

About ScanWizard 5

ScanWizard 5 is Microtek's scanning software developed exclusively for Microtek scanners. ScanWizard 5's unique dual interface has features that both the novice and experienced scanner users will love.

ScanWizard 5's two interface are named ScanWizard 5-Standard Control Panel and the ScanWizard 5-Advanced Control Panel.

[Learn more about the Standard Control Panel](#)

[Learn more about the Advanced Control Panel](#)

[Switching Between Standard and Advanced](#)

Quick Start-up

Scanning sequence is done in five easy steps.

Step 1. [**Install** Microtek ScanWizard 5](#)

Step 2. [**Position** your original material](#)

Step 3. [**Launch** ScanWizard 5](#)

Step 4. [**Scan** your material](#)

Step 5. [**Save** your scan material](#)

Step 6. [**Exit** ScanWizard 5](#)

Step 1. Install Microtek ScanWizard 5

Install the **ScanWizard 5** scanner driver (included in your Microtek CD-ROM) as instructed in the Installing and Getting Started booklet (a separate document that came with your scanner package).


For ScanWizard 5 to work properly after installation, the correct scanner model should be properly connected to your host beforehand and it needs to be "powered on" before launching the software.

Step 2. Position your original material

Place your material face down on the scanner bed.

Step 3. Launch ScanWizard 5

A. Launching ScanWizard 5 as a stand-alone program

Double-click the **ScanWizard 5** icon  on your desktop; or

B. Launching from an image-editing application

Windows: Go through the Windows menu - click Start, Programs, Image-editing software.

Macintosh: Launch your image-editing software from its folder.

Step 4. Scan your material

As soon as you launch ScanWizard 5, it will automatically detect, configure, scan, and perform a fast preview of the scan material and displays it in the preview area of the panel.


To set and make adjustments to the image, use the Tool buttons (Original, Scan Type, Purpose, Scale Output, or Adjust).


Step 5. Save your scan material

You need to click the **Scan to** button if you wish to store the scanned image(s) into a file and easily retrieve it for future use.

Click the Scan to button to save, print, or deliver your image(s) directly to another application (web, E-mail, or OCR).

Step 6. Exit ScanWizard 5

Windows: To quit ScanWizard 5, simply click on the **Exit** button  located at the top right corner of the Standard Control Panel.

Macintosh: The **Exit** button  is located at the top left corner of the Standard Control Panel.

Standard Control Panel

The ScanWizard 5 - Standard Control Panel offers a simple and easy way to complete a scanning session. It has a [balloon tutorial](#) that can guide you through the actual steps to help you accomplish your first scan.

To obtain a larger view and find out more about the functions behind the Standard Control Panel, click either one of thumbnails below:



Windows



Macintosh



Standard Control Panel

To view a brief information about the functions of the Standard Control Panel, position the cursor  over any button, icon, or bar on the panel, and then click the grabber pointer  to activate associated pop-up information dialog box.



Select the topic you wish to view from the links below to get a hold of a more specific explanation:

[The Preview window](#)



- [Scan Frame](#)

- [Tool Buttons](#)

- [Final Scanning Buttons](#)

- [Control Buttons](#)

Standard Control Panel

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- [Final Scanning Buttons](#)
- [Control Buttons](#)

Standard Control Panel

Preview window

By default, **ScanWizard 5 - Standard Control Panel** automatically detects and creates a preview image of your original material in the preview window when you first launch the program.

If you have disabled the auto-preview function under the "Preferences" dialog box, you will need to manually click the **Preview** button to prescan and preview your material.

- ▶ [Scan Frame](#) Plotting, Moving, Re-sizing
- ▶ [Toolbar commands](#) Original, Scan Type, Purpose, Scale Output, Adjust, Reset, Preferences
- ▶ [Final Scanning buttons](#) Scan, Scan to, E-mail, Copy, OCR, To Web
- ▶ [Control buttons](#) Panning tool, Zoom controls, i [Info], Arrow, Switch, Scanner info, Help [?], Exit

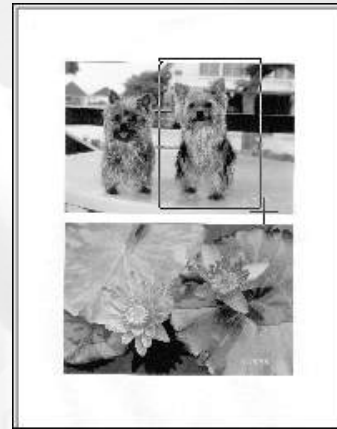
Scan frame

A Scan frame is a floating dotted-line border around a selected image.

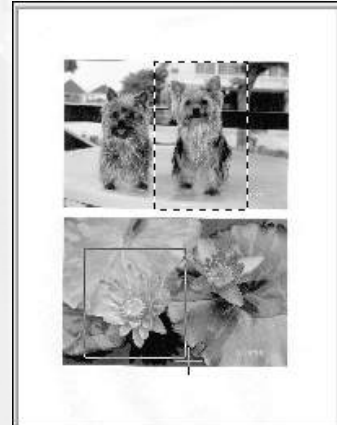
- ▶ [Plotting](#)
- ▶ [Moving](#)
- ▶ [Resizing](#)

Plotting

To plot a scan frame, point at any corner of your intended scan frame. When the crosshair pointer appears, drag diagonally until you have the desired image selection enclosed in a frame, and then release the mouse. Your actual scan frame border now turns into cascading lines.

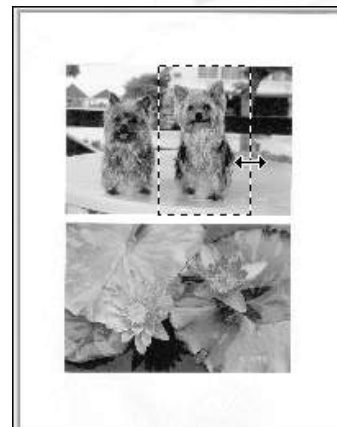


To create a new scan frame over an existing one or in another location of the same preview image, follow the steps in plotting a scan frame. When you release the mouse, however, the previous scan frame will be discarded.



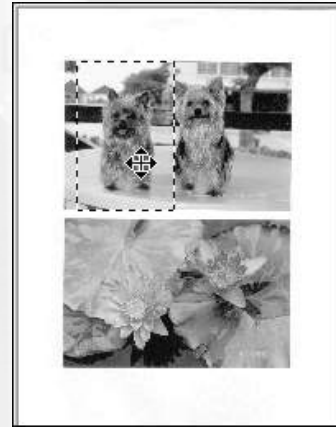
Resizing

Point at any border of the scan frame until a two-way arrow pointer appears. Drag horizontally or vertically until you have achieved the desired width and height adjustments.



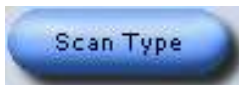
Moving

If you wish to use an existing scan frame dimension to select another area of the scan image, simply move the existing scan frame over to the new area by pointing anywhere within the existing scan frame. When the four-way arrow pointer appears, drag the scan frame to the target area.



Toolbar commands

Windows



Macintosh



[Original](#)

[Scan Type](#)

[Purpose](#)

[Scale Output](#)

[Adjust](#)

[Reset](#)

[Preferences](#)

The Standard Control Panel's Toolbar commands are designed for selecting your scan-setting requirements. There is no order or sequence required for using the Toolbar commands in defining various aspects of your image.

Original button

The **Original** button lets you select the type of material to be scanned. ScanWizard 5 - Standard Control Panel determines the best scanning parameters to automatically configure your original material.

Options for selecting the [type of scan material](#) under the Original button include: Photo, Text Document, Illustration, Printed Material, Film, etc.

Scan Type button

The **Scan Type** button allows you to select the image output to which the original scan material will be converted. The options for choosing the output [image type](#) are: True Color, Web Color, Gray, B&W, or JPEG.

Purpose button

The **Purpose** button displays a menu for selecting the intended usage of the output image resolution. Different image resolution values are provided for different output applications. The higher the resolution, the bigger memory size required for uploading and downloading images.

This is your button for defining image output resolution to match the target application (On-screen Viewing, Normal Screen, Ink-Jet Printing, and Laser).

Select from the menu the particular setting that will best match the intended device application for your output image. Different types of originals may have different predefined resolution values as shown on the table below.

If none of the predefined resolution matches your need, you may define your own resolution by selecting "Custom" and then enter your own resolution value in the Edit box provided at the bottom of the menu. Remember that the higher the resolution, the larger the file size will be.

	Text Doc./Photo	+/- Film	Graphic and Magazine
Normal Screen	72	72	72
Fine Screen	96	96	96
Ink Jet Printer	300	200	300
300 Laser Printer	300	100	300
600 Laser Printer	600	150	300
Fax	200	200	200
OCR	300	300	300

Scale Output button

This button lets you select image output resolution in terms of size/aspect ratio. (50%, 75%, 100%, 150%, or 200 %).

Adjust button

This button is your basic image enhancement tool for modifying or enhancing image(s) at the scanning stage.

It is suggested that you adjust the Brightness, Contrast, Sharpness, Color, and Saturation of the preview image to enhance the output image. Click on the Adjust button, and the Standard Control Panel image correction tool will display. Adjust the image appearance by dragging the slider of each tool along its grooves. Observe the changes from the preview image every time you move each pellet button.

Reset button

This button will cancel your defined choices or revert to the default settings.

Preferences button

This button will give you access to the "Preferences" dialog box to set up scanning function, and allows you to repaint or customize the appearance of your Standard Control Panel.

The Preferences setup dialog box provides options on how you would like ScanWizard 5 - Standard Control Panel to handle your scan material when the program is launched.

To redefine Preferences setup, click on the Preferences button. From the Preferences dialog box, select and choose your preferred options.

Automatically previews scan bed when launching ScanWizard 5

If checked, a reflective original overview will be carried out when ScanWizard 5 is launched. If unchecked, no preview is carried out.

Auto-detect image type and find edges of photo or document

If checked, the scanner detects the image type when a preview is in progress, and performs auto-cropping of the frame for reflective originals. If unchecked, the image type can be chosen by the user, and a scan frame can be set manually for cropping.

Hide balloon screen tips

If checked, a balloon help pops up while the mouse pointer is on a button, icon, or selection item. If unchecked, the balloon help becomes hidden and inactive.

Auto Image Enhancement

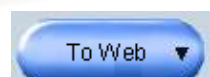
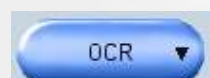
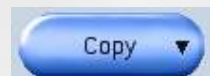
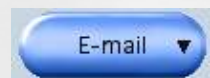
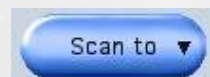
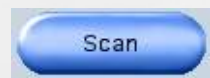
If the "Auto Image Enhancement" option is checked, resulting image will appear sharper, brighter, more realistic, and more saturated. If the "None" option is selected, no image enhancement is applied.

Final scanning buttons

Windows



Macintosh



[Scan](#)

[Scan to](#)

[E-mail](#)

[Copy](#)

[OCR](#)

[To Web](#)

Scan button

This is the default button when ScanWizard 5 - Standard Control Panel is launched from an image-editing application. It performs the final scan and sends the scanned image (output) to the application that you are using.

Scan to button

When ScanWizard 5 - Standard Control Panel is launched as a stand-alone program and is the default setting. This is also the default button on scanners with the "Go" button feature.

E-mail button

ScanWizard 5 automatically attaches the scanned image to your E-mail message.

Point the cursor on the Scan or Scan to (whichever was activated previously) button for a moment, then click and hold the button. Select **E-mail** from the drop-down menu.

The Save As dialog box appears and prompts you to save the file to your folder and key in a file name. It is recommended that you use either .jpg or .bmp as the file format.

Make sure that the check box "Send document to application after saving" has been selected/checked.

Make sure your preferred E-mail application is selected from the listed options.

Click Save to launch your E-mail editor with the attached image, then start typing your message and hit the Send button.

Copy button

Point the cursor on the Scan or Scan To button, then click and hold the button for a moment. Select **Copy** from the drop-down menu.

When the Copy dialog box appears, select your default printer or any alternative printer from the options, then specify the number of copies to be made. When you are ready to print, click OK to create a copy of the scanned material directly on your default printer.

The function of the Copy button is similar to the E-mail and OCR buttons.

OCR button

Point the cursor on the Scan or Scan to button, then click and hold the button for a moment. Select **OCR** from the drop-down menu.

When the Save As dialog box appears, key in a file name, then select .rtf, .txt, .xls, .htm, and pdf as the export file format.

Make sure that the check box "Send document to application after saving"

has been selected/checked. Now, choose the Word processing application from the options, and then click Save. The saved file can now be opened from your chosen application, and is ready to be edited.

To Web button

Point the cursor on the Scan or Scan to button, then click and hold the button for a moment. Select **To Web** from the drop-down menu.

ScanWizard 5 will check if the image size does not exceed the allowed file size. When the "Microtek ScanWizard 5 - Scan to Web" dialog box appears, save the file in your preferred folder, key in a file name, specify the file type, and choose the website address from the options given.

The scanned image will automatically be uploaded directly to the default/chosen website.

Control buttons

Windows



Macintosh



[Pan tool](#)

[Zoom controls](#)

[i \[Info\]](#)

[Arrow](#)

[Switch](#)

[Scanner info](#)

[Help \[?\]](#)

[Minimize](#)

[Exit](#)

Pan tool

Pans or moves around a magnified preview area

Zoom controls

(+) **Zoom in** button to magnify preview image
(-) **Zoom out** button to shrink preview image

i [Info]

The **Info** icon or status bar will show a summary of current configuration settings on the current image and also becomes a progress bar during scanning. Click this icon for more detailed configuration info.

Arrow

This is your button for resizing the preview window. Simply drag the **Arrow** icon (located at the bottom right corner of the panel) to adjust the size of the window.

Switch

This icon enables you to change/switch to the Advanced Control Panel and the Standard Control Panel, respectively.

Scanner info

Click the **Scanner info** icon to access the "Scanner Control and Scanner Information" options menu.

ScanWizard 5 is constantly in touch with your scanner, monitoring scanner availability and serviceability, as well as its make and mode. To see how your scanner is doing, simply click this icon from the title bar.

Help [?]

On-line help:

To access On-line help, click on the Help icon, then select **Help**.


Tutorial Guide:

To access the balloon tutorial, click on the Help icon, then choose **Tutorial Guide**.

About ScanWizard 5:


To learn more about the version and release date of your ScanWizard 5, click on **About** from the Help icon. The ScanWizard 5 splash screen will appear.


Minimize

Windows: To minimize ScanWizard 5, click on the **Minimize**  located at the top right corner of the Control Panel.

Macintosh: (Not available)

Exit

Windows: To close ScanWizard 5, click on **Exit**  located at the top right corner of the Control Panel.

Macintosh: **Exit**  is located at the top left corner of the Standard Control Panel.

Take note that when you exit, you quit from both standard and advanced modes of ScanWizard 5.

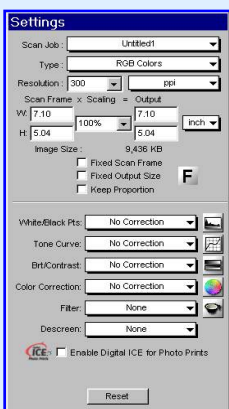
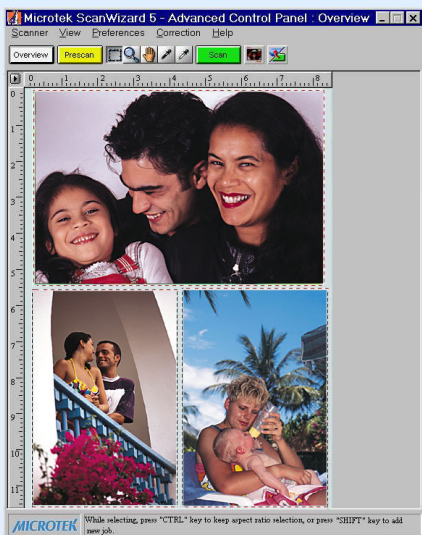


Advanced Control Panel

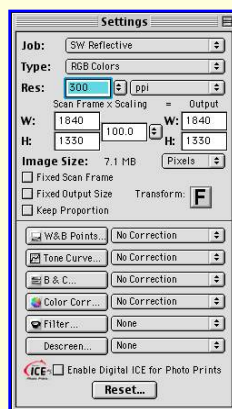
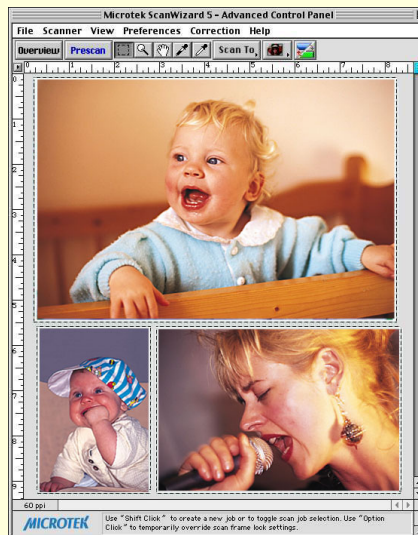
The **ScanWizard 5 - Advanced Control Panel** provides users the power to specify, correct, and improve the image at the scanning stage. Learn how to use the basic functions in the Advanced Control Panel to scan like a pro.

To learn more, click any of these four windows--related to your computer's Operating System (OS).

Windows



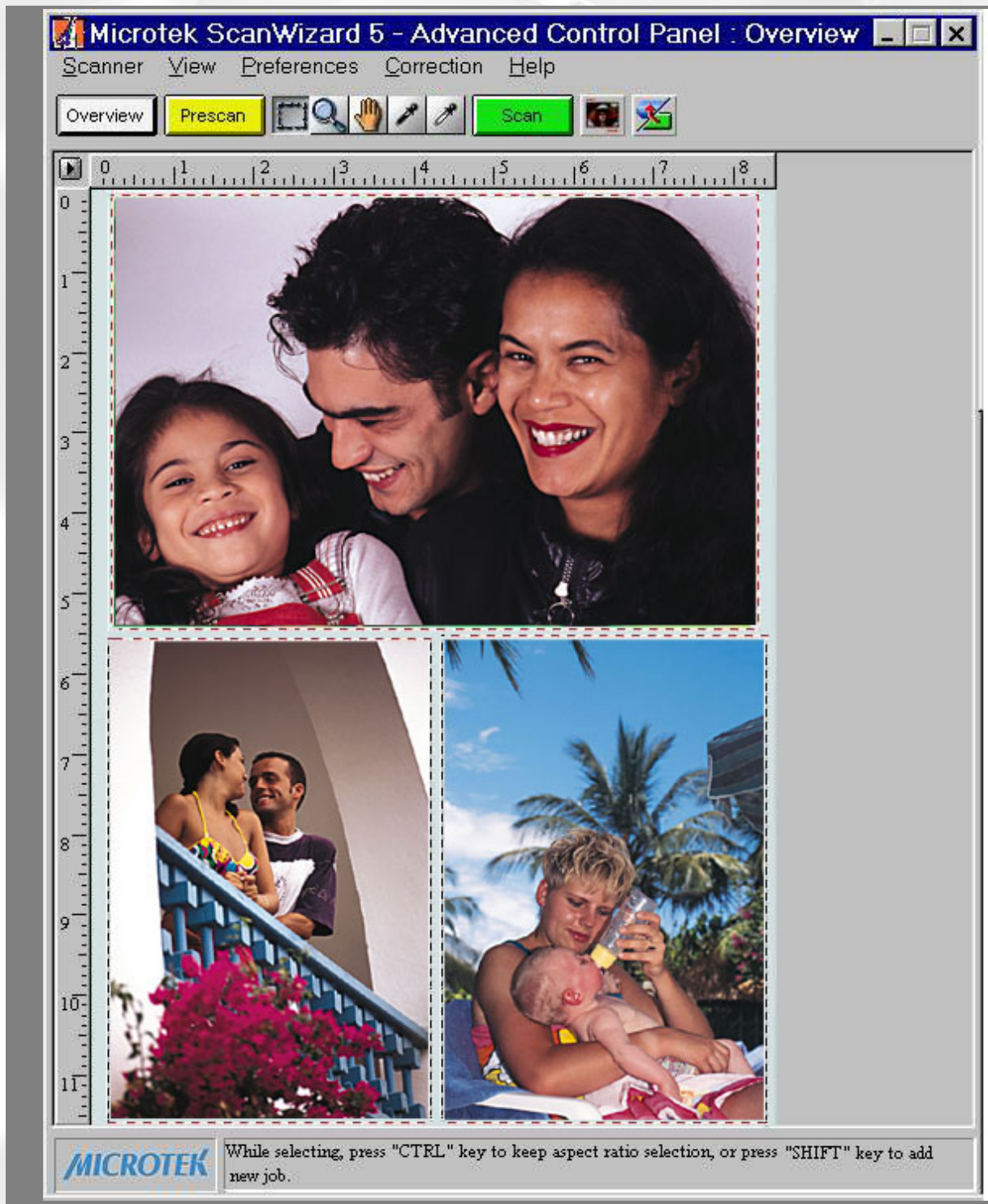
Macintosh



Advanced Control Panel

Preview window

To view information about the functions of the Advanced Control Panel, position the cursor over any button, icon, or bar on the panel. Click the grabber pointer to activate associated help information. Or select the topic that you wish to view from the links below: [Preview area](#), [Menu bar](#), [Control buttons](#), [Final Scanning buttons](#), and [Toolbar](#).



The Advanced Control Panel, Settings, Info, and Scan Job Queue windows appear when ScanWizard 5 - Advanced Control Panel is activated for the first time.

[Settings window](#)

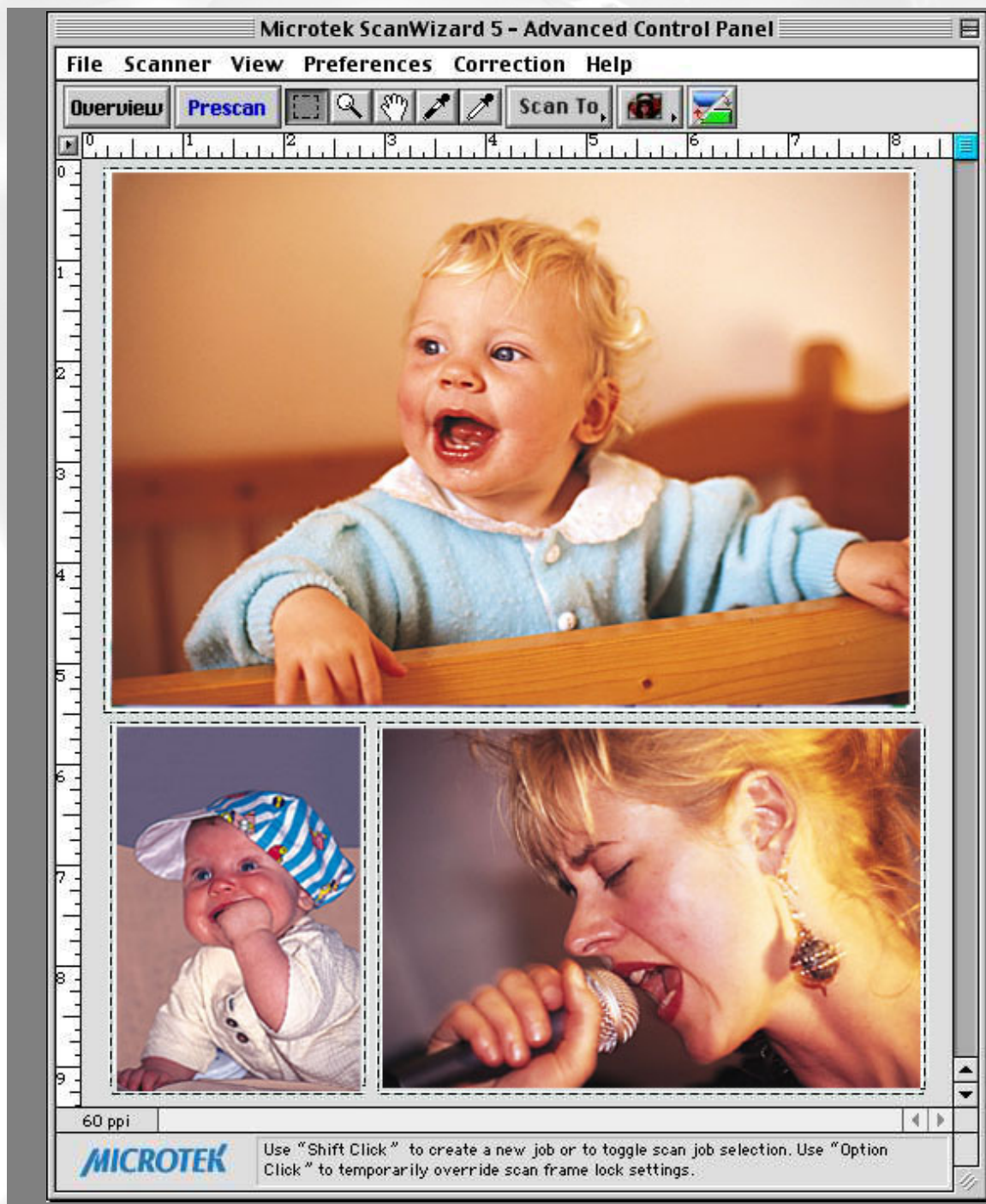
[Info window](#)

[Scan Job window](#)

Advanced Control Panel

Preview window

To view information about the functions of the Advanced Control Panel, position the cursor over any button, icon, or bar on the panel. Click the grabber pointer to activate associated help information. Or select the topic that you wish to view from the links below: [Preview area](#), [Menu bar](#), [Control buttons](#), [Final Scanning buttons](#), and [Toolbar](#).



The Advanced Control Panel, Settings, Info, and Scan Job Queue windows appear when ScanWizard 5 - Advanced Control Panel is activated for the first time.

[Settings window](#)

[Info window](#)

[Scan Job Queue window](#)

Advanced Control Panel

Preview window

The Preview window is the main window of the four windows. The Preview window is where your image appears after you click on the Overview or Prescan button.

- ▶ [Preview area](#) Preview image information
- ▶ [Menu bar](#) Scanner, View, Preferences, Correction, Help
- ▶ [Control buttons](#) Overview, Prescan, Scan Material, Switch, Unit of Measurement/Ruler, Exit, Minimize, Shrink
- ▶ [Final scanning buttons](#) Scan, Scan to, E-mail, Copy, OCR, To Web
- ▶ [Toolbar](#) Scan Frame, Zoom, Pan, Pickers

Preview area

The preview area is where the preview image appears.

The dimensions of the preview area vary, depending on your scanner model. The size of the preview area can be modified through the **Overview Setup** command in the Preferences menu. You can increase the size of the preview area to see more detail in your image, or you can reduce the preview area to fit more information on your monitor.

Menu bar

The menu bar includes the different menus for setting up the scanner.

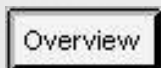
- ▶ [Scanner menu](#) To view the status and technical information about your scanner
- ▶ [View menu](#) To modify the ScanWizard 5 windows
- ▶ [Preferences menu](#) To customize how the image is processed
- ▶ [Correction menu](#) Contains the Advanced Image Correction items

▶ [Help menu](#) To access on-line help

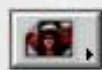
Control buttons

The Control buttons generate a specific action from the scanning software. The buttons include: Overview, Prescan, Scan Material, Switch, Unit of Measurements/Rulers, Status bar, Resize, and Exit.

Windows



Macintosh



[Overview](#)

[Prescan](#)

[Scan Material](#)

[Switch](#)

[Unit of Measurement/Ruler](#)

[Exit](#)

[Minimize \(Shrink for Macintosh\)](#)

Overview button

The **Overview** button creates a low-resolution preview.

Prescan button

The **Prescan** button creates a high-resolution preview.

Unit of Measurement/Rulers


The rulers on both sides of the preview window assist you in measurement or in checking the alignment of your image.

The **unit of measurement** in the ruler can be selected in two ways: in the Image Dimension controls located in the Settings window, or by clicking on the ruler unit button at the 0,0 point of the rulers in the Preview window.

Depending on your selection, the rulers can mark off measurement in these units: inch, centimeter, millimeter, point, and pixel. The pixel option is

dimmed if the selected resolution unit is lpi, and vice versa.

To select the unit of measurement for the rulers:

Click on the unit box in the Settings window, or click on the ruler unit button  at the 0,0 point of the rulers in the Preview window. When the submenu appears, select the unit of measurement.

Scan Material icon

Access the Scan Material menu by using the **Scan Material** icon, located to the left of the Switch button.

The appearance of the Scan Material icon changes, depending on whether your scan material is reflective, positive, or negative.



Appearance of the Scan Material Status icon when scanning reflective materials

If you are scanning reflective materials (such as photos or printed material), this is the appearance of the Scan Material icon. When you click on the icon and hold down the mouse, you will see the Reflective option checked.



Positive transparency or filmstrip

If you are scanning a positive transparency or filmstrip, this is the appearance of the Scan Material icon. When you click on the icon and hold down the mouse, you will see the Positive Film option checked.




Negative transparency or filmstrip

If you are scanning a negative transparency or filmstrip, this is the appearance of the Scan Material icon. When you click on the icon and hold down the mouse, you will see the Negative Film option checked.

Switch icon


This icon enables you to change/switch to the Advanced Control Panel and the Standard Control Panel, respectively.


Exit [X]

To close ScanWizard 5, click on the **Exit**  button located at the top right corner of the Control Panel for Windows, or select **Quit** from the File menu for Macintosh.

Take note that when you exit, you quit from both standard and advanced modes in ScanWizard 5.

Minimize/Shrink

Windows: To minimize ScanWizard 5, click on the **Minimize**  button located at the top right corner of the Control Panel.

Macintosh: To shrink Advance Control Panel, click on the **Shrink**  button located at the top right corner of the Control Panel.

Status bar

The status bar provides helpful tips when you click any button on the panel.

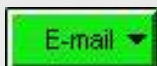
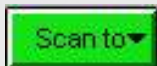
Resize

Simply drag the bottom right corner of the Advanced Control Panel to adjust the size of the Preview window.

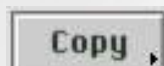
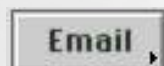
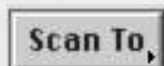
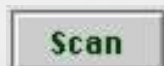
Final scanning buttons

One of ScanWizard 5's great features is the productivity tools under the Scan button. Click and hold the mouse button to activate the options menu and select either Copy, E-mail, OCR, or To Web.

Windows



Macintosh



[Scan](#)

[Scan to](#)

[E-mail](#)

[Copy](#)



[OCR](#)



[To Web](#)

Scan button

This is the default button when ScanWizard 5 - Advanced Control Panel is launched from an image-editing application. It performs the final scan and sends the scanned image (output) to the application that you are using.

Scan to button

When ScanWizard 5 - Advanced Control Panel is launched as a stand-alone program and is the default setting. This is also the default button on scanners with the "Go" button feature.

E-mail button

ScanWizard 5 automatically attaches the scanned image to your E-mail message.

Point the cursor on the Scan or Scan To (whichever was activated previously) button, then click and hold the button for a moment. Select **E-mail** from the drop-down menu.

The Save As dialog box appears and prompts you to save the file to your preferred folder and key in a file name. It is recommended that you use either .jpg or .bmp as the file format.

Make sure that the check box "Send to application after saving" has been selected/checked.

Make sure your preferred E-mail application is selected from the listed options.

Click Save to launch your E-mail editor with the attached image, then type your message and hit the Send button.

Copy button

Point the cursor on the Scan or Scan To button, then click and hold the

button for a moment. Select **Copy** from the drop-down menu.

When the Copy dialog box appears, select your default printer or any alternative printer from the options, then specify the number of copies to be made. When you are ready to print, click OK to create a copy of the scanned material directly on your default printer.

The function of the Copy button is similar to the E-mail and OCR buttons, but the image goes directly to your default or selected printer.

OCR button

Point the cursor on the Scan or Scan To button, then click and hold the button for a moment. Select **OCR** from the drop-down menu.

When the Save As dialog box appears, key in a file name, then select .rtf, .txt, xls, .htm, or .pdf as the export file format.

Make sure that the check box "Send document to application after saving" has been selected/checked. Then choose the word processing application from the options, and click Save. The saved file can now be opened from your chosen application and is ready to be edited.

To Web

Point the cursor on the Scan or Scan to button, then click and hold the button for a moment. Select **To Web** from the drop-down menu.

ScanWizard 5 will check if the image size does not exceed the allowed file size. When the "Microtek ScanWizard 5 - Scan to Web" dialog box appears, save the file in your preferred folder, key in a file name, specify a file type, and choose the website address from the options given. The scanned image will automatically be uploaded directly to the default/chosen website.

Note: If you have not created an account with iMira.com -- you can do so now by clicking the "Create a new account for photo Sharing" button from the same dialog box to enable access and to speed up the process of uploading images directly to the Web.

Toolbar

The Toolbar commands simplify the performance of certain tasks. The

Toolbar commands include Scan Frame, Zoom, Pan, and Pickers.

Windows



Macintosh



[Scan Frame](#)

[Zoom](#)

[Pan](#)

[Pickers](#)

Scan Frame tool

The **Scan Frame** lets you create a single scan frame or multiple scan frames in the preview image, which is the active area on which controls and commands can be applied.

The Scan Frame can also be used to create batch scans. The current scan frame is indicated by a marquee (cascading border). The current scan frame can be more easily distinguished if you turn on the Smoked Glass Background command (in the Preferences menu).

Zoom tool

The **Zoom** tool enlarges your view of the preview image, allowing you to set the scan frame with greater precision if you need to. Only your view of the preview image is changed; the actual output size of the image remains unaffected.

Each click of the Zoom tool magnifies or reduces image view by a factor of 2. Thus, the magnification levels increase from 100% to 200%, to 400%, and to the maximum of 800%.

Note: If the Info window is open, the zoom level will be indicated. This means you can also zoom in by selecting the appropriate zoom level in the Info window.

Pan tool



The **Pan** tool lets you scroll through a preview image, allowing you to move parts of the image into view.

The Pan tool can be used for zoomed-in images (enlarged through the Zoom tool), or images not completely displayed within the frame of the preview window (for instance, if your preview image is 7 inches wide and you resized the width of your overview/preview window to only 3 inches).

White / Black Point Picker tool

The Picker tools allow you to sample color from a particular area in an image, and are useful for designating shadow or highlight point.

The White Point Picker ( / ) lets you define the whitest reference point in the preview image. Once you have picked the whitest point, excessive white points are clipped off.

The Black Point Picker ( / ) lets you define the darkest reference point in the preview image. Once you have picked the darkest point, excessive black points are clipped off.

With the Picker tools, you can determine the color values for any pixel in an image. When you click on the White/Black Picker and pan over a pixel, the value for that pixel is displayed in the Info window, based on the sample size selected in the Info window. Pixel value information is useful especially when you are making color adjustments based on color value.

To change the sample size of the Picker tool:

1. Open the Info window by choosing the Show Info Window command in the View menu.
2. Click on the **Color Meter Options** button located to the right of the RGB values in the Info window.
3. Choose your options.

Select the sample size options from the drop-down list. For instance, the 1 by 1 option will display the value of one pixel — the one in the middle of the Color Output Meter. The 3 X 3 option reads the average value of a 3-pixel by 3-pixel area.

To display color information for a pixel or an averaged area:

1. Click on the Picker tool.

2. As you pass over a point in the image, observe the Info window — the RGB values will be displayed in the **Color Output Meter**. These values are in turn based on the sample size you selected.



Advanced Control Panel > Preview window

Menu bar

- ▶ [Scanner menu](#)
- ▶ [View menu](#)
- ▶ [Preferences menu](#)
- ▶ [Correction menu](#)
- ▶ [Help menu](#)
- ▶ [File menu](#) (for Macintosh only)

Scanner menu

The Scanner menu includes the following:

- ▶ [Scanner Model](#)
- ▶ [Get Current Scanner Info](#)
- ▶ [Scanner Probe](#)
- ▶ [Scanner Driver Manager](#) (for Macintosh only)

Scanner Model

The top of the scanner menu displays the scanner model you are using and its Scanner ID. If you have multiple scanners on your system, all the scanners are shown with their respective Scanner IDs, and the current scanner is indicated by a check.

Only one scanner can be accessed at a time. To switch among various scanners, select the scanner to be used.

Get Current Scanner Info

This command provides information about your current scanner. When you choose this command, a dialog box appears showing the scanner model, Scanner ID number, and firmware version.

Scanner Probe

This command displays the detected scanner devices.

If your scanner does not show in the list, make sure your scanner is connected and turned on, then click on the Probe button in the dialog box.

Scanner Driver Manager (for Macintosh only)

The Scanner Driver Manager keeps track of the scanners being used on your system and the interface bus/ID numbers occupied by the scanners. By keeping a record of this information, the Scanner Driver Manager allows ScanWizard 5 to start up more quickly, as there is no need to look for devices on the other interface buses.

To find a scanner:

Follow the hardware installation instructions for connecting a scanner to your system. Then you can use the Scanner Driver Manager in ScanWizard 5 to find the connected scanner in your scanner list.

1. Go to the Scanner menu in the Preview window, and choose Scanner Driver Manager. A dialog box will appear showing the connected scanner and the corresponding interface ID number.
2. Click the Find Scanners button. In case you have added new

scanners, the newly found scanners will be appended to the scanner list. If a scanner on the list is not detected (not turned on, not ready, or removed from the system), the model will not be removed from the list but will have a question mark before it.

3. Click the Close button to close the dialog box.

To remove a scanner from your scanner list:

1. Go to the Scanner menu in the Preview window, and choose Scanner Driver Manager.
2. Click the Remove button to delete the scanner model from your scanner list.
3. Click the Close button to close the dialog box.

Update List

This command refreshes the SCSI buses and updates the Scanner menu with the current scanner list.

This is most useful when ScanWizard 5 is brought up but one of the scanners is not turned on or has not become ready.

Only the current scanner list is used, and ScanWizard 5 will not find or add any new scanners to the scanner list. This is a short-cut command without invoking the Scanner Driver Manager.

View menu

The View Menu includes the following:

- ▶ [Overview or prescan image](#)

- ▶ [Resize window to fit](#)
- ▶ [Bring Settings window to front](#)
- ▶ [Show/Hide \(Info, Scan Job Queue windows, and Status bar\)](#)
- ▶ [About](#) (for Macintosh only)

Overview Image and Prescan image

These commands select the image obtained with the Overview and Prescan buttons, respectively, and allow you to switch between both viewing modes.

The dimensions of the Overview image and Prescan image are controlled by the [Overview Setup](#) command and the [Prescan Setup](#) command, respectively. For more details, see these commands under the [Preferences](#) menu.

To obtain the Overview image:

With the image(s) placed on your scanner, click the Overview button.

To obtain the Prescan image:

1. Click the Scan Frame tool.
2. Select the area to be prescanned by drawing a frame around the area in the Overview image.
3. Click the Prescan button.

To obtain multiple Prescan images:

1. Define your scan jobs in the [Scan Job Queue window](#).

2. To select multiple scan jobs, press the Shift key and click on the jobs to be selected in the Scan Job Queue or Preview window.
3. Click the Prescan button in the Preview window. Multiple prescans are created in the process, corresponding to the number of scan jobs defined, and you can then switch among the various prescan images.

Resize Window to Fit

This command resizes the Preview window, which you may find helpful for conserving space on your desktop monitor especially after enlarging the Preview window.

To verify the zoom level, open the Info window (choose Show Info Window command from the View menu), and look up the zoom level.

Bring Settings Window to Front

This command brings the Settings window to the forefront, which is useful if you have the Settings window hidden behind other windows or if you have expanded your Preview window such that it hides the Settings window in the background.

Show/Hide windows

These commands allow you to switch between showing or hiding the Scan Job Queue and the Info windows.

To use this feature, choose the correct command from the View menu for viewing a window. When the window appears, you can hide it by choosing the particular Hide command for it.

About (for Macintosh only)

This command displays the ScanWizard 5 splash screen and shows

program version and copyright information.

Preferences menu

The Preferences menu includes the following:

- ▶ [Scan Material](#)
- ▶ [Color Matching Setup](#)
- ▶ [White/Black Points Setup](#)
- ▶ [Cursor Auxiliary Lines](#)
- ▶ [Overview Setup](#)
- ▶ [Prescan Setup](#)
- ▶ [Monitor Gamma Setup](#) (for Windows only)
- ▶ [Invert](#)
- ▶ [More...](#)
- ▶ [Retain Scan Module after Scan](#) (for Macintosh only)

Scan Material

This command allows you to select your scan material, which can be one of the following:

- Reflectives, such as photographs or prints.

- Positives, such as slides.
- Negatives, such as the negative film you use for your camera.

The default scan material depends upon the scanner you are using, and the choices available to you in the Scan Material submenu will also depend on your equipment.

If you are scanning negatives or positives, make sure you specify the correct scan material, or you will get inaccurate scanning results.

To select the scan material:

1. Choose the **Scan Material** command in the Preferences menu. From the submenu that appears, select your scan material.
2. Alternatively, you can also click the [Scan Material icon](#) (adjacent to the Switch button), and then choose the correct scan material from the drop-down menu that appears.

Color Matching Setup

Color Matching is an important feature of ScanWizard 5 that ensures color is displayed consistently — from the initial input stage when an image is captured by the scanner, to the final output stage when the image is output to your monitor or printer (through either the Kodak CMS or Apple ColorSync™ technology). Color matching was developed to allow an equivalent "mapping" of colors from one device or from one color space to another, ensuring that no major color shifts occur in the transference process.

To use the ScanWizard 5 color matching function:

1. Set up the Kodak CMS and Apple ColorSync features correctly at the time that ScanWizard 5 is installed. For more information on this procedure, refer to your Kodak or Apple system documentation.

2. The first time you launch ScanWizard 5, you will be prompted to set up color matching for your scanner. You may also access the color matching parameters for ScanWizard 5 at any time in the future, by choosing the Color Matching Setup command in the Preferences menu. ScanWizard 5 includes several industry-standard ICC color profiles.

Display using monitor compensation

This box pertains to how your monitor displays color, relative to the RGB Destination color space. It is best to have this box checked so that there are no unexpected color shifts between your selected RGB Destination space and your monitor.

Monitor

Windows: This feature lets you select the type of color monitor that is used for displaying RGB data. The monitor profile will be applied only when "Displaying using monitor compensation" option is checked.

Note: If the available monitor types do not include the one you have, select Generic P22 or Generic EBU. These two profiles are suitable for most monitors.

Macintosh: The monitor selection shown here is the monitor set in your Apple ColorSync Control Panel.

To verify this information, go to your Apple Menu, select Control Panel, then Color Sync. Your selected monitor will be shown, which should be the same as the entry in this dialog box.

Note: This setting only affects how the image is shown on the screen — not the final scanned image.

RGB Color Matching

This box should generally be checked unless you want to scan raw color data, in which case you lose the compensatory effects of the Color Matching system. On the other hand, if this box is unchecked, all images will be scanned without any color matching processing.

Note: It is not desirable to scan in raw data and then perform ColorSync data conversion, which will not generate the correct CMS effect.

RGB Destination

Windows: This feature lets you select the RGB output device (e.g. display monitor, or RGB-based printer) for matching RGB Color family images (including RGB colors, 48-bit RGB colors, and 256 colors image types).

Macintosh: This feature lets you select the ICC profile in the ColorSync profile folder for outputting images to the RGB color space.

You may select from monitor, RGB printer (e.g., inkjet printers), a special color space, or the Adobe Photoshop 5.0 internal color space profile. For Photoshop 5.0 users, this should always be the same as your RGB working space as defined in the Photoshop 5.0 RGB Setup.

Color Enhancement (for Windows only)

This box has two options: Automatic and None. Before selecting the "Automatic option, the RGB Color Matching option should be checked first. If the Automatic option is selected, a color enhancement algorithm applies to the scanned image, and the resulting image appears brighter, more realistic, and more

saturated. If the "None" option is selected, the scanned image will appear as similar as the original.

Info/Profile Information button

This lets you get information on currently used ICC profiles.

Preview check box (for Macintosh only)

This immediately updates the Preview window image when a new color profile is selected. This will reflect colors consistent with the newly selected profile.

White/Black Points Setup

The White Point is a reference point that specifies the lightest area in an image. The Black Point is the darkest reference area.

Auto White Point Clipping

This lets you set the percentage of pixels in the highlight region to be truncated. Effective only when "Auto White/Black point" option is selected in the AIC dialog box.

Auto Black Point Clipping

This lets you set the percentage of pixels in the shadow region to be truncated. Effective only when "Auto White/Black point" option is selected in the AIC dialog box.

Minimum Output level

This lets you set the minimum output level of the Black Point. The higher the percentage value, the lower the contrast.

Maximum Output level

This lets you set the maximum output level of the White Point. The lower the percentage value, the lower the contrast.

Cursor Auxiliary Lines

This command allows you to create horizontal and vertical grid lines with your cursor to help define a scan frame precisely. Using the grid lines, you can also read the measurements of your ruler more easily.

To use this feature:

1. Choose the **Cursor Auxiliary Lines** command in the Preferences menu. From the submenu that appears, select how the cursor lines will appear.
 - On both x (horizontal) and y (vertical) axes
 - On x axis only
 - On y axis only
 - None (no cursor lines)
2. Click on the **Scan Frame** tool.

To see how the cursor lines work, draw a scan frame. Click on the top left corner of the image as your starting point, then drag down diagonally to form a scan frame. As you draw the scan frame, cursor lines will appear to help you draw the scan frame precisely. When you release the mouse, your scan frame will be aligned with the cursor lines.

Overview Setup

This command lets you set the area you want to be overviewed of the scan bed, and provides some overview options as well.

By default, ScanWizard 5 overviews the maximum scan area as determined by your scanner model's bed size. You can, however,

customize the overview area so that the scanner consistently overviews only the specific dimensions you have in mind. For example, if your maximum scan area is 8.5" x 14", you can customize the overview area so that it consistently overviews, say, 4" x 8" of the bed size.

As a rule of thumb, it is best to use the default maximum settings. You should change the overview area only if your subsequent overview is too large to be shown in entirety, or too small for reliable previewing. A smaller overview area will increase the overview resolution for clearer image viewing. You may also wish to change the size of your overview to improve performance. Generally, a shorter overview time results from the scanner motor travelling at a lesser distance.

Fast Overview/Fast

The Fast Overview/Fast option supports faster scanning. If Fast Overview is unchecked, the Overview scanning speed is slow, but a better overview image quality is obtained.

Overview Area

Choose Maximum Size, other fixed dimensions, or choose Custom Size, then enter the required dimensions. You may also set the Overview Area by dragging the dotted borders.

Unit

This lets you set the ruler units such as inch, cm, and mm.

Preview/Overview button

Click this button to get a scanning preview, or to do a new overview. This is helpful if you have specified custom settings or changed the dimensions.

Prescan Setup

This command allows you to set the parameters for scanning a prescan image. The major difference between Overview and Prescan is that the Overview button scans the area specified in the Overview Setup command for getting a low-resolution preview image, whereas the Prescan button only scans the selected scanning frame, resulting in a more detailed preview image. When the Prescan Setup dialog box comes up, click on the option you need or specify your parameters.

Fast Prescan

If checked, you get a coarser or lower-quality image is obtained but at a faster scanning speed. If unchecked, a better- quality image is obtained but at a slower scanning speed.

Prescan Image Margin

This option allows you to specify margin around the scan job in the first place, subsequently you can adjust the scan frame slightly in the Prescan mode. Available options are: None, Small, Medium (default), and Large.

Prescan Image Dimension

This option allows you to specify the size of the prescan image. Available options are: Full screen, 75% screen, 50% screen, and Fit Preview Window. Size of the Prescan image does not necessarily fit into the specified option, as it is based only on the height/width ratio to get the maximum covered area.

Monitor Gamma Setup (for Windows only)

The **Monitor Gamma Setup** command lets you compensate for the linear intensity of the monitor, allowing for consistency between the preview image and the final scanned image.

Monitor Gamma

Check this box to enable monitor gamma value setting.

When the monitor gamma option is checked, click the up/down arrow buttons to make the gray level of the boxes as close as possible. Click OK to confirm.

Invert

This command creates a negative effect to an image. The Invert effect is applied to all scan jobs, not just the selected scan job.

When an image is inverted, the brightness value of each pixel is converted to the inverse value on the 256-step color values scale. For example, a pixel in a positive image with a value of 255 is changed to 0, and a pixel with a value of 5 is changed to 250.



Before



After

To use this feature:

Choose the **Invert** command in the Preferences menu. A check (V) appears next to the command when it is enabled.

Retain Scan Module after Scan (for Macintosh only)

This command allows you to keep the ScanWizard 5 interface running after scanning is completed and after the image has been delivered to your image-editing software. This way, there is no need to go back to the File-Acquire process to start ScanWizard 5 all over again.

Note: This command can be used only in applications (such as Adobe Photoshop) that allow you to retain the scan module after a scan is completed. Some applications may not retain the scan module even if this option is enabled.

To use this feature:

Choose the command **Retain Scan Module after Scan** in the Preferences menu. A check (v) appears next to the command when it is enabled. If you wish to see the scanned image in your image-editing software after scanning is completed, you will need to quit ScanWizard 5 to see the image.

More... command

The **More...** command lets you specify, miscellaneous parameters.

Keep Overview Image

If checked, the image which is prescanned in the Overview command remains on the screen until the next image acquisition is performed. If unchecked, the overview image is deleted when you exit ScanWizard 5.

Keep All Prescan Images

If checked, the image which is prescanned in the Prescan command remains on the screen until the next image acquisition is performed. If unchecked, the prescanned image is deleted when you exit ScanWizard 5.

Confirmation Message (for Windows only)

If checked, a confirmation message appears when image effects such as Rotate or Flip are applied. If unchecked, no confirmation message appears.

Smoked Glass Background

This command helps in distinguishing the current scan frame from

the rest of the preview image for greater visibility of the current scan frame.

With the Smoked Glass feature turned on, the part of the image within the current scan frame will stand out, while the rest of the image (the “irrelevant” material) is relegated to a background resembling smoked glass.



Before



After

The Smoked Glass Background, helps you focus on the part of the image within the current scan frame, and is particularly helpful when you are editing a scan frame or applying image-correction controls. This way, the changes can be seen more clearly and stand out from the rest of the material. (See the next section for more details.)

Scan Quality selection

During a scan, the following selections are available: Speed, Quality, and Best Quality.

Speed:

Higher scan speeds are obtained, but lower image quality results in the process.

Quality:

If “Quality” option is selected, the scanning carriage slows down

while the CCD is exposed to the light source. As a result, a better image is achieved. Most scan materials can get a quality scan if this mode is chosen.

Best Quality:

This option is available for 10- or 12-bit scanners only. The CCD exposure scheme is much the same as the "Quality" option, but image correction is first applied to the 10- or 12-bit image, then the image is converted to 8-bits. RGB Colors (48-bit) image is always scanned in Best Quality option regardless of the option selected. This option is useful for scanning originals of lower quality and for performing image correction without losing detailed information.

Note: This option is useful for scanning Line art images to keep edges smooth; e.g., edges of a logo.

Working Directory

This lets you specify a place to store temporary working files (e.g., scan job files) during a scanning session. If the directory you specify is not found or does not exist, a warning message appears, and ScanWizard 5 will create one automatically for you.

If the computer is shared by several users, each user may specify a particular working directory to use..

Memory Usage (for Macintosh only)

This option controls the way ScanWizard 5 uses memory. Three options are provided:

Auto:

This is the default setting. ScanWizard 5 maximizes memory usage from both system and application, looking for memory first from the system heap and then from the application heap.

Application:

ScanWizard 5 will only use the memory inside the application heap as its image buffer. Make sure you allocate a large number of

memory in your application for this purpose; otherwise, ScanWizard 5 may not have enough memory to run. Use this option only if you do not want ScanWizard 5 to use memory outside your application.

System:

ScanWizard 5 will use the memory in the system heap as its image buffer, with a limited amount of memory used in the application heap. This option is best if you have only a small memory allocation for your application but a large amount of system memory.

Scratch Directory (for Macintosh only)

The scratch directory is the folder where ScanWizard 5 creates temporary files; these files are deleted at the end of scanning session. You should change to a different folder only if the scratch directory is located in a disk volume that is too small for scanning operations. To specify a new scratch directory, choose Other Directory... from the menu.

Correction menu

The **Correction Menu** lets you use the [Advanced Image Correction \(AIC\)](#) features of ScanWizard 5. The commands in the Correction menu correspond to the AIC buttons in the Settings window.

Help menu

The **Help** menu lets you access on-line help for ScanWizard 5, and gives you information on the ScanWizard 5 scanning software.

File menu (for Macintosh only)

The **File** menu contains one submenu — the Quit command, which lets you exit ScanWizard 5.



Advanced Control Panel

Settings window

Settings

Scan Job :

Type :

Resolution :

Scan Frame x Scaling = Output

W:


H:


Image Size : 9,436 KB


Fixed Scan Frame


Fixed Output Size


Keep Proportion

White/Black Pts: 


Tone Curve: 

Brt/Contrast: 

Color Correction: 

Filter: 

Descreen:

 Enable Digital ICE for Photo Prints

Shows the [current scan job](#), [image types selected](#), [output resolution](#) and [unit](#) options.

[Scan Frame settings](#), [Scaling](#), [Output settings](#), and [Unit of Measurement](#).

[Scan Frame options](#) and [Flip/Transform](#) tool

[Advanced Image Correction \(AIC\)](#) tools:

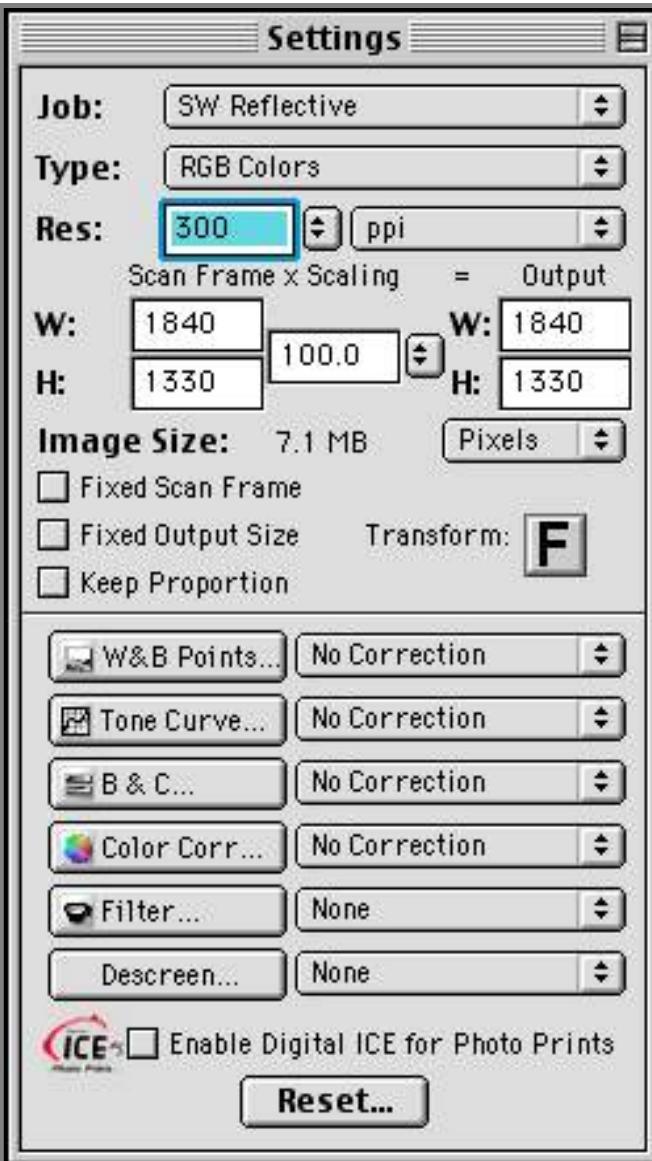
- [White/Black Points](#) tool for adjusting highlights
- [Tone Curve](#) tool for controlling gray intensity
- [Brightness and Contrast](#) tool for balancing light/dark shades
- [Color Correction](#) tool for adjusting color saturation
- [Filter](#) tool for applying/creating special

effects

- [Descreen](#) tool for removing moire patterns when scanning magazines/newspapers
- [Fast JPEG Quality](#) is a compressed true color image which takes up less disk space.
- [Enable Digital ICE for Photo Prints](#) enables Digital ICE-implemented scanners to automatically remove scratches, cracks, creases, and other defects of the scanned images, resulting in an improved image.

Advanced Control Panel

Settings window



Shows the [current scan job](#), [image types selected](#), [output resolution](#) and [unit](#) options.

[Scan Frame settings](#), [Scaling](#), [Output settings](#), and [Unit of Measurement](#).

[Scan Frame options](#) and [Flip/Transform](#) tool

[Advanced Image Correction \(AIC\)](#) tools:

- [White/Black Points](#) tool for adjusting highlights
- [Tone Curve](#) tool for controlling gray intensity
- [Brightness and Contrast](#) tool for balancing light/dark shades
- [Color Correction](#) tool for adjusting color saturation

- [Filter](#) tool for applying/creating special effects
- [Descreen](#) tool for removing moire patterns when scanning magazines/newspapers
- [Image Quality](#) is a compressed true color image which takes up less disk space.
- [Enable Digital ICE for Photo Prints](#) enables Digital ICE-implemented scanners to automatically remove scratches, cracks, creases, and other defects of the scanned images, resulting in an improved image.

Advanced Control Panel

Settings window

The **Settings window** contains the parameters for outputting your scanned image for the current scan job and includes the advanced image correction tools of the program.

- ▶ [Scan Job/Job](#)
- ▶ [Image Types](#)
- ▶ [Resolution](#)
- ▶ [Resolution Unit](#)
- ▶ [Scan Frame settings](#)
- ▶ [Scaling](#)
- ▶ [Output Settings](#)
- ▶ [Scan Frame options](#)
- ▶ [Flip/Transform](#)
- ▶ [Unit of Measurement](#)

Scan Job/Job

This shows the current scan job as indicated by the Scan Job window and corresponds with the selected image in the Preview window.

Image Types

ScanWizard 5 allows direct scanning in the following color spaces described below. The desired color space in ScanWizard 5 can be selected in the **Type** box in the Settings window.

RGB Color

RGB images use three colors (Red, Green, and Blue) to reproduce up to 68.7 billion colors. Because scanners and monitors are RGB devices, the RGB color space is the most commonly used space for capturing and displaying images. ScanWizard 5 offers standard RGB and 48-bit RGB color selection, with the 48-bit option available for the Microtek professional pre-press scanners.

Grayscale

Grayscale images use shades of gray to simulate gradations of color or tonal values, and contain 8 bits per pixel. The Grayscale 16-bit option is provided in ScanWizard 5 for professional pre-press scanners.

Web/Internet Colors

This mode is useful for displaying images on the Web or Internet. Output for the Web/Internet color mode in ScanWizard 5 is 8-bit, 256 indexed color images.

Line Art

Line Art images are made up of one bit of color (black or white) per pixel. Few editing options are available in this mode, but this mode is useful for images consisting purely of black and white or even single colors, such as mechanical drawings, blueprints, or fine-line illustrations.

Black-and-White Diffusion

This is a single-bit black-and-white image dithered with error diffusion. The black and white pixels are arranged in a way as to “fool” the eye into seeing gray.

256 Colors (Default) / 256 Colors (Custom)

These are single-channel images (8 bits per pixel) that use a color lookup table containing up to 256 colors. The file size is smaller for images in this mode. As an initial setting, selecting 256 Colors (Default) uses an Adaptive palette with Diffusion. If the 256 Colors (Custom) option is selected, the dialog box will appear.

Palette: The Palette option lets you choose the method for creating the color palette table. Uniform uses a 6-6-6 fixed color palette table. Adaptive (default) creates a color palette table from the more commonly used areas of the color spectrum that appears in the image.

Dither: The Dither option can improve the color quality of the 256-indexed color image for photographs or continuous-tone images, using a technique of mixing available colors to simulate missing colors. None provides no dithering. Pattern uses a structured pattern to simulate missing colors. Diffusion (default) uses the error diffusion technique to dither colors and produces the best quality for 256 colors.

Resolution/Res

Resolution/Res is the sampling of image pixel per measurement unit or the amount of pixel information stored in an image. Together, the image resolution and dimensions determine the file size of the image, which is measured in kilobytes (KB) or megabytes (MB).

The resolution of an image is important in determining the quality of the output image. Resolution is also directly related to file size, and the higher the resolution, the larger the resulting file size will be.

When dealing with resolution, remember to distinguish between optical resolution and interpolated resolution.

Optical resolution is the "real" resolution as measured by the

scanner's optics. Interpolated resolution is software-enhanced resolution and can be useful for enlarging very small images or for printing line art to obtain superior results.

Resolution Unit

The unit of measurement for resolution is in ppi (pixels per inch) or lpi (lines per inch). Lpi settings are dimmed if the ruler unit is in pixels.

To select your resolution unit:

- Choose **ppi** if your scanned images are intended for on-screen display; you do not have to go higher than the target resolution of your monitor (usually 72 dpi for Macintosh and 96 dpi for Windows). A higher resolution will simply increase the file size of your image without any perceptible improvement in image quality.
- Choose **lpi** if your scanned images are to be printed. If you choose 1x, for instance, your scanned image will be printed at 133 lines per inch, resulting in a 133-dpi image. At 1.5x, the image will be printed at 199.5 dpi; and at 2x, the image will be printed at 266 dpi. The Custom option allows you to set an lpi value of your own specification.

In choosing an appropriate lpi value, keep in mind that if the resolution is too low, pixelization of the image results, in which the Postscript language uses a single pixel's color values to create more than one halftone dot. If the resolution is too high, the file size becomes unwieldy and your file ends up containing more information than the printer needs, slowing down the printing process.

Scan Frame settings

The **Scan Frame** settings (**width** and **height**) provide controls relating to the output image dimensions.

To specify your settings, enter the dimensions manually in the width and height edit boxes; or use the Scan Frame tool to define or resize your scan frame. Changes made in the Preview window are automatically displayed in the Scan Frame setting edit boxes.

Scaling

Scaling lets you create larger or smaller images from the original image. Take note of the following:

- Keep the scaling at 100% if you are outputting at the same size (e.g., a 4" x 5" original to be output at the same size).
- Reduce the scaling if you are outputting your image at a smaller size (e.g., a 4" x 5" original to be output to 2" x 2.5"). Increase the scaling if outputting at a larger size.

To choose the scaling percentage, click the arrow next to the scaling box, or enter a value in the scaling edit box.

Output Settings

The **Output** settings (**width** and **height**) represent the dimensions of the image when it is output (to either monitor or printer). If the size of the image to be output is different from the size of the original image, adjust the scaling percentage, or manually increase/decrease the output values accordingly.

Scan Frame options

The Scan Frame options include Fixed Scan Frame, Fixed Output Size, and Keep Proportion.

Fixed Scan Frame

This option lets you lock in the settings of your scan frame, so that the width and height dimensions of the frame are always fixed no matter where you move the frame in your preview image.

If you know the exact input size for your image, or if you wish to “lock” the settings of your scan frame to a particular size, enter the Scan Frame width and height values first, then check Fixed Scan Frame. Your scan frame will be fixed at those values. So even if you move the scan frame around the preview image, the dimensions of the frame itself will remain unchanged.

Fixed Output Size

When the Fixed Output Size option is checked, the values specified for output width and height remain fixed. If any of the input values are changed, the scaling will be automatically adjusted proportionally to maintain the output dimensions as defined.


If you know the exact output size for your image, enter the output width and height values first, then check Fixed Output Size. The image will then be scanned and output at the values specified.

Keep Proportion

When the Keep Proportion option is checked, the width and height values of the image are kept in proportion despite changes made to either setting. This preserves the aspect ratio of the image.

This option is automatically checked when either “Fixed Scan Frame” or “Fixed Output Size” is selected.

Flip/Transform

The **Flip/Transform** button  allows you to rotate and/or flip the image at increments of 90 degrees.

The effects of the Flip/Transform button are seen only after you click the Scan button and scan the image. The effects are not shown in the Preview or Overview modes.

To use the Flip/Transform command,

1. Click on the Flip/Transform button in the Settings window.
2. From the options that appear, choose the degree of rotation you wish.
3. Click the Scan button in the Preview window. When the image is scanned, it will be rotated or transformed according to the selected option.

Unit of Measurement

The **unit of measurement** lets you select the desired unit (inch, cm, mm, point, pixel, pica) for your image dimensions.



Important: Make sure you select the correct unit of measurement before entering any of the values for width or height in the Scan Frame Settings or Output Settings.

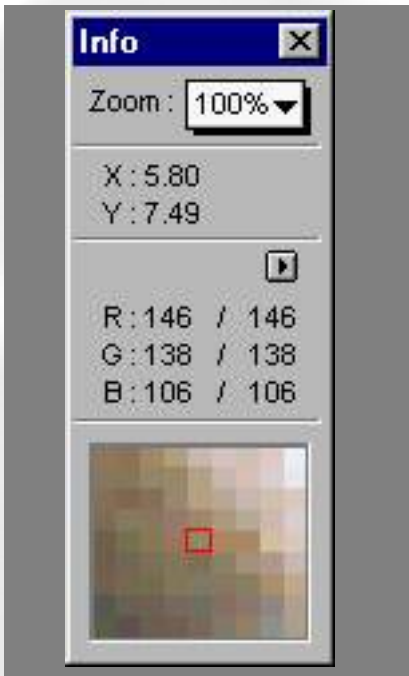
Additional Notes

- When none of the Scan Frame options are checked, all five edit boxes are enabled, allowing you to edit or enter values into any of the boxes.
- The Fixed Scan Frame and Fixed Output Size options are mutually exclusive. This means that only one of the options can be checked at a time; checking another option will automatically uncheck the other.

Advanced Control Panel

Info window

To view a brief information regarding this window, position the cursor  over the desired choice, and then double-click the grabber pointer  to activate its related pop-up information dialog box.





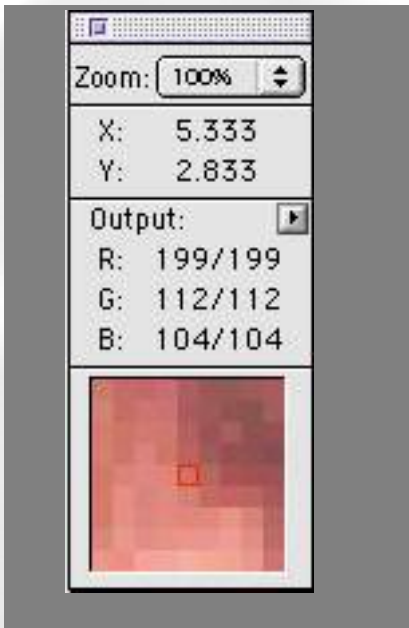
For a more details, select the topic you wish to view from the links below:

- [Zoom Level Display](#)
- [Mouse Cursor Position](#)
- [Color Meter Options](#)
- [Color Output Meter](#)
- [Sample Display Area](#)

Advanced Control Panel

Info window

To view a brief information regarding this window, position the cursor  over the desired choice, and then click the grabber pointer  to activate its related pop-up information dialog box.



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- [Color Output Meter](#)
- [Sample Display Area](#)

Advanced Control Panel

Info window

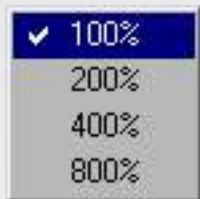
The **Info window** provides information on the cursor and the preview image. It also allows you to change zoom levels directly, in much the same way as using the [Zoom tool](#) in the Preview window.

The Info window is a "floating window" and does not appear when you start up the scanning software. To display the Info window, click on the Show Info window command in the View menu (in the Preview window).

Using the Zoom Level Display

The **Zoom Level Display** magnifies your view of an image, much like the Zoom tool in the Preview window.

The magnification factor in both Zoom Level Display and the Magnifying Lens tool is by a factor of 2. Thus, the magnification levels increase from 100% to 200%, to 400%, to 800%.



To use the Zoom Level Display:

Click on the Zoom Level box. From the drop-down menu that appears, select your zoom or magnification level.

Using the Mouse Cursor Position

The **Mouse Cursor Position** shows you the cursor position on the x (horizontal) and y (vertical) coordinates of the axis. This feature is useful for operations that require very precise measurements and

alignment.

Using the Color Output Meter

The **Color Output Meter** is useful if you wish to adjust the shadow and highlight points of an image.

As you pass over a point in the image, the Color Output Meter will show the appropriate RGB values of that point in the image. The significance of the numbers is explained below.


- There are two numbers shown in the Color Output Meter. The first number represents the raw color data taken by the scanner; the second number represents the resulting value after color correction or image enhancement is applied to the image.
- The values can be anywhere from 0 to 255, with 0 as the black point, 255 as pure white, and all other values in between corresponds to shades of varying degrees between black and white.
- The values as a whole represent color Info for the sample size selected in the Color Meter Options button (discussed below). For instance, if you chose 3 x 3 as your sample size and your R value reads 23, that shows your red value of 23 is the average of a 3-pixel by 3-pixel area.

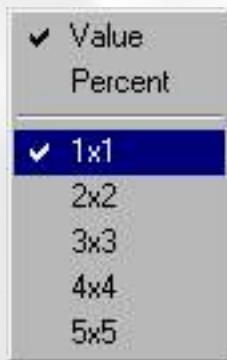
Pixel-value Info is useful especially if you are making color corrections based on color values. Knowing this, you can modify the shadow and highlight points of an image, then come back to the same point in the image, and verify through the Color Output Meter that the RGB values have indeed changed.

Using the Color Meter Options button

The **Color Meter Options** button provides options for choosing how extensively the color information will be read — whether the color information will apply to a pixel, a 2-pixel by 2-pixel area or wider

(maximum 5-pixel by 5-pixel area).

When you click on the Color Meter Options button , the drop-down menu below appears:



Value and Percent

- If you choose Value, the numbers in the Color Output Meter represent the values in the 0-to-255 pixel scale. For instance, an R value of 23 indicates that the sampling size selected has a red color value of 23. Value is calculated by multiplying the percentage by the constant 255 (value = 255 x percent).
- If you choose Percent, the numbers represent the percentage of the maximum intensity of the pixel. For instance, a G value of 35% indicates that the sampling size selected has a green color value of 35 percent intensity (out of 100 percent). Percent is calculated by dividing the constant 255 by the value (percent = 255 ÷ value).

Color Meter Options

This determines the expanse of color information to be made available. For instance, if you choose 5 x 5 as your sample area, this means your RGB values will represent color information for a 5-pixel by 5-pixel area. If you choose 1 x 1, the color information pertains to a single pixel — the one shown in the middle of the Pixel Display.



Using the Sample Display Area

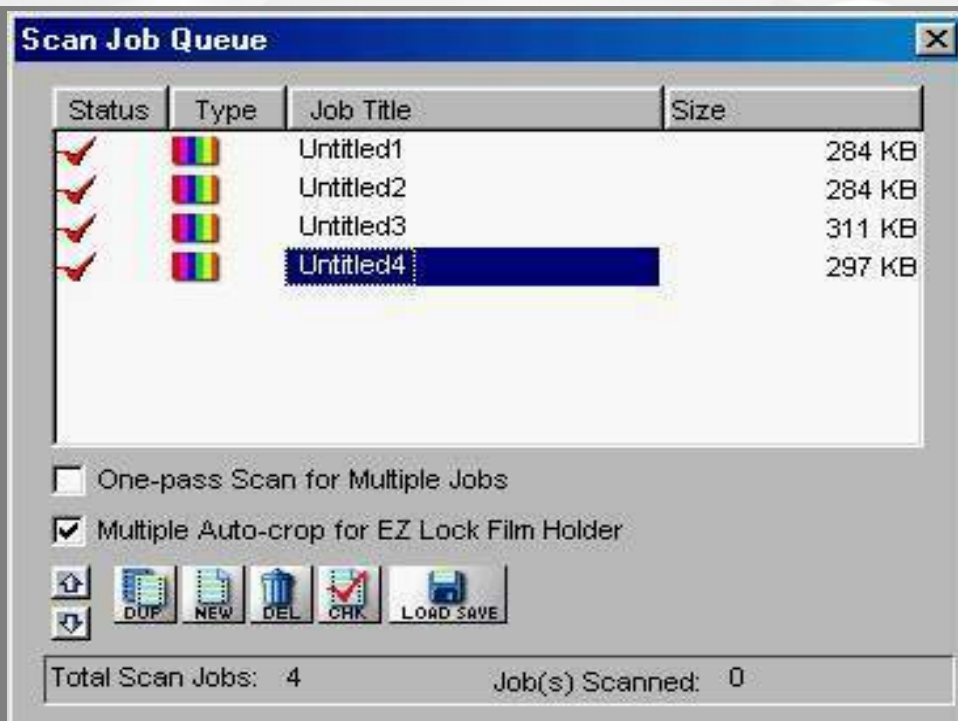
The **Sample Display Area** helps you see how color pixels are organized and distributed. The display can then help you make judgment on how best to modify the image characteristics, such as shadows and highlights, and also allow you to verify the changes that are made.



Advanced Control Panel

Scan Job Queue window

To view a brief information about the elements of the Scan Job Queue window, position the cursor  over an element, and then click the grabber pointer  to activate its related pop-up information dialog box.



Other Links:

[About this window](#)

[One-pass Scan for Multiple Scan Jobs](#)

[Multiple Auto-crop for EZ-Lock Film Holder](#)

[Function buttons:](#)

- [Up/Down arrows](#)

- [Duplicate](#)

- [New](#)

- [Delete](#)

- [Check](#)



- [Load/Save](#)

MICROTEK



Advanced Control Panel

Scan Job Queue window

To view a brief information about the elements of the Scan Job Queue window, position the cursor  over the desired choice, and then click the grabber pointer  to activate its related pop-up information dialog box.



Other Links:

[About this window](#)

[Function buttons:](#)

- [Up/Down arrows](#)

- [Duplicate](#)

- [New](#)

- [Delete](#)

- [Check](#)

- [Load & Save](#)

Advanced Control Panel

Scan Job Queue Window

The **Scan Job Queue** window is a floating window that shows your scan jobs. A scan job contains the following elements: a set of scanning parameters (shown in the Settings window); a scan frame (shown in the Preview window); and a scan job item (shown in the Scan Job Queue window).

You can assign or create as many scan jobs as you need. However, the more scan jobs there are, the longer the scanner time will be (unless you enable the "One-pass Scan for Multiple Scan Jobs" option).

Note: If the Scan Job Queue window is closed, go to the View menu in the Preview window, and choose the Show Scan Job Queue window command.

One-pass Scan for Multiple Scan Jobs (for Windows only)

If this option is unchecked, when you assign multiple scan jobs in the preview window, the scanner will continuously scan for several passes, depending on the number of scan jobs that are selected. For instance, assuming that there are three scan jobs selected, the scanner performs the first job, and as the scanner carriage returns to the stand-by position, the scan for the second job begins, and so forth to the third job -- for a total of three passes.

If this option is checked, the scanner performs scanning in a single pass for all the selected scan jobs. The scanner's carriage moves only once and when it returns to the stand-by position, ScanWizard 5 then starts to process and finish all of the scan jobs.

To use the "One-pass Scan for Multiple Jobs", the image original should meet the following conditions:

1. For all the scan jobs, the "resolution x scale" value in the

Settings window should be the same.

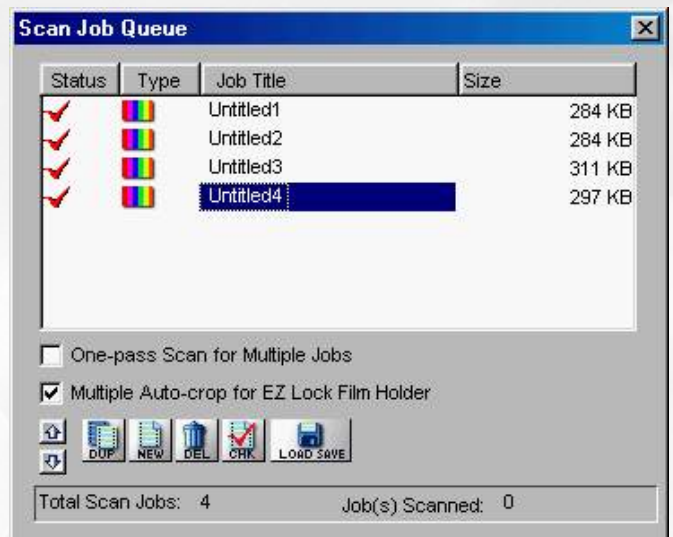
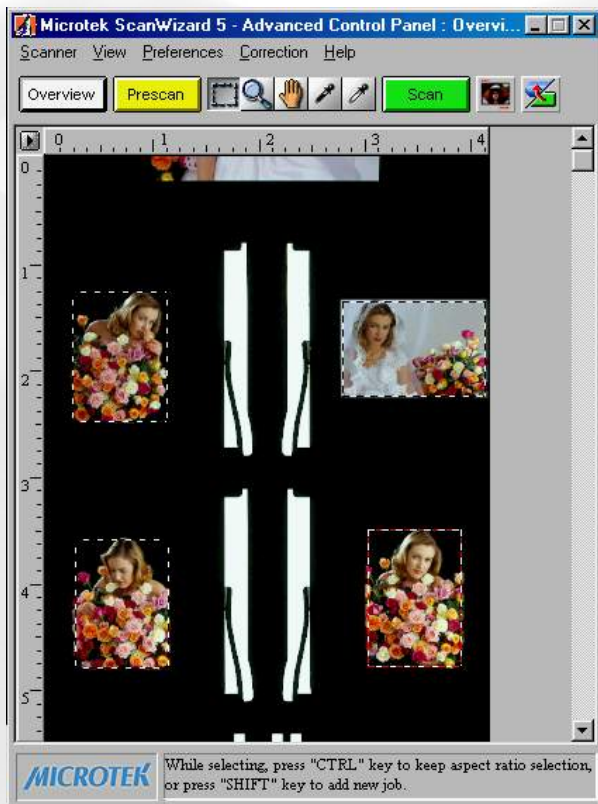
2. All the scan jobs should have the same scan type. For example, the scan type can be either color (RGB or RGB 48-bit) or gray (Gray or Gray 16-bit).
3. The Digital ICE function, if available, should be disabled.
4. If the screen filter is applied, all the scan jobs should use the same descreen lpi value.

If ScanWizard 5 has detected that your image original does not meet the above conditions, the "One-pass Scan for Multiple Jobs" option is dimmed and will not be available for selection.

Multiple Auto-crop for EZ-Lock Film Holder (for Windows only)

This option is enabled only when the EZ-Lock film holder is placed on the scanner glass surface, and the scan material is Positive or Negative Film. Otherwise, this option is disabled. Check this option to enable the scanner to auto-crop multiple scanning frames.

To perform a multiple auto-crop preview of the film loaded onto the scanner, click the Overview button. When done, you will see multiple scan frames that have been automatically cropped in the preview window. Multiple job titles will appear in the Scan Job Queue window, numbered sequentially and all marked by a "Check" that indicates the jobs are ready to be scanned.



Note: After performing multiple auto-crop scanning, the previously created jobs will be removed from the Scan Job Queue window.

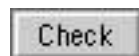
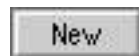
Function Buttons

The function buttons at the bottom of the Scan Job Queue window can be used for multiple job selections. The New and Load/Save button can be used on only one selected scan job. The Duplicate, Delete, and Check buttons can be used, however, on multiple selected scan jobs.

Windows



Macintosh



[Duplicate](#)

[New](#)

[Delete](#)

[Check](#)



Load & Save

[Load/Save](#)



[Up/Down](#)

Duplicate button

To duplicate a scan job:

1. From the list of scan jobs available, select the scan job(s) to be duplicated.
2. Click the **Duplicate** button. The selected scan job(s) will be duplicated. The Duplicate function is useful when scanning several images at the same settings.

New button

To add a new scan job:

1. Click the **New** button.
2. When a text box appears, accept the default name or enter a name for the new scan job.
3. Define the scan frame in the Preview window for the new scan job.
4. In the Settings window, specify the settings for the new scan job.

With the creation of a new scan job, the new scan job becomes the current scan job.

Delete button

To remove a scan job, highlight the scan job to be removed, then click the **Delete** button.

Check button

The **Check** button allows you to select the scan jobs to be

To use the Check button:

1. In the Job Title area of the Scan Job Queue window, select the scan job to be scanned.
2. Click on the **Check** button. A check will appear next to the selected scan job.
3. To uncheck a selection, select the scan job to be unchecked, and click on the **Check** button again. The scan job will be unchecked and will not be scanned when you click on the Scan button.

Load/Save button

This feature lets you save scan jobs that can be loaded at a later time when necessary. The idea of saving and loading scan jobs has important applications, especially for scanners with different templates or "trays". Loading/Saving scan jobs is also useful if you consistently work in a specific format, scan the same kind of images, or if the scanner is used by several users who have their own sets of jobs.

To use the Load/Save button:

[For Windows](#)

[For Macintosh](#)

Up/Down arrows

The **Up/Down arrows** allow you to change the sequence in which jobs are scanned by changing the order of the scan jobs in the Title area.

To use the Up/Down arrows:

1. In the Title area of the Scan Job Queue window, select the scan job to be moved up or down.
2. Click on the **Up** or **Down** arrow to change the sequential order of the scan jobs in the list. When you start scanning, the scan jobs will be processed and scanned in the order that they appear in the Scan Job Queue window (i.e., the scan job at the top is scanned first; then the second scan job under it is scanned second, etc.).

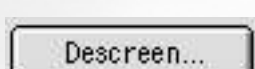
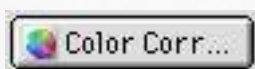
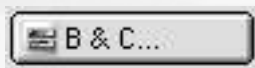
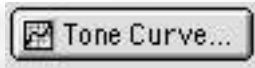


Advanced Image Correction tools

Windows



Macintosh



[White/Black Points](#)

[Tone Curve](#)

[Brightness/Contrast](#)

[Color Correction](#)

[Filter](#)

[Descreen](#)

[Fast JPEG Quality/Image Quality](#)

[Enable Digital ICE for Photo Prints](#)

Introducing the Image Correction tools

With the image correction tools, you can adjust the characteristics of your image right from within the ScanWizard 5. The image correction tools in ScanWizard 5 save you time and provide you with the needed flexibility to adjust images right within the scanning software. Experiment with the tools to see what each does to learn how to optimize your results.

Using the Advanced Image Correction dialog box

When you click on any of the image correction tools, or select Custom... in the Settings window, the Advanced Image Correction (AIC) dialog box appears. In this box, you can do the following:

1. These are the thumbnails of the image captured by your scanner. The left thumbnail is the "before" version — which

shows the effects of the last saved settings values. The right thumbnail is the “after” version — which shows the effects of the new settings added in the AIC.

2. To select another image correction tool, click on any of the buttons displayed in the vertical toolbar on the left side of the dialog box.

The Action Buttons in the AIC dialog box


- ▶ [1:1 Thumbnails](#)
- ▶ [Hide Thumbnails](#)
- ▶ [Preview](#)
- ▶ [OK button](#)
- ▶ [Cancel button](#)
- ▶ [Reset button](#)
- ▶ [Revert button](#)
- ▶ [Add to Menu button](#)

The Action buttons in the AIC dialog box carry out a specific action.

1:1 Thumbnails

If checked, size of the thumbnail is about the same as the image shown in the Preview window. If unchecked, the image size appears fit into the shown dialog box.

Hide Thumbnails (for Windows only)

If checked, the “before” and “after” thumbnails becomes hidden. To redisplay, click the “Up”  arrow at the left side of the dialog box.

Preview

If checked, the AIC image correction effect applies to the Preview image in real time.

The OK button

Clicking on this button will apply whatever Image Corrections you have performed on the current scan job, and close the AIC dialog box.

Example: If you increased brightness, changed the saturation, and then clicked OK, all the changes are applied, and you exit the AIC dialog box. The settings are changed as Customized status.

The Cancel button

Clicking on this button will cancel out all image correction changes you have made to the current scan job, and then close the AIC dialog box. The settings remained unchanged.

Example: If you applied filters, changed the curve, and then clicked Cancel, none of the changes will take effect, and you exit the AIC dialog box.

Reset button

Clicking on this button brings up the Reset dialog box, where you can specify which settings are to be reset, then click Reset or Cancel. If Reset is selected, the settings are restored to their default values; if Cancel is selected, the operation has no effect.

Example: If you changed white/black points, changed brightness, then clicked on Reset and chose to reset brightness, the brightness

setting of the scan job is restored to its default; but the altered shadows and highlights remains in effect. If you reset both white/black points and brightness, then those values are both restored to default.

Revert button

This button cancels out the changes that were made with the current image-enhancement tool. This means that if you used several AIC tools, Revert cancels the effect of only the last used (or current) tool, and preserves the effects of the other preceding tools.

Example: If you changed the tone curve, applied filters, changed brightness, then clicked Revert, the brightness changes will be cancelled out, but the altered tone curve and filters settings remain in effect.

Add to Menu button

This button adds the settings you have performed to the menu in the Settings window, so that you can retrieve and load the settings in the future if necessary.

Custom Settings

You can also create custom settings in each Advanced Image Correction control, and then add them to the Settings window menus for quick access to those settings.

To create a custom setting:

1. Choose the desired AIC control (e.g., Tone Curve, etc.) in the Settings window, and select **Custom** from the drop-down menu on the right side.
2. When the AIC dialog box for the selected control comes up, adjust the setting the way you want it, then click the **Add to**

Menu button at the bottom of the dialog box.

3. Enter a name for the Custom Setting (ex: More Red Tint), then click OK. The new custom setting is added to the menu.

To remove a custom setting:

1. Choose the desired AIC control in the Settings window, and select **Remove Custom Setting/Remove Setting** from the drop-down menu on the right side.
2. When a dialog box appears, highlight the custom setting to be removed, then click the **Remove** button. The custom setting is deleted from the menu.

Note: To delete the custom setting, you **MUST** click the **Remove** button (not just select and click OK).

3. Click OK to close the dialog box.

Advanced Control Panel > Settings window

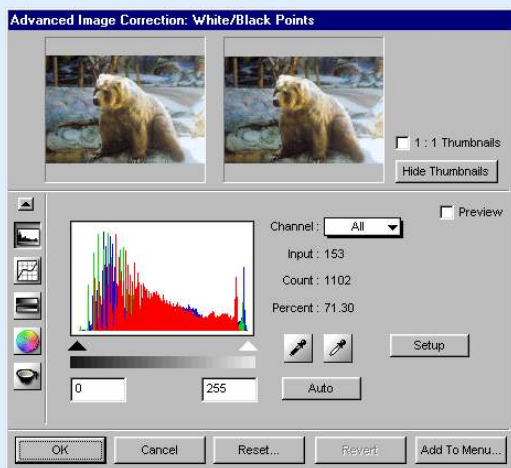
White/Black Points tool

For color and gray images, this tool allows you set [white/black points](#); for line-art image, it carries out [threshold](#) adjustment feature.

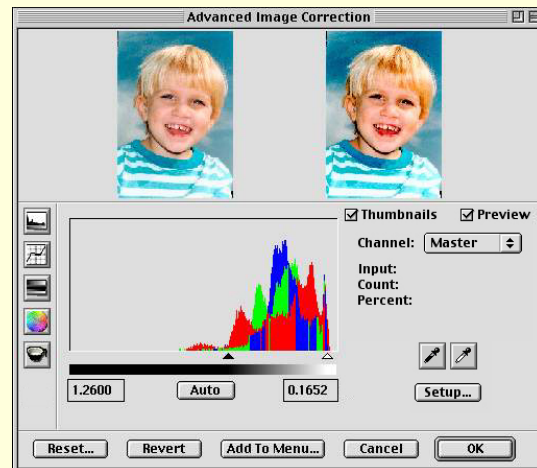
How to use the White/Black Points tool (Color/Gray image)

Click either one of thumbnails below to obtain a larger view.

Windows



Macintosh



Histogram

The histogram is a graphic representation of how all the pixels in an image are distributed across brightness and darkness levels. The darkest pixels are at the left; the lightest pixels are at the right.

A histogram skewed heavily to the left indicates that the image has many more dark pixels than light. Conversely, a histogram skewed heavily to the right will indicate a light image as it has more light pixels than dark. The height of the histogram indicates the number of pixels at that point in the histogram.

Sliders

The sliders are used to adjust the Black and White points of the image. The values of the black and white points are reflected in the edit boxes below.

Auto

The Auto button automatically judges the darkest and whitest points and clips excessive black or white points. The clipping percentage of the white/black points is accessible by clicking the Setup button.

Channel

The channel button lets you control the shadow and highlight settings for a particular color channel (red, green, or blue), or for the All/Master channel (red, green, and blue simultaneously). For CMYK images, the channel selections are cyan, magenta, yellow and black (for K).

Input, Count, Percent

These figures provide information about the histogram. The figures will appear only when the cursor is on the histogram or if a slider is being moved.

- The **Input** value indicates the color value of the data displayed in the histogram.
- The **Count** value indicates the number of pixels at the Input value. If Input value is 2 and Count value is 1300, then there are 1300 pixels in the image at the Input value of 2.
- The **Percent** value is the percentage of all pixels in the image where color value is less than or equal to the input value. For example, if Percent is 15% and Input value is 2, it means that 15% of all pixels in the image have a value of 2 or less.

Pickers

The Pickers can be used instead of the sliders to set the Black and White points, based on color values in the preview image. The Picker on the left sets the Black point; the Picker on the right sets the White point.

- To set the White point: Click the Picker on the right, then click on the preview image to define the reference point.
- To set the Black point: Click the Picker on the left, then click on the preview image to define the reference point.

Setup

This button provides you with advanced controls for setting the white/black clipping points, as well as for determining the output levels for the white/black points on your printer.



Before





After

Using the White & Black Point tool:

1. Choose the Channel in which the histogram will be modified.
 - If your Image Type is RGB, select All/Master to modify the tone curve in the red, green, and blue color channels of the image simultaneously; or select the color channels individually (red, green, blue) to modify that particular color channel.

- If your Image Type is Grayscale, only the Gray channel is available for selection.

2. Move the black and white sliders to new points on the histogram.

- Moving the black slider  to the right will yield more contrast in the highlight areas of the image, so that more detail emerges in the highlight areas.
- Moving the white slider  to the left will yield more contrast in the shadow areas of the image, so that more detail emerges in the shadow areas.

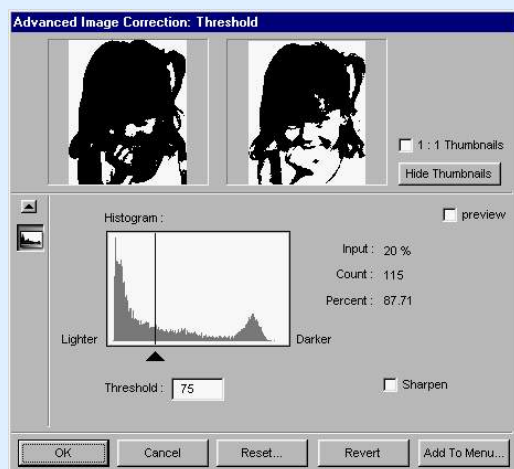
Another alternative is to simply click the Auto button, so that the dynamic range for the image is determined automatically.

3. When the changes are done, click OK. For more details on the effects of the other action buttons, see the section [The Action Buttons](#).

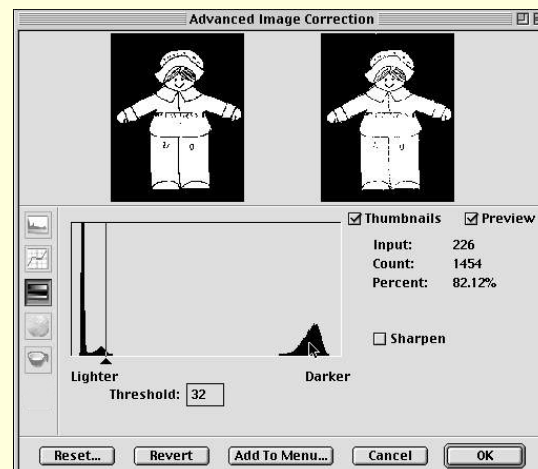
How to use the Black/White Points (Line-art image)

Click either one of thumbnails below to obtain a larger view.

Windows



Macintosh



For Line Art images, the Brightness & Contrast screen becomes the Threshold setting, and the Threshold dialog box appears instead.

Threshold is the dividing line between black and white; the range is 0 to 255, and the default is 128. Thus, gray levels below the Threshold are converted to black, while gray levels equal to or above the Threshold are converted to white, resulting in a high-contrast, black-and-white representation of the image.





Before



After

Using the Threshold feature:

1. Drag the sliders to change the Threshold.
 - To darken the original, drag the slider  to the right. This increases the Threshold value so that more pixels are turned to black, resulting in a darker image.
 - To lighten the original, drag the slider  to the left. This lowers the Threshold value so that more pixels are turned to white, resulting in a lighter image.
2. Alternatively, you can enter a value in the Threshold edit box to change the Threshold.
3. The Sharpen option lets you sharpen the Line Art image.

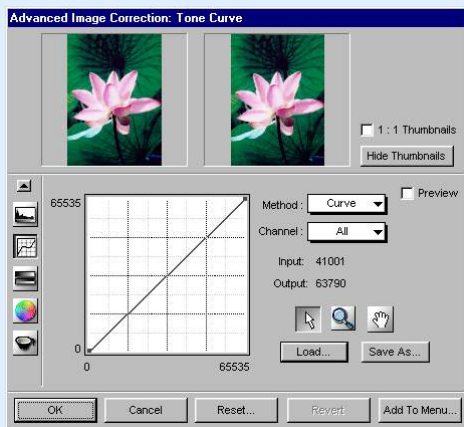
Advanced Control Panel > Settings window

Tone Curve tool

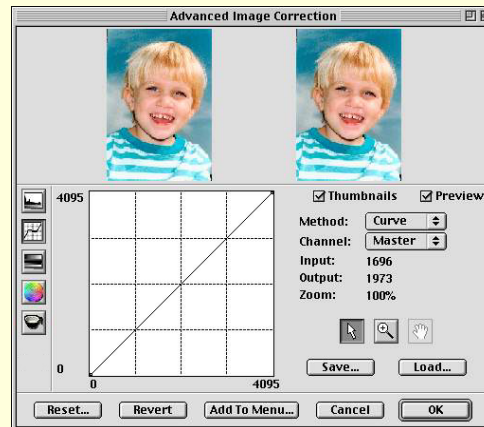
The **Tone Curve** tool lets you adjust the tonal range of an image. However, instead of making adjustments using just three variables (highlights, shadows, and midtones), you can adjust any point along the 0-to-255 scale (for 8-bit images; 0-to 4096 scale for 12-bit images). The Tone Curve tool applies to grayscale and all color images and is not available for line art or halftone scan modes.

Click either one of thumbnails below to obtain a larger view.

Windows



Macintosh

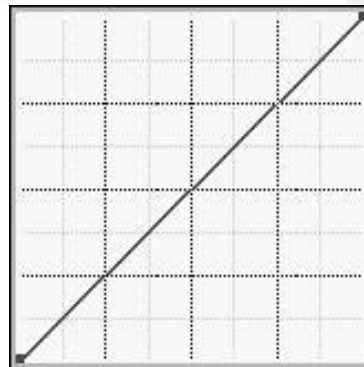


How to Read the Curve

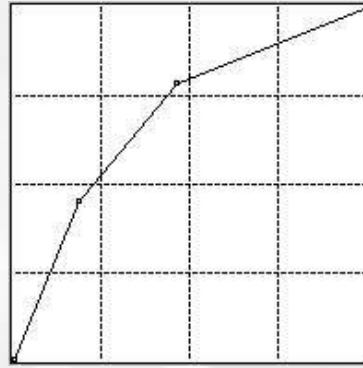
The Curve shows the relationship of the brightness changes across the middle pixels between the resulting image and the original. When you open the Curves dialog box, the line on the graph is diagonal because the Input and Output values are the same.

When the curve is moved up or down, the relationship between input value and output value changes accordingly.

- In areas where the curve is moved down, pixels in that portion of the image are darkened.
- In areas where the curve is moved up, pixels in that portion of the image are lightened.



Contrast in an image can be seen by the angle of the line. The steeper the slope, the higher the contrast. The closer the line is to horizontal, the lower the contrast.

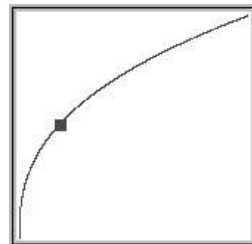
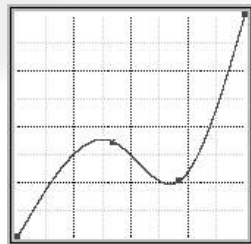
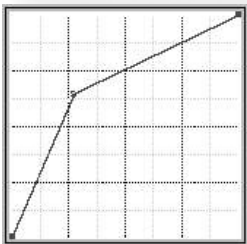


Curve

The Curve is a graphic representation of the tone curve showing scanner input from dark on the left to light on the right.

Method

The Method sets the kind of curve you wish to have. Select from Line, Curve, or Gamma.



Input, Output, Zoom:

- **Input** shows the horizontal value of wherever the cursor is inside the curve, reflecting the scanner's full depth.
- **Output** shows the vertical value of wherever the cursor is inside the curve, reflecting the scanner's full depth.
- **Zoom** indicates the magnification level of the curve box. At 100% zoom, the curve is seen in its entirety. Using the zoom frame tool to magnify the curve will zoom in or enlarge your view of the curve, resulting in a higher zoom percentage.

Channel

The Channel allows you to choose the color or gray channel in which the gamma will be affected.

Curve Tools

The Curve Tools let you modify the curve. The tools are the curve pointer, the curve zoom frame, and the curve pane.



Use the **Curve Pointer** tool to define points in the curve that will be modified. When you click on any point in the curve, a black handle appears to mark your position. To remove the handle, drag it off the graph.



Use the **Curve Zoom Frame** tool to zoom in and out on a particular point in the curve. Once the area is zoomed in, you can then use the Curve Pointer tool to define new points for better precision. This is particularly useful for working with 12-bit images, where more detail can be seen in such images. The zoom level can be seen in the Zoom field. To zoom out, click Option (for Mac), or click Shift (for Windows).



Use the **Curve Pane** tool to scroll through the curve if the curve has been zoomed in. This curve tool can be used only if the curve has been zoomed in with the Curve Zoom Frame button (above). Otherwise, the Curve Panel tool will be dimmed.

Load

The Load button lets you load a previously saved tone curve for use with another image. Photoshop-saved curves can also be loaded.

Save

The Save button lets you save a tone curve together with its settings so that the curve can be used in the future if necessary.

Using the Tone Curve tool:

1. Choose the Channel in which the curve will be modified.
2. If your Image Type is RGB, select All/Master to modify the tone curve in the red, green, and blue color channels of the image simultaneously; or select the color channels individually (red, green, blue) to modify that particular color channel.
3. If your Image Type is Grayscale, only the Gray channel is available for selection.
2. Choose the Method in which the curve will be modified. Select from Line, Curve, or Gamma.

3. Click the Curve Pointer tool, then click on the gamma curve to define the points where the curve will be modified. You can then either raise or lower the curve at that point and see changes to the image accordingly.
4. When the changes are done, click OK. For more details on the effects of the other action buttons, see the section [The Action Buttons](#).
5. To save a curve, click the Save/Save As button. To load a previously saved curve, click the Load button and specify the curve setting to be loaded.



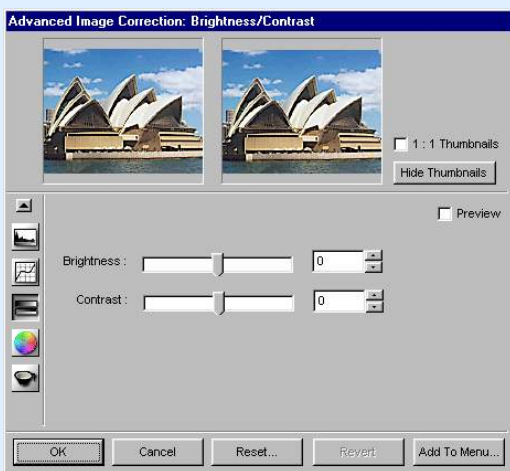
Advanced Control Panel > Settings window

Brightness and Contrast tool

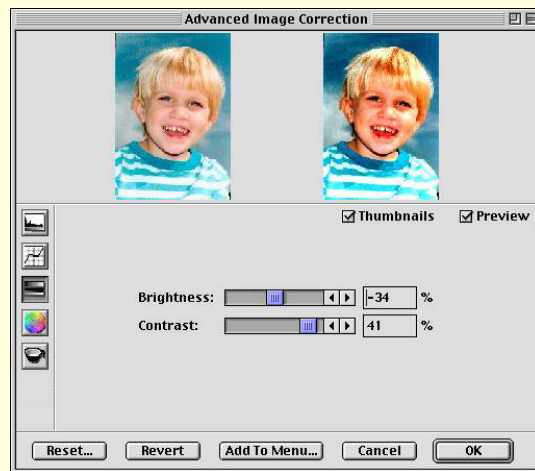
The **Brightness & Contrast** tool lets you control the brightness and contrast levels of the entire image. Increasing the brightness makes all tones in the image lighter. Contrast, on the other hand, is the range between the darkest and lightest shades in the image, and increasing the contrast makes greater separation between the darkest and lightest areas of the image.

Click either one of thumbnails below to obtain a larger view.

Windows



Macintosh



Note: For color images ScanWizard 5 applies the same effect to all channels.



Original



After Brightness



After Contrast

Using the Brightness & Contrast tool:

Drag the scroll bar on the Brightness or Contrast control to change the settings. Take note of the following:

- Too much brightness can make an image look washed out, while too little brightness will make the image look dark.
- Too much contrast will make an image look like a photocopy of a picture, with little or no gray shades left. Too little contrast will make the colors in the image look dull and flat.

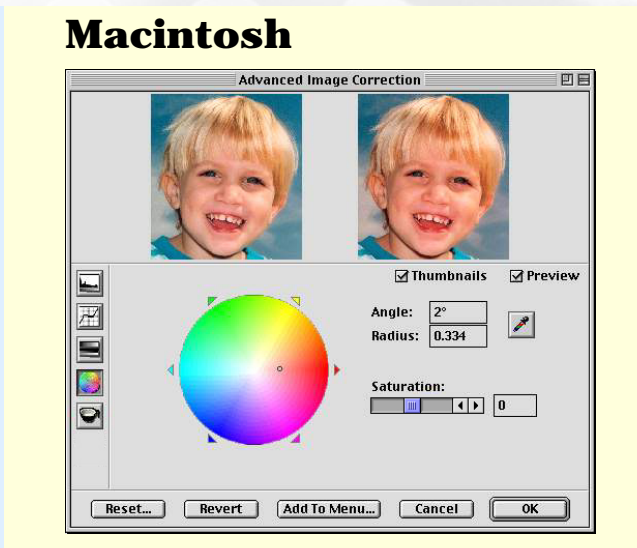
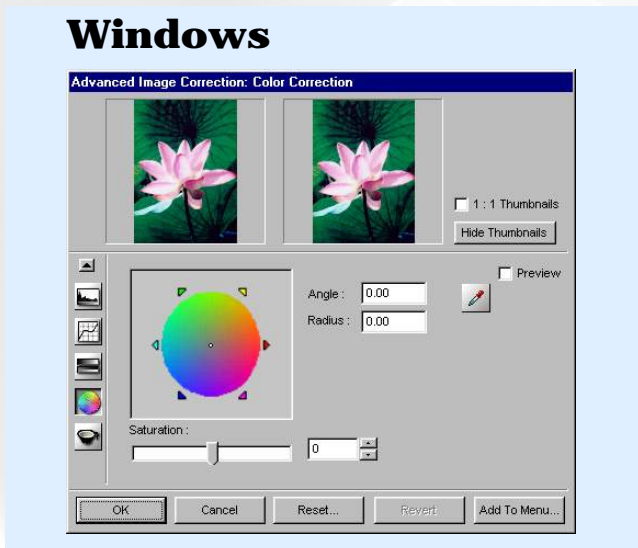


Advanced Control Panel > Settings window

Color Correction tool

The **Color Correction** tool changes the hue and saturation of an image. You can also add a color cast to an image by simply moving the pointer to a particular area on the Color Wheel, or you can remove an unwanted color cast by moving the pointer to a complementary color to balance out the tones. For instance, to remove a greenish cast from your image, move the pointer in the Wheel to the "red" area to neutralize the greenish hue of the image. The Color Correction tool is available only for RGB and indexed color images.

Click either one of thumbnails below to obtain a larger view.



Color Wheel

The Color Wheel allows you to add or remove a color cast from an image.

Angle

This shows the angle of the pointer on the Color Wheel as measured in degrees, and a value can also be entered directly in the edit box to move the cursor to any point in the Wheel.

Example: 0° corresponds to the color red on the Wheel, 60° to the color yellow, 120° to the color green, 180° to the color cyan, 240° to the color blue, and 300° to the color magenta.



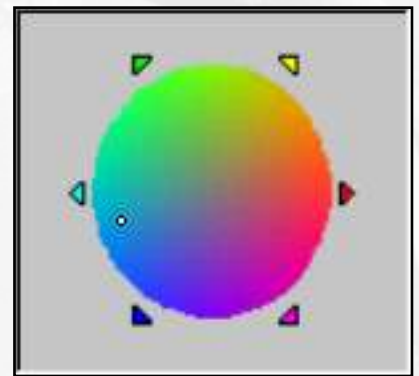
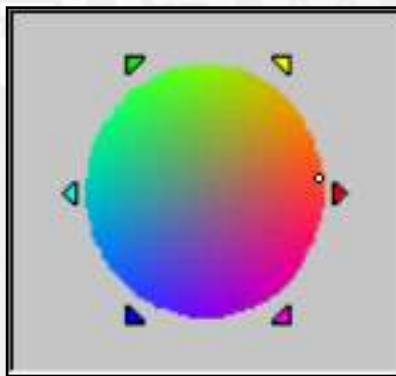
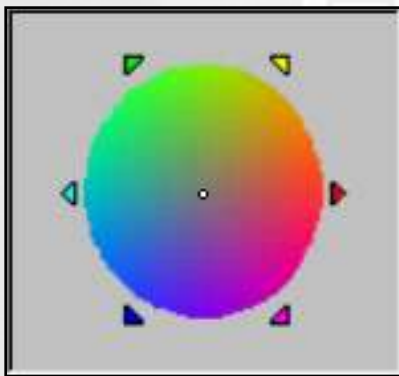
Original



After correction



After correction



Radius

This field shows the amount of shift towards a particular color and works in tandem with the Angle field. The Radius range extends from 0 located at the center of the Color Wheel and indicating the least concentration of color, to 1, located at the periphery of the Wheel and indicating the greatest concentration of color.

Example: If your angle is 0° (red on the Color Wheel) and the radius is 1, this results in an intense reddish cast on the entire image.

The Angle-Radius feature works differently from that of the Saturation bar, which increases the saturation of all hues in the image without tending towards any particular color cast.

Picker

The Picker lets you pick a known neutral gray shade in your image and adjusts it to a closer, truer gray. The grays in an image may have a particular color cast which can be verified through the color information in the Info window. A gray that tends towards a reddish tint, for instance, will have its R value skewed higher than the G and B values. By using the Picker on a gray area, the gray is adjusted so that the RGB values become approximately equal.

Saturation bar

This lets you change the intensity of the hues (colors) in your image. Use Saturation selectively, because increasing saturation will increase the intensity of all hues in the image.

Using the Color Wheel:

1. To change the hue of an image, move the pointer in the color wheel to its new color position in the wheel.
2. To change the saturation of an image, drag on the saturation slide bar. Dragging the slide bar to the left decreases saturation; dragging it to the right increases saturation.
3. Use the Angle, Radius, and Picker as necessary.
4. Click an action button. For more details, see the section [The Action buttons](#).

Advanced Control Panel > Settings window

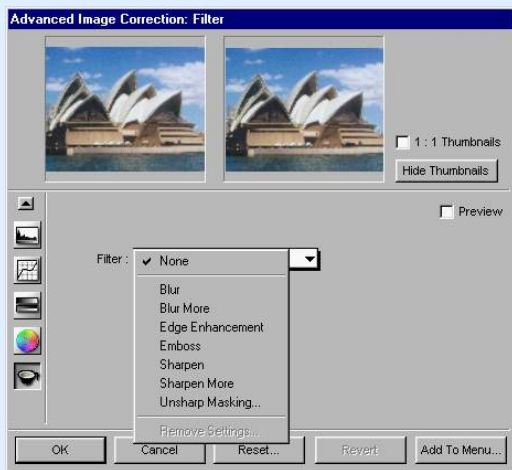
Filters

The **Filters** tool lets you apply or create special effects to your images. The filters include Blur, Blur More, Sharpen, Sharpen More, Edge Enhancement, Emboss, and Unsharp Masking.

In using the Filters tool, keep in mind that the image you obtain in the preview window may differ from the way the image appears when you finally scan it in. The appearance of the image in the preview window and how it is affected by a filter will depend on the resolution of the image. The higher the resolution, the less obvious the effect of certain filters (such as Blur).

Click either one of thumbnails below to obtain a larger view.

Windows



Macintosh



Using the Filters:

Click the Filter box, and from the drop-down menu that appears, select the filter to be used.

Blur filters

The Blur filters eliminate noise in the parts of the image where significant color transitions occur. These filters decrease the

contrast between adjacent pixels, making the image appear hazy and out of focus.

- Blur smooths out the transitions by lightening pixels next to the hard edges of defined lines and shaded areas.
- Blur More produces an effect three or four times stronger than Blur.



Before



After

Edge Enhancement filter

The Edge Enhancement filter gives greater contrast to edges. The filter can do this because edges are areas in an image where gray or color levels change abruptly. It is best to use this tool for improving geometrical contoured shapes.



Before



After

Emboss filter

The Emboss filter makes a selection appear raised or stamped by suppressing the color within the selection and then tracing its edges with black.



Before



After

Sharpen filters

The Sharpen filters do the opposite of the Blur filters and increase the contrast of adjacent pixels, making images appear sharper and more focused.

Both Sharpen and Sharpen More filters improve clarity, with the Sharpen More filter having a stronger sharpening effect than the Sharpen filter.



Before



After

Unsharp Masking filter

The Unsharp masking filter is used to adjust the contrast of edge detail, creating the illusion of more image sharpness. This filter can be useful for refocusing an image that has become blurry from interpolation or scanning, and it is an essential tool for doing CMYK color separation. In general, Unsharp masking is needed to render sharp color reproductions, especially when you wish to make a large color reproduction from a small original.



Before



After 7x7



After 13x13

Using the Unsharp Masking filter:

For Windows:

From the settings window, click the Filter tool button, then choose Unsharp Masking from the list of options.

For Mac:

From the Settings window, choose Unsharp Masking from the Filters list of options.

1. Click the Filter tool button to open the AIC window.
2. The Unsharp Masking dialog box appears.
3. Enter a value in the Strength box to specify the degree of the filter's effect. The higher the value, the stronger the effect of the filter.
4. Select a mask size in the Mask Size box. This parameter

determines the depth of pixels that will be affected at the edge. Available selections are 3x3, 5x5, 7x7, 9x9, 11x11, and 13x13. For small, low-resolution image files, 3x3 is sufficient. For high-resolution, or large-scale image files, use 7x7.

5. Enter a value in the Threshold box. This option allows you to specify a tolerance range to prevent overall sharpening that might generate noise or cause other unexpected results. The Threshold defines the required image of contrast between adjacent pixels before sharpening is applied to an edge. A lower value produces a clearer effect.
6. The Light and Dark option control the sharpness effect to be applied to the light and dark edges of the images, respectively. In general, doing too much Unsharp Masking on light edges would make images seem unnatural, as the human eye is sensitive in perceiving changes in bright areas of the image beyond a certain threshold. If both values are 0, Unsharp Masking effect is disabled.
7. Click OK to apply the settings.

Descreen

The Descreen tool lets you remove moiré patterns in the scan process. Moirés occur when you scan a screened original (mostly reflective materials, such as pictures from a newspaper or magazine). These patterns appear to the naked eye like a series of grids of dots or as shown in the example below.



Before



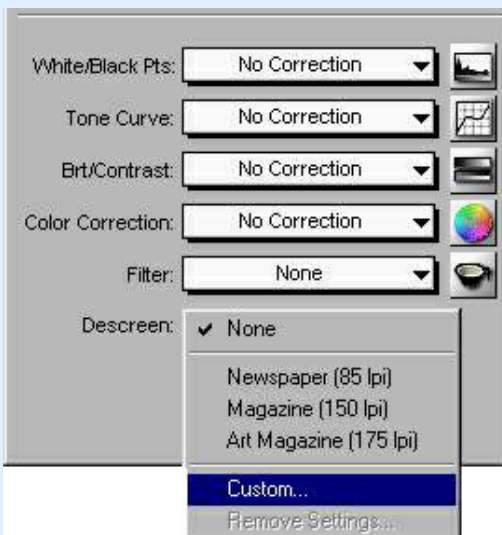
After

Using the Descreen:

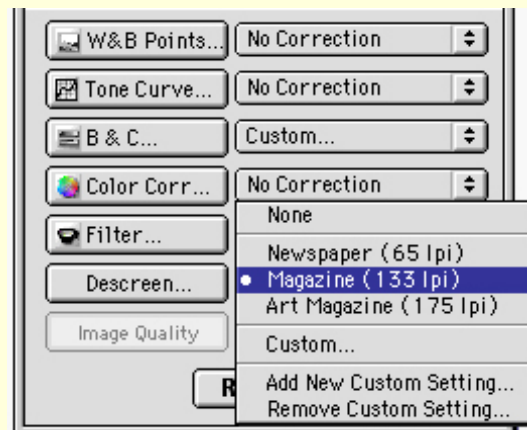
1. Click on the **Descreen** pop-up menu.

Click either one of thumbnails below to obtain a larger view.

Windows



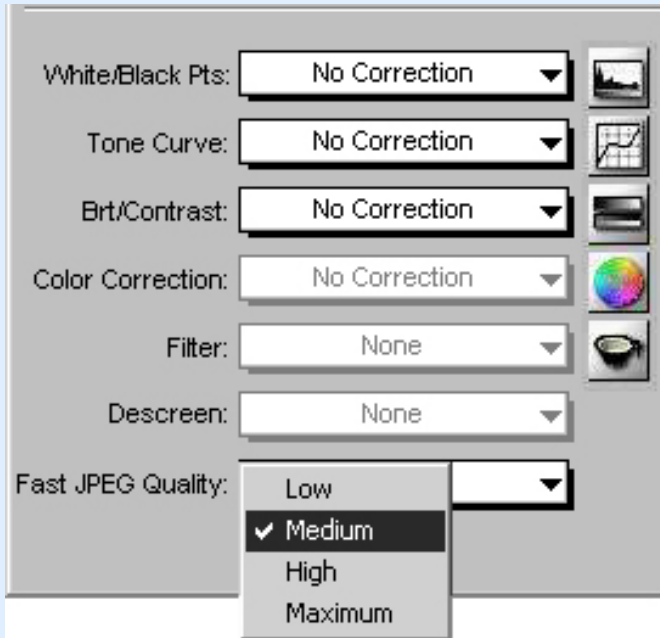
Macintosh



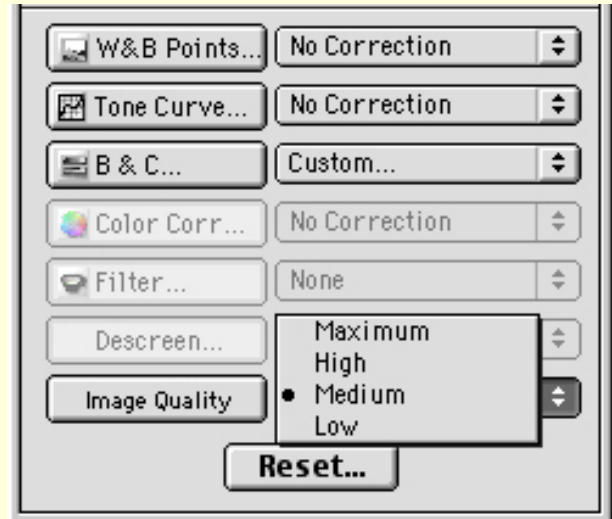
Advanced Control Panel > Settings window

Fast JPEG Quality/Image Quality

Windows



Macintosh



The Fast JPEG Quality/Image Quality option lets you choose the JPEG image compression ratio for JPEG-implemented scanners. If the JPEG image type is not selected in the Type options, this option will not appear.

Using the Fast JPEG Quality/Image Quality:

1. The Fast JPEG Quality/Image Quality is located under the AIC tools (located in the Settings window).
2. From the Fast JPEG Quality/Image Quality option, click on the Type arrow.
3. When the options menu appear; choose the compression level you desire. (Medium is the default).

Notes: The higher the selected image quality is, the lower the compression will be. Not all Microtek scanner models support the JPEG image format. If your scanner supports JPEG compression, you can choose the JPEG image quality that reflects the compression ratio you desire. However, the image type should be set under RGB, otherwise; JPEG compression will not work.

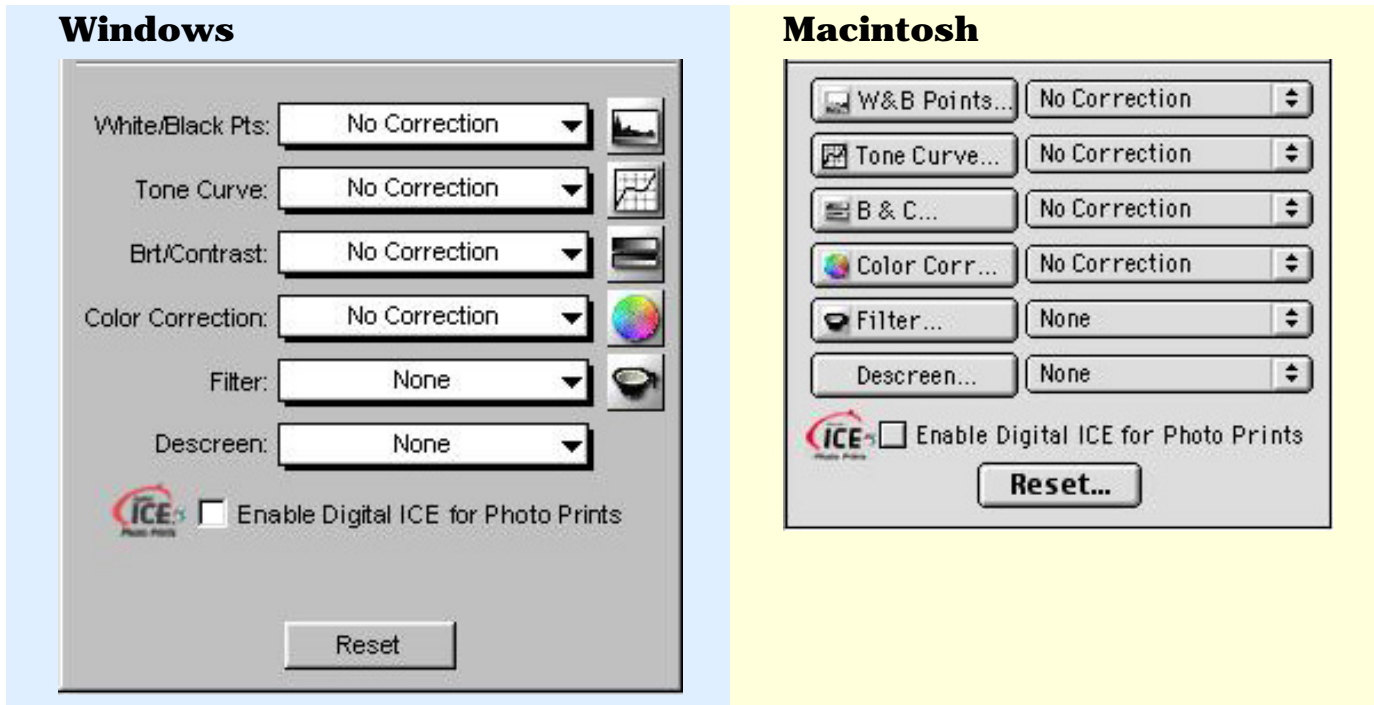
2. When the Descreen menu comes up, select the screen for your needs, or choose Custom to set your own descreen options.

When the Descreen dialog box comes up, enter a value that best corresponds to the dot quality of the original in which the moiré is to be removed. You may use a screen finder to measure the print screen lpi. Please contact your local print shop for more information on how to obtain a screen finder.

- Set a value from 50 to 85 if the original image has a coarse dot pattern, as in images taken from a newspaper.
- Set a value from 100 to 133 if the original image has a fine dot pattern, as in images taken from a magazine.
- Set a value from 200 to 250 if the original image has a very fine dot pattern with a near-photographic quality, as in images taken from a high-quality art magazine.

Advanced Control Panel > Settings window

Enable Digital ICE for Photo Prints



The "Enable Digital ICE for Photo Prints" option lets you enable Digital ICE-implemented scanners to automatically remove dust, scratches, cracks, creases, folds, and other defects of the scanned images, resulting in an improved image.

Available scanners

Photos tend to lose quality mainly because of handling and time. Defects such as scratches, creases, rips, dust, and dirt will cause the original to deteriorate further.

The Digital ICE function repairs defects, restoring photos back to their original pristine state digitally.

Notes: The Digital ICE feature is designed to work with continuous-tone reflective image originals such as photos. It is not designed to work with negatives, transparencies, and printed matter. In addition, when the Descreen feature is selected, the Digital ICE option is dimmed and will not be available for selection.

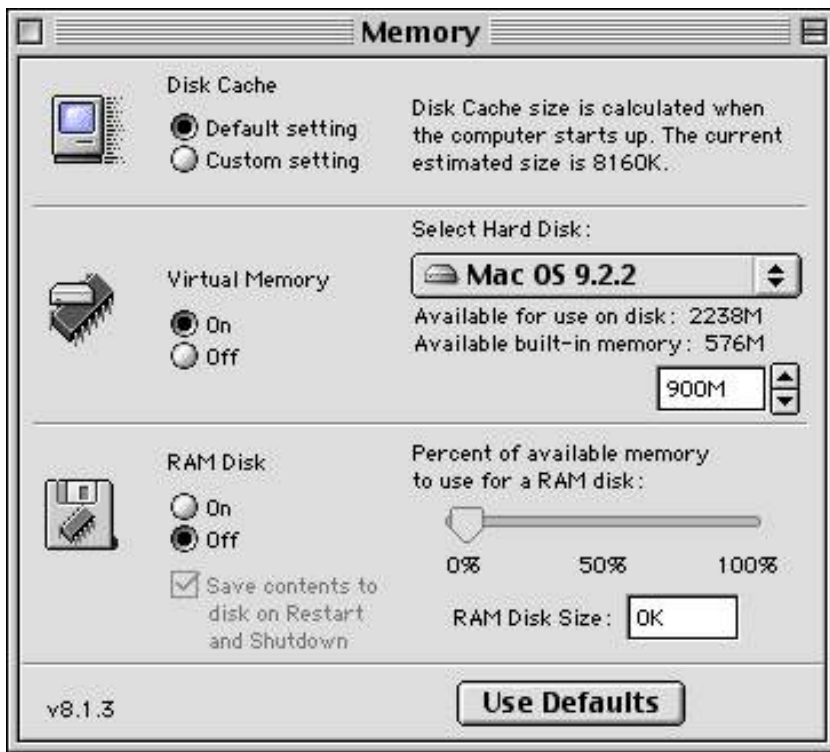
Memory allocation

The Digital ICE function requires more memory for processing. In Windows, memory allocation is rearranged automatically. In Macintosh systems, however,

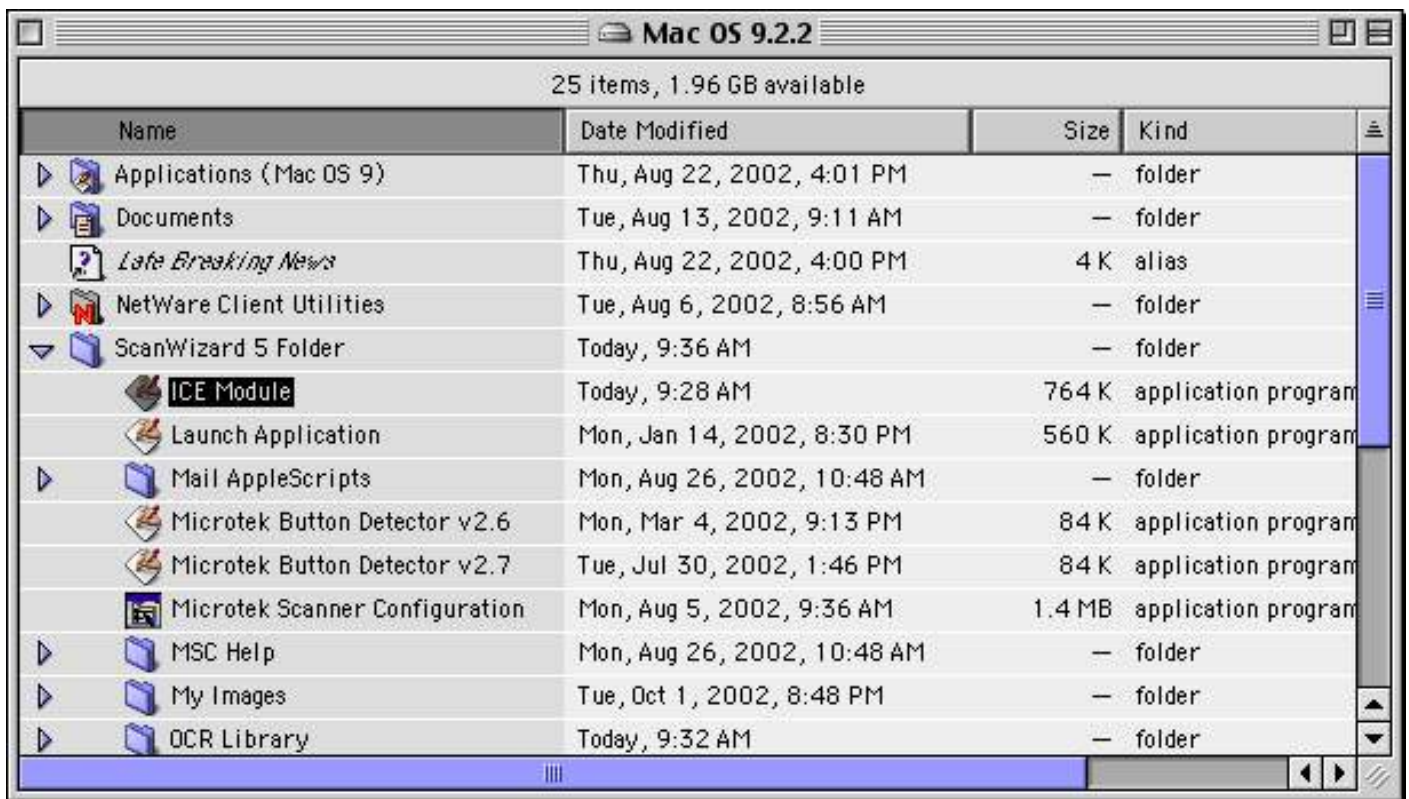
the memory size should be increased.

To expand memory:

1. Close ScanWizard 5 and any other applications.
2. Enable Virtual Memory. To do this: From the Apple menu, choose Control, then Memory; when the Memory window appears, select "On" for the Virtual Memory option, then change the built-in memory to 900M.



3. Select the **ICE Module** icon in the ScanWizard 5 folder.



4. Hold down the "Apple" key and press the "i" key. The Info window appears.
5. Select "Memory" from the *Show* pull-down menu.
6. Set the preferred size to 300,000 K; close the Info window.

ICE Module Info



ICE Module

Show: **Memory**

Kind: application program

Memory Requirements

Suggested Size: 260000 K

Minimum Size: K

Preferred Size: K

Note: This application may require 748 K more memory if moved to another hard disk or virtual memory is turned off in the Memory control panel.

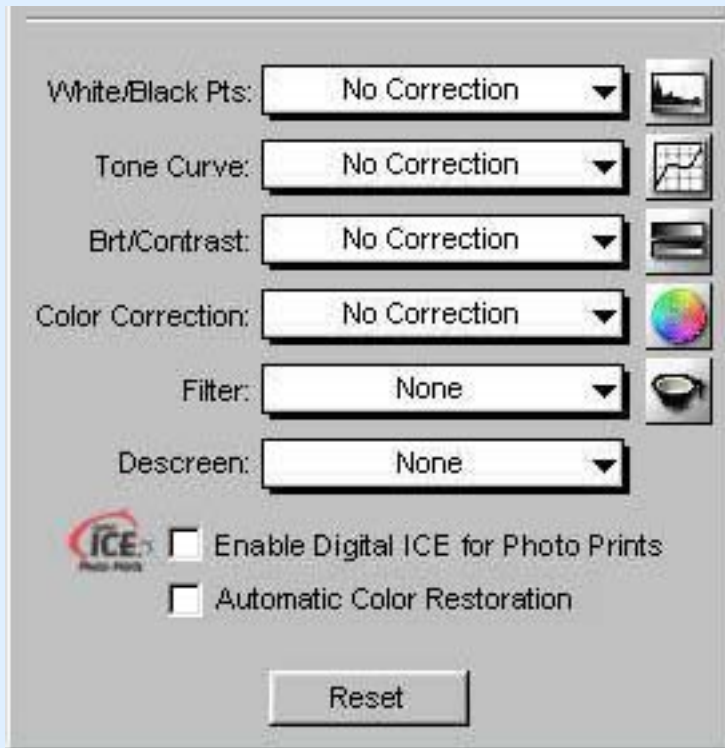
Locked

Advanced Control Panel > Settings window

Automatic Color Restoration

(For Windows only)

Windows



The "Automatic Color Restoration" option lets you bring faded colors back to life. This option will not work when the Image Type is set to "Line Art" or "Black and White Diffusion."

If the "Automatic Color Restoration" feature is checked, a corresponding action is generated in the White/Black Points feature, and the "Automatic" setting for the White/Black Points feature is also selected. Color restoration will then be applied when a scan is performed.

If the "Automatic Color Restoration" feature is unchecked, the option in the White/Black Points menu will show "No Correction," and color restoration will not be applied when a scan is performed.

Note: For best results when using the Automatic Color Restoration

feature, marquee (select) only the image area of the photo to be restored (the photo proper). Do not include the scan bed area as represented by the background of the photo in the Preview window. If the background is selected, color restoration may be inaccurate.

Basic Scanning Concepts

This section covers basic scanning concepts. If you already have basic scanning knowledge, you may skip this section.

- ▶ [What is a scanner](#)
- ▶ [Type of scanners](#)
- ▶ [Components of effective scanning](#)
- ▶ [Image types](#)
- ▶ [Text scanning](#)

A rule of thumb for choosing the right Quality Factor is, for images with printing screens less than or equal to 133 lines per inch, set Quality Factor to 2; above 133 lines per inch, set it to 1.5; contone printer (continuous tone printer, such as dye-sublimation printer), set it to 1.0

If you're outputting images to a monitor (such as doing multimedia work), you need not scan images higher than 72 ppi, as monitors are capable of only showing images up to 72 ppi. A higher-resolution image will not be any clearer on the monitor and will simply create larger files.

Remember that the higher the resolution, the larger your image file will be. For instance, an 8.5" x 11" color photograph scanned at 75 ppi takes up about 1.6 megabytes (MB). Doubling resolution to 150 ppi will increase the file size four times - to approximately 6.3MB! Going to 300 ppi will increase file size to 26.2MB.

What you need to do then is to select the lowest possible resolution that still gives you good image quality in order to keep file sizes manageable.

The two images were scanned at different resolutions, but there isn't much difference in the printed result. This is because all printers and presses have their own maximum resolution. It's also because the final size is so small that anything over 150 ppi is really unnecessary.

What is a scanner

A scanner is a device that captures an image and converts it into a digital form that your computer can display, edit, store, and output. The image may be a photograph, page of text, drawing or illustration, or even a relatively flat, three-dimensional object such as bolt or fabric. In practice, this means you can use your scanner to do the following:

- Incorporate artwork or photos into documents
- Scan printed text into your word processor and eliminate retyping
- Scan faxed documents into a database or word processor
- Add images to multimedia productions
- Integrate visuals into presentations to make them communicate more effectively.

With a basic understanding of how scanners work, the types of scanners available, and what they are capable of doing, you can improve the quality and efficiency of your work.

Type of scanners

Scanners can be classified into three general types:

- Flatbed scanners, which are used to scan photographs or prints. Flatbeds have a glass surface on which the materials to be scanned are placed.

- Transparency and slide scanners, which are used to scan transparent materials such as filmstrips and slides.

Components of effective scanning

The scanner is only one part of the scanning system. In addition to the scanner, you need these other components:

- A special cable to connect your scanner and computer
- Scanning software that controls how the scanner works
- Image-editing software to integrate scanned images into your work; or OCR software to integrate scanned text into your work.
- A suitable monitor to display color and grayscale images
- A device for outputting your work such as a black and white or color printer, dye sublimation printer, image setter or other color proofing device.

In addition to the basic components, you can use these scanner accessories to make your scanning even more effective:

- Transparent Media Adapter (TMA): for scanning slides, filmstrips, and transparencies
- Auto Document Feeder (ADF): Helps with text scanning by allowing continuous scanning of up to 50 pages of text.

Image types

For a computer to represent image information in a digital format, the computer uses units of picture elements, or pixels.

An image file, for instance, is simply a representation of hundreds, thousands, or even millions of pixels arranged in a grid, and

computers record the intensity and color of a pixel in 1 or more bits of data. The greater the number of bits, or bit-depth, of an image, the more information it can store. For easy classification, images can be categorized into single-bit, grayscale, or color.



CMYK



CMYK-C



CMYK-M



CMYK-Y



CMYK-K



RGB



RGB-R



RGB-G



RGB-B



GrayScale



Indexed



Lab1



Lab2

Single-bit

Single-bit images are the simplest kind, using just one bit of data to record each pixel. Single-bit images come in two types: line art, and error diffusion.

- Line Art includes anything that is black and white, such as a pencil or ink sketch. Line Art may also include one-color image, such as mechanical blueprints or drawings.
- Error Diffusion reproduction of images that gives the illusion of gray but only because the black and white dots (or pixels) comprising the image are arranged in such a way as to fool the eye to see gray. This is because when Error Diffusion is printed, dark areas are represented by darker dots coming

together, while lighter areas are those with scattered dots. An example of halftone images would be the pictures you see in a newspaper or magazine.

Grayscale

Grayscale images contain more than just black and white, and include actual shades of gray. In a grayscale image, each pixel has more bits of information encoded in it, allowing more shades to be recorded and shown.

For instance, four bits are needed to reproduce up to 16 levels of gray. Going higher, eight bits can reproduce the 256 levels of gray required to represent most black-and-white photos accurately.

Color

Color images contain the most complex information. To capture color images, scanners use a process based on the RGB (Red, Green and Blue) color model, where every color is composed of a varying amount of the three colors. In the RGB model, the absence of white light creates black, the complete saturation of light creates white (100% of red, green, and blue), and equal amounts of red, green, and blue create intermediate shades of gray.

Depending on the type of scanner you have, your scanner can record 24 bits for the three RGB channels. This means your scanner can record and reproduce an enormous amount of color information - anywhere from 16.7 millions colors for 24-bit scanners.

Selecting an image type

Depending on the scanner you have, you will be able to scan different types of images according to your needs. You can scan an image and output it in its original form, or you can output it in another form and get some interesting effects.

For instance, you can scan a color photo and output it in its original form as a color photo, or you can output it as a gray to create a

new look. Whatever you do, however, keep in mind that the quality of the original is very important in determining the quality of the final scanned image.

Text Scanning

Aside from scanning images, your scanner can scan text and deliver it into your word processor, eliminating the need for retyping. This is done through the use of Optical Character Recognition (OCR) software, which converts scans to text and retains text formats through the software's ability to recognize the shapes, shades and lines that make up individual characters.



the middle of operating ScanWizard 5. If you want to change the monitor profile, do it after exiting ScanWizard 5.

4. The same principle above applies to CMYK images: Make sure that the settings in the CMYK Setup in Photoshop 5.0 match the CMYK Destination in the CMS Setup in ScanWizard 5.

Take note that it is not desirable to scan in raw data and then perform ColorSync data conversion using the ColorSync plug-in or the Image / Mode / Profile to Profile... conversion in Photoshop 5.0.

Note: Since Photoshop 5.0 allows users to customize their own color space as well as select from a few built-in color spaces (such as sRGB, Apple RGB, CIE RGB, etc.), you may click "Save" in the RGB Setup dialog box to save the current Photoshop RGB workspace as an ICC ColorSync profile. The saved profile can then be selected in ScanWizard 5.

Take note that when you save the Photoshop RGB profile, the file name you specify may not be the same as the profile selection you see in ScanWizard 5's RGB Destination pop-up menu (where the profile information string is shown). For example, if you save "Photoshop sRGB" as a profile, it will appear as "sRGB IEC61966-2.1" in ScanWizard 5's pop-up menu. If you are not sure about the profile you want, click the "Load" button to load the profile by file name directly.

For more information on Photoshop's color management features, visit Adobe's site on the Internet <http://www.Adobe.com>.

B. ScanWizard 5 Setup:

1. Go to the Preferences / CMS Setup dialog box. Check and see that the monitor selection is the same as that in the ColorSync System Profile selection (your current monitor setup). If you need to change your monitor, do this in the ColorSync Control Panel.
2. Make sure that the Display using monitor compensation check

box is checked.

3. For both RGB and CMYK destination settings, select your desired profiles. These selections specify ScanWizard 5's output color space for RGB and CMYK images, respectively.
4. Make sure the RGB / CMYK destination setting matches Photoshop 5.0's RGB Setting / CMYK Setting in the RGB Setup / CMYK Setup dialog box, respectively.
5. To enable RGB color matching, make sure the RGB Color Matching check box is checked. Otherwise, raw RGB image data will be scanned.

Using Adobe Photoshop 4.0

A. Adobe Photoshop 4.0 Setup:

Photoshop 4.0 does not have color-management capabilities for RGB images. In Photoshop 4.0, RGB data is simply "dumped" or transferred to the monitor. As a result, the colors may appear to be different in Photoshop 4.0 compared to ScanWizard 5, regardless of the ColorSync version that you are using.

To display colors consistently on both Photoshop 4.0 and ScanWizard 5, make sure that the "Display using monitor compensation" check box is NOT checked in the CMS Setup dialog box in ScanWizard 5.

B. ScanWizard 5 Setup:

1. Go to the Preferences / CMS Setup dialog box. Check and see that the monitor selection is the same as that in the ColorSync System Profile selection (your current monitor setup). If you need to change your monitor, do this in the ColorSync Control Panel.
2. Make sure that the Display using monitor compensation check box is NOT checked.

3. To enable RGB color matching, make sure the RGB Color Matching check box is checked. Otherwise, raw RGB image data will be scanned. It is not desirable to scan in raw data and then perform ColorSync data conversion.

Additional Notes

These additional notes pertain to the use of the Batch Scan feature of ScanWizard 5.

When creating your batch command, you need to make sure that the color space where images will be output is set up correctly in ScanWizard 5's CMS Setup dialog box.

After images are scanned, saved as files, and then opened in Photoshop 5.0, you may be asked to convert the images when the assumed RGB profile setting (in Photoshop File / Color Settings / Profile Setup dialog box) does not match your RGB workspace (in File / Color Settings / RGB Setup dialog box). Select "Don't Convert", because the images have been scanned according to your color space requirement.

Please note that it is not desirable to convert the image if you have previously chosen to scan as raw data; the result will not be what you expect. Always let ScanWizard 5 perform the color matching for you.

Quick Tips for Best Scans

Whenever you scan, keep some goals in mind. How do you want the final scanned image to look? Where will it be used? What image-editing software will you use? How will the image be reproduced, on what type of printer and what type of paper?

With these goals in mind, you can then proceed to obtain quality scans. Here are a few tips to consider to obtain the best scans.

- ▶ [Get the necessary hardware](#)
- ▶ [Use a good original](#)
- ▶ [Keep your scanner clean](#)
- ▶ [Select the right image type and settings](#)
- ▶ [Use your image correction tools](#)

Get the necessary hardware

Take note of the following:

- Make sure you have enough RAM and available storage space in your computer. Scanned images need more memory than text files, so you may need to add RAM and storage.
- Check if your video card and monitor support the resolutions you need to display high-quality images. For optimal quality, use a 24-bit (also known as True Color) card that is set to "millions of colors" or "16.7 million colors."

Use a good original

A good original is still important in determining the final quality of

the scanned image. Even if your scanning software or image-editing package has tools to improve image quality, they work only up to a certain point. Images that are out of focus, dirty, or poorly exposed may never look great - no matter how much time and effort you spend retouching them.

ScanWizard 5 scans halftoned images such as magazine photos using special settings. If you scan magazine or newspaper photos without descreening the image, you will obtain something called a moiré, which is an undesirable pattern in color printing.

Keep your scanner clean

Make sure your scanner glass is clean before you scan images. This way, you don't pick up flecks of dust along with the image when you scan. To clean the scanner glass, use alcohol on a lint-free cloth and clean the glass carefully.

Select the right image type and settings

Choose the right image and set the correct resolution and scaling before you scan.

- If you have single-color art (even if it isn't black and white), scan it as line art.
- For black and white photos, scan these as grayscale (not color) to generate smaller files.
- If you plan to print a color scan in black and white, scan it in grayscale.

Finally, when scanning (whether in color or another mode), choose the correct resolution.

Use your image correction tools

When scanning color images to obtain more accurate colors, use

ScanWizard 5's Color Matching System and the Advanced Image Correction feature.

Experiment with the tools in your scanning software. Use White and Black Point tool, for instance, to adjust the look of the image as a whole, or use the Tone Curve tool to work on specific areas of the image (such as lightening up an excessively dark area).



Frequently Asked Questions

- ▶ [How do I access to the Microtek Scanner \(MSC\) Utility?](#)
- ▶ [How do I test if my scanner is working properly?](#) (for Windows only)
- ▶ [How do I configure my E-mail application?](#) (for Windows only)
- ▶ [What is Kodak Color Management System?](#)
- ▶ [What is Color Matching?](#) (for Macintosh only)



Do I have access to the Microtek Scanner Configuration (MSC) Utility?

The Microtek Scanner Configuration (MSC) utility is a companion program of ScanWizard 5. This utility works only if your scanner model is equipped with scanner one-touch buttons. If your Microtek scanner is equipped with scanner one-touch buttons, you can use the buttons to complete common scanning tasks.

How to configure the one-touch buttons with MSC utility

1. Launch the MSC Utility by - a) Double-clicking the MSC icon from the desktop; or b) (For Windows only) From Windows taskbar, click Start, Programs, Microtek ScanWizard 5 for Windows, then Microtek Scanner Configuration.
2. When the MSC panel appears, click on a tab to redefine the settings you want.

Important note about the MSC utility

ScanWizard 5 and MSC are running exclusive of each other.

ScanWizard 5 will not function correctly with the MSC running at the same time.

How ScanWizard 5 works with the scanner buttons

When ScanWizard 5 is launched from the desktop, the Scan, Copy, E-mail, OCR, or To Web buttons will complete a prescan and set ScanWizard 5's "Scan To" button to reflect the scan function you chose.

When ScanWizard 5 is launched from an image-editing application, the Scan, Copy, E-mail, OCR, or To Web buttons will only perform a prescan.

Relationship between MSC and the scanner buttons

The MSC utility is available for you to set parameter settings to the respective scanner button. When MSC is launched, to carry out physical scan, copy, e-mail, OCR, or To Web press the button you need on the scanner.



How do I test if my scanner is properly working? (for Windows only)

The Scanner Test is a utility included with ScanWizard 5 that allows you to verify if your scanner has been properly set up and connected to your PC.

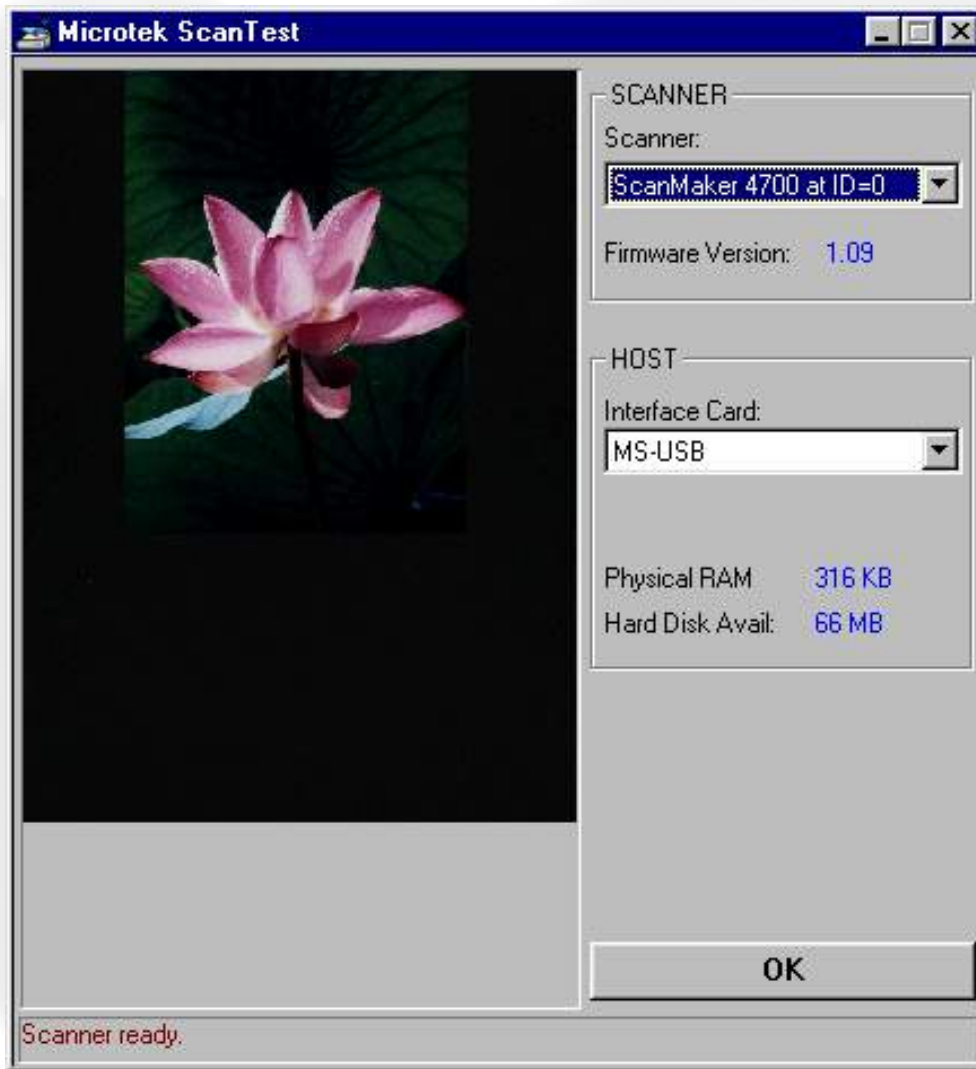
How to use the Scanner Test utility

1. Click on the Start button to select the “Programs/Microtek ScanWizard 5 for Windows/Scanner Test” submenu. The Scanner Test dialog box will appear.



2. Make sure your scanner model is shown in the **Scanner model box**. If you have multiple scanners hooked up on your system, choose the correct scanner model to be tested.
3. Click on the **Scanner Check button** to verify scanner location and identify.
4. Start the scanner test:
5. If you only have one **image button** (showing you the flatbed scanner): Click on the Image button to start the scan test.
 - If you're using a scanner accessory such as a TMA or ADF: Click on the image button showing the accessory (instead of clicking on the button showing the scanner). This will activate the scanning action on both the scanner and the accessory.

When the scan test is successful, the original image in your scanner bed will appear in the Scanner Test display window. This indicates that all is well with your scanner, then, click OK button.




Note: If you have an ADF, place a page inside the ADF and remove any material from the scanner glass. Then press the ADF image button to start the test.

5. To exit the Scanner Test utility, click on the **Exit** button.

Elements of the Scanner utility:

Scanner model	
It indicates the scanner connected to your PC and the scanner's Scanner ID	If you have multiple scanners hooked up to your computer, the scanners will appear in the drop-down menu, and choosing another scanner will update the image button accordingly.
Interface Card	

<p>It indicates the scanner interface you're using</p>	<p>If you have more than one SCSI card in your system, you can click on this option to select which card the scanner is connected to</p>
<p>Hard Drive Configuration</p>	
<p>Physical RAM - indicates the amount of system RAM plus Windows virtual memory Hard Disk. Available - indicates the remaining hard disk space available. The size indicated here may or may not be the maximum file size that you can have for a single scan.</p>	
<p>Scanner Check button</p>	
<p>It acts as a Scanner probe to verify the location of your scanner and the scanner ID.</p>	<ul style="list-style-type: none"> ••• When you click on the Scanner Check button, a dialog box appears, with the scanner and its corresponding Scanner ID displayed in the correct location.
<p>Image button</p>	
<p>Shows a thumbnail of the scanner you're using. Clicking on this button will activate your scanner and display whatever image is on your scanner. The image is shown in the Scanner Test display window (the area above the image buttons).</p>	<p>If you are using a scanner accessory such as a Transparent Media Adapter (TMA) or Auto Document Feeder (ADF) with your scanner, this will also show up as a second Image button. There will then be two Image buttons — one for the scanner, and one for the scanner accessory you're using (either the TMA or ADF).</p>
<p>Reconfigure Equipment button</p>	
<p>This allows the system to update its own internal reference file and is used if you have changed your setup or reconfigured your system.</p>	<p>If you changed scanner models on your system (physically removed a scanner model and attached a different one), the Scanner model box will not show the change automatically unless you first click on the Reconfigure Equipment button to update the system. Use this feature to make quick updates; all changes are done internally and automatically.</p>
<p>Exit button</p>	
<p>This button allows you to leave the Scanner Test utility</p>	

How do I configure my E-mail application? (for Windows only)

Currently, ScanWizard 5 "Scan to E-mail" supports the following MAPI compatible e-mail applications:

- ▶ [Outlook Express](#)
- ▶ [Microsoft Outlook 97/98](#)
- ▶ [Netscape Messenger \(aka Netscape Mail\) 4.6 or later](#)
- ▶ [QualComm Eudora Light/Pro 3.x](#)

When the ScanWizard 5 (both Standard and Advanced modes) "Scan to E-mail" function is launched either via E-mail button or from Save As dialog box, ScanWizard 5 will auto-detect your default e-mail application and auto-launched it with the scanned image file automatically attached to its message window. Complete the message with the recipient address and add accompanying text, then send it out.

Note that ScanWizard 5 will be able to detect your e-mail application only if such application has been defined as the default MAPI application of your system. The sections below explain how to setup each of the supported e-mail editors as your default messaging application programming interface.

Setting Outlook Express as Default MAPI

1. Open Outlook Express
2. Select Tool from the menu bar
3. From the resulting menu, select Option

4. The command displays the Option dialog box which contains 7 tabs
5. Choose General tab and check the items on "default e-mail" as shown below to assign Outlook Express as your default MAPI.

Microsoft Outlook 97/98 as Default MAPI

Microsoft Outlook 97/98 does not have a function for setting itself as default MAPI application, so there is no way to directly assign it as system default MAPI. However, ScanWizard 5 will still be able to auto-detect the program if any of the following conditions prevails:

- You have installed no other e-mail application except Microsoft Outlook 97/98.
- You have installed other e-mail applications aside from Microsoft Outlook 97/98, but none of them is setup to be your default MAPI. That is, Microsoft Outlook 97/98 automatically becomes your default MAPI-based unless otherwise other e-mail application in your system has been manually defined to be the default MAPI to supersede Microsoft Outlook 97/98.

Note: If you have a number of e-mail applications in your system, the last application to be defined as your default MAPI will override the previously defined application.

Setting Netscape Mail 4.6 as Default MAPI

1. Open your Netscape Mail (aka Netscape Messenger) Version 4.6 or later
2. Click on Edit from the menu bar
3. From the resulting menu, select Preferences
4. From the resulting Preferences dialog box, check the items on "MAPI-based applications" to define Netscape Mail as your

default MAPI.

Setting Qualcomm Eudora Light/Pro 3.x as Default MAPI

1. Open Eudora Light or Eudora Pro 3.x
2. Select tool from the menu bar
3. From the resulting menu, select Option
4. The command displays the Option dialog box shown below
5. From the Category pane of the dialog box, select the icon on "MAPI." Under the "Use Eudora server:" selection pane, enable "Always."

Always option

Select this item to make Eudora as your default e-mail program and allow ScanWizard 5 to auto-detect and launch the program during "scan to e-mail" function.

What is Kodak Color Management System?

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KCMS Overview

Some Background Information

Everyone perceives colors differently. Even the same person's perception can be affected by different lighting conditions. Different devices (input, display, and output) also interpret and define color differently and simply can't create the same gamut (or "range") of colors.

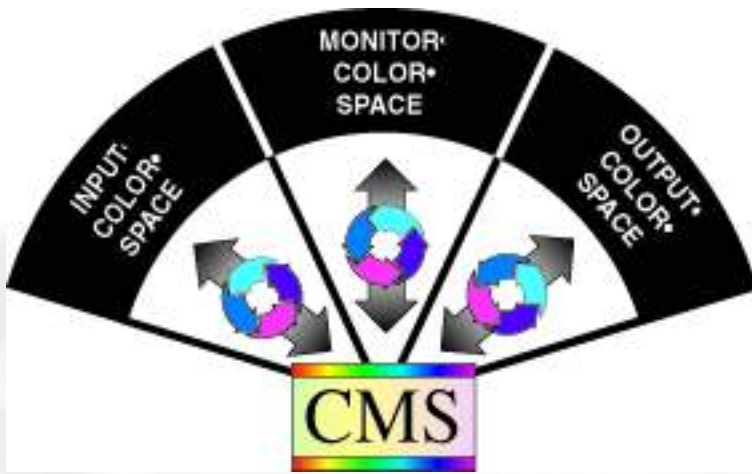
The goal of color management, then, is to help you get accurate, predictable color across all devices by managing, compensating for, and controlling these differences.

The Idea Behind Color Management

Each type of device reads, displays, or interprets color in a unique way. This unique interpretation is called a "device dependent color space." And while there are groups of color spaces, such as RGB or CMYK each device is still unique within its group. For example, monitors display color in RGB, yet each monitor displays a unique version.

The CMS automatically translates between each device dependent color space—so the color data is accurate and understandable.

This chart shows the central role of the CMS in managing device dependent color spaces.

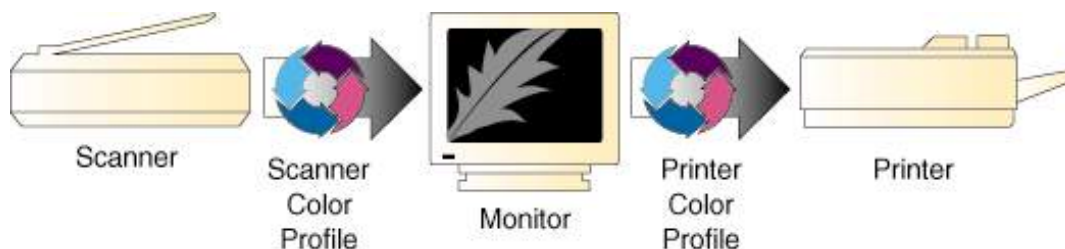


How Color Management Works

The aim of color management is to preserve true color information by making up for the differences in the way devices communicate color. Your CMS does this by using a scientifically designed system including:

- A Color Matching Processor
- A Device-Independent color space, frequently called a Reference Color Space or Profile Connection Space (PCS), which acts as a Rosette Stone in the translation process
- Device Color Profiles (DCPs)

DCPs relate a device dependent color space to the Profile Connection Space. The CMS uses the Color Profile to translate from one device dependent color space to another.



How CMS Translates between Devices

When you scan an image, a CMS uses the information about the

scanner—stored in the Scanner Color Profile—to translate the RGB image from the scanner to the Profile Connection Space. The CMS then uses the information about your monitor—stored in the Monitor Color Profile—to translate the image from the Profile Connection Space to your monitor color space, where you see it displayed.

In this example, the scanner is the “source” device, and the monitor is the “destination” device.



When you print the image, the CMS again translates the image data from the monitor’s RGB color space to the printer’s RGB color space—using the information about both devices as stored in their Color Profiles.

So, although all of the devices in this example use different device dependent color spaces, the CMS is able to translate between them and produce accurate, predictable color.



What are Device Color Profiles

Color Management Systems use Device Color Profiles to interpret color data between devices. DCPs are a collection of one or more ICC Profile data files. ICC Profiles contain color characteristics of a given device (input, display, or output).

ICC profiles conform to the International Color Consortium profile specification, allowing the same device profiles to be used across multiple platforms.

Where Do Color Profiles Come From?

Color Profiles are created by either Kodak scientists or other color professionals using specialized software packages, sometimes known as profile building tools.

Kodak scientists use sensitive, specialized equipment to measure the color characteristics of a representative example of each device, as supplied by the manufacturer, to determine the intrinsic properties of the device.

From these measurements they develop a “characterization” of the device, called a Device Color Profile, for each make and model measured.

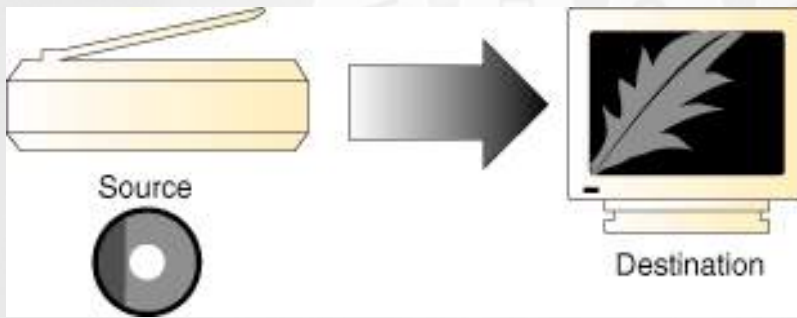
The Color Profile includes color tables that relates the device’s color space to a Profile Connection Space, as well as information about key attributes of the device for use by CMS-based applications.

A Word about Source and Destination

People often get confused about what is the “source” of an image and what is its “destination,” so let’s clarify this.

In general, the “source” of an image refers to where the image currently is, and the “destination” is where you want the image to go.

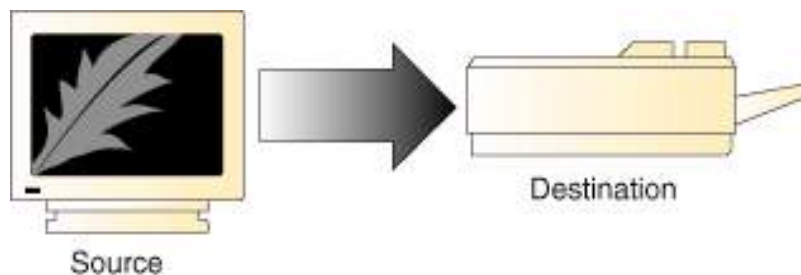
In CMS terms, “source” means the Color Profile used to bring the image data into the Profile Connection Space (PCS). “Destination” means which Color Profile is used to get it from PCS to the destination device. For example, when you scan in an image, you want it to appear on your monitor. So the source is your scanner, and its related Color Profile, and the destination is your monitor, using its Color Profile.



Likewise, when you open a Photo CD image, the source is the Photo CD, plus the Color Profile that relates the color data to the PCS, and the destination is the monitor, plus the Color Profile that relates the PCS to the monitor's color space.

Here's another example: Let's say you manipulate the image on your monitor screen, and print it.

The source this time is the monitor (plus the Color Profile that relates it to the PCS), and the destination is a printer (plus the Color Profile that relates the PCS to the printer's color space).



So, Source and Destination mirror a logical two-step process most Color Management Systems use to translate images between device color spaces;

- The Source Profile brings the image into the PCS
- The Destination Profile connects the image from the PCS to the output device, such as a Monitor, Printer, or Proofer.

However, this is not the case with a Kodak CMS.

Kodak has patented its composition technology. This technology takes the Source and Destination Profiles and composes them into a

single color transforming profile.

This technology adds significant improvement in the quality and performance of the Color Management System.

Note: You use the Source/Destination information when you setup or use your CMS-based application, such as PageMaker 6.5.



What is Color Matching? (for Macintosh only)

This section contains important information on further steps you need to take to achieve color matching across your devices. The procedures to be performed include monitor calibration and how to set up ScanWizard 5 with the Apple ColorSync™ system and the Adobe Photoshop software. Some recommendations are also given in order to achieve color matching across devices. For more detailed information on the ColorSync or Adobe Photoshop functions covered in this section, refer to the respective user guides of those programs.

Calibrating your monitor

Proper monitor calibration is important for achieving higher precision in color matching. Monitor ICC profiles may be created specifically for your monitor by calibrating your monitor through the following utilities:

- ColorSync 2.5 Monitors & Sound Control Panel Calibration function
- Adobe Gamma utility, from Adobe Photoshop 5.0
- Any third-party calibration programs or hardware calibrator

Setting up the System (Monitor) Profile using ColorSync

ColorSync is Apple's industry-standard color matching system. The notes below pertain to configuring ColorSync to ensure that it works properly with ScanWizard 5.

If you have ColorSync 2.1.2 or earlier, do the following:

1. In the ColorSync System Profile control panel, select your desired System Profile settings.

2. In the Monitors & Sound control panel, set the Gamma to "Uncorrected Gamma".

In addition, make sure you disable or remove any utilities or third-party control panels that alter monitor display. Your System Profile is the profile describing the monitor you are using.

If you have ColorSync 2.5, do the following in the exact order below:

1. Open the Monitors & Sound control panel to select your desired profile in the Monitor Profile list box.
2. Open the ColorSync Control panel to verify the desired monitor profile as the System Profile.

The settings in these two control panels should be the same. If you select a profile in Monitors & Sound, your ColorDync System Profile will change accordingly.

In addition, make sure you disable or remove any utilities or third-party control panels that alter monitor display.

Using Adobe Photoshop 5.0

A. Adobe Photoshop 5.0 Setup:

1. In the File / Color Settings / RGB Setup dialog box, select your desired RGB workspace.
2. Check and enable the Display using Monitor Compensation check box.
3. Make sure that the selected RGB workspace in Photoshop matches ScanWizard 5's RGB Destination selection. This way, the scanned images shown in Photoshop will match the preview image that was shown in ScanWizard 5. Do not change your monitor profile (i.e., ColorSync System Profile) in

ScanWizard 5

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Special Feature of the Standard Control Panel

The [ScanWizard 5- Standard Control Panel](#) gives you the power to scan photos or documents without having to learn the art of professional digital imaging. It provides a simple but straightforward control over the scanning process. It integrates a "follow-me" tutorial that guides beginners from start to finish.

ScanWizard 5 - Standard Control Panel provides a simple and straightforward way of navigating a scanning session that is designed for those who wish to accomplish scanning jobs quickly and easily.

Microtek is the first to offer "[Balloon Screen Tips](#)" (a balloon-shaped callout containing hints on function and information of any buttons on the panel) and "[follow-me tutorial](#)" (a basic tutorial to guide first-timers on a step-by-step scanning procedure).

Special Feature of the Advanced Control Panel


The [ScanWizard 5 - Advanced Control Panel](#) provides advanced color image enhancement tools tailored for a totally customizable scan.

Unlike the Standard Control panel, You can scan multiple images on the scan bed in a single pass. Batch scanning saves time and effort when scanning many images.

In the Advanced control panel, the [Advanced Image Correction \(AIC\)](#) tool enables you to perform any adjustments prior to completing the scan. This time saver eliminates the time spent in image-editing applications.

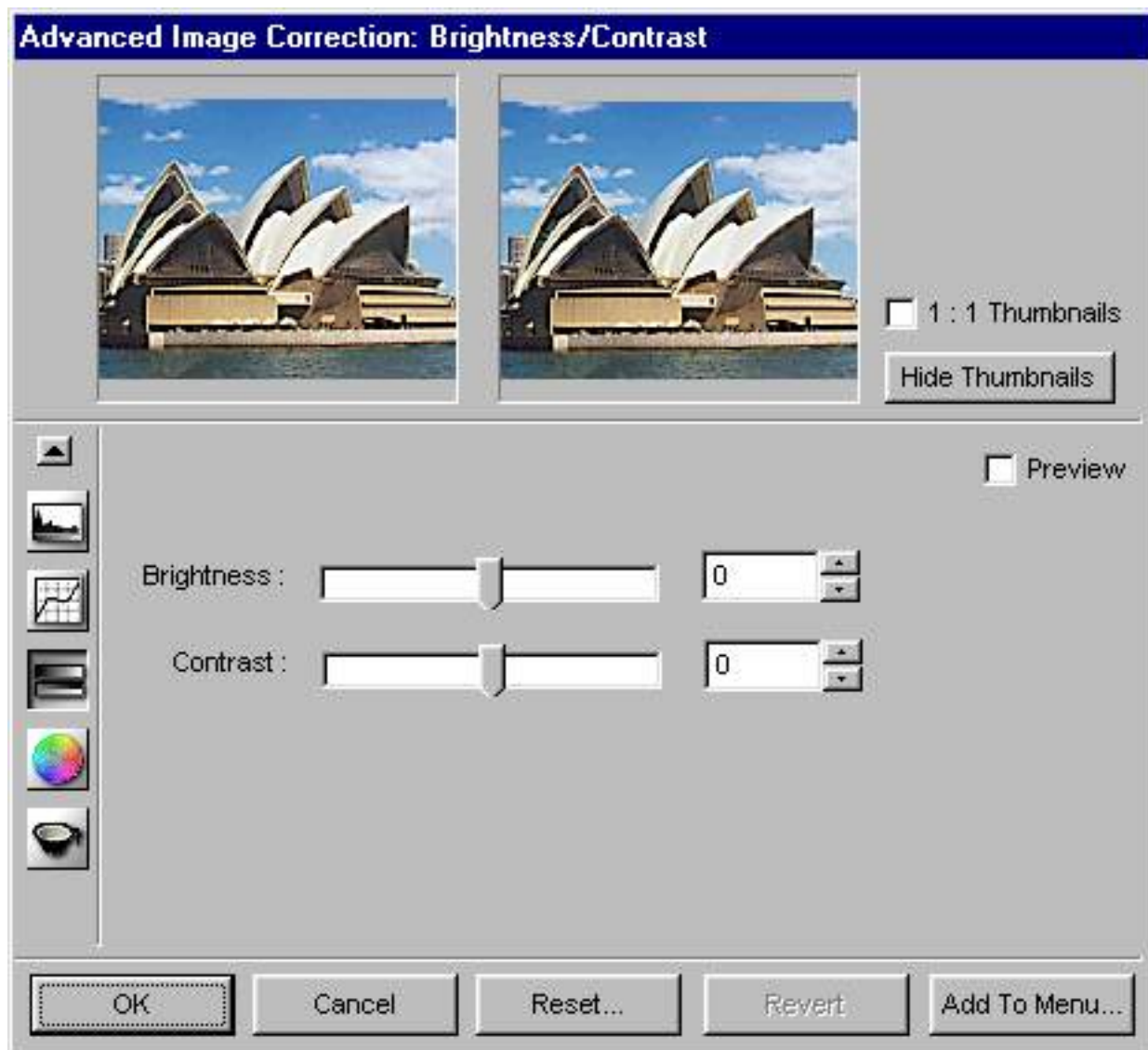
The Advanced Control Panel has four major windows consisting of the **Preview**, **Settings**, **Info** and **Scan Job** windows. The Preview and Settings windows will always appear automatically whenever ScanWizard 5 is activated.

Switching Between Standard and Advanced

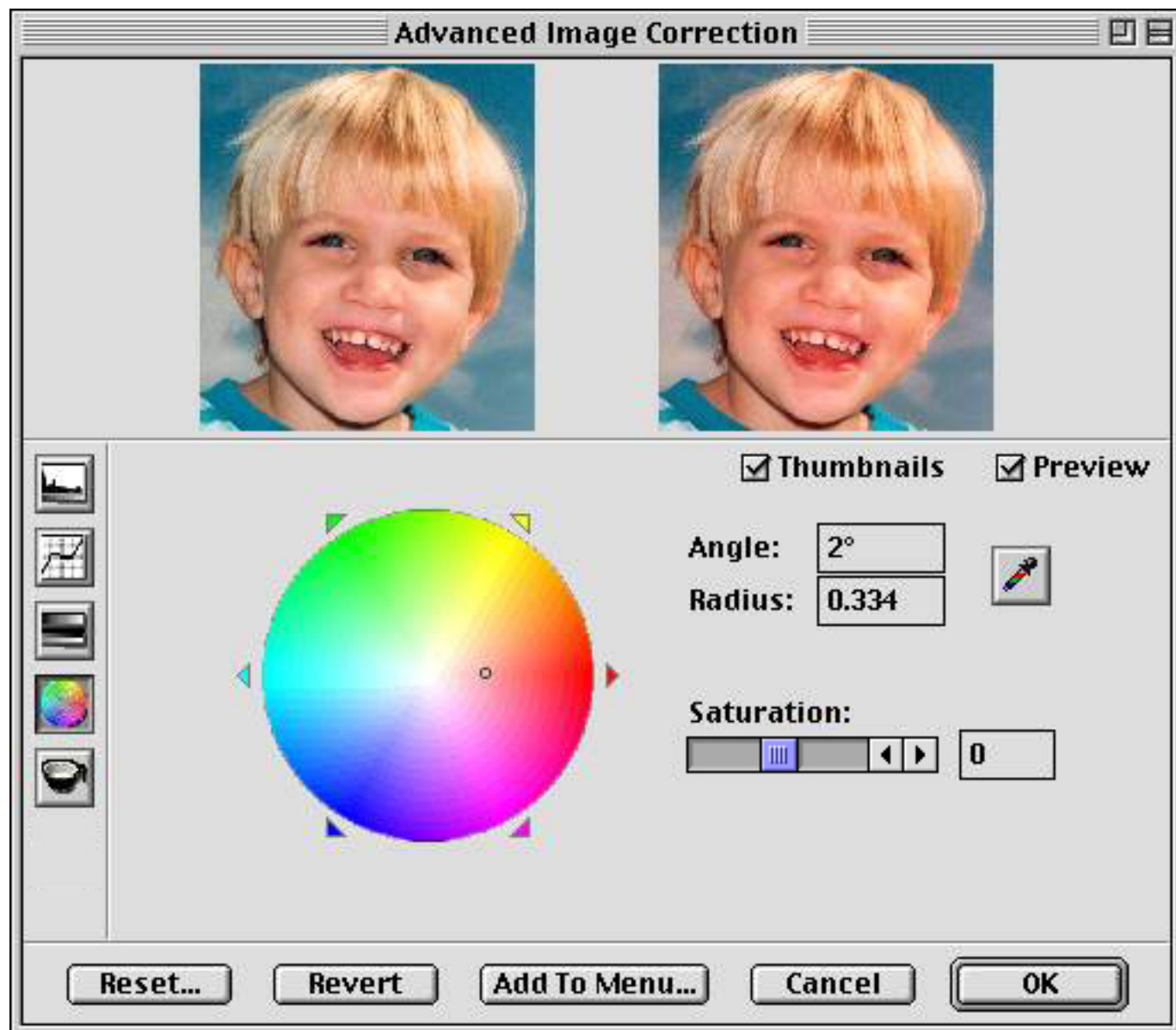
To switch between Standard and Advanced Control Panels, click on the **Switch** icon  on the Title bar. Within a few seconds, the current program exits and switches to the other control panel mode.



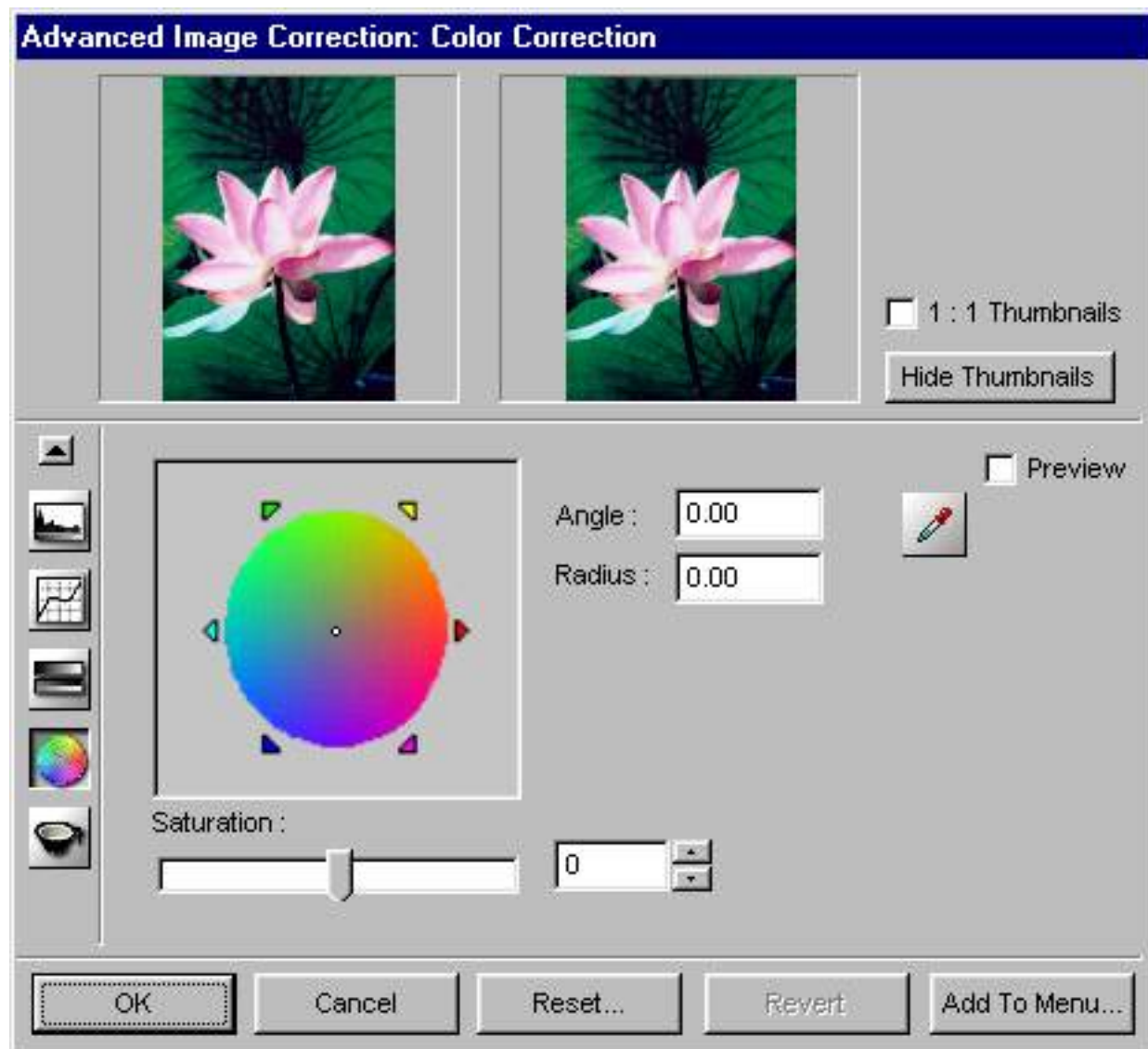
Brightness and Contrast dialog box



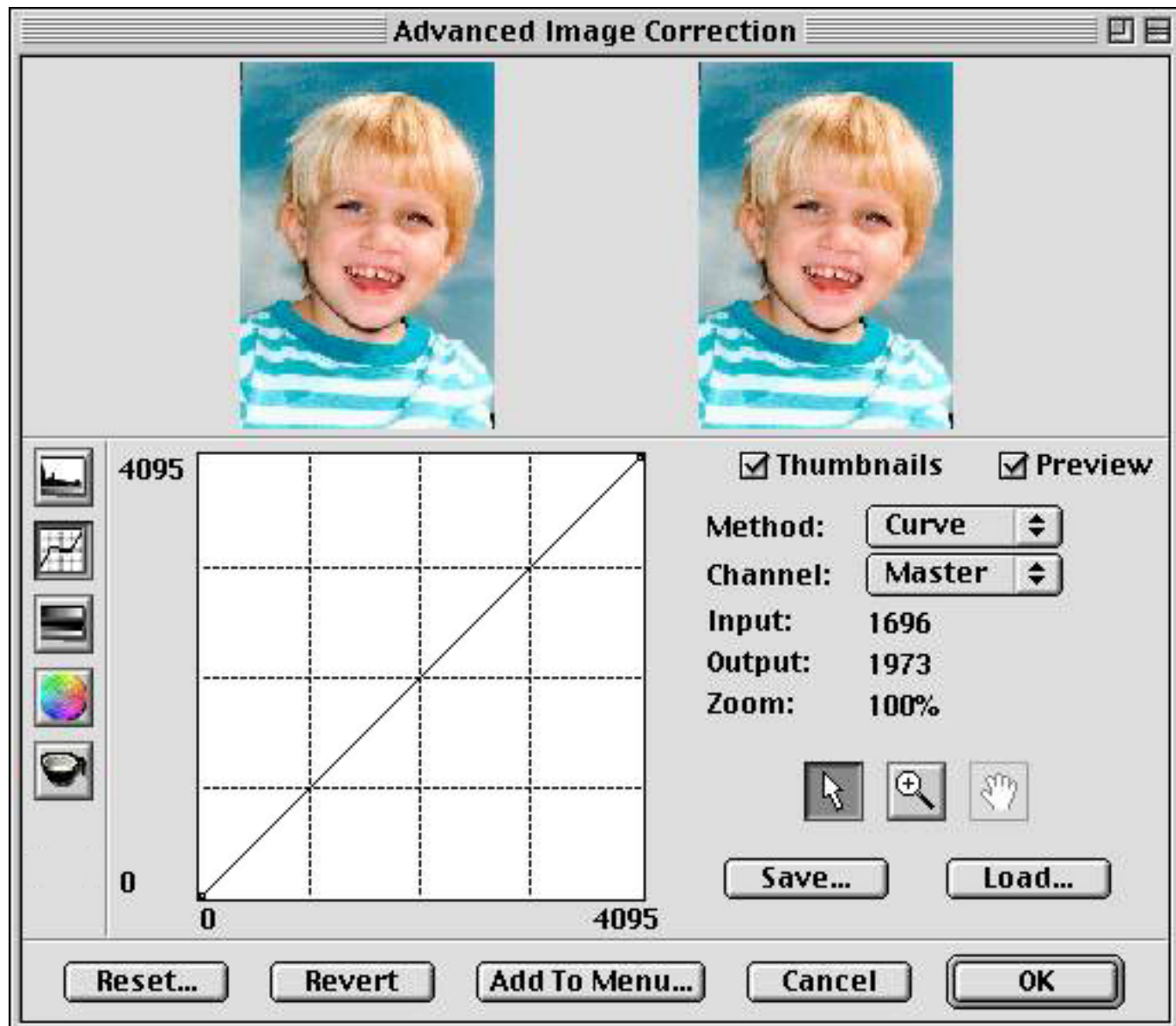
Color Correction dialog box



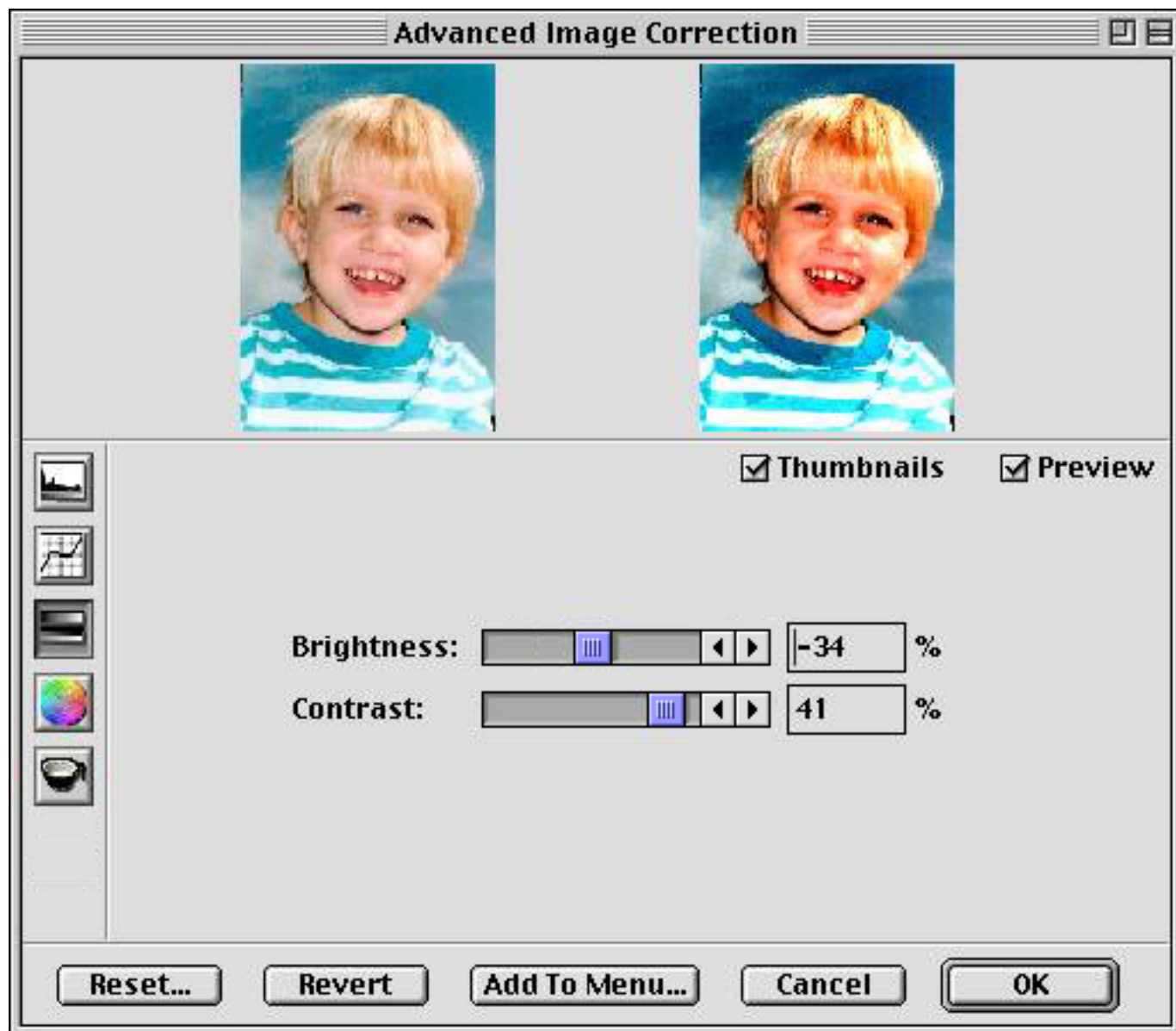
Color Correction dialog box



Tone Curve dialog box




Brightness and Contrast dialog box



Tone Curve dialog box

Advanced Image Correction: Tone Curve



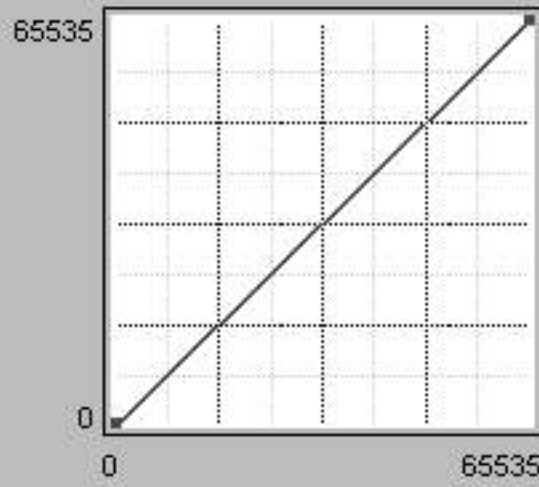
1 : 1 Thumbnails
Hide Thumbnails

Preview

Method: **Curve**

Channel: **All**

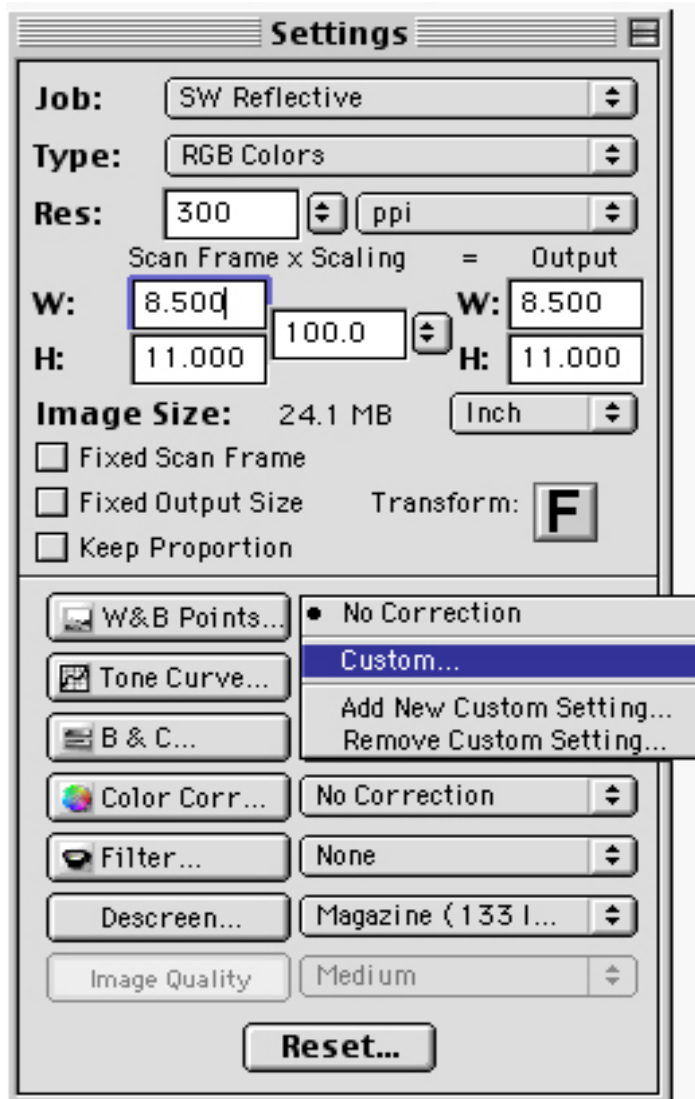
Input: 41001
Output: 63790



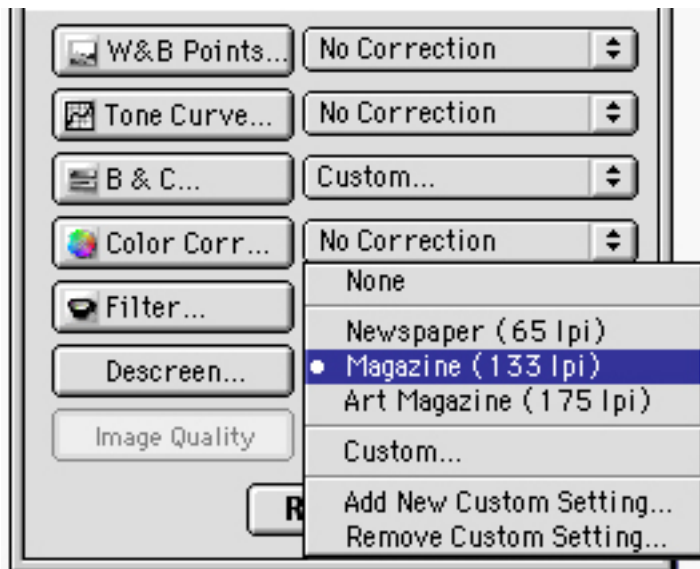
Load... Save As...

OK Cancel Reset... Revert Add To Menu...

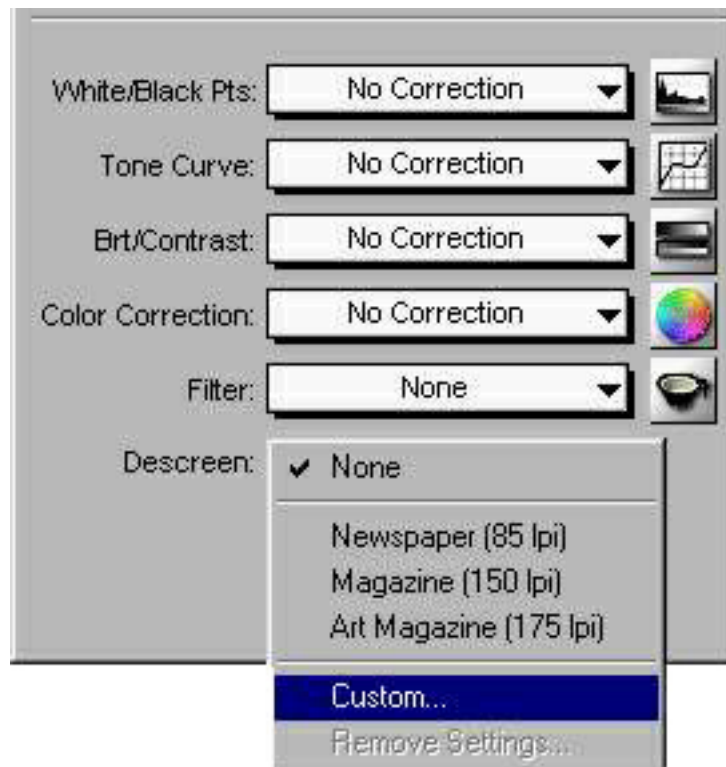
Settings window



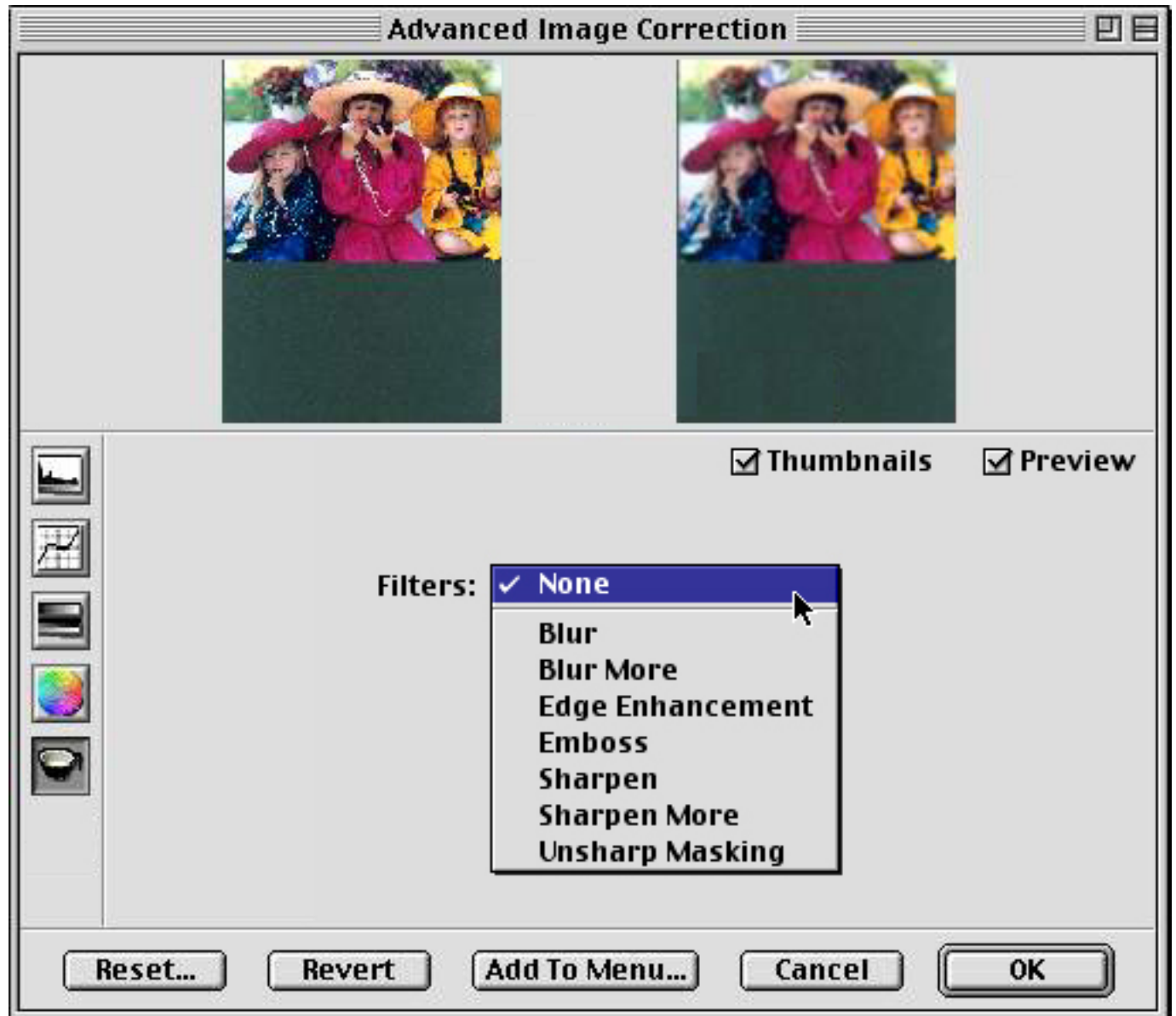
Descreen



Descreen



Filters



Filters

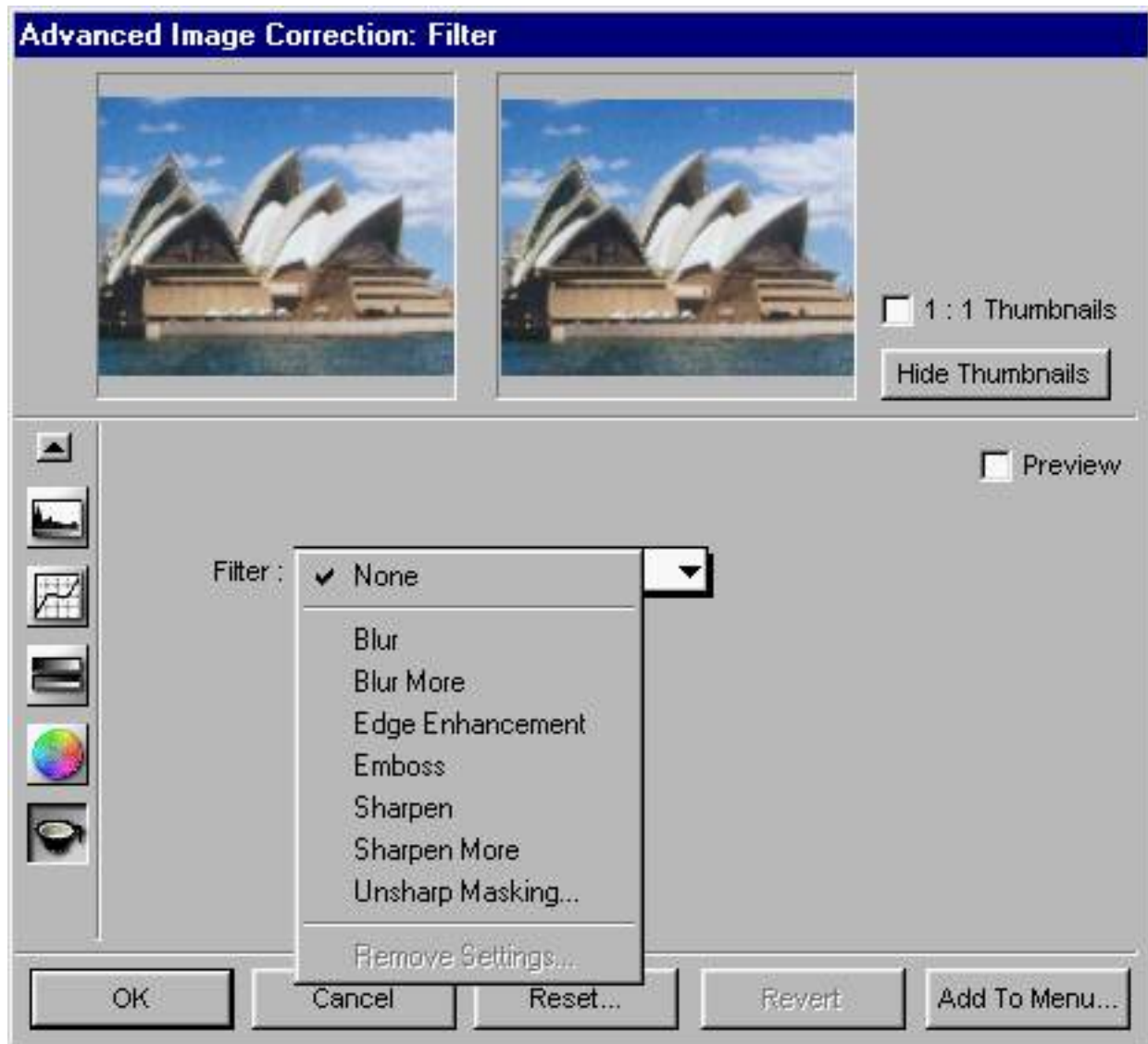
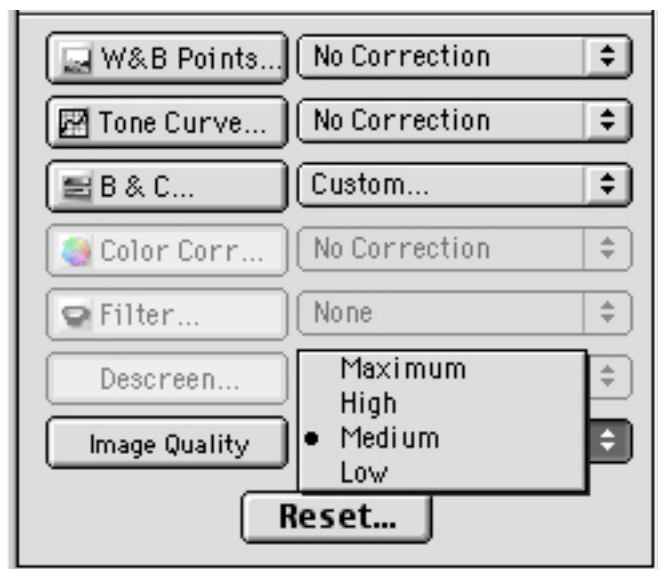







Image Quality



Fast JPEG Quality

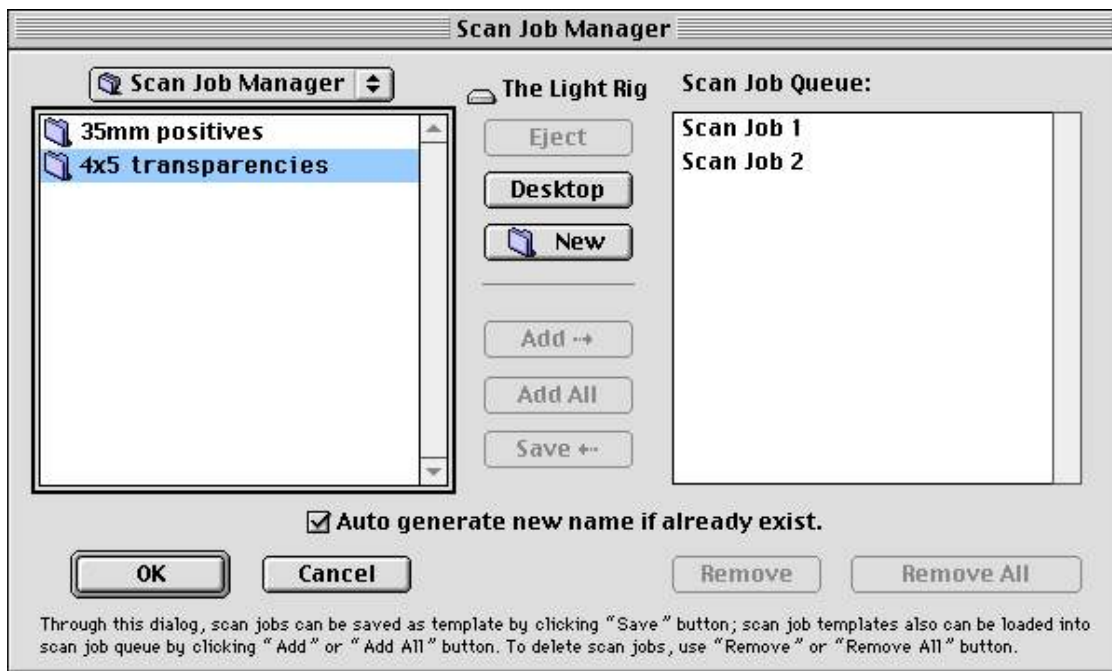
White/Black Pts:	<input type="text" value="No Correction"/>	
Tone Curve:	<input type="text" value="No Correction"/>	
Brt/Contrast:	<input type="text" value="No Correction"/>	
Color Correction:	<input type="text" value="No Correction"/>	
Filter:	<input type="text" value="None"/>	
Descreen:	<input type="text" value="None"/>	
Fast JPEG Quality:	<input type="text" value="Medium"/>	

- Low
- ✓ Medium
- High
- Maximum

Load & Save button

To use the Load & Save feature:

1. Click the **Load & Save** button in the Scan Job Queue window.
2. When a dialog box appears, go to the folder of your choice. The sample dialog box shows the following:
 - The left column shows your Scan Job Queue folders in the Finder. In this example, a folder called Scan Job Queue Manager contains two folders -- "35mm positives" and "4x5 transparencies".



- On the right column are your current Scan Job Queue s in the queue — "Scan Job Queue 1" and "Scan Job Queue 2".

Note: If you click the OK button and there are no Scan Job Queues on the right column, a dialog box will appear. You will then be asked if you wish ScanWizard 5 to automatically create a Scan Job Queue with default settings for you.

To add the Scan Job Queue template to the Scan Job Queue list:

1. Select and double-click a folder from the left column.
2. Click the **Add** button to add highlighted or selected templates, or click the **Add All** button to add all the Scan Job Queue templates in the folder.

Note: You may also add individual Scan Job Queues to the Scan Job Queue list.

To save Scan Job Queues as a template:

1. Select and double-click a folder from the left column.
2. Highlight the Scan Job Queue to be saved from the right column.
3. Click the **Save** button (located between the two columns). The selected Scan Job Queue is saved as a template to your selected folder.

To remove Scan Job Queue(s) from the queue:

1. Highlight the Scan Job Queue(s) to be removed from the right column.
2. Click the **Remove** or **Remove All** button located at the bottom of the dialog box.

To close the dialog box:

Click the **OK** button (located at the bottom of the dialog box).

If you remove all Scan Job Queues in the queue and close the dialog box, you will be informed that a default scan will be automatically created, or you will be prompted to return to the dialog box to manually enter at least one Scan Job Queue. This is because there should always be at least one Scan Job Queue in ScanWizard 5.

Load Save button

The "Load Save" button lets you save current scan jobs and lets you load scan job templates you have saved.

To save scan job as a template:

1. Click on the "**Load Save**" button.
2. At the right column, highlight the scan jobs you want to save.
3. Click on the "Load Save" button. From the Job Manager Template dialog box, the scan job templates are saved in the "Look in" options box. In this example, the directory name is "C:\windows\twain_32\scanwiz5\data". You may specify different folders for other scan job templates (6x7 cm, 35mm, etc.).

To load scan job templates:

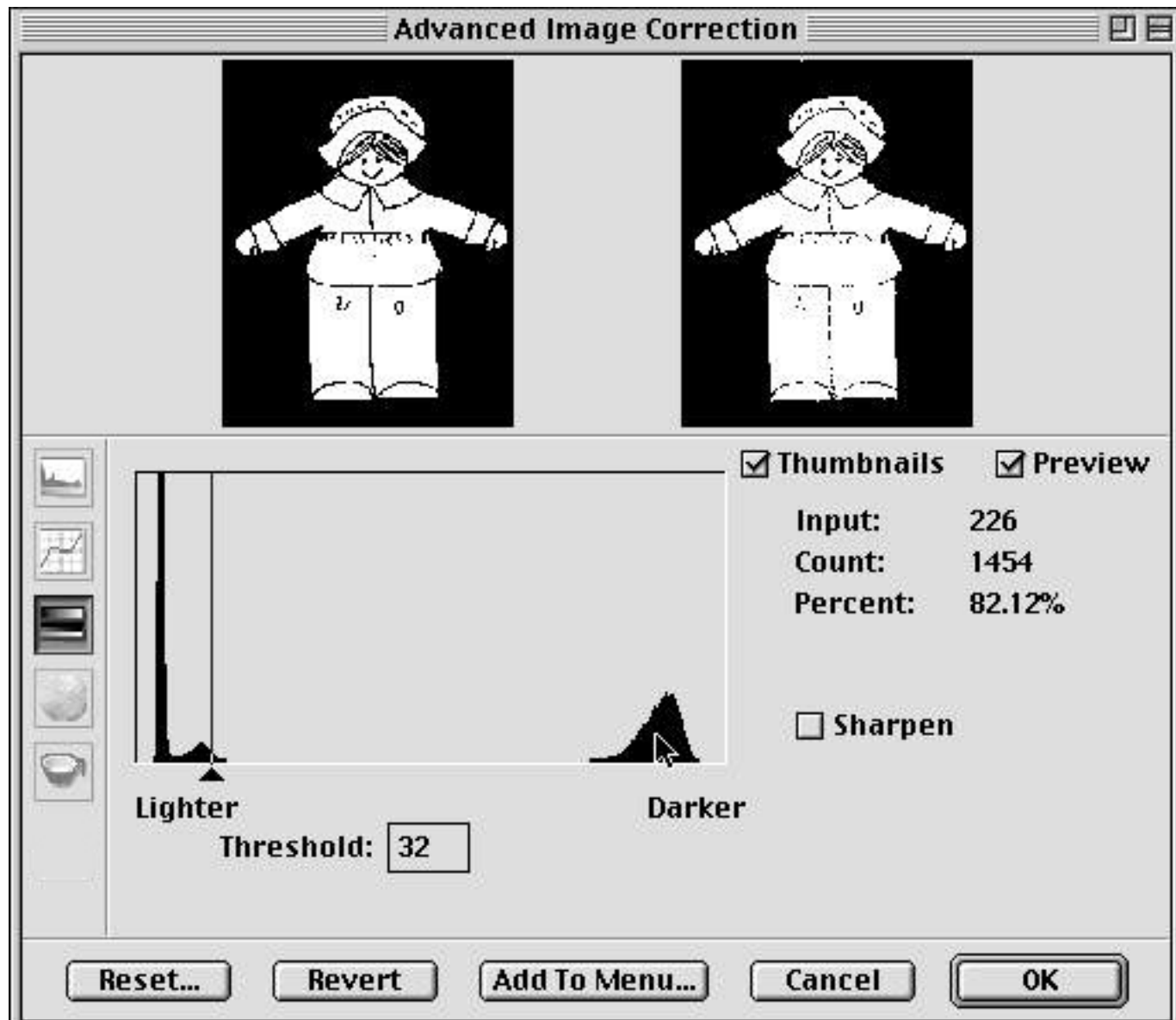
1. Click on the "Load Save" button. To select a different folder, other than the default folder, double-click folder icon to choose your preferred the folder.
2. You may remove your existing scan jobs from the right column before loading the new scan job templates.
3. From the left column, highlight the scan job templates you want to load. You can put more scan jobs into the left column by looking in the default folder.
4. Click on the Add button.

New name auto given if the name already exists

When you load or save scan job templates, you may check or uncheck the "New name auto given if the name already exists" option. Suppose the scan job templates you are going to add already exist, if you have checked this check box, a number suffix is

automatically appended to the root filename as new filename for the new scan job. If unchecked, the existing scan job templates are overwritten.

Threshold dialog box



Threshold dialog box

