PowerLook 1100

Color Scanner

Operation Manual

Thank you for purchasing the PowerLook 1100 color scanner. With PowerLook 1100 color scanner, you can easily scan 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 9600 dpi and high density range, 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 binuscan PhotoPerfect.

- *Transparency Adapter:* Allows the scanning of films, slides, and transparencies up to the full-size scanning area: 8.5" x 10".

- *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:

For PC users: Pentium or higher, CD-ROM drive, hard drive with 50MB free disk space, 64MB memory, Microsoft Windows 98 SE (Second Edition), Windows 2000, Windows-compatible keyboard, display, and mouse. Recommended: SVGA or higher graphics card.

For Mac users: Power Macintosh, New Power Mac G3, G4 with built-in FireWire® port, CD-ROM drive, hard drive with 50MB free disk space, 64MB memory, higher, FireWire Extension 2.1 or higher.

Important Safeguards

- Read all of the instructions.
- Save these instructions for later use.
- Follow all warning and instructions marked on the product.
- When replacement parts are required, be sure that service technicians have used replacement parts that conform to at least the same safety standards with regard to fire, electric shock, or other hazards.
- Do not use this product near water or in rainy/moist environment
- Do not place the scanner on an uneven surface which may cause serious damage to the product.
- The product should be operated only from the type of power source indicated on the marketing label.
- Do not attempt to service this product yourself as opening or removing the enclosure may expose you to dangerous voltage or other hazards.
- This unit has input circuitry suitable for a 100~240VAC supply.
- The sound level at the operators position according to IEC 704-1:1982 should be less than or equal to 70dB(A).

Contents

Quick Start Guide

This section serves as a quick reference to the connection and installation procedures for the PowerLook 1100 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. **Unlock your Scanner**
    Before using your scanner ensure that the carriage lock of scanner is in the unlocked position. Insert a coin in the thumbscrew of the *optical assembly lock* and turn it firmly counterclockwise to unlock the optical assembly to avoid damaging the optics during transportation.

3. **Connect the FireWire (IEEE 1394) Cable**
    Connect the FireWire (IEEE 1394) cable to the built in port of host and the other end of the cable to the scanner.

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

5. **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.
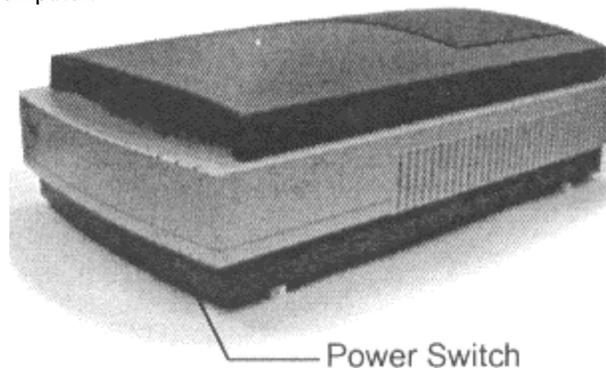
6. **Software Installation**
    We recommend that you install your image editing software first and then MagicScan.

    a) Insert UMAX MagicScan CD into your CD-ROM drive.
    b) Double-click on the MagicScan installer icon to start installation.
    c) Follow the on-screen instructions to completely install MagicScan.

Chapter 1. Getting Started

Your PowerLook 1100 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 items 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:

- 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 par 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.

- **Document Cover –** The plastic cover over the object glass. Can be raised or lowered to cover a document.

- **LED Indicators –** Three indicators – Power, Ready, and Option.

- **Optical Assembly Lock –** Locks the scanner's optical component system.

- **Power Switch –** Used for turning the scanner power ON and OFF.

- **FireWire (IEEE 1394) Connector –** Where you plug in the FireWire (IEEE 1394) cable.

- **UTA Connector** – A connector used to connect the optional UMAX Transparency Adapter.

- **Power Cord Connector** – Where you plug in the scanner power cord.

Front View

Document Cover/Transparency Adapter

Object Glass

Optical Assembly Lock

LED Indicators

Power Switch

Rear View

UTA Connector

Power Cord Connector

FireWire (IEEE 1394) Connector

UTA Connector
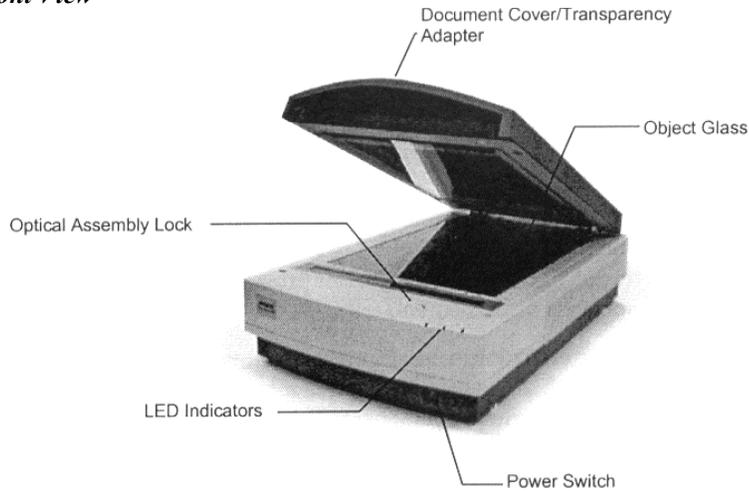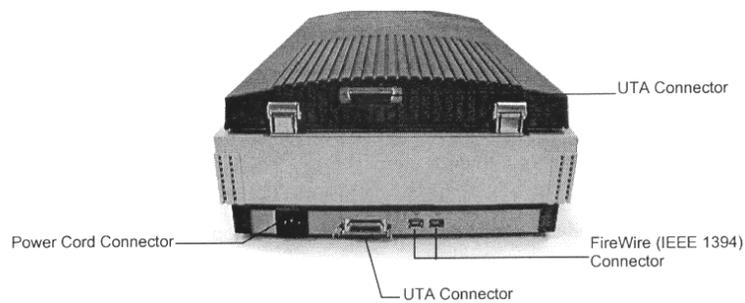
Prepare the Scanner

Prepare your scanner for installation through the following simple steps:

- Unlock the optical assembly

- Run the automatic scanner self-test

Unlock the Optical Assembly of the Scanner

Insert a coin in the thumbscrew of the optical assembly lock and turn it firmly counterclockwise.

Optical Assembly Lock

Option Indicator

Ready Indicator

Power Indicator

6
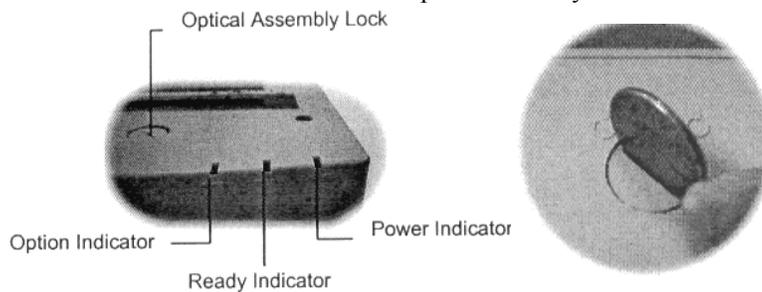
Before attempting to transport your scanner, it is important that you lock the optical assembly in place to avoid any possible damage to the scanner's optical components. To lock the optical assembly, insert a coin and turn it until points to the lock mark.

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.

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 to 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.

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 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. Connect the FireWire cable to your Macintosh's FireWire port and connect the other end of the FireWire cable to the scanner.
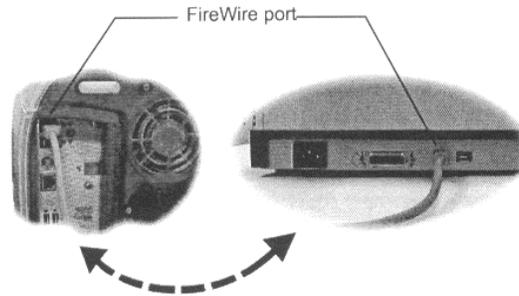
2. Connect the power cord to the scanner. And connect the other end of the power cord to a grounded power socket.

3. Turn on the scanner power.

4. Turn on the computer power.

Installing the Software

Install the software in the following order:

1. Image Application Software, e.g. Adobe PhotoShop.

2. Then MagicScan.

3. Then binuscan PhotoPerfect if needed.

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.

Chapter 3. PC Installation

This chapter describes how you can connect and use the PowerLook 1100 scanner with your IBM PC or compatible computer.

Installing the Software

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

1. Image Application Software, e.g. Adobe PhotoShop.

2. Then MagicScan.

3. Then binuscan PhotoPerfect if needed.

Notes: *If installation program does not show up automatically, please follow the procedure to install:*
Choose RUN from Start menu and type d:\setup (where "d" indicates CD-ROM drive), then click OK.

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.

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.

IEEE 1394 Interface Card Installation

Before you can use your scanner with your computer, you need to install the IEEE 1394 interface card into your PC.

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' 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.
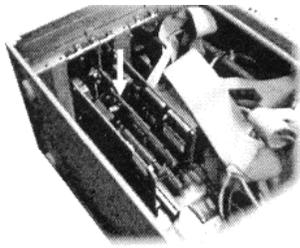
5. Secure the card into place with the screw removed from the expansion slot cover in step 3 above.

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 IEEE 1394 cable connector to the interface card in the PC.

2. Connect the other end of the IEEE 1394 cable to the scanner.
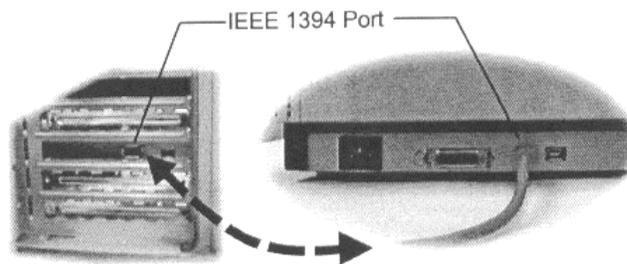
3. Connect the power cord to the scanner.

4. Turn on the scanner power.

5. Turn on the computer power.

Hardware installation is now complete.

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

Chapter 4. How to Use Frame Holder

How to Scan with Scan Frames

Scan Frames are for use with transparencies and negatives. Scan Frames can hold a source document of a slightly smaller size. 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 "Preview" 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. Open the Scan Frame and place the source document inside, taking care not to cover the orientation holes.

3. Lift up the Scanner transparency adapter and place the Scan Frame on the scanner's object glass.

4. 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.

5. Choose "Transparent" option from the MagicScan. For detailed information on using the frame holders, refer to your MagicScan online help.
6. Also, you can select the "Frame Holder" option from the MagicScan. And click the "Preview" button. MagicScan will automatically detect the existence of each frame.

Multiple Scanning Using the A4 / 35mm Slide Tray

1. Place the transparencies into the slide holders on the slide tray.
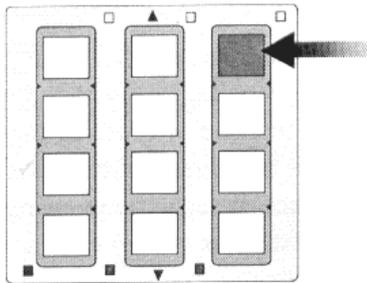
2. Lift up the A4 Scanner's transparency adapter and place the Slide Tray on the scanner's object glass.

3. Line the orientation holes up in such a way 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.

4. *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.

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

6. In addition, you must select the "35mm Slide Tray" option from the MagicScan.

7. Click the "Preview" button. MagicScan will automatically detect the slide tray and crop the image inside it precisely.

8. Click the "Scan" button to scan all cropped images.

Note: Do not open the document cover while scanning an image. Otherwise, the scanning image quality might be poor.

Chapter 5. Troubleshooting Tips

The PowerLook 1100 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 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, for Mac users, use Apple system profiler located at Apple menu item to output the system environment file.

    - TWAIN / Plug-in version

    - Version of FireWire (IEEE 1394), Extension OS

    - 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

Listed below are 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.
- Disconnect all FireWire (IEEE 1394) devices and connect them one by one, beginning with the scanner, to identify the device causing the problem.

Appendix A: Scanner Specifications

Scanner Type	Flatbed with Transparency Unit Integrated
Interface	FireWire (IEEE 1394)
Scan Speed	9.6ms/4.8ms line (color mode)
Maximum Scannable Area	215.9 x 297 mm (8.5" x 11.7") for flatbed 215.9 x 254 mm (8.5" x 10") for UTA
Optical Resolution	1200 dpi (H) x 2400 dpi (V)
Output (H/W) Resolution	1200 dpi (H) x 2400 dpi (V)
Maximum Resolution	9600 dpi (H) x 9600 dpi (V)

Sample Depth

Color Mode	24/36 bits/pixel, 42 bits/pixel extendable
Gray Scale Mode	8/12 bits/pixel, 14 bits/pixel extendable

Scanner Settings

Scaling	1% to 400%
Highlight/Shadow	1 ~ 255 steps/ 0 ~ 254 steps
Contrast/Brightness	-100% ~ +100%
Gamma Curve	Downloadable Curves, 14 bit depth

Data Output

Color Mode	36 bits (hardware) /24 bits (system), 42 bits extendable
Gray Scale Mode	12 bits (hardware) /8 bits (system), 14 bits extendable

Power Requirements

Voltage	100 ~ 240 VAC
Frequency	47-60Hz
Power Consumption	Maximum 30 Watts

Environmental Range

Operating Temperature	+5°C ~ +40°C
Relative Humidity	25% ~ 85%

Other Specifications

Noise	Under 55 dB (Operating)
Dimensions	543 mm x 336 mm x 165 mm (for scanner with UTA)
Net Weight	12.5Kgs (for scanner with UTA)
Systems Supported	PC/Macintosh Computers/ New Power Mac G3/G4
Options	UMAX Transparency Adapter UTA-1100

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).

Black and White A 1-bit image file capable of displaying only black and white image data with no intermediate gray levels.

Folder The icon in Macintosh systems in which software icons can be placed.

FireWire (IEEE 1394) Some of the fastest peripheral standards ever developed, which makes it great for use with multimedia peripherals such as video camcorders and other high-speed devices like the latest hard disk drivers and scanners.

Gray Scale An 8-bit image file capable of displaying up to 256 gray levels.

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.

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), an optional scanner hardware that allows the scanning of transparent originals.