

OPERATION MANUAL

For the
**Astra
4400**
Color
Scanner



UMAX Data Systems, Inc.

UMAX[®]

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

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Important Safeguards

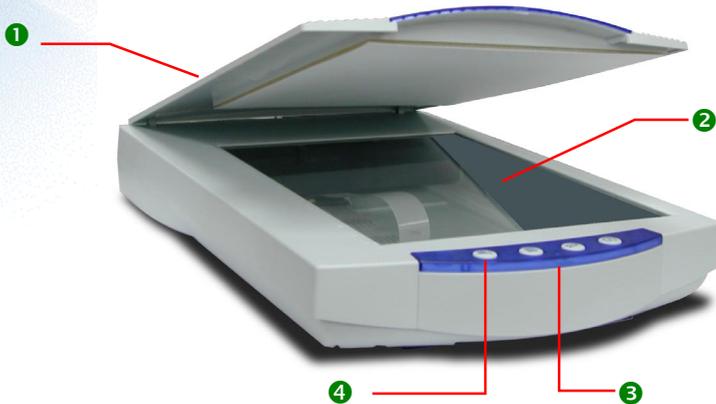
- ◆ Read all the instructions.
- ◆ Save these instructions for later use.
- ◆ Follow all warnings and instructions marked on the product.
- ◆ When replacement parts are required, be sure that service technicians have used replacement parts that conform to at least the same safety standards with regard 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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OVERVIEW OF YOUR SCANNER

Front View



① Document Cover

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

② Object Glass

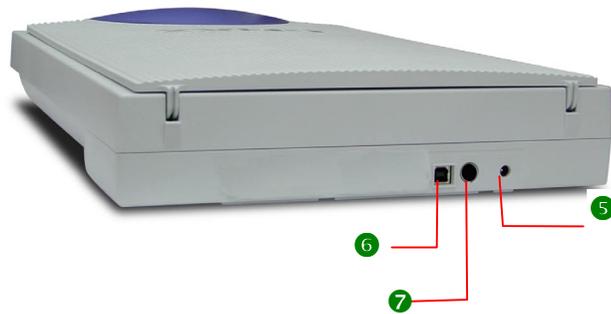
The glass surface on which the document or image should be placed.

③ Power Indicator

Illuminates to indicate that the scanner is powered on.

④ Scan, Copy, E-mail/Fax and Custom buttons

Back View



5 Power Adapter Receptacle

The power adapter is plugged-in here.

6 4-Pin USB Connector

7 Universal Transparency Cover Socket

The socket used by the Universal Transparency Cover.

Push buttons on the front panel

The defining feature of the Astra 4400 is its push button functionality.

You can scan an image to e-mail, perform OCR, or even use the scanner as a copy machine by pressing the buttons on the front panel of the scanner.

The scanner has four push buttons on the front panel, from left to right: “Scan”, “Copy”, “E-mail/Fax” and “Custom”.



Scan – Press this button to start scanning the image on the scanner to the image editing application, scanning the document on the scanner to the text editing application or scanning the document on the scanner to Microsoft Excel.



Copy – Press this button to directly spool your image to the printer.



E-mail/Fax – Press this button to scan the image to an e-mail application or have it prepared to be sent as a Fax.



Custom – Press this button to scan the image using VistaScan or launch an image editing application installed in your computer.

COMPLETING YOUR FIRST SCAN

Before proceeding with the steps below, please complete the hardware and software installation (refer to the Quick Start Guide).

Placing the Original Image

1. Raise the scanner's document cover.
2. Place the document (graphic, text or photo) face down on the glass.
3. Lower the document cover.

Starting by Pressing the Push Buttons

You can increase your productivity by accessing all the normal scanner functions without having to manually launch the software applications in your computer.

Press the push buttons on the front panel of your scanner and the image or the text document on the scanner will be scanned to the destination selected. Refer to the following sections to familiarize yourself with each push button on the front panel of the scanner and their functions.

Scan Button

Scanning images to the image editing application



1. Press the **Scan** button on the front panel of the scanner and a window with three icons appears, as shown on the next page. Click on the first icon from the left to scan an image to the image editing application. The default image editing application is MGI PhotoSuite (if you have installed it).



2. A scan progress window showing the executed scanning task appears.
3. Once the scan is completed, the image editing application automatically opens and displays the scanned image.

Scanning text documents to the text editing application



1. Press the **Scan** button on the front panel of the scanner and a window with three icons appears, as shown below. Click on the second icon from the left to scan a text document to the text editing application. The default text editing application is Microsoft Word (if installed).



2. A scan progress window showing the executed task appears.
3. Once the scan is completed, the scanned image is converted to text through the OCR engine and the text editing application automatically opens for editing the document.

Scanning documents to Microsoft Excel



1. Press the **Scan** button on the front panel of the scanner and a window with three icons appears, as shown below. Click on the third icon from the left to scan the spreadsheet document to Microsoft Excel.



2. A window appears, as shown below. The two icons on this window indicate two orientations of the document, landscape and portrait. Click on the correct orientation.



3. A scan progress window showing the executed task appears.
4. Once the scan is completed, the scanned image is converted to text through the OCR engine and Microsoft Excel automatically opens and displays the document.

Copy Button

Scanning images to the printer



1. Press the **Copy** button on the front panel of the scanner and a scan progress window appears, as shown below.



2. Once the scan is completed, the scanned image is sent to the default printer.

E-mail/Fax Button

Scanning documents to the e-mail application



1. Press the **E-mail/Fax** button on the front panel of the scanner and a window with two icons appears, as shown below. Click on the left icon to scan the document to the default e-mail application (if any).

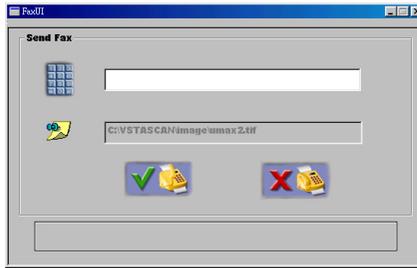


2. A scan progress window showing the executed task appears.
3. Once the scan is completed, the e-mail application automatically opens and the scanned document is attached to a message.

Scanning documents to the Fax software



1. Press the **E-mail/Fax** button on the front panel of the scanner and a window with two icons appears, as shown below. Click on the right icon to scan the document and have it prepared to be sent to the recipient's fax machine.
2. A **FaxUI** window appears: please input the fax number of the recipient in the FAX Number field, and then click on the Send Fax icon.



3. The scanned document will be sent to the selected fax number, just like a fax machine does, through the modem installed in your computer.

Custom button

The Custom button has two functions, which include invoking the scanner driver VistaScan and launching an image editing application installed in your computer.

Before utilizing any function of this button, please click on the scanner icon  in the Taskbar with the right mouse button to edit settings of this button first.

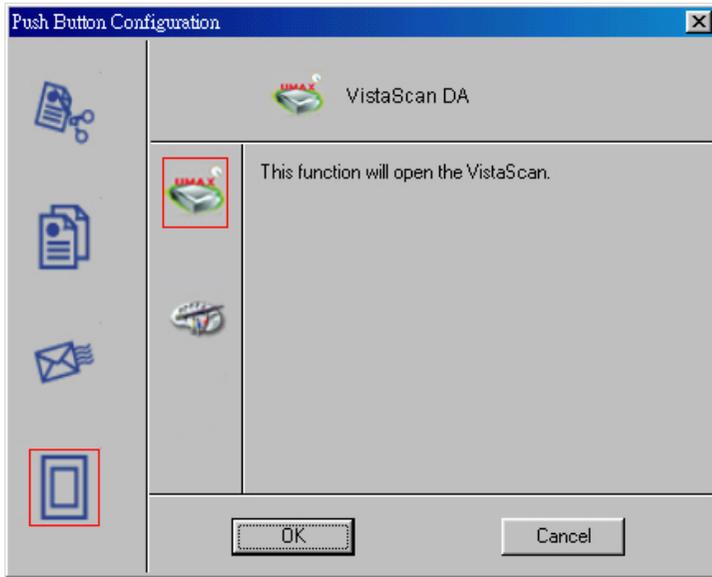
Following are introductions to two of the functions.

Invoking the scanner driver VistaScan directly

1. Right click on the scanner icon , a pop-up menu as shown on the right appears.
2. Click the **Push Button Configuration** option. The Push Button configuration window appears.
3. Select the custom icon and UMAX scanner icon, then click on the **OK** button to save the settings.



4. Upon pushing the **Custom** button , the scanner driver VistaScan will be invoked directly.



Open an image editing application

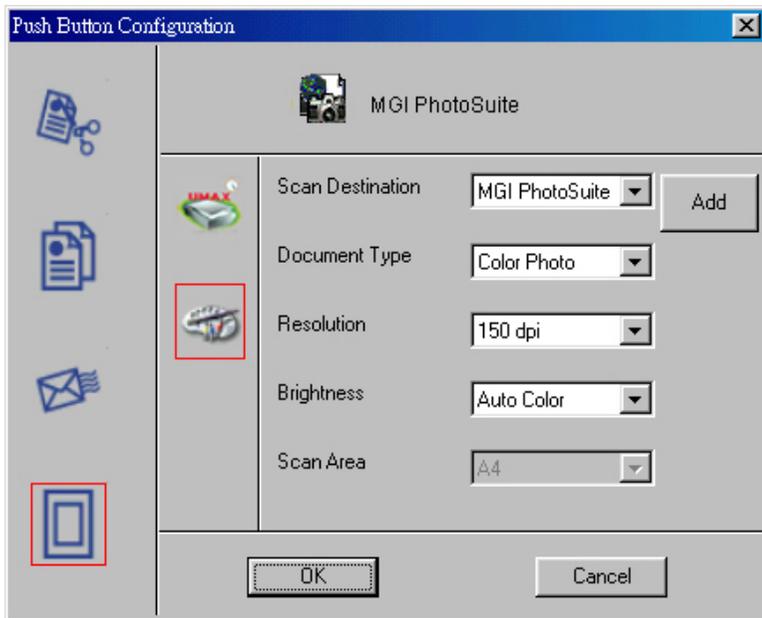
1. Right click on the scanner icon , a pop-up menu as shown on the right appears.
2. Click the **Push Button Configuration** option. The Push Button configuration window appears.
3. Select the custom icon and the image editing application icon.
4. Select the image editing application by clicking on the arrow on the right of the **Scan Destination** field. A list of all the available applications appears. Choose one of the applications.
5. If the application you want to scan to is not shown in the Scan Destination drop-down list, click on the Add button. The Add application window opens. Enter the application name in the Application Name text box. Enter the path and executable file name for the application you want to use in the File Location text box.
6. If you are not sure of the path or the exact executable name, click on the Browse button to locate the appropriate file



7. Click on the OK button to save the settings.
8. Select the type of document, the resolution, and the scanning intensity level by clicking on the arrows on the right of each field.
9. Click on the **OK** button to save the settings.



10. Upon pushing the **Custom** button on the front of your scanner, the selected image editing application will be launched for further editing of your scanned image.

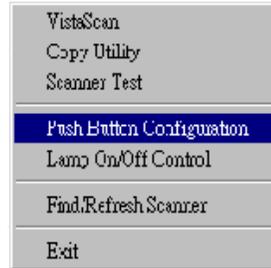


If you want to change the default configuration of the push buttons, please refer to the next chapter for more details.

CONFIGURING THE PUSH BUTTONS

Configuring the Scan button

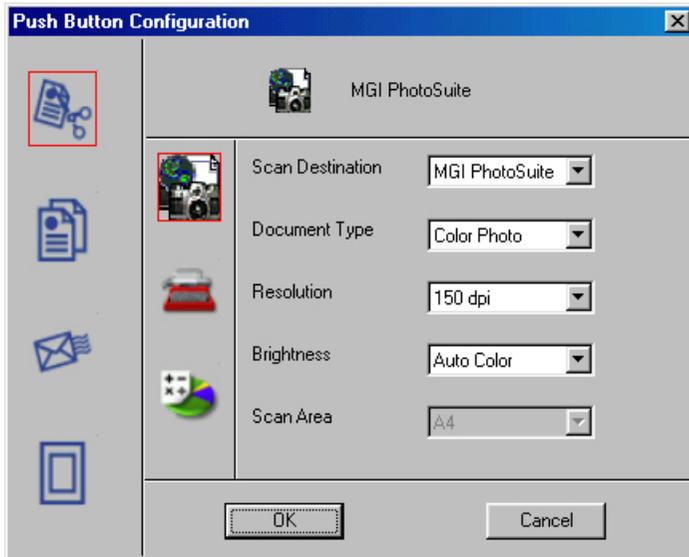
1. Click on the scanner icon  in the Taskbar with the right mouse button. A pop-up menu as shown on the right appears.
2. Click the **Push Button Configuration** option. The Push Button configuration window appears.



The **Scan** icon controls the values of the image editing application, text editing application and Microsoft Excel. Click on their icons to set their values.

Configuring the image editing application

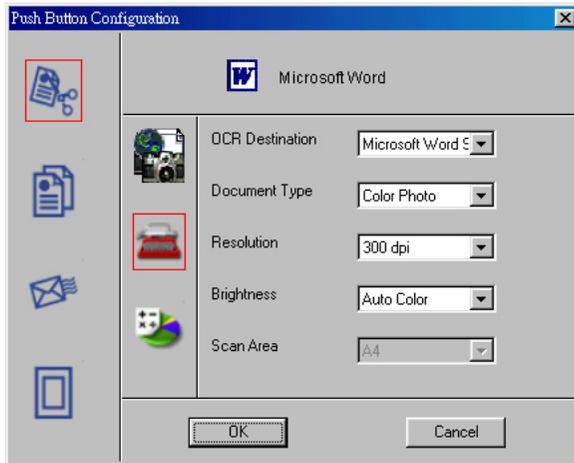
- a. Click on the **Scan** icon and the image editing application icon.
- b. Select the image editing application by clicking on the arrow on the right of the **Scan Destination** field. A list of all the available applications appears. Choose one of the applications.



- c. Select the type of document, the resolution, and the scanning intensity level by clicking on the arrows on the right of each field.
- d. Click on the **OK** button to save the settings.

Configuring the text editing application

- a. Click on the **Edit** icon and the text editing application icon.
- b. Select the text editing application by clicking on the arrow on the right of the **OCR Destination** field. A list of all the available applications appears. Choose one of applications.

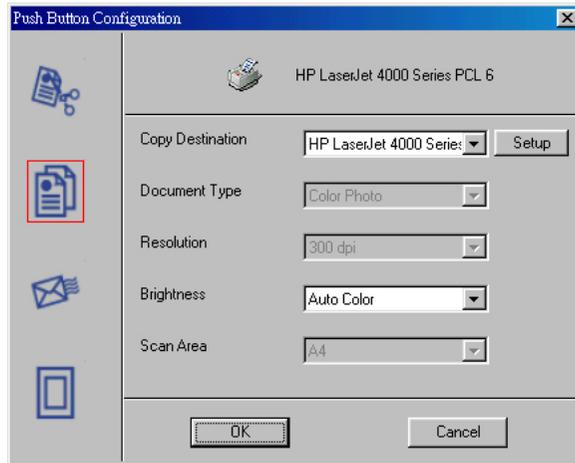


- c. Select the type of document, resolution, and scanning intensity by clicking on the arrows on the right of each field.
- d. Click on the **OK** button to save the settings.

Configuring the Copy button

- a. Click on the VistaAccess icon  in the Taskbar with the right mouse button. A pop-up menu as shown on the right appears.
- b. Click on the **Push Button Configuration** option. The **Push Button Configuration** window appears.
- c. Click on the Copy icon to open the window that contains the variables you are adjusting.





- d. Select the printer driver you want to use to print the copies to by clicking on the arrow on the right of the field.
- e. Select the desired scanning intensity level of the original image by clicking on the arrow on the right of the field.
- f. Click on the **OK** button. This setting will be used whenever you press the Copy button on the front of the scanner.

Configuring the E-mail/Fax button

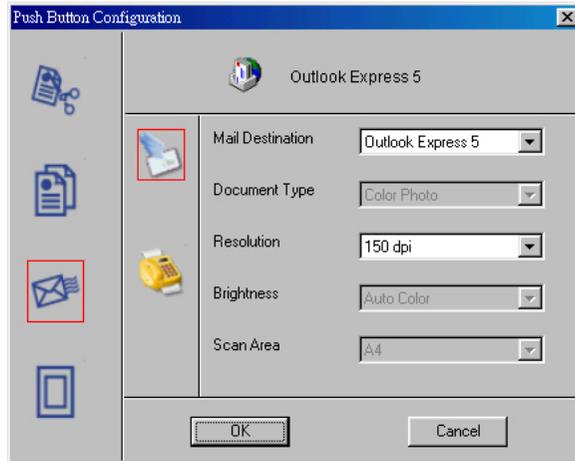
1. Click on the scanner icon  in the Taskbar with your right mouse button. A pop-up menu as shown on the right appears.
2. Click the **Push Button Configuration** option. The **Push Button Configuration** appears.
3. Click on the E-mail/Fax icon to open the window that contains the variables you are adjusting.



The E-mail/Fax icon controls the values for the E-mail and Fax functions. Click on their icon for setting their values.

Configuring the values for the E-mail function

- a. Click on the E-mail Icon
- b. Select the e-mail application and the resolution for sending the scanned image by clicking on the arrow on the right of the field.



- c. Click on the **OK** button to save the settings.

For more details on using the VistaAccess Utilities, please refer to the Utilities User's Guide in the VistaScan program group.

To open the Utilities User's Guide:

- 1. Click on the Start button on your desktop.*
- 2. Select Programs.*
- 3. Select the VistaScan program group.*
- 4. Select Utilities User's Guide.*

SCANNING WITH VISTASCAN

Note It is important to realize that different applications may use different methods to acquire images and only the most general case is given here. Please refer to your application documentation for details on its usage.

A. Using an image editing application to invoke VistaScan

1. Open a TWAIN-compliant application from Microsoft Windows in order to start. For example, launch MGI PhotoSuite on the Astra 4400 CD. Follow these steps to open MGI PhotoSuite:
 - I. Click on the **Start** button on your desktop.
 - II. Select **Programs**.
 - III. Select the **MGI PhotoSuite** program group.
 - IV. Select **MGI PhotoSuite**.
2. The MGI PhotoSuite window appears as shown in Fig 1. Select the scanner icon or the **Get** button on the top menu.
3. The **Get Photo** user interface appears as shown in Fig. 2. From the green panel on the left, select the **Scanner (Twain)** button.
4. The **Scanner (Twain)** user interface appears as shown in Fig. 3.
5. Click on the green **Scan** button on the left panel to invoke VistaScan, the VistaScan window will open as shown in Fig. 4.
6. Place the item you will scan on top of the scanner's object glass.
7. Click on **Preview** to preview the scanned image on the Preview window and then from the four modes on the **Click to scan** panel, click on a scan mode button that best suits the required scan. For example, if you wish to scan a color photograph, click on the **Color Photo** button to scan the image in true color. Scanning will commence upon selection of a button.
8. Once the scan is completed, Press the exit button, VistaScan closes and loads a thumbnail icon of the scanned image on the right top panel, named **Photos** on the **Scanner (Twain)** user interface.

9. Double click on the thumbnail icon to load the image. Refer then to the on-line help of MGI PhotoSuite for more detail on editing the scanned image.

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

Fig. 1



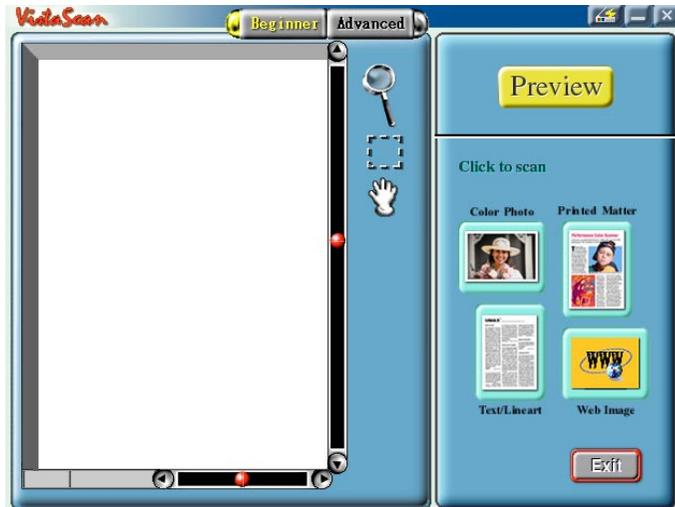
Fig. 2



Fig. 3



Fig. 4



B. Initiating VistaScan directly

From the VistaScan program group on the desktop

1. Launch the VistaScan program group as shown to the right.
2. The VistaScan Window will appear as shown in Fig. 5.
3. From the **Scan To** panel in the main menu, choose a destination for the scanned image.
4. Click on one of the small icons in the **Scan To** panel representing the desired destination (a folder, printer, email, application, etc.) for the scanned image. For example, if you want to save the image in a particular file, click on the disk icon  on the middle panel, and then click on the **Preferences** button  on the top right of the VistaScan interface. The **Preferences** dialog box appears.
5. In the **Preferences** dialog box as shown in Fig. 6, enter the relevant details into the **File Name**, **File Format** and **File Directory** fields. Use the **Browse** button to locate the desired folder for your image.
6. Click **OK**. The entries you made will be implemented and the dialog box closes.
7. Click on **Preview** to preview the scanned image on the Preview window and then 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 on the **Color Photo** button to scan the image in true color. Scanning will commence upon selection of a button.
8. For an explanation of the other **Scan To** destinations, please refer to the VistaScan's on-line help.

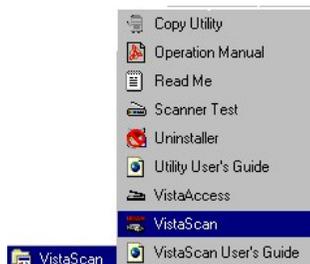
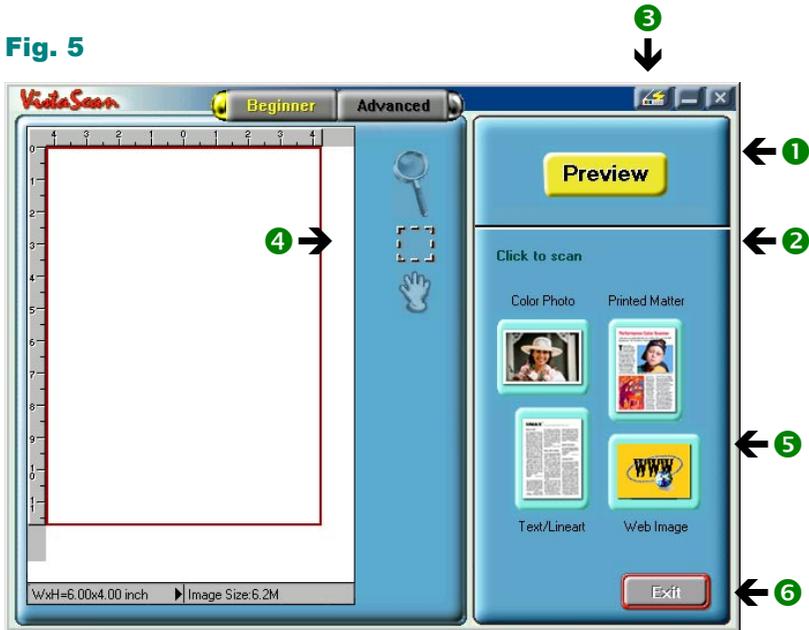
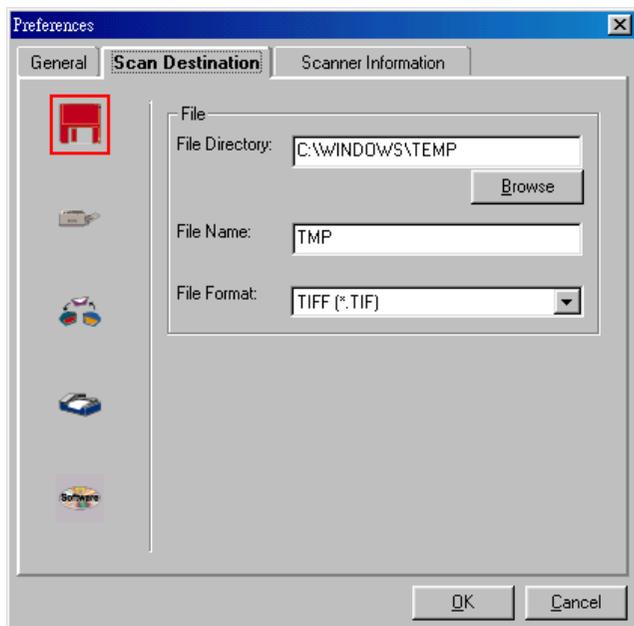


Fig. 5



1. Click on 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 on the icon that represents the desired destination for the scanned image.
3. Click on the **Preferences** button. The **Preferences** dialog box appears. Enter the relevant details.
4. Select the area to scan by clicking on the Frame tool , and dragging the cursor diagonally to form a rectangle that best defines the area to be scanned. As you drag, the borders of a frame encompassing the desired area will appear.
5. Click on one of the scan mode buttons and the scanning will commence.
6. Click here to **Exit**.

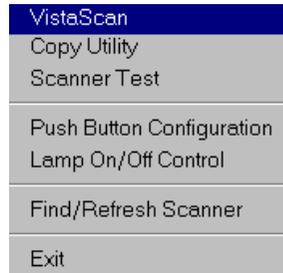
Fig. 6



From VistaAccess Utility

1. Click on the VistaAccess icon  in the Task bar with the right mouse button. A pop-up menu appears as shown on the right.
2. Click on the VistaScan option. The VistaScan window appears.

The following steps are similar to the section “From the VistaScan program group on the desktop” from step 2.



TROUBLESHOOTING

Our 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 our Technical Support.

If the indicator comes on, but software returns a “scanner link failed”, or a 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 commands, or encounter another system exception event, do the following:

1. Remove the cable from the USB port and re-insert it.
2. Ensure that 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 “Troubleshooting” section solutions do not resolve your problem, contact your dealer or the 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 operating system 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.

With the exception of periodic cleaning or lamp replacement, your 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 that 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 cleaning fluids 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 Scanning Area.....	216 x 297 mm (8.5 x 11.7 Inches)
Optical Resolution	1200 x 2400 dpi
Maximum Resolution	9600 x 9600 dpi
Color Scanning Method	Single pass with color CCD
Warm Up Time	30 sec.
Sample Depth	
Color Mode.....	48 bit/pixel
Grayscale Mode	16 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.....	48/24 bit
Grayscale Mode	16 bit
Interface.....	One USB connector
Power Requirements	
Voltage.....	DC 12V
Power Consumption	Maximum 9 watts
Environmental Ranges	
Operating Temperature....	10°C~35°C
Relative Humidity	10%~85%
Dimensions.....	461.2 mm x 296 mm x 81.6 mm
Net Weight.....	3 kg

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 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. An interface between host and peripherals.

Information to keep for future reference:

- Store sales receipt or credit card statement showing item description and date of purchase.
- Scanner serial number (see back of scanner)

Missing something?

UMAX often bundles different third party software with its products. If any of these options were ordered with your UMAX product and they appear to be missing or incorrect, contact the store you purchased your UMAX product from immediately. UMAX will not be responsible for missing or incorrect shipments of third party software delivered from your reseller.

Information to gather for technical support:

- Store sales receipt or credit card statement showing item description and date of purchase.
- Scanner model and serial number (see back of scanner).
- Version number of scanner (see face of CD ROM).
- Computer model used with scanner.
- Printer model in use.
- Application software you use.
- Error code or message.
- Description of what you were doing when the malfunction happened so event can be recreated.

Technical Support:

Please log on to <http://www.umax.com> for technical support. UMAX provides helpful guidance and troubleshooting advice on our website. Alternative means to receive technical support are e-mail, fax, and phone. Phone support hours are subject to change. Please check our website for hours of operation of technical support. Technical support is limited to questions about installation and maintenance of your UMAX product. No support is available for consumers outside of the United States and Canada.

If you are located outside the United States and Canada, you must contact your originating reseller for services and support.

Website: <http://www.umax.com>

Phone: (214) 739-1915

Please check our website for any changes of these contact windows.

Returns for Repair:

If your product appears to be damaged or does not work properly we encourage you to contact the store where you purchased the product immediately. Most stores provide replacement of damaged or non-operational goods for a short period after sale. Check your store receipts or documentation. At our option we may repair your scanner or replace it (see your Warranty). In either case you will have to call UMAX to arrange the return your scanner. When you call UMAX we will issue you a Return Merchandise Authorization (RMA) number. You MUST print this RMA number on the outside of the box in which the scanner is returned next to the shipping label. Please use large print. UMAX rejects all shipments without proper RMA numbers. Note that UMAX will not accept any shipments from outside the territory of the United States and Canada.

Limited Warranty

UMAX Technologies, Inc. (UMAX) warrants this hardware product against defects in material and workmanship for a period of one year from the original date of purchase.

Should any defect(s) be discovered, the product may be returned either to the manufacturer or an authorized UMAX service center. If you are returning product for repair, please be sure to do the following:

- 1) Call UMAX to obtain an RMA (Return Merchandise Authorization) number.
- 2) Clearly write your RMA number on the OUTSIDE of the box or package next to the shipping label.
- 3) Include a copy of the bill of sale with the returned product.
- 4) Unless otherwise instructed, do not return any manuals or Software when returning items for repair.
- 5) All scanners and transparency adapters need to be locked or restrained prior to transport. Failure to lock or restrain these items could cause serious damage to the product and void the warranty.
- 6) Ship to UMAX via a traceable shipping method and retain the tracking number.

This warranty is only valid within the boundaries and territories of the USA and Canada. UMAX is not responsible for costs incurred to shipping, insurance, customs, or duties.

This warranty does not apply if the product has been damaged by an accident, electrical fault, through misuse or abuse

If the product has been altered without written authorization by UMAX, the warranty will not be applicable.

This warranty applies only to hardware products manufactured by or for UMAX. Warranted products must bear the “UMAX” brand name, tradename, or logo.

The aforementioned warranty and remedies are exclusive, and in lieu of all others, whether oral, written, expressed or implied.

UMAX specifically disclaims any and all implied warranties of merchantability and fitness for a particular purpose.

FCC Declaration of Conformity

Declares that the products :

- **Product Name :** Color Scanner - **Model No. :** Astra 4400
- **EXT. Model No. :** U0001-HXXX(X=0~9,A~Z)
- **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 undesired 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 into an outlet on a circuit different from that to which the receiver is connected.*
4. *Consult the dealer or an experienced radio / TV technician for help.*

Caution :

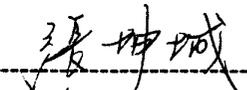
Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment.

The party responsible for product compliance :

- **Corporate Name :**UMAX Technologies, Inc.
- **Address :**3561 Gateway Boulevard, Fremont, California 94538, U.S.A.
- **Telephone No. :**510-651-4000

Person responsible for making this declaration :

-**Position/Title :** Chief Financial Officer

-**Signature :** 

Chang, Kwun-Chen

OPERATION MANUAL

For the
**Astra
4450**
Color
Scanner



UMAX Data Systems, Inc.

UMAX[®]

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

Trademarks

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Important Safeguards

- ◆ Read all 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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OVERVIEW OF YOUR SCANNER

Front View



① Universal Transparency Cover

The Universal Transparency Cover can be raised and lowered over the object glass.

② Object Glass

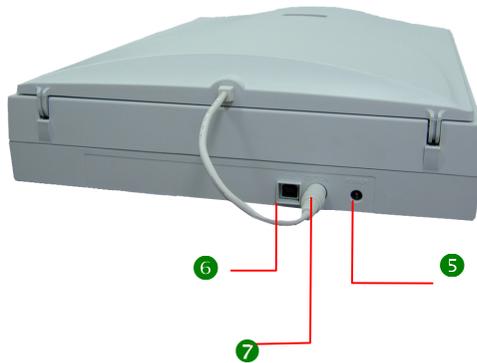
The glass surface on which the document or image should be placed.

③ Power Indicator

Illuminates to indicate that the scanner is powered on.

④ Scan, Copy, E-mail/Fax and Custom buttons

Back View



5 Power Adapter Receptacle

The power adapter is plugged-in here.

6 4-Pin USB Connector

7 Universal Transparency Cover Socket

The socket used by the Universal Transparency Cover.

Push buttons on the front panel

The defining feature of the Astra 4450 is its push button functionality.

You can scan an image to e-mail, perform OCR, or even use the scanner as a copy machine by pressing the buttons on the front panel of the scanner.

The scanner has four push buttons on the front panel, from left to right: “Scan”, “Copy”, “E-mail/Fax” and “Custom”.



Scan – Press this button to start scanning the image on the scanner to the image editing application, scanning the document on the scanner to the text editing application or scanning the document on the scanner to Microsoft Excel.



Copy – Press this button to directly spool your image to the printer.



E-mail/Fax – Press this button to scan the image to an e-mail application or have it prepared to be sent as a Fax.



Custom – Press this button to scan the image using VistaScan or launch an image editing application installed in your computer.

COMPLETING YOUR FIRST SCAN

Before proceeding with the steps below, please complete the hardware and software installation (refer to the Quick Start Guide).

Placing the Original Image

If the media to be scanned is a document or photo:

1. Raise the Universal Transparency Cover.
2. Place the document (graphic, text or photo) face down on the object glass. Center the document along the **triangular** mark.
3. Lower the Universal Transparency Cover carefully.

If the media to be scanned is a slide, negative or film:

1. Raise the Universal Transparency Cover.
2. Place the black transparency holder on the object glass of the scanner.
3. Place transparent media (35mm slides, negatives, or film) in the specific scanning area of the transparency holder.
4. Lower the Universal Transparency Cover carefully.

Note:

1. *Make sure that the transparent media is placed within the specific scan area on the object glass.*
2. *The size of the transparent media must be smaller than the specific scanning area.*
3. *Keep the black transparency holder well and don't lose it.*

The scanner is ready to scan transparent media. Be sure to select the transmissive or negative scan type from your software to scan 35mm slides, negatives, or film.



How to select the transmissive or negative scan type

1. Invoking the scanner driver VistaScan
2. **If the media to be scanned is a slide:**
 The VistaScan window appears, click on the “Advanced” button. The “Advanced” window appears as shown in figure below. From the scan modes listed, select “Transmissive”.
If the media to be scanned is a film or negative:
 The VistaScan window appears, click on the “Advanced” button. The “Advanced” window appears. From the scan modes listed, select “Negative”.
3. Click on the scan button to begin scanning transparent media.



Starting by Pressing the Push Buttons

You can increase your productivity by accessing all the normal scanner functions without having to manually launch the software applications in your computer.

Press the push buttons on the front panel of your scanner and the image or the text document on the scanner will be scanned to the destination selected. Refer to the following sections to familiarize yourself with each push button on the front panel of the scanner and their functions.

Scan Button

Scanning images to the image editing application



1. Press the **Scan** button on the front panel of the scanner and a window with three icons appears, as shown on the next page. Click on the first icon from the left to scan an image to the image editing application. The default image editing application is MGI PhotoSuite (if you have installed it).



2. A scan progress window showing the executed scanning task appears.
3. Once the scan is completed, the image editing application automatically opens and displays the scanned image.

Scanning text documents to the text editing application



1. Press the **Scan** button on the front panel of the scanner and a window with three icons appears, as shown below. Click on the second icon from the left to scan a text document to the text editing application. The default text editing application is Microsoft Word (if installed).



2. A scan progress window showing the executed task appears.
3. Once the scan is completed, the scanned image is converted to text through the OCR engine and the text editing application automatically opens for editing the document.

Scanning documents to Microsoft Excel



1. Press the **Scan** button on the front panel of the scanner and a window with three icons appears, as shown below. Click on the third icon from the left to scan the spreadsheet document to Microsoft Excel.



2. A window appears, as shown below. The two icons on this window indicate two orientations of the document, landscape and portrait. Click on the correct orientation.



3. A scan progress window showing the executed task appears.
4. Once the scan is completed, the scanned image is converted to text through the OCR engine and Microsoft Excel automatically opens and displays the document.

Copy Button

Scanning images to the printer



1. Press the **Copy** button on the front panel of the scanner and a scan progress window appears, as shown below.



2. Once the scan is completed, the scanned image is sent to the default printer.

E-mail/Fax Button

Scanning documents to the e-mail application



1. Press the **E-mail/Fax** button on the front panel of the scanner and a window with two icons appears, as shown below. Click on the left icon to scan the document to the default e-mail application (if any).

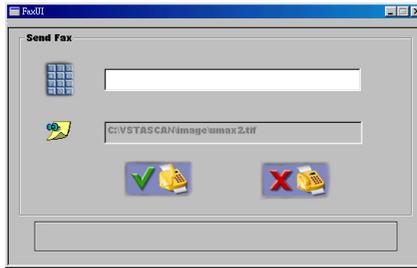


2. A scan progress window showing the executed task appears.
3. Once the scan is completed, the e-mail application automatically opens and the scanned document is attached to a message.

Scanning documents to the Fax software



1. Press the **E-mail/Fax** button on the front panel of the scanner and a window with two icons appears, as shown below. Click on the right icon to scan the document and have it prepared to be sent to the recipient's fax machine.
2. A **FaxUI** window appears: please input the fax number of the recipient in the FAX Number field, and then click on the Send Fax icon.



3. The scanned document will be sent to the selected fax number, just like a fax machine does, through the modem installed in your computer.

Custom button

The Custom button has two functions, which include invoking the scanner driver VistaScan and launching an image editing application installed in your computer.

Before utilizing any function of this button, please click on the scanner icon  in the Taskbar with the right mouse button to edit settings of this button first.

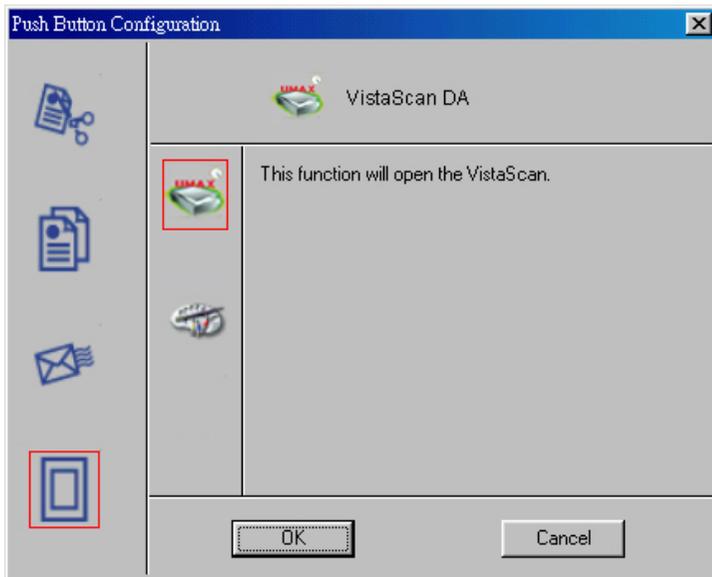
Following are introductions to two of the functions.

Invoking the scanner driver VistaScan directly

1. Right click on the scanner icon , a pop-up menu as shown on the right appears.
2. Click the **Push Button Configuration** option. The Push Button configuration window appears.
3. Select the custom icon and UMAX scanner icon, then click on the **OK** button to save the settings.

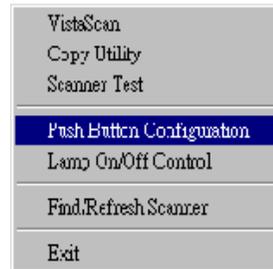


4. Upon pushing the **Custom** button , the scanner driver VistaScan will be invoked directly.



Open an image editing application

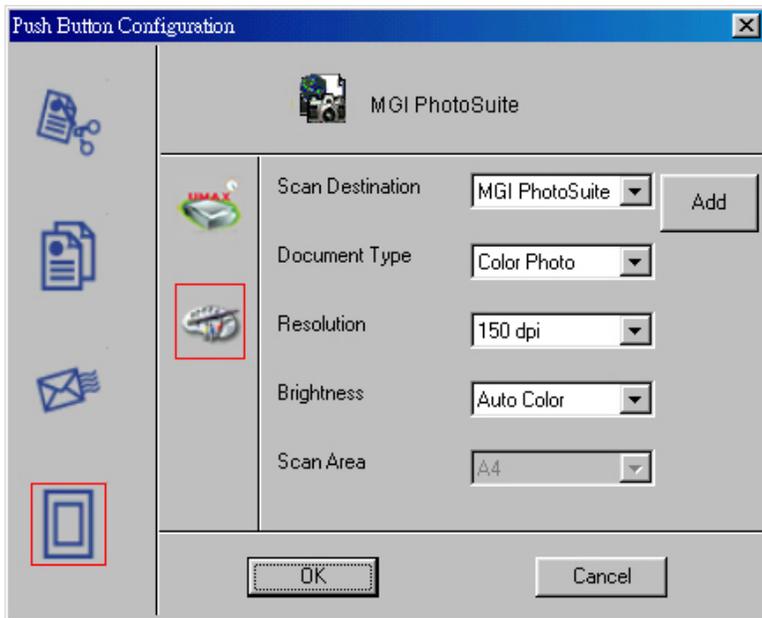
1. Right click on the scanner icon , a pop-up menu as shown on the right appears.
2. Click the **Push Button Configuration** option. The Push Button configuration window appears.
3. Select the custom icon and the image editing application icon.
4. Select the image editing application by clicking on the arrow on the right of the **Scan Destination** field. A list of all the available applications appears. Choose one of the applications.
5. If the application you want to scan to is not shown in the Scan Destination drop-down list, click on the Add button. The Add application window opens. Enter the application name in the Application Name text box. Enter the path and executable file name for the application you want to use in the File Location text box.
6. If you are not sure of the path or the exact executable name, click on the Browse button to locate the appropriate file



7. Click on the OK button to save the settings.
8. Select the type of document, the resolution, and the scanning intensity level by clicking on the arrows on the right of each field.
9. Click on the **OK** button to save the settings.



10. Upon pushing the **Custom** button on the front of your scanner, the selected image editing application will be launched for further editing of your scanned image.

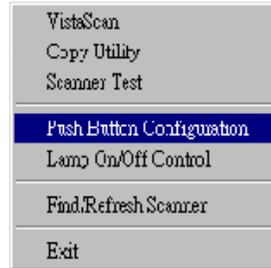


If you want to change the default configuration of the push buttons, please refer to the next chapter for more details.

CONFIGURING THE PUSH BUTTONS

Configuring the Scan button

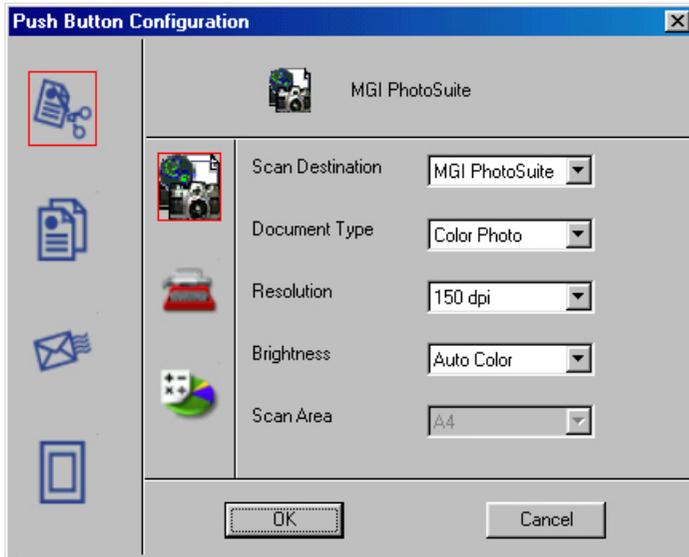
1. Click on the scanner icon  in the Taskbar with the right mouse button. A pop-up menu as shown on the right appears.
2. Click the **Push Button Configuration** option. The Push Button configuration window appears.



The **Scan** icon controls the values of the image editing application, text editing application and Microsoft Excel. Click on their icons to set their values.

Configuring the image editing application

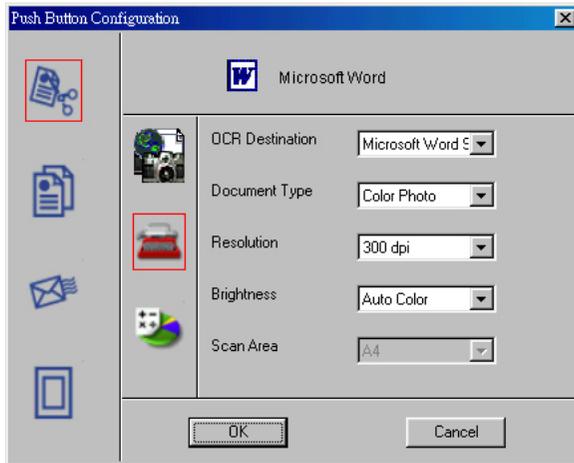
- a. Click on the **Scan** icon and the image editing application icon.
- b. Select the image editing application by clicking on the arrow on the right of the **Scan Destination** field. A list of all the available applications appears. Choose one of the applications.



- c. Select the type of document, the resolution, and the scanning intensity level by clicking on the arrows on the right of each field.
- d. Click on the **OK** button to save the settings.

Configuring the text editing application

- a. Click on the **Scan** icon and the text editing application icon.
- b. Select the text editing application by clicking on the arrow on the right of the **OCR Destination** field. A list of all the available applications appears. Choose one of applications.

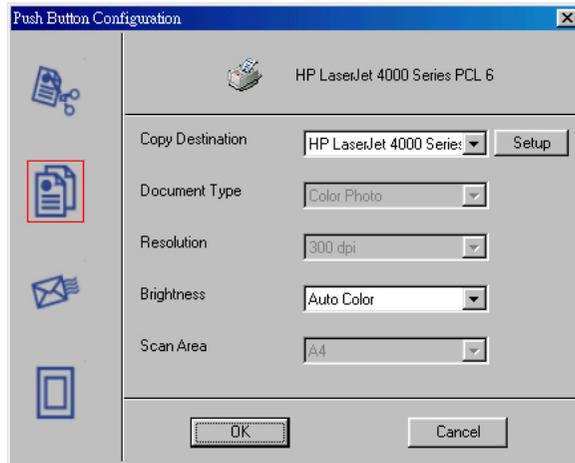


- c. Select the type of document, resolution, and scanning intensity by clicking on the arrows on the right of each field.
- d. Click on the **OK** button to save the settings.

Configuring the Copy button

- a. Click on the VistaAccess icon  in the Taskbar with the right mouse button. A pop-up menu as shown on the right appears.
- b. Click on the **Push Button Configuration** option. The **Push Button Configuration** window appears.
- c. Click on the Copy icon to open the window that contains the variables you are adjusting.





- d. Select the printer driver you want to use to print the copies to by clicking on the arrow on the right of the field.
- e. Select the desired scanning intensity level of the original image by clicking on the arrow on the right of the field.
- f. Click on the **OK** button. This setting will be used whenever you press the Copy button on the front of the scanner.

Configuring the E-mail/Fax button

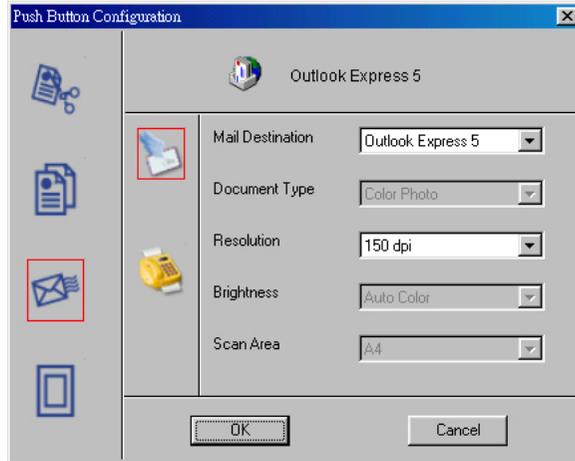
1. Click on the scanner icon  in the Taskbar with your right mouse button. A pop-up menu as shown on the right appears.
2. Click the **Push Button Configuration** option. The **Push Button Configuration** appears.
3. Click on the E-mail/Fax icon to open the window that contains the variables you are adjusting.



The E-mail/Fax icon controls the values for the E-mail and Fax functions. Click on their icon for setting their values.

Configuring the values for the E-mail function

- a. Click on the E-mail Icon
- b. Select the e-mail application and the resolution for sending the scanned image by clicking on the arrow on the right of the field.



- c. Click on the **OK** button to save the settings.

For more details on using the VistaAccess Utilities, please refer to the Utilities User's Guide in the VistaScan program group.

To open the Utilities User's Guide:

- 1. Click on the Start button on your desktop.*
- 2. Select Programs.*
- 3. Select the VistaScan program group.*
- 4. Select Utilities User's Guide.*

SCANNING WITH VISTASCAN

Note It is important to realize that different applications may use different methods to acquire images and only the most general case is given here. Please refer to your application documentation for details on its usage.

A. Using an image editing application to invoke VistaScan

1. Open a TWAIN-compliant application from Microsoft Windows in order to start. For example, launch MGI PhotoSuite on the Astra 4450 CD. Follow these steps to open MGI PhotoSuite:
 - I. Click on the **Start** button on your desktop.
 - II. Select **Programs**.
 - III. Select the **MGI PhotoSuite** program group.
 - IV. Select **MGI PhotoSuite**.
2. The MGI PhotoSuite window appears as shown in Fig 1. Select the scanner icon or the **Get** button on the top menu.
3. The **Get Photo** user interface appears as shown in Fig. 2. From the green panel on the left, select the **Scanner (Twain)** button.
4. The **Scanner (Twain)** user interface appears as shown in Fig. 3.
5. Click on the green **Scan** button on the left panel to invoke VistaScan, the VistaScan window will open as shown in Fig. 4.
6. Place the item you will scan on top of the scanner's object glass.
7. Click on **Preview** to preview the scanned image on the Preview window and then from the four modes on the **Click to scan** panel, click on a scan mode button that best suits the required scan. For example, if you wish to scan a color photograph, click on the **Color Photo** button to scan the image in true color. Scanning will commence upon selection of a button.
8. Once the scan is completed, Press the exit button, VistaScan closes and loads a thumbnail icon of the scanned image on the right top panel, named **Photos** on the **Scanner (Twain)** user interface.

9. Double click on the thumbnail icon to load the image. Refer then to the on-line help of MGI PhotoSuite for more detail on editing the scanned image.

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

Fig. 1



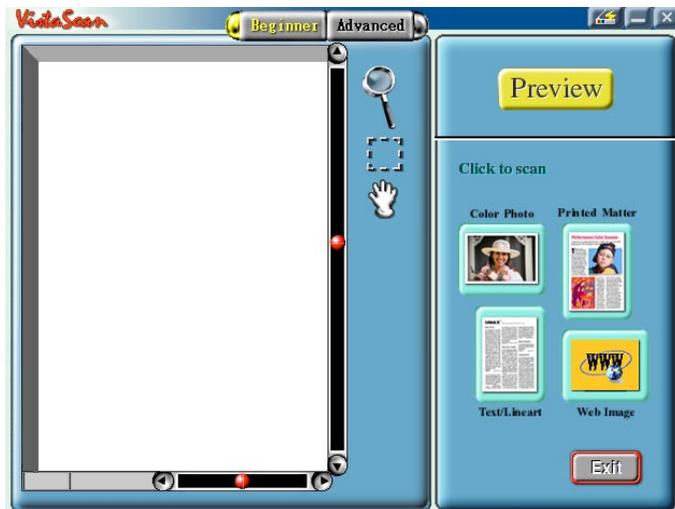
Fig. 2



Fig. 3



Fig. 4



B. Initiating VistaScan directly

From the VistaScan program group on the desktop

1. Launch the VistaScan program group as shown to the right.
2. The VistaScan Window will appear as shown in Fig. 5.
3. From the **Scan To** panel in the main menu, choose a destination for the scanned image.
4. Click on one of the small icons in the **Scan To** panel representing the desired destination (a folder, printer, email, application, etc.) for the scanned image. For example, if you want to save the image in a particular file, click on the disk icon  on the middle panel, and then click on the **Preferences** button  on the top right of the VistaScan interface. The **Preferences** dialog box appears.
5. In the **Preferences** dialog box as shown in Fig. 6, enter the relevant details into the **File Name**, **File Format** and **File Directory** fields. Use the **Browse** button to locate the desired folder for your image.
6. Click **OK**. The entries you made will be implemented and the dialog box closes.
7. Click on **Preview** to preview the scanned image on the Preview window and then 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 on the **Color Photo** button to scan the image in true color. Scanning will commence upon selection of a button.
8. For an explanation of the other **Scan To** destinations, please refer to the VistaScan's on-line help.

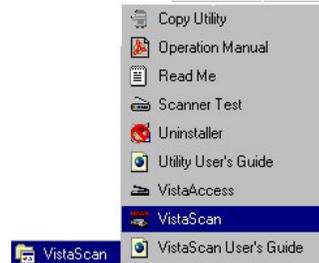
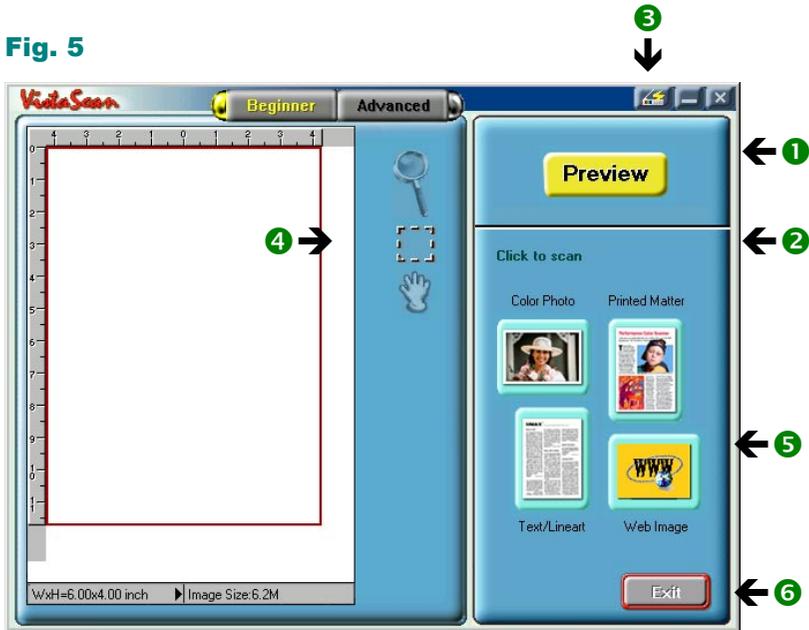
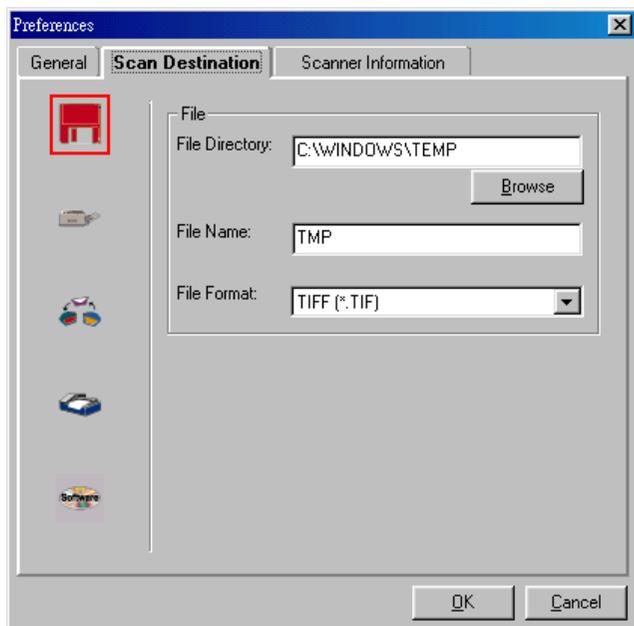


Fig. 5



1. Click on 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 on the icon that represents the desired destination for the scanned image.
3. Click on the **Preferences** button. The **Preferences** dialog box appears. Enter the relevant details.
4. Select the area to scan by clicking on the Frame tool , and dragging the cursor diagonally to form a rectangle that best defines the area to be scanned. As you drag, the borders of a frame encompassing the desired area will appear.
5. Click on one of the scan mode buttons and the scanning will commence.
6. Click here to **Exit**.

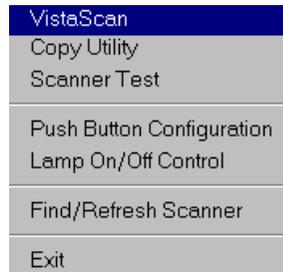
Fig. 6



From VistaAccess Utility

1. Click on the VistaAccess icon  in the Task bar with the right mouse button. A pop-up menu appears as shown on the right.
2. Click on the VistaScan option. The VistaScan window appears.

The following steps are similar to the section “From the VistaScan program group on the desktop” from step 2.



TROUBLESHOOTING

Our 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 our Technical Support.

If the indicator comes on, but software returns a “scanner link failed”, or a 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 commands, or encounter another system exception event, do the following:

1. Remove the cable from the USB port and re-insert it.
2. Ensure that 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 “Troubleshooting” section solutions do not resolve your problem, contact your dealer or the 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 operating system 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.

With the exception of periodic cleaning or lamp replacement, your 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 that 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 cleaning fluids 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 Scanning Area.....	216 x 297 mm (8.5 x 11.7 Inches)
Optical Resolution	1200 x 2400 dpi
Maximum Resolution	9600 x 9600 dpi
Color Scanning Method	Single pass with color CCD
Warm Up Time	30 sec.
Sample Depth	
Color Mode.....	48 bit/pixel
Grayscale Mode	16 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.....	48/24 bit
Grayscale Mode	16 bit
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.....	468.2 mm x 296 mm x 81.6 mm
Net Weight.....	3.3 kg

GLOSSARY

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 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. An interface between host and peripherals.

Information to keep for future reference:

- Store sales receipt or credit card statement showing item description and date of purchase.
- Scanner serial number (see back of scanner)

Missing something?

UMAX often bundles different third party software with its products. If any of these options were ordered with your UMAX product and they appear to be missing or incorrect, contact the store you purchased your UMAX product from immediately. UMAX will not be responsible for missing or incorrect shipments of third party software delivered from your reseller.

Information to gather for technical support:

- Store sales receipt or credit card statement showing item description and date of purchase.
- Scanner model and serial number (see back of scanner).
- Version number of scanner (see face of CD ROM).
- Computer model used with scanner.
- Printer model in use.
- Application software you use.
- Error code or message.
- Description of what you were doing when the malfunction happened so event can be recreated.

Technical Support:

Please log on to <http://www.umax.com> for technical support. UMAX provides helpful guidance and troubleshooting advice on our website. Alternative means to receive technical support are e-mail, fax, and phone. Phone support hours are subject to change. Please check our website for hours of operation of technical support. Technical support is limited to questions about installation and maintenance of your UMAX product. No support is available for consumers outside of the United States and Canada.

If you are located outside the United States and Canada, you must contact your originating reseller for services and support.

Website: <http://www.umax.com>

Phone: (214) 739-1915

Please check our website for any changes of these contact windows.

Returns for Repair:

If your product appears to be damaged or does not work properly we encourage you to contact the store where you purchased the product immediately. Most stores provide replacement of damaged or non-operational goods for a short period after sale. Check your store receipts or documentation. At our option we may repair your scanner or replace it (see your Warranty). In either case you will have to call UMAX to arrange the return your scanner. When you call UMAX we will issue you a Return Merchandise Authorization (RMA) number. You MUST print this RMA number on the outside of the box in which the scanner is returned next to the shipping label. Please use large print. UMAX rejects all shipments without proper RMA numbers. Note that UMAX will not accept any shipments from outside the territory of the United States and Canada.

Limited Warranty

UMAX Technologies, Inc. (UMAX) warrants this hardware product against defects in material and workmanship for a period of one year from the original date of purchase.

Should any defect(s) be discovered, the product may be returned either to the manufacturer or an authorized UMAX service center. If you are returning product for repair, please be sure to do the following:

- 1) Call UMAX to obtain an RMA (Return Merchandise Authorization) number.
- 2) Clearly write your RMA number on the OUTSIDE of the box or package next to the shipping label.
- 3) Include a copy of the bill of sale with the returned product.
- 4) Unless otherwise instructed, do not return any manuals or Software when returning items for repair.
- 5) All scanners and transparency adapters need to be locked or restrained prior to transport. Failure to lock or restrain these items could cause serious damage to the product and void the warranty.
- 6) Ship to UMAX via a traceable shipping method and retain the tracking number.

This warranty is only valid within the boundaries and territories of the USA and Canada. UMAX is not responsible for costs incurred to shipping, insurance, customs, or duties.

This warranty does not apply if the product has been damaged by an accident, electrical fault, through misuse or abuse

If the product has been altered without written authorization by UMAX, the warranty will not be applicable.

This warranty applies only to hardware products manufactured by or for UMAX. Warranted products must bear the “UMAX” brand name, tradename, or logo.

The aforementioned warranty and remedies are exclusive, and in lieu of all others, whether oral, written, expressed or implied.

UMAX specifically disclaims any and all implied warranties of merchantability and fitness for a particular purpose.

FCC Declaration of Conformity

Declares that the products :

- **Product Name :** Color Scanner - **Model No. :** Astra 4450
- **EXT. Model No. :** U0001-HXXX(X=0~9,A~Z)
- **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 undesired 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 into an outlet on a circuit different from that to which the receiver is connected.*
4. *Consult the dealer or an experienced radio / TV technician for help.*

Caution :

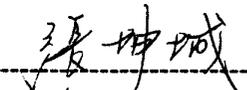
Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment.

The party responsible for product compliance :

- **Corporate Name** :UMAX Technologies, Inc.
- **Address** :3561 Gateway Boulevard. Fremont, California 94538, U.S.A.
- **Telephone No.** :510-651-4000

Person responsible for making this declaration :

-**Position/Title** : Chief Financial Officer

-**Signature** : 

Chang, Kwun-Chen