Scankit Utility Windows Version USER'S MANUAL

Scankit Utility

Windows Version

User's Manual

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Contents

Introduction 1-1
What You Can Do With Scankit Utility 1-1
System Requirements 1-2
About This Manual 1-2
What You Need to Know 1-3
Tutorial 2-1
Before You Begin 2-1
Getting Started 2-2
Scanning an Image
Scanning Large Images 2-6
Using Stitch
Using Merge 2-9
Using AutoMerge 2-10
Rotating the Image 2-13
Selecting a Part of the Image 2-14
Saving the Scanned Image 2-15
Scankit Utility Menus
To Load an Image File
The Close Command 3-2
To Save an Image
The Image Info Command 3-4
The Printer Setup Command 3-4
The Print Size Command 3-5
The Print Command
The Exit Command
The Edit Menu
The Edit Commands 3-6
The Stitch From Command
The Stitch Images Screen Commands
Using Edit Stitch From 3-7

iii

ŝ

The Scan Menu	3-9
To Execute Select	3-9
To Execute Acquire	
Scanning the Image	
The Transfer Menu	
Halftone To Gray	3-11
Gray To Halftone	
Color Optimization	3-12
Rotate	3-13
The View Menu	3-13
Zoom Out	
Zoom In	
Actual Size	3-13
The Merge Menu	3-13
To Execute Merge	3-14
To Execute AutoMerge	
The Help Menu	3-16
Index	I-1

Introduction

Scankit Utility is a scanning program that can be used with a supported halftone, gray-scale or color hand-held scanner. It allows you to scan an image; the number and size of which is limited only by your system memory or disk space. Easy to learn and fun to use, Scankit Utility employs basic Windows conventions such as drop-down menus and dialog boxes. It does not require you to master new techniques.

Scankit Utility is TWAIN-compliant, which is the standard protocol used by most digitizing hardware and image-processing software. TWAIN eliminates most compatibility problems associated with software and input devices supplied by different vendors. In addition, Scankit Utility takes advantage of the powerful Windows environment. You can easily scan an image, cut it and paste it in any Windows application software.

What You Can Do With Scankit Utility

With Scankit Utility you can:

- · Scan images whether graphics or text
- Scan a large image using several passes and complete the image by using stitch, merge, or automerge
- · Convert a halftone image to gray scale and vice versa
- · Optimize a color image to enhance its appearance
- Rotate the image from -180 to +180 degrees in increments of 1 degree
- · Print the scanned image
- Save or load images using any of six popular file formats: TIFF, BMP, PCX, MSP, IMG, and CUT

1-1

System Requirements

To effectively operate Scankit utility, you should have the following minimum system requirements:

- PC with 286, 386, 486 or higher and their compatibles
- VGA, Super VGA (or higher) video graphic adapter and appropriate monitor
- One floppy disk drive (5.25-inch/1.2MB or 3.5-inch/1.4MB)
- One hard disk drive (with free space)
- 2MB minimum system memory (4MB recommended)
- · Mouse with driver
- · DOS 3.1 or later version
- Windows 3.0 or later version, standard or enhanced mode
- · A supported color, gray-scale or halftone hand-held scanner

Take note that scanning images in 24-bit color and at high resolution can dramatically affect your computer's processing time. It is recommended that for better performance, you should increase your computer memory and allocate enough hard disk space for saving your image files.

About This Manual

This manual is designed to help you quickly get familiar with the operation of Scankit Utility. It is divided into sections so you can easily find the information you want. These sections are:

Introduction

The Introduction gives an overview of the whole guide. It summarizes the features of Scankit Utility and covers system requirements.

Tutorial

The *Tutorial* helps you to get off to a good start. This section is especially useful for beginners. Through a series of steps and examples it shows you how to scan an image and use the major commands of Scankit Utility.

- The Scankit Utility Menus
 This section serves as a quick reference for both beginners and
 experienced users of hand-held scanners. It describes all the
 commands of Scankit Utility.
- Index

The *Index* at the end of this guide is included to help you find information quickly and easily.

To install your hand scanner and Scankit Utility, please see the separate installation manual included in your scanner package.

What You Need to Know

To fully operate Scankit Utility and to make your scanning both efficient and enjoyable, we assume you are already familiar with the basics of Microsoft Windows and that you know how to:

- · Click, double-click, press, and drag using the mouse
- · Use the scroll bars and move about on the screen
- · Choose from menus and dialog boxes
- · Access Program Manager and other application group window
- Find, open/load, copy, delete, close, print, and save files
- · Cut, copy, or paste to and from the Clipboard

If you feel you're not familiar with any of these operations, we recommend that you consult your *Microsoft Windows User's Guide* before using Scankit Utility. We also recommend that you check out your *scanner manual* or *scanner quick guide* to learn how to use and reset the scanner switches.

Tutorial

This section takes you through a guided tour of Scankit Utility. Ideally, you should read this section from beginning to end and not skip any part. You will find detailed step-by-step procedures on how to use your hand scanner with Scankit Utility. When you finish the lessons in this section, you will be able to effectively use your hand scanner. However, if you're already familiar with using a hand scanner and only want brief instructions about using the Scankit Utility commands, you can skip to the next section, *The Scankit Utility Menus*.

Before You Begin

Make sure you have successfully done the following before proceeding with this section:

- · Installed the scanner interface card inside your computer
- · Connected the hand scanner to the interface card's port
- · Installed Scankit Utility

If you have not yet done any of the above, please refer to the installation procedure as described in the installation manual included in your scanner package. In this section you will learn to do the following tasks:

- Scan a small image
- · Scan a large image using the Stitch command
- Scan a large image using either the Merge or AutoMerge command
- · Rotate the scanned image
- Select any part of the scanned image for cutting, copying or saving
- · . Save the scanned image

Getting Started



- 1. Start Windows by typing win.
- 2. Locate the Scankit Utility group window.
- Double-click the Scankit Utility icon to launch the program. This displays the Scankit Utility main screen as follows:



Figure 2-1. The Scankit Utility Main Screen

In the Scankit Utility menu bar are seven menus, namely, *File*, *Edit, Scan, Transfer, View, Merge*, and *Help*. The following pages contain step-by-step instructions on how to use some of these menus. For additional information about all the commands found under these menus, please also see the section, *The Scankit Utility Menus*.

Scanning an Image

It is in the Scan menu where you perform the scanning operation. The Scan menu contains two commands, Acquire and Select. Choosing Acquire opens a dialog box that allows you to setup your scanner, specify the scanning parameters such as scan width and scan height, and execute the scan command. Choosing Select opens a dialog box that shows a list of currently available scanners you can use with Scankit Utility. If there's only one scanner in the list, it is automatically selected.

For this lesson, get a clear color photo to use as a sample. Lay the photo flat on an even surface and place your hand scanner beside it. Use the following steps to scan the sample photo:

1. Click Scan and choose Select in the Scankit Utility menu bar.

This opens the Select Source dialog box as shown in Figure 2-2. The Select Source dialog box lists the available scanners. If you only have one scanner installed, it is automatically selected.

Select Sour	'ce
Sources:	
Mustek Hand Scanner	
Hand Scanner	
	Select
	Cancel



Choose the scanner you're using and click Select to confirm your choice.

This closes the Select Source dialog box.

 Now choose Scan Acquire to display the Scanner Setup dialog box (Figure 2-3).

Scanning an Image

Scanner Type: Color Scanner	Halftone
Resolution : ? dpi	O Dither/Text
Scan Width : 💌 💓	O H/T to Gray
105 mm 4.1 inch	Gray
Scan Height : 💌 📑	○ 256 Gray
51 mm 2.0 inch	O Dither/Text
Required Space : 0 Kbytes	Color
Free Disk Space : 22804 Kbytes	⊖ SCG
	O CG
Cell Size : 16 * 16	O SMG
Scale: 1/16 💌 💌	O MG Color Dither
	O Mono Dither/
	Text

Figure 2-3. The Scanner Setup Dialog Box

 Take your hand scanner and adjust the scanner switches for scan mode and resolution.

The scan mode determines how the scanner will read the image (e.g., text, dither, gray-scale, or color). Take note that the available scan modes differ from one scanner type to another.

The resolution sets the dpi (dots per inch) the scanner will use for reading the image.

If you are not sure how to use the scanner switches, please consult your scanner manual.

Match the settings in the Scanner Setup dialog box to your scanner switch settings.

On the right side of the Scanner Setup dialog box are three groups of options: *Halftone*, *Gray*, and *Color*. The available options depend on the type of scanner you're using: *Halftone* for halftone scanners, *Gray* for gray-scale scanners, and *Color* for color scanners.

Click the option that matches your scanner's scan mode. Take note that this action will automatically display the current dpi setting of your scanner. If you wish to change the dpi, adjust your scanner's

2-4

dpi switch and then click Dpi Check.

If you change the scan mode of your scanner, you should also click the corresponding option in the dialog box.

6. Set the Scan Width and Height by using the scroll bars.

The size is shown in millimeters and inches. The values for **Required Space** and **Free Disk Space** allow you to adjust the scan area accordingly. It is important to note that if you're using a color scanner, setting the scan mode to SCG or CG, <u>and</u> the resolution to 500 ~ 800 dpi limits the Scan Width to two inches maximum.

The selections **Cell Size** and **Scale** are only available if you select the scan mode H/T to Gray. For more details about using this mode, please see *Halftone To Gray* in the *Scankit Utility Menus* section.

7. Click Scan to immediately execute the scan operation.

If you click **Cancel**, you invalidate the changes you have made to the Scanner Setup dialog box and you retain the previous settings.

- 8. Position the scanner over the image.
- 9. Press the scanner's Scan Button and start rolling the scanner over the image.

If you're using a color scanner, you may have to allow the scanner time to warm up before starting to scan.

Take note also that in scanning an image, some scanner models require that you press and release the Scan Button and other models require that you press and hold the Scan Button, while you roll the scanner over the image. Refer to your scanner manual for the correct scanning operation.

10. Roll the scanner over the image slowly and steadily.

To avoid data loss, refrain from moving the scanner too fast. Glance at your monitor display once in a while to make sure you're scanning straight and the image is not distorted.

11. Press any key to stop the scan operation.

It is likely that on your first try you may not be satisfied with the scan result. If you wish to rescan the image, simply choose Scan

Acquire to open the Scanner Setup dialog box. Then click Scan. We recommend that you practice scanning various types of images and selecting different scan modes and resolutions until you are quite comfortable in using your scanner. In Figure 2-4 is a sample of a scanned image.



Figure 2-4. A Sample Scanned Image

Scanning Large Images

There are times when you will want to scan an image that may well be wider than four inches. In this case, Scankit Utility allows you to scan the image using two or more passes and enables you to complete the image by using any of three easy Scankit commands, namely, *Stitch*, *Merge* and *AutoMerge*. The following procedures illustrates how to use these commands.

Using Stitch

The Stitch command is found under the Edit menu and can be used to piece together several scanned portions of a large image. You can also use this command to "stitch" two or more pictures to create a special kind of effect as shown in Figure 2-11. To use Stitch the steps are as

2-6

follows:

- 1. Get a picture wider (over four inches) than your scanner's width.
- 2. Scan the left side of the picture.
- 3. Open the Edit menu and select Stitch From Scan.

This opens the Scanner Setup dialog box. If you select Stitch From File, the Load dialog box opens instead. Take note that the Stitch command is disabled if you don't have an image on the screen.

 Click Scan in the Scanner Setup dialog box and proceed to scan the right side of the picture.

Be sure to have enough overlapped region. The overlapped region is the area where the two scans are identical. If you're stitching two different pictures, it may not be necessary for you to have an overlapped region.

After you have scanned the image, the STITCH IMAGES screen opens with the two images displayed side by side (see example in Figure 2-5). The second image automatically becomes the active image with moving dashes around its borders and its transparency at 50%.



Figure 2-5. The STITCH IMAGES Screen



5. Align the two images by moving the active image.

To move the active image, place the mouse cursor over it. Press and hold the left mouse button. The mouse cursor changes to a *grabber* shaped like a hand. Drag the active image to align it with the other image.

Take note that releasing the mouse button changes the *grabber* back to mouse cursor.

If you wish to, you can further change the transparency of the active image or use zoom in so you can accurately align the two images.

6. Click Stitch when you have the two images aligned.

This exits the STITCH IMAGES screen and displays the two images as one complete image (Figure 2-6).



Figure 2-6. The Complete Image

When you stitch images, they should be of the same data type. For example, both images should be halftone or both images are grayscale. You cannot for instance, stitch a gray-scale image to a color image, or stitch a 24-bit color image to an 8-bit color image.

Using Merge

1. Choose Merge to display the Merge Screen:



Figure 2-7. The Merge Screen





The Merge Screen appears with a Left Merge window and a Right Merge window. The Merge Screen menu bar contains seven (7) selections, namely, *Load, Scan, Merge, AutoMerge, Rotate, Info*, and *Exit.* For this session, use a sample photo that is about six inches wide. Take note that we will first scan the left side of the photo and then scan the right side.

- Click Scan and follow the steps for setup and scanning an image. The left side of the image appears in the Left Merge window.
- Next, move the cursor inside the Right Merge window area and click the mouse to activate that window.
- 4. Again, click Scan and follow the steps for scanning an image.

Be sure to have enough overlapped region. The overlapped region is the area where the two scans are identical.

The right side of the image appears in the Right Merge window.

5. Align the left and right images by using the scroll bars.



Using AutoMerge

Click inside the Left Merge window to activate that window's scroll bars. Likewise, click inside the Right Merge window to activate that window's scroll bars.

Click Merge in the menu bar when you have the two images aligned.

This closes the Merge Screen and the complete image is displayed. If you want to merge images stored on disk, choose Load instead of Scan.

Take note that you cannot merge images that are of different data types. For example, you can merge two 24-bit color images but you can't merge a 24-bit color image with an 8-bit color image.

The AutoMerge command allows for an easier merging of two images. In AutoMerge, instead of using the scroll bars to align the two images, you place two markers, one on each overlapped region of the images. The markers act as the merge match point where the two images will be joined when you give the AutoMerge command.

To execute AutoMerge you should have two images in the Merge screen. Refer to Using Merge for details.

The steps for using AutoMerge are:

- Move the cursor inside the Left Merge Window and click the mouse to select the left image.
- 2. Click again inside the Left Merge Window to place a marker on the image.

The marker appears like a small box. To increase the size of the marker, click the left mouse button successively. To reduce the size of the marker, click the right mouse button successively.



2-10



To change the position of the marker, point the mouse cursor inside the box. Press and hold the left mouse button. The mouse cursor changes to a *pointer* shaped as a hand with the index finger extended. Drag the marker to the new position. It is important that you place the marker on an area in the overlapped region.

Take note that releasing the left mouse button changes the *pointer* back to mouse cursor.

- Next, move the cursor inside the Right Merge Window and click the mouse to select the right image.
- 4. Click again inside the Right Merge Window to place a marker on the image.

Make sure that the position of the right marker is identical to the position of the left marker (see illustration in Figure 2-8).



Figure 2-8. Markers Placed On Identical Areas

5. Choose AutoMerge when both markers are correctly positioned.

This opens the AutoMerge Setup dialog box (Figure 2-9). In the dialog box there are five (5) options for Error Tolerance: Low, Medium Low, Medium, Medium High, and High.

AutoMerge SetUp						
Error Tolerance						
O low						
O medium low						
medium						
🔿 medium high						
⊖ high						
]					
OK Cancel						



A Low Error Tolerance results to a stricter condition for automerging, which means that for the program to find a merge match point on the two images, the markers should be placed on an identical area as accurately as possible. This gives a better merge result.

6. Select the Error Tolerance in the AutoMerge Setup dialog box (the default is *Medium*) and click OK.

This closes the Merge screen and the complete image is displayed.

If the program fails to find a merge match point you will get the following message:

Cannot find any merge match point!

You must reposition the markers until the program finds a merge match point and displays the complete image.

If you're not satisfied with the merge result, you can go back to the Merge screen by clicking **Merge** in the menu bar.

Rotating the Image

The Rotate command is found in both the Transfer and the Merge menus. When the Rotate command is selected, a dialog box opens (Figure 2-10) to let you enter the degree of rotation for the image.



Figure 2-10. The Rotate Dialog Box

You can rotate the image in increments of 1 degree from -180 degrees to +180 degrees. In the Merge menu, the Rotate command is especially useful for aligning images prior to merging. You also can use Rotate together with Stitch to create a variety of effects as shown in the example below.



Figure 2-11. Sample Produced By Using Rotate And Stitch

Selecting a Part of the Image

You can easily select any part of the scanned image for cutting, copying, or pasting. In some instances you also may not wish to save the entire scanned image. For example, a 24-bit color image scanned at high resolution can easily take a large chunk of your hard disk space. It is more practical to simply save that part of the scanned image you will be using.

To select a part of the image, the steps are:

- 1. Position your mouse cursor at the upper left edge of the part you want.
- 2. Drag the mouse and a box appears (Figure 2-12).



Figure 2-12. Selecting a Part of the Image

Continue dragging the mouse until the box encloses the part you want and then release the mouse button. If you don't draw the box right, click the mouse button. The box disappears and you can try again.

Tutorial

When you have the part you want inside the box, you can use the commands in the Edit menu or you can save the selected part using the File **Save As** command.

Saving the Scanned Image

The command to save the image is found under the File Menu. Scankit supports several popular file formats used by many Windows application programs. You can save the entire scanned image or save only a specified portion. The steps for saving are:

Directory : C:\SC/	ANW	
baby.tif bird.tif [] [-a-] [-b-] [-c-] [-d-] [-d-] [-f-]	Format TIFF BMP PCX MSP IMG CUT	Bit Mode 1-bit 4-bit 8-bit 16-bit 24-bit 24-bit Save Partia

1. Click Save as to display the Save As dialog box:

Figure 2-13. The Save As Dialog Box

- 2. Select the file format and bit mode you want to use.
- Click the option Save Partial if you only want to save a selected part of the scanned image.

Tutorial

To select a part see, Selecting a Part of the Image found in this section. The Save Partial option is disabled if no part is selected.

4. Select the directory or disk you want to save the file to.

Use the scroll bar to move through the list.

5. Type the name for your image in the filename box.

If you want to save the image file in another subdirectory you also must include the DOS pathname.

6. Click Save to save the image and close the dialog box.

Take note that saving the image under an existing filename will overwrite that file.

This concludes the *Tutorial* section. Please see the next section to learn how to use the other menus and commands of Scankit Utility.

Scankit Utility Menus

Scankit Utility has seven menus, namely, File, Edit, Scan, Transfer, View, Merge, and Help. This section serves as a quick reference to all the commands found under these menus. It is especially useful for experienced hand scanner users who only want to select needed information. If you are a beginner to hand scanning or you want more detailed information about using Scankit Utility, we suggest that you see first the previous section, *Tutorial*.

Before starting, you should have successfully installed your hand scanner and Scankit Utility as described in the installation manual included in your scanner package. If you have not yet done this, please do so before proceeding with this section.

The File Menu

The File menu contains commands that enable you to open and save files, establish a new workspace, and to resize and print scanned images. It also includes the Image Info command that gives information about the image that is currently displayed and the Exit command for quitting the program.

To Load an Image File

- 1. Click Load to display the Load dialog box (Figure 3-1).
- 2. Select the image file format that you need.

A List Box shows a list of files in the current directory having the file format you have selected. Use the scroll bar to move through the files. If the file you want is not in the current directory, select [..], another directory, or disk drive.

3. Choose the file that you wish to load from the List Box.

ile
Load
Close
Save as
<u>Image Info</u>
Printer Setup
Print Size
Print
Exit



Figure 3-1. The Load Dialog Box

4. Click Load to load the file and close the dialog box.

You may also double-click the file in the List Box to immediately execute Load. Another way of loading the image is by typing in the Filename box, the DOS pathname and full name of the file, and then clicking Load.



Click Info to get the height, width, total bytes used, resolution, etc. of the selected image.

The Close Command

The Close command closes the currently displayed image without exiting the Scankit Utility program. Take note that you should save important images before executing Close since this command will automatically erase the image from memory.

3 Scankit Utility Menus



To Save an Image

1. Click Save as to display the Save As dialog box:

Filename : *.tif		
Directory : C:\S	CANW	
baby.tif	Format	Bit Mode
bird.tif	TIFF	O 1-bit
[]	OBMP	O 4-bit
[-a-]		O 8-bit
[-D-] [-a-]	O MSP	O 16-bit
[-c-] [-d-]	OIMG	● 24-bit
[-e-]	OCUT	
[-f-]		🗌 Save Pa



- 2. Select the file format and bit mode you want to use.
- Click the option Save Partial if you only want to save a selected part of the scanned image.

To select a part see, *Selecting a Part of the Image* found in the *Tutorial* section. The Save Partial option is disabled if no part of the image is selected.

4. Select the directory or disk you want to save the file to.

Use the scroll bar to move through the list.

5. Type the name for your image in the filename box.

If you want to save the image file in another subdirectory you also must include the DOS pathname.

	Eile
I	<u>L</u> oad
l	<u>C</u> lose
	Save as
	<u>I</u> mage Info
	Printer Setup
	Print Size
	Print .
	E≚it

6. Click Save to save the image and close the dialog box.



Saving the image under an existing filename will overwrite that file.

The Image Info Command

The Image Info command gives information about the image that is currently displayed (see example below).

File Name	:	cent.t	tif		
Image Data Typ	e:	24-bit	t True Colo	r	
Image Width	:	178	Pixels [1.8	Inches]
Image Height	:	212	Pixels [2.1	Inches]
Resolution	:	100	d	pi	
Image Size	:	36	K	Byte	S
Compression	:	No			

Figure 3-3. The Image Information Dialog Box

The Printer Setup Command

Choosing File Printer Setup displays the Windows Printer Setup dialog box. For details on how to use the options in this dialog box, please consult your *Microsoft Windows User's Guide*.

<u>F</u> ile
<u>L</u> oad
<u>C</u> lose
Save as
<u>I</u> mage Info
Printer Setup
Print Size
Print
E≚it

3 Scankit Utility Menuš

The Print Size Command

You can easily scale the image before printing by using the File Print Size command. To change the image size the steps are:

1. Choose File Print Size.

This displays the Print Size dialog box:

	Print Size		
Width Scale :	•	Ð	1
Height Scale :		*	1
OK		Cancel	



2. Scale the image by using the scroll bars.

You can set the width and height scales from $\frac{1}{8}$ to 8.

3. Click OK.

The Print Command

Before printing, make sure that you have configured Windows for your printer. Refer to your Microsoft Windows manual for details. Choosing File **Print** immediately executes the Print command.

The Exit Command

The Exit command is for quitting Scankit Utility. Be sure to save important images before executing Exit.

Eile Load... Close Save as... Image Info Printer Setup... Print Size... Print Exit

The Edit Menu

<u>E</u> dit	
<u>U</u> ndo	ļ
Cut	1
С <u>о</u> ру	
<u>P</u> aste	Į
Clear	1
Сору <u>Т</u> о	
Paste <u>F</u> rom	
Clip <u>B</u> oard	
Stitch From	

The Edit menu contains commands for cutting or copying any selected part of the scanned image onto the Clipboard thus, enabling you to paste and use the selected part in another Windows program.

To specify an area on the scanned image as the selected part, simply drag the mouse cursor over the area. A box appears. Continue dragging the mouse until you enclose the part you want. If you want to remove the box, click the mouse. For detailed instructions, please see *Selecting a Part of the Image* in the *Tutorial* section.

The Edit menu also includes a special stitch command. You can use Stitch to connect scans of different pictures or several scans of a large picture to complete the image. Stitch also works for previously saved images.

The Edit Commands

Undo Undoes the most recent editing action.

Cut Removes the selected part of the image and places it on the Clipboard, erasing the previous Clipboard contents. This command is unavailable if no part of the image is selected.

Copy Copies the selected part and places it on the Clipboard, erasing the previous Clipboard contents. This command is unavailable if no part of the image is selected.

Paste Places a copy of the Clipboard contents on the selected part. This command is unavailable if the Clipboard is empty.

Clear Erases the selected part.

Copy To... Saves the selected part in a file. This command opens a dialog box.

Paste From... Retrieves a file and places it on the selected part. This command opens a dialog box.

Clipboard Displays the contents of the Clipboard.

Stitch From To stitch images captured by a scanner or previously saved.

The Stitch From Command

Edit Undo Cut Copy Paste Clear Copy To... Paste From... ClipBoard Stitch From File Scan The Stitch From command is found in the Edit Menu. With Stitch you can use your hand scanner to scan a large picture in several scans and complete the image by connecting two scanned portions at a time. In addition, you can use Stitch to put together several scans of different pictures to create special designs or effects. The Stitch From command also works for previously saved images.

When you have loaded or scanned two images for stitching, the STITCH IMAGES screen opens to display two images side by side with one image as the active image. To help you align and connect the two images, use the commands found in the menu bar of the STITCH IMAGES screen.

The Stitch Images Screen Commands

Stitch When you have aligned the two images, selecting Stitch will immediately connect the images to form one complete image.

Zoom in Magnifies the screen image one step at a time. This helps you to accurately align the two images.

Zoom out Shrinks the screen image one step at a time.

Transparency Helps you to align the two images by making the active image transparent. When selected, it opens the Stitch Image Control dialog box where you can set the transparency of the active image from 0% to 100%. At 0% transparency, the active image is most opaque. At 100% transparency, the active image is completely invisible.

Cancel Exits the STITCH IMAGES screen and at the same time deletes the active image.

Using Edit Stitch From

1. Scan the picture.

As mentioned earlier, you can scan a large picture using two or more scans and use Stitch to complete the image. Or you can scan different smaller pictures and use Stitch to create a special design. If you want detailed scanning instructions, please see Scanning an Image in the Tutorial section.

2. Open the Edit menu and select Stitch From Scan.

This opens the Scanner Setup dialog box. If you select Stitch From File, the Load dialog box opens instead. Take note that the Stitch command is disabled if you don't have an image on the screen.

3. Click Scan in the Scanner Setup dialog box and proceed to scan.

If you're stitching two separate scans of the same image, be sure to have enough overlapped region. The overlapped region is the area where the two scans are identical.

If you're stitching two different images, an overlapped region may not be necessary.

After you have scanned the image, the STITCH IMAGES screen opens with the two images displayed side by side.

The second image automatically becomes the active image with moving dashes around its borders.

4. Align the two images by moving the active image

To move the active image, place the mouse cursor over it. Press and hold the left mouse button. The mouse cursor changes to a *grabber* shaped like a hand. Drag the active image to align it with the other image.

Take note that releasing the mouse button changes the *grabber* back to mouse cursor.

5. Click Stitch when you have the two images aligned.

This exits the STITCH IMAGES screen and displays the two images as one complete image. If you're stitching several scans, you can continue stitching by simply choosing Edit Stitch From again. Take note that you cannot stitch images that are of different data types.

3-8

The Scan Menu

The Scan menu contains commands that enable you to capture images using a scanner. The available commands under the Scan menu are **Acquire**, where you set the scanning parameters (i.e., scan mode, scanning resolution, scan area, etc.) and actually perform the scanning operation; and **Select**, where you choose the scanner type. **Acquire** and **Select** are found in all TWAIN-compliant software.

To Execute Select

- 1. Choose File Select to display the Select Source dialog box.
- Choose the scanner you're using and click Select to confirm your choice.

This closes the dialog box. Take note that you need not open the Select Source dialog box if you only have one hand scanner installed since it is automatically selected.

To Execute Acquire

1. Click Acquire to display the Scanner Setup dialog box:

Scanner Setup	
Scanner Type : Color Scanner Resolution : ? dpi Scan Width : 105 mm 4.1 inch Scan Height : 51 mm 2.0 inch	Halftone Dither/Text H/T to Gray Gray 256 Gray Dither/Text
Required Space : 0 Kbytes Free Disk Space : 22804 Kbytes Cell Size : 16 * 16 * * Scale : 1 / 16 *	Color SEG CG SMG MG Color Dither Mono Dither/ Text
Scan	Dpi. Check

Figure 3-5. The Scanner Setup Dialog Box



<u>S</u>can <u>A</u>cquire... Select...

<u>S</u> can
Acquire
<u>S</u> elect

2. Take your hand scanner and adjust the scanner switches for scan mode and resolution.

If you're not sure how to use the scanner switches, please consult your scanner manual.

Match the settings in the Scanner Setup dialog box to your scanner switch settings.

On the right side of the dialog box are three groups of scan mode options: *Halftone, Gray,* and *Color.* Some options are disabled depending on the type of scanner you're using. Click the option that corresponds to your scanner's scan mode setting.

Take note that clicking a scan mode option automatically displays the current dpi setting of the scanner. If you want to change the dpi, adjust your scanner's dpi switch and then click **Dpi Check**.

If you wish to change the scan mode setting, first adjust the appropriate switch on the scanner and then in the Scanner Setup dialog box, click the new scan mode. Always make sure the settings in the dialog box match the scanner settings.

4. Set the Scan Width and Height by using the scroll bars.

The size is shown in millimeters and inches. The values for **Required Space** and **Free Disk Space** allow you to adjust the scan area accordingly. Take note that if you're using a color scanner, setting the scan mode to SCG or CG, <u>and</u> the resolution to $500 \sim$ 800 dpi limits the Scan Width to two inches maximum.

The selections **Cell Size** and **Scale** are only available if you select the scan mode H/T to Gray. For more details about using this mode, please see the *Halftone To Gray* command.

5. Click Scan to immediately execute the scan operation.

If you click **Cancel**, you invalidate the changes you have made to the Scanner Setup dialog box and you retain the previous settings.

Scanning the Image

When you execute the Scan command in the Scanner Setup dialog box, use the following steps to perform the scan operation.

- 1. Position the scanner over the image.
- Press the scanner's Scan Button and start rolling the scanner over the image.

If you're using a color scanner, you may have to allow the scanner time to warm up before starting to scan.

Take note also that in scanning an image, some scanner models require that you press and release the Scan Button and other models require that you press and hold the Scan Button, while you roll the scanner over the image. Refer to your scanner manual for the correct scanning operation.

3. Roll the scanner over the image slowly and steadily.

To avoid data loss, refrain from moving the scanner too fast. Glance at your monitor display once in a while to make sure you're scanning straight and the image is not distorted.

4. Press any key to stop the scan operation.

The Transfer Menu

Iransfer HalfTone to <u>Gray...</u> Gray to <u>H</u>alfTone... Color <u>O</u>ptimization Rotate ... The Transfer menu includes commands that enable you to transfer the image data type from halftone to gray or from gray to halftone, optimize the colors in the image, and rotate the entire image clockwise or counter-clockwise. The Transfer Halftone to Gray works the same way as the scan mode H/T to Gray in the Scanner Setup dialog box. Take note that converting an image permanently changes the image data format and you will not be able to revert it to its original format.

Halftone To Gray

The Transfer Halftone to Gray command is also available in the Scanner Setup dialog box. This command is especially useful if you're using a halftone scanner since you can still generate a gray-scale image from a halftone image. When selected, the Halftone to Gray

	Halfton	ie to Gray	
Scale :	*	+	1 /4
Cell :	+	+	8 × 8
[OK	Cancel	

command displays a dialog box (Figure 3-6) where you have to set the values for Cell and Scale.

Figure 3-6. The Halftone to Gray Dialog Box

The values you set for Cell and Scale determines the quality of the resultant gray-scale image. Cell sets the number of gray-scale levels of the resultant image. A 2x2 cell means 4 gray-scale levels, a 3x3 cell means 9 gray-scale levels and so forth. The higher the value you set for Cell, the better the resultant gray-scale image.

Scale, on the other hand, pertains to the overall size of the screen image. An image with a cell size of 2x2 can be scaled to $\frac{1}{1}$ or $\frac{1}{2}$. An image with a cell size of 3x3 can be scaled to $\frac{1}{1}$, $\frac{1}{2}$, or $\frac{1}{3}$, and so forth. Scaling down the image makes it look sharper but reduces the size of the resultant image. If you're using a halftone scanner, we recommend that you experiment and try out different combinations for Cell and Scale so you can acquaint yourself with this important feature.

Gray To Halftone

Choosing Gray to Halftone converts the gray-scale image to halftone. Take note that converting an image changes the image's data format and you can no longer revert it to its original data format.

Color Optimization

The **Color Optimization** command when invoked, converts a 24-bit color image to an 8-bit color image by selectively getting only the most used colors of the original image. This process enhances the appearance of the resultant image.

Rotate

The Rotate command is found in both the Transfer and the Merge menus. When the Rotate command is selected, a dialog box opens to let you enter the degree of rotation for the image. You can rotate the image in increments of 1 degree from -180 degrees to +180 degrees. For additional information about Rotate, please see *Rotating an Image* in the *Tutorial* section.

The View Menu

⊻iew	
Zoom <u>O</u> ut	►
Zoom <u>I</u> n	►
Actual Size	

The View menu enables you to view the scanned image in several sizes. By using Zoom Out or Zoom In, you can easily magnify or shrink the image.

Zoom Out

Click Zoom Out to shrink the image up to $\frac{1}{2}$ the size of the original.

Zoom In

Click Zoom In to magnify the image up to eight times the size of the original. Use the scroll bars to move a large image around your screen.

Actual Size

In Actual Size the image is displayed at its original screen size. When Zoom Out or Zoom In is selected, choose View Actual Size to return the image to its original size.

The Merge Menu

Merge is where you join two separate scans to form one complete image. This enables you to scan images wider than the scanner's width. There are two commands for merging images - Merge and AutoMerge.

To Execute Merge

1. Choose Merge to display the Merge Screen:



Figure 3-7. The Merge Screen

The Merge Screen appears with a Left Merge window (active) and a Right Merge window. The Merge Screen menu bar contains seven (7) selections, namely, *Load*, *Scan*, *Merge*, *AutoMerge*, *Rotate*, *Info*, and *Exit*.

2. Click Scan and follow the steps for setup and scanning an image.

The left side of the image appears in the Left Merge window.

Next, click inside the Right Merge window area to activate this window.

4. Again, click Scan and follow the steps for scanning an image.

When scanning the right side of the image, be sure to have enough overlapped region. The overlapped region is the area where the two scans are identical.

The right side of the image appears in the Right Merge window.

5. Align the left and right images by using the scroll bars.

Click inside the Left Merge window to activate that window's

Scankit Utility Menus

scroll bars. Likewise, click inside the Right Merge window to activate that window's scroll bars.

6. Click Merge when you have the two images aligned.

This closes the Merge Screen and the complete image is displayed. If you want to merge images stored on disk, click Load instead of Scan.



You cannot merge images that are of different image data types. For example, you can merge two 24-bit color images but you can't merge a 24-bit color image with an 8-bit color image.

To Execute AutoMerge

In the Merge Screen if you don't want to use the scroll bars to align the images, you can place a marker, one on each image, to act as a merge match point. The merge match point is where the two images will be joined when you choose the AutoMerge command. For additional information about AutoMerge, please see Using AutoMerge in the Tutorial section.

To execute AutoMerge, the steps are as follows:

1. Scan the two sides of the image using the Merge Screen.

Refer to To Execute Merge for details.

- 2. Select the left image by clicking inside the Left Merge window.
- 3. Click again to place a marker on the image.

The marker appears like a small box. To increase the size of the box, click the left mouse button successively. To reduce the size of the box, click the right mouse button successively.

To change the position of the marker, point the mouse cursor inside the box. Press and hold the left mouse button. The mouse cursor changes to a *pointer* shaped as a hand with the index finger extended. Drag the marker to the new position. Be sure to place the marker on an area in the overlapped region. Releasing the mouse button changes the *pointer* back to mouse cursor.

- Next, select the right image by clicking inside the Right Merge window.
- 5. Click again to place a marker on the image.

If you have moved the left marker, be sure that you also move the right marker to the area identical to where the left marker is located.

6. Choose AutoMerge when both markers are correctly positioned.

This opens the AutoMerge Setup dialog box with five (5) options for Error Tolerance: *Low, Medium Low, Medium, Medium High*, and *High*. The default setting is Medium. The Error Tolerance determines the degree to which the program will search for a match point using the markers you placed on the images.

7. Select the Error Tolerance and click OK.

This closes the Merge screen and the complete image is displayed. If you're not satisfied with the merge result, you can go back to the Merge screen by clicking **Merge** in the menu bar.

If the program fails to find a merge match point, the program will display a message and you must reposition the markers.

The Help Menu



Scankit Utility has an on-line Help which is readily accessible. Help contains information about using the menus and commands of Scankit Utility. Use Help any time you need information on how to use a particular menu or command.

Index

A

Acquire 2-3, 3-9 active image 2-7, 3-8 Actual Size 3-13

В

bit mode 3-3

С

close 3-2 Color Optimization 3-12

D

data type 2-8, 2-10, 3-15

Ε

Edit Commands 3-6 Edit menu 3-6 error tolerance 2-11, 3-16 Exit command 3-5

F

file format 3-1, 3-3 File menu 3-1

G

getting started 2-2 Gray to Halftone 3-12 guide 1-2

Н

H/T to Gray 3-10 cell size 2-5, 3-10 scale 2-5, 3-10, 3-12 Halftone to Gray 3-11 Help menu 3-16

I

image Info 3-4 installation hand scanner 2-1 Scankit Utility 2-1 installation manual 1-3, 2-1

L

loading an image file 3-1 Info 3-2

Μ

merge match point 2-12 Merge menu 3-13 AutoMerge 3-13, 3-15 Merge 3-13

0

overlapped region 2-9, 2-11, 3-8

Ρ

Print command 3-5 Print Size 3-5 Printer Setup 3-4

1-1

R

resolution 2-4, 3-10 dpi 2-4 rotate 2-13, 3-13

S

saving 2-15, 3-3 partial image 2-15, 3-3 scanned image 2-15 Scan Button 2-5, 3-11 Scan menu 3-9 scan mode 2-4, 3-10 color 2-4 CG 2-5 SCG 2-5 gray 2-4 halftone 2-4 Scankit Utility icon 2-2 main screen 2-2 Merge Screen 2-9 STITCH IMAGES screen 2-8, 3-7 scanned image selecting a part 2-14, 3-6 scanner interface card 2-1 scanning 2-3 an image 3-11 commands 2-3 large image 2-6 using AutoMerge 2-10, 2-12 using Merge 2-9, 2-10

using Stitch 2-6, 2-8 Select 2-3, 3-9 Stitch 2-13, 3-7 Stitch From Command 3-7 Stitch Images Screen 2-7 commands 3-7 system requirements computer memory 1-2 hard disk space 1-2 minimum 1-2

Т

Transfer menu 3-11 transparency 2-7, 3-7 TWAIN compliancy 1-1

U

Using Edit Stitch From 3-7

۷

View menu 3-13

W

warm-up time 2-5, 3-11

Ζ

zoom in 3-7, 3-13 zoom out 3-7, 3-13