

UMAX

Astra 1600U

*Color scanner
Operation Manual*



UMAX Data Systems, Inc.

1299

This operation manual contains all the information that you can not find in Quick Start Guide. For quick installation instructions, see the Quick Start Guide accompanying your scanner.

! Make sure the power is OFF before installing.

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Important Safeguards

- ◆ Read all of the instructions.
- ◆ Save these instructions for later use.
- ◆ Follow all warnings 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. This may cause serious damage to the scanner.
- ◆ The product should be operated using only the type of power source indicated on the product 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 12V DC supply.
- ◆ The sound pressure level at the operators position according to IEC 7041:1982 should be less than or equal to 70dB(A).

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A Glance at Your Scanner

The Front View

Document Cover

The plastic cover over the object glass which can be raised and lowered over a document.



Object Glass

The glass surface on which the document or image should be placed.

Power Indicator

Illuminates to indicate that the scanner is powered on.

The Rear View



4-Pin USB Connector

Power Adapter Receptacle

The power adapter is plugged in here.

Completing your first Scan

Before proceeding with the steps below, please finish the hardware and software installation first. Refer to Quick Start Guide.

Testing Your Scanner (For PC only)

1. Turn on your scanner.
2. Run Windows and open the VistaScan program group.
3. Click the “Scanner Test” icon to begin self-testing.

If the scanner test fails, please refer to the Troubleshooting section of this manual for a solution.

Original Image Placement

1. Raise the scanner’s document cover.
2. Place the document (graphic, text or photo) face down on the scanner. Center the document along the **triangular** mark.
3. Lower the document cover.



Start Your Scan by Using VistaScan

Note It is important to realize that different applications may use different methods of acquiring an image and only the most general case is given here. Please refer to your application's user documentation for details on its usage.

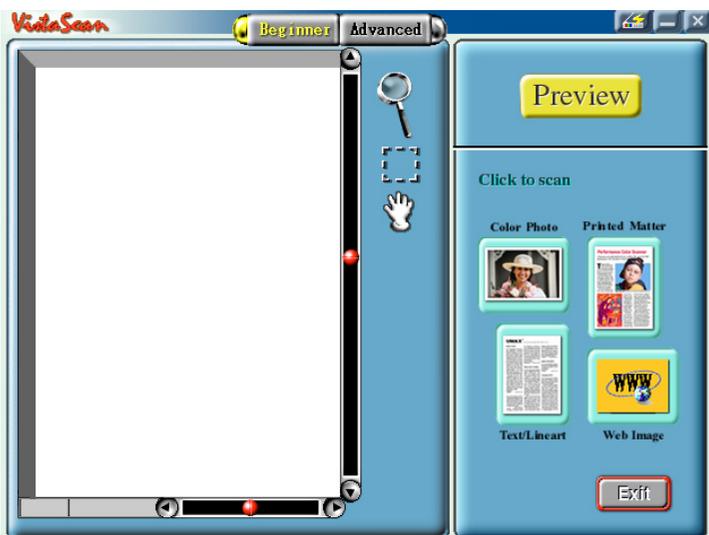
For Windows users

There are two ways to initiate VistaScan.

A. Using Application programs to invoke VistaScan

1. From Microsoft Windows, launch the application that will be used to call VistaScan. (e.g. Presto! PageManager or Adobe PhotoShop).
2. Pull down the "File" menu.
3. Choose "Select Source". Remember the specific wording of parameters may vary among different applications.
4. Select "VistaScan" as the data source. (You only need to do this once).
5. Pull down the "File" menu again.
6. Select "Acquire" to activate the scanning dialog box as shown in next page.
7. Place the image you will scan on top of scanner's object glass.
8. From the four modes on the "Click to Scan" panel, click a scan mode button that best suits the required scan. For example, if you wish to scan a color photograph, click the Color Photo button in order for the image to be scanned in true color. Scanning will commence upon selection of a button.
9. Click "Exit" to close VistaScan when scanning is complete. The scanned image will be placed on the application's desktop ready to be edited.
10. Edit the scanned image using the application. (e.g. Presto! PageManager or Adobe PhotoShop).

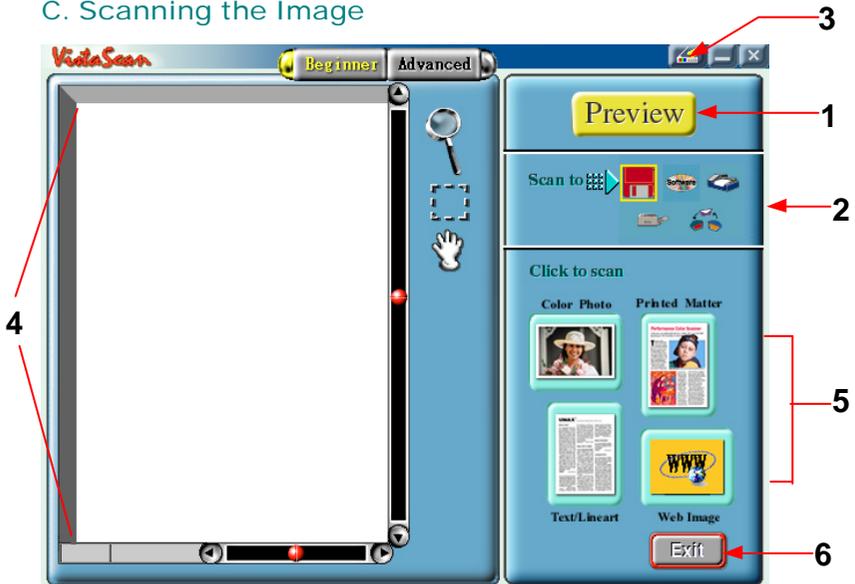
For more details about scanning the image, please refer to the on-line help of VistaScan



B. Initiating VistaScan directly

1. Launch the VistaScan program group.
2. The VistaScan interface will appear as shown in the next page.
3. From the "Scan to" panel in the main menu, choose a destination for the scanned image.
4. Click one of the small icons in the "Scan To" panel representing the desired destination (a file, printer, email application, etc.) for the scanned image. For example, if you want to save the image in a particular file, click the small icon  on the middle of panel, and then click the "Preferences" button  on the top right of the VistaScan interface. The Preferences dialog box will appear.
5. In the Preferences dialog box, enter the relevant details into the "File Name", "File Format" and "File Folder" fields respectively. You may use the "Browse" button to help you locate the desired folder for your image.
6. Click "OK". The entries you made will be implemented and the dialog box exited.
7. From the four modes on the "Click to Scan" panel, click a scan mode button that best suits the required scan. For example, if you wish to scan a color photograph, click the Color Photo button in order for the image to be scanned in true color. Scanning will commence upon selection of a button.
8. For an explanation of the other "Scan to" destinations, please refer to VistaScan's on-line help.

C. Scanning the Image



- 1 Click the PREVIEW button. A quick, low-resolution scan will be made and appear in the PREVIEW WINDOW. From this image, you can determine the area you want to scan.
- 2 From the five "Scan to" destinations, click the icon that represents the desired destination for the scanned image.
- 3 Click the "Preferences" button. The Preferences dialog box will appear from which you should enter the relevant details into the dialog box.
- 4 Select the area to be scanned by clicking on the Frame tool , and dragging the cursor diagonally to form a rectangle that best defines the area. As you drag, the borders of a frame encompassing the desired area will appear.
- 5 Click one of the scan mode buttons and scanning will commence.
- 6 Click here to **Exit**.

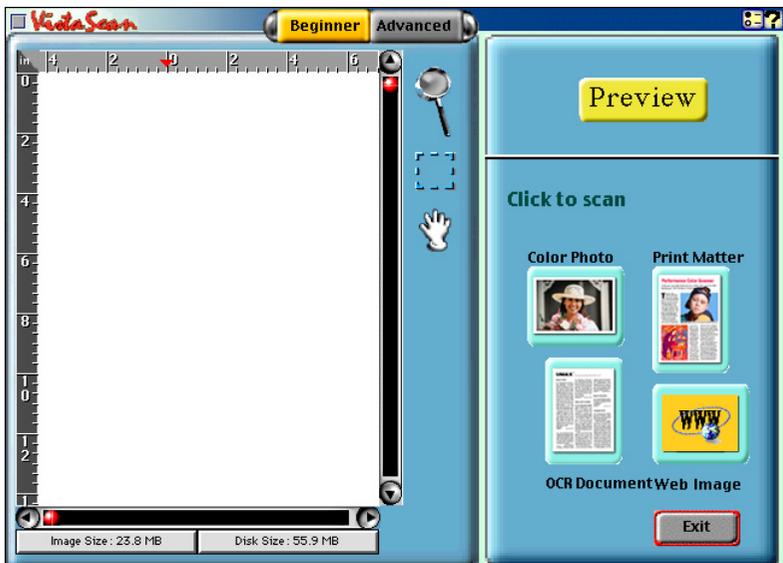
For iMac and New Power Mac G3 users

There are two ways to initiate VistaScan.

A. Using Application programs to invoke VistaScan

1. Launch scanning software which supports plug-in drivers (e.g. Presto! PageManager. If you use other image acquisition software, please refer to its accompanying documentation for operational details).
2. Pull down the "File" menu.
3. Choose "Select Source", and then select the "Plug-ins" command.
4. Choose "VistaScan" as the data source.
5. Select the "Acquire" command to activate the scanning interface as shown below.
6. The following steps are similar to those in the previous section "For Windows Users".

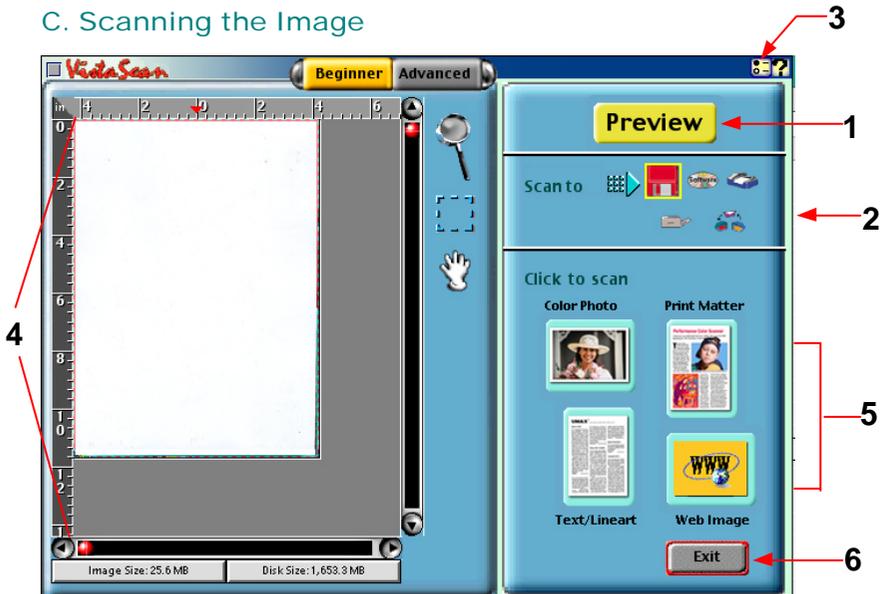
For more details about scanning the image, please refer to the on-line help of VistaScan



B. Initiating VistaScan directly

1. Launch the "UMAX VistaScan DA 3.x" program group.
2. The VistaScan interface will appear as shown in the next page.
3. From the "Scan to" panel in the main menu, choose a destination for the scanned image.
4. Click one of the small icons in the "Scan To" panel representing the desired destination (a file, printer, email application, etc.) for the scanned image. For example, if you want to save the image in a particular file, press the small icon  on the middle of panel, and then press the "Preferences" button  on the top right of the VistaScan interface. The Preferences dialog box will appear.
5. Enter the relevant details into the "File Name" field.
6. Click "OK". The entries you made will be implemented and the dialog box exited.
7. From the four modes on the "Click to Scan" panel, click a scan mode button that best suits the required scan. For example, if you wish to scan a color photograph, click the Color Photo button in order for the image to be scanned in true color. Scanning will commence upon selection of a button.
8. For an explanation of the other "Scan to" destinations, please refer to VistaScan's on-line help.

C. Scanning the Image



- 1 Click the **PREVIEW** button. A quick, low-resolution scan will be made and appear in the **PREVIEW WINDOW**. From this image, you can determine the area you want to scan.
- 2 From the five "Scan to" destinations, click the icon that represents the desired destination for the scanned image.
- 3 Click the "Preferences" button. The Preferences dialog box will appear from which you should enter the relevant details into the dialog box.
- 4 Select the area to be scanned by clicking on the **Frame** tool , and dragging the cursor diagonally to form a rectangle that best defines the area. As you drag, the borders of a frame encompassing the desired area will appear.
- 5 Click one of the scan mode buttons and scanning will commence.
- 6 Click here to **Exit**.

Troubleshooting

The scanners are designed to be reliable and easy to install. If, however, you have a problem with your scanner, these troubleshooting steps should indicate the cause of the problem.

If the scanner lamp flickers, dims, or fails to come on:

The scanning lamp is failing or has failed and needs to be changed. Please contact your dealer or Technical Support.

If the indicator comes on, but software returns “scanner link failed”, or similar message:

1. Make sure the cable is connected properly.
2. Check the installation procedures to make sure you followed all of the instructions.

If you see the error message “Scanner link failed” when executing the Preview or Scan command or encounter another system exception event, do the following:

1. Remove the cable from the USB port and re-insert it .
2. Ensure the cable to the USB port is securely and properly connected to the USB port.
3. Check the installation procedures to ensure that all the instructions have been followed.

If All Else Fails

If the above solutions do not resolve the problem, contact your dealer or Technical Support. Be sure to have the following information ready:

1. The scanner model you are using.
2. The version number of the scanner driver. (Located on the front of the CD)
3. The computer model you are using.
4. The Windows/Mac OS version that you are using.
5. The application software packages that you are using.
6. Error codes or messages seen.
7. A description of what you were doing at the time of the malfunction so that the problem can be re-created.
8. Other observations that may aid the technician in identifying the problem and solution.

Maintenance

With the exception of periodic cleaning or lamp replacement, the scanner is virtually maintenance free. The following sections give the procedures for basic maintenance of the scanner.

Static Electricity Precautions

Static electricity is a constant danger to computer systems. The charge that can build up in your body may be strong enough to damage electronic components on the scanner's printed circuit board or the computer's interface card. Therefore, it is important to observe basic precautions whenever handling electronic components for your computer. Although areas with high humidity are much less prone to static electricity, it is best to always take precautions against accidental damage that can result in expensive repairs.

The following measures should generally be enough to protect your equipment from static discharge.

- ◆ Discharge any static electricity that may have built-up in your body by touching a grounded or anti-static surface. For example, touch some large metal object or the silver-toned expansion slot covers at the rear of your computer's case. Be sure to do this immediately before removing any components from their anti-static bags.
- ◆ When handling any electronic components, be sure to carefully avoid touching any metal part of the component. Avoid touching any of the gold "fingers" that plug into the expansion slot. It is best to handle system components either by their edges or by the mounting bracket which attaches to the slot opening in the rear of the case.

Follow the above to the best of your ability. Excessive caution is not necessary, simply take reasonable care.

Cleaning

Regularly cleaning the object glass will ensure that dirt or smudges will not reduce the quality of your scanned images. Before you clean the glass, make sure the scanner is turned off and the power cord is unplugged.

Clean the object glass and document cover with a soft damp cloth and a mild detergent or alcohol.

Warning: Do not spray the cleaning fluid directly on the object glass. Spraying the liquid directly on the glass may cause the liquid to penetrate the seams around the glass and contaminate the mirrors and lenses inside the scanner. Please be sure you spray the liquid on the cleaning cloth and then wipe the glass clean.

Specifications

Maximum Scannable Area.....	216 x 297 mm (8.5 x 11.7 Inches)
Optical Resolution.....	600 x 1200 dpi
Maximum Resolution	9600 x 9600 dpi
Scanning Density	1 dpi to 9600 dpi, via Ultra View Technology
Color Scanning Method	Single pass with color CCD
Warm Up Time.....	30 Sec.
Sample Depth	
Color Mode.....	36 Bit/Pixel
Grayscale Mode.....	12 Bit/Pixel
Scanner Settings	
Scaling	1% to 200% in 1% Increments at 600 dpi Resolution
Highlight/Shadow.....	255 Steps
Contrast/Brightness	+100%~-100%
Gamma Curve	Downloadable Curves
Data Output	
Color Mode.....	36 Bit (BET)
Grayscale Mode.....	12 Bit (BET)
Interface.....	One USB Connector
Power Requirements	
Voltage	DC 12V
Power Consumption.....	Maximum 12 Watts
Environmental Ranges	
Operating Temperature	10°C~35°C
Relative Humidity	10%~85%
Dimensions.....	471mm x 312mm x 99mm
Net Weight	3.65Kg
Systems Supported	PC/ iMac/ New Power Mac G3

Glossary

Application Software: Software that is used to perform a specific function, e.g., image processing, OCR (Optical Character Recognition), or DTP (Desktop Publishing).

BET: Bit Enhancement Technology. This is a digital image processing technique which increases the number of bits used per pixel in order to acquire a more vivid and clearer image.

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

Document Cover: The plastic cover that is lowered over a document on the scanner's object glass.

Folder: An electronic storage area used to store and organize files and other folders and is often represented on a computer screen by a folder-like icon.

Grayscale: An 8-bit image file capable of representing all tones and colors in the image using 256 shades of gray.

Icon: The graphical representation of a computer file or piece of computer software.

Indicator Panel: The area of the scanner that contains the LED indicators to show scanner status.

Non-TWAIN Driver: An interfacing 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 objects to be scanned are placed.

Optical Assembly: The component system of the scanner that contains all of the optical components. Sometimes referred to as a carriage or carriage assembly.

Peripheral Device: A device attached to a computer that adds functionality to a computer system.

Power Indicator: The indicator that glows when the scanner's power cable is connected to the scanner and a "live" outlet and the power switch is turned on.

Transparency Adapter: A scanner option that consists of additional

hardware allowing the scanning of transparent originals, such as slides or X rays.

TWAIN Compliant: Any software or image input device that conforms to the TWAIN standard.

TWAIN: A standardized interfacing system that allows many different software applications to access many different image input devices. TWAIN is currently more popular on the Windows platform than it is on the Macintosh.

USB: Universal Serial Bus, a interface between host and peripherals.

FCC Declaration of Conformity

Declares that the products:

Product Name: Color Scanner Model No.: Astra 1600U (or) HB70

FCC Rules: Tested to comply with FCC Part 15, Class B

Operating Environment: For home or office use

FCC Compliance Statement:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesirable operation.

Information to user:

This equipment has been tested and found to comply with the limits of 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:

1. Reorient/Relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment to an outlet different from the one to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

Caution:

Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment.

The party responsible for product compliance:

Corporate Name: UMAX Technologies, Inc.

Address: 3561 Gateway Blvd. Fremont, CA 94538, U.S.A.

Telephone No.: 510-651-4000

Person responsible for making this declaration:

Position/Title: Vice President

Signature:

