

UMAXMirage IIse

Color Scanner

Operation Manual

Thank you for purchasing the color scanner. With this color scanner, you can easily scan A3 size documents and photographs into your computer and maintain them as electronic copies.

Main Features:

- ♦ *High Resolution and Density Range:* With a resolution of up to 9800 dpi, it produces better gamma transformation, and a more accurate detection of highlight and shadow details, thereby allowing even distribution of colors.
- ♦ *High Scanning Speed, Low Acoustic Noise:* The scanner's micro stepping technology greatly increases scanning speed and at the same time reduces noise level.
- ♦ *Intelligent Scanning Control Interface called MagicScan:* MagicScan provides a comprehensive range of scanning control functions. Completing the package are the bundled award-winning and proven software packages such as buniscan PhotoPerfect.
- ♦ *Transparency Adapter:* Allows the scanning of films, slides and transparencies up to the full-size scanning area: 11.4" x 17".
- ♦ *Proprietary Image Noise Reduction:* Your scanner uses a sealed optical system design that blocks dust particles and excess reflections from penetrating the optical unit, thereby overcoming image and optical noise and ensuring sharp, true-life images.

System Requirements: 486DX or higher (68030 processor or Power Macintosh for Mac users), CD-ROM drive, hard drive with 20MB free disk space, 4MB memory, Microsoft Windows 3.1 or 95 (Mac OS 7.0 or later for Mac users), Windows-compatible keyboard, display and mouse. Recommended: SVGA or higher graphics card.

Part No.: 830490-01

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Quick Start Guide

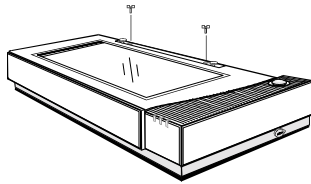
This section serves as a quick reference to the connection and installation procedures for the scanner.

1. *Unpack your Scanner*

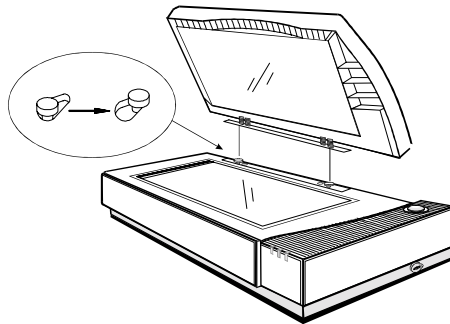
Unpack your scanner. Make sure that all the scanner system hardware, software, cabling and documentation items indicated on the packing list are present.

2. *Install UTA (UMAX Transparency Adapter)*

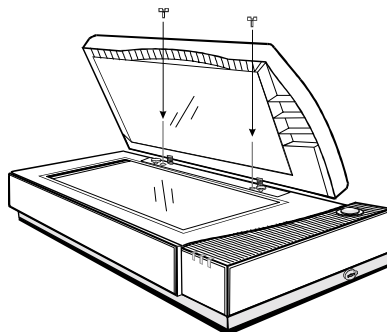
- a) Remove the screws on the hinge frame.



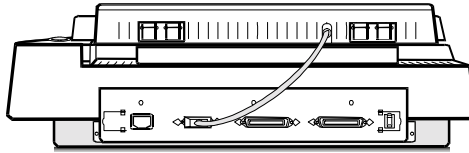
- b) Slide the transparency adapter in such way that the supporting posts move into the narrow sections of the holes.



- c) Insert the screws into the holes of the hinge frame and fasten them firmly.

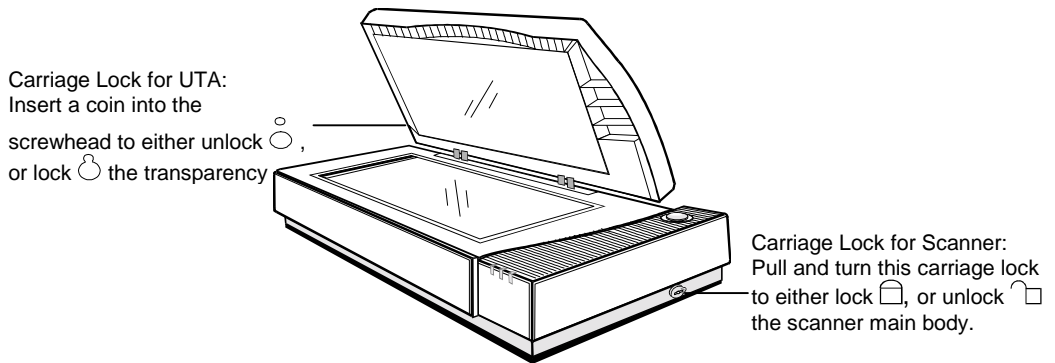


- d) Plug the UTA (multi-pin D-SUB) end of the cable from the transparency adapter into the UTA connector port on the back of your scanner.



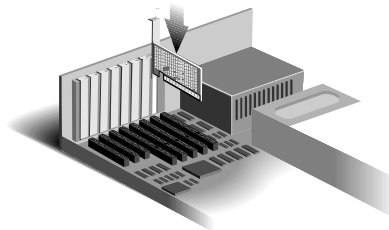
3. Unlock your Scanner and UTA

Before using your scanner ensure that the carriage locks of UTA and scanner are in the unlock position. Likewise, turn both the carriage locks of UTA and scanner to the locked position, to avoid damaging the optics during transportation.



4. Connect the Interface Card (for PC users only)

- Turn off your computer and remove the computer's housing cover.
- Locate an available 16-bit slot.
- Insert the SCSI card by pressing it gently but firmly into the slot. Make sure it is firmly seated in the slot.



- d) Replace the computer's housing cover.

Note. If you already have a SCSI card installed on your computer:

When installing the software and you are asked to choose TYPICAL or CUSTOM installation, choose CUSTOM and select "Adaptec or other ASPI Compatible Interface Card" when installing the scanner driver. Otherwise, the scanner will not work properly.

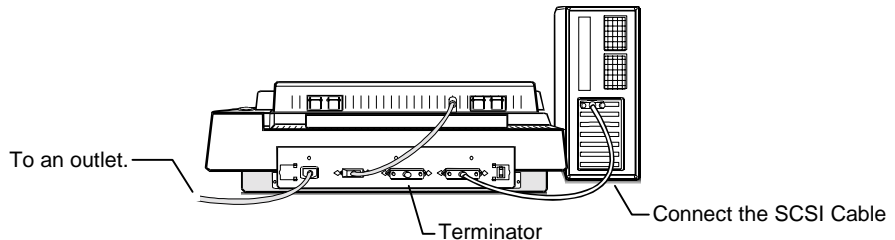
5. Connect the SCSI Cable

Connect the SCSI cable to the SCSI interface card and the other end of the SCSI cable to the scanner.

If your scanner is not chained to other SCSI devices or at the end of the SCSI chain, please connect the terminator to the remaining SCSI port of your scanner.

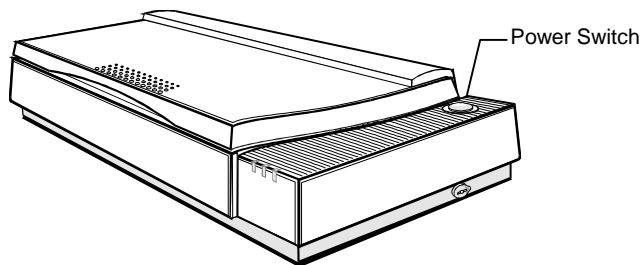
6. Connect the Power

Connect the power cord to the scanner and plug the other end of the power cord into an available outlet (socket).



7. Power Up

- a) Turn the scanner power switch on. When the Ready indicator is on, your scanner is ready to use.
- b) Turn on your computer.



8. Software Installation

We recommend that you install your image editing software first. Then, MagicScan.

- a) Insert UMAX MagicScan CD into your CD-ROM drive.
- b) **Win95 users** - click on the Start button and click on Run...

Win3.1/NT users - you can access Run... by clicking on the File menu in Program Manager and then click on Run...

In the Run dialog box, type d:\setup. If your CD-ROM drive is designated by another drive, please type the appropriate letter in the Run dialog box.

- c) **Mac users** - Double-click on the MagicScan installer icon to start installation.
- d) Follow the on-screen instructions to completely install MagicScan.

About this manual

This manual is divided into chapters and appendices. The chapters give instructions on all aspects of installation, troubleshooting, and basic scanner maintenance. The appendices contain relevant technical information for your reference.

- | | |
|-------------------|---|
| <i>Chapter 1</i> | gives instructions on scanner preparation and tips on handling and routine scanner maintenance. |
| <i>Chapter 2</i> | gives instructions on scanner connection to a Macintosh computer and the corresponding software installation. |
| <i>Chapter 3</i> | gives instructions on scanner connection to an IBM PC compatible and the corresponding software installation. |
| <i>Chapter 4</i> | gives troubleshooting tips for possible problems with the scanner. |
| <i>Appendix A</i> | gives instructions for installing an ASPI-compatible interface card. |
| <i>Appendix B</i> | list specifications of the scanner. |

A Glossary and an Index are also included for easy reference.

Chapter 1: Getting Started

Your scanner is extremely user-friendly. Hardware and software installation can be completed in a few steps. In minutes you can start operating your scanner to see for yourself the kind of quality scanned images it can produce.

This chapter tells you how to prepare your scanner for connection and installation. It also gives some handling precautions and general care measures to ensure that your scanner will stay in top condition at all times.

Before You Begin

Unpack Your Scanner

Ensure that your package contains all the hardware, software, cabling and documentation you ordered. Check for any damage that may have occurred while the package was in transit. If there are any missing or damaged item in your scanner package, contact your dealer or the carrier of your package immediately.

Static Electricity Precautions

Static electricity (in your body) can cause damage to the electronic components on the scanner's printed circuit board or the computer's interface card. Therefore, you need to discharge static build-up from your body before handling any card or component outside of its anti-static packaging.

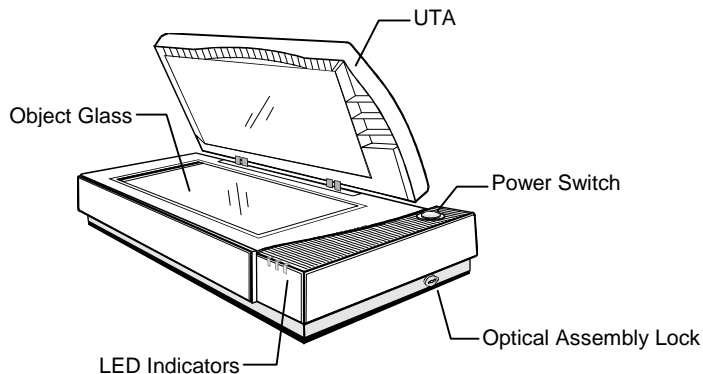
To protect your equipment from static discharge, you are advised to closely follow these measures below:

- ♦ Discharge any static build-up in your body by touching a grounded or anti-static surface (such as a large metal object or the silver-toned expansion slot covers at the rear of your computer.) Do this prior to removing any electronic components from their anti-static bags.
- ♦ When handling any electronic components, avoid touching any metal part of the component such as the gold "fingers" that plug into the expansion slot. It is best to handle system components either by their edges or by their mounting brackets.

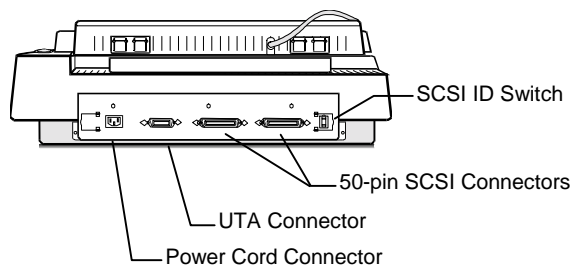
A Glance at Your Scanner

Take a few minutes to become familiar with the different parts of the scanner. The figure below shows the locations and names of the scanner parts. A brief description of each part is also given.

- ♦ **Object Glass** - The glass surface on which the document or image for scanning is placed; made of tempered glass with excellent optical qualities.
- ♦ **LED Indicators** - Three indicators - Power, Ready and UTA.
- ♦ **Optical Assembly Lock** - Locks the scanner's optical component system.
- ♦ **UTA** - A transparency adapter for scanning transparencies.
- ♦ **SCSI ID Switch** - Used for setting the scanner's SCSI ID.
- ♦ **50-Pin SCSI Connector** - Where you plug in the 50-pin SCSI cable.
- ♦ **UTA Connector** - a connector used to connect optional UMAX Transparency Adapter.
- ♦ **Power Cord Connector** - Where you plug in the scanner power cord.



Rear View

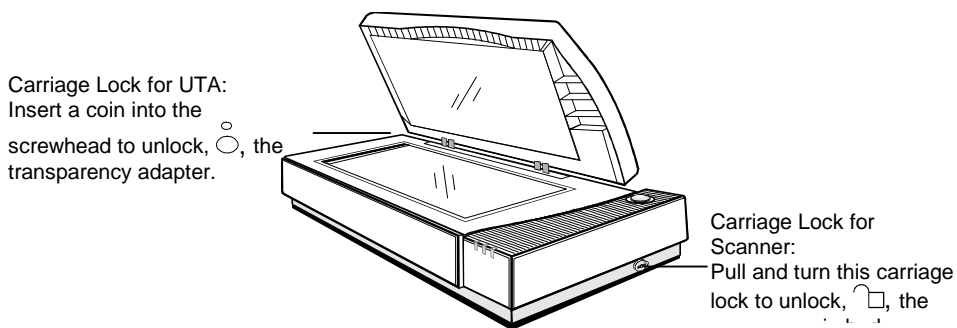


Prepare the Scanner

Prepare your scanner for installation through the following simple steps:

- ♦ Unlock the optical assembly
- ♦ Check and reset (if necessary) the scanner's SCSI address
- ♦ Run the automatic scanner self-test

Unlock the Optical Assembly of the Scanner



Before attempting to transport your scanner, it is important that you lock the optical assembly in place to avoid any possible damage to the scanner's optical components. To lock the optical assembly, insert a coin and turn it until it points to the lock mark.

Test the Scanner

The scanner automatically performs a simple self-test each time it is turned on. This self-test checks the status of certain scanner devices.

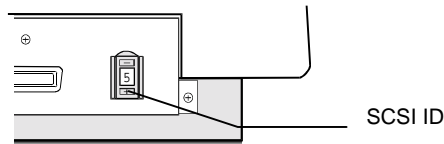
After unpacking and unlocking, start the scanner self-test by following the steps below:

1. Connect the power cord to a wall outlet.
2. Connect the other end of the power cord to the scanner.
3. Turn on the power of the scanner.

At power-on, the front panel indicators flash once. The power indicator then glows and the ready indicator blinks. When the test is completed, the power and ready indicators glow steadily.

Change the SCSI ID Number

Your scanner's SCSI ID setting is factory preset at #5.



- ♦ Check to see if this ID setting is used by another device connected to your computer's SCSI port.
- ♦ If SCSI ID #5 is not used, you do not need to change your scanner's SCSI ID number. You can directly proceed to hardware connection and software installation. For installation instructions, proceed to Chapter 2 if you are connecting to a Macintosh computer or to Chapter 3 if you are connecting to an IBM PC.
- ♦ If you find however, that another connected device is already using SCSI ID #5, then you must reset the SCSI ID on your scanner.

To reset the SCSI ID, do the following:

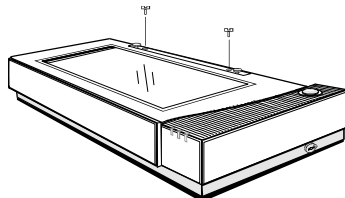
1. Make sure the scanner power is off.
2. Press the "+" or "-" buttons (above and below the number) on the SCSI ID switch until an unused number appears in the switch's notch.

Note: Do not use SCSI ID setting from 7 through 9 on your scanner. They are for factory use only.

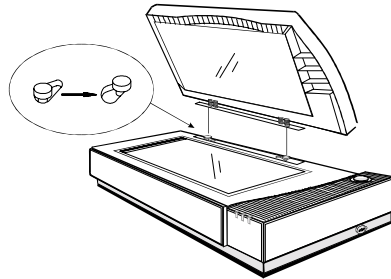
Installing UTA to your Scanner

You have to install the transparency adapter on your scanner before connecting the scanner to your Macintosh or PC computer. Follow the steps below to install the transparency adapter.

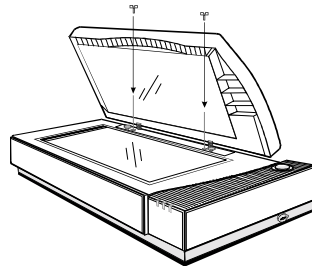
1. Turn off the power of your scanner and unplug the power cord from the scanner.
2. Remove the screws from the hinge frame. Keep these screws for later use.



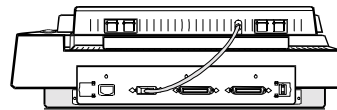
3. Position the hinge frame of the transparency adapter over the supporting posts on the scanner so that the posts fit into the holes in the hinge frame.



4. Gently slide the transparency adapter in such a way that the supporting posts move into the narrowed slots adjacent to the holes.
5. Insert the screws into the holes of the hinge frame and fasten them firmly.

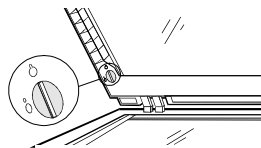


6. Plug the UTA (multi-pin D-SUB) end of the cable from the transparency adapter into the UTA connector port on the back of your scanner.



Unlock the Optical Assembly of the UTA

1. Find the Carriage Lock on the underside of the adapter near the rear.
2. Insert a coin in the Carriage Lock. Turn it until it points to the unlocked mark.



Note. Before attempting to transport your scanner, it is important that you lock the optical assembly in place to avoid any possible damage to the transparency adapter's optical components. Insert a coin in the Carriage Lock. Turn it until points to the lock mark.

Care and Maintenance Tips

Regularly clean the object glass of the scanner and the transparency adapter to prevent dirt or smudge build-up that may reduce the quality of your scanned images. Before you clean the object glass, make sure the scanner power is off and the power cord is unplugged.

Clean the object glass of the scanner and the transparency adapter with a soft damp cloth and a mild detergent or alcohol.

Note: Avoid spraying cleaning fluid directly on the object glass. This may cause the liquid to penetrate the seams around the glass and contaminate the mirrors and lenses inside the scanner. Spray the liquid on the cleaning cloth then wipe the glass clean.

Be sure that nothing covers the calibration area. It is important to keep the calibration area clean since dust or smudge marks on the glass will reduce the quality of scanned transparencies. Make sure the transparency fits in the scanning area.

Do not leave transparencies on the object glass of the scanner for excessive periods of time. The warmth of the scanner and transparency adapter lamps may cause them to deteriorate. Please, use the Frame holder to secure the transparencies for scanning.

Chapter 2: Macintosh Installation

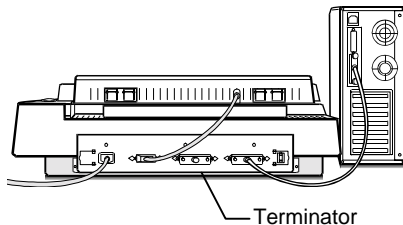
This chapter describes how you can use your scanner with your Macintosh computer.

Connect the Scanner to your Computer

1. Ensure that the scanner's SCSI ID is properly set. Refer to the "Change the SCSI Number" section in Chapter 1 for instructions on setting the scanner's SCSI ID.
2. Connect the SCSI cable to your Macintosh's SCSI port and connect the other end of the SCSI cable to the scanner.

Note: If your scanner is not chained to other SCSI devices and is the last device, please connect the terminator to the remaining SCSI port of your scanner.

3. Connect the power cord to the scanner. And connect the other end of the power cord to a grounded power socket.
4. Turn on the scanner power.
5. Turn on the computer power .



Installing the Software

Install the software in the following order:

1. Image Application Software, e.g. binuscan PhotoPerfect, Adobe Photoshop.
2. Then, MagicScan.

MagicScan is the interface used by application software to control UMAX scanners. Its advanced controls allow precise adjustments in images even during the initial scan.

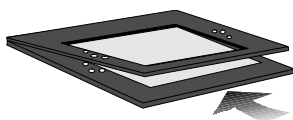
For detailed information on installing the software, refer to the Installation section of the Image Application Software User's Guide and MagicScan Electronic Books.

How to Scan with Scan Frames

Scan Frames are for use with transparencies and negatives. Scan Frames are thin, hinged, rectangular-shaped plastic frames which can hold a source document of a slightly smaller size. The Scan Frames come in a number of sizes, including 35mm, 60x60 mm and 4 x 5 inch. Orientation holes are located on the short sides of the frames. When one or more of these frames are placed on the scanner's object glass and the "Scan" button is clicked, the scanner will automatically detect the existence of each frame, using the orientation holes for reference, and will only include what is within each Scan Frame in the resulting scanned image.

To use the Scan Frames, do the following:

1. Ensure the Transparency Adapter is fitted before proceeding with the scan.
2. Select a Scan Frame size which will hold the original source document without covering up the orientation holes.
3. Select the "Frame Holder Detection" option from the MagicScan. For detailed information on using frame holder, refer to your MagicScan user's guide.
4. Open the Scan Frame and place the source document inside, taking care not to cover the orientation holes.

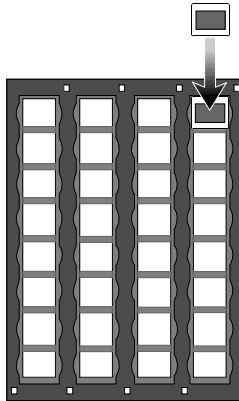


5. Lift up the Scanner's transparency adapter and place the Scan Frame on the scanner's object glass.
6. Carefully align the Scan Frame so that it's exactly parallel with one of the rulers bordering the scanner's object glass. You can easily do this by simply placing the Scan Frame against one of the rulers.

Note: Although misalignment will not prevent the scanner from scanning, portions of the Scan Frame may appear in the resulting scan if the frame is not perfectly aligned.

Multiple Scanning Using the A3/ 35mm Slide Tray

1. Place the transparencies into the slide holders on the slide tray.



2. Lift up the A3 Scanner's transparency adapter and place the Slide Tray on the scanner's object glass.
3. Line the orientation holes up in such away that the entire tray fits on to the object glass and the slide tray borders line up with the rulers on the scanner's object glass.

Note Although misalignment will not prevent the scanner from scanning, portions of the Slide Tray may appear in the resulting scan if the frame is not perfectly aligned.

4. Repeat steps 1 through 3 for placement of additional slides

Chapter 3: PC Installation

This chapter describes how you can connect and use the scanner with your IBM PC or compatible computer.

Interface Card Installation

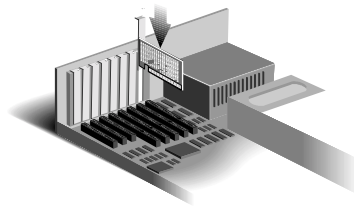
Before you can use your scanner with your computer, you need to install the interface card into your PC. To do this:

1. If your interface card is a UMAX proprietary card and has I/O Base Address dip switches on it, refer to the document comes with your interface card for confirm or reset the I/O base address. Then proceed with the instructions found in the next section for installing the card in the computer.
2. If your interface card is a switchless card (i.e. does not have dip switches on it for selecting the I/O base address), install the interface card in the computer as described in the next section.

To install the card into one of the computer's expansion slots, observe the following procedures:

Note. The interface card is sensitive to static electricity. Handle the card by its mounting bracket, particularly when removing the card from its anti-static packaging.

1. Turn the computer power off and unplug the power cord.
2. Remove the housing cover of the computer. Follow the instructions provided in your PC's reference manual.
3. Remove the metal cover corresponding to your chosen slot. Keep the removed screw so that it can be used to fasten the interface card.
4. Gently insert the interface card into the slot until it is firmly seated in the slot.

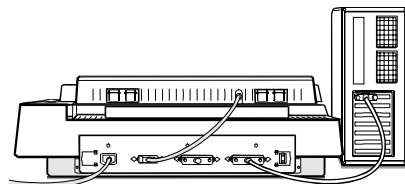


5. Secure the card in place with the screw removed from the expansion slot cover in step 3 above.
6. Replace the housing cover following the instructions provided in the computer's reference manual.

Connect the Scanner to the Computer

With settings on the scanner and card correctly set and the interface card properly installed in your computer, you can now connect the scanner and the computer, as follows:

1. Connect the 25-pin cable connector to the interface card in the PC.
Note. If your SCSI card is not UMAX brand, you have to use other 50-pin port (50-50 pin) cable connector for connecting to your interface card.
2. Connect the other end of the cable to the 50-pin connector of the scanner.
3. Connect the power cord to the scanner.
4. Turn on the scanner power.
5. Turn on the computer power.



Hardware installation is now completed.

Get ready to run the UMAX Setup program to install the supporting UMAX software supplied with your system.

Note. If you encounter intermittent problems either with the link between the scanner and your computer or with the results of your scans, you may have to install an external SCSI terminator. For more information about terminators, refer to the “Check the Terminators” in Appendix A.

Installing the Software

Install the software in two easy steps, in the following order:

1. Image Application Software, e.g. binuscan PhotoPerfect, Adobe Photoshop.
2. Then, MagicScan.

MagicScan is the interface used by application software to control UMAX scanners. Its advanced controls allow precise adjustments in images even during the initial scan.

For detailed information on installing the image editing application software, refer to the Installation section of the Image Editing Application Software User's Guide.

1. Insert UMAX MagicScan CD into your CD-ROM drive.
2. **Win95 users** - click on the Start button on the taskbar and select the Run command.
Win3.1/NT users - choose the Run command from the File menu of Windows Program Manager.
3. In the Command Line of the Run dialog box, type d:\setup (if you are using CD-ROM drive D). If your CD-ROM drive is designated by another drive, please type the appropriate letter in the Run dialog box.
4. Follow the on-screen instructions to completely install MagicScan.

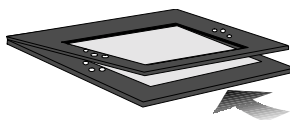
Double-click the Read Me icon in the MagicScan group for important up-to-date information that may not be included in the manual. If there are any problems with the icons in MagicScan group, double-click the Help icon in the MagicScan group.

How to Scan with Scan Frames

Scan Frames are for use with transparencies and negatives. Scan Frames are thin, hinged, rectangular-shaped plastic frames (see following diagrams) which can hold a source document of a slightly smaller size. The Scan Frames come in a number of sizes, including 35mm, 60x60 mm and 4 x 5 inch. Orientation holes are located on the short sides of the frames. When one or more of these frames are placed on the scanner's object glass and the "Scan" button is clicked, the scanner will automatically detect the existence of each frame, using the orientation holes for reference, and will only include what is within each Scan Frame in the resulting scanned image.

To use the Scan Frames, do the following:

1. Ensure the Transparency Adapter is fitted before proceeding with the scan.
2. Select a Scan Frame size which will hold the original source document without covering up the orientation holes.
3. Also, you must select the "Frame Holder Detection" option from the MagicScan. For detailed information on using frame holder, refer to your MagicScan user's guide.
4. Open the Scan Frame and place the source document inside, taking care not to cover the orientation holes.

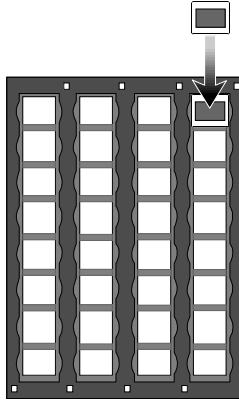


5. Lift up the Scanner transparency adapter and place the Scan Frame on the scanner's object glass.
6. Carefully align the Scan Frame so that it's exactly parallel with one of the rulers bordering the scanner's object glass. You can easily do this by simply placing the Scan Frame against one of the rulers.

Note: Although misalignment will not prevent the scanner from scanning, portions of the Scan Frame may appear in the resulting scan if the frame is not perfectly aligned.

Multiple Scanning Using the A3/ 35mm Slide Tray

1. Place the transparencies into the slide holders on the slide tray.



2. Lift up the A3 Scanner's transparency adapter and place the Slide Tray on the scanner's object glass.
3. Line the orientation holes up in such away that the entire tray fits on to the object glass and the slide tray borders line up with the rulers on the scanner's object glass.

Note Although misalignment will not prevent the scanner from scanning, portions of the Slide Tray may appear in the resulting scan if the frame is not perfectly aligned.

4. Repeat steps 1 through 3 for placement of additional slides

Chapter 4: Troubleshooting Tips

The scanner was designed to provide a hassle-free installation and operation. However, should you encounter problems with your scanner, correct them by way of the troubleshooting tips given in this chapter.

For persistent problems with your computer, consult your dealer or approved service personnel.

General Approach

In most cases, a problem does not call for the service of a qualified technician. The solution may be very simple, such as correcting cabling connections and the like. The solution of a problem normally lies at the source of the problem. Therefore, it is important that you ascertain the cause of the failure or malfunction. Below is a general troubleshooting approach.

1. Check the connections and installation. Ensure that there are no loose connections. Ensure that the settings on the scanner and/or the interface card are correct.
2. Check the error messages appearing on the screen. Does the message point to a hardware problem or software problem?

If the problem is software-related, refer to the software reference manuals or on-line help. Most software manuals include a troubleshooting chapter.

If the problem is hardware-related, verify that the cause is from your computer or scanner or in some cases, your network. If it is due to your computer malfunctioning, then consult your computer's reference manuals or a computer service technician.

Note. Macintosh and IBM computers and compatibles display error messages that normally tell you the cause of the problem and in some cases tell you what to check or do to solve the problem.

3. If the error message points to a problem with your scanner system, run the scanner self-test.

Turn the power of your scanner on. At power on, your scanner automatically runs the scanner self-test which can detect most of the problems with your scanner.

Observe the behavior of the LED indicators. Record all your observations.

4. If all else fails, call your dealer.

To facilitate servicing, supply your dealer with the following information:

- Your host environment files such as your config.sys, autoexec.bat, win.ini, system.ini and other system files
- Names and version of the application software you are using
- Model and version of other SCSI devices you are using
- TWAIN version
- Names and versions of the drivers you are using
- Model and version of your scanner hardware
- Error codes or messages seen
- Description of what you were doing at the time the malfunction or failure occurred
- Description of what you did to attempt to solve the problem
- Other observations that may aid the technician in identifying the problem and the solution

LED Indicators

The tables below list some of the more common specific problems you may have with your scanner. Corrective actions are also given.

Problem 1: Power Indicator fails to come on

Possible Cause / Solution:

- ♦ Make sure the power cable is plugged into the scanner and the wall socket.
- ♦ Make sure that the power switch is on.
- ♦ If none of the above works, contact your dealer.

Problem 2: Scanner lamp flickers, is dim, or fails to come on

Possible Cause / Solution:

- ♦ The scanning lamp is failing or has failed and needs to be changed. Contact your dealer.

Problem 3: If the Power and Ready indicators come on, but software returns "Scanner link failed" or similar message

Possible Cause / Solution:

- ♦ Make sure the cable is connected properly.
- ♦ Verify the setting of the SCSI ID number. PC users should also pay special attention to the I/O address setting.
- ♦ Disconnect all SCSI devices and connect them one by one, beginning with the scanner, to identify the device causing the problem.
- ♦ Check the terminators and the cables. If problem persists, contact your dealer.

System Hang

You may encounter a situation where the PC software installation appears to be stable and the scanner appears to be normal, but the system “hangs” whenever scanner operations are attempted. This problem is most often caused by another card in the system being set to the same address of your interface card. To solve the problem:

1. Remove all unnecessary interface cards from the PC.
2. If your interface card has I/O address setting dip switches on it, reset the switches to an unused number (not 300H).
3. Run Windows and your TWAIN-compliant imaging software.
4. Follow the instructions in the imaging software manual to start MagicScan.
5. After MagicScan starts, an initialization file will be automatically written to your hard disk. When MagicScan starts, exit MagicScan, the imaging application, and Windows.
6. Turn off the PC and re-install the other cards in your PC.
7. When you reboot and attempt to run MagicScan, it should come up normally.
8. If the above does not solve the problem, consult your dealer.

Appendix A: Installing An ASPI-Compatible Card

If you are using an ASPI-compatible SCSI interface card with your computer and scanner, refer to the installation instructions provided with the interface card.

After installing the card, do the following steps before connecting your scanner to your computer.

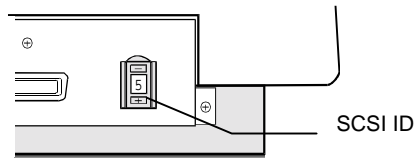
- ♦ Confirm or reset the SCSI address of the scanner.
- ♦ Check the terminators in the SCSI Chain
- ♦ Make the SCSI cable connections.

Check the SCSI Addresses

The illustration below shows the location of the SCSI address selector at the rear panel of the scanner. The selector shows the SCSI address setting of the scanner. In this case, it is #5 - the factory preset address.

After installing an ASPI-compatible SCSI interface card in your computer, proceed with the following:

1. Check the SCSI addresses of all devices on the SCSI chain. Is SCSI address #5 on the list of SCSI addresses in use?



2. If not, then you can connect your computer to the scanner with a factory preset SCSI ID of 5. You may jump to the section *Check the Terminators* in this appendix.

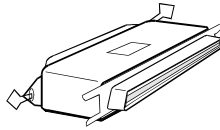
Reset the Address of the Scanner

If SCSI address #5 is in the list of SCSI addresses in use, then you must reset the SCSI address selector to another number:

1. Ensure the scanner power is off.
2. Choose any unused number in the range 0-6.
Note Do not use settings 7 to 9 on your scanner. They are for factory use only.
3. Reset the scanner's SCSI address to the number you have chosen.

Check the Terminators

There should be two terminators in a SCSI chain: it is best to place the terminators at each end of the SCSI chain.



The simplest configurations for using the scanner with an ASPI compatible SCSI card are as follows:

- ♦ Connect the scanner to an ASPI compatible interface card that does not have another device attached to it.

In this situation, the card will have a built-in terminator. The card forms one end of the SCSI chain; the scanner forms the other end. Simply attach the supplied external terminator to the scanner. These will ensure that there are two terminators and that they are placed at the ends of the SCSI chain.

- ♦ Connect the scanner to an ASPI card that has another device attached to it.

In this case, check to see if the other SCSI device has a terminator. If not, attach the terminator to the scanner. If the other device has an internal terminator, simply attach the scanner to the SCSI chain. Although the terminators are not, technically speaking, placed at the ends of the chain, the scanner should work properly.

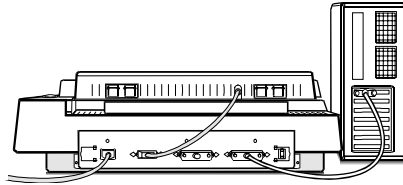
If you experience unreliable SCSI operation and suspect terminator problems, or would like a more thorough discussion of SCSI terminators and possible problems with SCSI terminators, please consult your dealer.

Connect the Computer and Scanner

Now that the interface card has been installed and all of the settings on the scanner and card are properly set, you can connect the computer and the scanner. Once this has been done, the hardware installation will be complete. To connect the scanner and computer, do the following:

1. Connect the SCSI cable to the interface card.
2. If your SCSI configuration requires the use of the external terminator, attach the terminator to the scanner.
3. Connect the other end of the SCSI cable to the scanner.
4. Connect the power cord to the scanner.
5. Turn on the scanner power.

6. Turn on your computer power.



Installing the Software for PC Users

Install software in two easy steps, in the following order:

1. Image Application Software.
2. MagicScan

MagicScan is the interface used by application software to control UMAX scanners. Its advanced controls allow precise adjustments in images even during the initial scan.

For detailed information on installing the image editing application software, refer to the Installation section of the Image Editing Application Software User's Guide.

1. Insert UMAX MagicScan CD into your CD-ROM drive.
2. **Win95 users** - click on the Start button on the taskbar and select the Run command.
Win3.1/NT users - choose the Run command from the File menu of Windows Program Manager.
3. In the Command Line of the Run dialog box, type `d:\setup` (if you are using CD-ROM drive D). If your CD-ROM drive is designated by another drive, please type the appropriate letter in the Run dialog box.
4. Follow the on-screen instructions to completely install MagicScan.

Double-click the ReadMe icon in the MagicScan group for important up-to-date information that may not be included in the manual.

If there are any problems with the icons in MagicScan group, double-click the Help icon in the MagicScan group.

Appendix B: Scanner Specifications

Scanner Type	Flatbed
Interface	Built-in SCSI II, two 50-pin connectors
Scan Speed	176 sec. / A3 (700dpi)
Preview Speed	30 sec. / A3 (700dpi)
Maximum Scannable Area	11.4" x 17"
Optical Resolution	700 x 1400dpi
Output (H/W) Resolution	700 x 1400dpi
Maximum Resolution	9800 x 9800dpi
Scanning Density	1 dpi to 3200dpi
Color Scanning Method	One pass with color CCD
Sample Depth	
Color Mode	24/36 bits/pixel
GrayScale Mode	8/12 bits/pixel
Lineart mode	1 bit per pixel
Scanner Settings	
Scaling	1% to 1600%/1200% in 1% increments at 700/1400 dpi resolution
Highlight/Shadow	255 steps
Contrast/Brightness	-100% ~ +100%
Gamma Curve	Downloadable Curves
Data Output	
Color Mode	36 bits (hardware) /24 bits (system)
Grayscale Mode	12 bits (hardware) /8 bits (system)
Power Requirements	
Voltage	100 ~ 240 VAC
Frequency	50-60Hz
Power Consumption	Maximum 60 Watts
Environmental Range	
Operating Temperature	10°C ~ 40°C
Relative Humidity	20% ~ 80%
Other Specifications	
Noise	Under 60 dB (Operating)
Dimensions	730 mm x 528 mm x 142 mm (for scanner) 670 mm x 456 mm x 63 mm (for UTA-II)
Net Weight	19Kgs (42lbs) for scanner main body 7Kgs (15.5lbs) for UTA-II
Systems Supported	PC and Macintosh computers
Options	UMAX Transparency Adapter UTA-II

Note. Specifications are subject to change without prior notice.

Glossary

Apple Compatible Driver	An interface software module for applications other than Photoshop that support Apple scanners.
Application Software	Software that is used to perform a specific function, e.g., image processing, OCR (Optical Character Recognition), or DTP (Desktop Publishing).
ASPI	SCSI communication standard developed by Adaptec.
Black and White	A 1-bit image file capable of displaying only black and white image data with no intermediate gray levels.
DIP Switch	A small switch mounted in or on computer equipment that sets certain parameters.
Expansion Slot	A connector and bracket system in a computer into which an expansion or interface card can be inserted to add functions to a computer system.
Expansion Slot Cover	A metal or plastic plate dust cover that covers the exterior "hole" of an expansion slot.
Folder	The icon in Macintosh systems in which software icons can be placed.
Grayscale	An 8-bit image file capable of displaying up to 256 gray levels.
Halftone Pattern	The pattern that is used when varying the ratio of black and white pixels in a halftone image.
Halftone	A 1-bit image file capable of displaying gray levels by varying the ratio of black and white pixels within a given area.
I/O Base Address	An address that is used for communication between a host computer and an expansion or interface card. All cards in a computer system must be set to different I/O addresses.
Icon	The graphical representation of a computer file or piece of computer software.
Indicator Panel	The area of the scanner that shows the LED indicators.
Interface Card	A card that provides additional functions or capabilities for your computer. These cards are called by various names such as adapter, add-in card, controller card, expansion card, option card or by the names of the functions they do such as fax/modem cards, network card, scanner card, etc. This card is inserted into an expansion slot to allow the connection of a peripheral device to a PC.
Non-TWAIN Driver	An interface system that does not follow the TWAIN standard and is designed for a specific software package and a specific image input device.

Object Glass	The tempered glass of the scanner where documents or object to be scanned are placed.
Optical Assembly	The component system of the scanner that contains all the scanner's optical components. Sometimes referred to as a carriage or carriage assembly.
Peripheral Device	A device attached to a computer that adds functions to a computer system.
Power Indicator	The indicator that glows when the scanner's power cable is connected to the scanner and "live" outlet and the power switch is turned on.
Ready Indicator	The indicator that glows when the scanner is ready to be used.
SCSI Chain	One or more SCSI devices connected to the same SCSI controller.
SCSI Device	A device that uses the SCSI interface to connect to a computer.
SCSI ID	A unique number between 0 and 7 that identifies each device in a SCSI chain. The SCSI ID is set using a SCSI ID switch found on most external SCSI devices.
SCSI ID Switch	The switch on most external SCSI devices which is used to set the SCSI ID.
Terminator	An electronic component that absorbs stray signals in a chain of computer equipment to ensure reliable operation.
TWAIN	A standardized interfacing system that allows many different software applications to access many different image input devices.
TWAIN Compliant	Any software or image input device that conforms to the TWAIN standard.
UTA	UTA (UMAX Transparency Adapter), a optional scanner hardware that allows the scanning of transparent originals.