| GESTEK Lab. | FCC ID: MLDFS-12UU2F | Report #: 988023F |

NO ., Pau-Tou-Tsuo Valley, Chia-Pau Tsuen, Lin Kou Hsiang, Taipei County, Taiwan, R.O.C. Tel:886-2-603-5321 Fax:886-2-603-5325

Appendix D

User Manual

Scanner User's Manual

Welcome

Congratulations on your new color scanner! We've designed this scanner to be easy to install, fast-working, flexible and stylish, but at the same time provide you with all the powerful scanning capabilities you need. You'll soon bring polish and crispness to all of your reports, letters, presentations and e-mails with your new color flatbed scanner, and save yourself valuable space on the desktop. With 36 dazzling bits of color and high resolution, your scanner delivers nothing but brilliance and clarity. There's no limit to what you can scan, from faxes and magazine articles to black & white or color photos.

Chapter 1:

Installing the Scanner and Software

This chapter gives you step-by-step instructions on setting up your scanner and installing the included software suite, ScanOffix ™ Pro. Before going on with the installation, be sure to familiarize yourself with the safety precautions in Appendix A of this guide. To install your scanner and software, you will need to:

- Connect the scanner to your computer.

- Install the TWAIN driver and the application software (ScanOffix ™ Pro), ScanOffix ™ Pro is found on the CD-ROM, and the TWAIN driver is included on the floppy disk that came with your scanner.

WHAT YOU NEED

To use the scanner and the included software, you must have the following:

- IBM PC 486 compatible or higher with standard USB port.

- Windows 98, Windows NT

- CD-ROM player

- 16 megabytes (MB) of internal memory (RAM) for the scanner software.

- 130 MB of free hard-disk space for the ScanOffix ™ Pro image-processing software package.

- High (16-bit) or true (24-bit) color for included software.

- A mouse or other pointing device.

- A floppy disk drive.

- Optional: A laser, ink-jet, or dye-sublimation color printer.

! Note: The software included with this scanner works only in true color (24-bit) or high color (16-bit) modes. To use this software make sure your computer supports these modes by opening up the Display control panels, clicking on the settings tab, and changing your color mode in true color palette to 16 or 24-bit color.

UNPACKING THE BOX

Before you begin setting up your scanner, carefully inspect the contents of the box and compare what you find against the figures below to make sure that all parts were included. If anything is missing, please contact your supplier.

THE SCANNER

The scanner hardware consists of two items:

Scanner

Power adapter
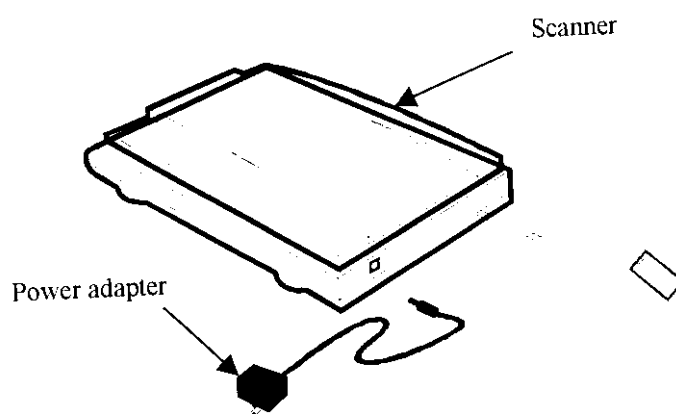
THE SOFTWARE AND THE USER'S GUIDES
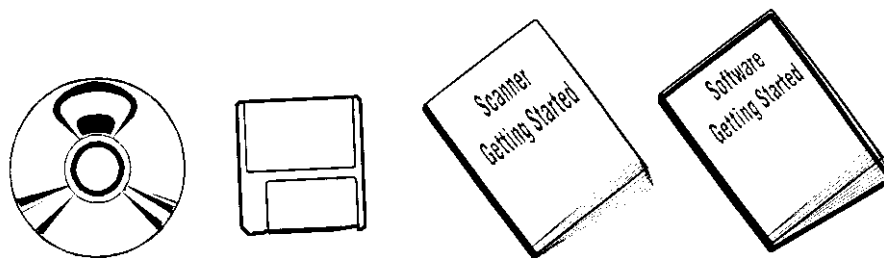
The CD-ROM that came with your scanner contains many things: the TWAIN driver (the program that runs your scanner); the ScanOffix ™ Pro

software suite, for processing and manipulating the images and texts that you scan; and a full version user's manual for ScanOffix ™ Pro, as well as this full version user's manual for the scanner.

For those who only want a quick introduction to the scanner and ScanOffix ™ Pro, we've also provided condensed (printed) versions of the user's manuals, called "Scanner Getting Started" and "ScanOffix ™ Pro Getting Started."

INSTALLING THE SCANNER

The scanner connects the USB port on your computer. If you do not have the USB port your PC is not compatible with the SlimTak 12U scanner (an EPP / USB adapter is available separately).

To connect the scanner to your computer, do the following:

1. Plug the scanner serial cable into an available USB port on your computer (it is not necessary to turn off the power to your computer).
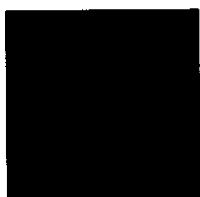
2. Plug the scanner's power adapter into an AC (wall) outlet.

3. Plug the power cable into the power jack on the back of the scanner.

INSTALLING THE TWAIN DRIVER & SCANOFFIX PRO™

The scanner driver, which is TWAIN-compatible, is the software program that controls the scanner itself. ScanOffix ™ Pro is a suite of application programs for processing and manipulating further the images that you've already scanned. Both need to be installed onto your computer's hard disk before you can begin scanning.

To install the TWAIN driver and ScanOffix ™ Pro, do the following:

1. Start up Microsoft Windows.

2. Insert the CD-ROM that came with your scanner into your CD-ROM drive. The installation screen appears automatically. Then follow the onscreen

instructions.

To install the TWAIN driver from the floppy disk:

1. Insert the TWAIN driver diskette into your floppy disk drive.

2. Click on the Windows **Start** button and choose **Run** from the list commands.

3. Type **A:\SETUP** or **B:\SETUP**, depending on which disk drive the diskette is in, and click **OK**.

4. When installation of the TWAIN driver is complete, click on **Finish**.

Now whenever you want to scan, just open ScanOffix Pro.

Chapter 2:

Scanning Items

Now that you've set up your scanner and installed all the software, you're ready to begin scanning. This chapter will explain how to scan and how to adjust your scanning in order to get the best possible image.

THE EASY TWAIN MODULE

Before you can start scanning you will need to tell your scanner some information about the document that you wish to scan: How big is it? How high do you want the quality to be? Is it color? Et cetera. There are two ways to scan—the quick way (prescanning) involves getting the basic image into the computer, and the other way involves more adjustment, but of course makes for a better image. We'll begin first by looking at the Easy TWAIN Module user interface (hereafter referred to as "TWAIN screen"), which is where you'll find possibilities for making very fine adjustments.

To access the TWAIN screen, do the following:

1. Start up Microsoft Windows.

2. Start ScanOffix Pro. You'll find ScanOffix Pro on the Windows Programs menu next to all your other programs.

3. Choose **Select Source** from the **File** menu.

4. Select **FS-12UU2F**

5. Click on **Select**

6. Choose the **New Scan** command from the **File** menu. Alternatively you could click on the Scanner icon on the far left of ScanOffix Pro's Command bar.

! Note: Steps 3-5 only need to be performed the very first time you scan or if you install another scanner driver onto your hard drive. After you select the source for the first time, every time you want to access the TWAIN screen you can simply go through steps 1,2 and 6.

The first thing you'll see is a message telling you to allow the scanner to warm up for at least thirty seconds. If you don't wait, the scan might be of poor quality. This only happens if the scanner needs warming up. After you click **OK**, you will be presented with the following screen, which looks like the cockpit of a racing car:

The following screen is displayed:
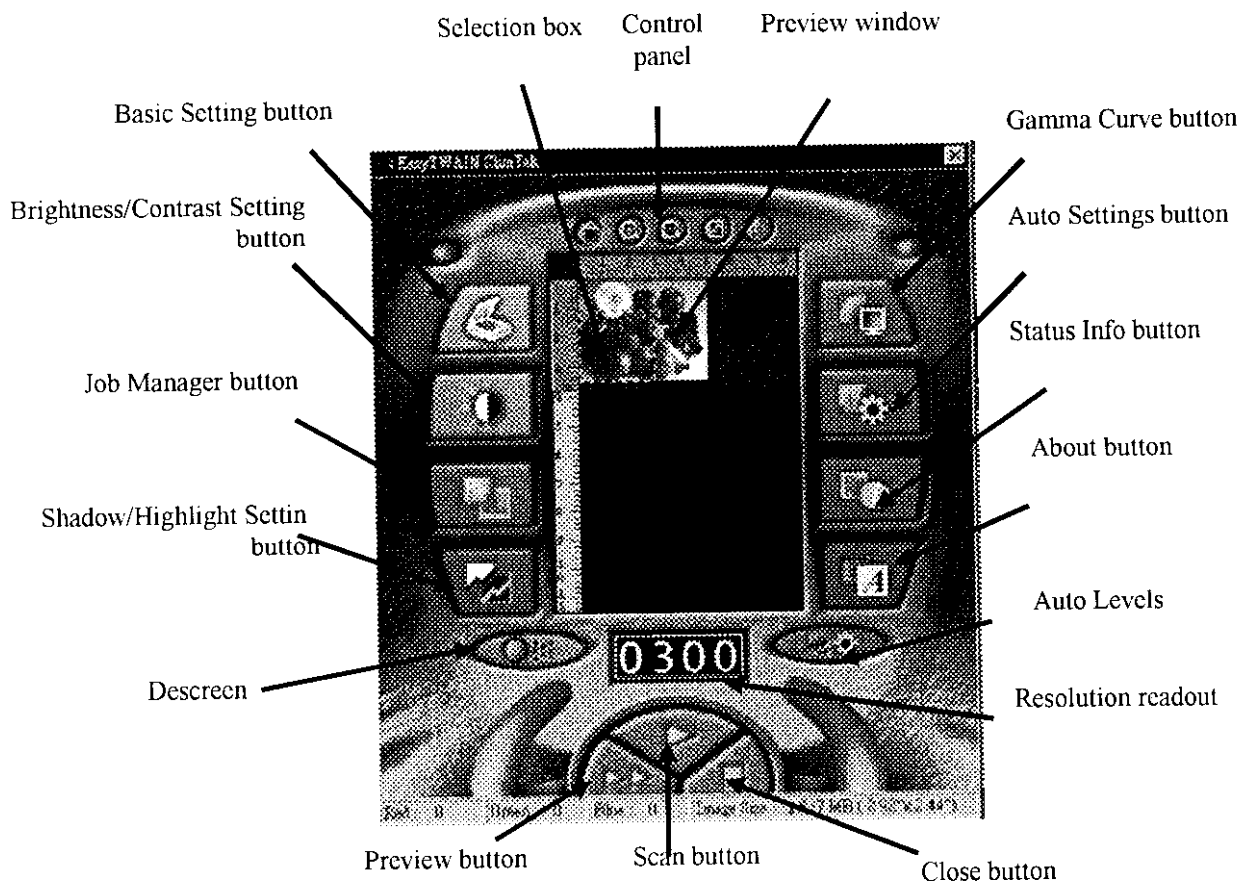
This is the Easy TWAIN Module user interface, or "TWAIN screen", and this is where you'll find all the commands you need for scanning.

The scanning process is made up of three steps. The first step is called prescanning. Prescanning is like making a "rough draft" scan. The second

step involves perfecting or altering the quality of the prescanned image. The third step is called final scanning, or simply scanning. We'll now take you through the first and third steps, prescanning and scanning, and later we'll see how to adjust settings in order to get the best possible image.

To scan, do the following:

1. Place a photograph onto the scanner's glass plate and center it around the zero mark at the front.
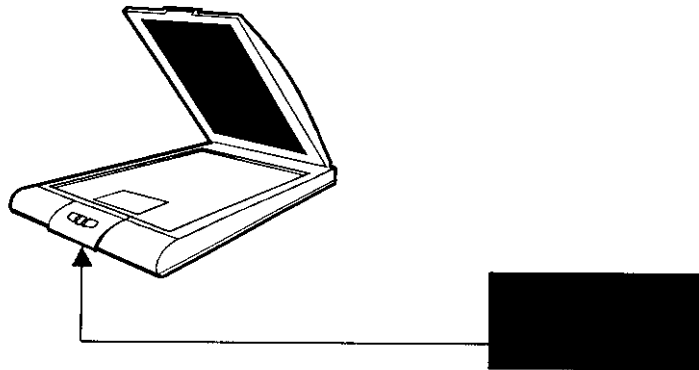
2. To prescan, click on the Preview button.

   Shortly after you click on the Preview button, an image of the item you've prescanned is displayed on the Preview window of the TWAIN screen. If you cannot see the entire image, it may be that you need to adjust the small blue tab on the left side of the Preview window. Moving this tab changes the size of the area to be prescanned or scanned. Slide the tab all the way to the bottom to scan the largest area possible.

   Notice the box in the Preview window made up of moving dotted lines. This is the Selection box; only those parts of the preview image which are within the Selection box will be captured during the final scan.

3. To change the size of the Selection box, click with the mouse on one side of the box, hold down the mouse button, and drag the side to the desired position. Or you can click and drag outside of the Selection box to create an entirely new Selection box.

4. To perform the final scan click on the Scan button.

   After the scanner performs the final scan, the TWAIN screen closes automatically, and your scanned image is placed onto the ScanOffix ™ Pro

desktop. Please refer to your ScanOffix ™ Pro User's Manual for information on how to process the scanned image further.

5. To perform a new scan, repeat steps 2 - 4.

! NOTE: Prescanning is always optional. If you feel you don't need to prescan, you can simply place your original on the scanner, adjust the Selection box and other settings if you wish, and click on the Scan button.

SCANNING TO GET THE BEST IMAGE

Since you will be scanning different kinds of documents and images, you should set the scanner according to the kind of original you're working with and the kind of image you would like to produce. In this section we will see how to set the image mode and resolution and how to alter the quality of the tones (colors and shades) of the scanned image. All the instructions that follow assume that you've already chosen the New Scan command from the ScanOffix ™ Pro File menu, and that you have the TWAIN screen in front of you.
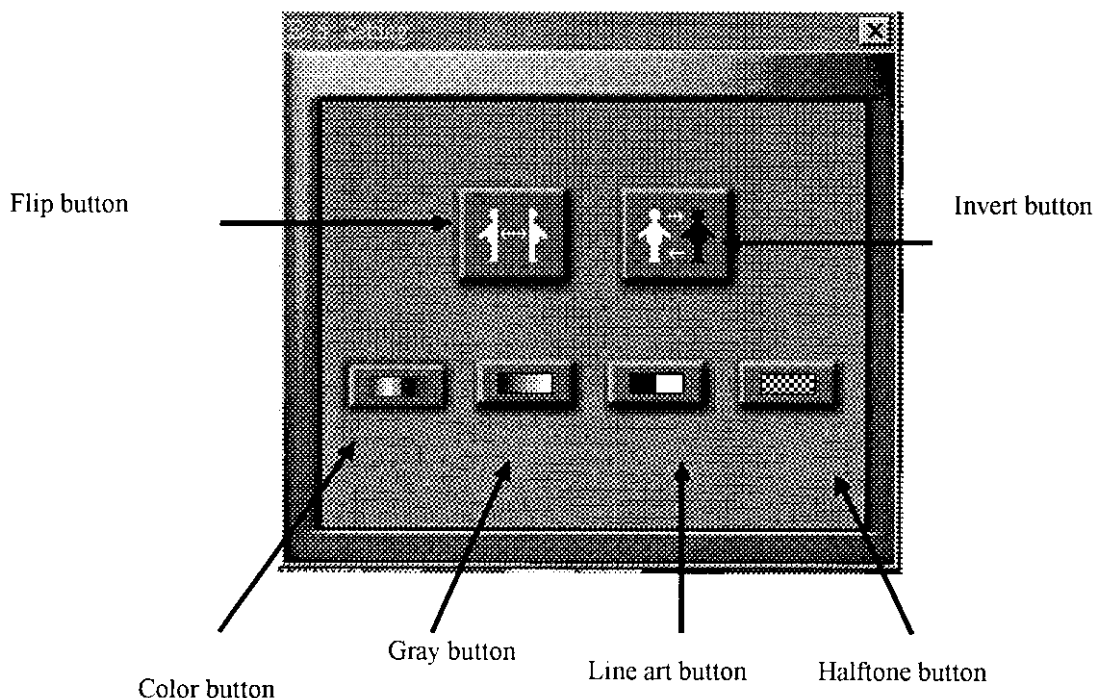
IMAGE RESOLUTION

When you scan, the result is an image that is made up of dots (also called pixels), like on a TV screen. Image resolution is measured in dots per inch (dpi). A resolution of 300 dpi means that the scanned image contains 300 pixels, or dots, for each inch of the original. The recommended resolution when scanning a photograph or a text document is 300 dpi. For a business card, however, you may need 400 dpi.

The Resolution readout is found on the TWAIN screen below the Preview window. At any time before scanning you may change the resolution by clicking on the digits with the mouse pointer. By clicking with the left mouse button you can increase the resolution, while the right mouse button decreases the resolution.

IMAGE MODE

The next thing to do is choose one of the four possible image modes, depending on what the item you're scanning is. Are you scanning a color photo? A fax? A business card? Something else?

1. Click on the Basic Setting button to see the Basic Setting screen.

Flip button   Invert button

Gray button
                              Line art button   Halftone button
Color button

2. Click on the image mode button that corresponds to the type of image you are scanning. You have four choices:

- Color - The Color button is only for scanning color images. By clicking on this button before you prescan or scan, you allow your scanner to reproduce the colors found in the original, and the scanner can reproduce over a trillion colors!

- Gray - The Gray Scale button uses 256 shades of gray to produce images like black & white photos.

- Line Art - The Line Art button is for producing images containing only pure black and pure white. Use this button when scanning text. If you use this

button for scanning a photograph, the scanned image will usually have a woodcut effect.

- Halftone -Clicking on the Halftone button mixes different patterns of black and white to give the appearance of shading, like in newspaper photographs.

3. If you wish, click on the Flip button to create a mirror-image of the item you are scanning, or click on the Invert button to invert the colors of the image (e.g. black becomes white, white becomes black, etc.).
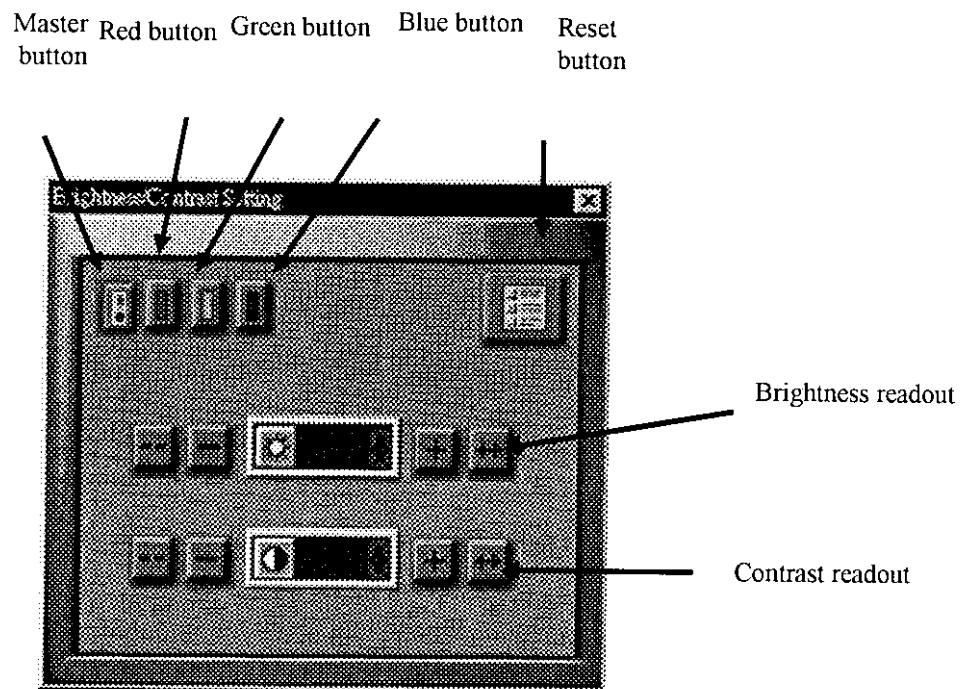
BRIGHTNESS AND CONTRAST

By adjusting the brightness of the image before you carry out the final scan, you can lighten or darken the image as a whole; by changing the contrast of the image, you can increase or decrease the difference between relatively dark and light portions of the image.

To change the brightness or contrast, do the following:

1. After prescanning, click on the Brightness/Contrast Setting button.

The Brightness/Contrast Setting screen is displayed.

Master Red button Green button Blue button Reset
button   button

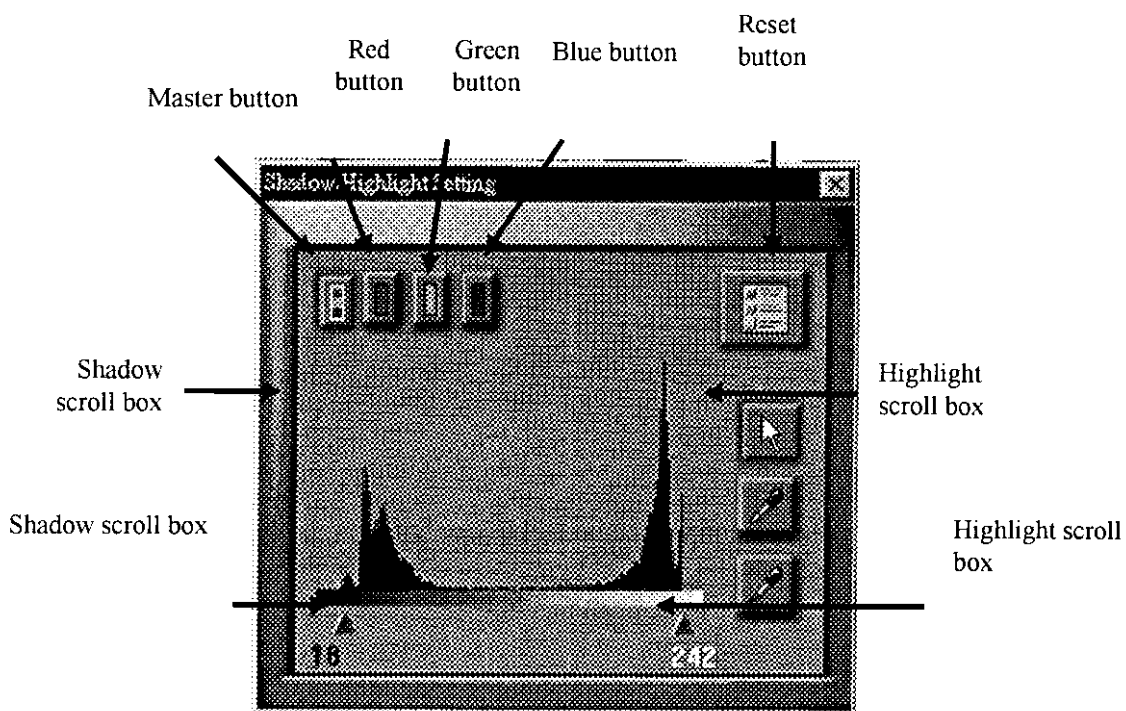
Brightness readout

Contrast readout

2. If you scanned a color image, select the color you wish to change by clicking on the appropriately colored button (click on the Red button to change red, click on the Blue button to change blue, etc.).

3. Click on the Plus (+) or Minus (-) buttons until you reach the desired value.

4. If you are working on a color image and wish to adjust a different color, do steps 2 - 3 again.

5. If you want to bring the brightness and contrast settings back to zero (no adjustment), click on the Reset button.

SHADOW AND HIGHLIGHT

Using the Shadow/Highlight Setting, it is possible to make changes to the image that will affect the brighter parts of the image without influencing the darker parts, or conversely, affect the darker parts of the image without influencing the brighter parts.

To change the shadow or highlight values of an image, do the following:

1. After prescanning, click on the Shadow/Highlight Setting button.

Master button | Red button | Green button | Blue button | Reset button

Shadow scroll box

Highlight scroll box

Shadow scroll box

Highlight scroll box

You will see a graph representing the intensity of the tones in the image. Below the graph is a scroll bar with one scroll box at each end. The box on the left is the Shadow scroll box; the one on the right is the Highlight scroll box.

2. To make the darker parts of the image even darker, drag the Shadow scroll box to the right. To make the lighter parts of the image even lighter, drag the Highlight scroll box to the left.

3. To return to the original value (no adjustment), click on the Reset button.

If you have scanned a color image, you may change the values for each color separately by using the appropriately colored buttons at the top of the screen.

THE DESCREEN BUTTON

The Descreen button, at the lower left hand corner of the Preview Window, moothes scans and prevents a screen-like effect without changing the resolution or increasing the image size.

To activate the Descreen button, click on it.

THE AUTO LEVELS BUTTON

The Auto Levels button is at the bottom right hand corner of the Preview Window. Clicking on the Auto Levels button changes the settings to the document to the default settings your scanner
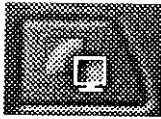
THE GAMMA CURVE

When you adjust the gamma curve, you make adjustments to the middle range of tones in the image, and the shadow and highlight remain relatively unaffected.

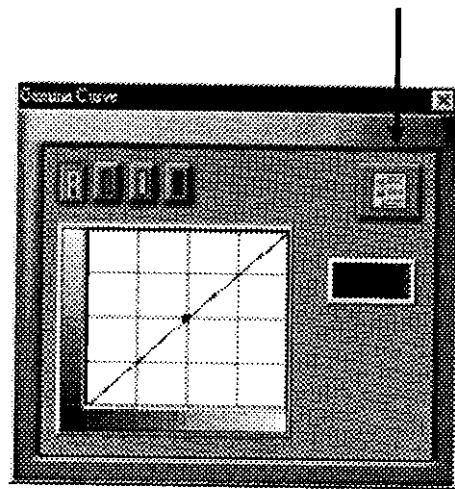! NOTE: The Gamma Curve button is an option only if you have chosen Color or Gray as your image mode.

To adjust the gamma curve, do the following:

1.   After prescanning, click on the Gamma Curve button on the TWAIN screen.

Reset button

A graphical mapping of the gamma curve is displayed.

2.   To adjust the gamma value, first click on the color for which you'd like to adjust the Gamma Value. You can adjust all the colors at once by clicking the multi-color button, or the individual colors by selecting their respective buttons.

3.   Then click on the black dot in the center of the diagonal line. As you drag this, you will see changes to your scanned document. When you are satisfied with the changes, close the window by clicking the box in the upper right hand corner.

THE AUTO SETTINGS

You can use the Auto Settings button to have the TWAIN screen decide for you which settings are best for the document you will scan. For example, if you are scanning a business card and click on the Business Card Setting, the image mode will automatically be set at Line Art (black & white) mode and the resolution will be set at 400 dpi.

To use the Auto Settings, do the following:

1. Before prescanning, click on the Auto Settings button on the TWAIN screen.

Color Photo Setti[ng button]

Gray [Photo] Settings button

Text Document S[etting button]

Busine[ss] Card Settings [button]
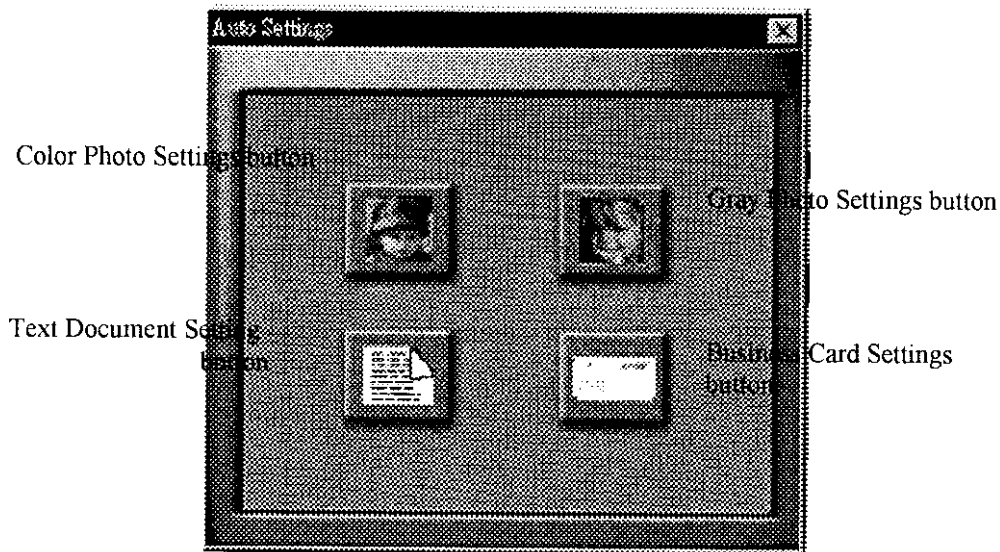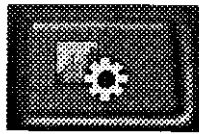
2. Click on the icon that corresponds to the item you are scanning.

3. Go through the normal steps of prescanning or scanning.

THE CONTROL PANEL

On the TWAIN screen above the preview screen is the Control panel, which is a row of four buttons offering more adjustments.

The buttons are (from left to right):

- Frame - click on this button to adjust the size and location of the Selection box (you only need to click on this button after having used the Zoom In or Zoom Out button).
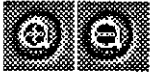
- Zoom In / Zoom Out - click on these buttons then click on the preview image to reduce or increase its size.

- Select Paper Size - click on this button to change the size of the Selection box (This can also be done by dragging the sides of the Selection box.).

- Lock—Use this button if you plan to move or travel with the scanner. It will lock the internal mechanism so that it won't get jarred during movement.

MANAGING SCAN JOBS WITH THE JOB MANAGER

The Job Manager is a useful tool for performing multiple scans on the same original. You can use the Job Manager to scan two or more separate areas of the preview image, or you could use the Job Manager to capture two or more different versions of the same area.

To use the Job Manager to perform multiple scans, do the following:

1. After prescanning and adjusting any settings that you wish (such as moving and resizing the Selection box, adjusting resolution, brightness, etc.), click on the Job Manager button.
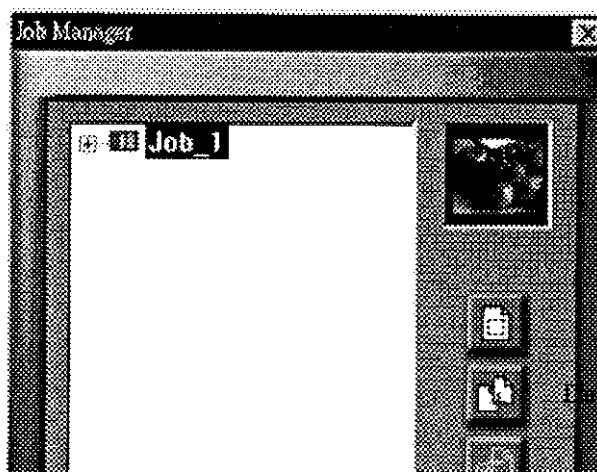
Create a new job button

licate current job button

You will see a screen with **Job 1** highlighted. Job 1 stands for the current scan you are working on—thus any settings that you changed in the TWAIN screen have been memorized by Job 1. You now have two choices. You can duplicate your current job, which will create another Selection box exactly where you've positioned the first one; or you can create a new job, which will create a second, distinct Selection box which you can resize and drag to a new place on the preview image.

2. Click on the Create a new job button, or on the Duplicate current job button.

3. On the Job Manager screen appears **Job 2**—another Selection Box will be created in the Preview Window as well. To select the job you want to work with, click on its title. It will become highlighted or its Selection Box in the Preview Window. The Selection box with moving lines signifies the Job that is currently selected.

4. Adjust any settings that you wish for **Job 2** such as the Gamma Settings, Color/B&W, or even resizing the selection box if you've created a new job.

5. Repeat steps 2 - 3 as often as you like, creating as many new or duplicate jobs as you wish.

6. To move from one job to another, click either on that job's Selection box, or on the job's name.

7. To delete a job, make sure it is the selected job by clicking on it, then click on the **Delete current job** button.

8. When you are done making jobs, click on the scan button.

Once the scanner has scanned all the jobs, it sends them all to the ScanOffix Pro desktop.

Appendix A:
Care and Maintenance

SAFETY PRECAUTIONS

To ensure a long life of continuous use for your scanner, please be sure to take the following precautions:

- Always keep the scanner on a firm, level surface.

- If you need to transport the scanner over long distances, make sure to repack the scanner carefully using the original packing materials.

- Before cleaning the scanner, unplug it from the computer, and never spray directly onto the scanner or let any liquids enter the scanner.

- Do not install the scanner in a humid or dusty place, nor in a place where vibrations might occur.

- To ensure proper ventilation, allow at least two inches (5 cm) free space around each side of the scanner, and four inches (10 cm) at the back of the scanner.

- Do not attempt to perform any maintenance on the scanner yourself. There are high-voltage and sensitive areas inside. All service and maintenance must be carried out by an authorized dealer.

- Do not leave the original on the glass plate for too long, as the warmth of the scanner could cause your original to deteriorate.

- Do not operate the scanner when the surrounding temperature falls below 50° Fahrenheit (10° Celsius) or rises above 95° Fahrenheit (35° Celsius).

- Do not operate the scanner when the surrounding humidity falls below 20% or rises above 80%.

- Keep food and liquid away from the scanner.

CLEANING THE SCANNER

It is recommended that you keep the document cover closed whenever you're not using the scanner to prevent dust and other particles from collecting on the glass plate.

However, if for any reason you need to remove or lift the cover away from the scanner, the hinges have been engineered to slip out of their sockets. Simply open the lid to a right angle, and then gently pull straight up.

To clean the Scanner, do the following:

1. Unplug the scanner from your computer.

2. Spray any household glass cleaner onto a soft, clean, lint-free cloth and then gently wipe the glass plate.

⊗ **CAUTION:** Do not spray directly onto any part of the scanner, as the components inside could be harmed.

3. Wipe the body of the scanner with a moist towel and mild detergent.

4. Dry the scanner with a lint-free cloth.

⊗ **CAUTION:** Do not use any abrasive or ammonia-based cleaning products on the scanner.

Appendix B:

Scanner Specifications

Scanner type	Color CIS module
Scanning method	Single-pass flatbed type
Brightness	200 levels in single-step increments (software definable)
Maximum scan size	216 mm x 297 mm (8.5" x 11.7")
Interface	Serial cable USB connector
Light Source	L-type cold cathode fluorescent lamp; 10,000 hours life expectancy
Color	36-bit RGB
Gray scale	12-bit
B/W	1-bit line art or halftone patterns
Optical resolution	600 x 1200 dpi
Scanning resolution	Up to 9,600 dpi by software interpolation
Operating environment	Temperature: 10° - 35° Celsius (50 - 95° Fahrenheit) Humidity: 20% - 80% RH
Dimensions (L x H x W)	419 mm x 41 mm x 274 mm (16.5" x 1.6" x 10.8")
Weight	2.5 kg (5.5 lb)
Power consumption	7 W maximum
Noise	Under 55 dB (operating)

Glossary

Italicized words in the definitions refer to other entries in the glossary.

Color	One of four possible image modes. When you choose Color as the image mode, your scanner can produce an image with over one trillion colors.
dot	See pixel.
Dots per inch (dpi)	The number of dots, or pixels, for each inch of the original that you scanned. See also *resolution*.
gamma curve	The line that represents the value of the tones of the original versus the value of the tones of the scanned image. A gamma value of 1 means no adjustment - the scanned image will look the same as the original. If you alter the gamma curve you can affect the middle range of tones without drastically altering the brightest or darkest parts of the image.
Gray	One of four possible *image modes*. When you choose Gray as the image mode, your scanner will produce an image containing only shades of gray. Choose Gray if the original you are scanning is a black and white photo, or if you want the scanned image to look like a black and white photo. See *also Color, Halftone, Line Art*.
Halftone	One of four possible *image modes*. When you choose Halftone as the image mode, your scanner will mix black and white to give the illusion of tone, just as in a newspaper photo. See also *Color, Gray, Line Art*.
image mode	Refers to the kind of original you are scanning (e.g. text vs. photo) or to the type of image you would like to produce. See *Color, Gray, Halftone, Line Art*.
Job Manager	Click on this button on the TWAIN screen for executing more than one scan job on the same original.
Line Art	One of four possible *image modes*. When you choose Line Art as the image mode, your scanner will produce an image containing only pure black and pure white. Choose Line Art if the original you are scanning is a text document or a pen-and-ink drawing. See also *Color, Gray, Halftone*.
pixel	The smallest discrete unit of the scanned image. All scanned images are made up of many pixels, each of which is one particular color (or white, gray, or black). Also called dot.

prescan	The first step in the scanning process. You prescan to quickly capture a large area of an image, after which you can adjust other settings in order to carry out the final scan.
preview image	The image of the original that appears after you click on the Preview button on the TWAIN screen.
Preview window	The part of the TWAIN screen that shows you the *preview image*.
primary color	Each of the three colors - red, green, and blue - which your scanner mixes to produce over one trillion different colors.
resolution	The sharpness of an image, measured in dpi (*dots per inch*). The higher the dpi, the greater the resolution.
Selection box	A box made up of moving dotted lines, found on the *Preview window*, which can be manipulated to specify the exact area of an image to be scanned.
shadow	The dark areas of an image.
TWAIN	An industry standard for scanners and image application programs. Since your scanner conforms to the TWAIN standard, you can use it with any image processing software that also conforms to the TWAIN standard.
TWAIN driver	A scanner driver (like your scanner's) which conforms to the TWAIN standard.
USB	Universal Serial Bus. This port, located on the back of newer PC's, allows the user to plug in up to 7 peripherals simultaneously.
user interface	A.k.a. UI, is a window that enables you to give commands to your scanner. Your scanner comes with one user interface; the TWAIN screen for making detailed and precise settings.

Copyright Information

Notice

The Manufacturer makes no warranty of any kind with regard to this material, including, but not limited to, the implied warranties of
merchantability and fitness for a particular purpose.
The manufacturer shall not be liable for incidental or consequential damages of any nature resulting from the use of this material.
This document contains proprietary information which is protected by copyright. All rights are reserved. No part of this document
may be copied, reproduced, or translated to another language without the prior written consent of the manufacturer
The information described in this document is subject to change without any notice

Safety Regulations

This scanner is designed to comply with UL1950-D3
UL Safety Statement
For your personal safety, besides the general maintenance mentioned in the manual, do not try to remove any mechanical parts or
any electronic devices. If you need service, contact our dealer or service offices near you.

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that
  to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: To assure continued compliance, the user must use only shielded interface cable when connecting to
computer. Any changes or modifications not expressly approved by the party responsible for compliance could void the
user's authority to operate this equipment.