flatbed SCANNER professional
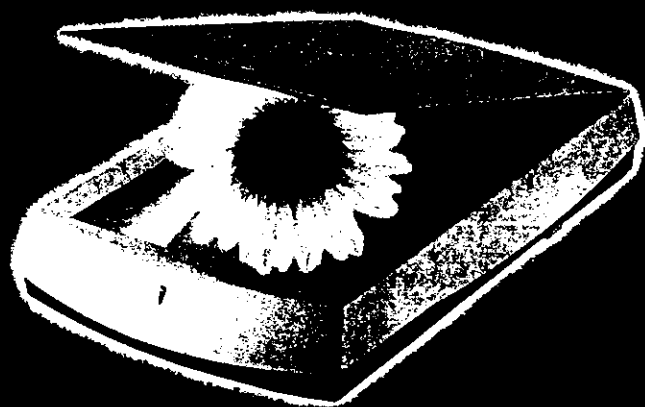
USER'S MANUAL

FCC Class B Radio Frequency Interference Statement

NOTE : 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 or more 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.

NOTICE
Any changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Table of Contents
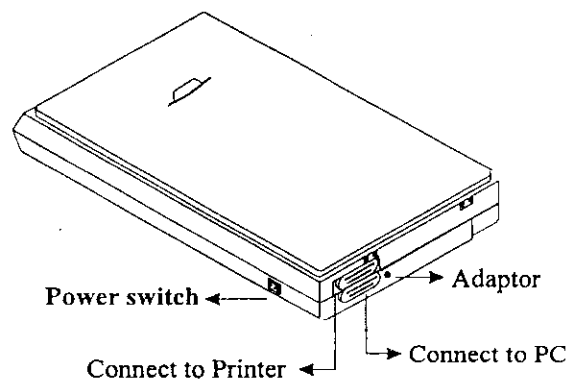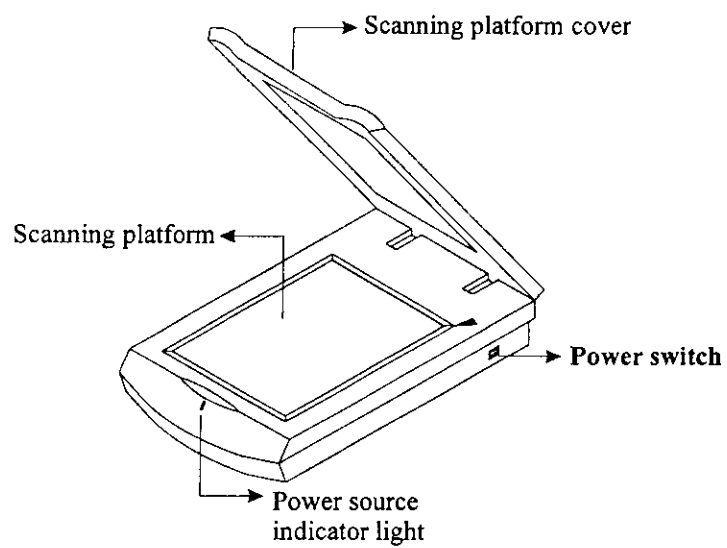
Flatbed Scanner User's Manual

Introduction

This product is a multi-function desktop flatbed scanner that scans color as well as black and white photographs, drawings and text. Hardware resolution of the scanner is 600 x 1200dpi, while software enhanced resolution can reach up to 9600 x 9600dpi. Using the software accompanying the scanner can produce high quality, high efficiency, multi-functional images and documents. This product meets FCC Class B, CE, UL, CSA, TUV, VCCI-2, New Zealand, Australian and Northern European testing standards as a safe, energy efficient desktop scanner.

System Requirements

Suggested system specifications:
  586-133 CPU or higher;
 32MB or more DRAM;
  VGA monitor;
  200MB or more free disk space

(2) Scanner parts:

Scanning platform cover

Scanning platform

Power switch

Power source
indicator light

Power switch

Adaptor

Connect to PC

Connect to Printer

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Scanner Features

- 3 dimensional object scanning
- Auto frame-size selection for commonly used document, photograph and name card sizes
- Using an optional transparency kit, slides, transparencies and negatives can be scanned
- Fast scanning speed
- Auto descreening (eliminate image ripple)
- Pre-scan editing

(3) Procedure for locking (refer to the figure)
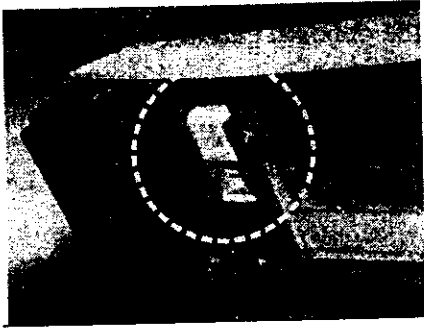
- Switch the scanner power to ON, ensuring that the cathode lamp assembly is in the START position (at the upper area of the scanner flatbed)

- Switch the scanner power to OFF

- Push in the locking switch to the position indicated by a ** symbol

NOTE: Always locks the scanner when moving it in order to avoid damaging the device. Unlock the scanner before using it.

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Chapter 1   Scanner Accessories

(1) Enclosed Scanner Accessories

Parallel port type scanner

Application software

25 pin signal cable

Scanner
(Parallel port type)

User's manual

Adaptor
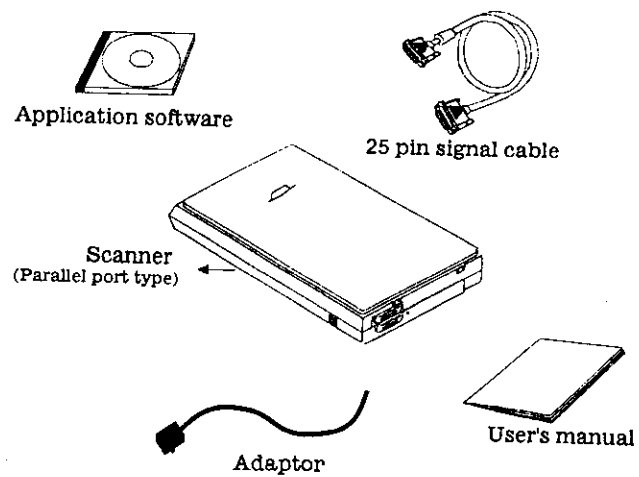
NOTE: The transparency kit is an option, the user can purchase it separately.

Chapter 3   Setting up the Scanner

Parallel port type scanner

Please ensure that the onboard parallel mode is set to the highest efficiency setting. The onboard parallel mode setting can be found in the INTEGRATED PERIPHERALS or CHIPSET FEATURES SETUP menu of the BIOS CMOS SETUP UTILITY. The ranking of most efficient to least efficient settings is as follows: EPP-EPP/SPP-EPP/ECP-Normal.

(1) Connect the scanner to the computer using the transmission cable while the power is off. Securely attach the cable.

(2) Connect the adaptor to the scanner and plug into power socket.

(3) Turn the PC and scanner power switches ON.

(4) Install the application and scanner driver software.

Chapter 4: Installation of Driver and Application Software

(1) Installing with the AUTO RUN feature from the applications CD-ROM

    1.   Turn on your computer and go into the MS Windows operating system.

    2.   Place the CD in the CD-ROM drive.

    3.   Select the appropriate language version.

    4.   Select the directory for the program installation.

    5.   Select the program and functions that you wish to install, following the instructions of the installation wizard program.

(2) Installing without the AUTO RUN feature from the applications CD-ROM

    1.   Turn on your computer. If the computer is already ON, then exit all applications.

    2.   Launch MS-Windows.

    3.   Place the CD in the CD-ROM drive.

Chapter 2 Scanner Placement / Locking and Unlocking

(1) Placement of the Scanner

- Place the scanner on a flat, stable surface.

- Avoid placing scanner in direct sunlight.

- Do not set heavy objects on the scanner lid in order to avoid damage.

(2) Procedure for unlocking (refer to the figure)
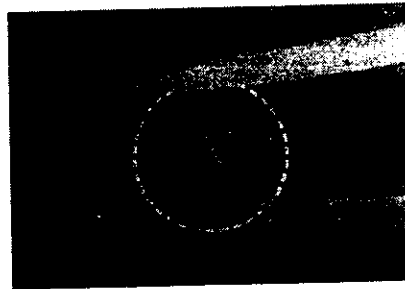
- Switch the scanner power to OFF

- Pull out the locking switch to the position indicated by a ** symbol

4. In Windows 95, click START, then select RUN or, in Windows 3.1, choose FILE from the File Manager application; then click RUN.

5. Enter D:\Install and click ENTER.

6. Select the appropriate language version.

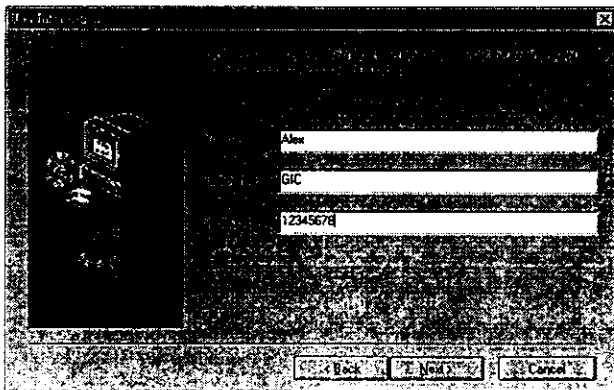7. Follow the installation wizard's instructions to complete the installation process.

The installation process appears on your screen as follows:
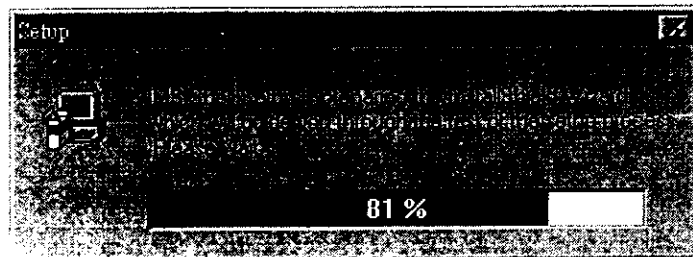
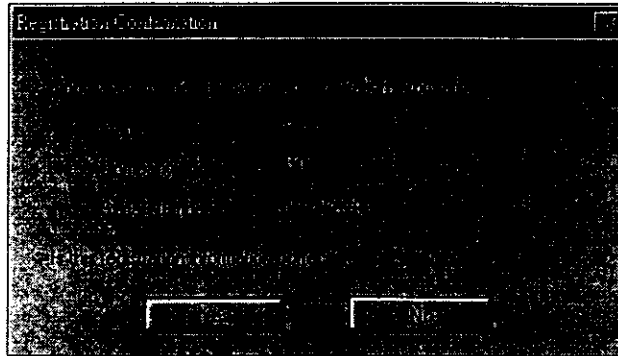The following screen lets you know that the computer is installing IMS Shell.
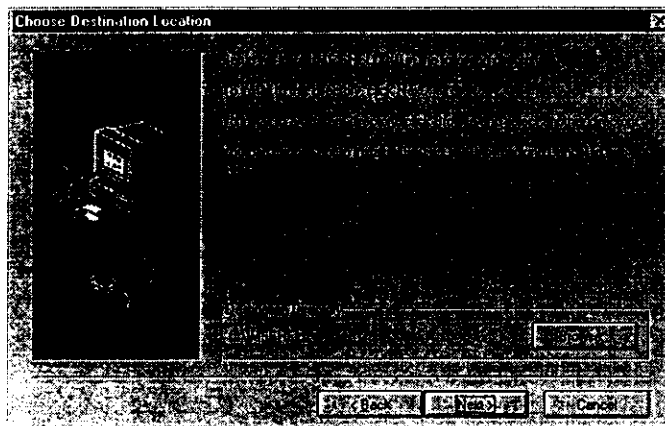
IMS Shell Setup
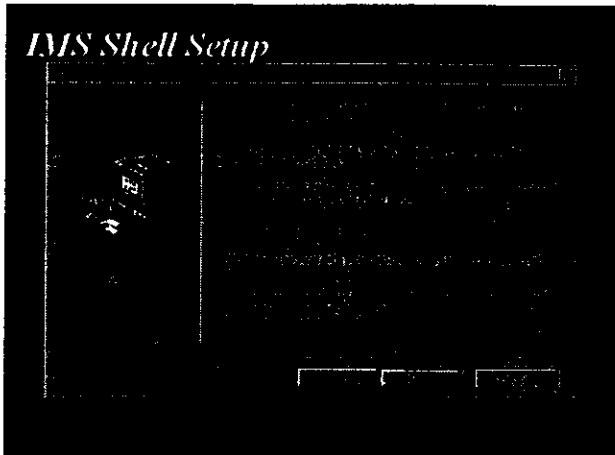
When you see this screen, click NEXT to continue the
installation process.

When this screen shows up, you need to key in some
information to register for the product.

Click YES here to show that your registration information is correct.

If you want to install to this directory, click NEXT. If you want to install to another directory, click BROWSE. If you want to cancel IMS Shell installation, click CANCEL.
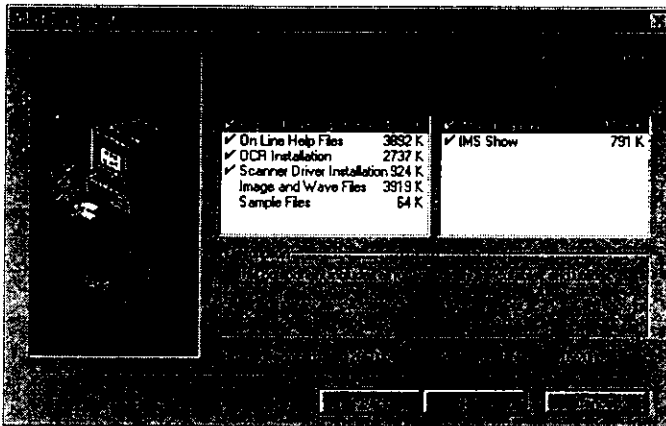
Use your mouse to check or delete files from among those listed.
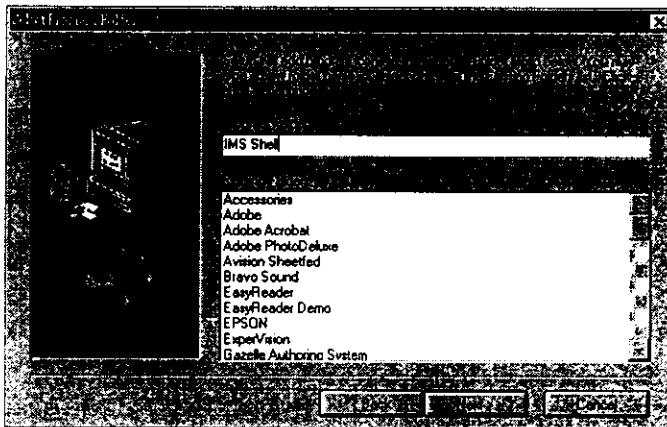
Choose a Program Folder name to install IMS Shell.

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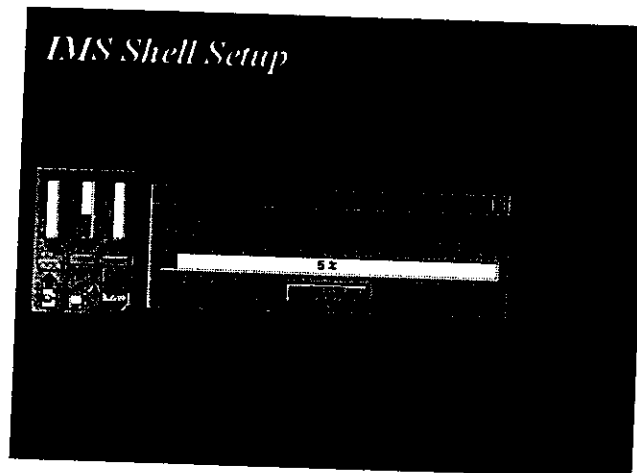
Then you will see a progress bar.
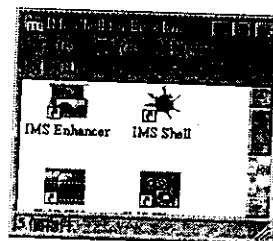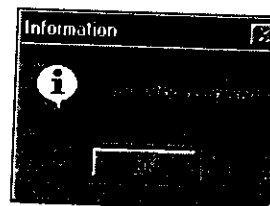
When you see this screen, the installation process is complete.

Installing the Scanner Driver
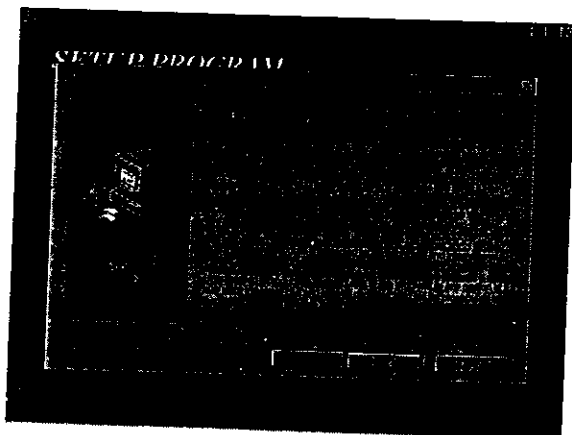
When this screen appears, you need to click NEXT to continue the installation.
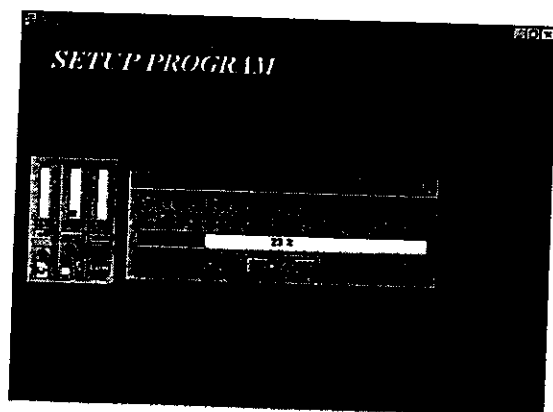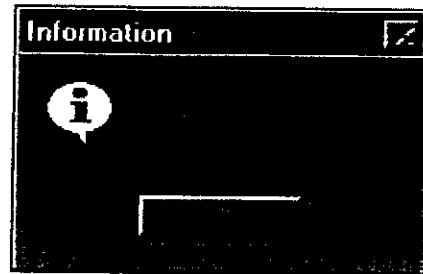
When this screen appears, the driver installation is completed. Click the OK button to finish the installation. The software is now ready to use.

Chapter 5   Scanner Operating Instructions

(1) Basic Features

1.   This device is a desktop scanner.

2.   The largest possible scanning area is 8.5 X 11.7 (inches).
     You can scan in commonly used document sizes such as
     Letter, A4, B5 and all standard size photographs and
     business cards.

3.   Optical resolution is 600 X 1200 dpi; emulation
     resolution can reach 9,600 X 9,600 dpi. The scanner can
     provide 30 bit high quality color images.

4.   There is a choice of several scanning modes to
   accommodate any type of document processing (color,
     grayscale, line art and dither mode).

(2) Scanner Functions

1.   Document Scanning: The scanner can utilize OCR
     (Optical Character Recognition) which converts scanned
     documents into text documents.

2.   Image Scanning: Desktop backgrounds, personalized
     greeting cards, visual presentations, archiving,
     exhibiting photographs and image layout.

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3. Personal Automated Office: Create files and document folders as well as manage photographs and images. The scanner coordinates with the printer and modem to act as a copier, fax machine or Email delivery tool.

(1) How to Use the Scanner

(A) Operations Guide

1. Complete installation of hardware and software by following instructions in the installation manual.

2. Unlock the scanner (refer to the installation manual).

3. Turn the scanner power ON—the power indicator lights up.

4. Place the image face down on the scanning surface using the start arrow as a guide (refer to page36).

5. If this is the first time you use the scanner, first use Select Source (which is usually found under the File menu) and choose E-Scanner 32 Vx.xxx (Windows 95 users) or E-Scanner 16 Vx.xxx (Windows 3.1 users)

NOTE: x.xxx is the code number for the driver version.

Users can easily update their driver version (refer to page20).

6. Select Acquire and enter the user interface. (refer to page 20)

7. Select scanning mode according to the type of object scanned and your requirements. Select Color, Grayscale, Line Art or Dither. If you want to use OCR (Optical Character Recognition), you must use Line Art at 300 dpi or higher (refer to page 23).

8. When scanning in Color mode, select the image source as PHOTO or PRESS in order to decide whether or not to run the descreen function (refer to page 22)

9. Click on PRESCAN in order to edit the scanning area. The user can designate the size of the area to be scanned, the resolution, brightness, contrast, magnification and quality (refer to page 24).

10. When you have finished settings for the image to be scanned, click SCAN to perform a final scan (at this point, a progress bar will appear on the screen). When the progress bar disappears, the scanning is complete.

11. Clicks ON/OFF to exit the scanner user interface (UI) and return to the application.

(B) Introduction to Scanner User Interface
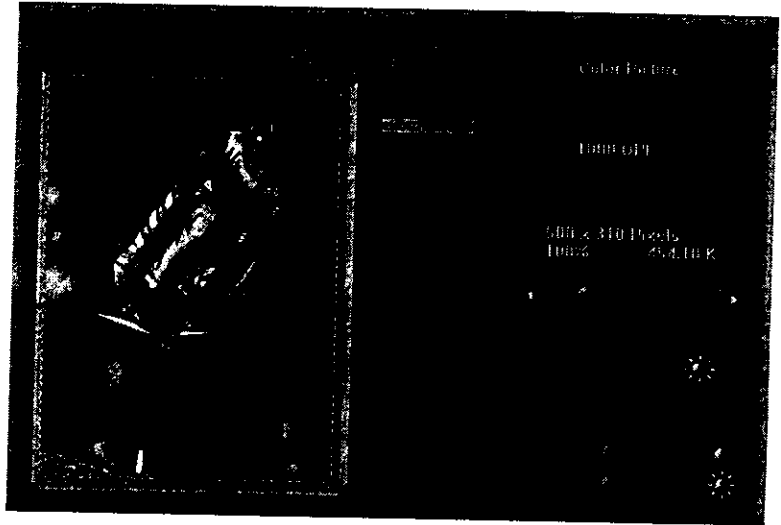
The scanner user interface (pictured above) simulates the appearance of many home video and audio devices in order to make the users feel comfortable in using the scanner.

The preview screen (as seen on the left-hand side of the above figure) allows the user to see and select desired portions of the image.

The user can upgrade to the latest version of the driver application by visiting the website at www.e-lux.com, and clicking DRIVER, whereupon the required application can be downloaded.

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Introduction to the icons and their functions

Preview window: Displays the prescanned image.

 Logo: Click on the logo to view scanner driver information, release notes and to refer to online help. You can use the mouse to drag this area to change the location of the window on the screen.

 Image Size: By clicking this icon, the user can quickly select a preset document scanning size. There is a choice of A4/B5 and Letter for documents and 3X5/4X6/5X7/5X3/6X4 and 7X5 for photographs or business card size.

 Power: Click on this icon to close the UI (user interface).
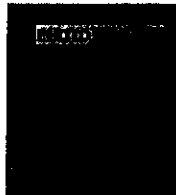
Document Type: Select whether the document that you want to import is a PRESS image (*ie.* printed) or a PHOTO. If you select PRESS, you will enter the descreen mode. Using this function, you can quickly eliminate Moir* patterns normally accentuated when scanning in printed images. To select 3D object scanning, the scanner will procure a good 3D effect. While using transparency, user will have 4 choices of exposure time 1, 2, 4, 8 to get the best scanning effect.

Prescan: Click this icon to observe what's present in the complete scanning area of the Preview Window.

Scan: To scan a final image with the set parameters.

Zoom: Magnifies a selected area of the preview window to allow for precise choice of details to be scanned.

Color Picture

Image Types: Displays the selected image type. You can select a type from the pop-up menu. There are four image types available using this system:

(1) Color picture: Color image scan.

(2) Grayscale: This function is used to obtain black and white images, complete with shades of gray.

(3) Line Art: This is used to obtain pure black and white images.

(4) Dither: To create halftone images. When printing, more dots will be placed in darker regions and fewer dots will be placed in lighter regions in order to create the impression that the selection is a grayscale image. Images found in newspapers are halftones.

75 DPI

Resolution: The desired resolution of the image can be selected as a dpi value. You can choose from a list of preset resolutions or you can enter a desired dpi value in the custom area.

Interpolated Resolution: Using software to boost the resolution.
The optical resolution of this scanner is 600 dpi. If the user
selects a resolution greater than 600 dpi, then the software will
increase the resolution according to mathematical calculations.
This function refers to a scaling ratio to adjust the image size
(refer to next item). The user can increase or decrease the size
and resolution of the imported image as desired.
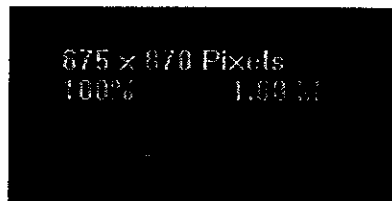
Image Information: Displays
many different types of information about the image such as:
width, height, scaling ratio and image size. The scroll bar can
increase or decrease the size of the imported image according to
its ratio with that of the original image. Users can select the units
of the image based on the requirements in the pop-up window.

NOTE: When increasing the size of an image, take note of the
file size of the image in order to avoid not having enough
available hard disk space, which could lead to a system crash.

Image Parameter Setup Icon: There
are four tuning tools to enhance the quality of an image, namely

Color Balance, Gamma Correction, Brightness and Contrast.

(This function is only available for images when Color Picture is selected.)

The operating steps are as follows:

(1) After Prescan is complete, select the desired scanning region. Click ZOOM to magnify the scanning region.

(2) Click the Advance icon in order to enter the Tuning window.

(3) By moving the scroll bars, you can adjust the image's parameters to your satisfaction. (If you are unsatisfied with your adjustments, you can click RESET to return to the original settings.).

(4) Click OK to return to the main user interface screen to initiate the final scan process.

Brightness: Adjust the brightness of the image by moving this slider.

Contrast: Adjust the contrast of the image by moving this slider.

Auto: The Auto automatically defines the lightest and darkest pixels in each channel as white and black, and then redistribute the intermediate pixel values proportionately. In general, the Auto feature gives good results when a simple contrast adjustment is needed to an image with an average distribution of pixel values; however, this feature does not provide the more precise control that can be achieved by adjusting the Levels or Curves controls manually.

(C) IMS Shell Manual

The IMS Shell provides an easy-to-use environment where data from digital input devices can be transferred to OLE applications, such as IMS Enhancer, IMS Show, MS Word, OCR programs, business card readers, and MS Exchange. IMS Shell is also an easy-to-use data management system for all types of files including images, text, audio, and animation.

> IMS Shell supports and manages all types of data including images, text, audio, and animation.
> Features an all-graphic user interface.
> Easy drag-and-drop design simplifies locating objects in folders and opening applications.
> Allows user to link with and open other applications without exiting IMS Shell.

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Shopping Cart allows user to collect objects from different
folders and move them to an application.

Folders allow user to manage a large number of objects.

IMS Shell Preface

Main IMS Shell Screen:
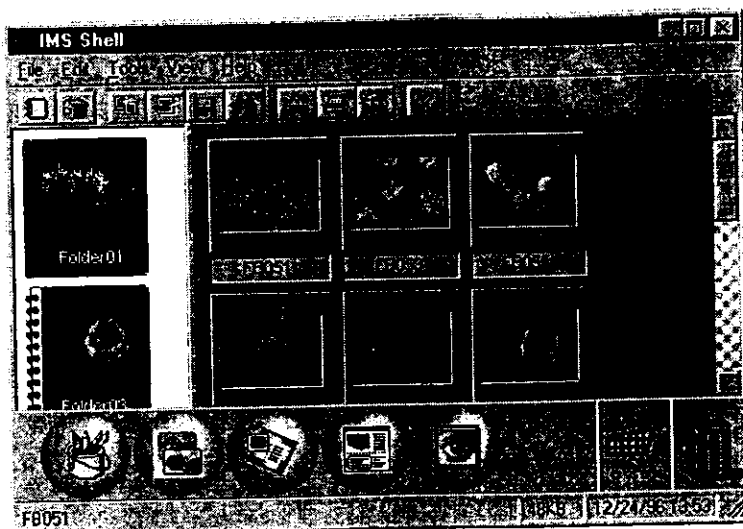
- Title Bar: This area displays the name of the software,
  namely IMS Shell.
- Function Bar: This area displays all of the IMS Shell's
  function buttons.

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- Tool Bar: This area displays several frequently used function buttons of the IMS Shell, such as "Find" and "Acquire Image."
- Application Bar: This area displays icons of all the selected applications that are already linked with the IMS Shell.
- Shopping Cart: A unique feature of the IMS Shell, the shopping cart can be used to collect objects from different folders.
- Recycle Bin: Temporarily holds objects which user would like to delete.
- Icon Area: The window on the right side of the working space displays iconized images of objects contained in open folders. Double-click on an icon to view the real size image.
- Folder Area: The window on the left side of the working space displays in the form of icon folders that the user has created. When IMS Shell is opened for the first time, a preset folder containing example objects will be displayed here.

The following are the functions of icons on the Tool Bar:
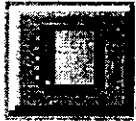
Clicking here will create a new folder. The new folder will appear at the end of the list of folders. You can create any number of new folders.
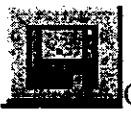
Clicking on this icon will delete all objects in the currently open folder.

Click on this icon to add new objects to the currently open folder. After a dialog box appears, you may select objects to be added from the file icon list.

Clicking on this icon will delete selected objects from the open folder.

Click on this icon to save an object in another location or under a different name.

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This button is used to find an object. A dialog box will appear after clicking on the icon, and the user may then type in the name of the object to be found.

Clicking on this icon will activate the scanner's Twain driver and acquire an image from the scanner.

Clicking here will cause the "Select Printer" dialog box to appear. Click on "OK" after selecting a printer, and the icons in the open folder will then be printed out.

This button may be used to add or delete applications.

Click here to open on-line help.

IMS Shell User Guide

How to create a new folder and add objects to the folder

A preset folder will appear in the folder window when you first start IMS Shell. You may add items to this folder or to a new folder you have created yourself.

To add objects to a folder, click on "Add Object" under the File menu.

Select objects to be added from the "Add Object" dialog box.

Click on "OK" to confirm selected objects. The dialog box will close and the IMS Shell will reappear.

You may also use an image acquired from the scanner as an object to be added. Click on the "Acquire Image" button to acquire the desired image.

You may only add audio, text, and animation files that have already been saved on disk.

To create a new folder, you may click "New Folder" under the File menu.

A new folder icon will appear on the final page of the list of folders.

To open any folder, click on the folder's icon.

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How to easily manipulate objects by dragging and dropping them

Rearranging objects

> You can use drag and drop to arrange objects in any order you wish. To drag and drop an object, first press the left mouse button and hold it down while the cursor is over the object. Move the object to the desired position and release the left mouse button.
> You can drag objects from one folder to another.

Dragging objects to applications

- Press the left mouse button and hold it down while the cursor is over the object to be moved.
- Drag the object to the desired application and release the left mouse button.

How to perform batch processing

The Shopping Cart is an innovative feature of the IMS Shell that allows you to perform batch processing of objects from different folder.

> Drag objects from different folders and drop them in the Shopping Cart for temporary storage.
> Drag the Shopping Cart to the desired application. This

will open the application and cause it to process the objects in the Shopping Cart.

You can drag the Shopping Cart to the Recycle Bin to delete all the objects inside.

How to add or delete applications

To add or delete applications, click on "Application" under the Tools menu.

The "Insert Applications" dialog box will appear (see illustration below). This dialog box allows you to add or delete applications.
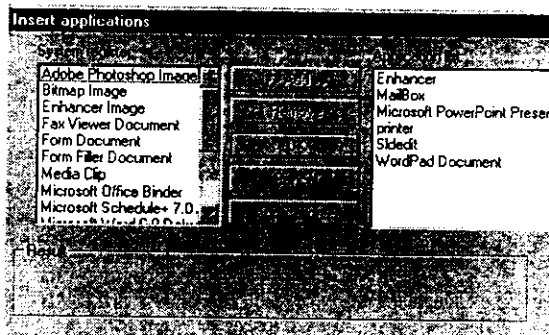
Select an application from the left window. Click on the "Add" and "OK" buttons to add the application.

To remove an existing application, select the name of the application in the right window. Click on "Remove" and "OK" to remove the application. The name of the application will disappear from the right window.

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For more information on the IMS Shell please refer to the IMS Shell on-line help.

Enhancer User Guide

Double clicking on this button on the IMS Shell allows you to enter the Enhancer image processing software. You can use the mouse to either drag or drop graphics documents on this button, or just double click on the button.
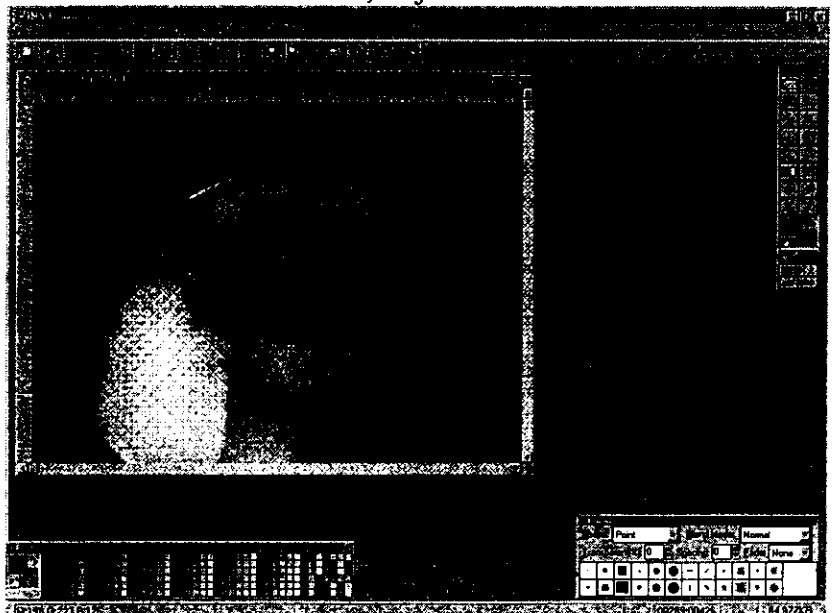
- Tool Box: These buttons allow user to perform various

kinds of image processing, such as selecting a rectangular portion of the image, selecting a circular portion of the image, selecting an irregular portion of the image, selecting a similarly colored area (Magic Wand), adding text, painting, and magnifying.

- Palette: The Palette contains various color templates that can be used to change the color of the background, foreground, or within a selected area.
- Brush Bar: These buttons allow the user to change the shape, thickness, and transparency of brush strokes.
- Status Bar: Displays image information and explanations of commands.
- Shortcut Bar: Allows user to quickly select image processing commands and functions.

Opens a new image file

Opens an old image file

Prints an image file

Undoes the previous command

Cuts a selected portion of image

Copies selected portion of image

Pastes image on clipboard to an image file

Selects unselected portion of image and deselect portion that was originally selected.

Enlarges display of image on the screen

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Shrinks display of image on the screen

Displays image in 1:1 ratio (that is, without adding or subtracting any pixels)

Displays all of image on the screen

Displays image contents, including magnification, resolution, filename, file size, and file type.

Allows user to quickly adjust the preset values of six functions, such as brightness, contrast, and tilt, etc.

(D) Scanning Example

(1) Scanning an image

Document must face down

Scanning start here
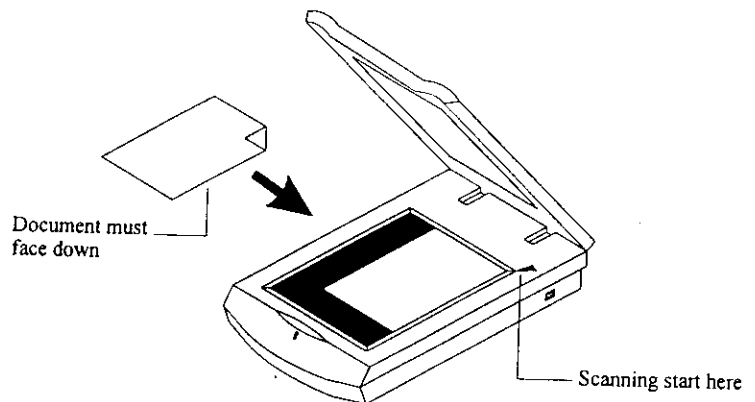
1. Open an image processing application. Place the document to be scanned face down on the glass surface of the scanner using the start arrow as a guide. Click on "Prescan" to quickly preview the image.

2. Use the mouse to select the area to be scanned using the drag and zoom functions.
3. Set the resolution, brightness, contrast, and magnification.
4. Click on "Scan" to generate an image.
5. Use the image processing application to edit the scanned image.
6. Enter a filename and save the image file.

(2) Optical Character Recognition (OCR) of documents
1. Click on "Prescan" to quickly preview the document.
2. Use the mouse to select the area to be scanned using the drag and zoom functions.
3. Select the "Line Art" mode and set resolution at 300dpi.
4. Click on "Scan" to scan the document and produce a text image file.
5. Leave the scanner interface and enter the IMS Shell.
6. Select the OCR language (in the "Tools" menu of the IMS Shell).
7. Use the mouse to drag the text image file to the icon of a word processing application (such as Word, Wordpad, etc.). The OCR function will automatically produce a text file.
8. Use the word processor to correct, modify, and save the

file.

1. The "Line Art" scanning mode must always be used to OCR a document Character recognition will be impossible if "Line Art" is not selected.
2. In the IMS Shell, OCR is performed by using the mouse to drag the text image file onto the icon of a word processing application. OCR takes place automatically and the results are loaded in the word processor. There is no special OCR dialog box and no independent OCR icon.
3. To OCR a Chinese text, drag the text image file onto the icon of a Chinese word processor.
4. The IMS Shell contains 12 different OCR versions for various languages. The user may select the language versions to be used when installing the IMS Shell OCR software (see page 10) and find them under the "Tools" menu in the IMS Shell.

Chapter 6 Scanner Care and Maintenance

(1) Cleaning the glass scanning surface:

Wipe the glass-scanning surface in a uniform direction.

Avoid marks from drops of water left on the glass surface.

(2) Moving the scanner:

Be sure the scanner lock is in the locked position prior to moving. Unlock the scanner only after it is placed in a secure location.

(3) To prevent the glass surface from being scratched, avoid scanning sharp or hard objects or use extra caution when doing so.

(4) To prevent the cover from deforming or damaging the glass, avoid placing heavy objects on the scanner cover.

Chapter 7 Troubleshooting and Technical Support

(1) Prior to installing the driver and applications programs, make sure that there is enough disk space. We recommend that there be at least 50MB of free disk space.

(2) If the 【Scan】 function is disabled while the scanner driver is in operation, this function will be shown in gray:

1. Make sure the scanner power is ON and the indicator light is lit. (Refer to Chapter 1)

2. Turn off the computer power and make sure that the signal cable is securely attached.

(3) When using an application other than IMS, if scanning is slow and results are poor, please check whether the application you are using is a 16-bit or a 32-bit program. Select the driver under 【Select Source】 as "E-SCANNER" for 16 bit applications or "E-SCANNER32" for 32 bit applications.

(4) If the scanner stops functioning and emits a high-pitched noise, make sure that the scanner is unlocked.

(5) If the power light does not come on but the scanner starts up after the power has been switched on anyway, this indicates that the power light is malfunctioning. If the scanner fails to start up, check if the cable linking the computer is connected properly and that the scanner is plugged in.

(6) If the message "Scanner Not Responding!!" appears when attempting to scan an image, check whether power has been

turned on to the scanner. If the scanner has power, make sure the cable between the computer and the scanner is connected securely.

(7) If the scanned image has streaks or lines, check:

1. Whether the monitor has been set at HI-COLOR (16-bit) or higher.

2. Whether the scanned document is a printed article. If so, make sure the "PRESS" option is selected before performing scanning.

(8) If the scanner does not operate properly because of an unfavorable work environment:

1. After closing applications and the scanner interface program, turn the power switch off and then on again. Open applications software and perform scanning tasks as usual. Take the following steps if the problem persists:

2. Close all applications and turn off power to the scanner.

3. After restarting the computer, turn on power to the scanner.

4. Open applications software and commence scanning operations.

Wichtige Sicherheitshinweise

1. Bitte lessen sie sich diese Hinweise sorgfältig durch.

2. Heben Sie diese Anleitung für den späteren Gebrauch auf.

3. Vor jedem reinigen ist das Greät vom Stromnetz zu trennen. Verwenden Sie Keine Flüssig-oder Aerosolreiniger. Am besten dient ein angefeuchtetes Tuch Zur Reinigung.

4. Das Gerät ist vor Feuchtigkeit zu schützen.

5. Die Belüftungsöffnungen dienen zur Luftzirkulation die das Greät vor Überhitzung schützt. Sorgen Sie dafür, daß diese Öffnungen nicht abgedeckt werden.

6. Verlegen Sie die Netzanschlußleitung so, daß niemand darüber fallen kann. Es sollte auch nichts auf der Leitung abgestellt werden.

7. Alle Hinmeise und Warnungen die sich am Geräten befinden sind zu beachten.

8. Wird das Gerät über einen längeren Zeitraum nicht benutzt, sollten Sie es vom Stromnetz trennen. Somit wird im Falle einer Überspannung eine Beschädigung vermieden.

9. Durch die Lüftungsöffnungen dürfen niemals Gegenstände oder Flüssigkeiten in das Gerät gelangen. Dies könnte einen Brand bzw, elektrischen Schlag auslösen.

10. Öffnen Sie niemals das Gerät. Das Gerät darf aus Gründen der elektrischen Sicherheit nur von authorisiertem Servicepersonal geöffnet werden.

11. Wenn folgende Situationen auftreten ist das Gerät vom Stromnetz zu

trennen und von einer qualifizierten Servicestelle zu überprüfen:

a. - Netzkabel oder Netzstecker sind beschädigt.

b. Flüssigkeit ist in das Gerät eingedädigt.

c. Das Gerät war Feuchtigkeit ausgesetzt.

d. Wenn das Gerät nicht der Bedienungsanleitung entsprechend funktioniert oder Sie mit Hilfe dieser Anleitung keine Verbesserung erziele.

e. Das Gerät ist gefallen und/oder das Gehäuse ist beschädigt.

f. Wenn das Gerät deutliche Anzeichen eines Defektes aufweist.

12. Zum Netanschluß Dieses Gerätes ist eine geprüfte Leitung zu verwenden. Für einen Nennstrom bis 6A und einem Gerätegewicht größer 3kg ist eine Leitung nicht leichter als H05W-F mit einem Leitungsquerschnitt von 00.75mm² einzusetzezen.

13. Dieses Schaltnetzeil kann bis zu einer Außentemperatur von maximal 25 °C betieben werden.

flatbed
SCANNER