher dpi settings take longer to scan and produce larger files for the scanned images.

   Picture type—Click the drop-down menu and choose the most appropriate type for the item you're scanning.

3. Click **OK**.

   The Custom Settings button is now set to scan with the options you selected.

   If you want to reset the settings and start over, click **Reset**.

Maintenance

This section covers information on maintenance, troubleshooting, uninstalling, scanner specifications, and spare parts.

Clearing Paper Jams

If your scanner stops scanning due to a paper jam in the Automatic Document Feeder, a warning opens after a few moments.
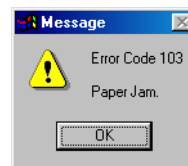
To clear a paper jam:

1. Open the Automatic Document Feeder cover.
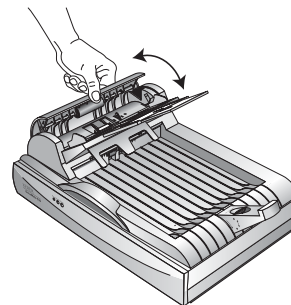
2. Remove the jammed paper and close the cover.
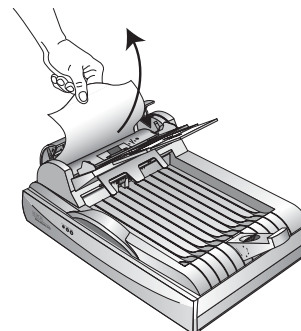
To reduce the number of paper jams, smooth and straighten the paper before scanning, adjust the guides to the paper size, and insert the paper evenly into the ADF.

Care and Maintenance

Your scanner is designed to be maintenance-free. Occasional cleaning, however, can help ensure continual optimal performance.

Cleaning the Scanner Glass

Scanning items that have excessive amounts of dirt or dust may dirty the glass. To ensure the best quality scanned item, wipe the scanner glass with a soft clean cloth to rid the glass of dust or other debris.

Cleaning the Automatic Document Feeder

You may need to clean the ADF feed mechanism if your scanned documents do not feed easily into the ADF, or several feed in at the same time.

To clean the ADF:

1. Wet a cotton swab with some isopropyl alcohol (95%).

2. Open the ADF cover.
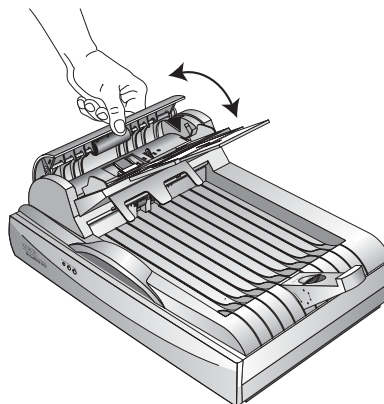
3. Wipe the feed roller from side to side. Rotate the roller to clean its entire surface.

4. Wipe the pad from top to bottom. Be careful not to snag the swab on the springs on either side of the pad.

5. Close the cover when you're finished.

Replacing the ADF Pad Assembly

The ADF pad spring may wear out and is designed to be a user-replaceable part. Problems with documents feeding into the ADF is an indication that the pad spring may be wearing out.
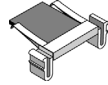
You received a replacement pad in the original scanner box, and you can also order a new one. See the "Xerox DocuMate 510 Parts List" on page 48 for ordering information.

To replace the ADF Pad assembly:

1. Open the ADF cover.
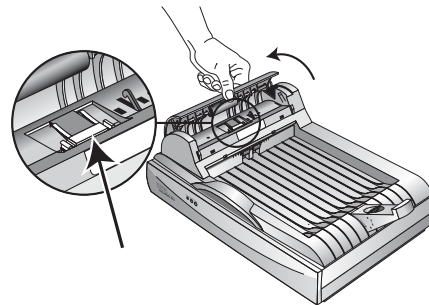
2. Squeeze the plastic clamps that hold the pad assembly in place and lift the pad up and out.
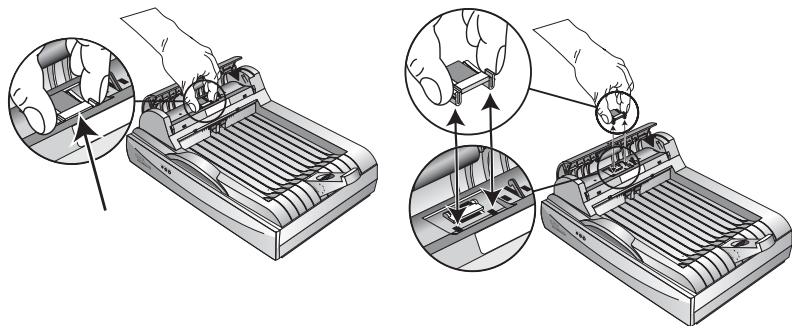
3. Reverse the procedure to replace the new pad into its slots.

Troubleshooting

In addition to the troubleshooting information contained in this section, please see the Readme file on your installation CD. The Readme file contains additional information that may help you diagnose problems with the scanner.

If you try the troubleshooting procedures described in this section and in the Readme file, and the scanner still has problems, you may have a malfunctioning scanner. Refer to the technical support card you received with your scanner for contact information. Also visit our web site at www.xeroxscanners.com for additional technical information.

Problem: The scanner won't scan. What's wrong?

Check for one of these possible problems:

- **Is a cable loose or not plugged in securely?** Inspect all cable connections. Make sure all the cables are plugged in securely.

- **Are the scanner's status lights on?** Turn on the scanner's power. If the status lights doesn't come on, plug the power supply into another electrical outlet.

- **Is the scanner's locking tab in the locked position?** Slide the locking tab to the unlocked position. If you tried to scan with the scanner locked, you must restart your computer after unlocking the scanner.

- **Did you restart the computer after installing the software?** If you didn't restart the computer, it may not have loaded all of the software files. Try restarting your computer.

- **Did you select another TWAIN source for acquiring images?** If you use multiple TWAIN devices with your computer, you may have selected another source for images. Start the PaperPort software and click the Scan icon on the PaperPort command bar and make sure **DocuMate 510** is selected as your scanner.

Problem: During installation I got the error message: PaperPort Installation is not complete. What do I do?

The installation procedure was not successful. You need to reinstall the PaperPort software.

Problem: I got the error message: PaperPort cannot allocate enough memory to perform internal critical operations. What do I do?

Close any other active applications so that additional memory is available. If you click Continue, PaperPort moves the file to the PaperPort data directory and renames the file with the prefix "bad." This allows you to recover the file later. To recover the file, import it into PaperPort by using the Import command in the File menu.

Problem: How do I uninstall PaperPort?

See the next section, "Uninstalling Your Scanner" on page 45. Uninstalling does not delete your scanned items, and they remain in the PaperPort Data folder.

Problem: If the USB cable is disconnected during a scan, the scanner does not reconnect when the USB cable is plugged back in.

• Unplug the power cable from the scanner, and then plug it back in.

• If the scanner does not reconnect:

1. Unplug the power cable from the scanner.

2. Restart your computer.

3. After the restart is complete, plug the power cable back in.

Problem: The status light is blinking. What does this mean?

The status light indicates the current state of the scanner. Descriptions of the most common patterns are listed below. Contact Xerox Technical Support if you experience a different blinking pattern.

• **Blinking green:** indicates the scanner is preparing to scan.

• **Blinking amber, 1 long + 6 short blinks:** indicates a problem with the status light itself. Contact Xerox Technical support.

• **Blinking amber, 1 long + 7 short blinks:** indicates a scanner lock error. Make sure the lock on the bottom of the scanner is in the unlocked position.

• **Blinking amber, 1 long + 11 short blinks:** indicates a paper jam. Refer to "Clearing Paper Jams" on page 40.

Uninstalling Your Scanner

To uninstall your DocuMate 510 scanner, remove the scanner software first, and then remove PaperPort, or other scanner software.

Step 1: Uninstalling the DocuMate Software

1. On the Windows taskbar, click **Start**, point to **Settings**, and then click **Control Panel**.

2. Double-click the **Scanner and Cameras** icon.

    •   For Windows 98SE or 2000, click the **Devices** tab, select the **XEROX DocuMate 510** scanner, and click the Remove button to remove the scanner from the list. Click **OK**.

    •   For Windows ME or XP, right-click the **XEROX DocuMate 510** icon, and select **Delete** to delete the scanner from the list.

3. Unplug the USB cable from the scanner.

4. Click the **Back** button in the toolbar to go back to the Control Panel.

5. Double-click the **Add/Remove Programs** icon.

    •   Windows 98SE or ME: The Add/Remove Programs Properties window opens. Select the Install/Uninstall tab.

    •   Windows 2000 or XP: The Add or Remove Programs window opens. Make sure the Change or Remove option is selected.

6. From the list of programs, select **XEROX DocuMate 510**.

    •   Windows 98SE or ME: Click the **Add/Remove** button.

    •   Windows 2000 or XP: *Click the* **Change/Remove** *button.*

7. Click **OK** when the message asks "Are you sure you want to completely remove XEROX DocuMate 510 and all its components."

8. On the Maintenance Complete window, click **Finish**.

    The DocuMate software is removed from your computer.

9. Close all open windows and restart your computer.

Step 2: Uninstalling the PaperPort Software

To uninstall PaperPort 9.0 from Windows 98SE or ME:

1. On the Windows taskbar, click **Start**, point to **Settings**, and then click **Control Panel**.

2. Double-click the **Add/Remove Programs** icon.

3. On the Add/Remove Programs Properties window, select the **Install/Uninstall** tab.

4. Select **PaperPort 9.0** and click **Remove**.

5. On the Welcome window, click **Next**.

6. On the Program Maintenance window, select the **Remove** option, and then click **Next**.

7. On the Remove the Program window, select the **Remove files** option, and then click **Remove**.

   The PaperPort software is removed.

8. On the Uninstall Completed window, click **Finish**.

9. Close all open windows and restart your computer.

To uninstall PaperPort 9.0 from Windows 2000 or XP:
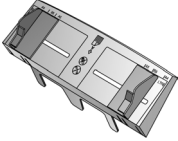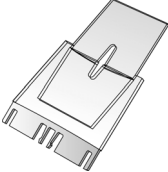
1. On the Windows taskbar, click **Start**, point to **Settings**, and then click **Control Panel**.

2. Click the **Add or Remove Programs** icon.

   The Add or Remove Programs window opens.

3. Select **PaperPort 9.0** and click **Remove**.

4. A message window opens, asking if you are sure you want to remove PaperPort 9.0 from your computer. Click **Yes**.

   The PaperPort software is removed.

5. Close all open windows and restart your computer.

Xerox DocuMate 510 Scanner Specifications

Bit depth	True 42-Bit color (internal), 14-Bit gray (internal), 1-Bit line art/text
Scanning resolution	Optical resolution: 600 x 1200 dpi, Hardware supersampling, Interpolated resolution: 2400 dpi
Maximum item sizes	ADF Mode 8.5 x 14 inches (21.6 x 35.6 cm) Flatbed Mode 8.5 x 11.69 inches (21.6 x 29.7 cm)
ADF Minimum item size	5 x 7 inches (12.7 x 17.8 cm)
ADF scanning speed	Up to 10 pages per minute @ 200 dpi B&W
Light source	Cold cathode fluorescent lamp
Interface	USB 2.0 Full Speed
Scanner dimensions	
Height	7.5 inches (19 cm)
Width	12 inches (30.5 cm)
Length	17.5 inches (44.5 cm)
Weight	10.95 pounds (5.03 kg)
Operating temperature	50°–104° F (5°–35° C without condensation)
Relative humidity	20%–80% (@35° C without condensation)
Power supply	
Input voltage/frequency	100 Vac, 50/60 Hz (Japan) 120 Vac, 60 Hz (North America) 230 Vac, 50 Hz (Europe)
Output voltage/watt	24 V DC, 20.16 watt maximum
Power consumption	< 20 Watts
Safety and agency certifications	UL, C-UL, TUV/GS, FCC Class B, CE

Xerox DocuMate 510 Parts List

Please use the following part names and numbers when ordering replacements for your DocuMate 510 scanner.

	Part Name	Part Number
	Paper Guide	57-0097-000
	Paper Guide Extension	57-0098-000
	Paper Stop	57-0099-000
	ADF Pad	57-0100-000
	AC Power Cord	35-0060-000
	Power Supply	37-0046-000

Appendix A   Notices

It's Illegal in the USA

Congress, by statute, has forbidden the reproduction of the following subjects under certain circumstances. Penalties of fine or imprisonment may be imposed on those guilty of making such reproductions.

1. Obligations or Securities of the United States Government, such as:

Certificates of Indebtedness	National Bank Currency
Coupons from Bonds	Federal Reserve Bank Notes
Silver Certificates	Gold Certificates
United States Bonds	Treasury Notes
Federal Reserve Notes	Fractional Notes
Certificates of Deposit	Paper Money

    Bonds and Obligations of certain agencies of the government, such as FHA, etc.

    Bonds. (U.S. Savings Bonds may be photographed only for publicity purposes in connection with the campaign for the sale of such bonds.)

    Internal Revenue Stamps. (If it is necessary to reproduce a legal document on which there is a canceled revenue stamp, this may be done provided the reproduction of the document is performed for lawful purposes.)

    Postage Stamps, canceled or uncanceled. (For philatelic purposes, Postage Stamps may be photographed, provided the reproduction is in black and white and is less than 75% or more than 150% of the linear dimensions of the original.)

    Postal Money Orders.

    Bills, Checks, or Drafts of money drawn by or upon authorized officers of the United States.

    Stamps and other representatives of value, of whatever denomination, which have been or may be issued under any Act of Congress.

2. Adjusted Compensation Certificates for Veterans of the World Wars.

3. Obligations or Securities of any Foreign Government, Bank, or Corporation.

4. Copyrighted material, unless permission of the copyright owner has been obtained or the reproduction falls within the "fair use" or library reproduction rights provisions of the copyright law. Further information of these provisions may be obtained from the Copyright Office, Library of Congress, Washington, D.C. 20559. Ask for Circular R21.

5. Certificates of Citizenship or Naturalization. (Foreign Naturalization Certificates may be photographed.)

6. Passports. (Foreign Passports may be photographed.)

7. Immigration Papers.

8. Draft Registration Cards.

9. Selective Service Induction Papers that bear any of the following Registrant's information:

Earnings or Income	Dependency Status
Court Record	Previous military service
Physical or mental condition	

Exception: U. S. Army and Navy discharge certificates may be photographed.

10. Badges, Identification Cards, Passes, or Insignia carried by military personnel, or by members of the various Federal Departments, such as FBI, Treasury, etc. (unless photograph is ordered by the head of such department or bureau.)

Reproducing the following is also prohibited in certain states: Automobile Licenses — Drivers' Licenses — Automobile Certificates of Title.

The above list is not all inclusive, and no liability is assumed for its completeness or accuracy. In case of doubt, consult your attorney.

It's Illegal in Canada

Parliament, by statute, has forbidden the reproduction of the following subjects under certain circumstances. Penalties of fines or imprisonment may be imposed on those guilty of making such copies.

1. Current bank notes or current paper money.

2. Obligations or securities of a government or bank.

3. Exchequer bill paper or revenue paper.

4. The public seal of Canada or of a province, or the seal of a public body or authority in Canada, or of a court of law.

5. Proclamations, orders, regulations or appointments, or notices thereof (with intent to falsely cause same to purport to have been printed by the Queen's Printer for Canada, or the equivalent printer for a province).

6. Marks, brands, seals, wrappers or designs used by or on behalf of the Government of Canada or of a province, the government of a state other than Canada or a department, board, Commission or agency established by the Government of Canada or of a province or of a government of a state other than Canada.

7. Impressed or adhesive stamps used for the purpose of revenue by the Government of Canada or of a province or by the government of a state other than Canada.

8. Documents, registers or records kept by public officials charged with the duty of making or issuing certified copies thereof, where the reproduction falsely purports to be a certified copy thereof.

9. Copyrighted material or trademarks of any manner or kind without the consent of the copyright or trademark owner.

The above list is provided for your convenience and assistance, but it is not all inclusive, and no liability is assumed for its completeness or accuracy. In case of doubt, consult your solicitor.

Federal Communications Commission (FCC) for USA

This equipment has been tested and found to comply with the limits for the class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed, and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

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

This equipment has been certified to comply with the limits for a class B computing device, pursuant to FCC Rules. In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Energy Star for the USA

As an ENERGY STAR partner, Xerox Corporation has determined that this product meets the ENERGY STAR guidelines for energy efficiency.

ENERGY STAR® is a US registered trademark.

The ENERGY STAR program is a team effort between the Environmental Protection Agency and the office equipment industry to promote energy-efficient personal computers, monitors, printers, digital presses, fax machines and copiers. Reducing the energy consumption of this equipment will help combat smog, acid rain and long-term changes to the climate by decreasing the emissions that result from generating electricity.

Product recycling and disposal for USA

Xerox operates a worldwide equipment takeback and reuse/recycle program. Contact your Xerox sales representative (1-800-ASK-XEROX) to determine whether this Xerox product is part of the program.

If your product is not part of the Xerox program and you are managing its disposal, please note that the product may contain lead and other materials whose disposal may be regulated due to environmental considerations. For recycling and disposal information, contact your local authorities.

Index

Numerics

24-bit color *21, 34*
8-bit gray *21, 34*

A

ADF *3, 18*
ADF cable *3, 11*
ADF pad assembly
   replace *42*
ADF port *3, 11*
adjust image *20*
align item *15*
automatic color adjustment *29*
Automatic Document Feeder *3*
   cleaning *41*

B

bit depth *47*
black and white *21*
brightness *22*
brightness slider *22*

C

CD
   other software *13*
   starting manually *8*
CD-ROM drive *4*
color adjustment *27*
   automatic *29*
   manual setting *30*
color balance *32*
color drop-out *34*
computer requirements *4*
contrast *22*
contrast slider *22*

D

descreen image *27*
distorted image *27*
document cover *2, 3*
document pad *3*
dots-per-inch *22*
dpi *22*

G

gamma *31*
   manual setting *31*

H

halftone *21*
help information *43*
highlight level *30, 31*
hue *31, 33*

I

image
   adjust color *27, 29*
   color balance *32*
   descreen *27*
   highlights *30, 31*
   invert *26*
   mirror *26*
   shadows *30, 31*
   sharpen *28*
image adjustment *20*
image size *23*
image type *21*

L

length and width
   manual setting *26*
lightness *33*
lock scaling icon *26*
locking tab *3, 6, 43*

M

magazine article *27*
monitor *4*

N

newspaper article *27*

O

on/off switch *3, 12*
output size *23, 25*

P

paper guide *3, 6*
paper jam *40*
paper size *24*
paper stop *3, 7*
PaperPort
    Scan pane *17*
    scanning with Windows XP or ME *35*
PaperPort desktop *17*
    thumbnail *19*
patterns on picture *27*
preview auto-area *23*

R

requirements
    computer *4*
    monitor *4*
resolution *22*
reverse image *26*
RGB *31, 32*
ruler units *24*

S

saturation *31, 33*
scan
    file name *19*
    multiple pages *14, 18, 19*
    PaperPort desktop *19*
    preview *19*
    single page *15, 18*
    small item *23*
scan area
    automatic setting *23*
    manual setting *24*
Scan Manager *18*
    scan options *20*
scanner
    uninstall *45*
scanner assembly *5*
scanner features *3*
scanner glass *3*
scanning
    Windows 98SE, ME, 2000, or XP *16*
shadow level *30, 31*
sharpen image *28*
status light *3, 12, 43*
system requirements *4*

T

technical support *43*
thumbnail *19*

TWAIN standard *16*

U

uninstall *45*
units *24*
USB port *3, 12*

W

watermark, remove *34*
wavy appearance *27*
Web site for help *43*
WIA standard *16*