

MINOLTA

Dimâge Scan Multi II



Software Instruction Manual



Thank you for purchasing the Minolta Dimâge Scan Multi II. The Dimâge Scan Multi II 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 (Macintosh OS, Windows®95, Windows®98, Windows®2000, 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 II software.

This manual does not instruct in the:

- basic use of personal computers.
- use of Window®95, Windows®98, Windows®2000, Windows®NT, or Mac OS.
- use of Adobe Photoshop, Paint Shop Pro, or Corel PHOTO-PAINT.

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

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- Every necessary caution has been taken to ensure the accuracy of this instruction manual. Please contact us if you have any questions, find any errors, or notice missing information.
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TABLE OF CONTENTS

SYSTEM REQUIREMENTS – PC/AT	7
SYSTEM REQUIREMENTS – MACINTOSH	8
INSTALL THE SOFTWARE	9
WINDOWS 95/98/98SE/2000/NT4.0	9
MACINTOSH	12
INSTALL THE PLUG-IN – MACINTOSH	14
STARTING UP THE SOFTWARE – WINDOWS	15
WINDOWS 95/98/98SE/2000/NT	15
STARTING UP THE SOFTWARE – MACINTOSH	17
THE FLOW CHART TO PRESCAN	18
MAIN WINDOW	19
MAIN WINDOW – NAMES OF PARTS	19
SELECTING THE FILM FORMAT	20
SELECTING THE FILM TYPE	21
INDEX SCAN	22
INDEX WINDOW – NAMES OF PARTS	22
MAKING AN INDEX SCAN	23
SELECTING INDEX IMAGE	24
SELECTING FRAMES	24
ROTATING THE INDEX FRAMES	25
FLIPPING THE INDEX FRAMES	25
MAGNIFYING THE INDEX IMAGE	26
REVERSING THE INDEX IMAGE	27
SAVING AFTER LINING UP THE INDEX SCAN IMAGES	28
SAVING THE INDEX SCAN IMAGES AS AN INDEX FILE	30
LOADING THE INDEX SCAN IMAGES SAVED AS THE INDEX FILE	31
PRESCAN	32
MAKING A PRESCAN	32
PRESCAN TAB – NAMES OF PARTS	33
ROTATING THE PRESCAN IMAGE	34
FLIPPING THE PRESCAN IMAGE	34
FULL-SCREEN VIEW	35
MAGNIFYING OR REDUCING THE VIEW	36
SCROLLING THE VIEW	37
AUTO EXPOSURE LOCK	38
AE AREA LOCK	39
FOCUS	40
POINT AF	40
MANUAL FOCUS	41
AUTO CROPPING	42
MANUAL CROPPING	43
APS FORMATS; C, H, AND P	45
DISPLAYING FRAME NUMBER	46
RGB/CMY INFO	46

TABLE OF CONTENTS

IMAGE CORRECTION .....	.47
PRESCAN TAB – NAMES OF PARTS .....	.47
TONE CURVES AND HISTOGRAM .....	.48
CORRECTING THE TONE CURVES .....	.49
TONE CURVES BY FREEHAND .....	.50
SPECIFYING THE BLACK, WHITE OR GRAY POINT .....	.51
CORRECTING THE HISTOGRAM .....	.54
CORRECTING THE HISTOGRAM – AUTO SETTING .....	.54
CORRECTING THE HISTOGRAM – EACH R, G, B CHANNEL .....	.55
CORRECTING THE HISTOGRAM – RESET .....	.55
CORRECTING BRIGHTNESS/CONTRAST/COLOR BALANCE .....	.56
CORRECTING BRIGHTNESS/CONTRAST/COLOR BALANCE – AUTO SETTING .....	.57
CORRECTING BRIGHTNESS/CONTRAST/COLOR BALANCE – RESET .....	.57
CORRECTING HUE/SATURATION/LIGHTNESS .....	.58
CORRECTING HUE/SATURATION/LIGHTNESS – AUTO SETTING .....	.59
CORRECTING HUE/SATURATION/LIGHTNESS – RESET .....	.59
VARIATION CORRECTION .....	.60
VARIATION CORRECTION – COLOR BALANCE .....	.61
VARIATION CORRECTION – BRIGHTNESS & CONTRAST CORRECTION .....	.62
VARIATION CORRECTION – SATURATION CORRECTION .....	.63
CANCELLING THE IMAGE CORRECTION .....	.64
REDO THE CORRECTION .....	.64
DELETING THE IMAGE CORRECTION (DELETING ALL THE IMAGE CORRECTIONS) .....	.64
SNAPSHOT .....	.65
IMAGE CORRECTION JOB .....	.66
IMAGE CORRECTION JOB – SAVING IMAGE CORRECTION JOB .....	.66
IMAGE CORRECTION JOB – LOADING IMAGE CORRECTION JOB .....	.67
CHECKING THE CORRECTION RESULT WHILE LINING UP IMAGES .....	.68
FULL-SCREEN VIEWING THE POST-CORRECTION IMAGE .....	.68
DIGITAL ROC/GEM .....	.69
DIGITAL ROC .....	.69
DIGITAL GEM .....	.70
THE FLOW CHART TO THE FINAL SCAN .....	.74
JOB .....	.75
LOADING A JOB .....	.76
CATEGORIES .....	.77
FINAL SCAN .....	.78

TABLE OF CONTENTS

SCAN SETTINGS WINDOW .....	.80
SCAN SETTINGS WINDOW – NAMES OF PARTS .....	.80
REGARDING THE SETTING ITEMS OF THE SCAN SETTINGS WINDOW .....	.81
EXAMPLE OF THE SCAN SETTING – WHEN DISPLAYING IN A MONITOR .....	.84
EXAMPLE OF THE SCAN SETTING – WHEN PRINTING A SCANNED IMAGE .....	.85
REGISTERING A JOB .....	.86
DELETING A JOB .....	.87
SETTING THE PREFERENCES .....	.88
THE DISPLAY IN THE PREFERENCES WINDOW .....	.88
REGARDING THE SETTING ITEMS OF THE PREFERENCES WINDOW .....	.89
COLOR MATCHING .....	.92
COLOR MATCHING – THE SETTING OF OUTPUT COLOR IMAGE .....	.92
REGARDING OUTPUT COLOR SPACE SETTINGS AVAILABLE .....	.93
COLOR MATCHING – THE SETTING OF ICC PROFILE .....	.95
NAVIGATION .....	.96
THE AUTOMATIC OPERATION BY THE NAVIGATION FUNCTION .....	.98
INPUTTING THE NAME OF NAVIGATION SET AND SAVING IT .....	.100
SELECTING A NAVIGATION SET .....	.100
DELETING A NAVIGATION SET .....	.101
SLIDE FEEDER (OPTIONAL ACCESSORY) .....	.102
LOADING TIME – WINDOWS .....	.104
LOADING TIME – MACINTOSH .....	.105
JOB FILE LIST – 35 MM .....	.106
JOB FILE LIST – 6 X 4.5 .....	.108
JOB FILE LIST – 6 X 6 .....	.110
JOB FILE LIST – 6 X 7 .....	.112
JOB FILE LIST – 6 X 8 .....	.114
JOB FILE LIST – 6 X 9 .....	.116
JOB FILE LIST – APS .....	.118
JOB FILE LIST – 16 MM .....	.120
JOB FILE LIST – CENTER AREA 2820 .....	.122

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.

The Dimage Scan Multi II and the supplied software are not designed for use with sepia color film. However, if you intend to use sepia color film, select Color Negative in the film type (p.xx). After the final scan, retouch the saved image using the image editing application so that a sepia tone is reproduced.

Also, when scanning sepia color film with an APS cassette, [The film type cannot be selected.] appears if the Auto Detect (color) is selected in the film type. In this case, select Color Negative and perform the final scan. After the final scan, retouch the saved image using the image editing application so that a sepia tone is reproduced.

SYSTEM REQUIREMENTS – PC/AT

- CPU:** IBM PC/AT compatible with an Intel Pentium processor 90 MHz or above.
• Support cannot be provided for custom or home built machines.
Pentium III Processor is recommended when loading with 16 bit or using the Digital ROC/GEM functions.
- Operating System:** Windows®95 (inc. OSR2), Windows®98 (inc. Second Edition), Windows®2000 Professional, Windows®NT 4.0
- Memory:** A minimum of 32 MB (megabytes) of RAM.
A minimum of 512 MB when loading with 16 bit and using the Digital ROC/GEM functions.
- Hard Disk Space:** About 600 MB or more of available hard disk space.
About 2 GB or more of available hard disk space when loading with 16 bit and using the Digital ROC/GEM functions. (About 3 GB or more is recommended.)
- Monitor:** Minimum VGA (640 x 480) monitor capable of displaying High Color (16 bit) is required. XGA (1024 x 768) or larger is recommended.
- CD-ROM Drive:** Necessary (when installing the software.)
- Recommended SCSI Board:**
Adaptec AHA-1510B, AHA-1520B, AHA-1540CP, AHA-2910B, AHA-2910C, AHA-2920C, AHA-2940, AHA-2940U/W/AU/UW/U2W, SCSI Card 19160/29160/29160N, AVA-2902E/2903B/2906
- Other:** Photoshop Ver. 3.0.5, Ver.4.0.1, Ver. 5.0.2, Ver. 5.5, Photoshop 5.0 LE, Paint Shop Pro Ver. 6, Corel PHOTO-PAINT Ver. 9* have been fully tested for use with the TWAIN driver software.

*Corel Scan is not recommended.

SYSTEM REQUIREMENTS – MACINTOSH

- CPU:** Power PC, Power Macintosh G3, Blue & White Power Macintosh G3 and Power Macintosh G4
(Except for 68 K Macintosh and Mac OS compatible unit)
Power Macintosh G4 is recommended when loading with 16 bit and using the Digital ROC/GEM functions.
- Operation System:** Mac OS 7.5.3 to 9.0.4
- Memory:** A minimum of 32 MB (megabytes) application RAM in addition to the requirements for the Mac OS.
256 MB or more when loading with 16 bit and using the Digital ROC/GEM functions.
- Hard Disk Space:** About 600 MB or more of available hard disk space.
About 2 GB or more of available hard disk space when loading with 16 bit and using the Digital ROC/GEM functions. (About 3 GB or more is recommended.)
- Monitor:** Minimum 13 (640 x 480) inch monitor capable of displaying at least 32,000 Colors.
19 inch(1024 x 768) or larger is recommended.
- CD-ROM Drive:** Necessary (when installing the software.)
- Recommended SCSI Board:**
With a Power Macintosh and Power Macintosh G3
The standard built-in SCSI board
Connecting to the extension board inserted into the PCI bus/NuBus is not available.)

With a Blue & White Power Macintosh G3*, Power Macintosh G4
Adaptec PowerDomain 2940UW/U2W, PowerDomain 2930U, SCSI Card 2906, and AVA-2903B
- * Some models in the Blue & White Power Macintosh G3 series use the Ultra2 Wide SCSI board as the standard built-in SCSI board, however, connecting the Dimage Scan Multi II to the standard built-in SCSI board is not recommended. The connecting capacity may be limited and the full capabilities of the PC may not be usable due to the specifications of the standard built-in SCSI board.
- When using the model which has the standard built-in SCSI board, insert the recommended SCSI board as described above in the open slot without detaching the standard built-in SCSI board and then connect the Dimage Scan Multi II to the SCSI connector on the inserted SCSI board.
- Other:** Adobe PhotoShop Ver. 4.0.1, Ver. 5.0.2, Ver. 5.5 and Adobe Photoshop 5.0 LE have been fully tested for use with the plug-in software.

INSTALL THE SOFTWARE

To use the Dimage Scan Multi II, install the software by following the procedure below.

CAUTION – Before installing

- Make sure that the Damage Scan Multi II is connected to your PC correctly. For connecting the Dimage Scan Multi II to the PC, refer to the hardware instruction manual.
- The antivirus system extensions may conflict with the operation of this installer. Remove or disable any extensions before launching this installer and replace or re-enable them when installations are complete.

WINDOWS 95/98/98SE/2000/NT4.0

These installation instructions assume drive C or D is the CD-ROM drive or the startup disk drive respectively.

1 Turn on the Dimâge Scan Multi II.

2 Turn on the PC and start up Windows.

- The “[New Hardware Found]” window will appear.



FOR WINDOWS 2000/NT4.0

3 Select “Do not install a driver.” and click on [OK].

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

FOR WINDOWS 95 RELEASE 2 (OSR2)

- The 2 dialog boxes shown on the left will appear.

3a Click on [Next >] in the first dialog box.

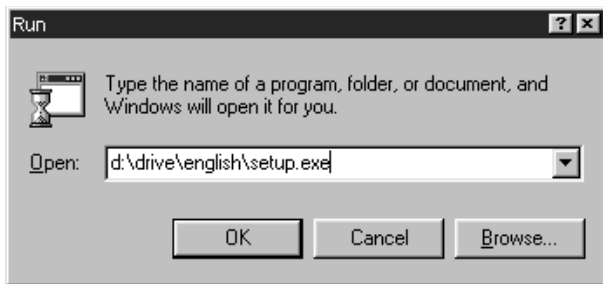
3b Click on [Finish] in the second dialog box.

FOR WINDOWS 98

3 Click on [Next >] until [Finish] appears and Click on [Finish] at last.

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

INSTALL THE SOFTWARE



5 From the START button, select Run...

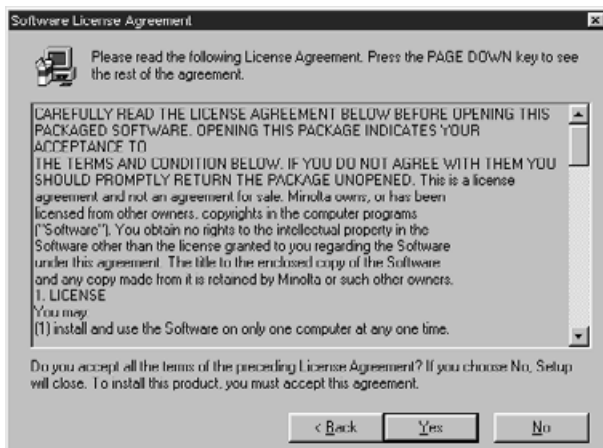
When the Run dialog box appears, enter D:drive\english\setup.exe from the Open drop-down list, then click on [OK].

- The following dialog box will appear.



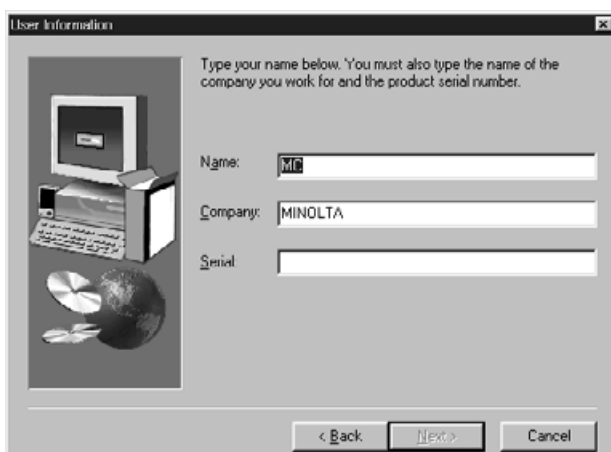
6 Click on [Next >].

- The Software License Agreement will appear.



7 After reading the agreement, if you accept it, click on [Yes].

- The [Serial Number Input] dialog box will appear.
- If you do not accept, click on [No]. Setup will be cancelled.



8 Enter your name, company name and the serial number described on the CD-ROM case and click on [Next >].

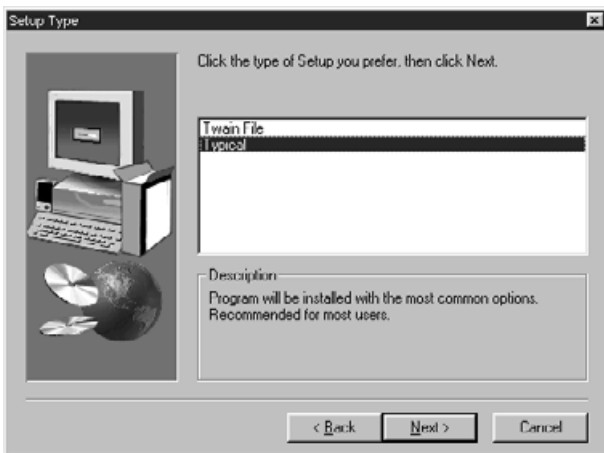
- The Choose Destination Location dialog box will appear.
- Take care to type them correctly, otherwise, [Next >] cannot be clicked.

INSTALL THE SOFTWARE



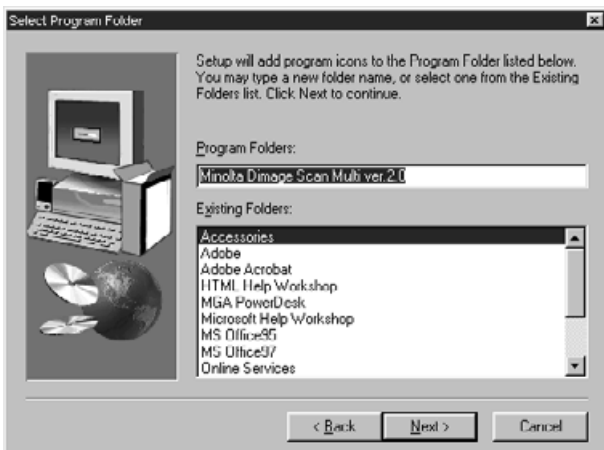
9 To install the software into the directory in the default setting ;C:\Program Files\DS_Multi II, click on [Next >].

- The “Setup Type” dialog box will appear.
- To select another destination directory, click on [Browse...] and select the directory. Click on [OK].



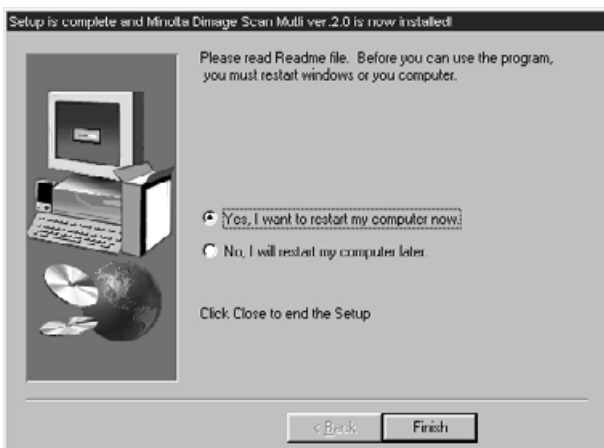
10 Select the setup type and click on [Next >].

- Normally, select “Typical” When the DS Multi II Utility software is not used, select [TWAIN File].
- When [Next >] is clicked on, the [Select Program Folder] dialog box appears.



11 The name of the program folder in which program icons will be added is displayed. Confirm the name and click on [Next >].

- Setup will begin.
- When setup is complete, the “Setup is complete and Minolta Dimage Scan Multi ver.2.0 is now installed!” dialog box appears.



12 Make sure that the message “Yes, I want to restart my computer now.” is checkmarked and click on [Finish].

- Your computer is restarted.

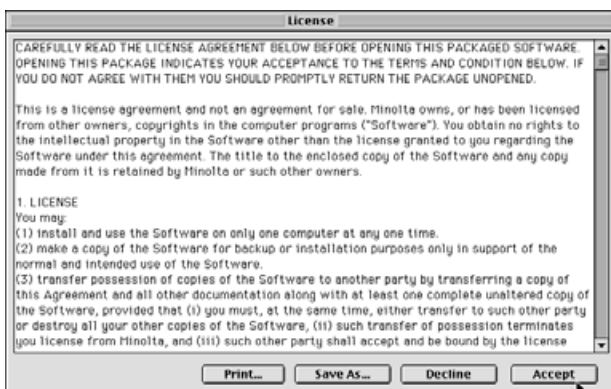
INSTALL THE SOFTWARE

MACINTOSH

- 1 Turn on the Dimâge Scan Multi II.
- 2 Turn on the PC and start up the Mac OS.
- 3 After the desk-top window is displayed, insert the Dimage Scan Multi II CD-ROM into the CD-ROM drive.
- 4 Double-click on the Dimage Scan Multi II CD-ROM icon.
- 5 Double-click on the Driver folder and English folder.
- 6 Double-click on the DS Multi II Installer icon.
 - The install screen will appear.



- 7 Click on [Continue...].
 - The user License Agreement will appear.



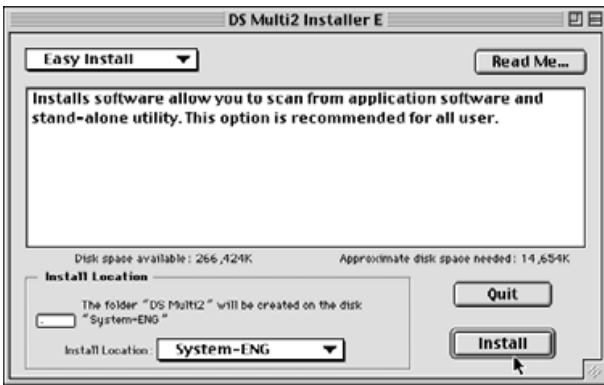
- 8 After reading the agreement, if you accept it, click on [Accept].
 - The Easy Install dialog box will appear.

When [Print...] is clicked, the user License Agreement can be printed.

When [Save As...] is clicked, the content of the License Agreement is saved as a text file.

If you do not accept the user License Agreement, click on [Decline]. The installation will be cancelled.

INSTALL THE SOFTWARE

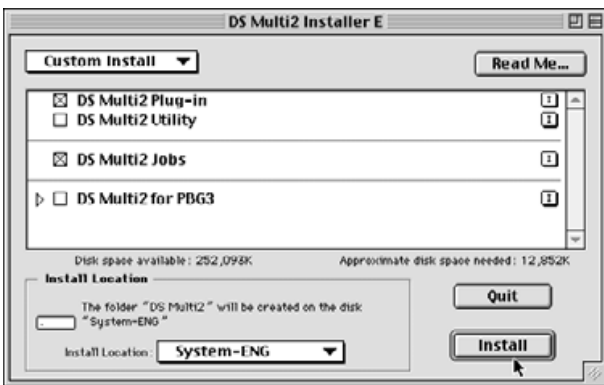


- 9 Confirm the install location of the software displayed in Install Location.**

To change the location

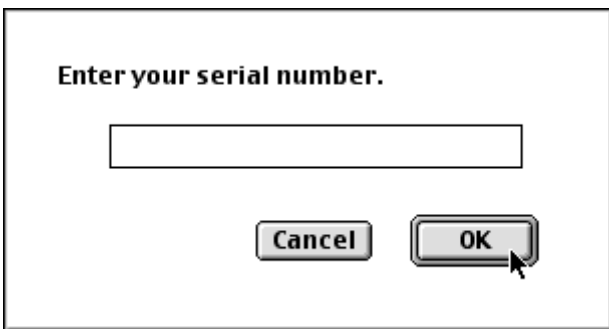
- Select Install Location from the Install Location pull-down menu and specify the folder or make a new folder.

When **Easy Install** is selected, all the folders are installed.



When installing either the DS Multi Plug-in or the DS Multi Utility, select the **Custom Install**.

- 1 Select Custom Install from the [Install Select] pull-down menu.
- 2 Click on the checkbox of the file to be installed.



- 10 Click on [Install].**

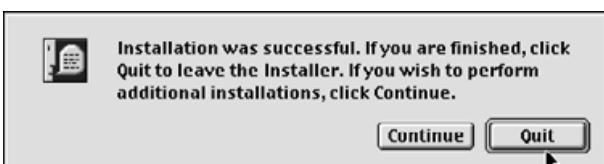
- The [Enter your serial number] dialog box will appear.

- 11 Enter the serial number described on the back of the CD-ROM case.**

- Type it correctly.

- 12 Click on [OK].**

- The installation will begin. Follow the procedure displayed in the window.
- When the installation is complete, a message appears informing you installation was successful.



- 13 Click on [Quit].**

INSTALL THE SOFTWARE

INSTALL THE PLUG-IN – MACINTOSH

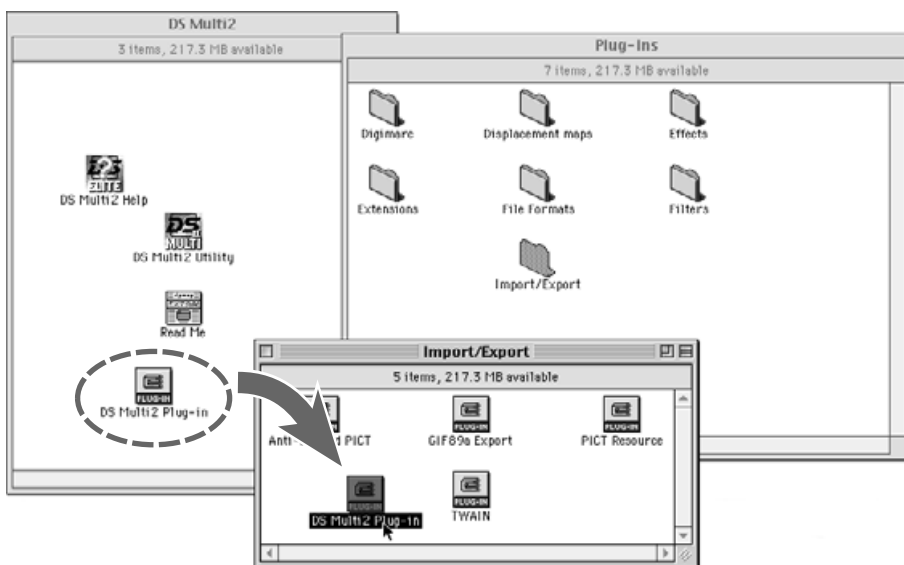
Once the installation procedure is complete, move the DS Multi Plug-in from the Dimage Scan Multi folder to the appropriate folder for the host application.

You can use the DS Multi II Plug-in when Adobe Photoshop is functioning.

As this DS Multi Plug-in cannot be installed automatically, install this Plug-in by performing the following procedure after the installation is complete.

When using only the DS Multi Utility without activating the DS Multi Plug-in, the installation is not necessary.

- 1 If Adobe Photoshop is functioning, quit it.**



- 2 Open the Adobe Photoshop folder, and open the Photoshop Plug-ins folder.**
- 3 Drag and drop the DS Multi II Plug-in folder in the DS Multi II folder into the Plug-in's Import/Export folder.**

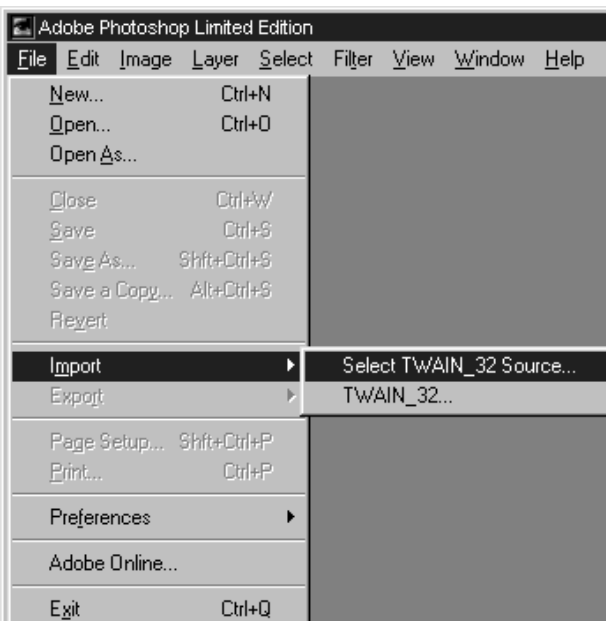
STARTING UP THE SOFTWARE – WINDOWS

WINDOWS 95/98/98SE/2000/NT4.0

STARTING UP THE TWAIN DRIVER

This uses Adobe Photoshop 5.0LE as an example. The commands and displays may vary among applications. For details, refer to the instruction manual of the image editing software you use.

- 1 Turn on the Dimage Scan Multi II.
- 2 Turn on the PC and start up Windows.
- 3 Start up Adobe Photoshop LE.

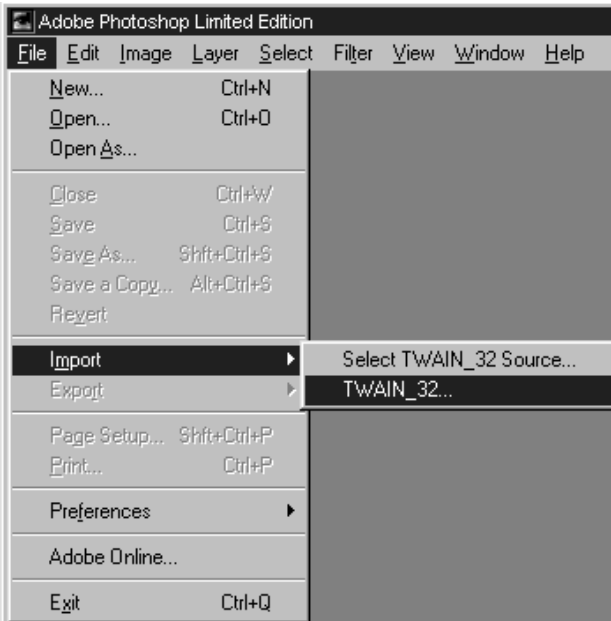


- 4 Select File -> Import -> Select TWAIN_32 Source... .
 - The [Select TWAIN Source] dialog box appears.



- 5 Select DS Multi 2.0 from the Source list, then click on Select.

STATING UP THE SOFTWARE – WINDOWS



6 Select File -> Import -> TWAIN_32.

STARTING UP THE UTILITY SOFTWARE

When you intend to scan and save images only, use the DS Multi II Utility software.

After performing step 1 and 2 on page 15, select Start -> Programs -> Minolta Dimage Scan Multi ver.2.0 -> DS Multi II Utility.

- The software will function and the Main window (p.19) will appear.

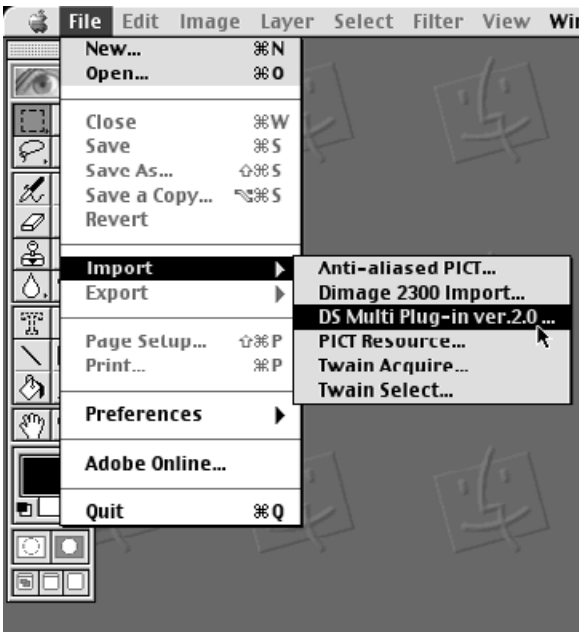


STATING UP THE SOFTWARE – MACINTOSH

MACINTOSH

STARTING UP THE Adobe Photoshop PLUG-IN

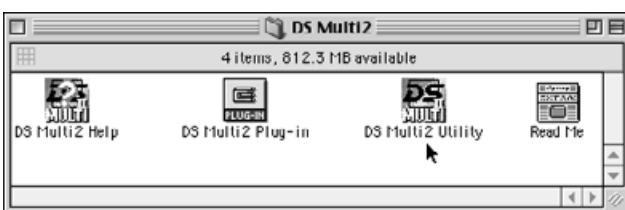
This instruction assumes that the DS Multi II folder is installed in the Plug-ins Import/Export folder of Adobe Photoshop 5.0 LE. For the installation of the DS Multi II Plug-in, see page 14.



- 1 Turn on the Dimage Scan Multi II.
- 2 Turn on the PC and start up Mac OS.
- 3 Start up Adobe Photoshop LE.
- 4 Select File -> Import -> DS Multi Plug-in ver. 2.0....
 - The software will function and the Main window (p.19) will appear.

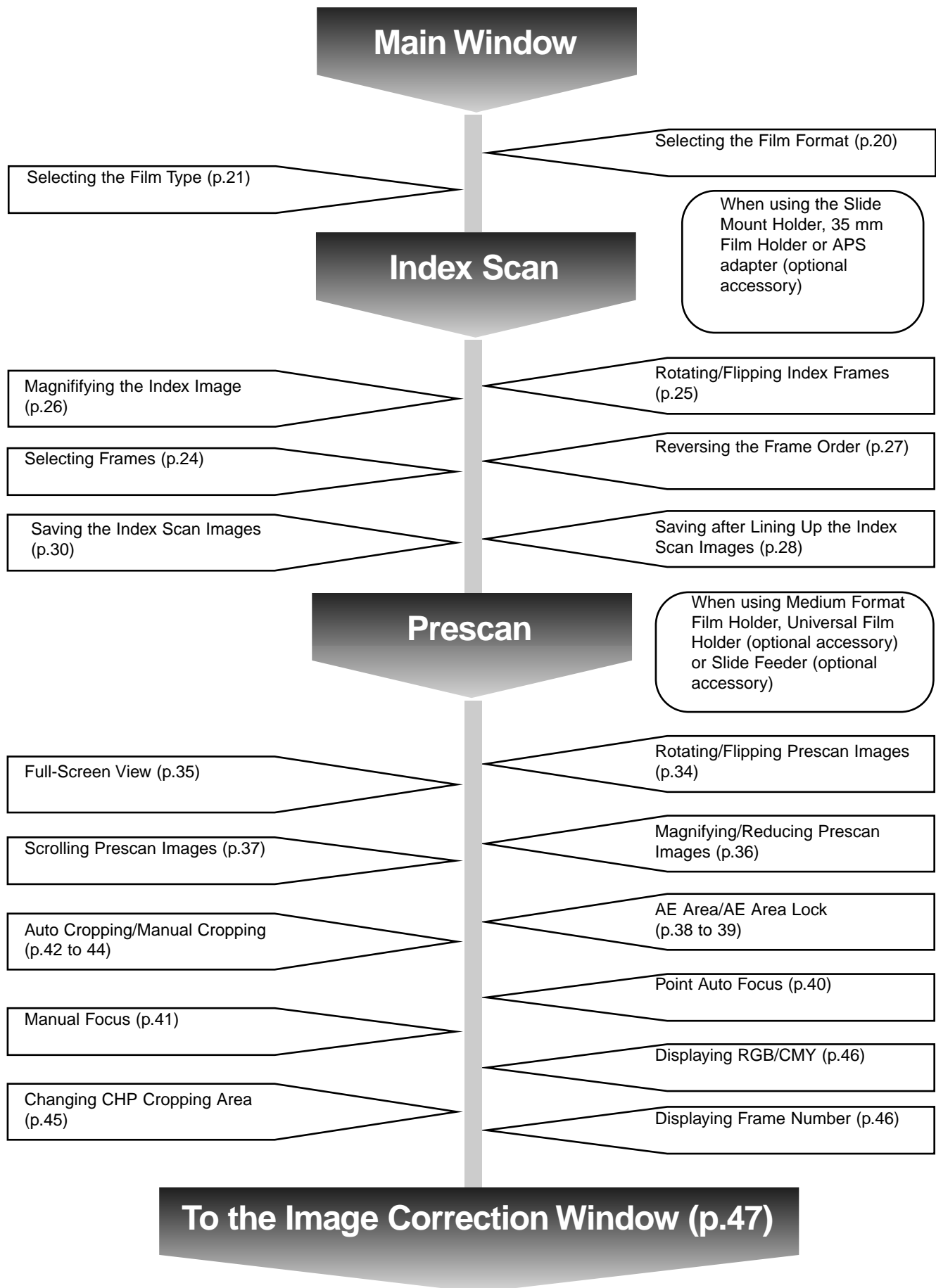
STARTING UP THE UTILITY SOFTWARE

When you intend to scan and save images only, use the DS Multi ii Utility software.



- 1 Turn on the Dimage Scan Multi II.
- 2 Turn on the PC and start up Mac OS.
- 3 Double-click on the DS Multi II folder.
- 4 Double-click on the DS Multi II Utility icon.
 - The software will function and the Main window (p.19) will appear.

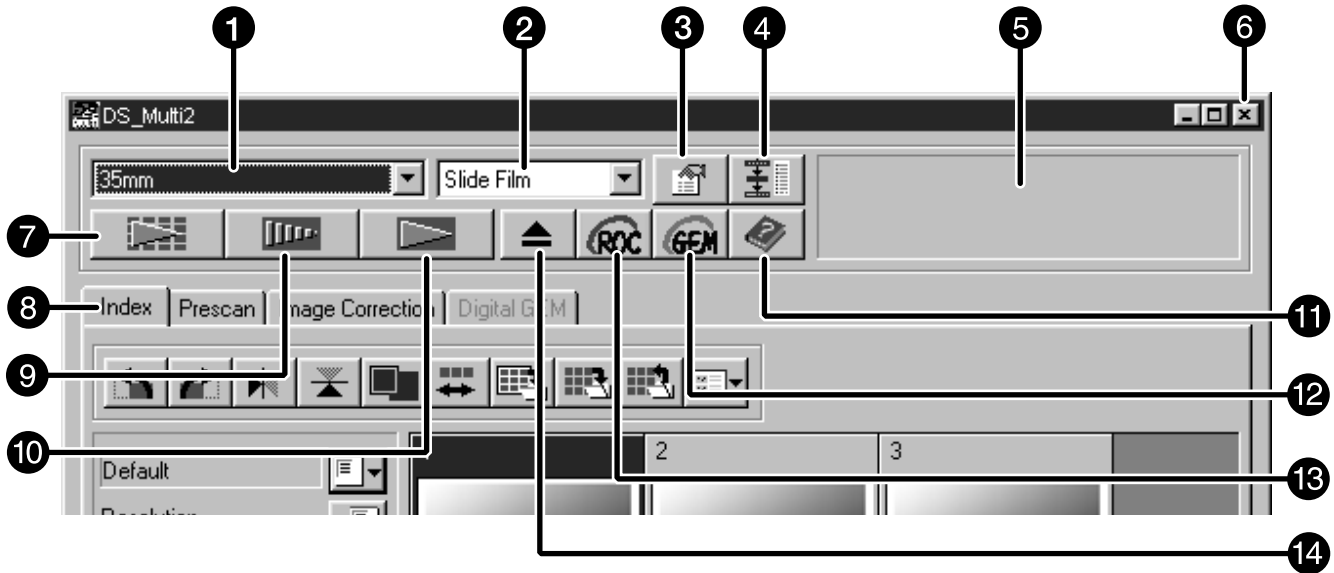
THE FLOW CHART TO PRESCAN



MAIN WINDOW

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

MAIN WINDOW – NAMES OF PARTS



- ❶ Film Format list box
- ❷ Film Type list box
- ❸ Preferences button
- ❹ Navigation button
- ❺ Status bar
- ❻ Closing button (The upper left side of the window on Macintosh)
- ❼ Index Scan button
- ❽ Tab (Switching the Tab of the Index Scan/ Prescan/Image Correction/Digital GEM Window)
- ❾ Prescan button
- ❿ Scan button
- ⓫ Help button
- ⓬ Digital GEM button
- ⓭ Digital ROC button
- ⓮ Eject button

MAIN WINDOW

SELECTING THE FILM FORMAT



In the Main window, select the film format from the drop-down list.

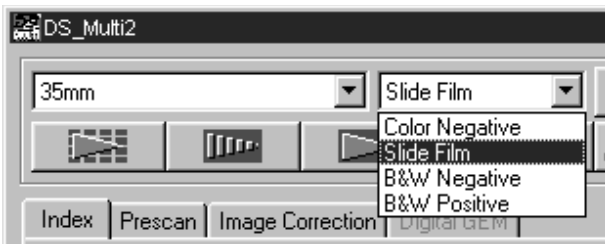
- The Index window (p.22) will appear if 35mm or APS Cassette is selected.
- The Prescan window will (p.33) appear if a Medium-Format Film Size (6x4.5, 6x6, 6x7, 6x8, 6x9), APS Sleeve, Transparent Media, TEM Film, 16 mm, Center Area 2820 or Whole Area Interpolation 2820 is selected.
- The following list shows the film formats and appropriate holders for scanning.

FILM FORMAT	HOLDER
35mm	35mm Film Holder FH-M1 (sleeved film)/Slide Mount Holder SH-M2 (mounted slides)
APS Cassette	APS Adapter AD-100*
6x4.5, 6x6, 6x7, 6x8, 6x9	Medium Format Film Holder MH-M1 and the mask corresponding to each film size, or Universal Holder UH-M1* and Wide Universal Mask WM-M1*
APS Sleeve	Medium Format Film Holder MH-M1 and APS mask
Transp. Media	Slide Mount Holder SH-M2, or Universal Holder UH-M1* and Wide Universal Mask WM-M1*
TEM Film	Medium Format Film Holder MH-M1 and the mask corresponding to each film size, or Universal Holder UH-M1* and Wide Universal Mask WM-M1*
16mm	Medium Format Film Holder MH-M1 and 16mm mask
Slide Feeder	Slide Feeder SC-100*
Center area 2820/ Whole area interpolation 2820	Medium Format Film Holder MH-M1 and the mask corresponding to each film size, or Universal Holder UH-M1* and Wide Universal Mask WM-M1*

* shows optional accessories.

MAIN WINDOW

SELECTING THE FILM TYPE



In the Main 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, Medium-format films, APS Sleeve, 16mm, Slide Feeder	Color Negative, Color Positive, B&W Negative, B&W Positive
APS Cassette	Auto Detect (colour), Color Negative, Color Positive
Transparent Media	Special (colour), Color Negative, Color Positive, B&W Negative, B&W Positive
TEM film	Special (B&W), Color Negative, Color Positive, B&W Negative, B&W Positive
Center Area 2820/ Whole Area interpolation 2820	Special (colour), Special (B&W), Color Negative, Color Positive, B&W Negative, B&W Positive

Auto Detect (APS Cassette)

The APS cassette has a built-in disk in which data such as the film sensitivity (ISO), the number of film or the type of film, etc. is recorded. When selecting the [Auto Detect], the scanner detects the information and specifies the film type automatically.

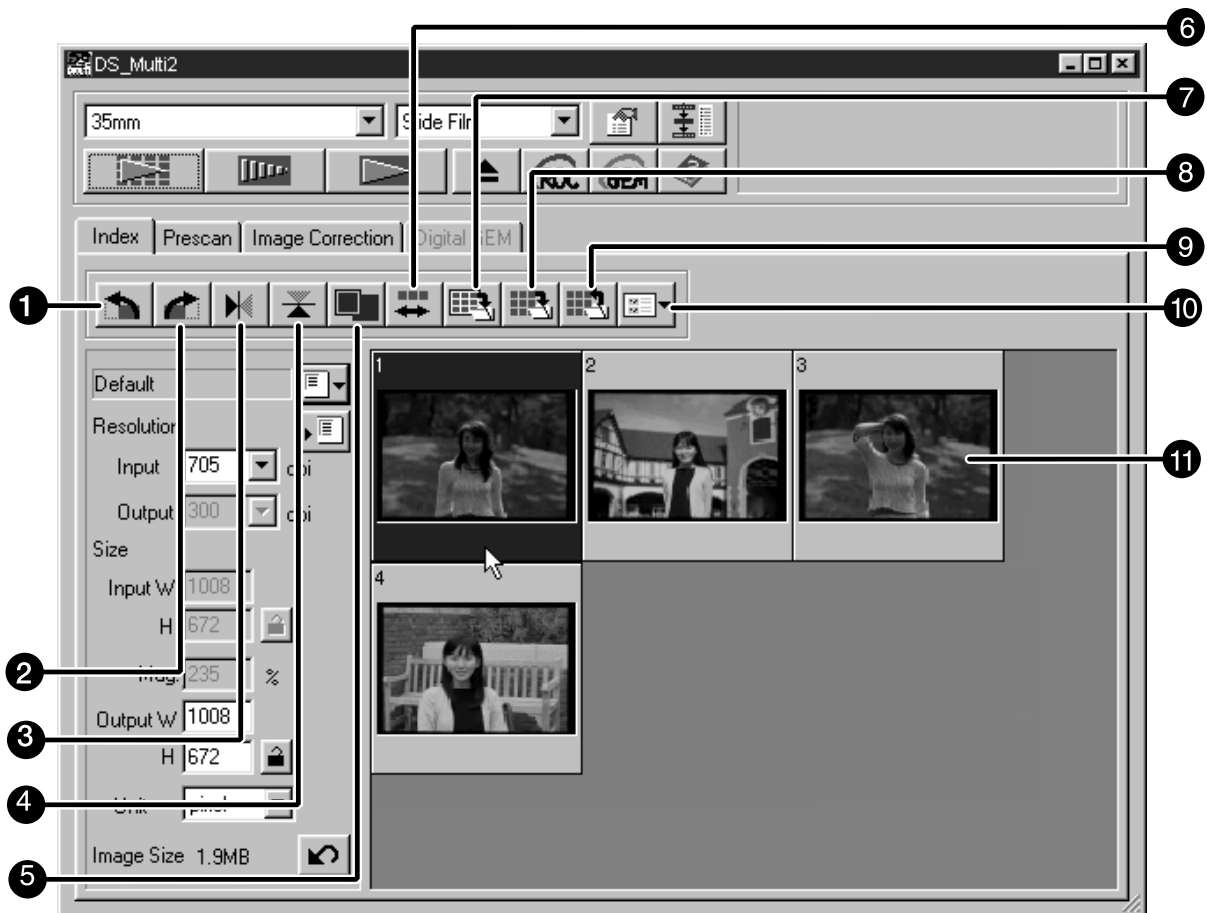
Special (Color/B&W)

The transparent media or TEM film differs from ordinary camera film in characteristics such as transparency rate, etc. When selecting [Special], the scanner specifies the film type according to the characteristics of the transparent media or TEM film.

INDEX SCAN

When [35 mm] or [APS Cassette] is selected in the film format, the Index tab in the Main window is activated. (The Index window is displayed in the front.) When the index scan is performed, the index images of all frames set in a Slide Mount Holder SH-M2, 35 mm Film Holder FH-M1 or an APS adapter (optional accessory) are displayed in the Index window.

INDEX WINDOW – NAME OF PARTS



- ① Rotate Left button
- ② Rotate Right button
- ③ Flip Horizontal button
- ④ Flip Vertical button
- ⑤ Index Image Magnifying Display button
- ⑥ Reverse frame order button
- ⑦ Save Index Image button
- ⑧ Save Index Scan button
- ⑨ Index Load button
- ⑩ Image Correction Job Load button
- ⑪ Index images

INDEX SCAN

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 Main window.

- All frames will be scanned and appear in the Index window in the order in which the frames are scanned.
- When using the 35mm film holder, the frames are scanned in the following order: 1, 2, 4, 3, 5, 6. This is not a malfunction but for. The index images are displayed in the order of 1, 2, 3, 4, 5, 6.

- There are two modes of the index scan; [High-Speed Scan] and [High-Quality Scan]. These modes can be switched in the Preferences. The default setting (after installing the software) is [High-Speed Scan].
- To cancel the index scan halfway:
Windows Press the Esc key.
Macintosh Press Command and the period key simultaneously.
- To delete all index images displayed in the Main window:
When the Index window is activated (displayed in the front),
Windows Press Ctrl, Shift, and R simultaneously.
Macintosh Press Command, Shift and R simultaneously.

INDEX SCAN

SELECTING INDEX IMAGE

Index frame can be selected by clicking on the desired frame. The selected frame can be rotated in 90° increments either clockwise or counterclockwise or flipped horizontally or vertically (p.25) . Moreover, that can be also prescanned by clicking on the Prescan button (p.32).



SELECTING FRAMES

To select more than 2 index frames, perform the following procedure when the Index window is displayed.

Windows

- Click on the desired index frames while holding the Ctrl key.
To cancel the selected frame, click on the frame to be cancelled again while holding the Ctrl key.
- To select a sequence of index frames
Example: To select the images from frame numbers 2 to 9
Click on the images of frame numbers 2 and 9 while holding the Shift key.
- To select all the frames, press the Ctrl and A keys simultaneously.

Macintosh

- Click on the desired frames while holding the Command key.
To cancel the selected frame, click on the frame to be cancelled again while holding the Command key.
- To select a sequence of index frames
Example: To select the images from frame numbers 2 to 9
Click on the images of frame numbers 2 and 9 while holding the Shift key.
To select all the frames, press the Command and A keys simultaneously.

INDEX SCAN

ROTATING THE INDEX FRAMES

Select the frame (p. 24) to be rotated and click on  or .

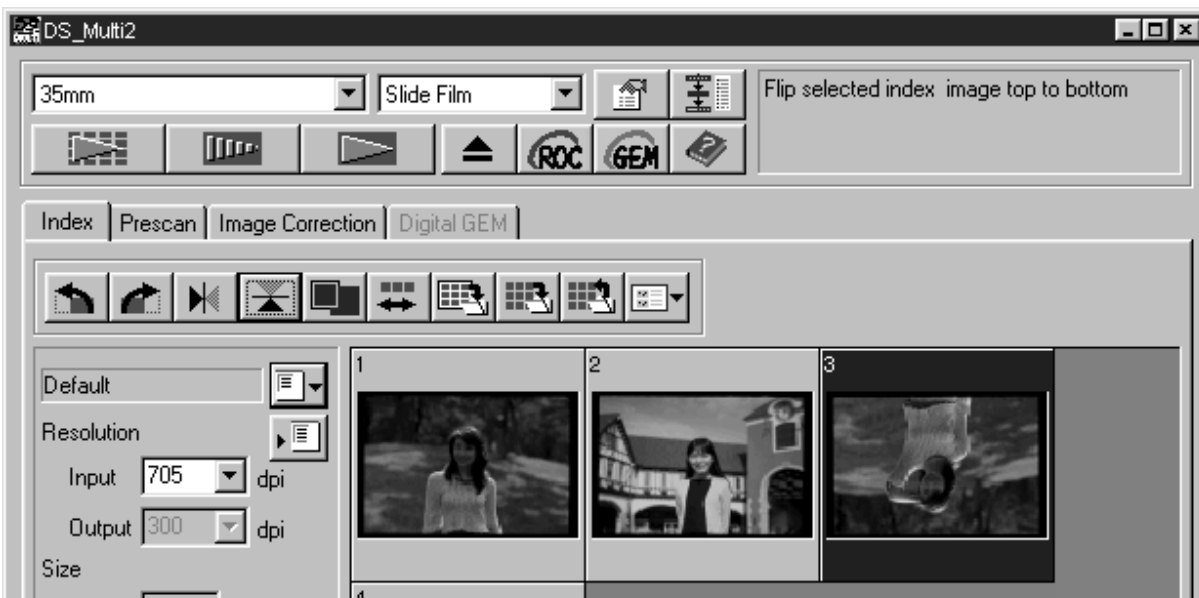
- Each time the Rotate Left button or Rotate Right button is clicked, the index frame is rotated in 90° increments either clockwise or counterclockwise.



FLIPPING THE INDEX FRAMES

Select the frame (p. 24) to be flipped and click on  or .

- To cancel flipping frame, click on the Flip Horizontal button or Flip Vertical button again.



INDEX SCAN


MAGNIFYING THE INDEX IMAGE

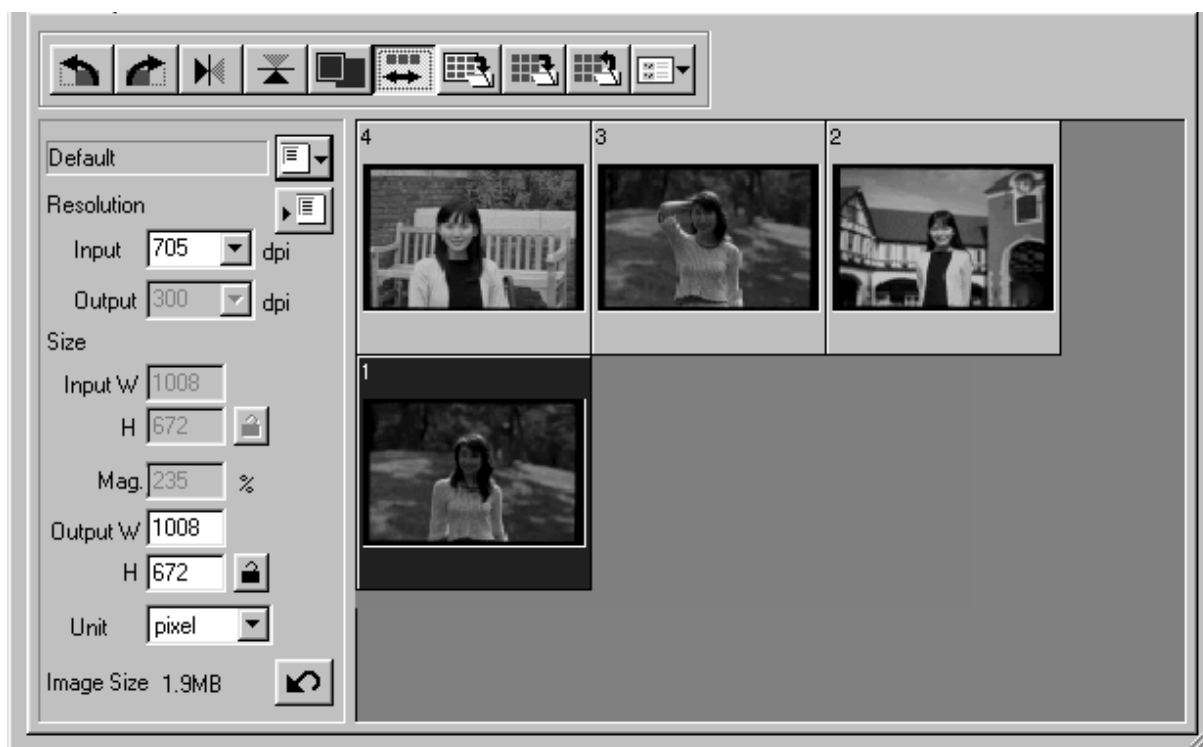
When  is clicked, the index image is magnified. When the button is clicked again, the image returns to the previous size.



INDEX SCAN

REVERSING THE INDEX IMAGE

Each time  button is clicked, the order of the index frames is switched between reverse order and original order.



INDEX SCAN

SAVING AFTER LINING UP THE INDEX SCAN IMAGES

The index scan images can be lined up like an album (as shown on the next page) and then saved as an image file.



1 Click on **Save Index Image** button .

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

2 Select the file type to be saved from the **[Save as Type]** list box (or the file format pull-down menu).

- Windows: The displayed index scan image can be saved in the Windows® Bitmap (BMP) file format or the JPEG file format.
- Macintosh: The displayed index scan image can be saved in the PICT file format or JPEG file format.

3 Enter the desired file name, choose the file destination and then click on **Save**.

- When the index scan images are displayed, these images are saved regardless of the film set in the scanner.
- When the index images are not displayed, the index images are saved after performing the index scan.
- If there are index images which have not been scanned yet, those images will be scanned and then all index images including those images will be saved.

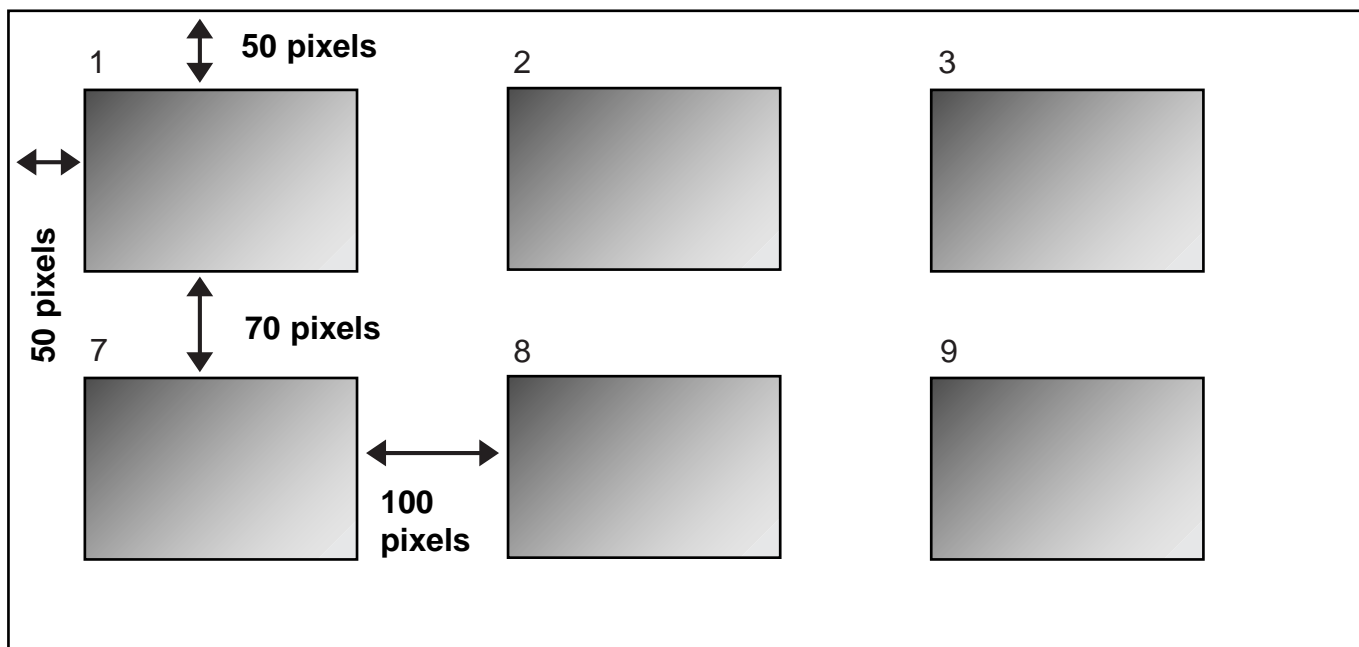
INDEX SCAN

The index scan images are arranged in the image file to be saved as follows

- When there are 4 index frames, the frames are arranged in 4 columns of one line.

When there are more than 6 index frames, the frames are arranged in 6 columns multiplied by the necessary number of lines (for example, when there are 15 index frames, the frames are arranged in 6 columns multiplied by 3 lines.)

- A spacing of 50 pixels is allocated at the top, bottom, right and left sides of the window.
- The horizontal or vertical space between frames is 100 pixels or 70 pixels respectively.
- The output resolution of the image file to be saved is 300 dpi.



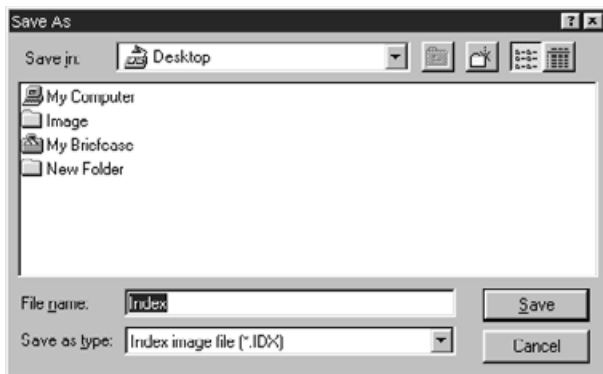
INDEX SCAN

SAVING THE INDEX SCAN IMAGES AS AN INDEX FILE

The index images can also be saved as an index file using the original file format of this software.

1 Click on **Save Index Scan** button .

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



2 Enter the desired file name, choose the file destination, then click on **Save**.

- File types other than the Index Image file (*.idx) cannot be selected in the [Save as Type] list box (or the file format pull-down menu).
- When the index scan images are displayed, these images are saved regardless of the film set in the scanner.
- When the index images are not displayed, the index images are saved after performing the index scan.
- If there are index images which have not been scanned yet, those images will be scanned and then all index images including those images will be saved.
- The index image file is saved in the original format of this software.

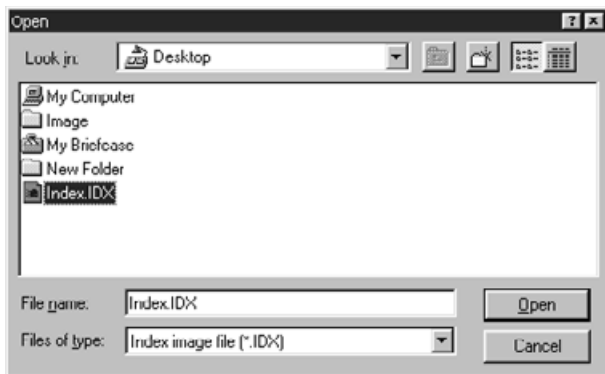
INDEX SCAN

LOADING THE INDEX SCAN IMAGES SAVED AS THE INDEX FILE

The index images can be displayed in the Index window by loading the index file saved in the original format of this software.

1 Click on Index Load button  .

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



2 Select the file to be loaded and then click on [Open].

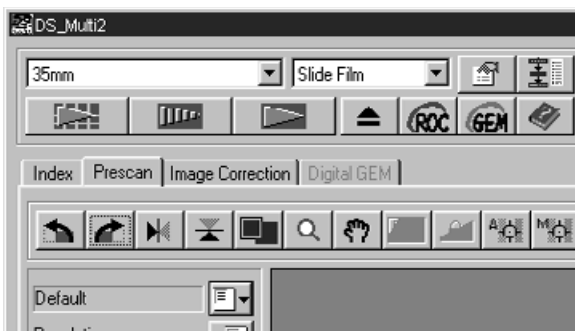
- When the previous index scan image is displayed, the image is replaced with the current loaded image.

PRESCAN

MAKING A PRESCAN

1 Insert the film holder loaded with a film into the scanner by following the procedure of the hardware instruction manual.

- When using the slide mount holder, 35 mm film holder or APS adapter (optional accessory), select the index scan image to be prescanned by performing the index scan before making a prescan (p.23 to 24).



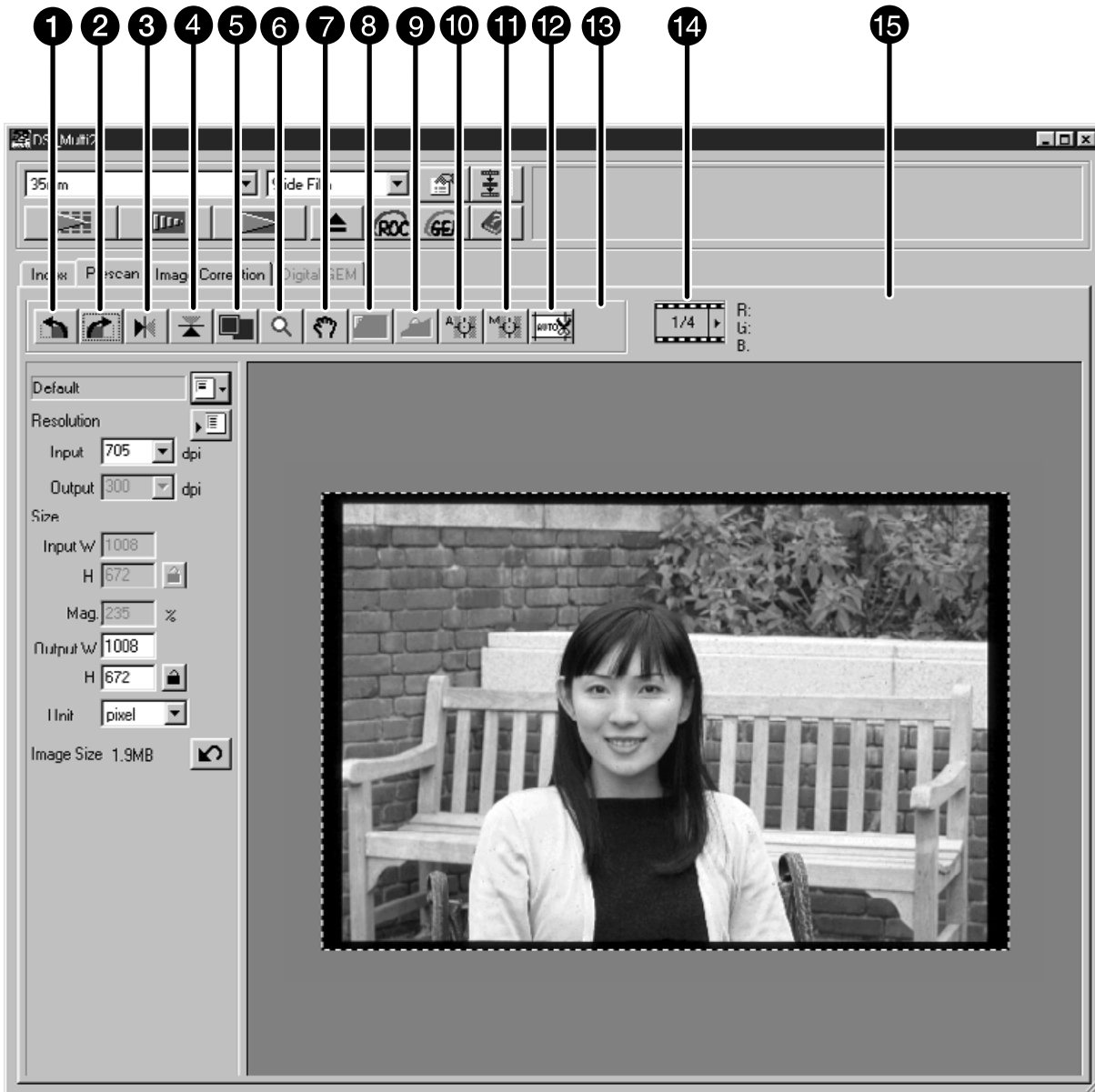
2 Click on  in the Main window.

- The prescan will begin.
- When the prescan is complete, the prescanned image appears in the Prescan window.

PRESCAN

When prescan is performed, the Prescan window changes to the following window.

PRESCAN TAB – NAMES OF PARTS



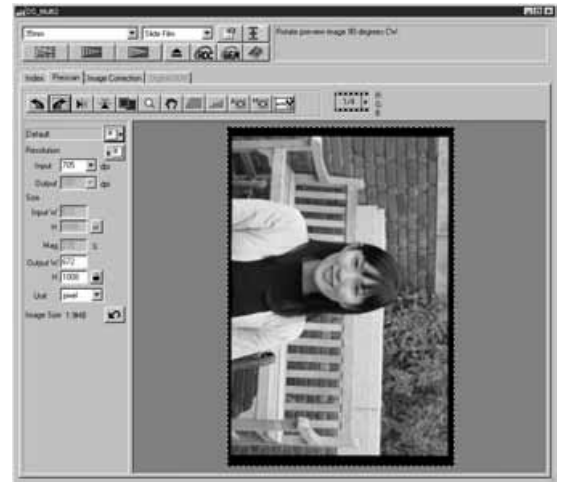
- | | |
|--------------------------|--|
| ① Rotate Left button | ⑩ Point AE button |
| ② Rotate Right button | ⑪ Manual Focus button |
| ③ Flip Horizontal button | ⑫ Auto Cropping button |
| ④ Flip Vertical button | ⑬ Change CHP button (Only when [APS Cassette] or [APS Sleeve] is selected in the film format.) |
| ⑤ Full-Scale View button | ⑭ Frame Number Display (Only when [35 mm] or [APS Cassette] is selected in the film format.) |
| ⑥ Zoom button | ⑮ RGB/CMY display |
| ⑦ Scroll button | |
| ⑧ AE Area Lock button | |
| ⑨ AE Lock button | |

PRESCAN

ROTATING THE PRESCAN IMAGE

Click on  or .

- Each time the Rotate Left button or Rotate Right button is clicked, the prescan image rotates in 90° increments either counterclockwise or clockwise.
- Changes performed in the Prescan image will be reflected in the final scan.



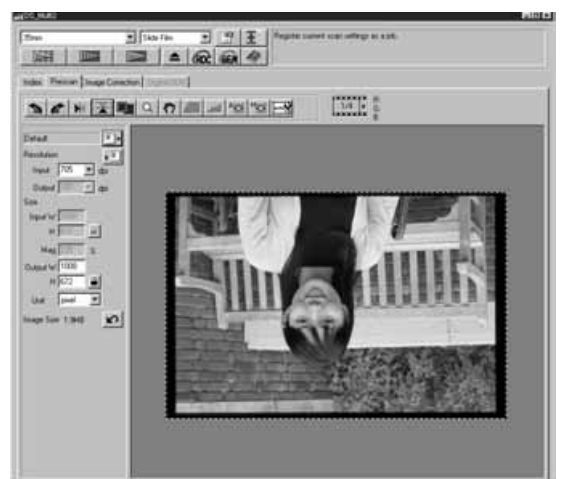
FLIPPING THE PRESCAN IMAGE

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 left to right.

Click on  to flip the image from top to bottom.

- To cancel flipping frame, click on the Flip Horizontal button or Flip Vertical button again.
- Changes will be reflected in the Prescan image.



PRESCAN

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.

Click on .

- The prescan image is magnified so that it fits in the Main window.
- When the Full-Screen button is clicked again, the prescan image returns to the previous size.



MAGNIFYING OR REDUCING THE VIEW

The Zoom button magnifies or reduces the prescan image regardless of the cropping frame.

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 clicking on repeatedly, the image is magnified accordingly.
- When the maximum magnification is reached, the “+” will disappear. The view of the prescan image cannot be magnified any further.



3 To reduce the view of the prescan image:

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.

- The clicked position will be the center of the reduced view in the Prescan window. When clicking on repeatedly, the image is reduced accordingly.
- When the maximum reduction is reached, the “-” will disappear. The view of the prescan image cannot be reduced any further.



PRESCAN

SCROLLING THE VIEW

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.

- The image moves according to the movement of the mouse.

AUTO EXPOSURE LOCK

AE Lock allows you to lock an auto exposure value.

Once the auto exposure is locked, multiple images in a same film are scanned with the same exposure settings when performing the prescan and the final scan. With the AE lock function, for example, when scanning a backlit scene or a scene where exposure compensation has been used, you can obtain a scanned image which reflects the exposure correction made when taking a photograph.

AE (Auto Exposure) function is performed in the following cases:

- When prescanning negative film.
- When selecting [Auto Expose for Slides] in the Preferences (p.89) and prescanning colour positive film.

1 Click on .

- The prescan is performed with the AE function.

2 Click on .

- The exposure setting displayed in the Prescan window is locked.

3 Select an image to which the same locked exposure setting is to be applied and click on the Prescan button.

- The locked exposure setting will apply to the selected prescan image.
- The prescan and the final scan will be performed with the locked exposure setting until the AE Lock function is cancelled by clicking on the AE lock button again.
- When [Auto Expose for Slides] in the Preferences (p. 89) is not checkmarked, the AE lock function is not available with a positive film.

PRESCAN

AE AREA LOCK

A specified area in the prescan image can be exposed automatically.

1 Click on  .

- The prescan is performed with the AE function.

2 Click on  .

- When the Shift key is pressed, the AE area is indicated by a line instead of the cropping area indicated by a dashed line. By dragging the line surrounding AE area, the AE area can be specified.



3 Click on  again.

- The specified area is exposed automatically.
- To cancel the AE area lock function, click on the AE Area Lock button again.

PRESCAN

FOCUS

The Dimage Scan Multi II uses the center of the image to focus. If the film is warped or curled, or if [Auto Focus at Scan] is not checkmarked in the Preferences (p. 88), the focus should be adjusted with the Point AF or the Manual Focus function.

The focus is determined by detecting the contrast in an image. Therefore, the focus may not be adjusted appropriately in an area with no contrast (such as a white cloud or a solid black subject).

POINT AF

A specified point in the prescan image can be focused automatically.



PRESCAN

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.

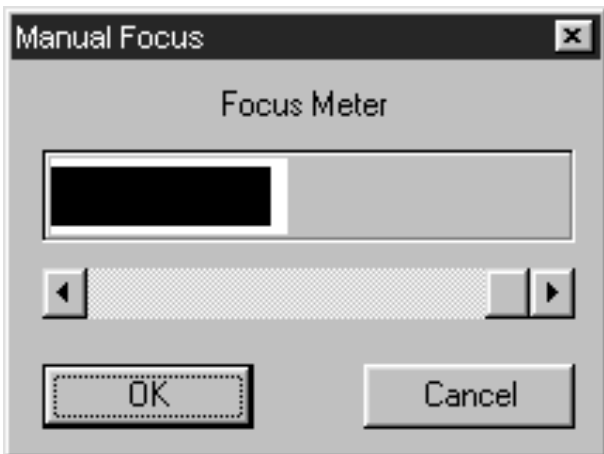


1 Press  in the Prescan window.

- The pointer will change to the Manual Focus icon.
- When you click the Point AF button again, The pointer shape returns to the original one.

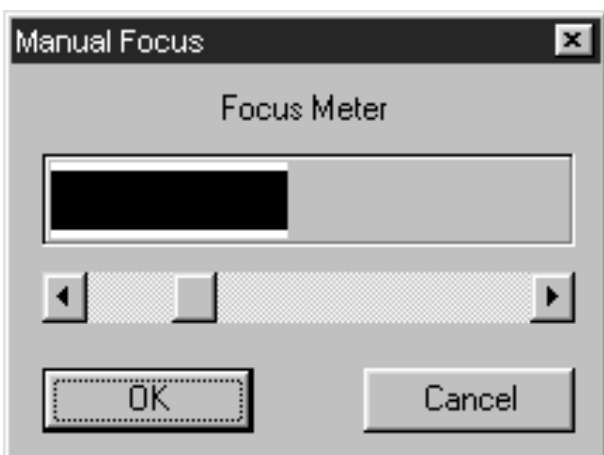
2 Click on the area of the image to be in sharp focus.

- The Focus Control dialog box will appear.



3 Adjust the slider until the black and white bars are at their longest for maximum focus.

- The black bar shows the current focus value and the white bar shows the maximum focus value previously obtained.
- 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.
- When [Cancel] is clicked on, the manual focus setting is cancelled and the Focus Control dialog box disappear.



4 Click on [OK].

- The point clicked on step 2 will be focused and the prescan will begin again.

PRESCAN

AUTO CROPPING

The prescan image can be cropped automatically so that a holder frame or a slide mount holder frame is removed.

Click on .

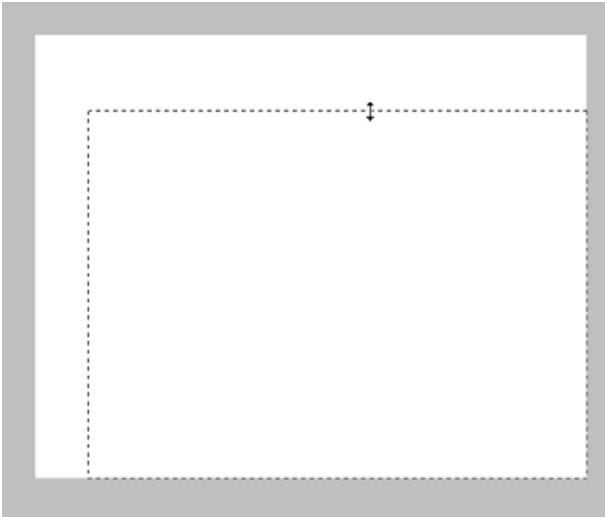
- The auto cropping will begin and the prescan image can be cropped automatically so that a holder frame or a slide mount holder frame is removed.



PRESCAN

MANUAL CROPPING

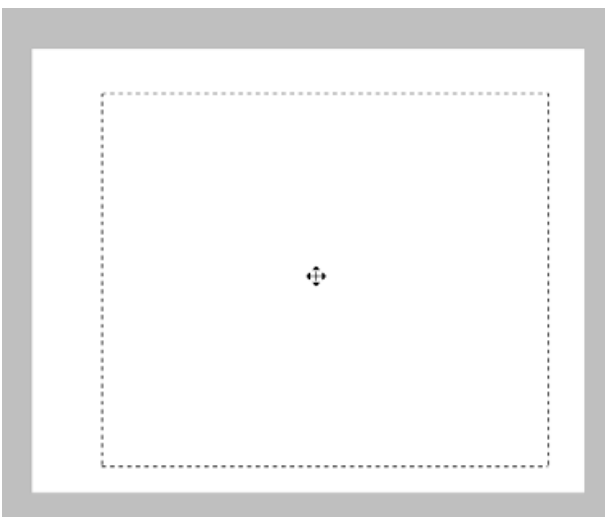
By adjusting the cropping frame indicated by a dashed line in the prescan image, the cropping area for the final scan can be determined. Unnecessary part can be removed before prescanning. The prescan can also be performed without cropping.



Resize only a cropping frame by clicking on the frame to be resized, then dragging the pointer up or down or left or right.

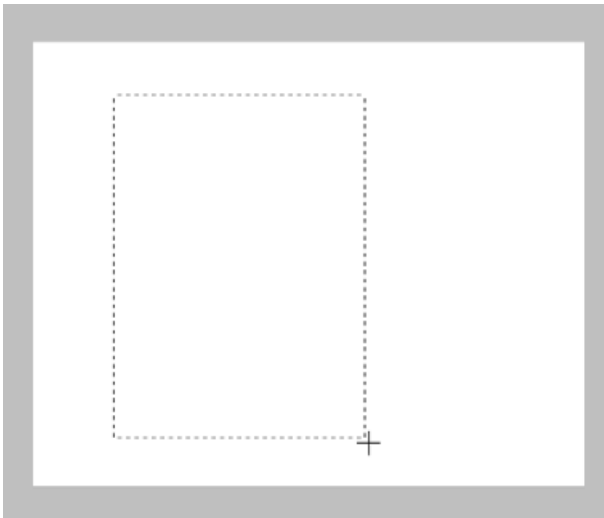


Resize the cropping frame proportionally by clicking on the corners of the frame, then dragging the pointer in or out.



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

PRESCAN



Define a new cropping frame by clicking and dragging outside the current frame. The previously displayed cropping frame is cancelled.

* You can resize the cropping frame to cover the full prescan image again by pressing the following keys.

When the Prescan window is displayed:

Windows: Press the Ctrl key and A key simultaneously.

Macintosh: Press the Command key and A key simultaneously.

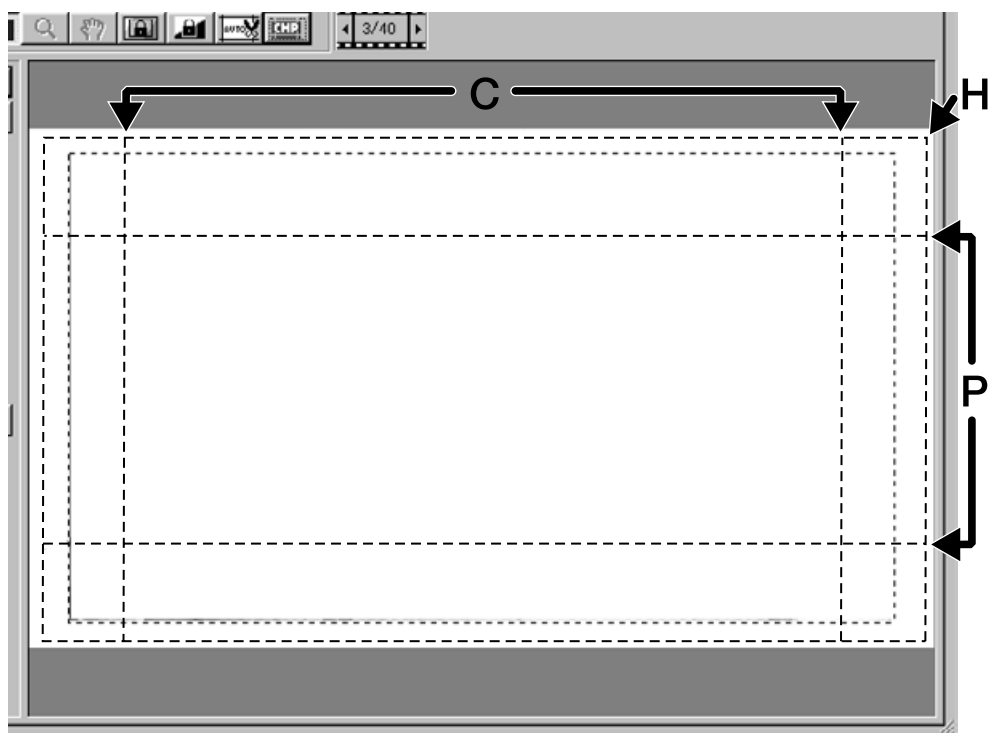
PRESCAN

APS FORMATS; C, H, AND P

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

Click on  to display the APS cropping frames.

- Each time the CHP button is clicked, the cropping frames are displayed in the order of C, H and P.
- The cropping area can be defined by dragging the cropping frames (p.43 to 44).



PRESCAN

DISPLAYING FRAME NUMBER

When 35 mm or APS Cassette is selected in the film format, the frame number display appears in the Prescan window.

It shows the frame number of the currently displayed prescan image and the total frame number.



1 To display the next frame, click on the Right Arrow button.

2 To display the previous frame, click on the Left Arrow button.

- When the selected image is not prescanned yet, the prescan image is displayed after the image is prescanned.

RGB/CMY INFO

The RGB (red, green and blue channel) value at the pointer position or the CHY (cyan, magenta and yellow) value is displayed in the Prescan window.

Normally the RGB value is displayed.

To display the CMY value,

Windows:

Press and hold the Shift key while the Prescan window is displayed.

Macintosh:

Press and hold the Command key while the Prescan window is displayed.

- While the key is pressed, the CMY value is displayed. When the key is released, the display returns to the RGB value.

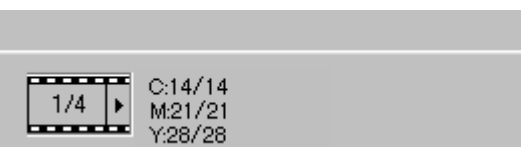
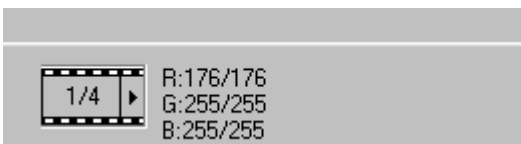
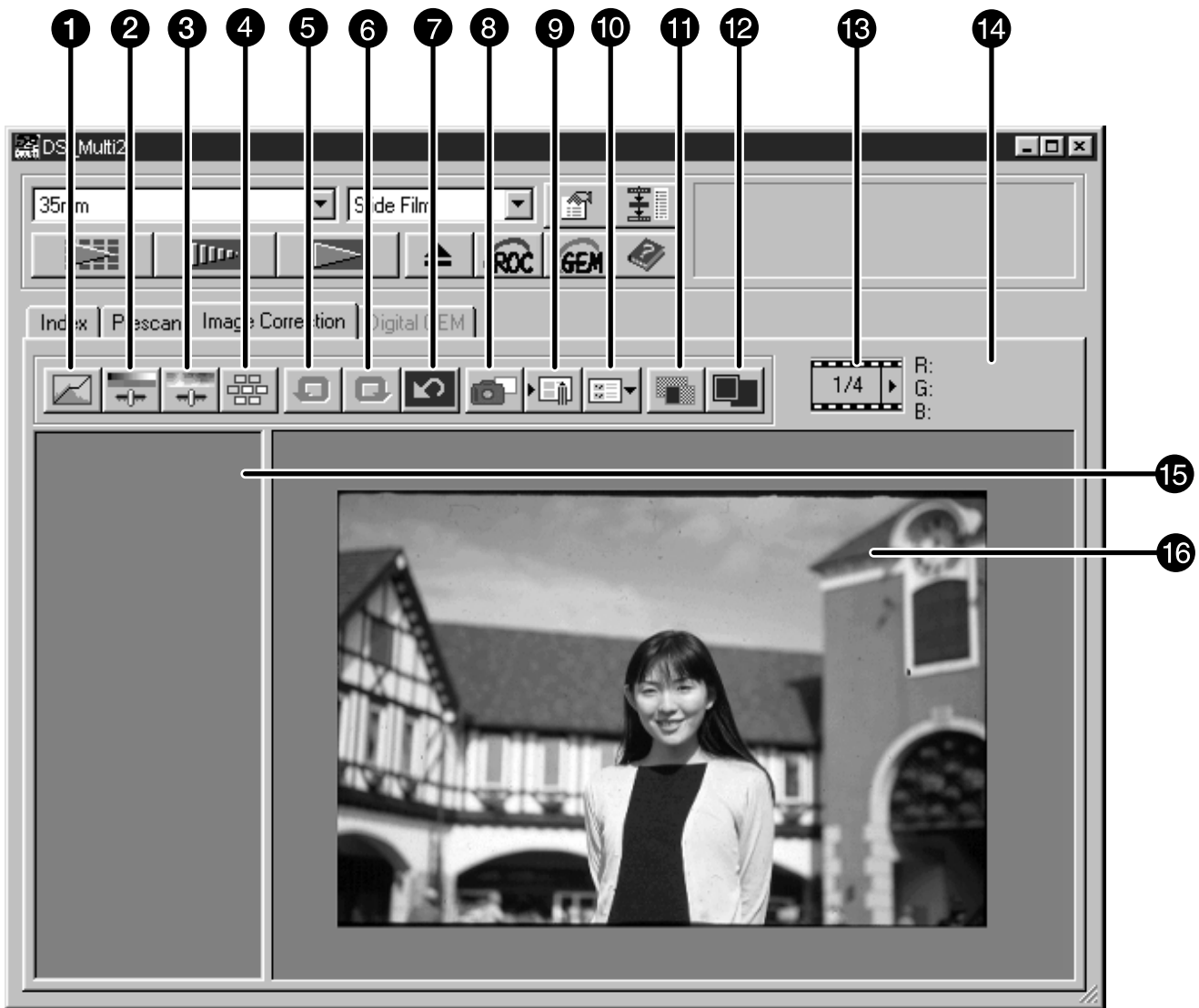


IMAGE CORRECTION

To correct prescan images, click on the Image Correction tab.

The Prescan window changes to the following window.

IMAGE CORRECTION TAB – NAMES OF PARTS



- | | |
|---|--|
| 1 Tone Curves/Histogram Correction button | 9 Image Correction Job Save button |
| 2 Brightness/Contrast/Color Balance Correction button | 10 Image Correction Job Load button |
| 3 Hue/Saturation/Lightness Correction button | 11 Pre/Post Correction Comparison Display button |
| 4 Variations button | 12 Full-Screen View button |
| 5 Undo button | 13 Frame Number display (Only when 35 mm or APS Cassette is selected in the film format) |
| 6 Redo button | 14 RGB/CMY Value display |
| 7 Correction Reset button | 15 Snapshot display area |
| 8 Snapshot button | 16 Image Correction display area |

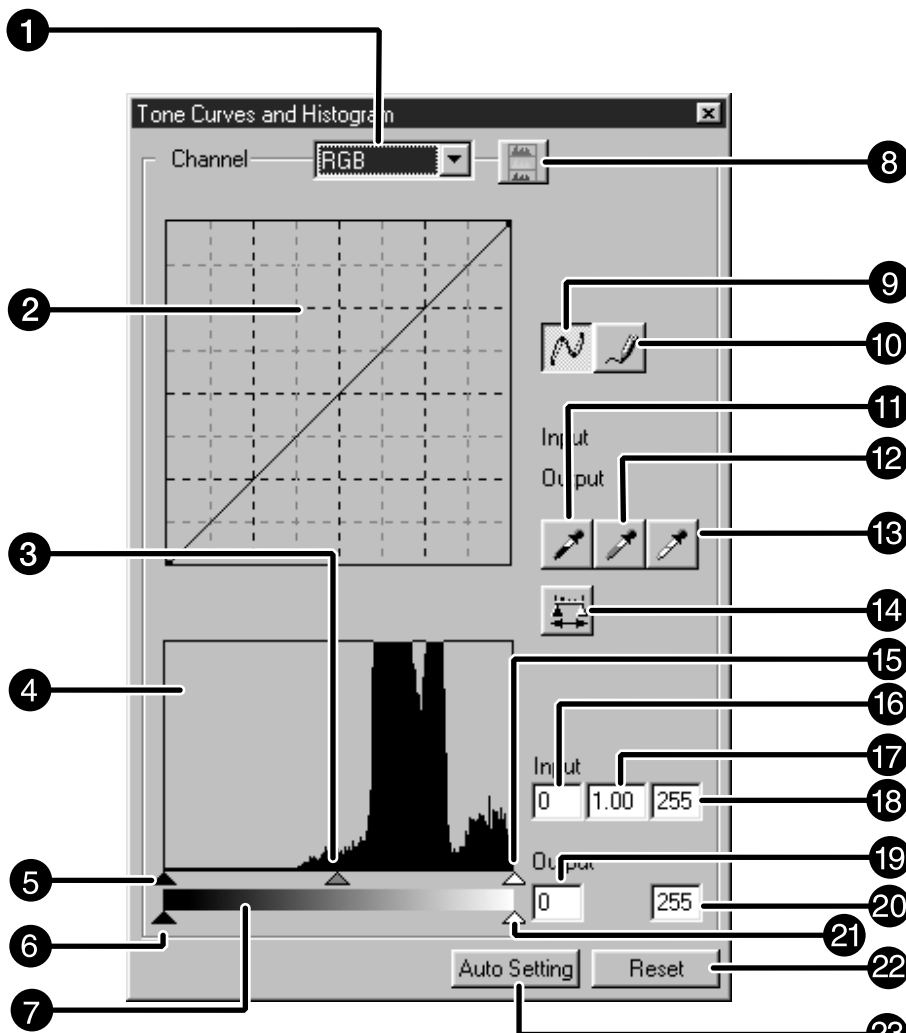
IMAGE CORRECTION

TONE CURVES AND HISTOGRAM

The Tone Curves and Histogram dialog box allows you to change the tone curves and correct the output value directly. Also, the Histogram part allows you to correct the input and output level in all RGB colours or in each RGB colour.

Click on .

- Tone Curves and Histogram Correction dialog box will appear



The screenshot shows the 'Tone Curves and Histogram' dialog box. It features a 'Channel' dropdown menu set to 'RGB', a 'Histogram RGB display' button, a 'Tone curves/Smooth Curve' button, and a 'Freehand curve' button. Below these are 'Input' and 'Output' sections, each with a 'Black point', 'Gray point', and 'White point' button. At the bottom, there are 'Input Highlight', 'Input Shadow', 'Input Gamma', 'Output Highlight', and 'Output Shadow' sliders and text boxes, along with 'Auto Setting' and 'Reset' buttons.

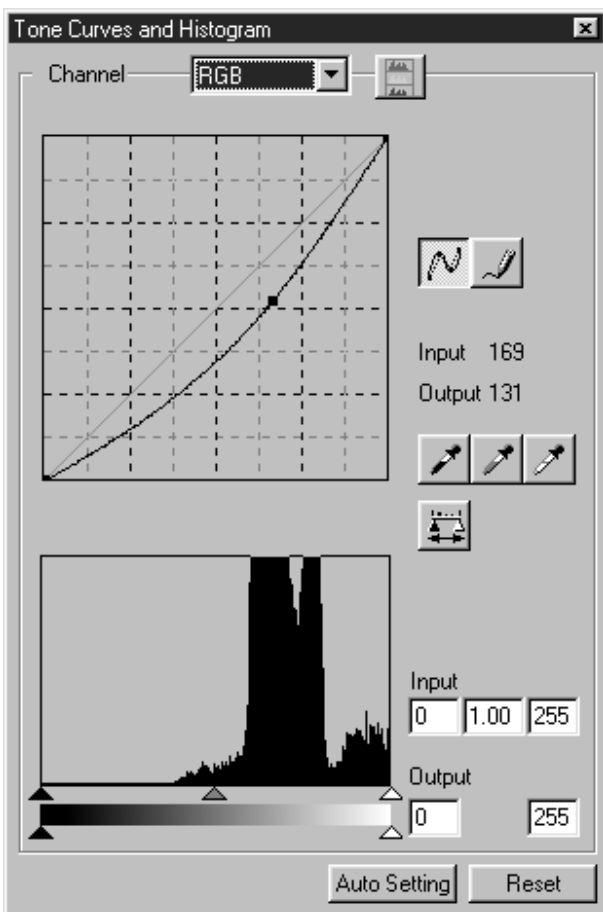
- 1 Channel Selection list box
- 2 Tone curves
- 3 Input Gamma slider
- 4 Histogram
- 5 Input Shadow slider
- 6 Output Shadow slider
- 7 Gray scale
- 8 Histogram RGB display button
- 9 Tone curves/Smooth Curve button
- 10 Freehand curve button
- 11 Black point button
- 12 Gray point button
- 13 White point button
- 14 Apply button
- 15 Input Highlight slider
- 16 Input Shadow text box
- 17 Input Gamma text box
- 18 Input Highlight text box
- 19 Output Shadow text box
- 20 Output Highlight text box
- 21 Output Highlight slider
- 22 Reset button
- 23 Auto Setting

IMAGE CORRECTION

CORRECTING THE TONE CURVES

The tone curve shows the standard input level of Dimage Scan Multi II in the horizontal axis and the output level for corresponding input level in the vertical axis.

When selecting RGB in the Channel Selection list box, R, G and B are corrected at a same rate. And when selecting R, G or B, each colour is corrected separately.



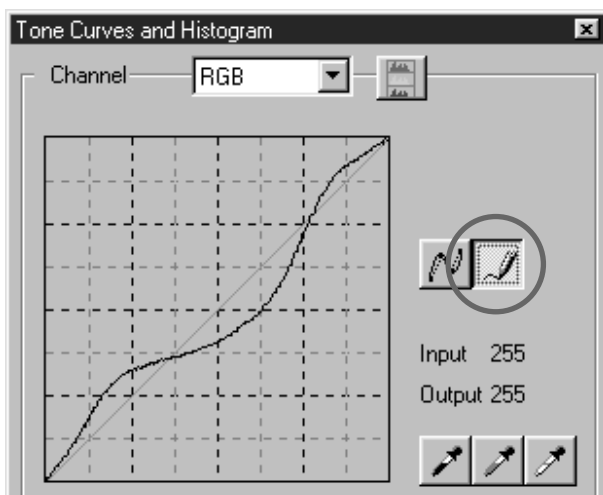
- 1 Click on the arrow next to the Channel Selection list box to select the channel (R, G, B, RGB) of the colour to be corrected.**
 - When a prescan image is monochrome, only RGB can be selected.
- 2 Click and drag the portion of the curve to be changed.**
 - The value of the horizontal axis is displayed in the Input box, and that of the vertical axis is displayed in the Output box respectively.
 - The change will be reflected in the prescan image displayed in the Image Correction display area.

IMAGE CORRECTION

tone curves by freehand

This function allows you to draw tone curves by freehands.

- 1** Click on the arrow next to the **Channel Selection** list box to select the channel (R, G, B, RGB) of the colour to be corrected.
 - When a prescan image is monochrome, only RGB can be selected.

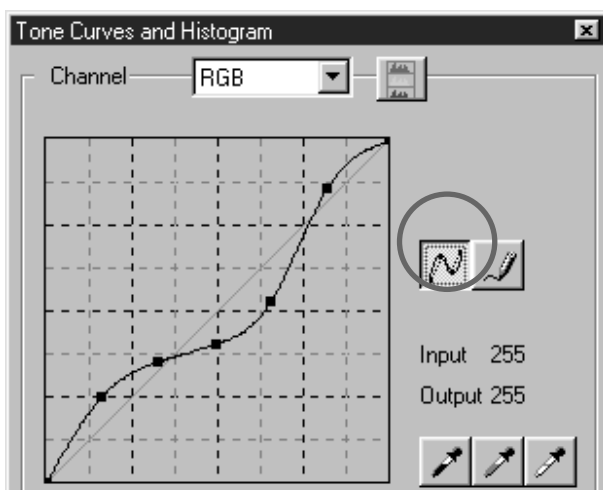


- 2** Click on  and move the cursor on the tone curve display.

- The cursor changes to the pencil shape.

- 3** Draw the desired curve by dragging.

- The value of the horizontal axis is displayed in the Input box, and that of the vertical axis is displayed in the Output box respectively.
- The change will be reflected in the prescan image displayed in the Image Correction display area.




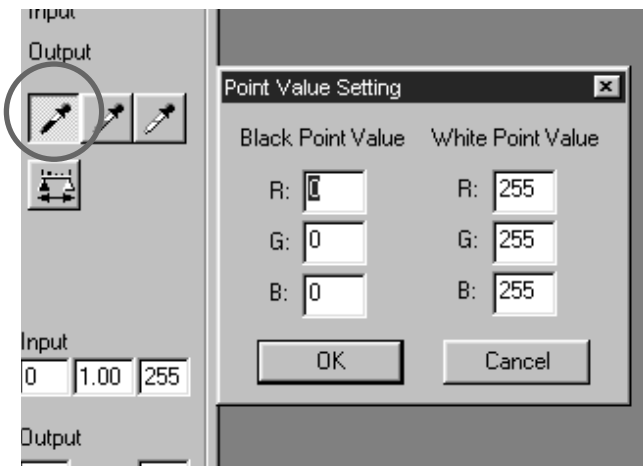
- 4** When the curve you drew is not smooth, click on  to smooth the curve point.

IMAGE CORRECTION

SPECIFYING THE BLACK, WHITE OR GRAY POINT

This function allows you to correct a prescan image by specifying the shadow point, highlight point or gray point.

Specifying the Black point



1 Double-click on .

- The Point Value Setting dialog box is displayed.
- The initial value of the Black point is 0 in each R, G and B.

2 Input the desired black point value and click on [OK].

3 Click on .

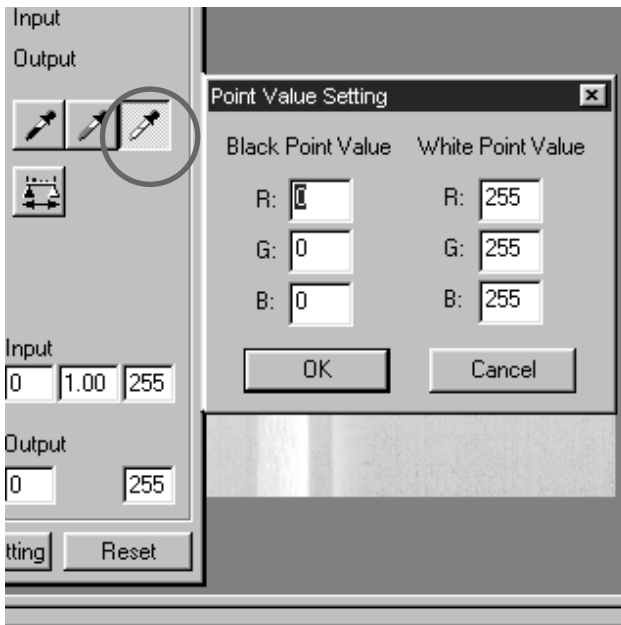
- The cursor changes to the black dropper shape.

4 Click on the shadow point to be corrected in the prescan image.

- The image is corrected so that the point you clicked is a shadow point. The colour of the shadow point is the black point value you input in step 2.
- The change will be reflected in the prescan image displayed in the Image Correction display area.

IMAGE CORRECTION

Setting the White point



1 Double-click on .

- The Point Value Setting dialog box is displayed.
- The initial value of the White point is 255 in each R, G and B.

2 Input the desired white point value and click on [OK].

3 Click on .

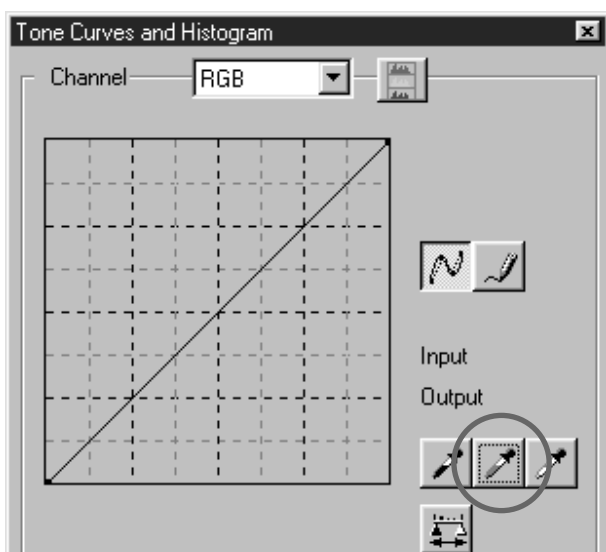
- The cursor changes to the white dropper shape.

4 Click on the highlight point to be corrected in the prescan image.

- The image is corrected so that the point you clicked is a highlight point. The colour of the highlight point is the white point value you input in step 2.
- The change will be reflected in the prescan image displayed in the Image Correction display area.

IMAGE CORRECTION

Setting the Gray point

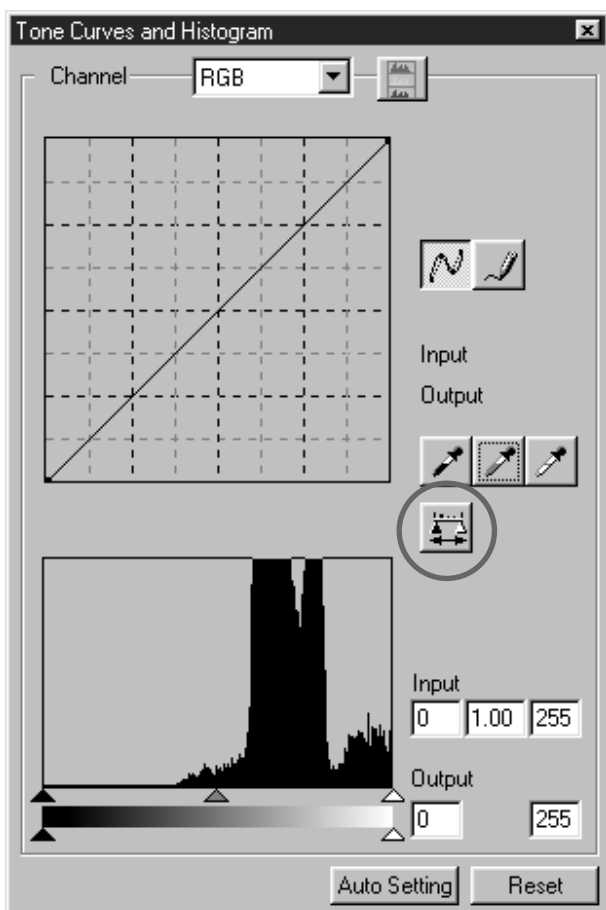



1 Click on .

- The cursor changes to the gray dropper shape.

2 Click on the gray point to be corrected in the Prescan image.

- The image is corrected so that the point you clicked is a gray point. The colour is balanced and the value of brightness is not changed on that point.
- The change will be reflected in the prescan image displayed in the Image Correction display area.



When  is clicked, the histogram of images after making corrections can be displayed.

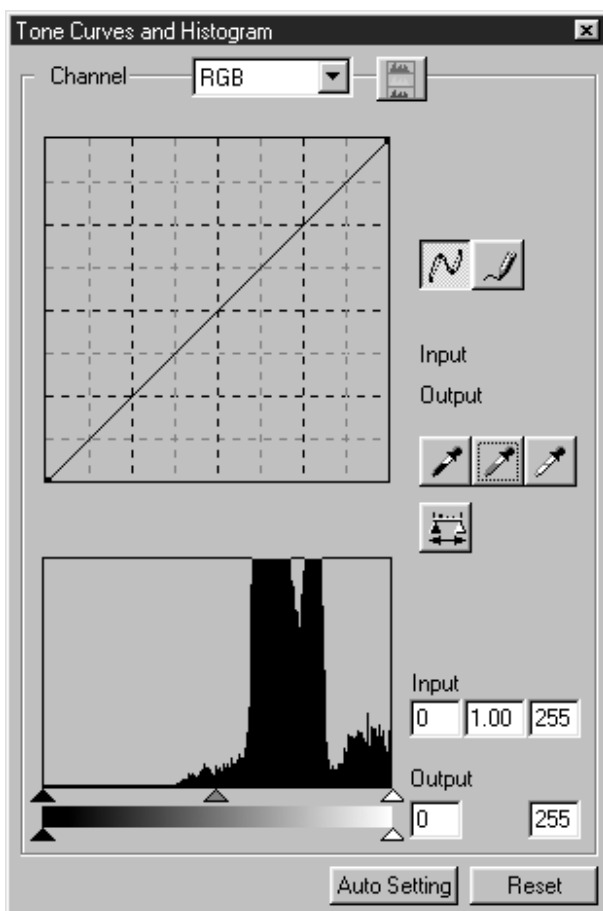
The histogram after making corrections is displayed as long as you press this button. When the button is released, the histogram returns to the previous one.

IMAGE CORRECTION

CORRECTING THE HISTOGRAM

The Histogram part allows you to correct images by specifying the input and output area from the information including in a film. Also, this window displays the histogram of the image area inside the cropping frame in each RGB colour. The level is indicated in 256 colour steps (0 to 255) from left to right side.

The tone curves and histogram are linked each other. When the tone curve is corrected, the histogram is automatically corrected and vice versa.



The input slide bar and the output slider are under the Histogram window.

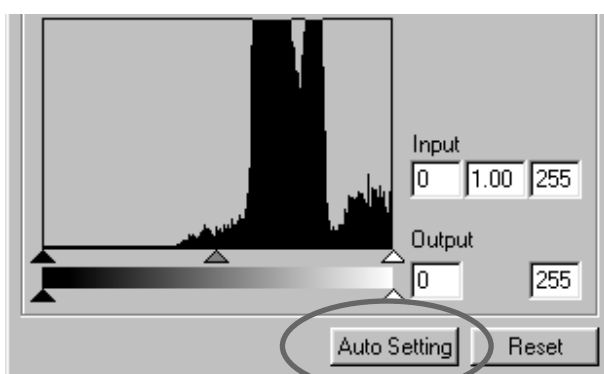
The input slider has the Highlight slider (right), gamma slider (middle) and shadow slider (left). The output slider has the Highlight slider (right) and Shadow slider (left).

The Histogram can be corrected by dragging each slider or inputting the value directly in each Input or Output level box.

For example, if you use the input Highlight slider and input shadow slider to remove areas which contain no pixels (flat line at left or right) the original colour will be better represented.

Although the output slider does not normally need to be adjusted, use it according to the characteristics of the output equipment. For example, use the output slider when the black part is not printed clearly with the 0 setting in the black level. (In this case, adjust the Output level by moving the Output Shadow slider to the right slightly while checking the correction result).

CORRECTING THE HISTOGRAM – AUTO SETTING

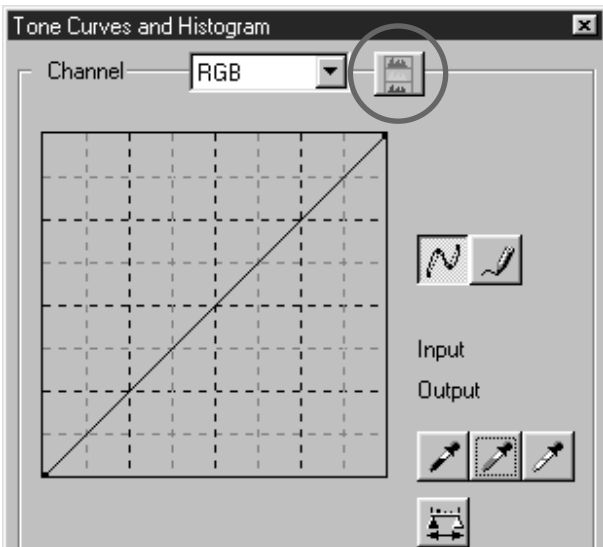


Click on the Auto setting button.

- The image is corrected automatically by removing no information (pixels) parts from the histogram and using all tone steps from 0 to 255.
- The change will be reflected in the prescan image displayed in the Image Correction display area.

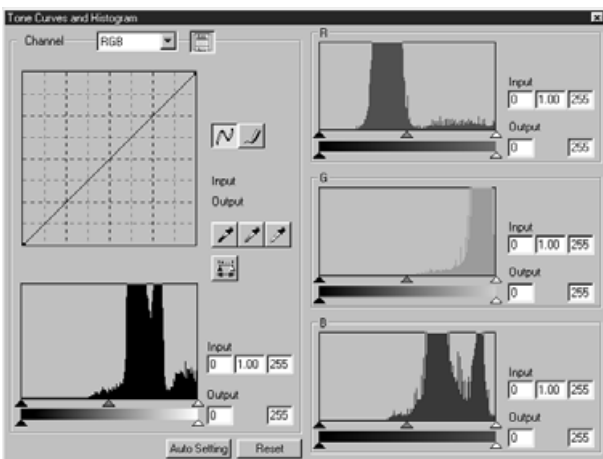
IMAGE CORRECTION

CORRECTING THE HISTOGRAM – EACH R, G, B CHANNEL



1 Click on the Histogram RGB display button.

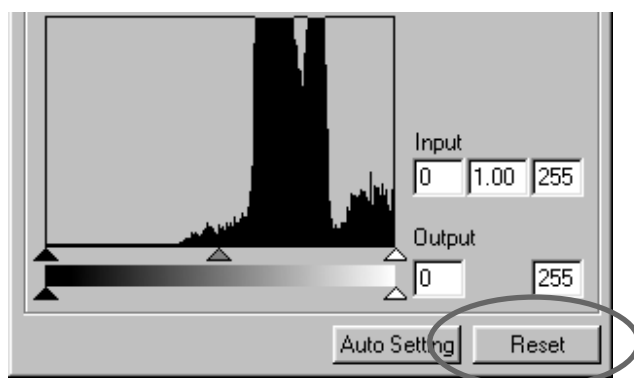
- The RGB Histogram display will appear in the Tone Curves and Histogram dialog box.
- When the Histogram RGB display button is clicked again, the histogram of each R, G, B channel will disappear.



2 By dragging the Input Highlight slider (right) or the Input Shadow slider (left) in each R, G, B channel or inputting the value directly in each text box, the Histogram RGB can be corrected.

- The change will be reflected in the prescan image displayed in the Image Correction display area.
- The change corrected in each R, G, B channel will be also reflected in each corresponding tone curve.

CORRECTING THE HISTOGRAM – RESET



Click on the Reset button.

- All corrections made in the Tone Curves and Histogram dialog box will be reset. The prescan image will also return to the previous image.

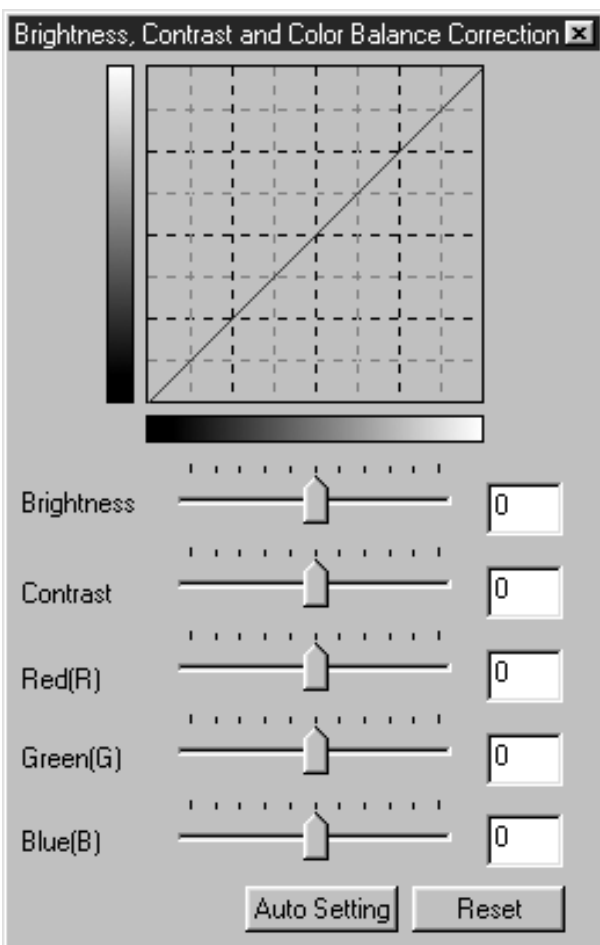
IMAGE CORRECTION

CORRECTING BRIGHTNESS/CONTRAST/COLOR BALANCE



1 Click on .

- The Brightness, Contrast, Color Balance Correction dialog box will appear.



2 Drag each Brightness, Contrast, Red (R), Green (G) or Blue (B) slider or input each value directly in each text box.

- Values from -100 to +100 can be input.
- The change will be reflected in the prescan image displayed in the Image Correction display area.

Brightness correction:

By dragging the Brightness slider to the right (or inputting a big plus number in the text box), the brightness of the image is raised.

Contrast correction:

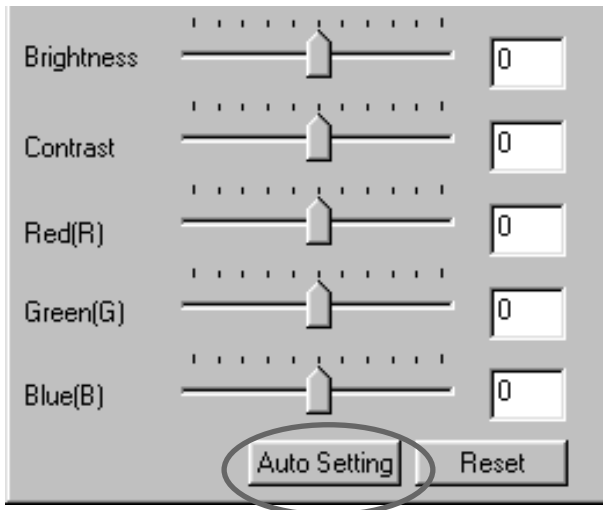
By dragging the Contrast slider to the right (or inputting a big plus number in the text box), bright parts will be made brighter and dark parts will be made darker.

RGB color balance correction:

By dragging the Colour Balance slider to the right (or inputting a big plus number in the text box), each colour content is increased to emphasize each colour.

IMAGE CORRECTION

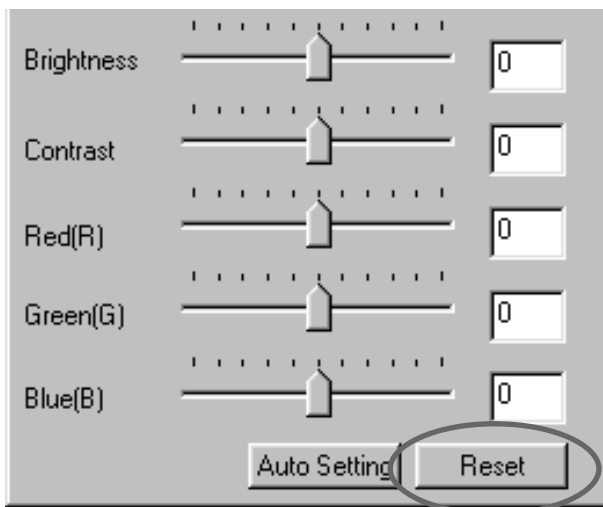
CORRECTING BRIGHTNESS/CONTRAST/COLOR BALANCE – AUTO SETTING



Click on the Auto Setting button.

- The brightness and contrast of the image is corrected automatically according to the lightness information without changing the RGB input colour balance.
- The change will be reflected in the prescan image displayed in the Image Correction display area.

CORRECTING BRIGHTNESS/CONTRAST/COLOR BALANCE – RESET

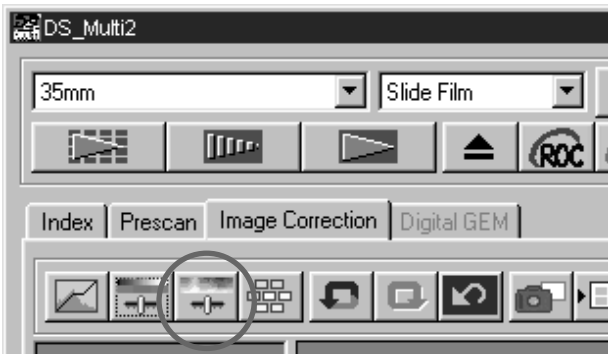


Click on the Reset button.

- The corrections made in the Brightness, Contrast, Colour Balance Correction dialog box will all be reset. The prescan image will also return to the previous image.

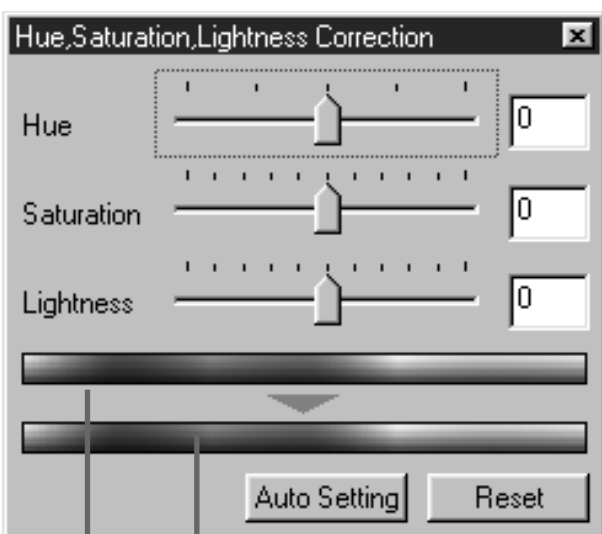
IMAGE CORRECTION

CORRECTING HUE/SATURATION/LIGHTNESS



1 Click on .

- The Hue, Saturation, Lightness Correction dialog box will appear.



2 Drag each Hue, Saturation or Lightness slider or input each value directly in each text box.

- Values from -180 to $+180$ or -100 to $+100$ can be input in the Hue or the Saturation and Lightness respectively.
- The change will be reflected in the prescan image displayed in the Image Correction display area.

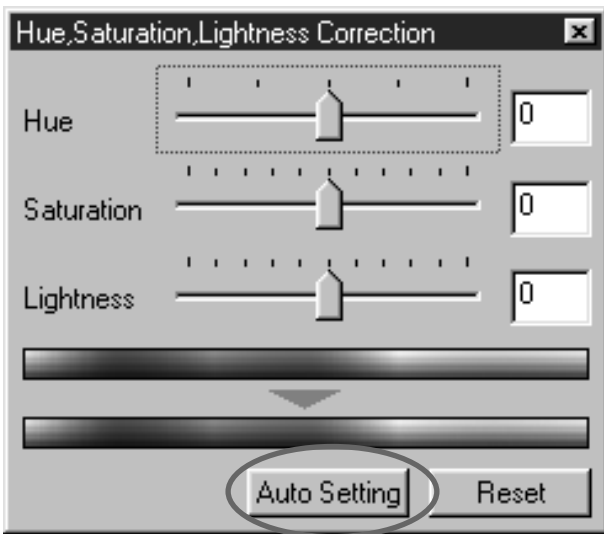
Post-Correction Colour Sample

Pre-Correction Colour Sample

- Hue correction: By dragging the Hue slider, the colour of the image displayed in Pre-Correction Colour Sample is changed as shown in Post-Correction Colour Sample. When the Hue slider is dragged to the rightmost or leftmost side, the hue of the image is reversed.
- Saturation correction: By dragging the Saturation slider to the right (or inputting a big plus number in the text box), the colours become more saturated. By dragging the Saturation slider to the left (or inputting a big minus number in the text box), the saturation of the image is reduced.
- Lightness correction: By dragging the Lightness slider to the right (or inputting a big plus number in the text box), the lightness of the image is raised.

IMAGE CORRECTION

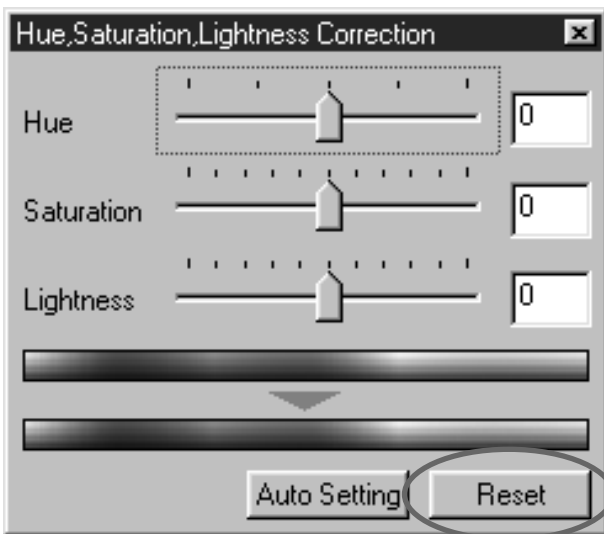
CORRECTING HUE/SATURATION/LIGHTNESS – AUTO SETTING



Click on the Auto Setting button.

- The saturation of the image is corrected automatically without changing the hue and lightness information.
- The change will be reflected in the prescan image displayed in the Image Correction display area.

CORRECTING HUE/SATURATION/LIGHTNESS – RESET



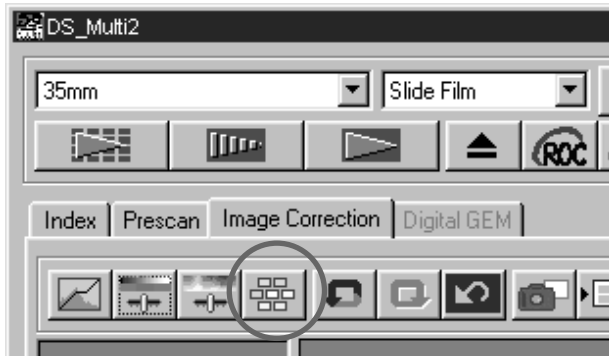
Click on the Reset button.

- The corrections made in the Hue, Saturation, Lightness Correction dialog box will all be reset. The prescan image will also return to the previous image.

IMAGE CORRECTION

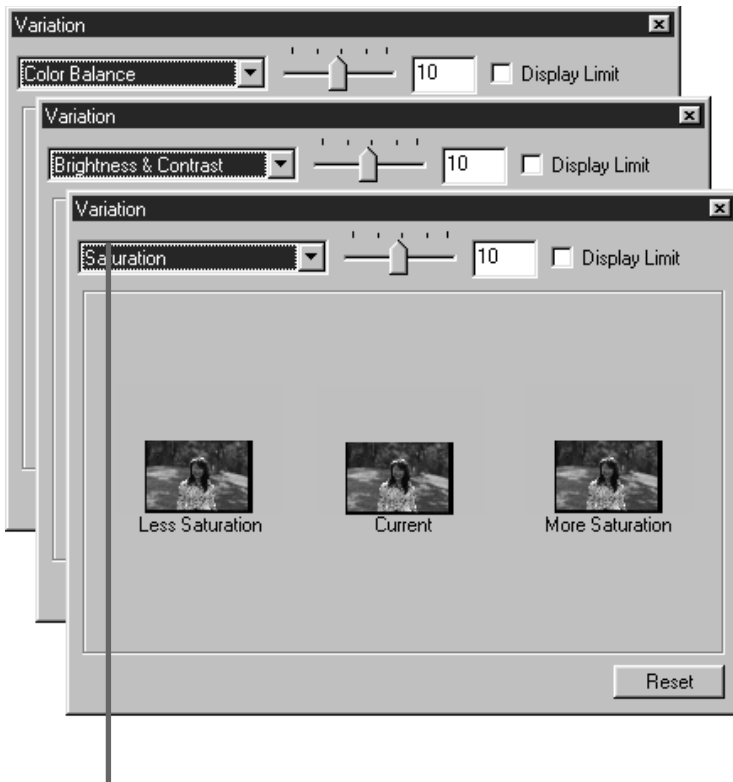
VARIATION CORRECTION

The Variation correction allows you to correct the brightness, contrast and saturation while checking the simulated image after correction.



1 Click on .

- The Variation correction dialog box will appear.



Correction list box

2 Click on the arrow in the **Correction list box** to select the correction item.

- Colour Balance, Brightness & Contrast and Saturation can be selected from the Correction list box.
- Colour Balance and Saturation cannot be selected when B&W is selected in the film type.
- A number of frames of variation images corrected according to the selected correction item are displayed.

IMAGE CORRECTION

VARIATION CORRECTION – COLOUR BALANCE

Variation Amount Control slider

Limit indication checkbox



In the Colour Balance correction, 6 images that have been corrected by one-step in each red (R), magenta (M), blue (B), cyan (C), green (G) or yellow (Y) direction from the center image are displayed. When the image in the direction to be corrected is clicked, the image is placed in center and new variation images are displayed.

By dragging the Variation Amount Control slider, the value of correction can be changed in the range from 1 to 20 (The initial value is 10).

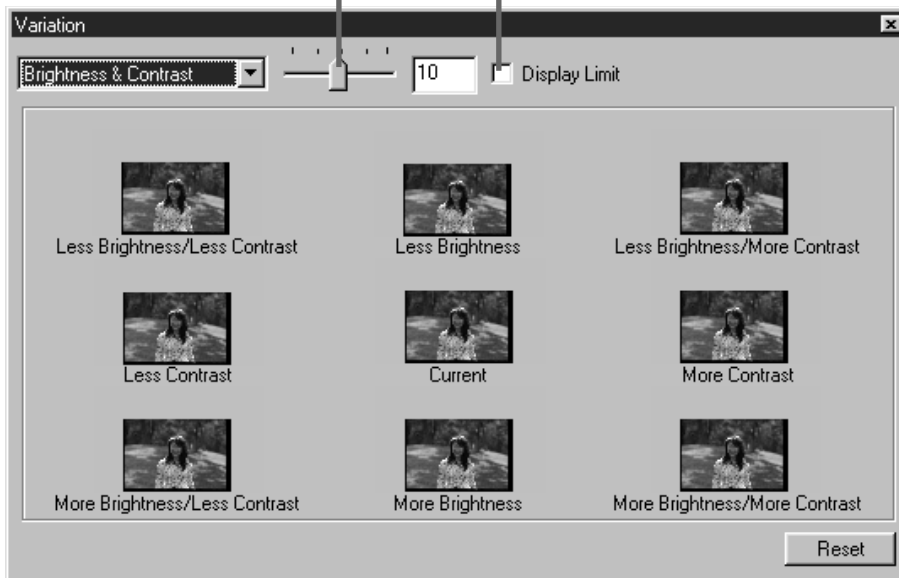
When the Limit indication check box is checkmarked and the image is corrected in each red (R), magenta (M), blue (B), cyan (C), green (G) or yellow (Y) direction, any part of the image which has been corrected beyond the range which can be displayed is displayed in reversed colour.

IMAGE CORRECTION

VARIATION CORRECTION – BRIGHTNESS & CONTRAST CORRECTION

Variation Amount Control slider

Limit indication checkbox



In the Brightness & Contrast correction, 8 images that have been corrected from the center image by one-step in the horizontal direction for brightness and in the vertical direction for contrast are displayed. When the image in the direction to be corrected is clicked, the image is placed in the center and new variation images are displayed.

By dragging the Variation Amount Control slider, the value of correction can be changed in the range from 1 to 20 (The initial value is 10).

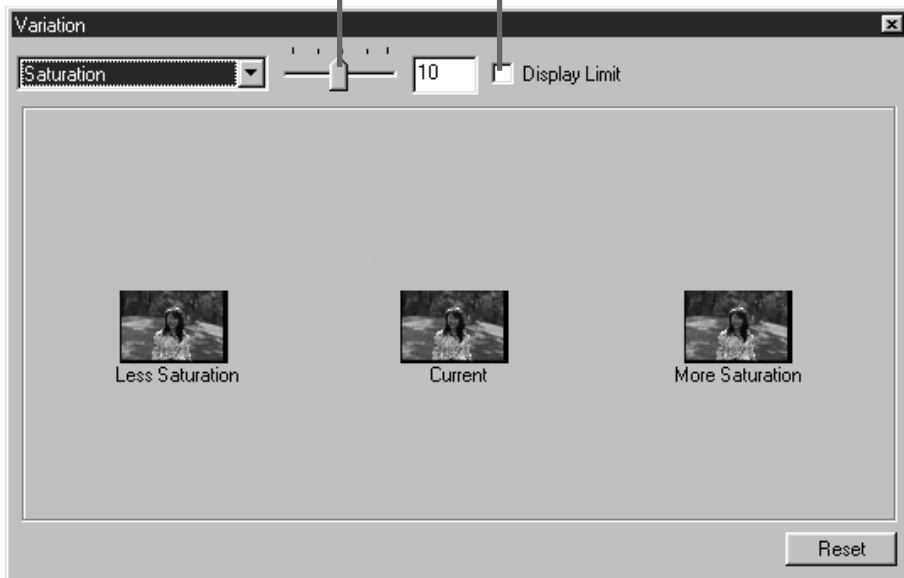
When the Limit indication check box is checkmarked and the brightness and contrast are corrected, any part of the image which has been corrected beyond the range which can be displayed is displayed in reversed colour.

IMAGE CORRECTION

VARIATION CORRECTION – SATURATION CORRECTION

Variation Amount Control slider

Limit indication checkbox



In the Saturation correction, 2 images in which saturation has been corrected from the center image by one-step are displayed on the right and left sides of the center image. When the image in the direction to be corrected is clicked, the image is placed in the center and new variation images are displayed.

By dragging the Variation Amount Control slider, the value of correction can be changed in the range from 1 to 20 (The initial value is 10).

When the Limit indication check box is checkmarked and the saturation is corrected, any part of the image which has been corrected beyond the range which can be displayed is displayed in reversed colour.

IMAGE CORRECTION

CANCELLING THE IMAGE CORRECTION



Click on .

- The image correction will be cancelled and the image will return to the previous one. The image before correction will be restored as long as sufficient memory is available.

REDO THE CORRECTION



Click on .

- The cancelled image correction will be resumed.

DELETING THE IMAGE CORRECTION (DELETING ALL THE IMAGE CORRECTION)



Click on .

- All the image corrections will be reset and the image will return to the initial state.
- All the correction items will be reset. Even if the Redo button is clicked, nothing can be resumed.

IMAGE CORRECTION

SNAPSHOT

The current prescan image can be stored in the Snapshot display area temporarily and displayed as a thumbnail.

Click on .

- The current prescan images are stored in the Snapshot display area temporarily and displayed as a thumbnail.



- The thumbnail images are displayed in the Snapshot display area as long as there is sufficient memory available.
- When the thumbnail image in the Snapshot display area is clicked, that image is displayed as a prescan image.
- To delete the thumbnail image in the Snapshot display area, click on the thumbnail image to be deleted then press the Delete key (Press the Command key and D key simultaneously for Macintosh).
- When the Correction Reset button (p.64) is clicked or the software is shut down, all the thumbnail images in the Snapshot display area are deleted.

IMAGE CORRECTION

IMAGE CORRECTION JOB

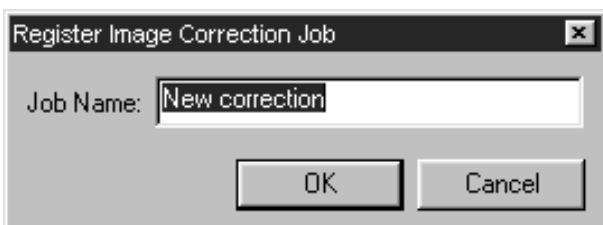
The image correction setting in each correction window can be saved as an image correction job. Once the correction item is saved, you can easily correct the image by loading the appropriate correction job.

IMAGE CORRECTION JOB – SAVING IMAGE CORRECTION JOB



1 Click on .

- The register Image Correction Job dialog box will appear.



2 Input the job name and click on [OK].

- The current image correction setting is saved as an image correction job.

IMAGE CORRECTION

IMAGE CORRECTION JOB – LOADING IMAGE CORRECTION JOB



1 Click on .

- The Select Image Correction Job dialog box will appear.



2 Select the image correction job and click on [OK].

- The saved image correction job will be applied to the currently displayed prescan image.

IMAGE CORRECTION

CHECKING THE CORRECTION RESULT WHILE LINING UP IMAGES

Click on  .

- The correction result can be checked easily because the pre-correction image is displayed in the left side and the post-correction image is displayed in the right side.



FULL-SCREEN VIEWING THE POST-CORRECTION IMAGE

Click on  .

- The post-correction image will be displayed in the Image Correction display area.



DIGITAL ROC/GEM

DIGITAL ROC

The Digital ROC (Reconstruction Of Colour) function is an image correct function that can restore the colour quality of a faded image.

If the colour of the film has faded with the passage of time, the changed colour can be corrected automatically by reconstructing colour when scanning so that a digital image with an appropriate colour can be restored.

Click on  in the Main window.

- The Digital ROC function is turned on. When the preview scan and final scan (p.78) are performed, the colour quality of a faded image is restored and the corrected image is displayed.



- When scanning a B&W film, or a colour film when 16 bit linear is selected as the scanning mode in the Preferences, the Digital ROC function cannot be used.
- When the Digital ROC function is turned on, the settings of [Auto Expose for Slides] in the Preferences, the colour matching, the AE Lock function when prescanning (p.38) or the AE Area Lock function (p.39) are cancelled.
- When using the Digital ROC function, be sure and perform the prescan and adjust the focus with the Point AF or Manual Focus function (p.40 to 41) before the final scan. Putting a checkmark on [Auto Focus at Scan] in the Preferences is recommended.
- To turn off the Digital ROC function, click on the Digital ROC button again.
- The Digital ROC function may not always be obtained effectively depending on the conditions of the film or the faded colour.
- Much more time is required for scanning when the Digital ROC function is turned on, compared with when that function is turned off.

DIGITAL ROC/GEM

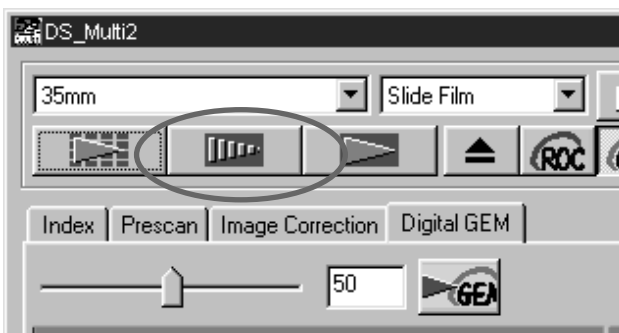
DIGITAL GEM

The images of developed film are composed of high-density grains. These grains sometimes clump together so that the images look rough. This function detects the grains when scanning and equalizes them. So, a sharp and smooth image can be obtained even when the image of 35 mm film is magnified.



1 Click on **GEM** in the Main window.

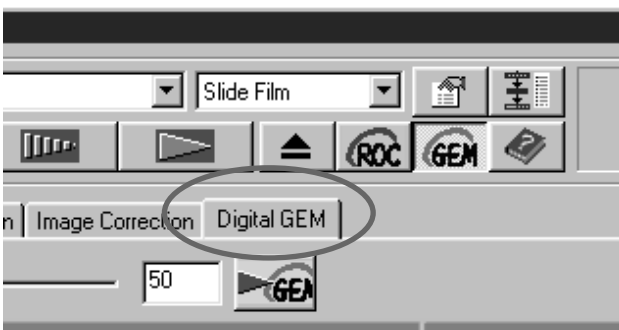
- The [Digital GEM] tab will be activated.



2 Click on **Prescan** in the Main window.

- The prescan will begin.
- The Prescan window will appear and the prescan image will be displayed in the window.

3 Select the desired Input Resolution in the Scan Settings window (P. 80-81).



4 Click on [Digital GEM] tab.

- The next page window will appear.

DIGITAL ROC/GEM

Digital GEM Adjust slider

Digital GEM text box

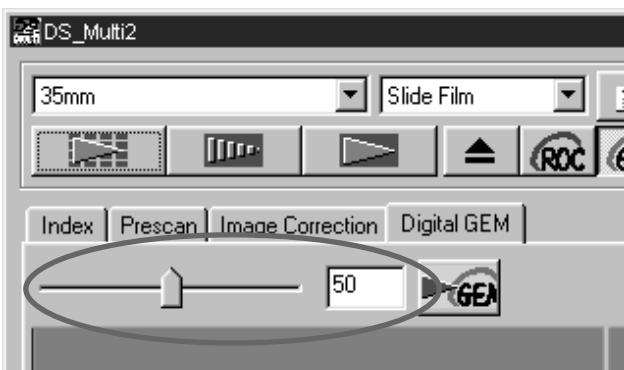
Digital GEM check button



Digital GEM check area

Digital GEM image display check area

Digital GEM image display area



5 Drag the Digital GEM Adjust slider or input the desired value directly in the text box.

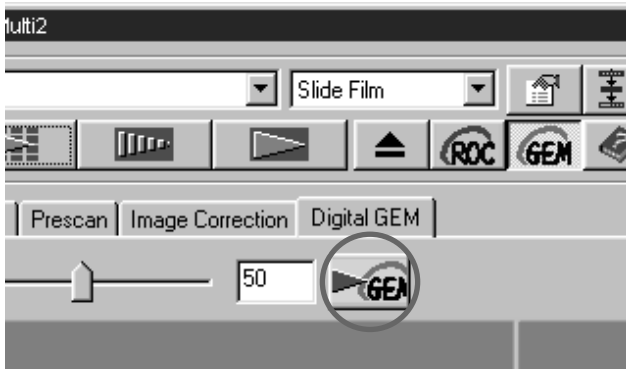
- Values from 0 to 100 can be input.
- The bigger the value is, the more effective the correction result is.

DIGITAL ROC/GEM



6 Change the Digital GEM check area size or move that area if necessary and specify the image area to be checked.

- The Digital GEM check area is specified in the center of the image and the size of 64 pixels x 64 pixels.
- To move the area or change the area size, refer to the operations of the cropping frame (p.43 to 44).



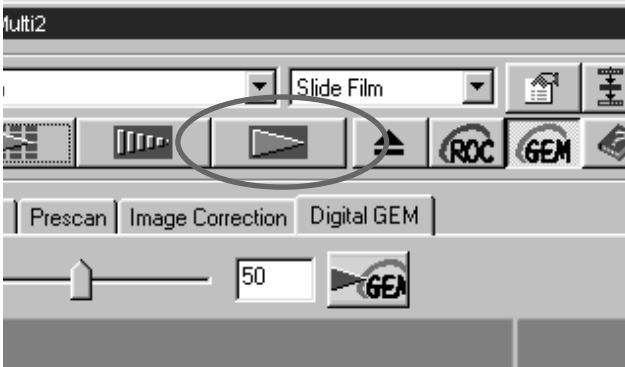
7 Click on the Digital GEM check button.

- To get the Digital GEM check image, the film will be scanned according to the input resolution specified in step 3.
- The image area specified in step 6 will be corrected according to the value specified in step 5, and displayed in the Digital GEM check image display area and the correction result can be checked.



DIGITAL ROC/GEM

- Repeat steps 5 to 7 if necessary and specify the Digital GEM adjust value so that an appropriate correction result can be obtained.

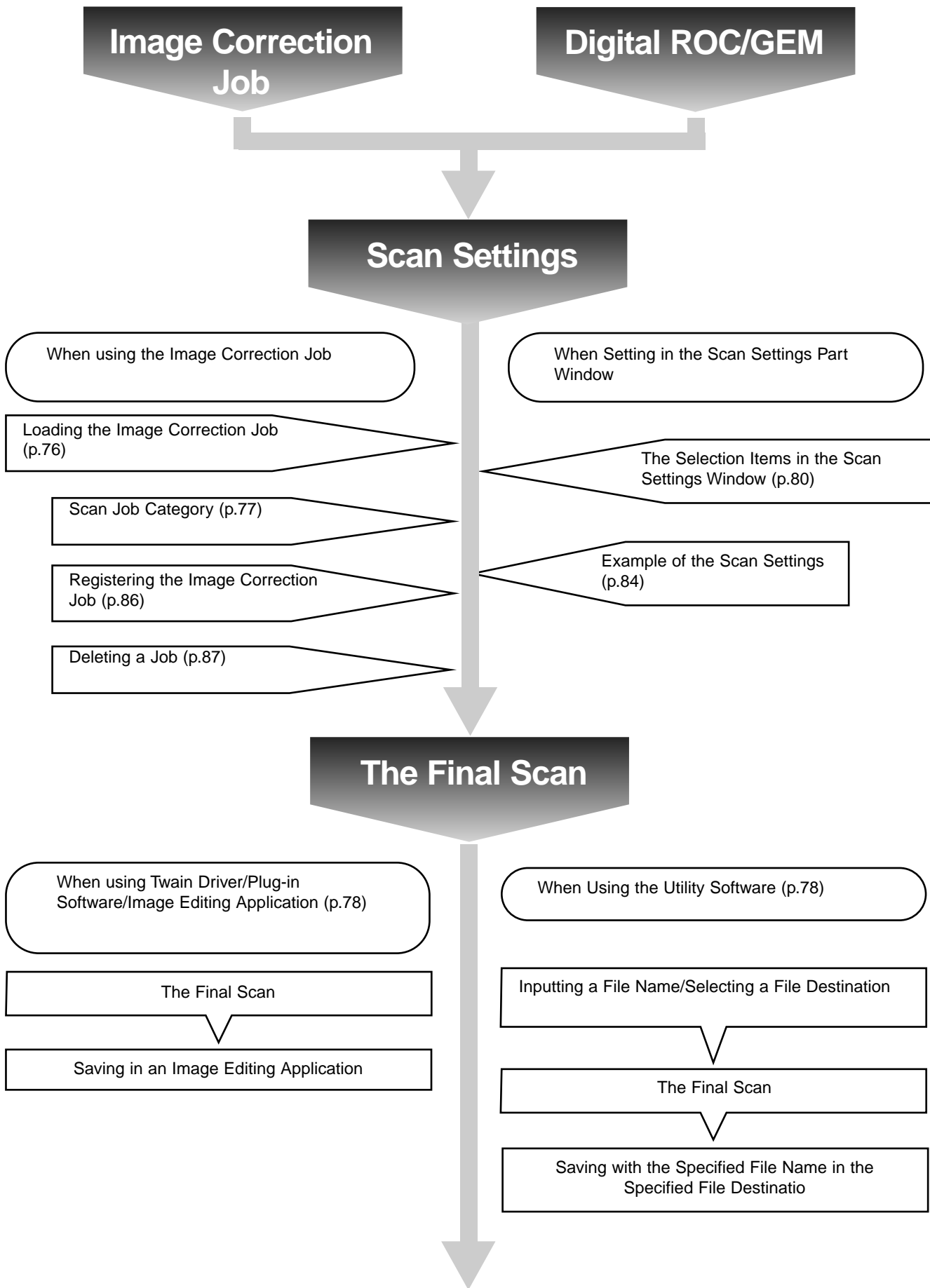


- Click on  .

- The image will be scanned and corrected according to the specified value (Digital GEM adjust value).
- For operations after performing the final scan, see page 86.

- When scanning a B&W film, the Digital GEM function is not available.
- When using the Digital GEM function, be sure and perform the prescan and adjust focus with the Point AF or Manual Focus function (p.40 to 41) before the final scan. Putting a checkmark on [Auto Focus at Scan] in the Preferences is recommended.
- The Digital GEM function may not always operate effectively depending on the condition of the film.
- Much more time is required for scanning when the Digital GEM function is turned on compared with when that function is turned off.

FLOW CHART TO THE FINAL SCAN



Before scanning, it is necessary to make various settings in the Scan Settings window (p. 80) such as the amount of detail required to read the original film (input resolution), the amount of detail required for output (output resolution), the size required for output (output size/magnifications), etc.

It is important that these settings are made properly in order to achieve optimal results for the size and/or purpose of the final image. A beginner may find these settings to be complicated and difficult to understand.

“Job” is a function that allows you to save all the item settings made to the Scan Settings window to a particular file so that this file can be recalled when necessary for any future jobs that require the same settings. Properly used, this function can simplify the complicated process of setting the resolution, image size, magnifications, etc. scanner settings, so that even a beginner can easily execute the ideal settings required for the job.

Up to 8 items can be set to numerical values in the Scan Settings window. One pattern reflecting settings for each of the 8 items can be saved to a Job file. Should these settings be changed, the new settings can be saved to another job file. All Job files are collected within the “Job File List” that designates 10 individual categories for each image output destination (device to which the job is to be output). In total, approximately 570 different types are available.

Because other optional settings can be registered to the Job File List, intermediate and advanced users can increase their work efficiency by saving commonly used scanner settings to the Job File List. Also, it is possible to reduce work time by saving settings to the Job File List when specific settings are required, regardless of the image to be scanned.

- When installing the setup program (installer) by following the instructions, the job files are installed in the following folders for each category.

When using Windows® (The startup hard disk assumes drive C.)

[C:] -> [Program Files Folder] -> [DS_Multi II Folder] -> [Job Folder]

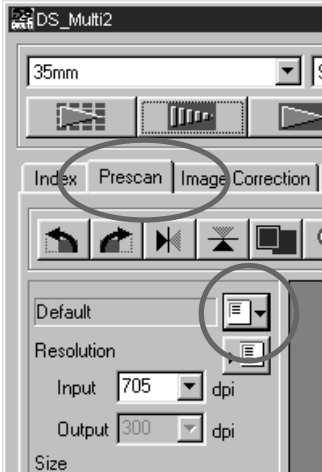
When using Macintosh

[System Folder of Start Up Disk] -> [Preferences Folder] -> [DSMulti II Jobs Folder]

- For adding or deleting a job file, see “Registering a Job” or “Deleting a Job” described on the following pages. The files in the folders described above can not be operated with Explorer (or Finder on Macintosh).
- The “Scan Job File List” in which all the scan job settings are listed, is at the end of this instruction manual.

LOADING A JOB

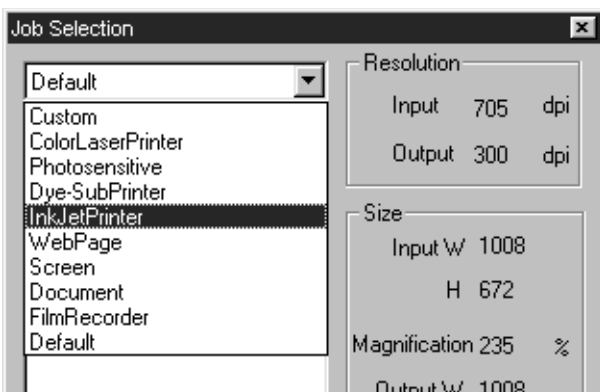
The scan setting of the job file can be applied to the current prescan image by loading a job file from the preset Job File List.



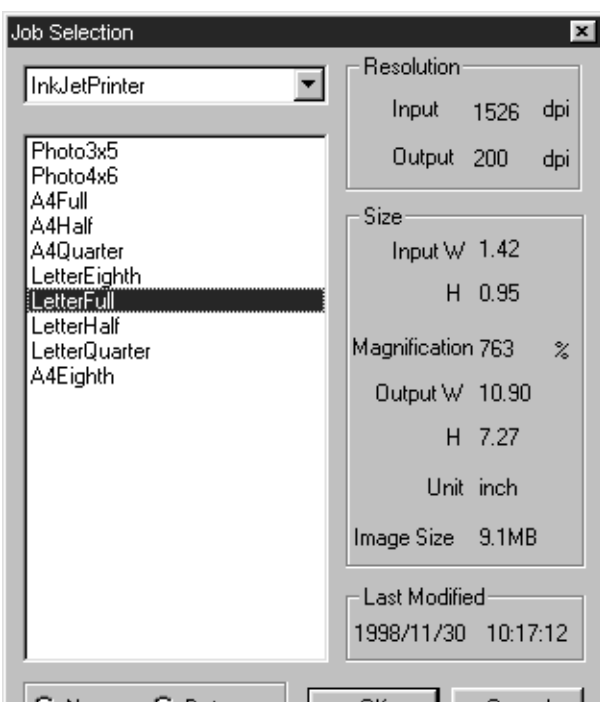
1 Click on the Prescan tab.

2 Click on .

- The Job Selection dialog box will appear.



3 Select the appropriate category from the list box.



4 Select the job file name to be applied from the list.

- The scan setting saved in the selected job file will be displayed in the right of the window. When another job file is selected, the setting is changed correspondingly.
- By clicking on the Name or Date option button, the format of the Job File List can be changed.

5 Click on [OK].

- The selected scan setting will be applied to the prescan image and the Job Selection dialog box will disappear. The selected job will be displayed in the Job Name list box.

CATEGORIES:

Scan Job Category	Description
Custom	This category allows the user to create customized settings using the Scan Settings part.
Colour Laser Printer (Digital colour copiers and colour laser printers)	Uses an output resolution of 400 dpi. There are two image-size options; letter and A4.
Photosensitive (Printers that use photosensitive/photographic material)	Uses an output resolution of 400 dpi, 300 dpi 267 dpi and 180 dpi. The image size will vary.
Dye-sub (Dye-sublimation printers)	Uses an output resolution of 300 dpi. There are 11 available image sizes.
Ink-jet (Ink-jet printers)	Uses an output resolution of 200 dpi. The image size will vary.
Web Page (For use on home pages)	Uses an output resolution of 72 dpi. Image size is listed in pixels and will vary. There also 4 standard PhotoCD size available.
Screen (For display on monitors)	Uses an output resolution of 72 dpi. 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 by a variety of 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 settings appear in the Job Selection window.

FINAL SCAN

After cropping frames, correcting images and specifying the scanning settings, the final scan is performed.

When using Twain Driver/Plug-in Software



1 Click on  in the Main window.

- The final scan will begin.
- When the final scan is complete, the final scan images will appear in the window of the image editing application you use.

2 Perform subsequent operations according to the instruction for your image editing application.

- For details, see the instruction manual for the image editing application.

When Using the Utility Software



1 Click on  in the Main 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 [Save as type] list box (or the file format drop-down list).

FINAL SCAN

With the the DS Multi II Utility software, you can save the final scan in one of the following file fomats.

Windows® Bitmap (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.

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.

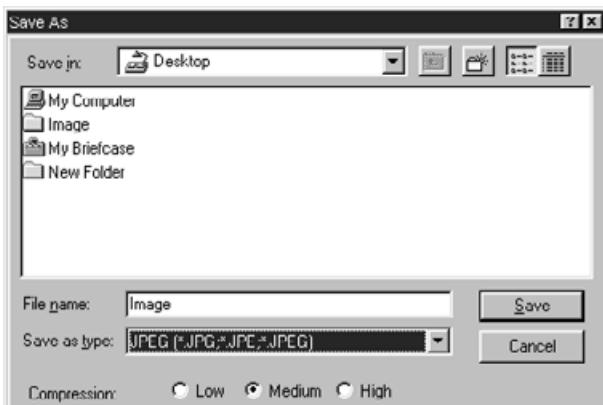
TIFF

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

PICT (Macintosh operating system only)

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

- Only TIFF can be selected when using a utility software and selecting 16-bit or 16-bit linear in the [Colour depth] of the Preferences (p.89).
- PICT can not be selected when the width of the image size is over 4096 pixel.



4 Select the compression rate when selecting JPEG as a file type.

- When 'low' is selcted, the file size is large. However, the deterioration of image is reduced comparedwith selecting [Medium] or [High compression].
- When 'High' is selected, the file size is smaller. However, there is more degradation to image qulaity, compared to using medium or low.

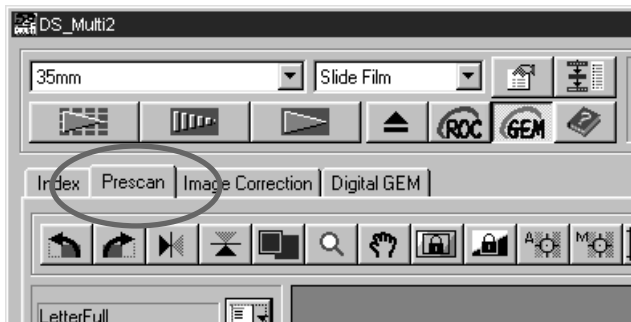
5 Click on [Save] (or [OK]).

- The final scan will begin.
- When the final scan is complete, the final scan image is saved in the selected location, with the file name you input, and in the specifed file type.
- After the image is saved, the display returns to the Prescan window.

SCAN SETTINGS WINDOW

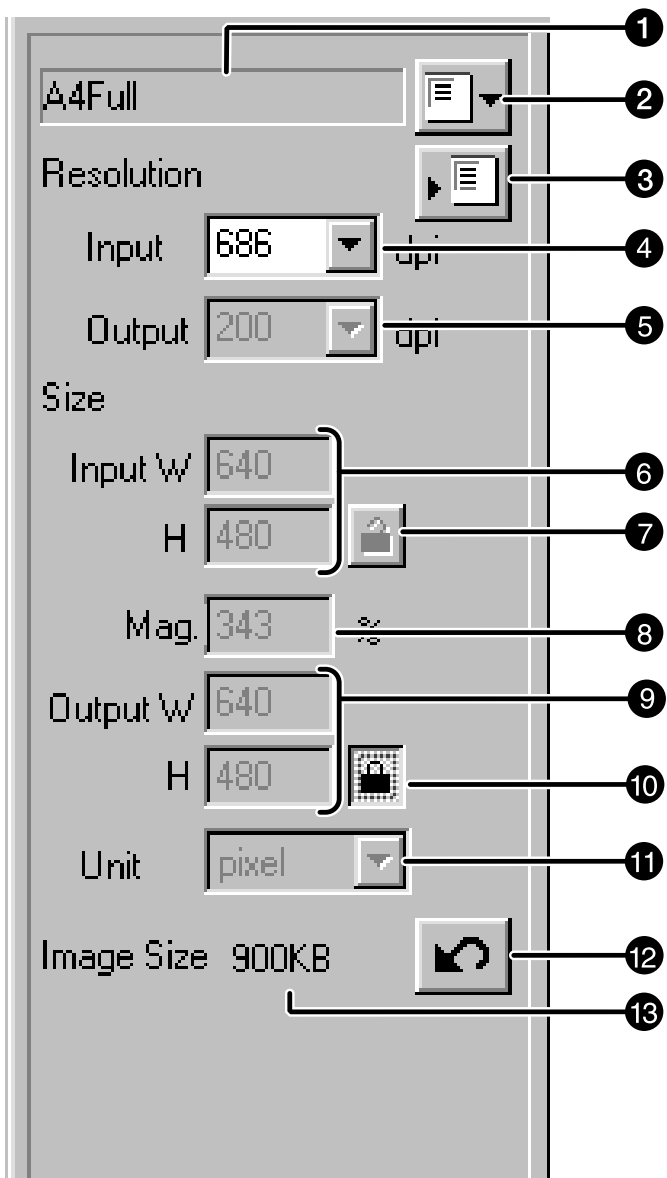
The Scan Settings window allows you to make various settings such as the amount of detail required to read the original film (input resolution), the amount of detail required for output (output resolution), the size required for output (output size/magnifications), etc.

When the Scan Settings window is not displayed



Click on the Prescan tab in the Main window.

SCAN SETTINGS WINDOW – NAMES OF PARTS



- 1 Job Name list box
- 2 Job Load button
- 3 Job Save button
- 4 Input Resolution list box
- 5 Output Resolution list box
- 6 Input size text box
- 7 Input size lock button
- 8 Magnification size text box
- 9 Output size text box
- 10 Output size lock button
- 11 Unit list box
- 12 Reset button
- 13 Image Size display

SCAN SETTINGS WINDOW

REGARDING THE SETTING ITEMS OF THE SCAN SETTINGS WINDOW

Job Name list box

This shows the selected job file name. When a job file is not selected, the job file in the default setting is selected and “Default” appears in the box. When the job file in the default setting is not specified, [“Untitled “] appears in the box.

Job Load button

This opens the Job Selection dialog box (p.76).

Job Registry button

This opens the Job Registry dialog box (p.86).

This allows you to save (register) the settings in the Scan Settings dialog box naming it as a job file.

Input Resolution list box

This allows you to specify an input resolution by selecting from the values displayed in this list or by inputting value directly.

The values displayed in this list vary depending on the film format as shown below.

The value with “#” is the default setting.

<When selecting 35 mm, APS Cassette, APS Sleeve, Transparent Media, 16 mm or Center area 2820>

2820/1410/940/#705/470/352/282

(When inputting value directly, the desired value from 176 to 2820 is available.)

<When selecting 6 x 4.5, 6 x 6, 6 x 7, 6 x 8, 6 x 9, TEM Film, Whole area interpolation 2820>

2820/1128/564/376/#282/188/141/112

(When inputting value directly, the desired value from 70 to 2820 is available.)

Output Resolution list box

This allows you to specify an output resolution by selecting from the values displayed in this list or by inputting value directly.

The values displayed in this list are the followings.

The value with “#” is the default setting.

2400/1200/800/720/600/400/360/350/#300/240/200/180/150/96/72/36

(When inputting value directly, the desired value from 36 to 2400 is available.)

- When “pixel” is selected in the Unit list box, the output resolution cannot be selected or specified.

Input Size text box

This allows you to specify an input size. Although the input size is normally determined according to the size of the cropping frame you specified (p.42 to 44), you can also input a value in each W (wide) or H (Height) box. In this case, the size of the cropping frame changes according to the value you input.

- When “pixel” is selected in the Unit list box, the input resolution cannot be selected or specified.

SCAN SETTINGS WINDOW

Input size lock button

This locks the value in each Input size W or H text box so that you cannot change the value. While the Input size is locked, the cropping frame is also locked, therefore, that size cannot be changed.

Magnification Size text box

This allows you to specify a magnification size. Normally, the value which an input resolution is divided by an output resolution or the value which an output size is divided by an input size is indicated in percentage. You can also input a value in this box.

- When the input and output sizes are not locked, the input resolution and the output sizes are changed according to the magnification size you specified.
- When the output size is locked, the input resolution and the input sizes (W/H) are changed according to the magnification size you specified.
- When the input size is locked, the input resolution and the output sizes (W/H) are changed according to the magnification size you specified.
- When “pixel” is selected in the Unit list box, the magnification size cannot be selected or specified.

Output Size text box

This allows you to specify an output size. With the default setting, the image is printed in a scale of 100 % after performing the final scan.

Although the output size is normally determined by the input and output resolutions and the cropping frame you specified (p.42 to 44), you can also input a value directly in each W (Wide) or H (Height) box. In this case, the input resolution and the input size change according to the values you input and the size of cropping frame also changes correspondingly.

Output size lock button

This locks the value in each Output size W or H text box so that you cannot change the value.

Unit list box

This allows you to select the unit of Input size and Output size from the following units displayed in the list box. The value with “#” is the default setting.

#pixel/mm/cm/inch/pica/point

Reset button

This resets the scan settings to the settings of the currently selected job file.

Image Size display

This shows the estimated image file size after performing the final scan with the current settings.

SCAN SETTINGS WINDOW

Resolution and Output size

Image resolution is the number of pixels per inch (about 25.4 mm) and represented in dpi (dot per inch). As the image size and resolution affect the size of image data file, the higher the resolution value of image is, the longer the scanning time and printing time are required compared with the lower value resolution of image.

The necessary resolution value is determined by the output device such as a printer, monitor, etc. For example, for a commonly used monitor or printer, the resolution value needs 72 dpi or 300 to 400 dpi respectively. Each item can be represented in the following formula.

$$\frac{\text{Input resolution}}{\text{Output resolution}} = \frac{\text{Output size}}{\text{Input size}} = \text{Magnification size}$$

Example: When printing the image of 35 mm film using the printer with the resolution value of 400 dpi, in the size of 15 cm x 10 cm and with a high-quality image as possible.

$$\frac{\text{Input resolution}}{400 \text{ dpi}} = \frac{100 \text{ mm}}{24 \text{ mm}} = \text{about 4 times}$$

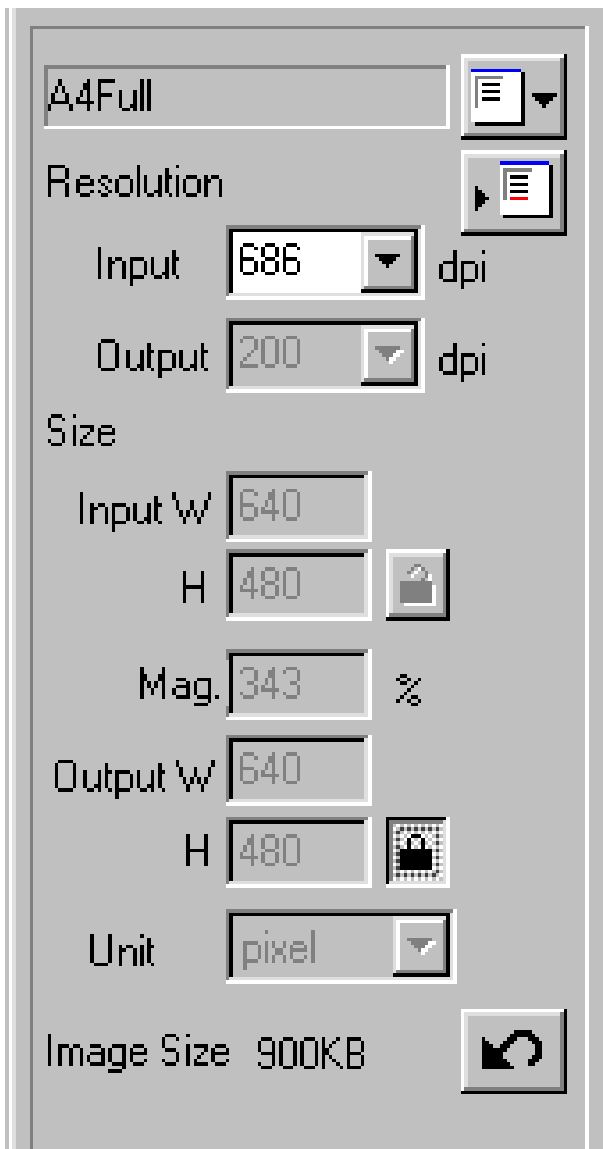
(the shorter side of the film)

It shows that an input resolution value of 1600 dpi (400 dpi x 4) is necessary.

SCAN SETTINGS WINDOW

EXAMPLE OF THE SCAN SETTING – WHEN DISPLAYING IN A MONITOR

This explains how to display in a 13 inch monitor (640 x 480) as an example.



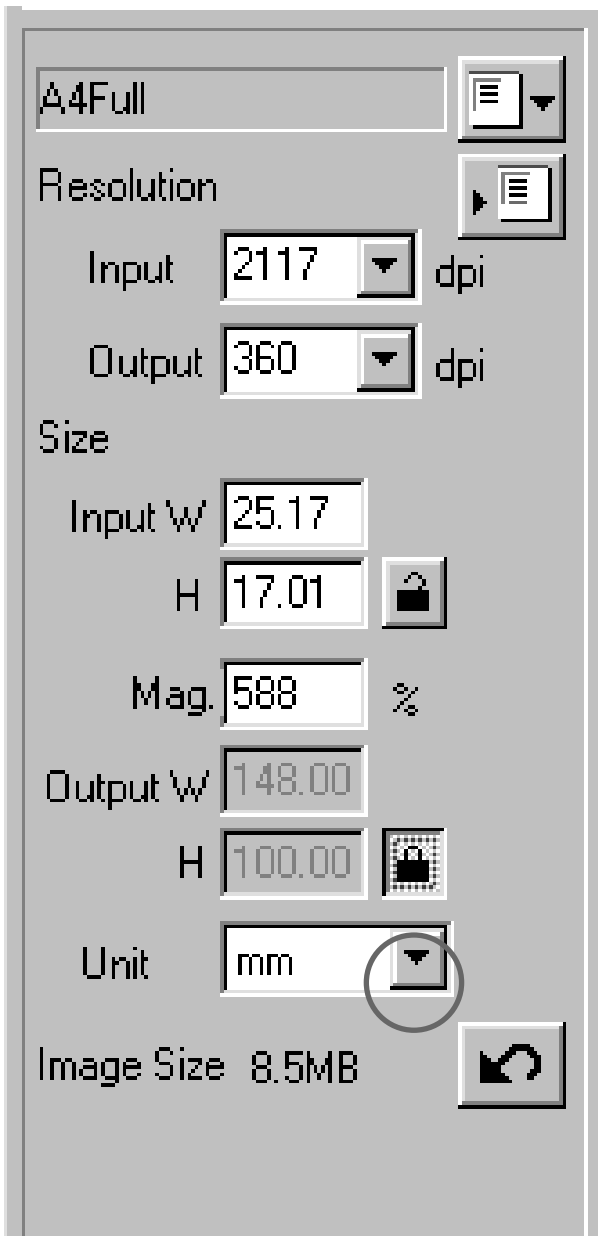
- 1 Select “Pixel” from the Unit list box.**
 - The Output Resolution list box and the Input W and H size text boxes are not available.
- 2 Input “640” and “480” in the Output W and H size text boxes respectively and click on the Output size lock button.**
 - The Output size is locked so that the size cannot be changed.
- 3 Drag the cropping frame to determine the cropping area.**
 - While the cropping area is changed, the input resolution is also changed accordingly.

*The scan settings are complete.

SCAN SETTINGS WINDOW

EXAMPLE OF THE SCAN SETTING – WHEN PRINTING A SCANNED IMAGE

This explains how to print in a post card of 148 x 100 mm (width x height) with the resolution of 360 dpi printer as an example.



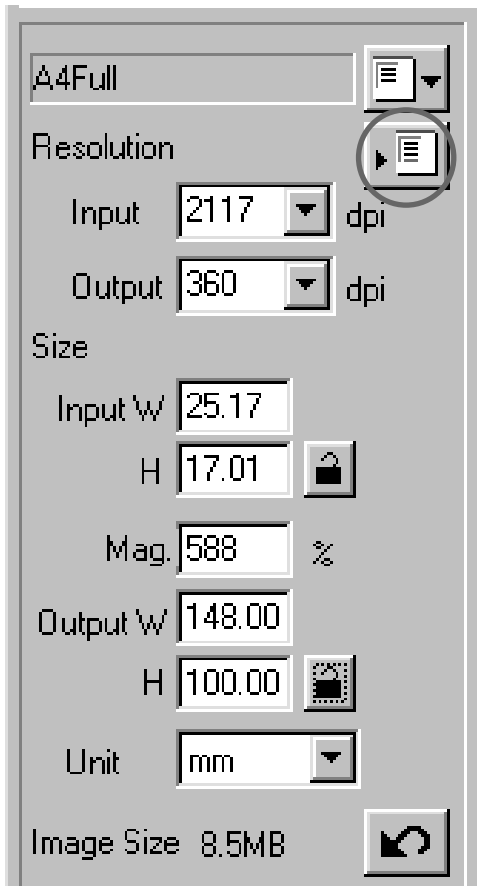
- 1 Select “mm” from the Unit list box.
- 2 Select “360” from the Output resolution list box.
- 3 Input 148 and 100 in the Output W and H size text boxes respectively and click on the Output size lock button.
 - The Output size is locked so that the size cannot be changed.
- 4 Drag the cropping frame to determine the cropping area.
 - While the cropping area is changed, the input resolution is also changed accordingly.
 - As the output size is locked, the ratio of length and breadth of the cropping frame is not changed. To change that ratio, click on the Output size lock button again to cancel the lock mode. In this case, however, the image size is changed according to the cropping area.

*The scan settings are complete.

SCAN SETTINGS WINDOW

REGISTERING A JOB

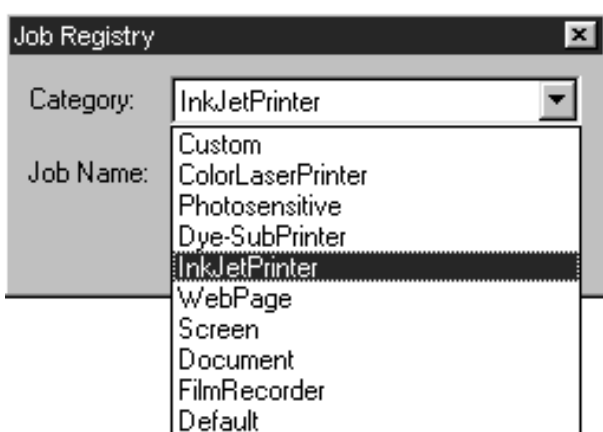
In addition to the Job settings included with the software, it is possible to register your own Job settings in the Job File List.



1 Specify the scan settings to be registered in the Scan Settings window.

2 Click on .

- The Job Registry dialog box will appear.



3 Select the desired category to be registered from the Category list box.



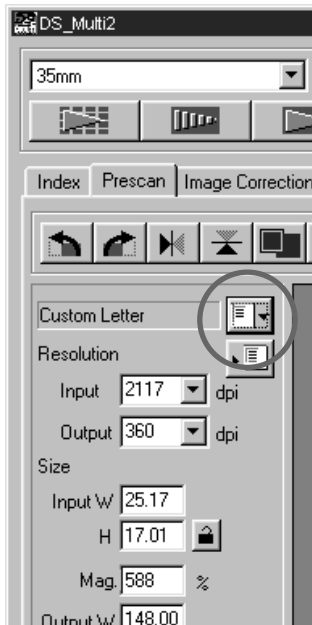
4 Input the job name to be registered and click on [OK].

- The scan settings you specified are registered with the specified name as a job file. The Job Registry dialog box will disappear.
- Input the job name within 24 characters.

SCAN SETTINGS WINDOW

DELETING A JOB

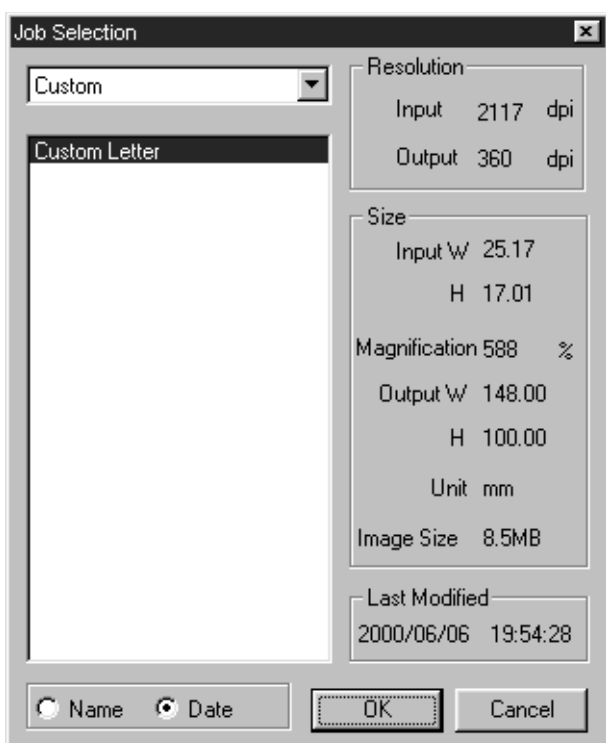
It is possible to delete a job file from the Job File List when it is no longer needed.



1 Click on .

- The Job Selection dialog box will appear.

2 From the Category list box, select the category in which the job to be deleted is registered.



3 After clicking on the job name to be deleted,

Windows®:

Press the Delete key.

Macintosh:

Press the Command key and D key simultaneously.

- The deleted job cannot be restored again. If you delete the job mistakenly, register the job again by following the procedure described on page 86.

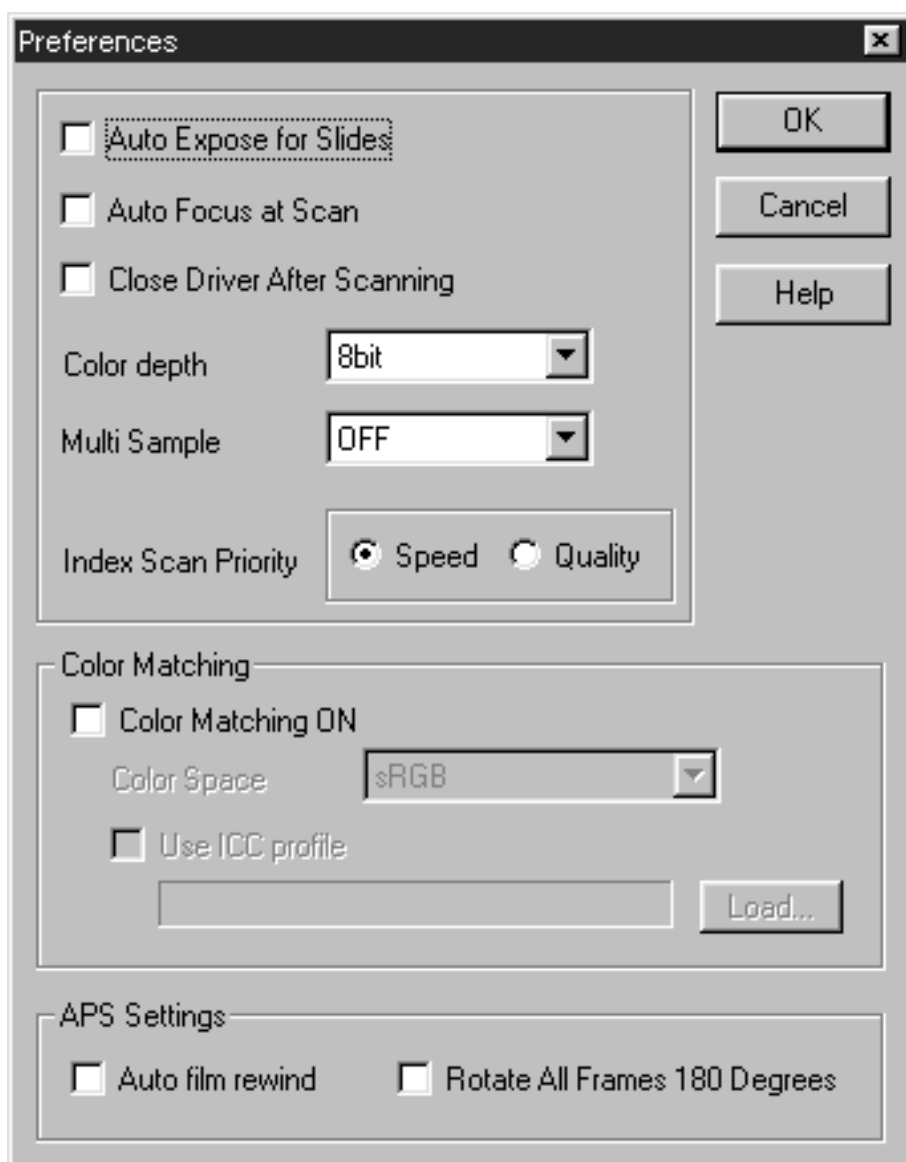
SETTING THE PREFERENCES

THE PREFERENCE WINDOW DISPLAY



1 Click on  in the Main window.

- The Preferences window will appear.



SETTING THE PREFERENCES

REGARDING THE SETTING ITEMS OF THE PREFERENCES WINDOW

Auto Expose for Slides

This option allows you to select whether to perform auto exposure during the prescan or the final scan when using colour slides. As colour slide users often adjust the exposure and colour when taking a photograph, the Auto Expose function when performing the prescan or final scan is turned off in the default setting (The checkmark is not on the checkbox). However, when scanning a slide which is underexposed or when using the AE Lock or AE Area lock function (p.38, 39), click on the checkbox of “Auto Expose for Slide” so that the Auto Expose function is turned on.

Auto Focus at Scan

This option allows you to select whether to use the Autofocus function when performing the prescan or the final scan.

To obtain higher scanning speed, the Autofocus function is turned off in the default setting (The checkmark is not on the checkbox). However, if you intend to use the Autofocus function when scanning, click on the checkbox of “Auto Focus at Scan”.

When using the Digital ROC or Digital GEM function (p.69 to 73), it is recommended to turn on the Autofocus function by clicking on the checkbox of “Auto Focus at Scan”.

Close the Driver Software After Scanning

This option allows you to select whether to close the driver software after scanning when using Twain driver or Plug-in Software and image editing application.

The driver software is specified not to be closed after scanning in the default setting (The checkmark is not on the checkbox). This setting is convenient when scanning multiple images continuously and loading them into an image editing application such as Adobe Photoshop. However, if you intend to retouch each image in the editing software after scanning, click on the checkbox to display the checkmark.

Colour depth

This option allows you to specify the format when outputting the scanned data to a file or an application software. Select one from the following items of the list box.

The default setting is 8 bit.

8 bit	Outputs an image of 8 bits for each R, G or B channel
16 bit	Outputs the image of 16 bits for each R, G or B channel
16 bit linear	Outputs the image of 16 bits for each R, G or B channel but corrections

such as a gamma correction cannot be made. Therefore, when scanning a negative film, it is output as a negative image.

- * Only TIFF can be selected when using the utility software and selecting 16 bit or 16 bit linear as a colour depth.
- * When selecting 16 bit, the image size display in the Scan Settings window is represented in the 16 bit size (8 bit x 2).
- * Some types of graphic application software cannot handle 16 bit image files.

SETTING THE PREFERENCES

Multi Sample

This option allows you to select the Multi-Sampling setting. This function reduces random noise in the image by analyzing the data of a number of sample scans in advance. Select one from the following items of the list box.

The Multi-Sample Scanning function is turned off in the default setting.

OFF	Multi-Sample Scanning function not used.
2 times	Performs sampling 2 times.
4 times	Performs sampling 4 times.
8 times	Performs sampling 8 times.
16 times	Performs sampling 16 times.

* The more times the image is sampled, the longer the required time for scanning.

Index Scan Priority

This option allows you to select either a high speed index scan or a quality index scan by clicking on "Speed" or "Quality". The default setting is "Speed".

Speed	This performs the index scan at high speed. The autofocus function is not used while scanning. The index images are displayed in a thumbnail representation after only easy-auto expose function is performed for each frame.
Quality	After prescanning each frame, the size of the prescan images is reduced and those images are displayed in the thumbnail representation. Therefore, it takes longer to display index images. However, the prescan image can then be immediately displayed just by double-clicking the index image. Whether the autofocus function or the auto expose function for a colour slide film is performed when prescanning depends on the setting of Auto Focus at Scan or Auto Exposure for Slides.

Colour Matching

When displaying the scanned image in the monitor of the PC, the colour of the image varies depending on the type of the monitor. This option allows you to match the colour data of the scanned image to the monitor specifications.

For details, see page 92.

SETTING THE PREFERENCES

APS Settings – Auto Film Rewind

This option allows you to select whether to rewind or not to rewind the film in the APS cassette automatically before the APS adapter (optional accessory) is ejected. The film is rewound in the default setting. (The checkmark is on the checkbox). When setting not to rewind a film, click on the checkbox to remove the checkmark.

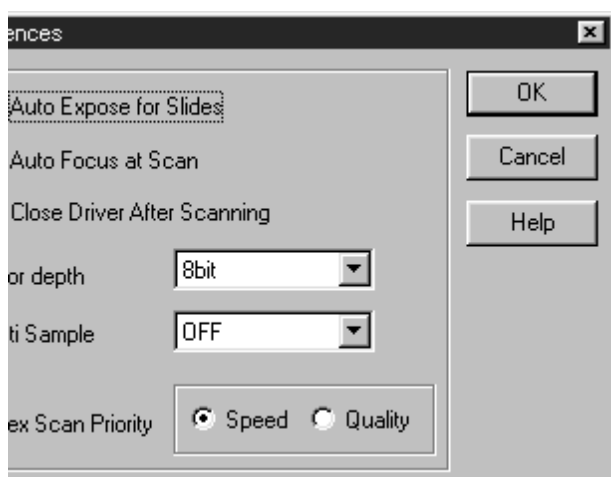
* When ejecting the APS adapter by pressing the eject button in front of this scanner, the film is rewound regardless of this setting.

APS Settings – Rotate All Frames 180 Degrees

This option allows you to select whether to display or not to display all index frames in the Index window rotated by 180 degrees when performing the index scan with the APS adapter (optional accessory).

When using an APS film shot by a camera in which the film holder is on the left side of the back, such as Minolta Vectis S-1/S-100, all index frames are displayed upside-down with the normal setting of the index scan. In this case, click on the checkbox to display the checkmark so that the frames are displayed correctly.

The frames are not rotated in the default setting (The checkmark is not on the checkbox).



When clicking on [OK], the settings in the Preferences are determined. The Preferences window will disappear.

When clicking on [Cancel], each setting is reset to the previous one.

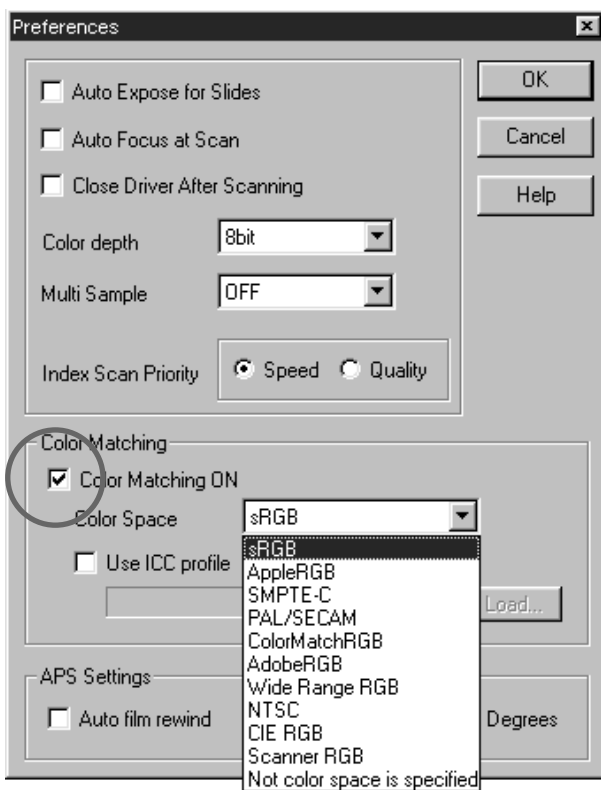
When clicking on [Help], the Help file is displayed.

SETTING THE PREFERENCES

COLOUR MATCHING

When displaying the scanned image in the monitor of the PC, the colour or light and shade of the image varies depending on the colour format of the monitor or the characteristics of colour representation. The Colour Matching function matches the colour data of the image to the monitor specifications (colour space).

COLOUR MATCHING – THE SETTING OF OUTPUT COLOUR IMAGE



1 Click on Colour Matching ON to display the checkmark.

- When this checkmark is displayed, the required time of scanning becomes longer.

2 Select the desired colour space from the Output Colour Space list box.

- For the available colour space setting, see the next page.

SETTING THE PREFERENCES

REGARDING OUTPUT COLOUR SPACE SETTINGS AVAILABLE

sRGB

This is the colour spacing standard promoted by Hewlett-Packard and Microsoft. Because sRGB reflects the quality of average PC monitors, this standard is well suited for handling images that are to be displayed on the Web. However, because of its limited colour scale, it is not suitable for professional prepress usage. sRGB is widely used around the world, and is considered to be the colour spacing standard for multi-media and Internet usage.

Apple RGB

This Apple based colour spacing has been available since the Apple 13 model. It is used as a standard default setting for software such as Adobe Illustrator, Adobe Photoshop Ver. 4 and higher, etc. Because this colour spacing standard is widely used in the world of Desktop Publishing (DTP), it is suited for the reproduction of older version DTP files. As this standard affords a wider colour scale than sRGB, it is commonly employed when a printed product is the intended objective.

SMPTE-C

This colour spacing is currently the accepted standard used in the USA for television broadcasting. This standard is the most suitable colour spacing available for work intended for television broadcast in the USA.

PAL/SECAM

This colour spacing is currently the accepted standard used in Europe for television broadcasting. This standard is the most suitable colour spacing available for work intended for television broadcasting in Europe.

ColourMatch RGB

This colour spacing standard has a wide colour scale and is considered ideal for use with Radius Press View monitors, which are used commonly in the prepress (publishing?) world.

Adobe RGB

This colour spacing standard offers a wider colour scale than ColourMatch RGB. The extensive range of colours available with this colour spacing make this standard the most suitable standard for prepress usage. However, this range also includes many colours that cannot be printed (colours other than CMYK, etc.).

Broad Spectrum Colour Scale RGB

Utilizing the genuine coordinates of the colour spectrum, this colour spacing standard offers an extremely extensive selection of colours. However, most of the colours available in this range cannot be displayed on standard computer monitors, or be used for printing.

NTSC

This colour spacing is currently the accepted standard used in Japan for television broadcasting. This standard is the most suitable colour spacing available for work intended for television broadcast in Japan.

CIE RGB

This is the colour spacing defined by the CIE (Commissin Internationale d'Eclairage).

SETTING THE PREFERENCES

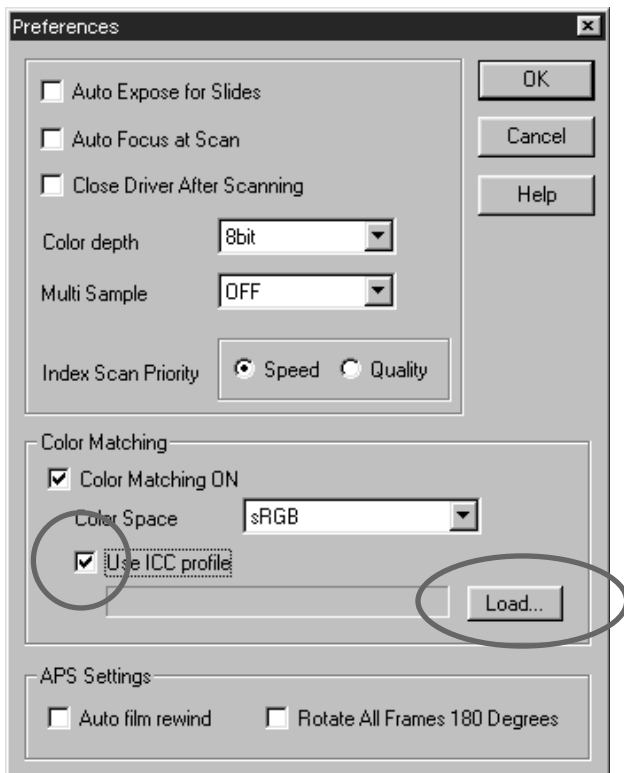
The recommendable settings of “Output colour space” and “ICC profile use/not use” according to the combination of each operating system and the image editing application are as follows:

OS	Using application	Output colour space	ICC profile
Windows®/ Mac OS	Adobe Photoshop Ver.5.0.2/5.5 The monitor colour matching function is set to ON.	Select the same colour space as specified in the application.	use
	Adobe Photoshop Ver.5.0.2/5.5 The monitor colour matching function is set to OFF.	No colour space is specified	use
Windows®/ Mac OS	When using an application other than Adobe Photoshop and the monitor colour matching function is set to off, or when using an application other than Adobe Photoshop and that application does not have the monitor colour matching function.	No colour space is specified	use
Windows®98	When using an application other than Adobe Photoshop and that application is applied to the sRGB colour space.	“sRGB”	use

SETTING THE PREFERENCES

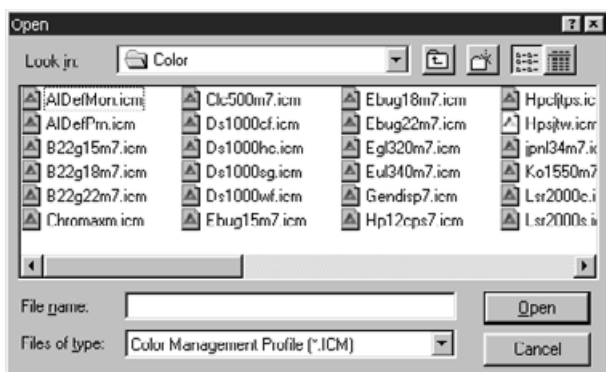
COLOUR MATCHING – THE SETTING OF ICC PROFILE

To use the ICC profile, specify the ICC profile of the monitor you use by following the procedure below.



1 Click on the checkbox of Use ICC profile to display the checkmark and click on Load.

- The file open dialog box will appear.

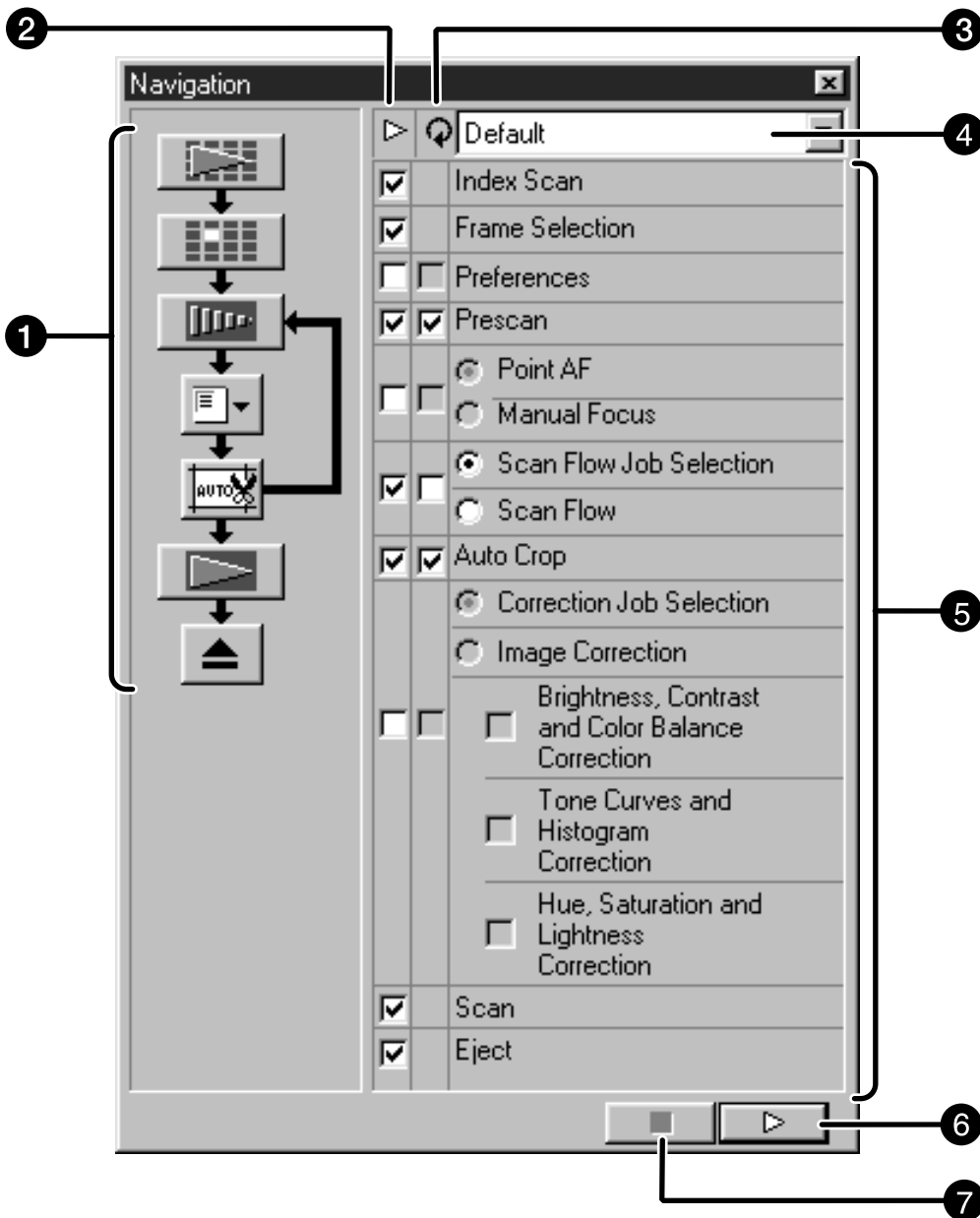


2 Select the ICC profile of the monitor you use and click on [Open].

NAVIGATION



The Navigation function allows you to automate a series of operations of scanning. When clicking on the Navigation button in the Main window, the Navigation window appears.



- 1** Navigation Flow
- 2** Operation Item checkboxes
- 3** Repeated Operation Item checkboxes
- 4** Navigation Menu list box
- 5** Operation items
- 6** Navigation Start button
- 7** Navigation Stop button

NAVIGATION

Navigation Flow

The flow chart for the automatic operation is represented by icons according to the settings of the Operation Item checkboxes and the Repeated Operation Item checkboxes.

By clicking on the icon, the operation can be started from the item of the icon you clicked.

Operation Item checkboxes

Only the items which are selected in these checkboxes can be performed in the automatic operation. The icons in the flow chart change depending on the settings of the Operation Item checkboxes. When the checkbox is clicked to remove the checkmark, the icon of the clicked item is removed from the flow chart. The checkboxes of "Index Scan" and "Frame Selection" are available only when "35 mm" or "APS Cassette" is selected in the film format (p.20).

Repeated Operation Item checkboxes

The items which are selected in these checkboxes are performed repeatedly for each frame. The icons in the flow chart change depending on the settings of the Repeated Operation Item checkbox. When the checkbox is clicked to remove the checkmark, the icon of the clicked item is removed from the flow chart. These checkboxes are available only when "35 mm" or "APS Cassette" is selected in the film format (p.20).

Navigation Menu list box

The flow determined by the settings of the Operation Item checkboxes and the Repeated Operation Item checkboxes is called a "Navigation Set". By clicking on the Navigation Menu list box to display the menu, operations such as naming a navigation set and saving it, or selecting or deleting the saved navigation set can be performed.

When the Navigation window is displayed for the first time, the default setting is selected.

Operation Items

The operations which can be performed automatically are displayed. The order of the item cannot be changed. It is not possible to add items to the list or delete them from it.

Navigation Start button

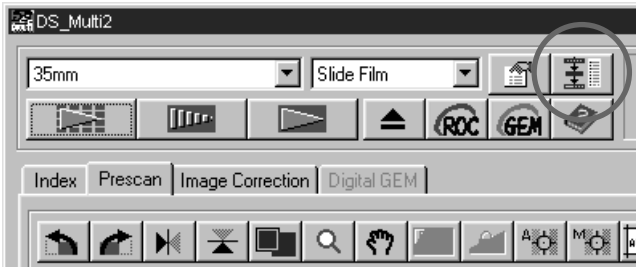
This button activates automatic operation according to the settings of the Operation Item checkboxes and the Repeated Operation Item checkboxes.

Navigation Stop button

This button stops the automatic operation. When the Navigation Start button is clicked in this mode, the operation resumes.

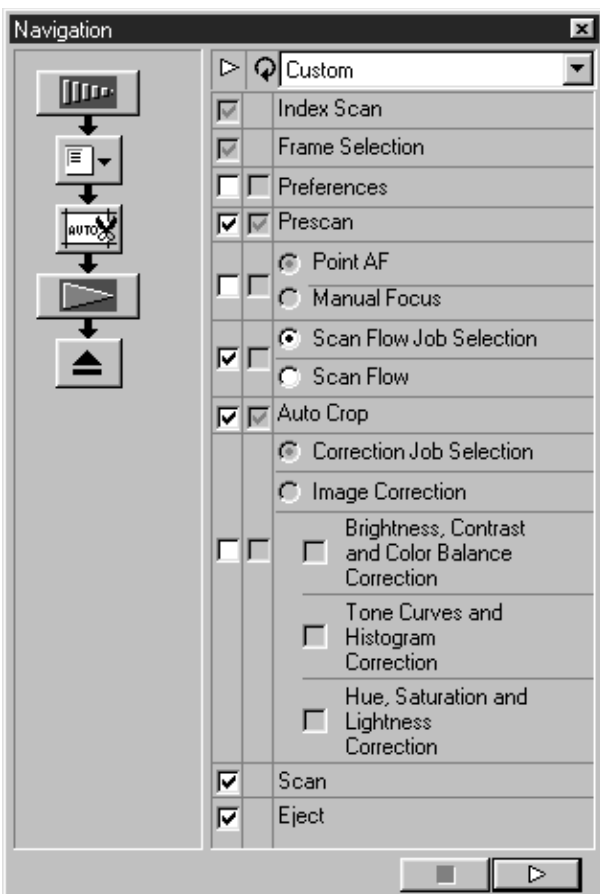
NAVIGATION

AUTOMATIC OPERATION USING THE NAVIGATION FUNCTION



1 Click on the Navigation button.

- The Navigation window will appear.
- When the Navigation window is displayed for the first time, the navigation set in the default setting is selected.



2 Select the operation items to be automated in the Operation Item checkboxes and the Repeated Operation Item checkboxes.

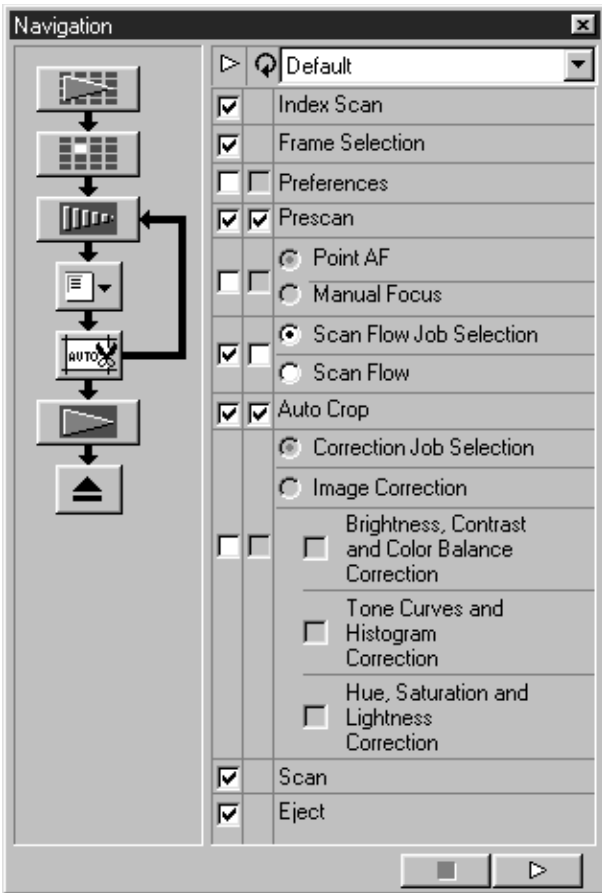
- The Index Scan or Frame Selection is available only when “35 mm” or “APS Cassette” is selected in the film format.
- The Repeated Operation Item checkboxes are available only when “35 mm” or “APS Cassette” is selected in the film format.
- When performing the automatic operation in the default setting, skip this step.
- When Point AF or Manual Focus, Auto Crop, Correction Job Selection or Image Correction are selected, be sure and select the Prescan Operation Item checkbox at the same time.

3 Click on the Navigation Start button.

- The automatic operation will start.
- If you click on the Navigation Stop button, the automatic operation stops temporarily. To resume the operation, click on the Navigation Start button.

NAVIGATION

Though the Navigation function automates a series of scanning operations, the operations which require you to select or input something cannot be automated.



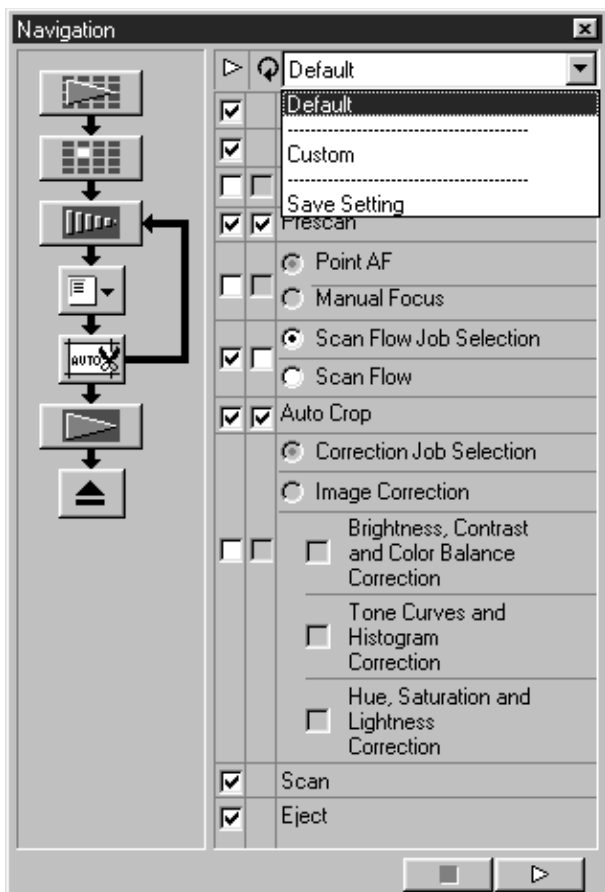
For example, when performing the Navigation set described on the left, the operation stops temporarily after performing the index scan of all frames and the frames are displayed in a thumbnail representation. After performing “Frame Selection” by clicking on the image to be prescanned and pressing the Enter key, or by double-clicking on the image to be prescanned, the operation resumes.

And, when “Scan Flow Job Selection” is selected, the Job Selection window appears and the operation stops temporarily. After selecting the job file to be applied, the operation re-starts.

When using the utility software, rather than the Twain Driver/Plug-in Software, the file save dialog box is displayed and the operation stops temporarily when “Scan” is readied. After specifying or inputting the file destination, file name and file type and clicking on Save in the file save dialog box, the operation resumes and the final scan is performed.

NAVIGATION

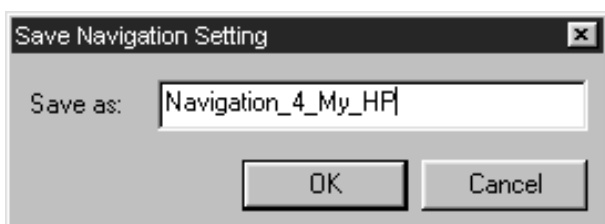
NAMING AND SAVING A NAVIGATION SET



1 Select the operation items to be automated in the Operation Item checkboxes and the Repeated Operation Item checkboxes.

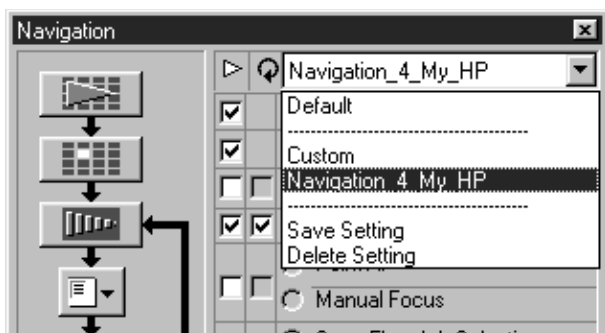
2 Click on the Navigation Menu list box to select [Save Setting].

- The navigation set saving dialog box will appear.



3 Input the name of the navigation set and click on OK.

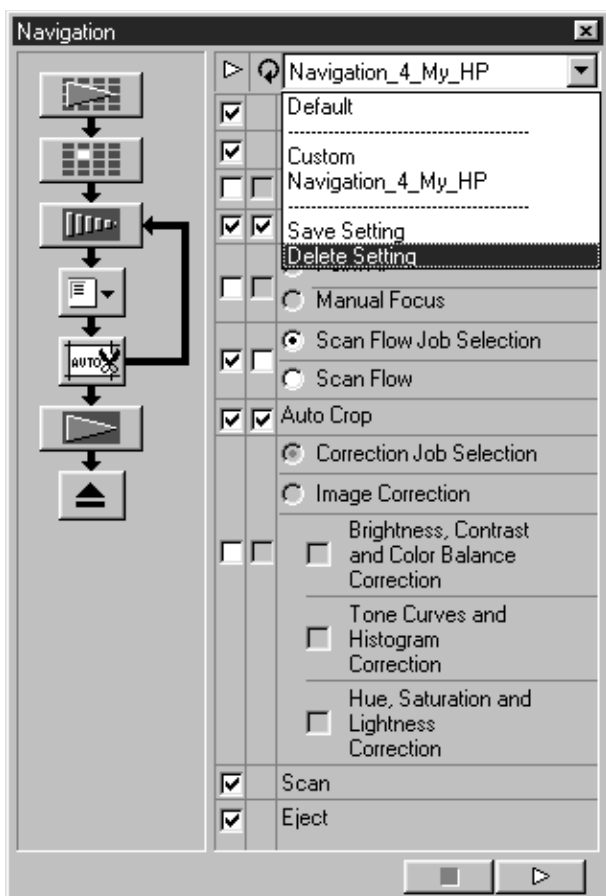
SELECTING A NAVIGATION SET



Click on the Navigation Menu list box to select the menu to be used.

NAVIGATION

DELETING A NAVIGATION SET



1 Click on the Navigation Menu list box to select [Delete Setting].

- The navigation set deleting dialog box will appear.



2 Select the navigation set to be deleted and click on Delete.

SLIDE FEEDER (optional accessory)

The optional slide feeder can scan automatically up to 50 mounted 35mm slides continuously. The data of scanned images can be also saved onto a hard disc, etc.

For the names of parts of the slide feeder, and instructions for attaching to or detaching from the Dimage Scan Multi II or loading the slides, see the instruction manual supplied with the slide feeder.

- 1 Attach the slide feeder to the Dimage Scan Multi II and load the slides by following the procedure described in the instruction manual supplied with the slide feeder.**



- 2 Select Slide Feeder from the Film Format list box and select the film to be set from the Film Type list box.**

- 3 Click on  in the Main window.**

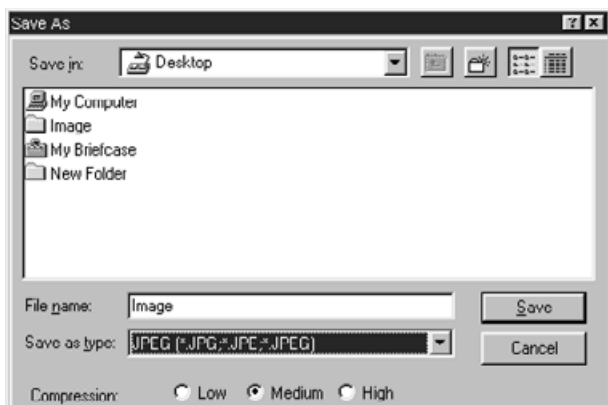
- The first slide to be scanned in the supply-side storage (on the left side) is loaded into the scanner and prescanned, and the prescan image is displayed.
- The cropping frame function or image corrections described on page 48 to 68 or the Digital ROC/GEM functions described on page 69 to 73 can be applied to the prescan image.



- 4 After performing the image correction, click on  in the Main window.**

- The file save dialog box will appear.
- The same image correction performed for the prescan image is applied to the other slides.

SLIDE FEEDER (optional accessory)



- 5** Specify the file destination and input the file name to be saved.
- 6** When using the DS Multi II Utility software, select the file type to be saved from the [Save as Type] list box (or the file format pull-down menu).
 - When selecting JPEG as a file type, select the compression rate from the 3 items.
 - The number of frames with which [Continuous Scanning -> Continuous Loading] can be performed varies depending on the image editing application. For details, refer to the instruction manual supplied with the image editing application you use.

- 7** Click on [Save] (or [OK]).
 - The final scan will begin.
 - Every time an image is scanned, the image is saved with the input file name adding a serial number of 2 digits in the specified location and file type.

For example, when inputting My_Birthday as a file name and specifying JPEG as a file type, the image is saved with the file name of My_Birthday01.jpg, My_Birthday02.jpg, My_Birthday03.jpg, My_Birthday04.jpg... .

LOADING TIME – WINDOWS®

Film Format	Digital ROC/Digital GEM	Operations	
		Prescan	Final Scan (after Prescan)
35mm in 2820 dpi (Colour Positive)	Digital ROC OFF/Digital GEM OFF	about 14 sec.	about 45 sec.
	Digital ROC ON/Digital GEM OFF	about 1 min. 30 sec.	about 60 sec.
	Digital ROC OFF/Digital GEM ON	about 35 sec.	about 2 min. 40 sec.
	Digital ROC ON/Digital GEM ON	about 1 min. 30 sec.	about 2 min. 00 sec.
6 x 9 in 1128 dpi (Colour Positive)	Digital ROC OFF/Digital GEM OFF	about 25 sec.	about 55 sec.
	Digital ROC ON/Digital GEM OFF	about 3 min. 20 sec.	about 1 min. 20 sec.
	Digital ROC OFF/Digital GEM ON	about 50 sec.	about 2 min. 40 sec.
	Digital ROC ON/Digital GEM ON	about 3 min. 20 sec.	about 2 min. 10 sec.
6 x 9 in 2820 dpi (Colour Positive)	Digital ROC OFF/Digital GEM OFF	about 25 sec.	about 4 min. 00 sec.
	Digital ROC ON/Digital GEM OFF	about 3 min. 20 sec.	about 7 min. 40 sec.
	Digital ROC OFF/Digital GEM ON	about 50 sec.	about 13 min. 40 sec.
	Digital ROC ON/Digital GEM ON	about 3 min. 20 sec.	about 13 min. 00 sec.

The preferences in loading time

CPU : Pentium III 700MHz
 RAM : 757MB
 OS : Winsows®98 Second Edition
 Applications : Adobe Photoshop 5.5
 Memory allocation to applications : 570MB
 Colour matching : OFF
 Driver : TWAIN_32 Sources
 ASPI version : 4.57
 SCSI board : Adaptec AHA-2940AU

*The loading time changes according to the preferences you use.

*The values described above do not include the transfer time to the PC.

LOADING TIME – MACINTOSH

Film Format	Digital ROC/Digital GEM	Operations	
		Prescan	Final Scan (after Prescan)
35mm in 2820 dpi (Colour Positive)	Digital ROC OFF/Digital GEM OFF	about 7 sec.	about 50 sec.
	Digital ROC ON/Digital GEM OFF	about 3 min. 10 sec.	about 55 sec.
	Digital ROC OFF/Digital GEM ON	about 20 sec.	about 6 min. 30 sec.
	Digital ROC ON/Digital GEM ON	about 3 min. 10 sec.	about 3 min. 50 sec.
6 x 9 in 1128 dpi (Colour Positive)	Digital ROC OFF/Digital GEM OFF	about 10 sec.	about 55 sec.
	Digital ROC ON/Digital GEM OFF	about 7 min. 30 sec.	about 1 min. 10 sec.
	Digital ROC OFF/Digital GEM ON	about 20 sec.	about 6 min. 20 sec.
	Digital ROC ON/Digital GEM ON	about 7 min. 30 sec.	about 4 min. 00 sec.
6 x 9 in 2820 dpi (Colour Positive)	Digital ROC OFF/Digital GEM OFF	about 10 sec.	about 4 min. 30 sec.
	Digital ROC ON/Digital GEM OFF	about 7 min. 30 sec.	about 7 min. 50 sec.
	Digital ROC OFF/Digital GEM ON	about 20 sec.	about 25 min. 30 sec.
	Digital ROC ON/Digital GEM ON	about 7 min. 30 sec.	about 21 min. 20 sec.

The preferences in loading time

CPU : PowerPC G4 450MHz
 RAM : 768MB
 OS : Mac OS 9.0.4
 Applications : Adobe Photoshop 5.5
 Memory allocation to applications : 570MB
 Colour matching : OFF
 Driver : Dimage Scan Multi Photoshop Plug-in 2.0
 Virtual memory : OFF
 SCSI board : Adaptec PowerDomain 2940UW

*The loading time changes according to the preferences you use.

*The values described above do not include the transfer time to the Mac.

JOB FILE LIST – 35 MM

JOB FILE LIST – 6 X 4.5

Category	Job name	Input Res.	Output Res.	Mag.	Unit	Input Size		Lock(IN)	Output Size		Lock(OUT)	Input Pixels	
						W	H		W	H		W	H
		1128				42	56					1856	2496
Custom	default	282	300	94	pixel	464	624	OFF	464	624	OFF	464	624
ColorLaserPrinter	MaxSize 600dpi	1128	600	188	mm	42	56	OFF	79	105	ON	1856	2496
	A4Eighth 600dpi	1065	600	177	mm	42	56	OFF	74	100	ON	1752	2355
	LetterEighth 600dpi	985	600	164	inch	2	2	OFF	3	4	ON	1620	2178
	MaxSize 400dpi	1128	400	282	mm	41	56	OFF	117	158	ON	1856	2496
	A4Quater 400dpi	1006	400	251	mm	42	56	OFF	105	141	ON	1653	2220
	A4Eighth 400dpi	709	400	177	mm	42	56	OFF	74	100	ON	1166	1568
	LetterEighth 400dpi	657	400	164	inch	2	2	OFF	3	4	ON	1080	1452
Photosensitive	MaxSize	1128	400	282	mm	42	56	OFF	117	158	ON	1856	2496
	PostCard4x6 400dpi	975	400	243	inch	2	2	OFF	4	5	ON	1604	2156
	A5 267dpi	946	267	354	mm	42	56	OFF	148	199	ON	1555	2091
	5x7 267dpi	813	267	304	inch	2	2	OFF	5	7	ON	1337	1796
	PostCard4x6 267dpi	731	267	273	inch	2	2	OFF	5	6	ON	1201	1615
		1035	360	287	mm	42	56	OFF	120	161	ON	1700	2281
	2L 360dpi	1097	360	304	mm	42	56	OFF	127	171	ON	1800	2423
	11x14 180dpi	988	180	548	mm	42	56	OFF	229	308	ON	1622	2182
	10x12 180dpi	969	180	538	mm	42	56	OFF	225	302	ON	1594	2140
		517	180	287	mm	42	56	OFF	120	161	ON	850	1140
	2L 180dpi	547	180	303	mm	42	56	OFF	127	171	ON	900	1211
Dye-SubPrinter	MaxSize	1128	300	376	mm	42	56	OFF	157	211	ON	1856	2496
	A4Half	1065	300	355	mm	42	56	OFF	148	199	ON	1748	2350
	A4Quater	748	300	249	mm	42	56	OFF	104	140	ON	1228	1653
	A4Eighth	531	300	177	mm	42	56	OFF	74	100	ON	874	1175
	LetterHalf	995	300	331	inch	2	2	OFF	5	7	ON	1638	2202
	LetterQuater	744	300	248	inch	2	2	OFF	4	5	ON	1224	1644
	LetterEighth	492	300	164	inch	2	2	OFF	3	4	ON	810	1089
		718	300	239	mm	42	56	OFF	100	134	ON	1181	1582
	Photo4x6	1077	300	359	mm	42	56	OFF	150	201	ON	1771	2374
	Photo3x5, Photo9x13	631	300	210	mm	42	56	OFF	88	118	ON	1039	1393
Ink-JetPrinter	A4Full	1006	200	503	mm	42	56	OFF	210	282	ON	1653	2220
	A4Half	709	200	354	mm	42	56	OFF	148	199	ON	1165	1566
	A4Quater	502	200	251	mm	42	56	OFF	105	141	ON	826	1110
	A4Eighth	353	200	176	mm	42	56	OFF	74	99	ON	582	782
	LetterFull	995	200	497	inch	2	2	OFF	8	11	ON	1638	2200
	LetterHalf	663	200	331	inch	2	2	OFF	5	7	ON	1090	1468
	LetterQuater	496	200	248	inch	2	2	OFF	4	5	ON	816	1096
	LetterEighth	328	200	164	inch	2	2	OFF	3	4	ON	540	726
		478	200	239	mm	42	56	OFF	100	134	ON	787	1055
	Photo4x6	718	200	359	mm	42	56	OFF	150	201	ON	1181	1582
	Photo3x5, Photo9x13	420	200	210	mm	42	56	OFF	88	118	ON	692	929
WebPage	761x1024	462	300	154	pixel	761	1024	OFF	761	1024	ON	761	1024
	714x960	434	300	144	pixel	714	960	OFF	714	960	ON	714	960
	647x870	393	300	131	pixel	647	870	OFF	647	870	ON	647	870
	571x768	347	300	115	pixel	571	768	OFF	571	768	ON	571	768
	464x624	282	300	94	pixel	464	624	OFF	464	624	ON	464	624
	446x600	271	300	90	pixel	446	600	OFF	446	600	ON	446	600
	356x480	216	300	72	pixel	356	480	OFF	356	480	ON	356	480
	PhotoCD1024x1536	622	300	207	pixel	1024	1377	OFF	1024	1377	ON	1024	1377
	PhotoCD512x768	311	300	103	pixel	512	688	OFF	512	688	ON	512	688
	PhotoCD256x348	155	300	51	pixel	256	344	OFF	256	344	ON	256	344
	PhotoCD128x192	77	300	25	pixel	128	172	OFF	128	172	ON	128	172
Screen	1280x1024	578	300	192	pixel	952	1280	OFF	952	1280	ON	952	1280
	1280x960	578	300	192	pixel	952	1280	OFF	952	1280	ON	952	1280
	1152x870	521	300	173	pixel	857	1152	OFF	857	1152	ON	857	1152
	1024x768	462	300	154	pixel	761	1024	OFF	761	1024	ON	761	1024
	832x624	376	300	125	pixel	618	832	OFF	618	832	ON	618	832
	800x600	361	300	120	pixel	595	800	OFF	595	800	ON	595	800
	640x480	218	300	72	pixel	360	484	OFF	360	484	ON	360	484
Document	A4Half	254	72	352	mm	42	57	OFF	148	198	ON	419	561
	A4Quater	180	72	250	mm	42	56	OFF	105	140	ON	297	396
	A4Eighth	127	72	176	mm	42	57	OFF	74	99	ON	209	280
	LetterHalf	238	72	330	inch	2	2	OFF	5	7	ON	392	526
	LetterQuater	178	72	247	inch	2	2	OFF	4	5	ON	293	393
	LetterEighth	117	72	162	inch	2	2	OFF	3	4	ON	193	259

JOB FILE LIST – 6 X 4.5

JOB FILE LIST – 6 X 6

Category	Job name	Input Res.	Output Res.	Mag.	Unit	Input Size		Lock(IN)	Output Size		Lock(OUT)	Input Pixels	
						W	H		W	H		W	H
		1128				56	56					2496	2496
Custom	default	282	300	94	pixel	624	624	OFF	624	624	OFF	624	624
ColorLaserPrinter	MaxSize 600dpi	1128	600	188	mm	56	56	OFF	105	105	ON	2488	2488
	A4Eighth 600dpi	791	600	131	mm	57	57	OFF	74	74	ON	1748	1748
	LetterQuater 600dpi	1128	600	188	inch	2	2	OFF	4	4	ON	2496	2496
	LetterEighth 600dpi	732	600	122	inch	2	2	OFF	3	3	ON	1620	1620
	MaxSize 400dpi	1128	400	282	mm	56	56	OFF	158	158	ON	2488	2488
	A4Quater 400dpi	748	400	187	mm	56	56	OFF	105	105	ON	1653	1653
	A4Eighth 400dpi	526	400	131	mm	57	57	OFF	74	74	ON	1165	1165
	LetterQuater 400dpi	770	400	192	inch	2	2	OFF	4	4	ON	1700	1700
	LetterEighth 400dpi	488	400	122	inch	2	2	OFF	3	3	ON	1080	1080
Photosensitive	MaxSize	1128	400	282	mm	56	56	OFF	158	158	ON	2496	2496
	A5 400dpi	1053	400	263	mm	56	56	OFF	148	148	ON	2330	2330
	5x7 400dpi	905	400	226	inch	2	2	OFF	5	5	ON	2000	2000
	PostCard4x6 400dpi	723	400	180	inch	2	2	OFF	4	4	ON	1600	1600
	A5 267dpi	704	267	263	mm	56	56	OFF	148	148	ON	1555	1555
	5x7 267dpi	604	267	226	inch	2	2	OFF	5	5	ON	1335	1335
	PostCard4x6 267dpi	482	267	180	inch	2	2	OFF	4	4	ON	1068	1068
		770	360	213	mm	56	56	OFF	120	120	ON	1700	1700
	2L 360dpi	815	360	226	mm	56	56	OFF	127	127	ON	1800	1800
	14x17 180dpi	1128	180	626	mm	56	56	OFF	352	352	ON	2496	2496
	11x14 180dpi	880	180	488	mm	56	56	OFF	274	274	ON	1948	1941
	10x12 180dpi	802	180	445	mm	56	56	OFF	250	250	ON	1771	1771
		381	180	212	mm	56	56	OFF	119	119	ON	843	843
	2L 180dpi	407	180	226	mm	56	56	OFF	127	127	ON	900	900
Dye-SubPrinter	MaxSize	1128	300	376	mm	56	56	OFF	211	211	ON	2496	2496
	A4Quater	560	300	186	mm	56	56	OFF	104	104	ON	1228	1228
	A4Eighth	395	300	131	mm	56	56	OFF	74	74	ON	872	872
	LetterQuater	576	300	192	inch	2	2	OFF	4	4	ON	1275	1275
	LetterEighth	366	300	122	inch	2	2	OFF	3	3	ON	810	810
		533	300	177	mm	56	56	OFF	100	100	ON	1179	1179
	Photo4x6	533	300	177	mm	56	56	OFF	100	100	ON	1179	1179
	Photo3x5, Photo9x13	470	300	156	mm	56	56	OFF	88	88	ON	1039	1039
Ink-JetPrinter	A4Full	748	200	374	mm	56	56	OFF	210	210	ON	1653	1653
	A4Half	526	200	263	mm	56	56	OFF	148	148	ON	1165	1165
	A4Quater	373	200	186	mm	56	56	OFF	104	104	ON	818	818
	A4Eighth	263	200	131	mm	56	56	OFF	74	74	ON	581	581
	LetterFull	770	200	385	inch	2	2	OFF	9	9	ON	1702	1702
	LetterHalf	492	200	246	inch	2	2	OFF	5	5	ON	1090	1090
	LetterQuater	384	200	192	inch	2	2	OFF	4	4	ON	850	850
	LetterEighth	244	200	122	inch	2	2	OFF	3	3	ON	540	540
		356	200	178	mm	56	56	OFF	100	100	ON	786	786
	Photo4x6	356	200	178	mm	56	56	OFF	100	100	ON	786	786
	Photo3x5, Photo9x13	312	200	156	mm	56	56	OFF	88	88	ON	691	691
WebPage	1024x1024	462	300	154	pixel	1024	1024	OFF	1024	1024	ON	1024	1024
	960x960	434	300	144	pixel	960	960	OFF	960	960	ON	960	960
	870x870	393	300	131	pixel	870	870	OFF	870	870	ON	870	870
	768x768	347	300	115	pixel	768	768	OFF	768	768	ON	768	768
	624x624	282	300	94	pixel	624	624	OFF	624	624	ON	624	624
	600x600	271	300	90	pixel	600	600	OFF	600	600	ON	600	600
	480x480	216	300	72	pixel	480	480	OFF	480	480	ON	480	480
	PhotoCD2048x3072	925	300	308	pixel	2048	2048	OFF	2048	2048	ON	2048	2048
	PhotoCD1024x1536	462	300	154	pixel	1024	1024	OFF	1024	1024	ON	1024	1024
	PhotoCD512x768	231	300	77	pixel	512	512	OFF	512	512	ON	512	512
	PhotoCD256x348	115	300	38	pixel	256	256	OFF	256	256	ON	256	256
Screen	1280x1024	462	300	154	pixel	1024	1024	OFF	1024	1024	ON	1024	1024
	1280x960	434	300	144	pixel	960	960	OFF	960	960	ON	960	960
	1152x870	393	300	131	pixel	870	870	OFF	870	870	ON	870	870
	1024x768	347	300	115	pixel	768	768	OFF	768	768	ON	768	768
	832x624	282	300	94	pixel	624	624	OFF	624	624	ON	624	624
	800x600	271	300	90	pixel	600	600	OFF	600	600	ON	600	600
	640x480	216	300	72	pixel	480	480	OFF	480	480	ON	480	480
Document	A4Half	189	72	262	mm	56	56	OFF	147	147	ON	419	419
	A4Quater	134	72	186	mm	56	56	OFF	104	104	ON	297	297
	A4Eighth	94	72	130	mm	57	57	OFF	74	74	ON	209	209
	LetterHalf	177	72	245	inch	2	2	OFF	5	5	ON	391	391
	LetterQuater	138	72	191	inch	2	2	OFF	4	4	ON	306	306
	LetterEighth	87	72	120	inch	2	2	OFF	3	3	ON	193	193

JOB FILE LIST – 6 X 6

JOB FILE LIST – 6 X 7

JOB FILE LIST – 6 X 8

JOB FILE LIST – 6 X 9

JOB FILE LIST – APS

Category	Job name	Input Res.	Output Res.	Mag.	Unit	Input Size		Lock(IN)	Output Size		Lock(OUT)	Input Pixels	
						W	H		W	H		W	H
		2820				30	17					3328	1920
Custom	default	705	300	235	pixel	832	480	OFF	832	480	OFF	832	480
ColorLaserPrinter	MaxSize 600dpi	2820	600	470	mm	30	17	OFF	140	81	ON	3328	1920
	A4Eighth 600dpi	2104	600	350	mm	30	17	OFF	105	61	ON	2483	1433
	LetterEighth 600dpi	2161	600	360	inch	1	1	OFF	4	2	ON	2550	1471
	MaxSize 400dpi	2820	400	705	mm	30	17	OFF	211	121	ON	3328	1920
	A4Half 400dpi	2809	400	702	mm	30	17	OFF	210	121	ON	3315	1912
	A4Quater 400dpi	1977	400	494	mm	30	17	OFF	148	85	ON	2334	1346
	A4Eighth 400dpi	1401	400	350	mm	30	17	OFF	105	61	ON	1654	954
	LetterQuater 400dpi	1851	400	462	inch	1	1	OFF	5	3	ON	2184	1260
	LetterEighth 400dpi	1440	400	360	inch	1	1	OFF	4	2	ON	1700	981
Photosensitive	MaxSize	2820	400	705	mm	30	17	OFF	211	121	ON	3328	1920
	A5 400dpi	2809	400	702	mm	30	17	OFF	210	121	ON	3315	1912
	5x7 400dpi	2374	400	593	inch	1	1	OFF	7	4	ON	2802	1616
	PostCard4x6 400dpi	2039	400	509	inch	1	1	OFF	6	3	ON	2406	1388
	Letter 267dpi	2472	267	925	inch	1	1	OFF	11	6	ON	2917	1683
	A4 267dpi	2654	267	994	mm	30	17	OFF	297	171	ON	3132	1807
	A5 267dpi	1870	267	700	mm	30	17	OFF	210	121	ON	2207	1273
	8x10 267dpi	2263	267	847	inch	1	1	OFF	10	6	ON	2670	1540
	5x7 267dpi	1586	267	594	inch	1	1	OFF	7	4	ON	1871	1080
	PostCard4x6 267dpi	1359	267	508	inch	1	1	OFF	6	3	ON	1604	925
		1935	360	537	mm	30	17	OFF	161	93	ON	2284	1317
	2L 360dpi	2092	360	581	mm	30	17	OFF	174	100	ON	2469	1424
	14x17 180dpi	2578	180	1432	mm	30	17	OFF	429	247	ON	3042	1755
	11x14 180dpi	2117	180	1176	mm	30	17	OFF	352	203	ON	2498	1441
	10x12 180dpi	1809	180	1005	mm	30	17	OFF	301	173	ON	2135	1231
		966	180	536	mm	30	17	OFF	160	93	ON	1140	657
	2L 180dpi	1046	180	581	mm	30	17	OFF	174	100	ON	1234	712
Dye-SubPrinter	MaxSize	2820	300	940	mm	30	17	OFF	281	162	ON	3328	1920
	A4Half	2104	300	701	mm	30	17	OFF	210	121	ON	2483	1429
	A4Quater	1482	300	494	mm	30	17	OFF	148	85	ON	1749	1009
	A4Eighth	1050	300	350	mm	30	17	OFF	105	61	ON	1240	715
	LetterFull	2776	300	925	inch	1	1	OFF	11	6	ON	3276	1890
	LetterHalf	2161	300	720	inch	1	1	OFF	9	5	ON	2550	1471
	LetterQuater	1385	300	461	inch	1	1	OFF	5	3	ON	1635	943
	LetterEighth	1080	300	360	inch	1	1	OFF	4	2	ON	1275	735
		1500	300	500	mm	30	17	OFF	150	86	ON	1771	1021
	Photo3x5, Photo9x13	1270	300	423	mm	30	17	OFF	127	73	ON	1500	864
Ink-JetPrinter	A4Full	1977	200	988	mm	30	17	OFF	297	171	ON	2338	1346
	A4Half	1401	200	700	mm	30	17	OFF	210	121	ON	1654	954
	A4Quater	987	200	493	mm	30	17	OFF	148	85	ON	1165	672
	A4Eighth	700	200	350	mm	30	17	OFF	105	60	ON	826	476
	LetterFull	1846	200	923	inch	1	1	OFF	11	6	ON	2180	1256
	LetterHalf	1440	200	720	inch	1	1	OFF	9	5	ON	1700	981
	LetterQuater	924	200	462	inch	1	1	OFF	5	3	ON	1090	629
	LetterEighth	720	200	360	inch	1	1	OFF	4	2	ON	850	490
	Photo4x6	1001	200	500	mm	30	17	OFF	150	86	ON	1181	681
	Photo3x5, Photo9x13	846	200	423	mm	30	17	OFF	127	73	ON	1000	574
WebPage	1280x739	1085	300	361	pixel	1280	739	OFF	1280	739	ON	1280	739
	1152x665	976	300	325	pixel	1152	665	OFF	1152	665	ON	1152	665
	1024x590	867	300	289	pixel	1024	590	OFF	1024	590	ON	1024	590
	832x480	705	300	235	pixel	832	480	OFF	832	480	ON	832	480
	800x461	678	300	226	pixel	800	461	OFF	800	461	ON	800	461
	640x369	542	300	180	pixel	640	369	OFF	640	369	ON	640	369
	PhotoCD1024x1536	1303	300	434	pixel	1536	887	OFF	1536	887	ON	1536	887
	PhotoCD512x768	650	300	216	pixel	768	443	OFF	768	443	ON	768	443
	PhotoCD256x348	294	300	98	pixel	348	200	OFF	348	200	ON	348	200
Screen	1280x1024	1085	300	361	pixel	1280	739	OFF	1280	739	ON	1280	739
	1280x960	1085	300	361	pixel	1280	739	OFF	1280	739	ON	1280	739
	1152x870	976	300	325	pixel	1152	665	OFF	1152	665	ON	1152	665
	1024x768	867	300	289	pixel	1024	590	OFF	1024	590	ON	1024	590
	832x624	705	300	235	pixel	832	480	OFF	832	480	ON	832	480
	800x600	678	300	226	pixel	800	461	OFF	800	461	ON	800	461
	640x480	542	300	180	pixel	640	369	OFF	640	369	ON	640	369
Document	A4Half	504	72	700	mm	30	17	OFF	210	121	ON	595	343
	A4Quater	355	72	493	mm	30	17	OFF	148	85	ON	419	241
	A4Eighth	251	72	348	mm	30	17	OFF	105	60	ON	297	171
	LetterHalf	518	72	719	inch	1	1	OFF	9	5	ON	612	352
	LetterQuater	332	72	461	inch	1	1	OFF	5	3	ON	392	226
	LetterEighth	259	72	359	inch	1	1	OFF	4	2	ON	306	175

JOB FILE LIST – APS

JOB FILE LIST – 16 MM

JOB FILE LIST – CENTER AREA 2820

Category	Job name	Input Res.	Output Res.	Mag.	Unit	Input Size		Lock(IN)	Output Size		Lock(OUT)	Input Pixels	
						W	H		W	H		W	H
		2820				87	24					9280	2688
Custom	default	705	300	235	pixel	2320	672	OFF	2320	672	OFF	2320	672

- A** Minolta Austria Ges.m.b.H
Amalienstr. 59-61, A-1131 Wien, Österreich
Tel:01 87868 176
Fax:01 87868 153
<http://www.minoltaeurope.com>
- B** Minolta Belgium Branch
Prins Boudewijnlaan 1
B-2550 Kontich, België
Tel: 03 451 07 00
Fax: 03 458 50 48
<http://www.minolta.be> en <http://www.minolta.nl>
- CAN** Minolta Canada Inc., Head Office
369 Britannia Road East,
Mississauga, Ontario L4Z 2H5, Canada
Tel.0905 890 66 00
Fax0905 890 71 99
<http://www.minolta.com>
- CH** Minolta (Schweiz) AG
Riedstr. 6, CH-8953 Dietikon, Schweiz
Tel:157 57 11 (sFr 2.15/min)
Fax:01 741 33 12
<http://www.minolta.ch>
- D** Minolta Europe GmbH
Minoltaring 11,
D-30855 Langenhagen,
Deutschland
- Reparatur/Repair
Senator-Helmken-Strasse 1,
D-28279 Bremen,
Deutschland
- Hotline: Tel: 0221 5 60 60 31
Fax: 0221 5 60 60 40
- <http://www.minolta.de>
- DK** Paul Westheimer A/S
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<http://www.minoltaeurope.com>
- F** Minolta France S. A.
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Tel:0130 86 62 37
Fax:0130 86 62 82
<http://www.minolta.fr>
- FIN** Minolta Finland Branch
Niittykatu 6, PL 37 SF-02201 Espoo, Finland
Tel:435 565 0
Fax:435 565 56
<http://www.minolta.fi>
- GB** 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>
- IRL** Photopak Sales
241 Western Industrial Estate, Naas Road,
Dublin 12, Ireland
Tel:01 45 66 400
Fax:01 45 00 452
<http://www.minoltaeurope.com>
- I** Rossi & C. S.p.A.
Via Ticino 40,
I – 50019 Osmannoro Sesto Fiorentino (Fi),
Italy
Tel.:055 323141
Fax:055 32314252
<http://www.minoltafoto.it>
- N** Scandiafilm AS
Enebakkveien 304, N-1188 Oslo 11, Norge
Tel:022 28 00 00
Fax:022 28 17 42
<http://www.minoltaeurope.com>
- NL** Minolta Camera Benelux B.V.
Zonnebaan 39, Postbus 6000
3600 HA Maarssen, Nederland
Tel: 030 247 08 09
Fax: 030 247 08 88
<http://www.minolta.nl>
- P** Minolta Portugal Lda
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Tel:01793 00 16
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<http://www.minoltaeurope.com>
- S** Minolta Svenska AB
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- Sin** Minolta Singapore (Pte) Limited
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