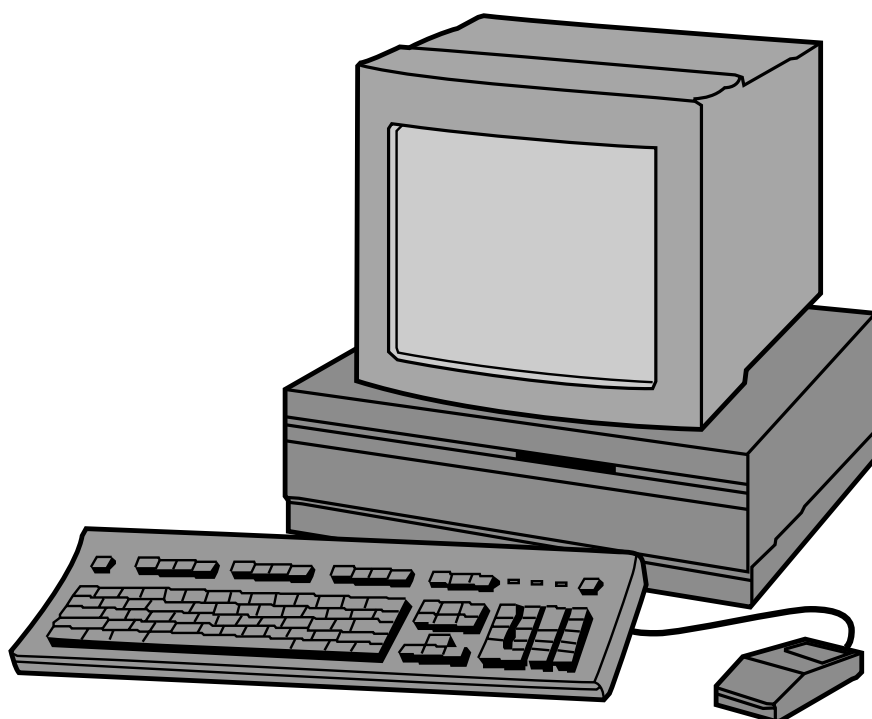


# *Dimâge Scan Multi*

## Software Instruction Manual



Thank you for purchasing the Minolta Dimâge Scan Multi. The Dimâge Scan Multi is a multiple format film scanner capable of scanning medium-format, 35mm, 16mm, and sleeved APS film. With the optional APS adapter, Advanced Photo System film in the cassette can also be scanned.

This manual has been designed to help you understand the operation of your scanner. To realize all the benefits of your scanner, please read this manual and the accompanying hardware manual thoroughly.

The instructions in this manual assume you have a working knowledge of the operating system for your computer (Mac OS, Windows 95, or Windows NT) and its conventions. Familiarity with the mouse and standard operating system menus and commands is necessary before operating the Dimâge Scan Multi software.

This manual does not instruct in the:

- basic use of personal computers.
- use of Window 95, Windows NT, or Mac OS.
- use of Adobe Photoshop, Paint Shop Pro, or Corel Draw.

The examples in this manual use Windows 95. The appearance of some screens may differ from the examples when using Windows NT or the Macintosh operating system.

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Corel Draw™ is the trademark of Corel Corporation.

Paint Shop Pro is the copyright of Met's Corporation.

Other corporate and product names are the trademarks and registered trademarks of their respective companies.

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## PACKAGE CONTENTS

Check this packing list before you begin. If some parts are missing, contact your dealer or a Minolta Service Facility.

- **Minolta Dimâge Scan Multi scanner**
- **35mm Film Holder FH-M1**
- **35mm Slide Mount Holder SH-M1**
- **Medium Format Film Holder MH-M1**
- **Film Masks:**
  - 6 x 4.5 Medium Format Film Mask**
  - 6 x 6 Medium Format Film Mask**
  - 6 x 7 Medium Format Film Mask**
  - 6 x 8 Medium Format Film Mask**
  - 6 x 9 Medium Format Film Mask**
  - APS Sleeve Film Mask**
  - 16mm Film Mask**
- **Power Cord PW-M2**
- **SCSI Cable SC-11**
- **Dimâge Scan Multi CD-ROM v1.0**
- **Instruction Manuals (1 software, 1 hardware)**
- **Warranty and Software Registration card.**

## SOFTWARE REGISTRATION

Please register this software before using it.

You will receive technical support, as well as software upgrade and product information once this software is registered. Complete and return the enclosed Product & Software Registration form after detaching it from the Warranty. No postage is necessary.

- The information provided in the questionnaire will only be used for Minolta customer service and product research & development. The information you provide will be kept private and confidential.

## SYSTEM REQUIREMENTS

### MACINTOSH

CPU:	Power PC
OPERATING SYSTEM:	System 7.5 to Mac OS 8.5.1
MEMORY:	A minimum of 8MB (megabytes) free memory.
HARD DISK SPACE:	90 MB or more of available hard disk space. When 16bit or 16bit linear is selected from the Color Depth list box in the Preferences dialog box, 200MB or more of available hard disk space.
MONITOR:	Minimum 13 inch monitor capable of displaying at least 32,000 colors. 16 inch (832 x 642) or larger is recommended.
OTHER:	Adobe PhotoShop 3.0.5 or Adobe PhotoShop 4.0.1 and 5.0.2 have been fully tested for use with the plug-in software.

### PC/AT

CPU:	i486DX2 66MHz or above (Windows98/NT: Intel Pentium or later).
OPERATING SYSTEM:	Windows NT 4.0, Windows 98 or Windows 95 (incl. OSR2).
MEMORY:	A minimum of 32MB (megabytes) of RAM.
HARD DISK SPACE:	90 MB or more of available hard disk space. When 16bit or 16bit linear is selected from the Color Depth list box in the Preferences dialog box, 200MB or more of available hard disk space.
MONITOR:	Minimum VGA monitor capable of displaying High Color (16 bit) is required. SVGA (800 x 600) or larger is recommended.
SCSI BOARD:	Adaptec AVA-1505*, AVA-1505AE*, AHA-1520B, AHA-1540CP, AHA-2910B, AHA-2910C, AHA-2940, or AHA-2940U/AU/UW/W.
OTHER:	PhotoShop 3.0.5, PhotoShop 4.0.1, 5.0.2, Paint Shop Pro 4.1E, 5.0.1E, Corel Draw 7, and Corel Draw 8 have been fully tested for use with the TWAIN driver software.

\*Adaptec AVA-1505, AVA-1505AE are only recommended for Windows 95.

# INSTALLING THE SOFTWARE

## WINDOWS 95/WINDOWS NT

- These installation instructions assume drive D is the CD-ROM drive.

**1. Turn on the Dimâge Scan Multi, then turn on your PC.**

**2. Start Windows 95 or Windows NT.**

**3. This step varies with your specific operating software...**

### Windows 95

- The New Hardware Found dialog box will appear.



**3. Click on Cancel.**

- This dialog box may appear several times. Repeat step 3 until the dialog box no longer appears.

### Windows NT

**3. Select Start ' Settings ' Control Panel, then double-click on the SCSI Adapters icon. Confirm that Minolta #2883 appears as a connected device for your SCSI board.**

- If Minolta #2883 does not appear, turn the system off and check all the connections. Repeat the procedure.

**4. Insert the Dimâge Scan Multi CD-ROM into the CD-ROM drive.**

**5 From the START button, select Run...**

- The Run dialog box will appear.

### Windows 95 Release 2 (OSR2)

- The appearance and/or wording of some dialog boxes may vary.
- The following dialog box will appear.

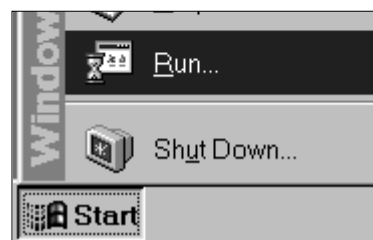


**3a. Click on Next.**

- A similar dialog box will appear.

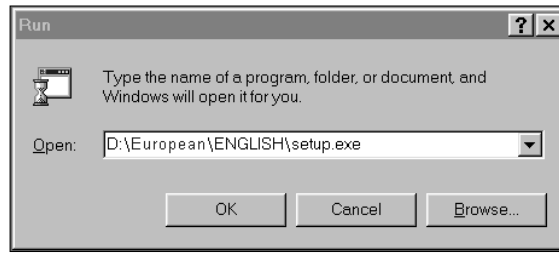
**3b. Click on Finish.**

- This dialog box may appear several times. Repeat step 3 until the dialog box no longer appears.



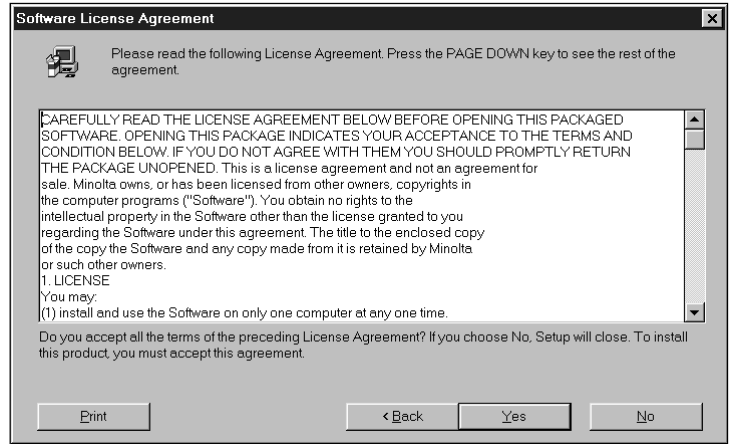
**6. Select D:\ENGLISH\Setup.exe from the Open drop-down list, then click on OK.**

- If your CD-ROM drive is not the D drive, replace the D with the appropriate letter for your CD-ROM drive.
- The Software License Agreement will appear.



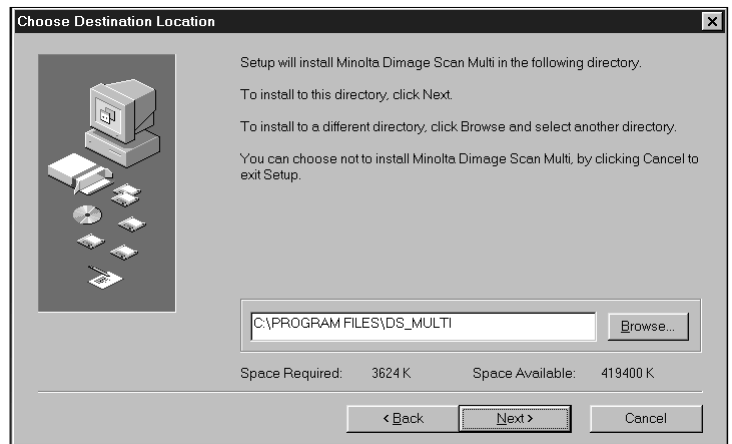
**7. After reading the agreement, click on Yes.**

- The Choose Destination Location dialog box will appear.



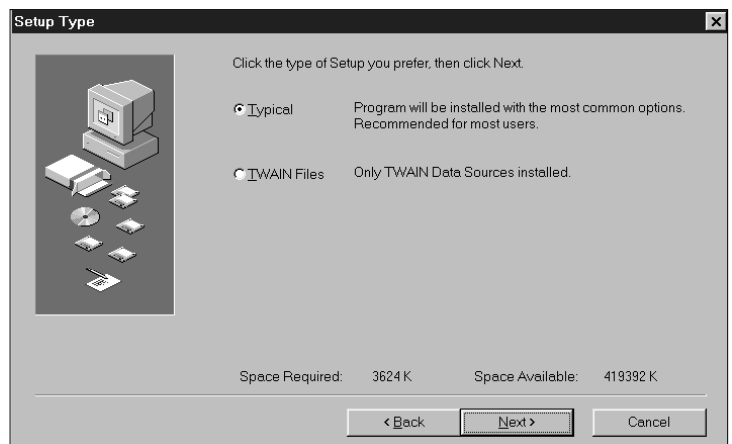
**8. To select another destination directory, click on Browse... and select the directory. Click on Next.**

- The Setup Type dialog box will appear.



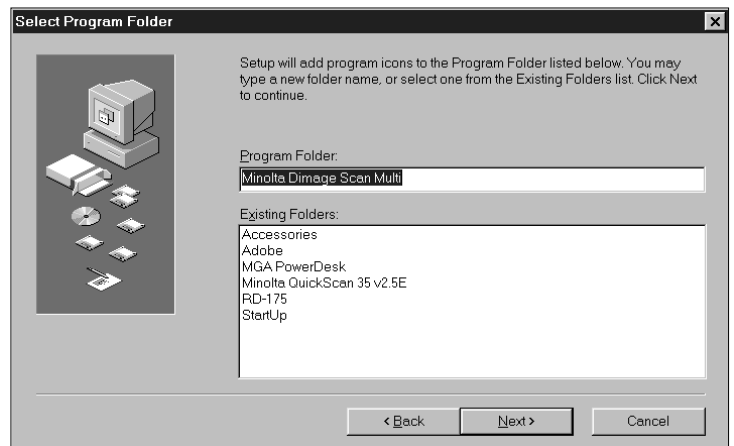
**9. Choose either Typical or TWAIN Files Only install, then click on Next.**

- The Select Program Folder dialog box will appear.



## 10. Click on Next.

- Setup will begin.
- When setup is complete a message will appear informing you installation was successful.

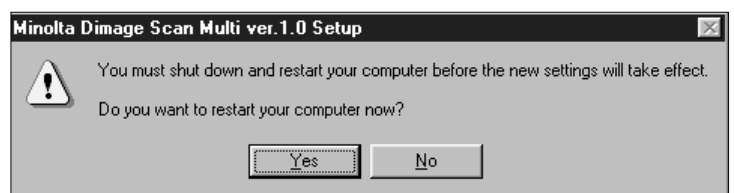


## 11. Click on Close.

- A message will appear asking if you want to restart the computer.



## 12. Click on Yes.



The Dimage Scan Multi setup will have placed the following files on your computer.

ds\_multi.exe  
Readme.txt  
Job  
twain.dll  
twain32.dll  
twunk\_16.exe  
twunk\_32.exe  
dsm\_tw.ini  
Dsmulti.hlp  
Dsmultij.hlp  
ds\_multi.dll  
dsm\_resj.dll  
DS\_multi.ds



## MACINTOSH

### 1. Insert the Dimage Scan Multi CD-ROM into the CD-ROM drive.

- The Dimage Scan Multi CD-ROM icon will appear on the desktop.

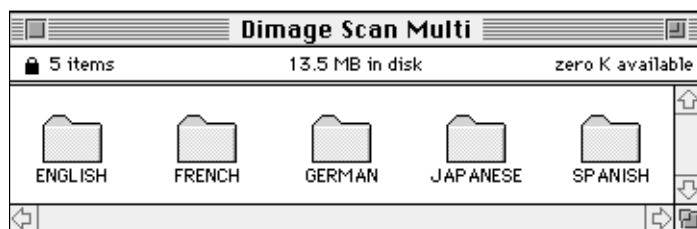
### 2. Double-click on the Dimage Scan Multi CD-ROM icon.

- The language folders will appear.



### 3. Double-click on the English language folder.

- The Dimage Scan Multi Installer icon will appear.



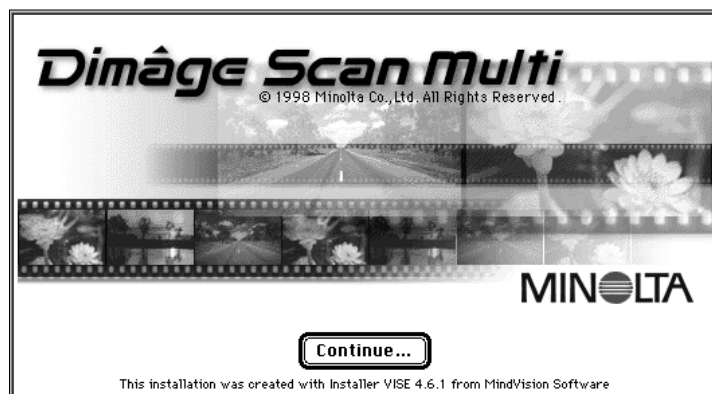
### 4. Double-click on the Dimage Scan Multi Installer icon.

- The installer screen will appear.



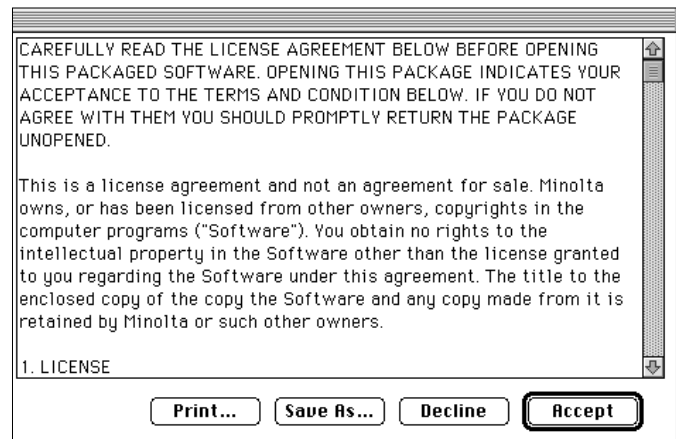
### 5. Click on Continue... .

- The User License Agreement will appear.



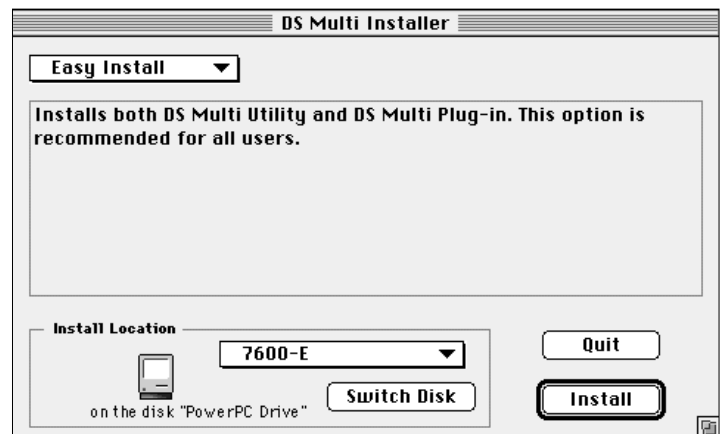
## 6. Click on Accept.

- The Dimage Scan Multi Installer will appear.



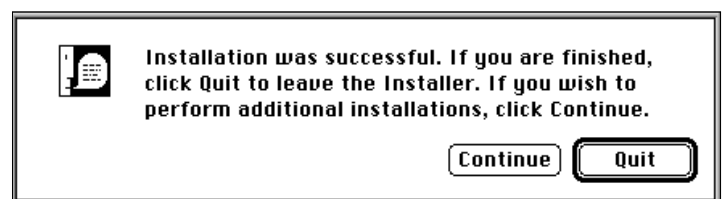
## 7. Choose the Install Type and confirm the Install Location of the software, then click on Install.

- Installation will begin. When installation is complete, a message will appear informing you installation was successful.



## 8. Click on Quit.

- The software will be installed in a new folder titled Dimage Scan Multi.
- If Easy Install was chosen, the Dimage Scan Multi folder will contain the following items: the DS Multi Utility, DS Multi Plug-in, and Read Me file.



## MACINTOSH – PLUG-IN

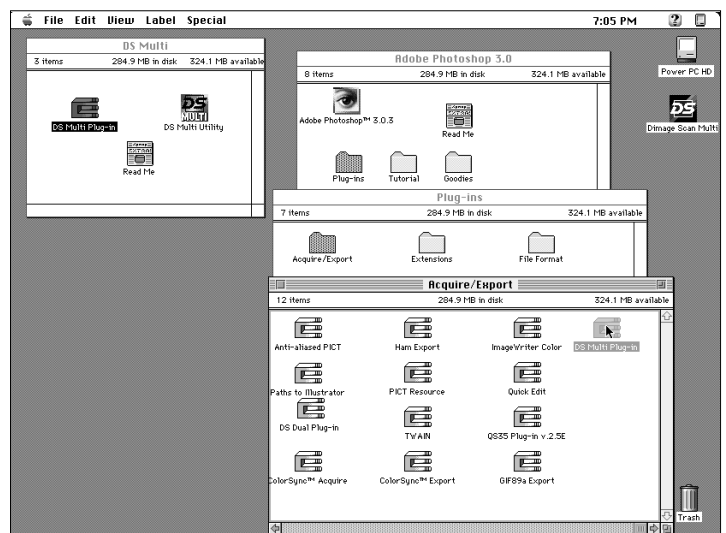
Once the installation procedure is complete, move the DS Multi Plug-in from the Dimage Scan Multi folder to the appropriate folder for the host application.

### Adobe Photoshop 3.0.5

- Open Photoshop's Plug-ins folder then drag and drop the DS Multi Plug-in into the Plug-ins' Acquire/Export folder.

### Adobe Photoshop 4.0.1

- Open Photoshop's Plug-ins folder then drag and drop the DS Multi Plug-in into the Plug-ins' Import/Export folder.



ColorSync helps your color devices (monitor, scanner, printer etc.) match their colors. This makes it faster and easier to obtain the correct colors in the final image.

The Dimâge Scan Multi driver software is compatible with ColorSync 2.0, which is included with the software. If ColorSync 1.0 is already installed on your computer, please remove it before installing ColorSync 2.0.

## Removing ColorSync 1.0:

To remove ColorSync 1.0 from your system, drag the following items into the trash:

**ColorSync™** system extension from the Extensions folder.

**ColorSync™ System Profile** control panel from the Control Panels folder.

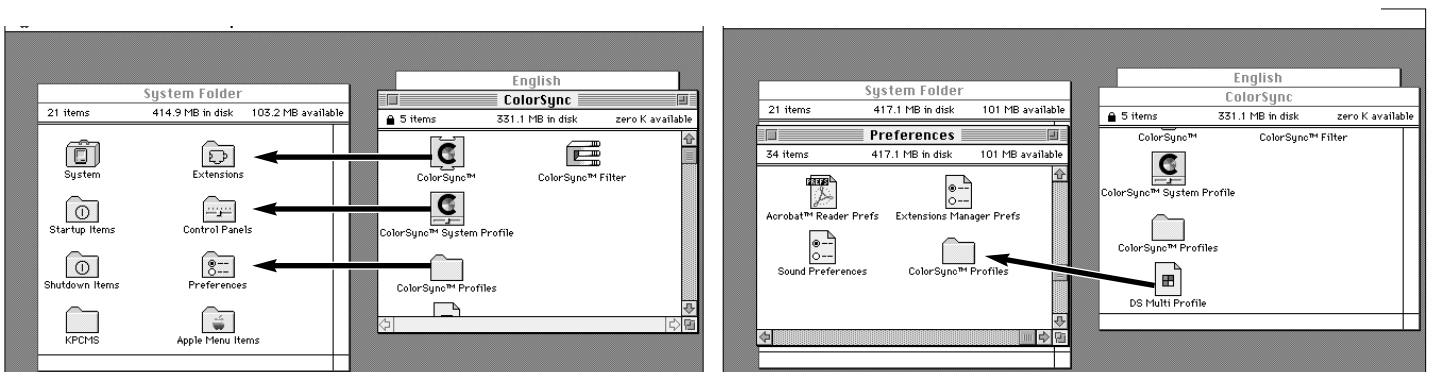
**ColorSync™ Profiles** folder from the Preferences folder.

## Installing ColorSync 2.0

The included ColorSync software can be installed directly from the Dimâge Scan Multi CD-ROM

- For Mac OS 7.5 and 7.5.2 or later, follow steps 1, 2, 6, and 7 only.

1. Insert the Dimâge Scan Multi CD-ROM into the CD-ROM drive, then double click on the **Dimâge Scan Multi** icon.
  - The language folders will appear.
2. Double-click on the **English** folder to open it, then double click on the **ColorSync** folder.
3. Drag the **ColorSync™** system extension to the **Extensions** folder.
4. Drag the **ColorSync™ System Profile** to the **Control Panels** folder.
5. Drag the **ColorSync™ System Profiles** folder to the **Preferences** folder.
6. Drag the **DS Multi Profiles** into the **ColorSync™ System Profile** folder now in the **Preferences** folder.
7. Drag the **ColorSync** filter to **Adobe Photoshop's Filters** folder located inside the **Plug-ins** folder.



# LAUNCHING THE SOFTWARE – WINDOWS

The utility software is a stand alone application used to control the scanner. The TWAIN driver lets you control the software through another application, such as your image editing software.

## LAUNCHING THE TWAIN DRIVER

This uses Adobe Photoshop 4.0.1 as the example. Commands may vary among applications.

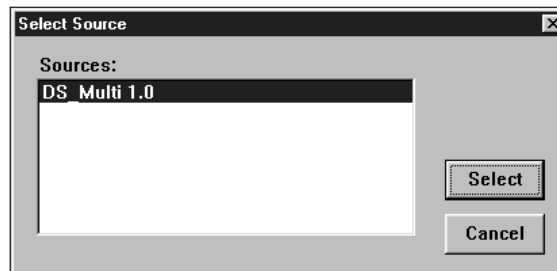
### 1. Open the host application.

### 2. Select File – Import – Select TWAIN\_32 Source...

- The Select Source dialog box appears.

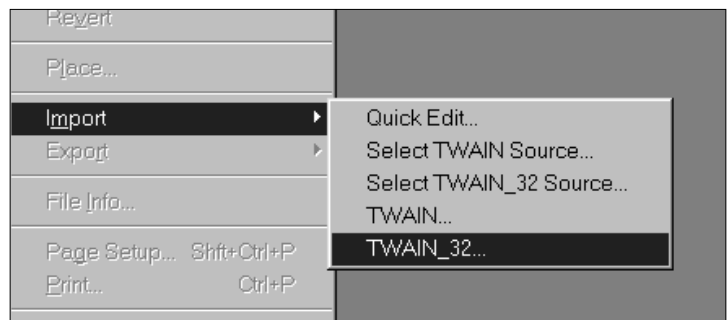


### 3. Select DS\_Multi 1.0, then click on Select.



### 4. Select File – Import – TWAIN\_32.

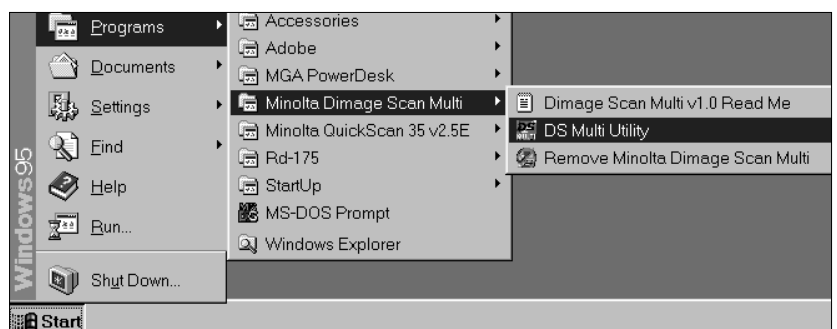
- The start-up screen will briefly appear. The software is ready for use when the Command window appears.



## LAUNCHING THE UTILITY SOFTWARE

### Select Start – Programs – Minolta Dimage Scan Multi ‘ DS Multi Utility.

- The start-up screen will briefly appear. The software is ready for use when the Command window appears.(p 15)



# LAUNCHING THE SOFTWARE – MACINTOSH

The utility software is a stand alone application used to control the scanner. The plug in lets you control the software through Adobe Photoshop.

## LAUNCHING THE PLUG-IN

1. Launch Adobe Photoshop.

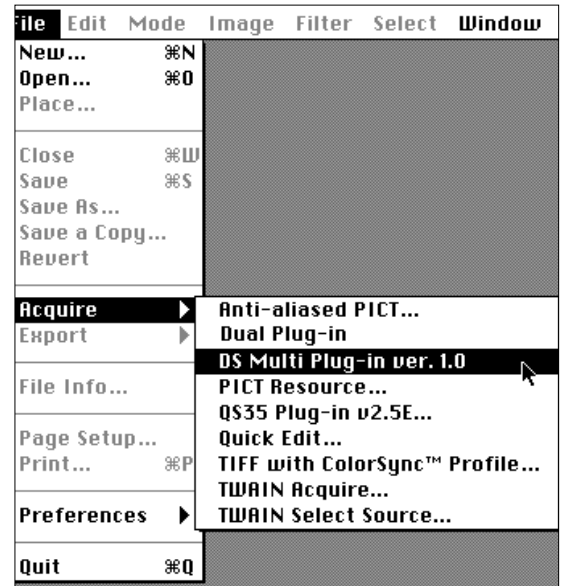
2. Photoshop 3.0.5:

- Select File – Acquire – DS Multi plug-in ver. 1.0.

Photoshop 4.0.1:

- Select File – Import – DS Multi plug-in ver. 1.0.

3. The start-up screen will briefly appear. The software is ready for use when the Command window appears.



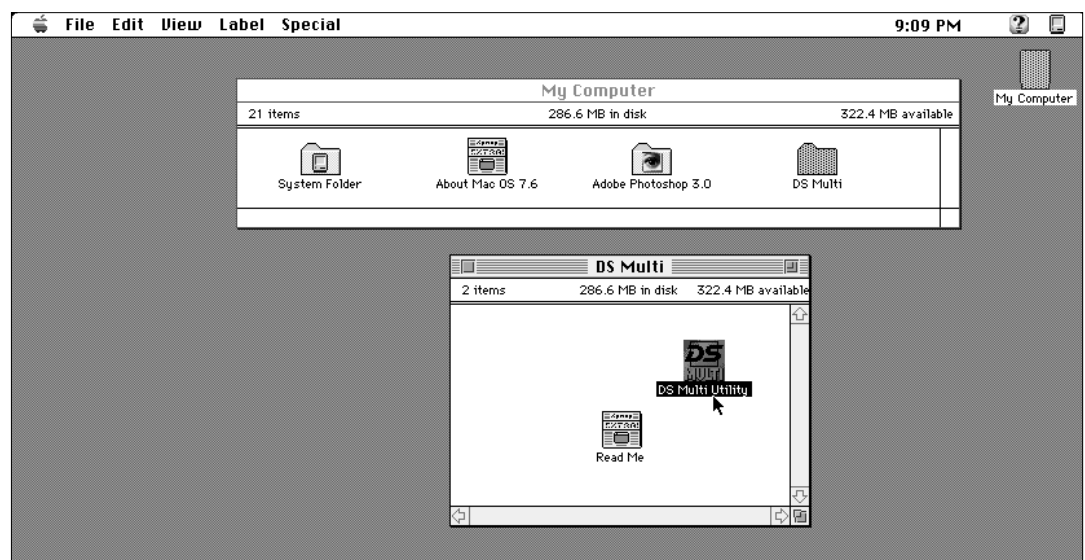
## LAUNCHING THE UTILITY SOFTWARE

1. Open the DS Multi folder.

- This folder will be in the location selected during installation.

2. Double click on the DS Multi Utility icon.

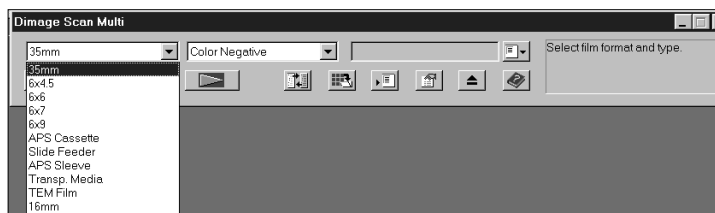
- The start-up screen will briefly appear. The software is ready for use when the Command window appears.



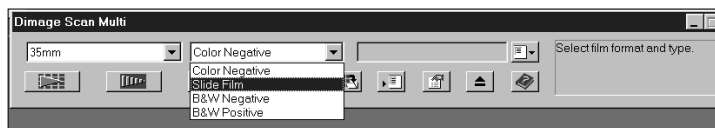
# QUICK GUIDE TO BASIC OPERATION

This quick guide will help you get started right away with your new scanner. Refer to the page number in parenthesis for additional information.

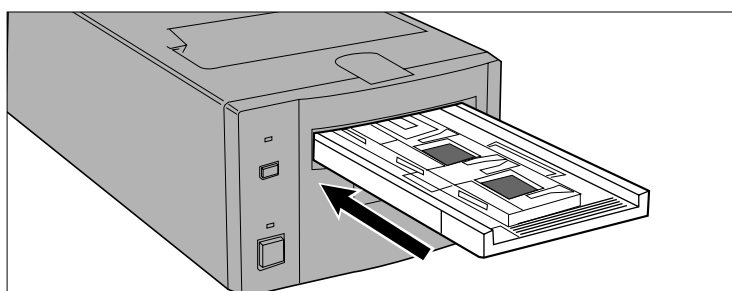
## 1. Select the film format (p. 16).



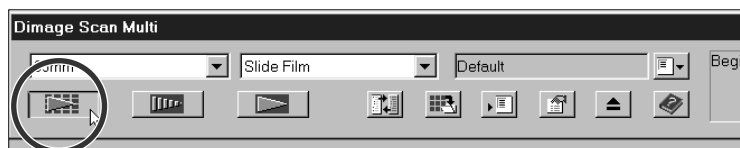
## 2. Select the film type (p. 16).



## 3. Insert the film into the film holder, then insert the holder into the scanner as instructed in the hardware manual.



## 4. For 35mm film and APS cassette, click on the Index Scan button (p. 17).



## Medium format films, 16mm, and TEM:

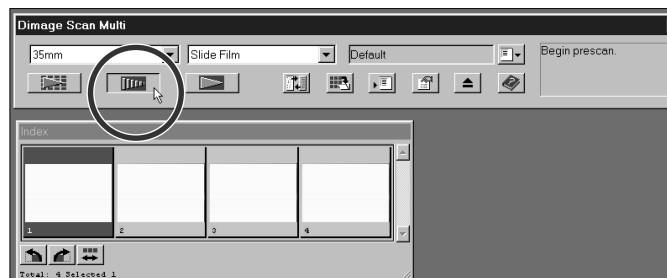
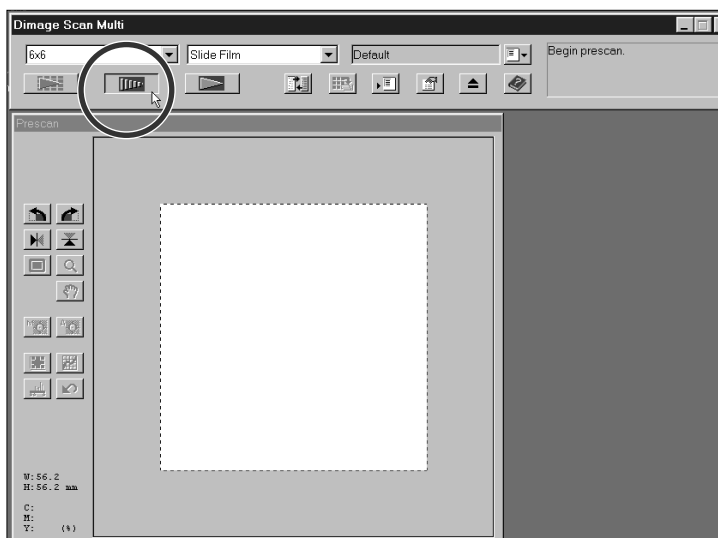
## 5. Click on the Prescan button (p. 23).

- The prescanned image will appear in the Prescan window (p. 21).

## 35mm film and APS Cassette:

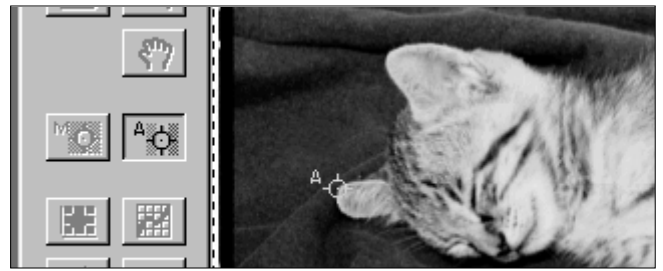
## 5. Click on a frame to select it, then click on the Prescan button (p. 22).

- The prescanned image will appear in the Prescan window (p. 21).

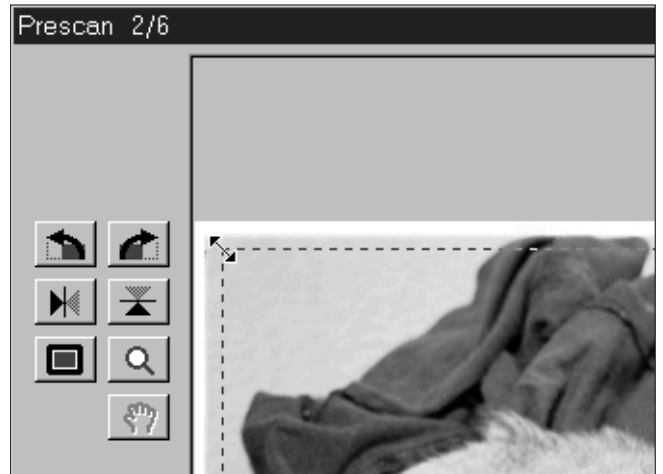


**6. If required, use Manual Focus or Point AF (p. 28 – 29).**

- A new prescan will begin.




**7. Crop, rotate, and flip the image as desired (p. 23 – 25).**

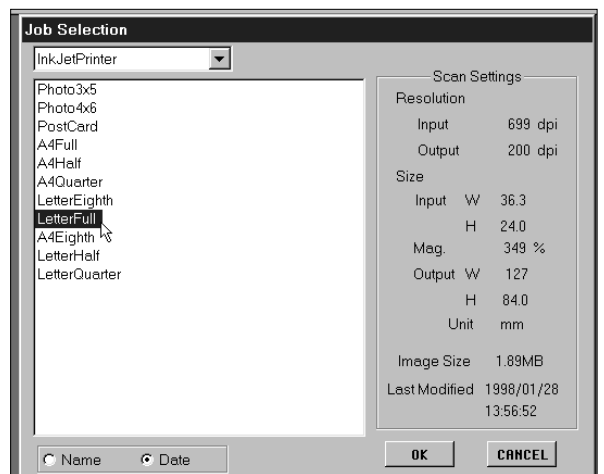


**8. Make brightness, color, and contrast corrections as needed.**

- There are three options for making these corrections:
  - Variations (p. 31)
  - Histogram (p. 34)
  - Tone Curve (p. 39)
- The Variations window is recommended for beginners.



**9. Click on the load job button , then select the Job category and job file name (p. 44).**



**10. Click on the Scan button.**

- TWAIN/Plug-in: Scanning will begin. The scanned image will appear in the host application's window (p. 46).
- Utility: You will be asked to name the file, choose a file format, and select the destination. Scanning will begin. When scanning is complete, the computer will return to the utility software and image will be in the selected destination (p. 47).

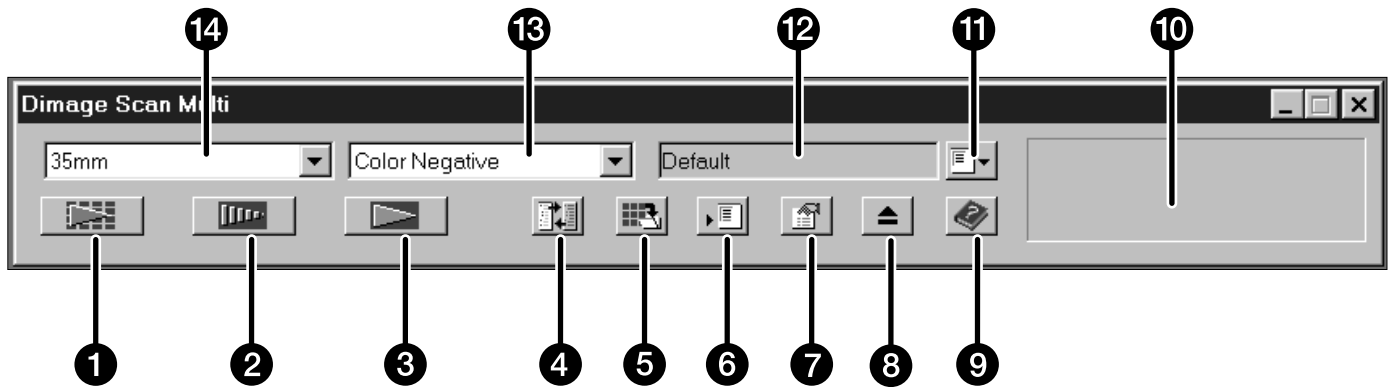



**BEGIN SCANNING**



The command window appears when you launch the software. This is the main window for the Dimâge Scan Multi software.

## COMMAND WINDOW – NAMES OF PARTS

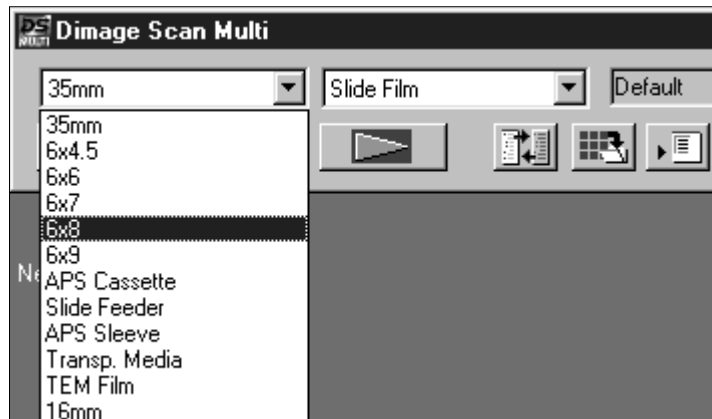


- ① Index Scan button
- ② Prescan button
- ③ Scan button
- ④ Scan Settings button
- ⑤ Save Index Scan button
- ⑥ Save Job button
- ⑦ Preferences button
- ⑧ Eject film button
- ⑨ Help button (Macintosh Help button: )
- ⑩ Status bar
- ⑪ Load Job button
- ⑫ Displays current Job selection
- ⑬ Film Type drop-down list
- ⑭ Film Format drop-down list

## SELECT THE FILM FORMAT

### 1. In the Command window, select the film size from the drop-down list.

- The Prescan window will appear if a medium-format film size (6x4.5, 6x6, 6x7, 6x8, 6x9), TEM, or 16mm was selected. See Prescan Window (p. 21).
- The Index window will appear if 35mm or APS Cassette is selected (p 17).



FILM FORMAT	HOLDER
35mm	5mm Film Holder FH-M1(sleeved film)/Slide Mount Holder SH-M1(mounted slides)
6x4.5	Medium Format Film Holder MH-M1 – 6x4.5 mask
6x6	Medium Format Film Holder MH-M1 – 6x6 mask
6x7	Medium Format Film Holder MH-M1 – 6x7 mask
6x8	Medium Format Film Holder MH-M1 – 6x8 mask
6x9	Medium Format Film Holder MH-M1 – 6x9 mask
APS Cassette	APS Adapter AD-100*
Slide Feeder	Slide Feeder SC-100*
APS Sleeve	Medium Format Film Holder MH-M1 – APS mask
Transparent Media	Slide Mount Holder SH-M1
TEM Film	Medium Format Film Holder MH-M1
16mm	Medium Format Film Holder MH-M1 – 16mm mask

\* The APS Adapter AD-100 and the Slide Feeder SC-100 are optional accessories (p. 57).

## SELECTING THE FILM TYPE

### 1. In the Command window, select the type of film from the drop-down list.

- The film type options differ according to the film format currently selected.



FILM FORMATS	FILM TYPES
35mm, APS Sleeve, Medium-format films, Slide Feeder, 16mm	Color Negative, Slide Film, B&W Negative, B&W Positive
APS Cassette	Auto Detect (color), Color Negative, Slide Film, B&W Negative, B&W Positive
Transparent Media	Special (color), Color Negative, Slide Film, B&W Negative, B&W Positive
TEM film	Special (B&W), Color Negative, Slide Film, B&W Negative, B&W Positive

# INDEX SCAN

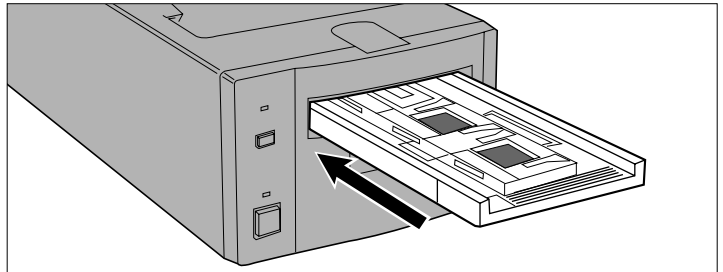
The index scan function can be used with 35mm film (in the 35mm Film Holder FH-M1 or Slide Mount Holder SH-M1) and APS film in the cassette (using the optional APS Adapter AD-100). Index Scan performs a low resolution scan of each image and displays them in the Index Window.

It is not necessary to create an index scan before prescanning and scanning.

## MAKING AN INDEX SCAN

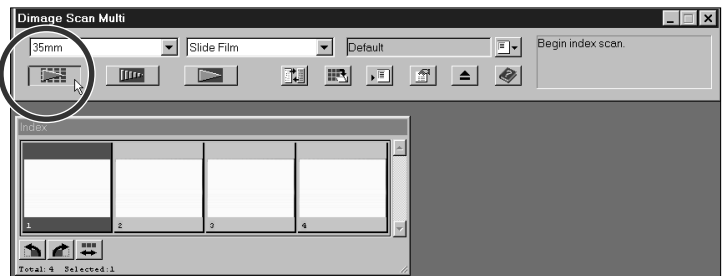
### 1. Insert the film holder into the scanner as instructed by the hardware manual.

- Index scans can only be performed when using the 35mm film holder, slide mount holder, or optional APS adapter.

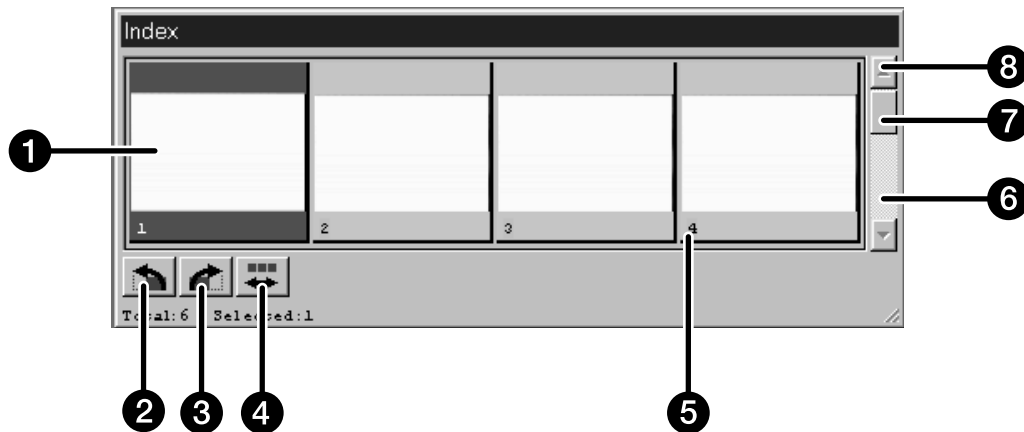


### 2. Click on in the Command window.

- All frames will be scanned and appear in the Index window.
- When using the 35mm film holder, the frames are scanned in the following order: 1, 2, 4, 3, 5, 6.



## INDEX WINDOW – NAMES OF PARTS



- |                              |                |
|------------------------------|----------------|
| ① Frame area                 | ⑤ Frame number |
| ② Rotate left button         | ⑥ Scroll bar   |
| ③ Rotate right button        | ⑦ Scroll box   |
| ④ Reverse frame order button | ⑧ Scroll arrow |

- The frame number that appears in the Index window corresponds to the film holder; it is not related to the frame number that appears on the film.
- The following Index Scan options can be set in Preferences (p. 53).
  - Index Scan Priority; Speed or Quality.
  - Index window scroll direction: Horizontal or Vertical.
- To cancel the index scan:
  - Windows: Press the ESC key.
  - Macintosh: Press Command and the period key.

## CHANGING THE WINDOW SIZE

Change the size of the Index window as desired. The position of the frames will change accordingly.

**Click on the corner tab and drag to reach the desired size.**

- The size and shape of the index frames do not change.



## SELECTING FRAMES

Selected frames can be rotated or prescanned. A border appears around selected images.

**Click on a frame to select it.**

- A border will appear around the image.



### Windows

- Select multiple frames by holding the Ctrl key while clicking on frames.
- Select a group of frames by holding the Shift key while clicking on the first and last frame in the group.
- Select all the frames by pressing Ctrl and A.
- Delete all the frames by pressing Ctrl, Shift, and R.

### Macintosh

- Select multiple frames by holding the Command key while clicking on frames.
- Select a group of frames by holding the Shift key while clicking on the first and last frame in the group.
- Select all the frames by pressing Command and A.
- Delete all the frames by pressing Command, Shift, and R.

## REVERSING THE FRAME ORDER

Some cameras are reverse-winding, so the last frame appears at the beginning of the roll of film. The order of the index display can be reversed to correct the chronology.





Click on  in the Index window.

## ROTATING THE INDEX FRAMES

Rotate index frames so they appear in the index window with the proper orientation.



Select the desired frames, then click on

 or .

- The selected frames will rotate in 90° increments either clockwise or counter-clockwise.
- Rotating the index frame will not affect the Prescan or Scan.

## SAVING THE INDEX SCAN IMAGE

It is possible to save the index scan as an image file that can be opened and edited in other applications.

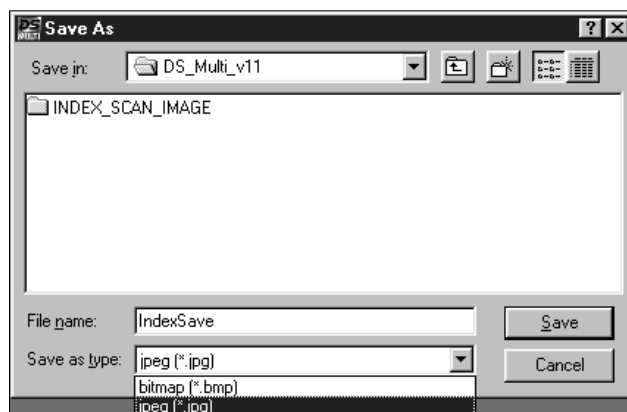
### 1. Click on .

- The standard save dialog box for your operating system will appear.



### 2. Enter the desired file name, choose the file destination, then click on OK.

- Windows: The displayed index scan will be saved in JPEG (.jpg) or in the BMP file format.  
Macintosh: The displayed index scan will be saved in JPEG or in the PICT file format.

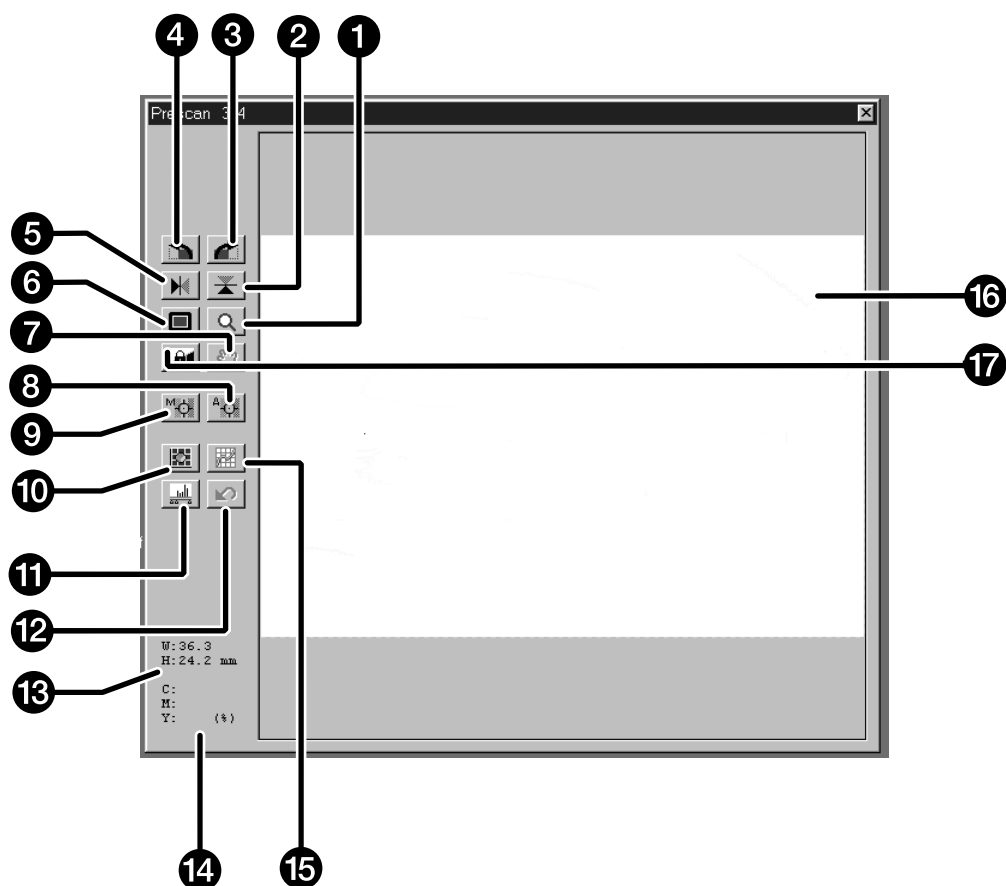


If a frame area in the Index window is empty because the index scan was cancelled partway through the process or the film holder has changed, an index scan of the empty frames will begin.

# PRESCAN

It is necessary to create a prescan of your image before making the final scan. Use the prescan to make focus, brightness, color, contrast, and cropping changes to your final scan.

## PRESCAN WINDOW



- |   |                         |   |                                       |
|---|-------------------------|---|---------------------------------------|
| ① | Zoom button             | ⑨ | Manual Focus button                   |
| ② | Flip Vertical button    | ⑩ | Variations button                     |
| ③ | Rotate Right button     | ⑪ | Histogram button                      |
| ④ | Rotate Left button      | ⑫ | Reset All button                      |
| ⑤ | Flip Horizontal button  | ⑬ | Frame Area display (width and height) |
| ⑥ | Full-Screen View button | ⑭ | RGB/CMY display                       |
| ⑦ | Scroll button           | ⑮ | Tone Curves button                    |
| ⑧ | Point AF button         | ⑯ | Image area                            |
|   |                         | ⑰ | AE-Lock (AEL) Button                  |

## MAKING A PRESCAN 35MM FILM (APS CASSETTE)

Prescanning creates a scan of the image that you can apply and view color, contrast, focus, orientation, and brightness corrections before clicking on the Scan button. This will ensure the final scan will be the best it can be.

### 1. Select the film type and format, then insert the film holder.

- The Index window will appear.



### Optional – To create an index scan:

### 2. Click on the index scan button .

- The index scans will appear in the Index window.



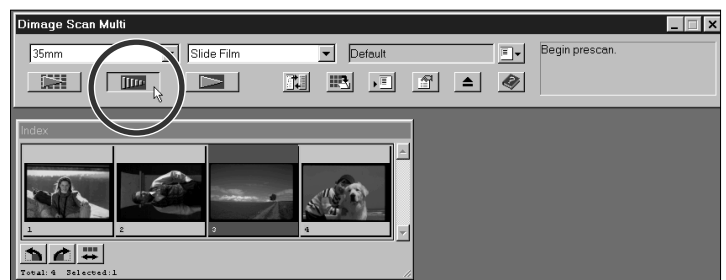
### 3. Click on the image area of the desired frame number in the Index window to select it.

- A border will appear around selected images
- Multiple images can be selected (p. 18).



### 4. Click on in the Command window.

- When the prescan is complete, the prescanned image will appear in the Prescan window.



If multiple images are prescanned: Only one prescan can appear in the Prescan window at a time. Click on the desired index frame to display the image in the prescan window. Adjustments made to the prescan are not lost when displaying or scanning another prescan.

There are two options for making index scan, Speed or Quality. Select the desired option in the Preference window (p. 53).

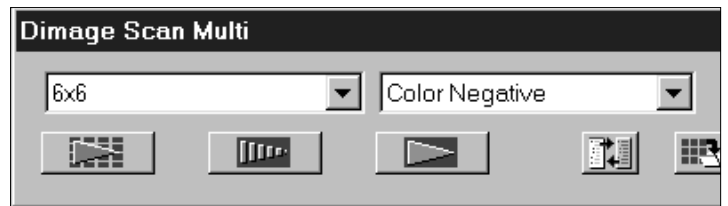


## MAKING A PRESCAN MEDIUM FORMAT, TEM, 16MM

Prescanning creates a scan of the image that you can apply and view color, contrast, focus, orientation, and brightness corrections before clicking on the Scan button. This will ensure the final scan will be the best it can be.

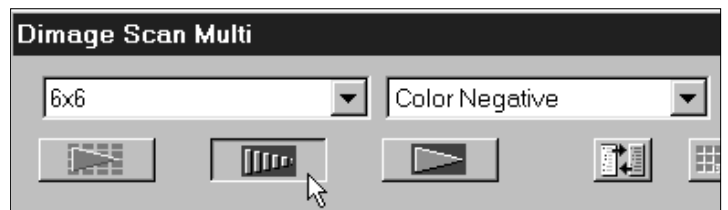
### 1. Select the film type and format, then insert the film holder.

- The Prescan window will appear.





### 2. Click on the Prescan button in the Command window.

- When the prescan is complete, the prescanned image will appear in the Prescan window.



## ROTATE

Use the rotate left  and rotate right  buttons to correct the orientation of your image before scanning.

Click on  to rotate the image 90° clockwise.

Click on  to rotate the image 90° counter-clockwise.

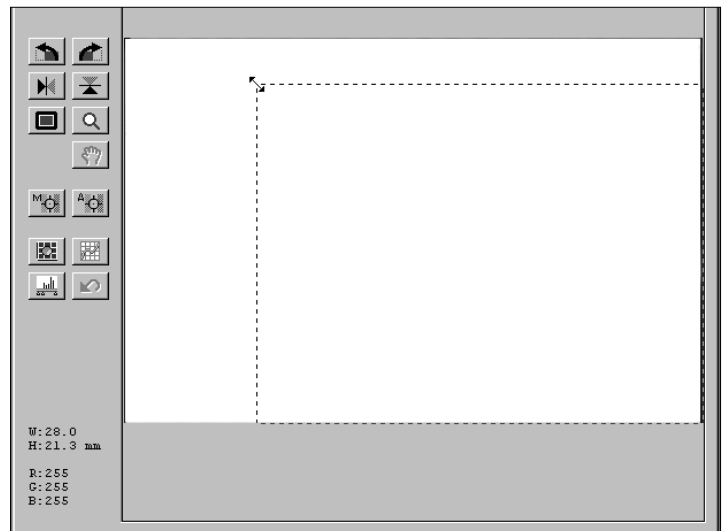
- Changes will be reflected in the Prescan image.



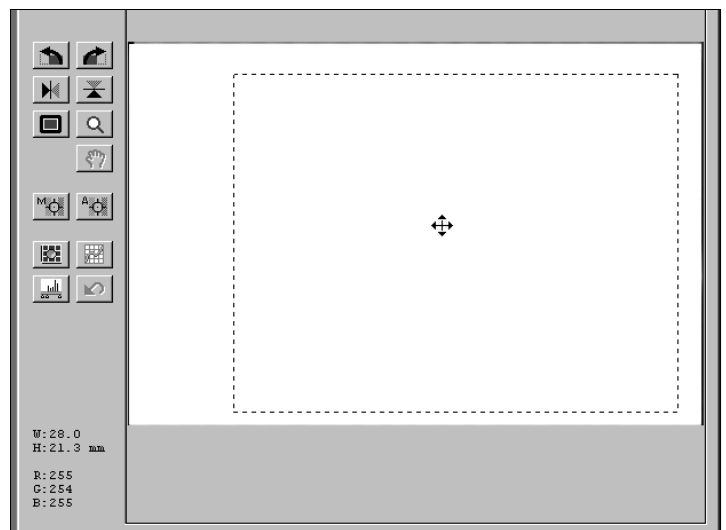
## CROP

The cropping area defined on the prescan by the cropping frame determines the area of the final scan. The cropping frame dimensions are displayed in the Prescan window.

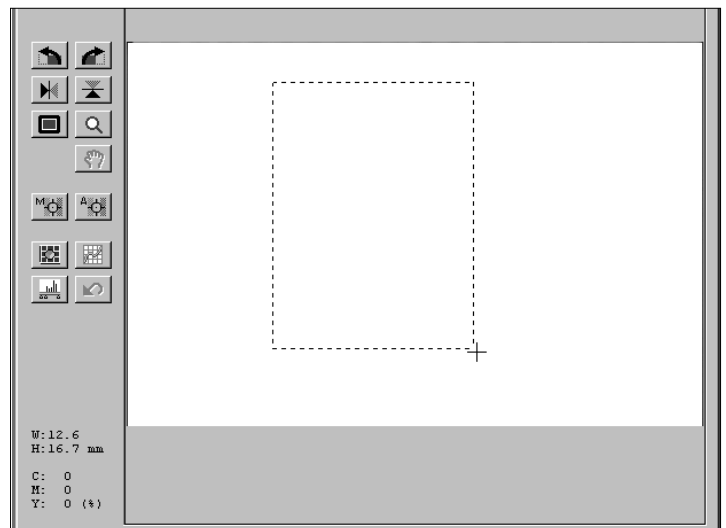
**Resize the cropping frame by clicking on the frame, then dragging the pointer in or out.**



**Move the cropping frame without changing its size by placing the pointer inside the frame, then click and drag it to its new location.**



**Define a new cropping frame by clicking and dragging outside the current frame.**



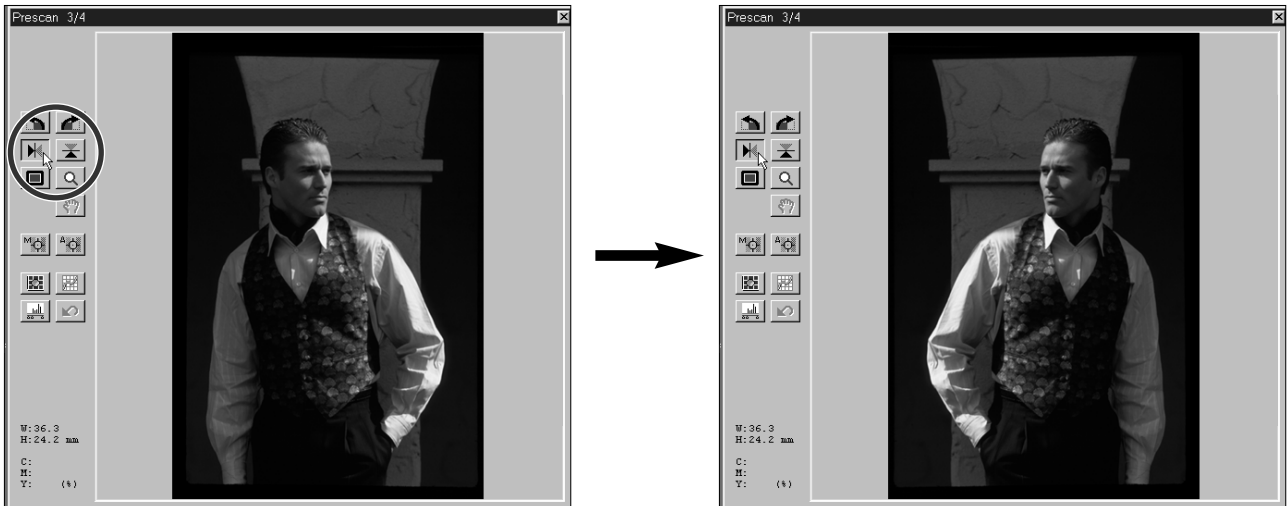
## FLIP

The Flip Vertical and Flip Horizontal buttons let you flip the image from top to bottom or left to right before scanning.


Click on  to flip the image from top to bottom.

Click on  to flip the image from left to right.

- Changes will be reflected in the Prescan image.



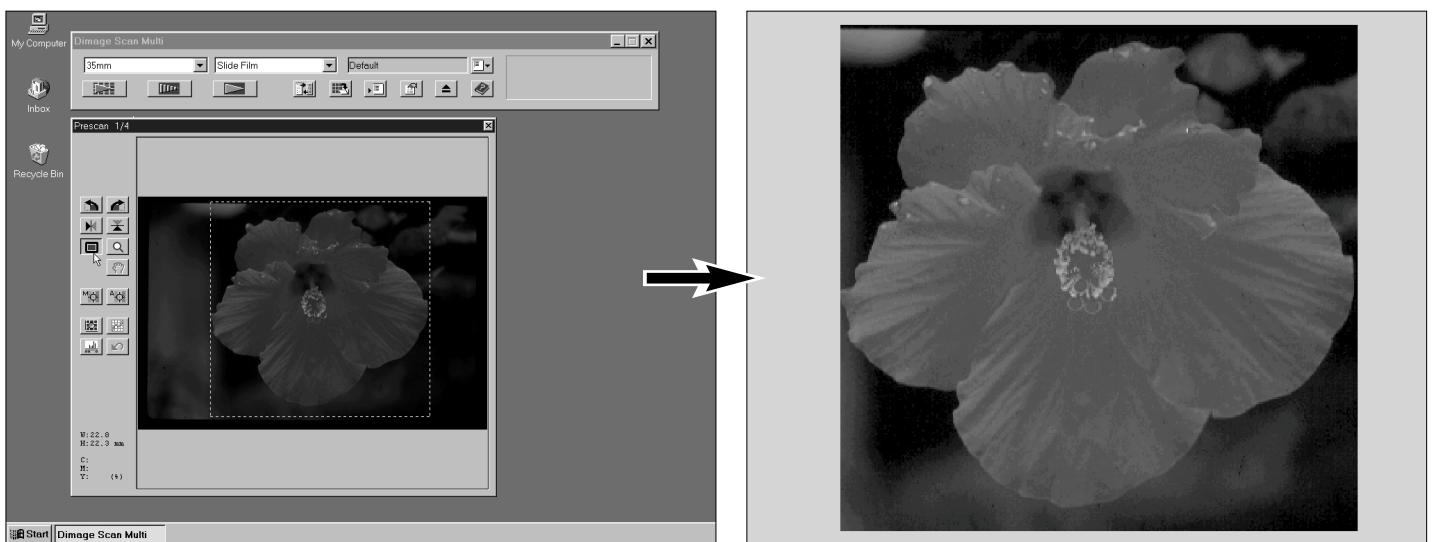
## FULL-SCREEN VIEW

The Full-Screen View button  enlarges the area inside the cropping frame so it fills the screen. This allows you to see close details and view the final composition.


- Full-screen view is only for viewing in the Prescan window. It does not affect the final scan.

1. Click on  in the Prescan window.

- The cropping frame area will fill the screen.



## MAGNIFYING OR REDUCING THE VIEW

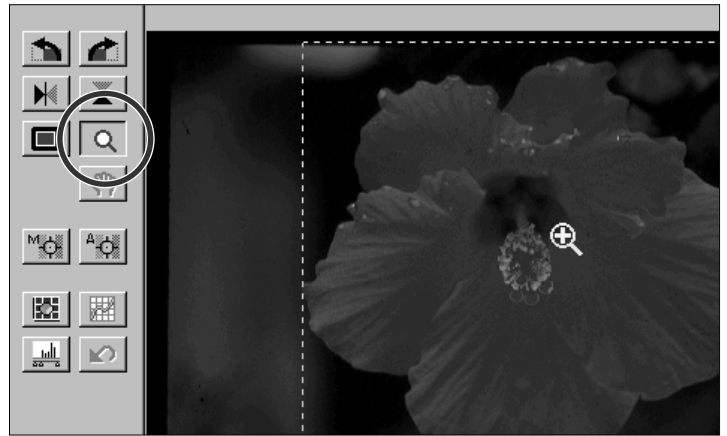
Use the Zoom button  to magnify or reduce the view of the image. This allows you to see close details of specific areas.

### 1. Click on in the Prescan window.

- The pointer will change to a magnifying glass with a + inside.

### 2. Click anywhere on the image to zoom in.

- The clicked position will be the center of the magnified view in the Prescan window.
- When the maximum magnification is reached, the + will disappear.

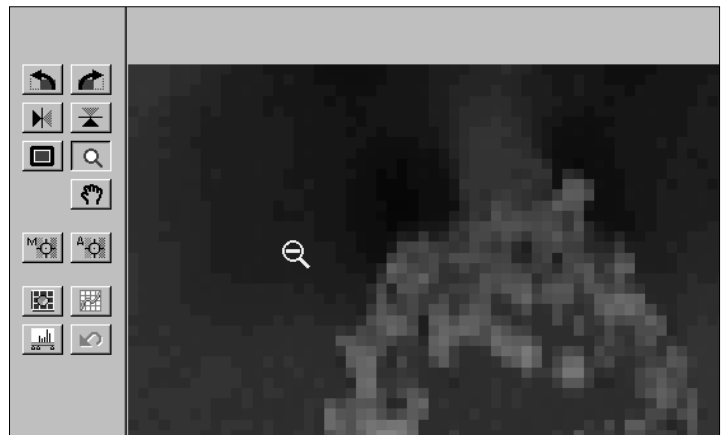


### 3. Windows: Press and hold the Ctrl key. Macintosh: Press and hold the Option key.

- The pointer will change to a magnifying glass with a – inside.

### 4. Click anywhere on the image to zoom out.

- When the minimum magnification is reached, the – will disappear.



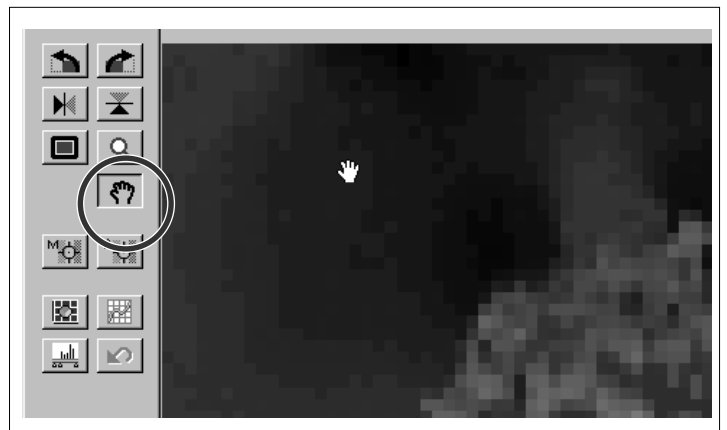
## SCROLL

The scroll button can only be selected when the view of the Prescan image has been magnified by the Zoom button. This function allows you to view other parts of the image when it is too big to fit in the window.

### 1. Click on .

- The pointer will change to a hand icon.

### 2. Click on and drag the image to move the image around in real time.



## RGB/CMY INFO

The RGB (red, green, and blue channel) information from the pointer position is always displayed in the Prescan window. The information is described in brightness levels from 0 to 255. The display can be changed to show CMY (cyan, magenta, and yellow) percentages.

### To change the display to show CMY information:

- Windows: Press and hold the Ctrl key while the Prescan window is active.
- Macintosh: Press and hold the Option key while the Prescan window is active.

- The RGB information will change to CMY.

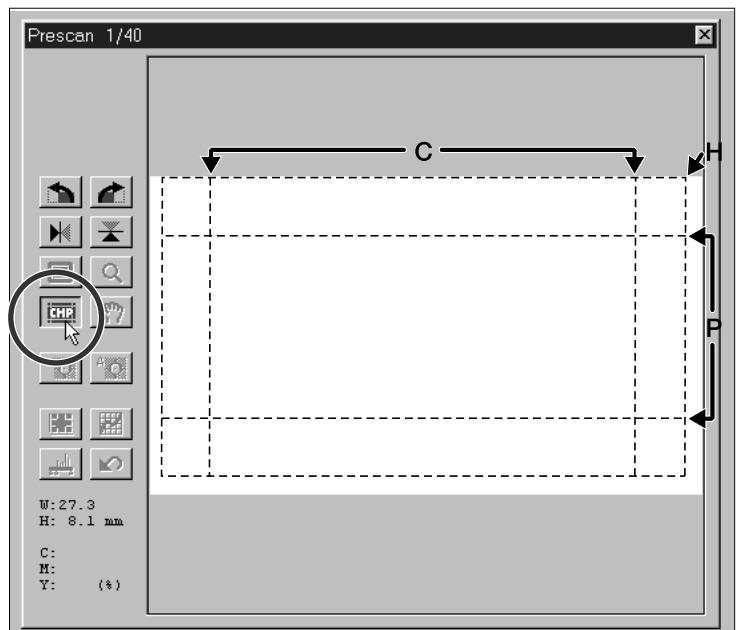


## APS FORMATS; C, H, AND P

When APS Cassette or APS Sleeve is the selected film format, the CHP button allows you to quickly and easily define the cropping frame by the standard APS formats; C, H, and P.

### Click on the CHP button to display the APS cropping frames.

- The cropping frames are displayed in sequence with each click of the CHP button.



## FOCUS

The Dimâge Scan Multi uses the CCD sensor for autofocus.

Autofocus uses the center of the image to determine focus. Normally, this results in an excellent scan because the film plane is flat. However, if the film is warped or curled, or if Autofocus is turned off in the preferences, focus may not be accurate and Point AF or Manual Focus should be used.

- Automatic autofocus can be turned on and off in the Preferences (p. 53).

## POINT AF

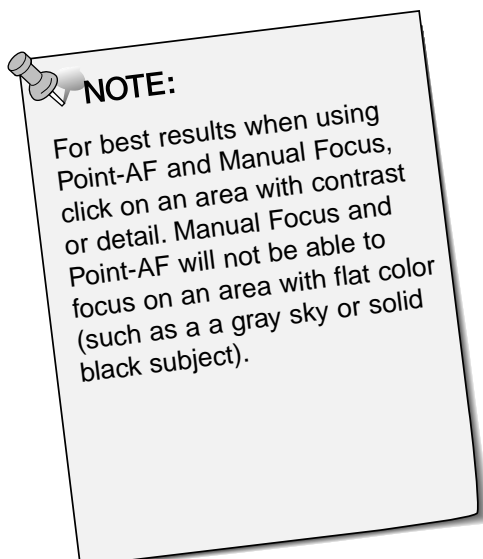
This allows you to use autofocus on a specific area of the image.

### 1. Click on in the Prescan window.

- The pointer will change to the Point AF icon.
- Click on the Point AF button again to escape the function.

### 2. Click on the area of the image to be in sharp focus.

- Autofocus will begin, then a new prescan will start.
- The prescanned image will appear in the Prescan window when complete.



## MANUAL FOCUS

Use manual focus to focus on a specific area of the image or to reduce the appearance of grain in grainy film (such as high-speed or pushed film) by slightly defocusing it.

### 1. Press the Manual Focus button in the Prescan window.

- The pointer will change to the Manual Focus icon.
- Click on the Manual Focus button again to escape the function.

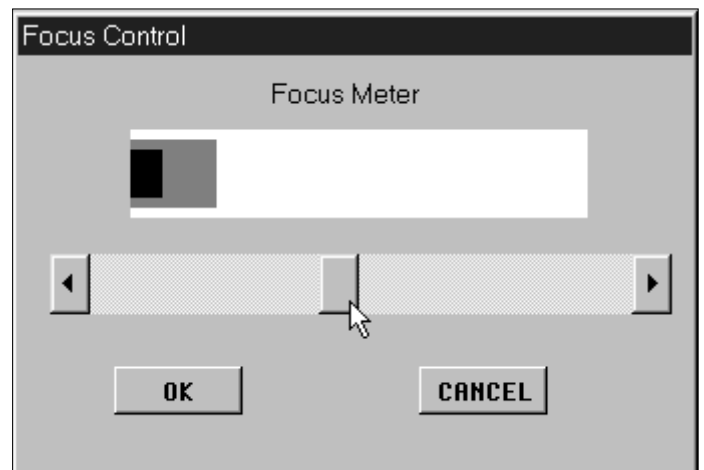
### 2. Click on the area of the image to be in sharp focus.

- The Focus Control dialog box will appear.



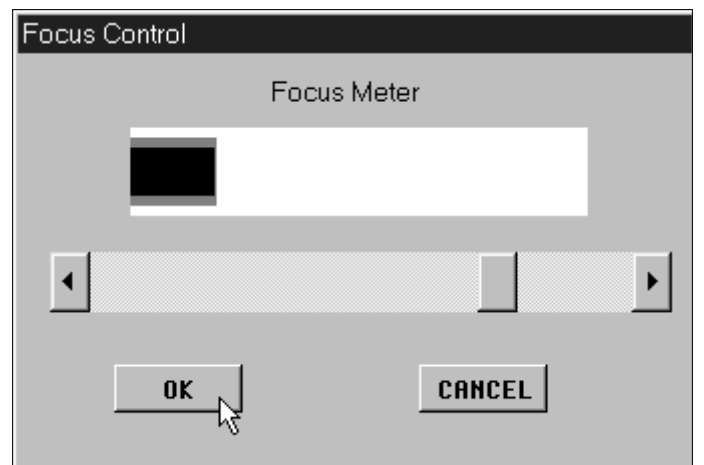
### 3. Adjust the slider until the black and gray lines are at their longest for maximum focus.

- Click and drag the slider to the left and right. Click on the slider arrow to make a small change. Click on the slider bar to make a larger change.
- To slightly defocus, adjust the sliders until the black bar is a little shorter than the gray bar.



### 4. Click on OK.

- A new prescan will begin.
- The prescanned image will appear in the Prescan window when complete.



## AUTO-EXPOSURE LOCK (AE-LOCK)

Especially useful when scanning bracketed exposures, AE Lock lets you scan multiple images with the same initial exposure settings. AE Lock saves the automatic exposure settings determined when an image is prescanned. Subsequent images are prescanned using the 'locked' exposure settings.

- AE-Lock does not save exposure corrections made in the Variations, Histogram, or Tone Curves dialog boxes.

### SETTING AE-LOCK

**After prescanning the image...**

**1. Click on the AE-Lock button .**

- AE-Lock button can not be selected until an image has been prescanned.

**2. Select another image, then click on the prescan button .**

- The scanner skips the setting exposure step in the prescan sequence.
- Images will be scanned using the AE-Lock settings until AE-Lock is cancelled or the scanner is reinitialized.

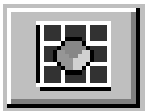
### CANCELLING AE-LOCK

**1. Click on the AE-Lock button .**

**2. Click on the prescan button  to prescan the image again.**

# MAKING IMAGECORRECTIONS

You can change the brightness, contrast, and color balance of the prescan and the resulting final scan. The Dimâge Scan Multi software gives you three options for making such corrections:



#### Variations

- This is the easiest way to make corrections and is recommended for beginning users. It uses a visual display of contrast and brightness differences and you choose the one that looks best. Color corrections are made by clicking on slider bars.
- An unchanged version of the prescan (control image) and a preview of the changed image (preview image) appear in the Variations dialog box for comparison.



#### Histogram

- The Histogram dialog box gives a graphical representation of the 256 brightness levels in the image for each of the red, green, and blue channels. Using slider bars, the input and output levels can be adjusted to make changes in the brightness, overall contrast, gamma (midtone contrast), and color of the image. A control and preview image appear in the Histogram dialog box for comparison.



#### Tone Curves

- The Tone Curves dialog box displays correction curves for the red, green, and blue channels of the prescanned image. By adjusting these curves, the brightness, contrast, gamma, and color of the output image can be changed.
- **Making brightness changes first may eliminate the need for color corrections.**



#### Reset All – Prescan Window

- The Reset All button, located in the Prescan window, will reset all the brightness, contrast, and color balance changes made in all three of these modes.



# VARIATIONS

## OPENING THE VARIATIONS DIALOG BOX

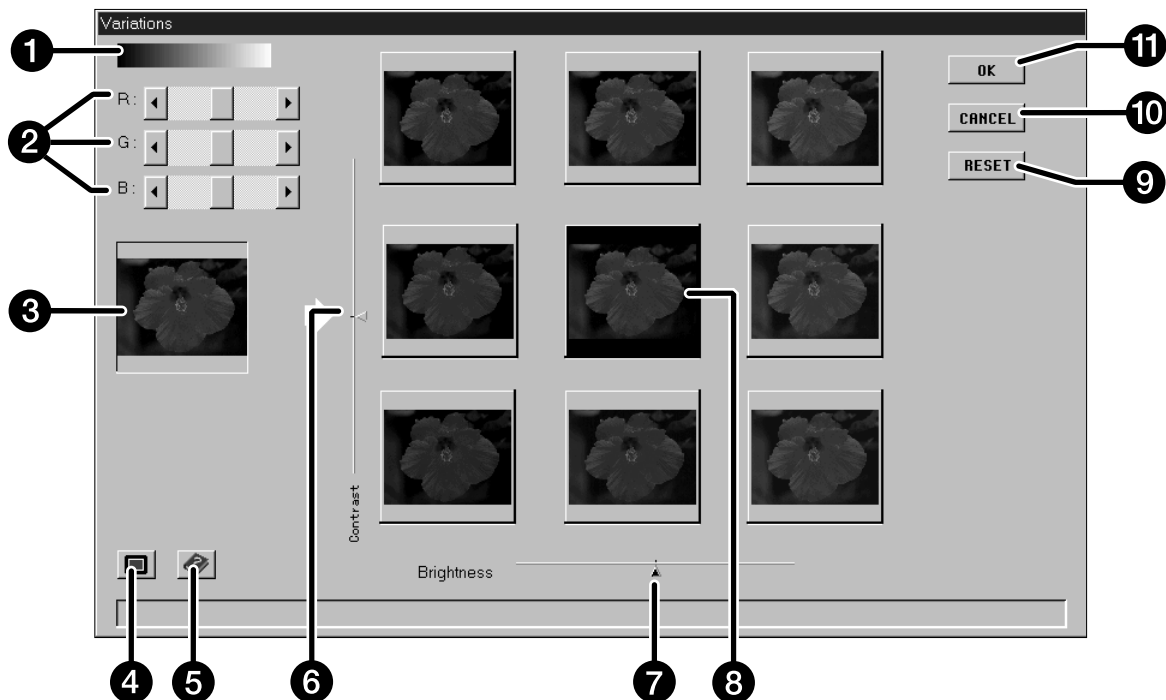
Open the Variations dialog box by clicking

on  in the Prescan window.

- The Variations dialog box will appear.



## VARIATIONS DIALOG BOX – NAMES OF PARTS



- |   |   |
|---|---|
| <b>1</b> Grayscale<br>Represents changes in brightness, contrast, and color.  | <b>6</b> Contrast slider  |
| <b>2</b> R, G, and B sliders<br>Use to make color changes.  | <b>7</b> Brightness slider  |
| <b>3</b> Control image<br>Shows the unchanged prescan.  | <b>8</b> Preview image<br>Shows the prescan with the changes.                           |
| <b>4</b> Full Screen Display button<br>Displays the Control and Preview images so they fill the monitor screen. The Control will be at the top or the left, while the Preview will be at the bottom or right. | <b>9</b> Reset button<br>Cancels the changes without closing the Variations dialog box. |
| <b>5</b> Help button<br>Click on the help button to launch the help file.<br>• Only the area inside the cropping frame appears in the variations dialog box.  | <b>10</b> Cancel button<br>Closes the Variations dialog box without making changes.     |
|   | <b>11</b> OK button<br>Applies the changes and closes the Variations dialog box.        |

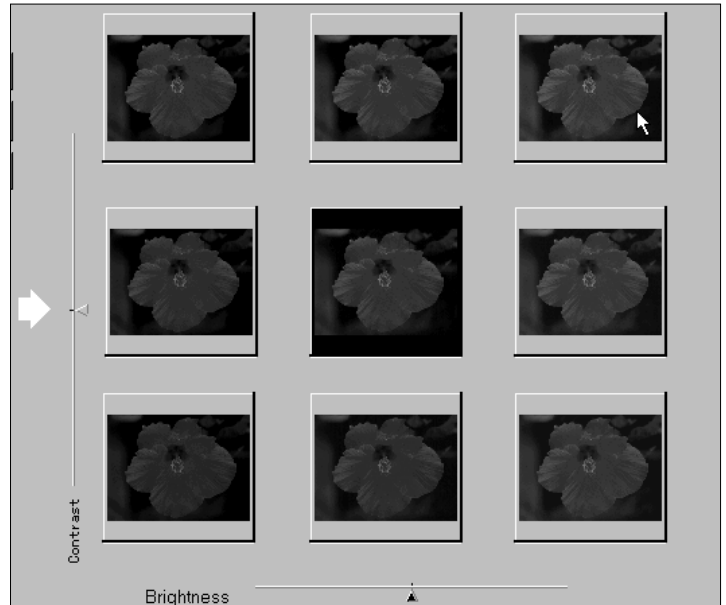
## BRIGHTNESS AND CONTRAST CHANGES

Brightness changes are represented horizontally; by the bar at the bottom and the thumbnails in a row (from left to right). Contrast changes are represented vertically; by the bar on the side and the thumbnails in a column (from top to bottom).

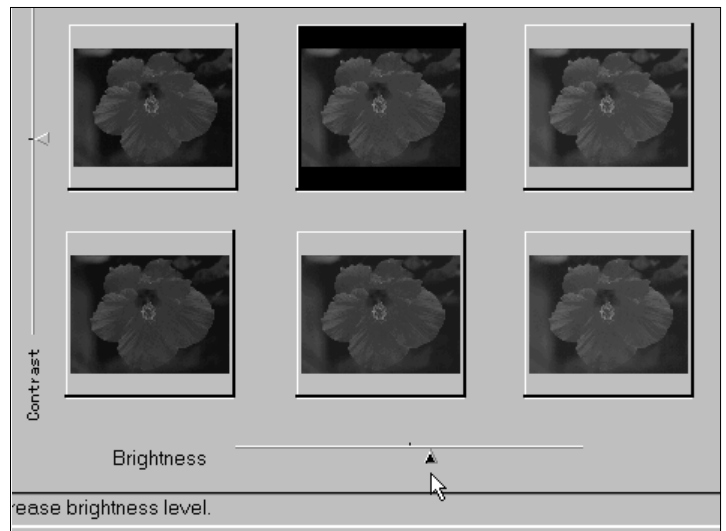
**Click on a thumbnail that represents a correction.**

**The preview image will receive the change and the brightness/contrast on the grid will shift accordingly.**

- Example: The thumbnail in the first column/first row represents a decrease in brightness and an increase in contrast.



**You can also use the arrows on the slider bars to make corrections.**



- If the upper or lower limits of brightness or contrast are reached, the preview image will not be in the center.



## ADJUSTING THE COLOR BALANCE

**Adjust the color balance as necessary by clicking on the R, G, and B sliders.**

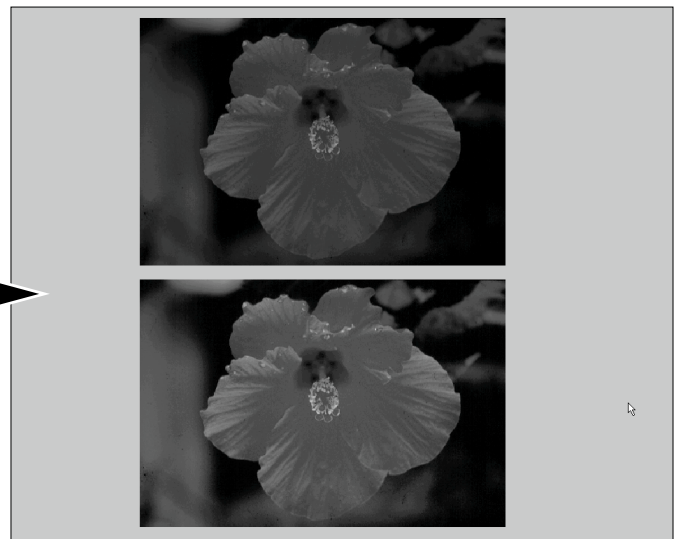
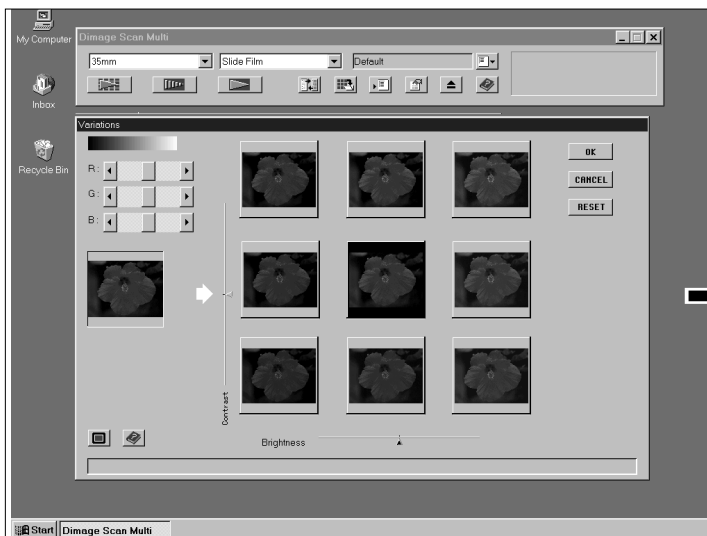
- R can subtract red (left arrow) or subtract cyan (right arrow).
- G can subtract green (left arrow) or subtract magenta (right arrow).
- B can subtract blue (left arrow) or subtract yellow (right arrow).



## FULL-SCREEN VIEW BUTTON

**Click on  to view the control and preview images full screen.**

- The control image will be to the left or on top.
- Click the mouse anywhere on the screen to return the the normal Variations dialog box.



## CANCELLING OR APPLYING THE CHANGES

**Click on  in the Variations dialog box to apply the changes and close the dialog box.**

**Click on  to close the Variations dialog box without making any changes.**

**Click on  to cancel the changes without closing the dialog box.**

# HISTOGRAM

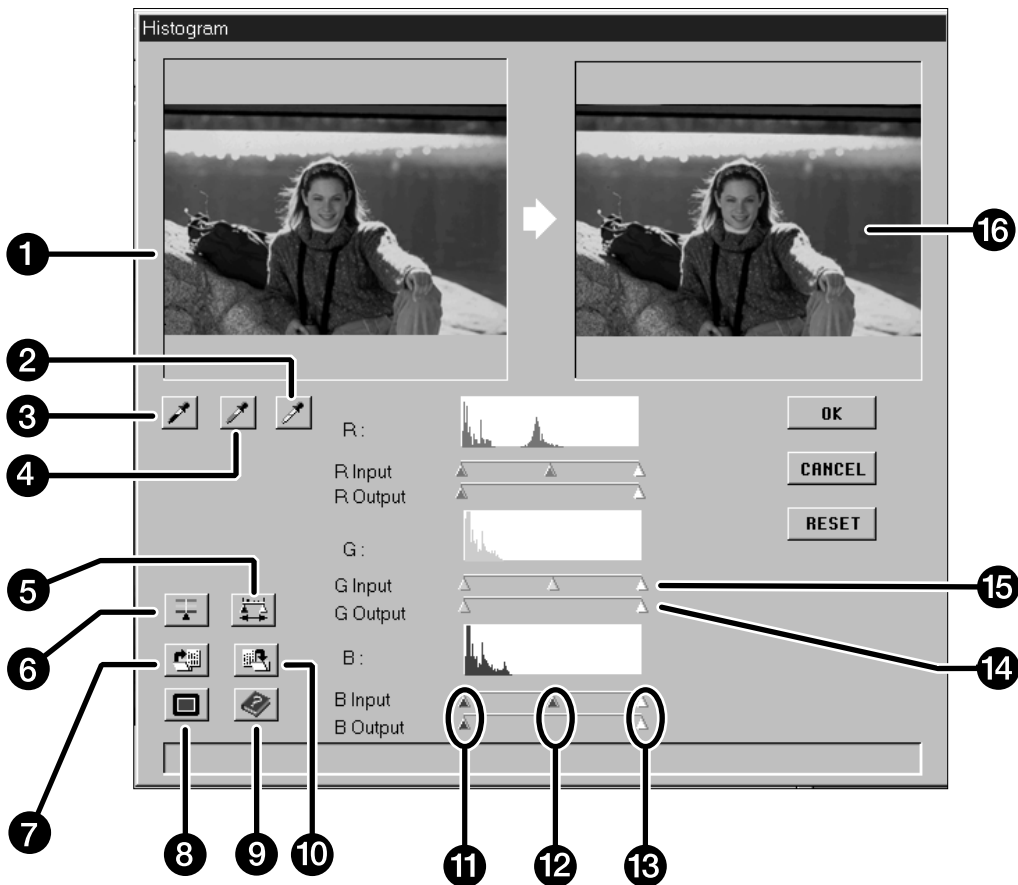
The Histogram dialog box displays the frequency of occurrence of the 256 levels of brightness (0 – 255) for each of the color channels that make up the image area inside the cropping frame. Level 0 is the minimum brightness (black). Level 255 is the maximum brightness (white). The midtone values fall in between.

## OPENING THE HISTOGRAM DIALOG BOX

Click on  in the Prescan window to display the Histogram dialog box.



## HISTOGRAM DIALOG BOX – NAMES OF PARTS



- |                                |                          |
|--------------------------------|--------------------------|
| 1 Control image                | 9 Help button            |
| 2 White point button           | 10 Save Histogram button |
| 3 Black point button           | 11 Shadow slider         |
| 4 Gray point button            | 12 Midtone slider        |
| 5 View Output Histogram button | 13 Highlight slider      |
| 6 RGB Synchro button           | 14 Output level sliders  |
| 7 Load Histogram button        | 15 Input level sliders   |
| 8 Full Screen Display button   | 16 Preview image         |

- The level from the location of the pointer on the histogram is displayed to the left of each histogram.
- Changes made to the image in the Histogram dialog box will be displayed in the Preview image.

## SETTING THE WHITE, BLACK, AND GRAY POINTS

Properly setting an image's white and black points will usually correct the color cast and midtone distribution. Properly setting the gray point will correct the color balance.

### 1. Click on .

- The cursor will change to the white eye-dropper.

### 2. Click on the tone in either the Control or Prescan image that should be scanned as the brightest neutral white in your image.

- The RGB brightness value of the selected tone will be changed to 255. The change will be reflected in the Preview image.



### 3. Click on .

- The cursor will change to the black eye-dropper.

### 4. Click on the tone in either the Control or Prescan image that should be scanned as the darkest neutral black in your image.

- The RGB brightness value of the selected tone will be changed to 0. The change will be reflected in the Preview image.



### 5. Click on .

- The cursor will change to the gray eye-dropper.

### 6. Click on the tone in either the Control or Prescan image that should be scanned as a neutral tone.

- The tone of the clicked area will become neutral and the color balance of the image will shift accordingly. The adjustment will be reflected in the Preview image.

## BRIGHTNESS AND CONTRAST CHANGES – RGB SYNCHRO

Under each histogram are two slider bars. The upper bar has three sliders that allow you to change the input values for the highlights, shadows, and midtones; the lower bar has two sliders that allow you to change the output values for the highlights and shadows.

By using RGB Synchrony, the sliders for the highlights, midtones, or shadows for each of the channels move in unison. This means you can make overall brightness and contrast changes without changing the color.


### If the histogram contains large flat line areas...

1. Click on the RGB Synchrony button .

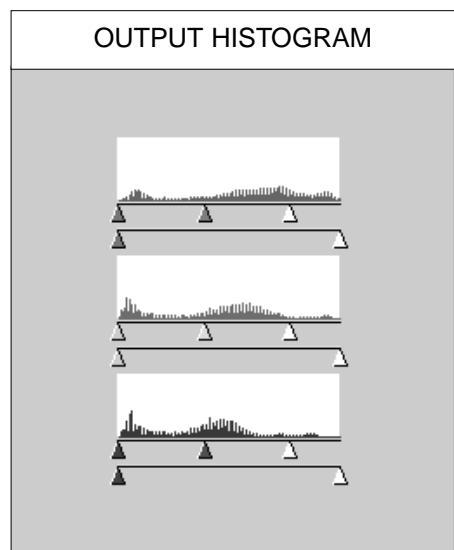
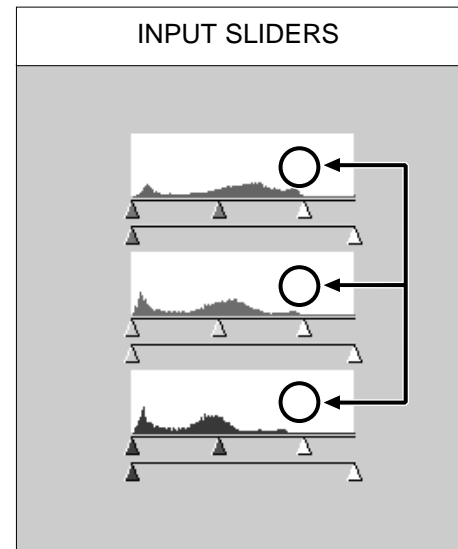
2. Click on and move the input level highlight and shadow sliders to the edges of the flat line area.

- Changes are automatically applied to the Preview image.
- Values to the right of the highlight slider will be scanned as pure white (level 255). Values to the left of the shadow slider will be scanned as pure black (level 0).

3. Adjust the midtone contrast by moving the midtone slider. Contrast can be decreased by using the output level sliders.

- Click on  to view the control and preview images full screen. The control image will be to the left or on top. Then, click anywhere on the screen to return to the normal Histogram dialog box.

4. Click on  and hold to view the output level histograms.




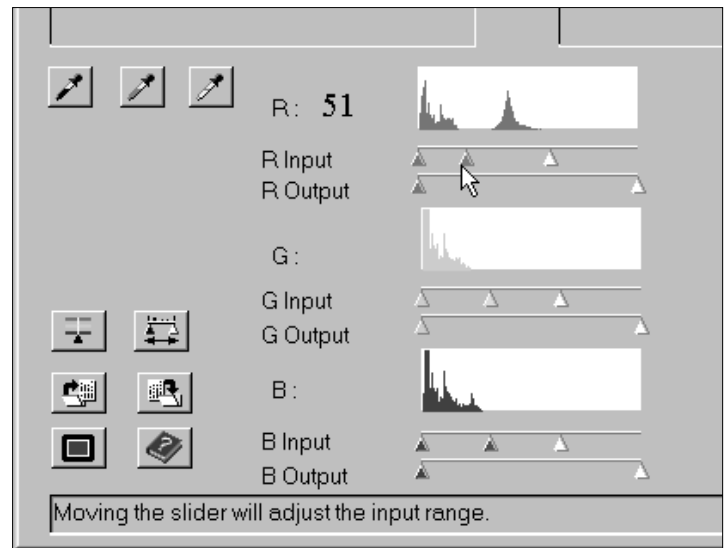
## COLOR BALANCE ADJUSTMENT – INDIVIDUAL CHANNELS

Changing the slider positions for individual channels affects the color balance of the image.

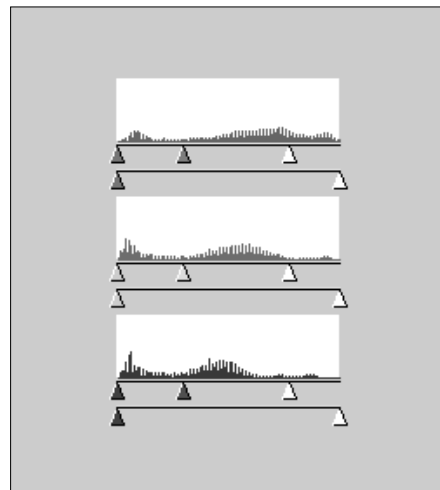
### 1. Make sure RGB Synchro is off.

### 2. Click on and move the R, G, and B sliders to the desired locations.

- Changes are automatically applied to the Preview image.
- Click on  to view a full-screen display of the Control and Preview images.



### 3. Click on and hold to view the output level histograms.



## APPLYING OR CANCELLING CORRECTIONS

Click on  to apply the changes.

Click on  to close the dialog box without making changes.

Click on  to cancel the changes without closing the dialog box.

## SAVING AND LOADING HISTOGRAM SETTINGS

The Dimâge Scan Dual software lets you save the histogram settings as a file that can be loaded and applied to other images. This is convenient when you will be scanning more images that require the same corrections.

### SAVE HISTOGRAM

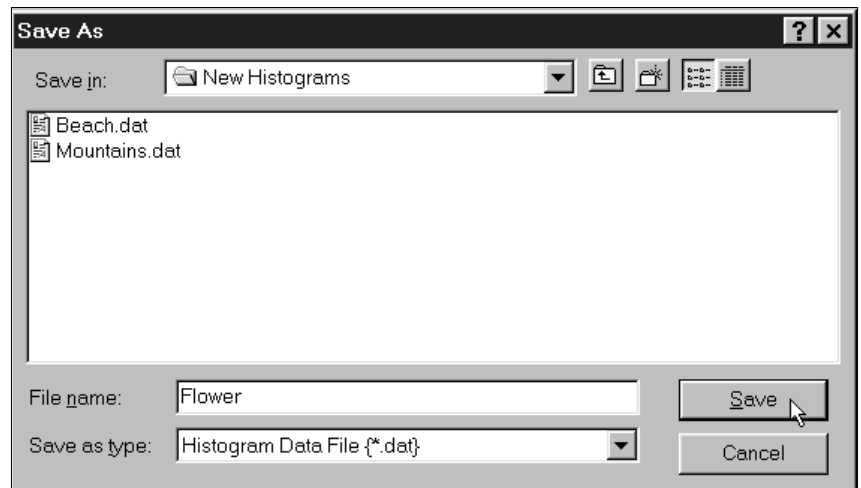
**1. Click on .**

- The standard save dialog box for your operating system will appear.

**2. Select the destination and name the file.**

- The file will be saved as a data (.dat) file.

**3. Click on Save.**



### LOAD HISTOGRAM

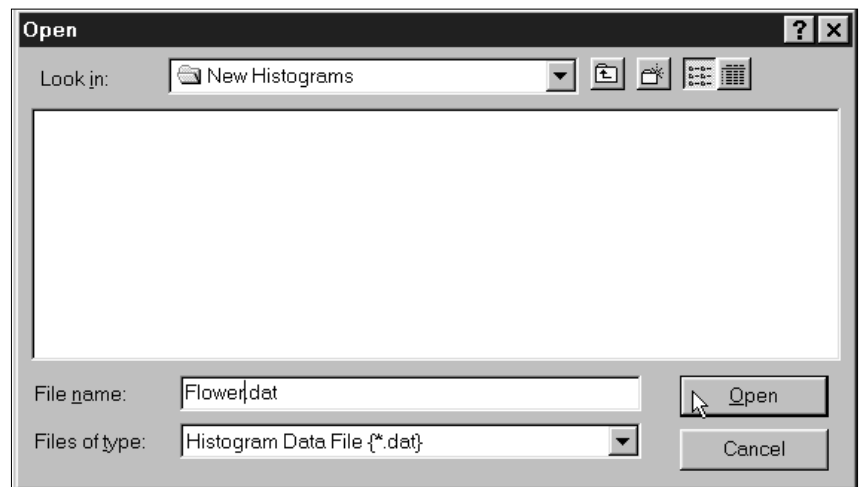
**1. Click on .**

- The standard open dialog box for your operating system will appear.

**2. Select the desired histogram file.**

- The settings in the selected file are applied to the current image.

**3. Click on Open.**



- Histogram settings for color and B&W films are not interchangeable.



# TONE CURVES

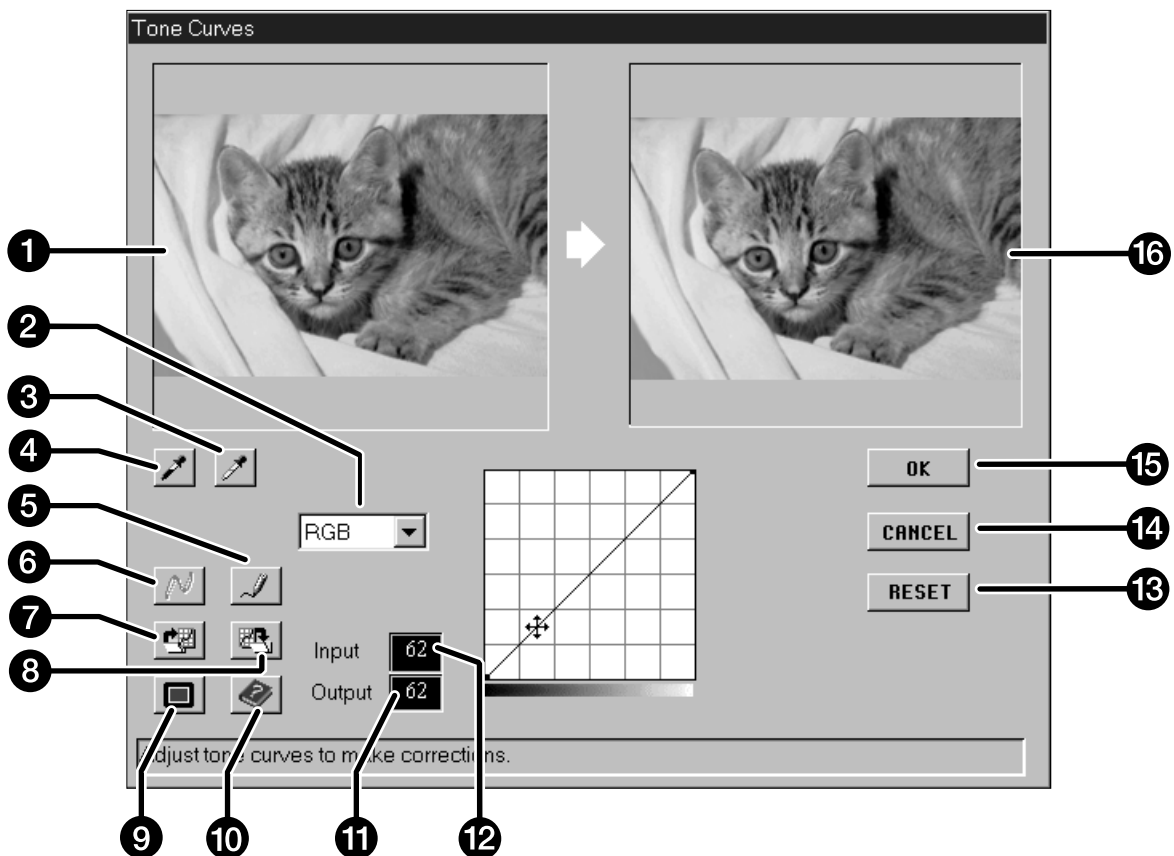
The Tone Curves dialog box displays curves for the prescanned image inside the cropping frame. The curve represents the input brightness values (x-axis) in relation to the output values (y-axis). This dialog box allows you to make changes to the tone curves. It is possible to make changes to the individual curves for each channel; red (R), green (G), and blue (B), or to make changes to the overall curve (RGB curve).

## OPENING THE TONE CURVES DIALOG BOX

Click on  in the Prescan window to open the Tone Curves dialog box.



## TONE CURVES DIALOG BOX – NAMES OF PARTS



- |   |                              |
|---|------------------------------|
| 1 Control image                               | 9 Full Screen Display button |
| 2 Color channel drop-down list (R, G, B, RGB) | 10 Help button               |
| 3 White point button                          | 11 Output brightness value   |
| 4 Black point button                          | 12 Input brightness value    |
| 5 Freehand curve button                       | 13 Reset button              |
| 6 Smooth curve button                         | 14 Cancel button             |
| 7 Load Tone Curve button                      | 15 OK button                 |
| 8 Save Tone Curve button                      | 16 Preview image             |

- The right side of the curve affects highlights, the left side of the curve affects shadows, and the midtones fall in between. Brightness values are 0 (black) at the bottom of the grid, 255 (white) at the top of the grid, and the middle values fall in between.

# TONE CURVES

## SETTING THE WHITE AND BLACK POINTS

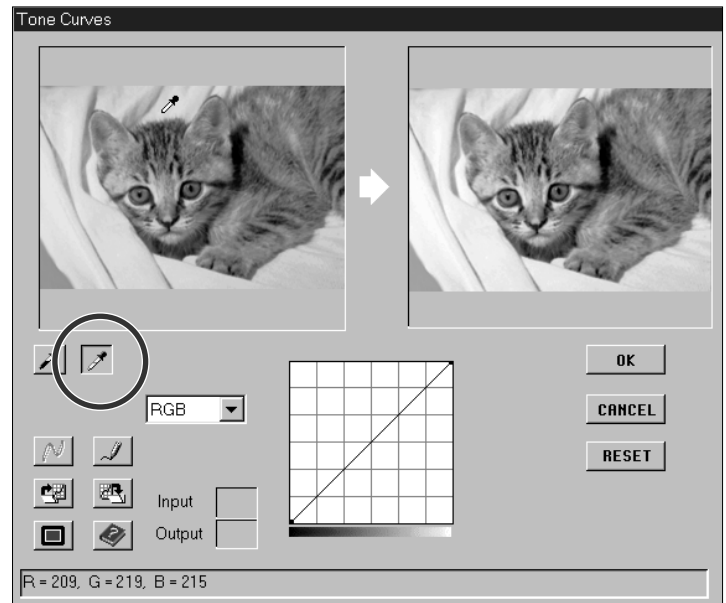
Properly setting an image's white and black points will usually correct the color cast and midtone distribution.

### 1. Click on .

- The cursor will change to the white eye-dropper.

### 2. Click on the tone in the control image that should be scanned as the brightest neutral white in your image.

- The RGB brightness value of the selected tone will be changed to 255. The change will be reflected in the Preview image.

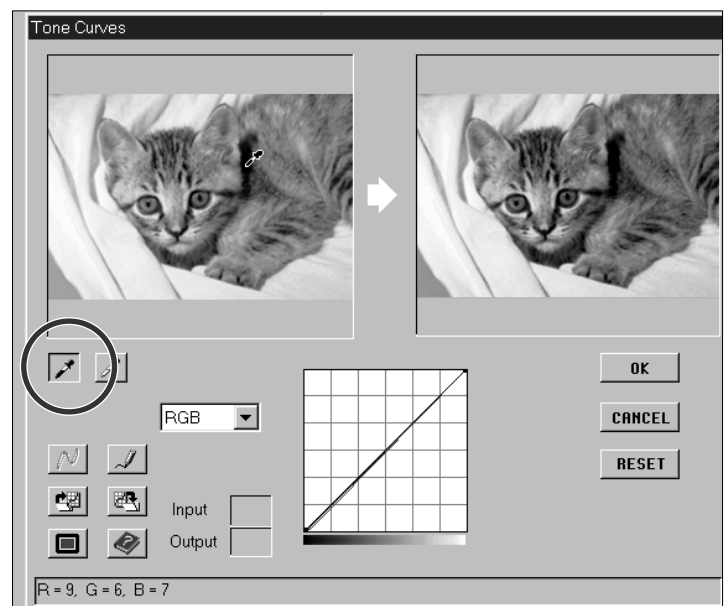


### 3. Click on .

- The cursor will change to the black eye-dropper.

### 4. Click on the tone in the control image that should be scanned as the darkest neutral black in your image.

- The RGB brightness value of the selected tone will be changed to 0. The change will be reflected in the Preview image.

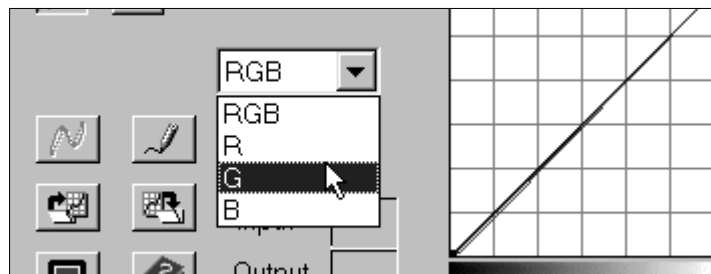


## CHANGING THE TONE CURVES – CONTRAST, BRIGHTNESS, AND COLOR BALANCE


Changing the shape of a curve changes the output brightness level for each corresponding brightness level. Changing the shape of the individual R (red), G (green), and B (blue) curves affects the color balance of the image. Changes to the RGB (overall) curve affect the image contrast and brightness.

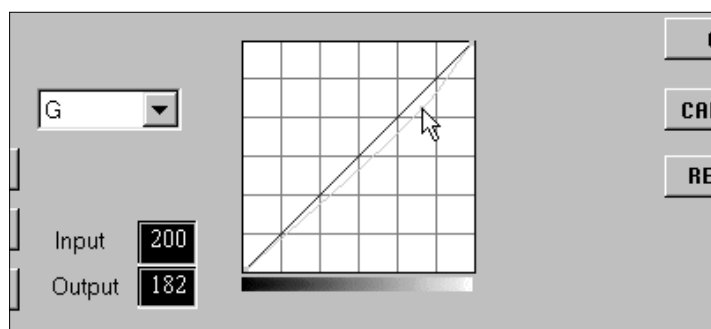
### 1. Select the color channel you want to adjust from the channel drop-down list.

- RGB will change brightness and contrast with little change to color balance.
- R will affect red and cyan.
- G will affect green and magenta.
- B will affect blue and yellow.



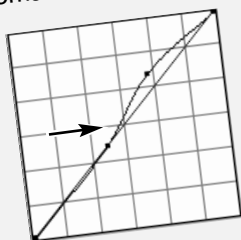
### 2. Click on and drag the portion of the curve you want to change.



- Changes are automatically applied to the preview image.
- Click on  to view the control and preview images full screen. The Control image will be to the left or on top.



#### NOTE:

Click on the curve to fix an anchor point. Anchor points let you modify part of the curve with little or no effect to the remaining values.



- Click on  to draw a curve with the mouse.
- Click on  to smooth out the final curve.
- This function draws a smooth curve based on the intersection of the corrected curve through seven input brightness values; 31, 63, 95, 127, 159, 191, 223, and 255.

## APPLYING OR CANCELLING CORRECTIONS

Click on  to apply the changes.

Click on  to close the dialog box without making changes.

Click on  to cancel the changes only to the currently selected channel with out closing the Tone Curves dialog box.

## SAVING AND LOADING TONE CURVE SETTINGS

The Dimâge Scan Multi software lets you save the tone curve settings as a file that can be loaded and applied to other images. This is convenient when you will be scanning more images that require the same corrections.

### SAVE TONE CURVE

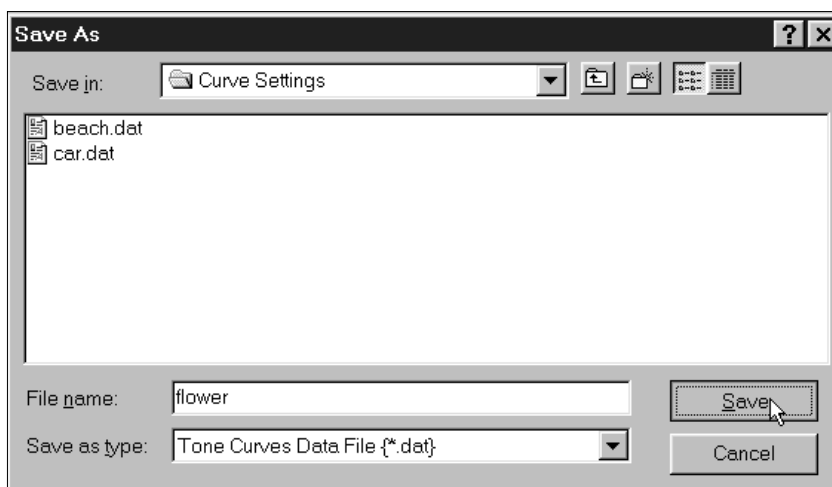
**1. Click on  in the Tone Curve dialog box.**

- The standard save dialog box for your operating system will appear.

**2. Select the destination and name the file.**

- The file will be saved as a data (.dat) file.

**3. Click on Save.**



### LOAD TONE CURVE

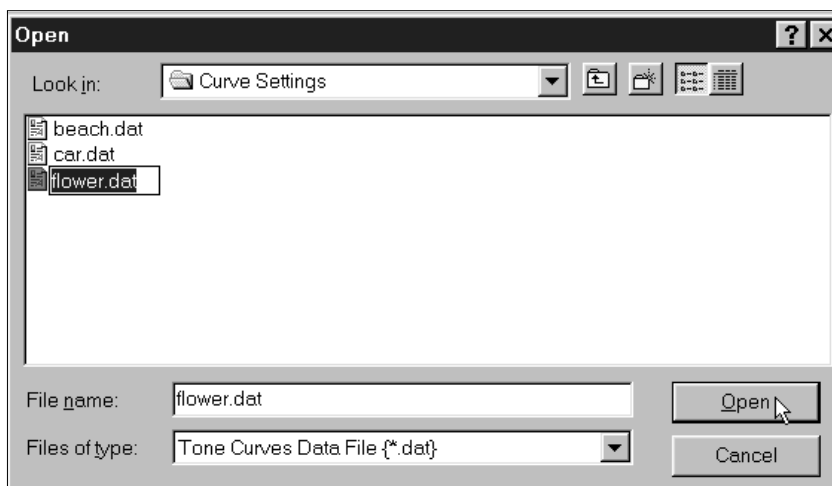
**1. Click on  in the Tone Curve dialog box.**

- The standard open dialog box for your operating system will appear.

**2. Select the desired tone curve file.**

- The settings in the selected file are applied to the current image.

**3. Click on Open.**



## **MAKING THE FINAL SCAN**

Before making the final scan, the scanner needs to know how big the final image will be and the quality of output that will be used (printer, monitor, etc.) so it knows what resolution to scan the film. Using the Load Job function is a quick and easy way to enter the scan settings.

## LOADING A JOB

Load an existing job and apply it to the current Prescan image.

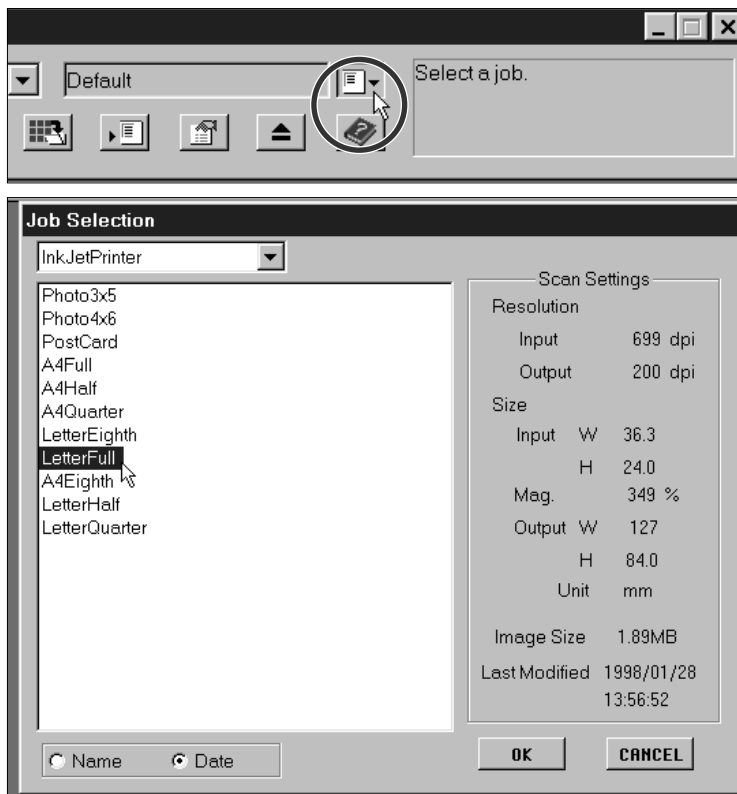
### 1. Click on the Load Job button in the Command window.

- The Job Selection dialog box will appear.

### 2. Select the appropriate category from the drop-down list.

### 3. Click on the job name to select it, then click on OK.

- The settings are applied to the active Prescan window.
- The job names can be listed chronologically or alphabetically. Select the format by clicking on the Name or Date option button.
- The cropping frame will change accordingly, but can be proportionally resized.



There are nine Job Categories available for various film formats.

#### Custom

- This category allows the user to create customized settings using the Scan Settings dialog box.

#### Color Laser Printer

- (Digital color copiers and color laser printers) Uses output resolution of 400dpi or 600dpi. There are two paper-size options; letter and A4.

#### Photosensitive

- (Printers that use photosensitive/photographic material) Can use output resolutions of 400 dpi, 360 dpi, 267 dpi, and 180 dpi. There are ten paper size options.

#### Dye-Sub Printer

- (Dye-sublimation printers) Uses an output resolution of 300dpi. There are 4 available paper sizes.

#### Ink Jet Printer

- Uses an output resolution of 200 dpi. There are 4 available paper sizes.

#### Web Page

- (For use on home pages) Image size is listed in pixels and will vary. There are also standard PhotoCD sizes available.

#### Screen

- (For display on monitors) Image size is listed in pixels and will be the VGA standard of 640 x 480 pixels or larger.

#### Document

- (For insertion into documents) Uses an output resolution of 72 dpi. Image size can be determined based on two paper sizes.

#### Film Recorder

- For high input resolution images that will be output to a film recorder.

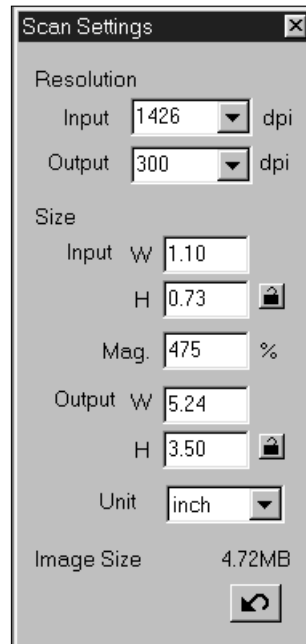
#### Default

- This category uses the default settings for each film format. The scan settings appear in the Job Selection window.

## CREATING A JOB

In addition to the Job settings included with the software, it is possible to create and save your own Job settings.

### 1. Set the desired settings in the Scan Settings dialog box (p. 49).



### 2. Click on the Save Job button in the command window.

- The Save Job dialog box will appear.



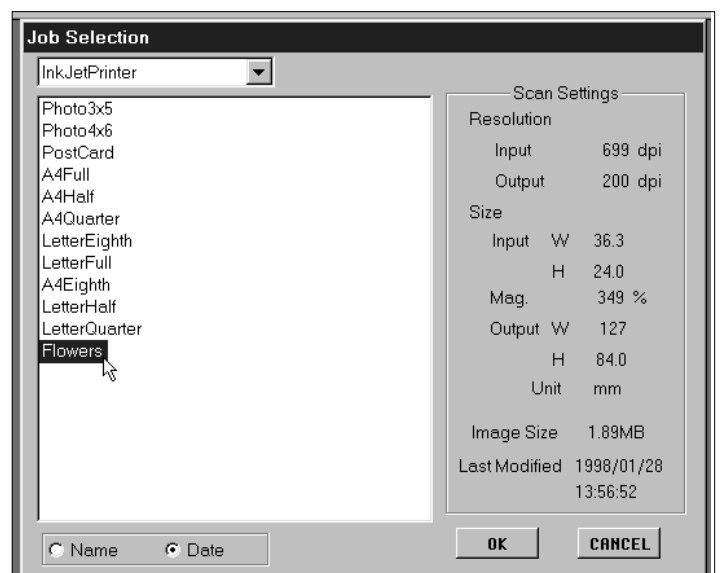
### 3. Name the job by entering a title and select the desired category, then click on OK.



## DELETING A JOB

It is possible to delete the Job you created when it is no longer needed.

Click on the name of the job in the Job Selection window, then press the delete key on your keyboard.



# FINAL SCAN

Once all the desired adjustments are made to the Prescan and the Scan Settings have been entered, you are ready to make the final scan of the displayed Prescan image.

## TWAIN DRIVER/PLUG-IN SOFTWARE

**With the Prescan image displayed in the Prescan window...**

**1. Click on the Scan button in the Command window.**

- The final scan will begin.
- When scanning is complete, the final scan will appear in the host application's window.



**2. Save the image using the instructions for your host application.**



## UTILITY SOFTWARE

With the Prescan image displayed in the Prescan window...

**1. Click on the Scan button in the Command window.**

- The standard save dialog box for your operating system will appear.

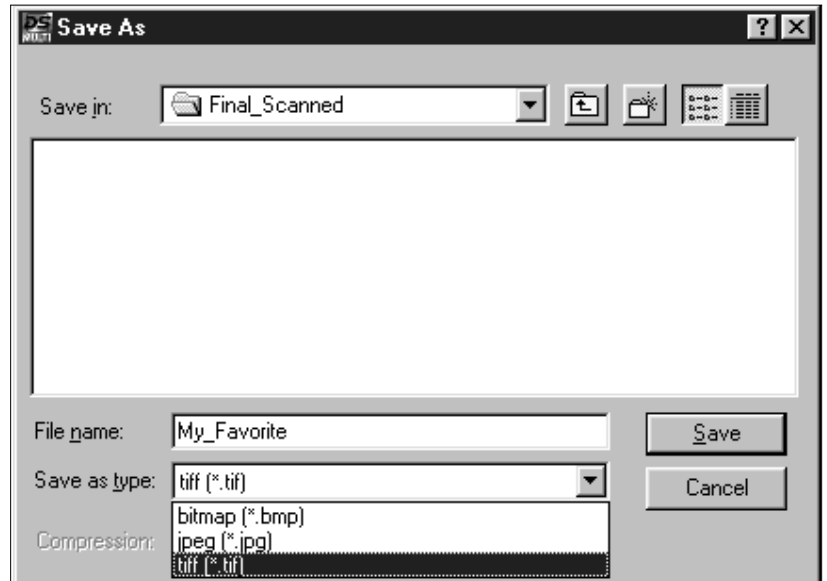


**2. Enter the desired file name and select the file destination.**

**3. Select the file type from the drop-down list.**

**4. Click on Save.**

- The final scan will begin.
- When scanning is complete, the scan will be saved in the selected location. The software will return to the Prescan window.



**Multiple scans will be saved using the selected file name and numbered chronologically.**

**Example: File\_Name01, File\_Name02, File\_Name03...**

## UTILITY SOFTWARE – FILE FORMATS

With the Dimage Scan Multi utility software, you can save the final scan in one of the following file formats.

### JPEG

- The JPEG (Joint Photographic Experts Group) compression standard is capable of producing a high compression ratio while maintaining image quality. JPEG is a widely supported image file format.

### TIFF

- Tagged Image File Format (TIFF) files contain bit-mapped data. In addition to being a widely supported format, TIFF is able to handle the color palette needed for professional-quality images and graphics.

### WINDOWS® BMP (Windows only)

- The BMP graphic file format is for bit-mapped images. BMP images are supported by the Paint accessory and can easily be opened on most PCs running Windows.

### PICT (Macintosh operating system only)

- The PICT graphic file format uses a lossless compression scheme and is compatible with many Macintosh applications.

# **ADDITIONAL FEATURES**

# SCAN SETTINGS

The scan settings determine your final image's resolution, dimensions, and file size, as well as helping determine the image quality. You can select a Job (p. 44) to have the scan settings selected for you or you can directly enter them into the Scan Settings dialog box.

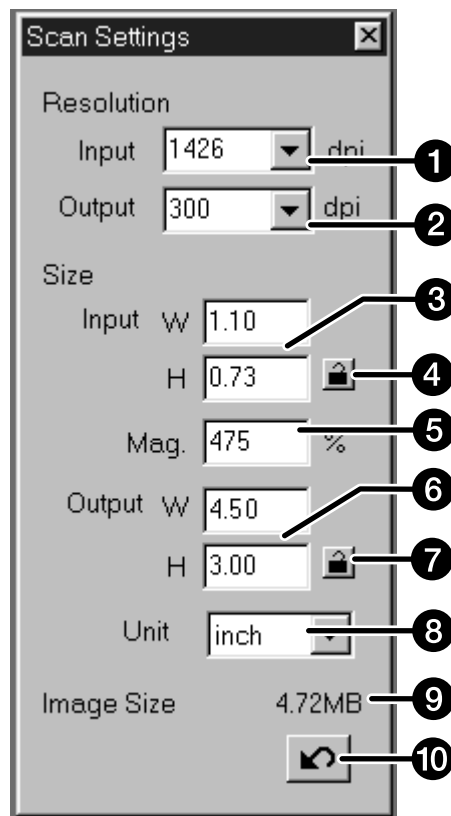
## OPENING THE SCAN SETTINGS DIALOG BOX

Click on  in the command window to display the Scan Settings dialog box.

- Use the same button to hide the Scan Settings dialog box to optimize window space.



## SCAN SETTINGS DIALOG BOX – NAMES OF PARTS

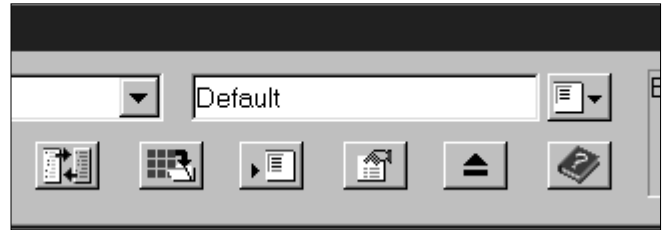


- 1 Input Resolution list box
- 2 Output Resolution list box
- 3 Input Size text boxes
- 4 Input Size lock
- 5 Magnification text box
- 6 Output Size text boxes
- 7 Output Size lock
- 8 Units list box
- 9 Image size display
- 10 Reset button

## QUICK GUIDE TO SCAN SETTINGS

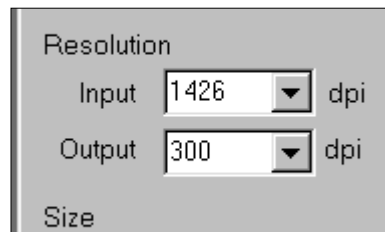
This Quick Guide only describes one method of determining the settings. Please read the entire Scan Settings section in the manual for details.

### 1. Select Default as the Job category (p. 44).



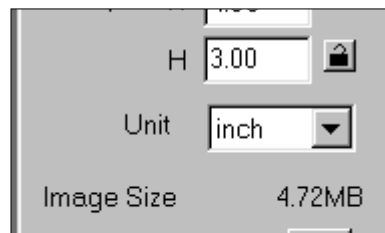
### 2. Enter the desired OUTPUT RESOLUTION.

- Example: You want to print the image at 300dpi on your printer.
- When the selected unit is pixels (from the Unit drop-down list) the output resolution cannot be selected.



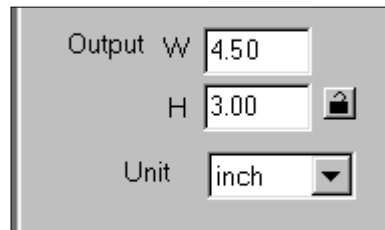
### 3. Select the UNIT of measurement.

- Example: You want the size to be listed in inches..

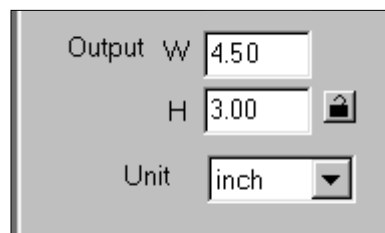


### 4. Enter the desired OUTPUT SIZE.

- Example: You want the image to be printed as 4.5 x 3 inches (width x height).
- The cropping frame on the prescan will change to meet this ratio.



### 5. Lock the OUTPUT SIZE by clicking on the lock button next to it.



### 6. Adjust the cropping frame if needed. The INPUT SIZE will automatically change.

- With the Output size locked, the frame ratio will not change, but the size can change.
- If you do not like the ratio and the output size doesn't have to be exact – unlock the output size, then make minor adjustments to the cropping frame.

### 7. The Scan Settings are ready for you to do the final scan of the image.

- Using this Quick Guide, the INPUT RESOLUTION is determined by the other settings.

## SCAN SETTING OPTIONS

### INPUT RESOLUTION

Input resolution is the number of pixels per inch (ppi or dpi) on the film that will be scanned.

**Select a value from the Input Resolution drop-down list or input the desired value directly.**

- The available resolution values are dependent on the Film Format selected.

Film Formats	Resolution Options (dpi)
35mm, APS Cassette, APS Sleeve, Transparent Media, 16mm	2820, 1410, 940, 705, 470, 352, 282*
1128, 564, 376, 282, 188, 141, 112**	1128, 564, 376, 282, 188, 141, 112**

\* Any whole number between 176 and 2820 can be input directly.

\*\* Any whole number between 70 and 1128 can be input directly.

### OUTPUT RESOLUTION

The output resolution is the number of pixels per inch (ppi or dpi) that for final image will be printed or displayed.

**Select a value from the Output resolution drop-down list or input the desired value directly.**

- A variety of output resolution options are listed. However, whole numbers can be typed in directly.
- When the selected unit is pixels (from the Unit drop-down list), the output resolution cannot be selected.

### UNITS

The Unit drop-down list displays the unit options for the input and output sizes.

**Select the desired unit of measurement from the Unit drop-down list.**

- The available units are pixel, mm, cm, inch, pica, and point.

### INPUT SIZE

The Input Size boxes list the dimensions of the part of the film you will be scanning. These values are the width (W) and height (H) of the cropping frame and are always displayed in the lower-left corner of the Prescan window.

Usually the input size is automatically determined by the chosen cropping frame. However, if you need a specific dimension:

**1. Select the unit, then input the width and height directly into the list box.**

**2. Click on the lock button to lock the input size.**

- The cropping frame will change accordingly.
- When the selected unit is pixels (from the Unit drop-down list), the input size cannot be selected.

## OUTPUT SIZE

The Output Size boxes list the dimensions of the final scan (the size your image will be if printed at 100%). Usually, the output size is set by default according to the input resolution, output resolution, and cropping frame area. To specify an output size:

### **1. Select the unit and the output resolution.**

- The output resolution cannot be selected when pixel is the selected unit.

### **2. Enter the width and height directly into the list box.**

### **3. Lock the output size by clicking on the lock button.**

- The input size and resolution will change accordingly.
- The cropping frame can be proportionally resized.

## MAGNIFICATION

Magnification is equal to the input resolution divided by the output resolution (or the output size divided by the input size).

Magnification is determined by the input and output settings.

The magnification can be set directly, the input and output values will change accordingly.

- When the selected unit is pixels (Unit drop-down list), the magnification cannot be selected.
- If the input size and output size are not locked, the output size and input resolution will change according to the set magnification.
- If the output size is locked, the input size and input resolution will change according to the set magnification.
- If the input size is locked, output size and input resolution will change according to the set magnification.

## IMAGE SIZE

The image size is listed in megabytes (MB), kilobytes (KB) or bytes (B). Actual file size may differ among file types.



## RESET BUTTON

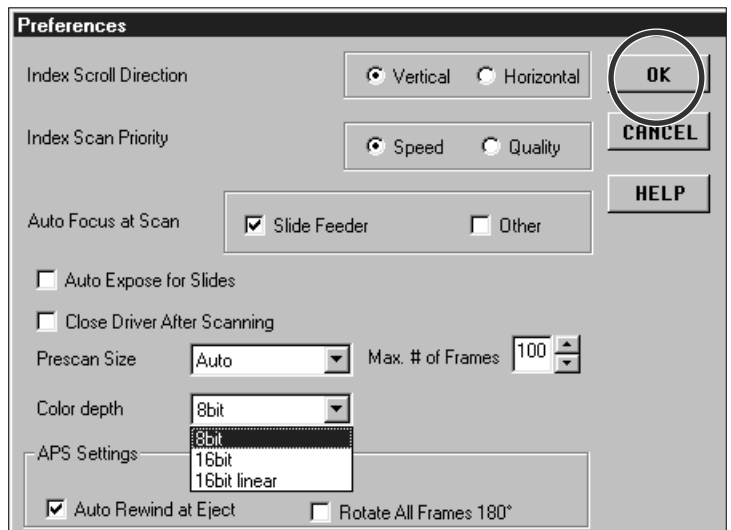
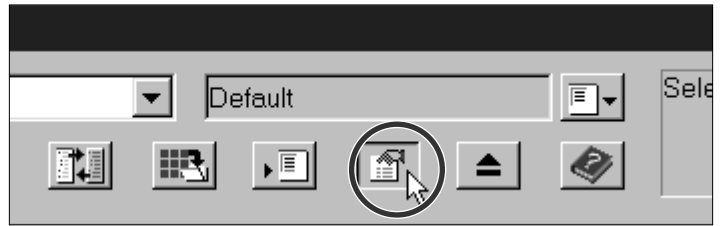
Cancels the changes made to the scan settings of the selected Job.

# PREFERENCES

The Preferences dialog box gives options for customizing the software to your needs.

## SETTING THE PREFERENCES

1. Click on the Preferences button  in the Command window to open the Preferences dialog box.
2. Select the desired Preference Options.
3. Click on  to set the Preferences.



## PREFERENCE OPTIONS

### INDEX SCROLL DIRECTION

When there are more frames in the index window than can be displayed at once, the scroll bar will appear. Choose either a vertical or horizontal scroll direction for the Index window.

### INDEX SCAN PRIORITY

Choose either a fast index scan or a quality index scan.

The purpose of the fast index scan (Speed) is to give a quick thumbnail representation of each frame. Autofocus is not utilized.

The quality index scan (Quality) uses autofocus and autoexposure (unless they are turned off in the Preferences), creating both a Prescan image and a thumbnail. So when you double-click on the index image, the ready-made prescan pops-up.

### AUTOFOCUS OPTIONS

For each prescan, the CCD makes three passes; one for autofocus, one for exposure adjustment, and one for the prescan. It is possible to have the scanner skip the autofocus step during the prescan.

You can turn AF off for the Slide Feeder and/or all other film formats.

### AUTOEXPOSURE FOR SLIDES

It is possible to have the scanner skip the autoexposure step during the prescan when using color slides. Most slide users prefer to fine tune all the image details on the slides themselves so they turn AE off. However, the AE is convenient when scanning improperly exposed slides.

### CLOSE DRIVER AFTER SCANNING

The driver software can be automatically closed after making a scan. This is convenient when you prefer to retouch each image in an image application program after scanning.

- Do not select this option when scanning multiple images at once.
- Some applications are not able to make multiple scans regardless if this option is not selected.

### PRESCAN SIZE OPTIONS

There are three options for setting the prescan size: Small, Large, and Auto.

The automatic setting determines the appropriate prescan size based on monitor size and film format.

Film Formats	Prescan Size in Pixels	
16mm, 35mm, Transparent Media	448 x 672 (L)	336 x 504
6x4.5	416 x 310 (L)	312 x 232
6x6	416 x 416 (L)	312 x 312
6x7	416 x 480 (L)	312 x 360 (S)
6x9, TEM Film	416 x 619 (L)	312 x 464
APS Cassette, APS Sleeve	320 x 555 (L)	240 x 416 (S)



## MAXIMUM NUMBER OF FRAMES

This function is designed for use with the Slide Feeder or the APS adapter.

It enables you to limit the number of continuous scans in a row. The range is from 1 to 100.

Type the desired number into the text box or use the arrows to scroll through the values.

## COLOR DEPTH LIST BOX

Version 1.1 allows you to select the pixel depth of each color channel used to scan your image (RGB or CMY). Three options are available. The default setting is 8bit.

- 8bit: over 16.7 million colors
- 6bit: over 2.8 billion colors
- 16bit linear: same as 16bit, but image correction is not applied when the image is scanned.

\* If you are using the Dimâge Scan Multi utility software, 16bit and/or 16bit linear color depth are valid only when the TIFF format is chosen as a file format after final scanning.

\* Some image-process applications do not support 16bit images.

## APS SETTINGS – REWIND FILM AT EJECT

This option is for use with APS Cassettes. Select this if you would like the film to be automatically rewound into the cassette before the film is ejected after the eject button in the Command window is pressed.

The film will always rewind into the cassette if the Eject button on the front of the scanner is used.

## APS SETTINGS – ROTATE ALL INDEX FRAMES 180 DEGREES

When this option is selected, all the frames in the index window will automatically appear rotated by 180 degrees.

## HELP BUTTON

Click on the help button to launch the help file.

## CANCEL BUTTON

Closes the Preferences dialog box without making the changes.


# APPENDIX

## SLIDE FEEDER SC-100

The Slide Feeder holds up to 50 mounted slides and is compatible with the Utility Software and the TWAIN driver/Plug-in software. Please follow the instructions in the Slide Feeder manual for loading the slides and attaching the Slide Feeder to the Dimâge Scan Multi.

**1. Load the slides and attach the Slide Feeder to the Dimâge Scan Multi as instructed in the Slide Feeder manual.**

**2. Launch the software, select "Slide Feeder" from the Film Format drop-down list, then select the type of film from the Film Type drop-down list.**

**3. Click on the prescan button  in the Command window.**

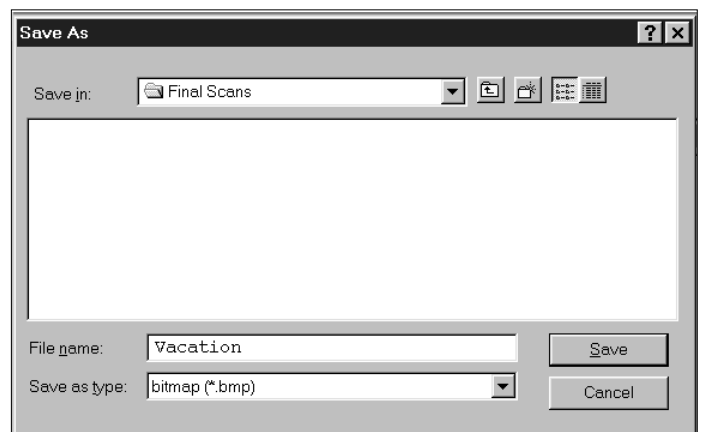
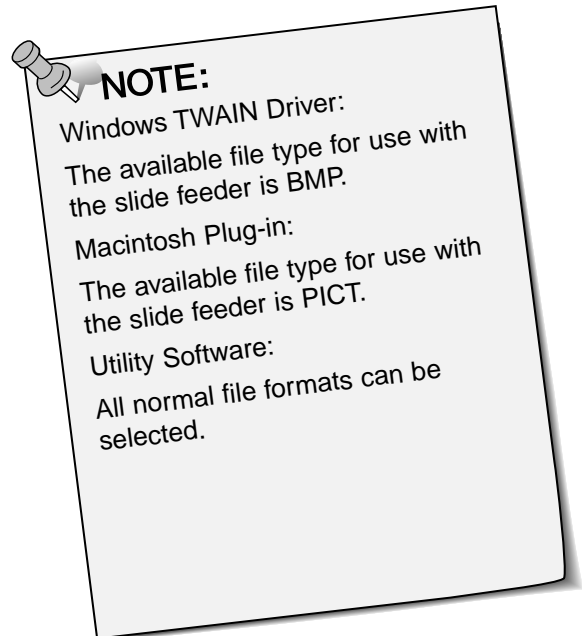
- A slide at the bottom of the "IN" column is carried into the scanner and is prescanned. When the prescan is complete, the prescanned image will appear in the Prescan window.
- You can change or adjust the brightness, contrast, color balance, focus, orientation, etc. against a prescanned image (Software Instruction Manual pages 21 - 42).

**4. After the desired adjustments are made to a prescanned image, click on the Scan button  in the Command window.**

- The standard save dialog box for your operating system will appear.

**5. Select the destination and file type, enter a file name, then click on Save.**

- Scanning will begin.
- Same adjustments that you have done to a prescanned image will be applied to the all remaining slides in the "IN" column of Slide Feeder.
- The scans will be saved using the selected file name and numbered chronologically. Example: File\_Name01, File\_Name02, File\_Name03,...



# TROUBLESHOOTING

<b>Symptom</b>	<b>Cause/Action</b>
The scanned image colour is strange.	<p>Check that there is no dust on the film or film holder.</p> <p>Check that the colour palette (START – SETTINGS – CONTROL PANEL – DISPLAY – SETTINGS) is on High Colour (16 bit) or higher. Different or additional steps may be necessary depending on your graphics board. Refer to your graphics board's documentation.</p> <p>If using the Medium-format holder, be sure to use the proper fitting mask. If the holder is dirty, clean it as directed.</p> <p>Reinitialise the scanner.</p> <p>Windows: press the Ctrl, Shift, and i keys simultaneously.</p> <p>Macintosh: press the Command, Shift, and i keys simultaneously.</p> <p>Reinitializing while using the APS adapter:</p> <ol style="list-style-type: none"><li>1. Press the initialisation key combination.</li><li>2. The adapter will eject automatically.</li><li>3. Initialisation (set-up) will stop.</li><li>4. Remove the adapter.</li><li>5. Close the accessory panel.<ul style="list-style-type: none"><li>• Initialisation (set-up) will resume.</li></ul></li></ol>

## RESOLUTION, RESIZING, AND RESAMPLING

Image size (width x height) and resolution determine file size. The greater the dpi and image size, the larger the file size will be.

As all the image adjustments are made before scanning and the Dimâge Scan Multi will not allow you to enter an Input resolution lower than the relative output resolution, there is no need for users of the Utility software to be concerned about resampling up or interpolation (two computer functions that can result in loss of image quality) when scanning.

Users of image editing software (such as Adobe Photoshop) however, can adjust image size and resolution in the application after scanning. If done incorrectly, resizing can result in loss of image quality. Please refer to your image editing software user's guide for additional information regarding resolution, file size, and resizing.

# GLOSSARY

## BRIGHTNESS:

The lightness or darkness of the image.

## CHANNEL

The component of an image. Your scanned image has three channels; red, green, and blue (RGB).

## CONTRAST

The gradation of shades in an image. A high contrast image has very dark areas and bright areas without many middle shades. A low contrast image has many tones that are close to the same brightness. Low contrast images are often described as looking 'flat'.

## CROP

To trim and delete the unwanted edges of the image.

## DPI

Dots (pixels) per inch.

## EMULSION SIDE

The side of the film coated with the photographic material.

## GAMMA

The contrast of only the middle tones.

## HIGHLIGHTS

The lighter areas of the image.

## HISTOGRAM

A graph showing the amount of each level of the 256 brightness levels.

## INTERPOLATION

A form of adding new pixels in an image when resampling up.

## MIDTONE

The middle shades of an image, in between light and dark.

## NEUTRAL

Having no colour cast, such as black, white, or gray.

## PIXEL

Abbreviation for picture element. The dots that make up an electronic image.

## RESAMPLE

To change the number of pixels in the image. If pixels are discarded when shrinking an image, it is called resampling down. If new pixels are created in an image, it is called resampling up (p. 59).

## RESOLUTION

The number of pixels in a given area of the image; such as pixels per inch or pixels per centimeter. High resolution is the term for an image with a lot of pixels in a given area. Low resolution means there are not many pixels in a given area.

## RGB

Red, Green, and Blue. These are the colours of the three channels that make up the scanned image. Monitors use red, green, and blue phosphors to create the image you see on the screen.

## SHADOWS

The dark areas of an image.

# USER TECHNICAL SUPPORT

Please contact your dealer regarding installation, SCSI interface recommendations, or application compatibility. If your dealer is unable to help you, contact us toll free.

Technical Support  
Minolta (UK) LTD. Photographic Division  
Precedent Drive,  
Rooksley, Milton Keynes, MK13 8HF, England  
Tel: 01 908 208 349 Fax: 01 908 208 334  
<http://www.minoltaeurope.com>

**Please have the following information ready when calling Minolta Technical Support:**

Make and model of your computer:

Available application RAM:

Operating system and version:

Other connected SCSI devices and their SCSI ID numbers:

DS Multi software version number:

Symptoms:

Messages that appear on the screen when the problem occurs:

Frequency of occurrence:

**To determine the version number of your driver software:**

Place the pointer over the Status Bar in the Command window. The version number will be displayed in the status window.

<b>A</b>	<b>Minolta Austria Ges.m.b.H</b> Amalienstr. 59-61, A-1131 Wien, Österreich Tel: 01 87868 176 Fax: 01 87868 153	<a href="http://www.minoltaeurope.com">http://www.minoltaeurope.com</a>
<b>B</b>	<b>Minolta Belgium Branch</b> Kontichsesteenweg 38, B-2630 Aartselaar, Belgique Tel: 03 877 04 30 Fax: 03 877 00 49	<a href="http://www.minolta.be">http://www.minolta.be</a>
<b>CAN</b>	<b>Minolta Canada Inc., Head office</b> 369 Britannia Road East, Mississauga, Ontario L4Z 2H5, Canada Tel. 0905 890 66 00 Fax: 0905 890 71 99	<a href="http://www.minolta.com">http://www.minolta.com</a>
<b>CH</b>	<b>Minolta (Schweiz) AG</b> Riedstr. 6, CH-8953 Dietikon, Schweiz Tel: 157 57 11 (sFr 2.15/min) Fax: 01 741 33 12	<a href="http://www.minolta.ch">http://www.minolta.ch</a>
<b>D</b>	<b>Minolta GmbH</b> Kurt-Fischer-Str. 50, D-22923 Ahrensburg, Deutschland Tel: 0221 93 76 71 50 Fax: 0221 93 76 71 77 Mo – Fr, 10.00 – 19.00	<a href="http://www.minolta.de">http://www.minolta.de</a>
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<b>NL</b>	<b>Minolta Camera Benelux B. V.</b> Zonnebaan 39, P. O. Box 6000, NL-3600 HA, Maarssen, Nederland Tel: 030 241 14 11 Fax: 030 241 41 65	<a href="http://www.minolta.nl">http://www.minolta.nl</a>
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