

Uniscan A686 Scanner

User Manual



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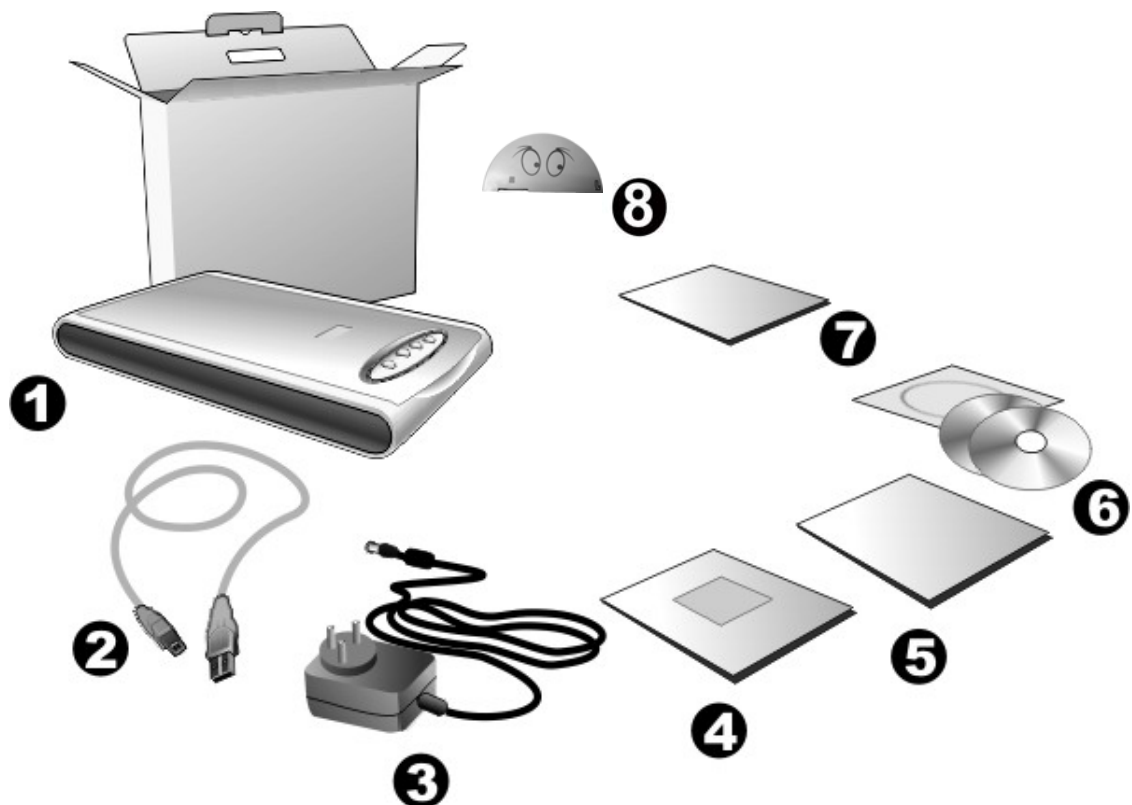
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I. How to set up your scanner

Equipment included:

Please ensure all the following items are included before installing this scanner:

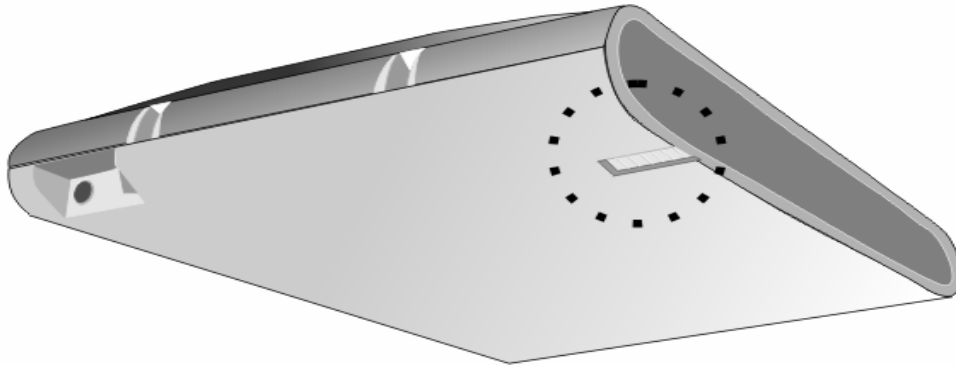
- 1 Flatbed scanner
- 2 USB Cable
- 3 Power Adapter
- 4 Uniscan Golden Quality Guarantee
- 5 Quick Start Guide
- 6 Scanner Driver, User manual and Image-processing software CD
- 7 Certification of Quality
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Installing and Setting scanner

Step 1: Lock Mechanism

This scanner has a locking mechanism to hold the scanning head in place during the transportation. It is located on the scanner's underside (as shown)



ATTENTION: 1. Always place your scanner on a flat and smooth surface before preceding the scanner setup or any scanning task. Please ensure the lock is open before scanning. (As shown Figure1)

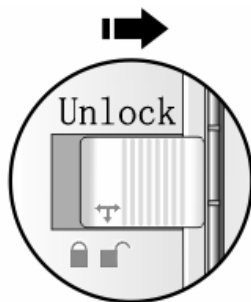


Figure 1

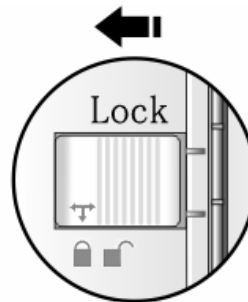


Figure 2

2. Before you moving the scanner, please make sure to turn off your computer first and keep the locking switch NOT PRESSED (as shown Figure2), in order to avoid some damage to optical module during the transportation.

3. This scanner use USB connector, users should be ensuring to install driver software first and then the hardware.

Step 2: Install the software

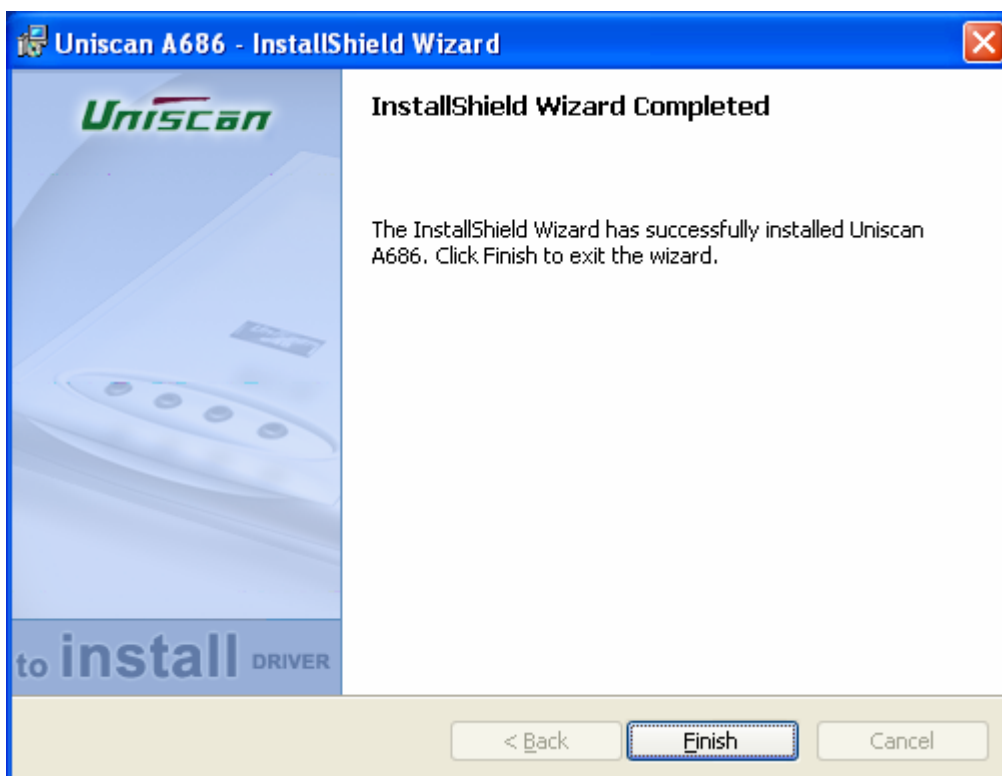
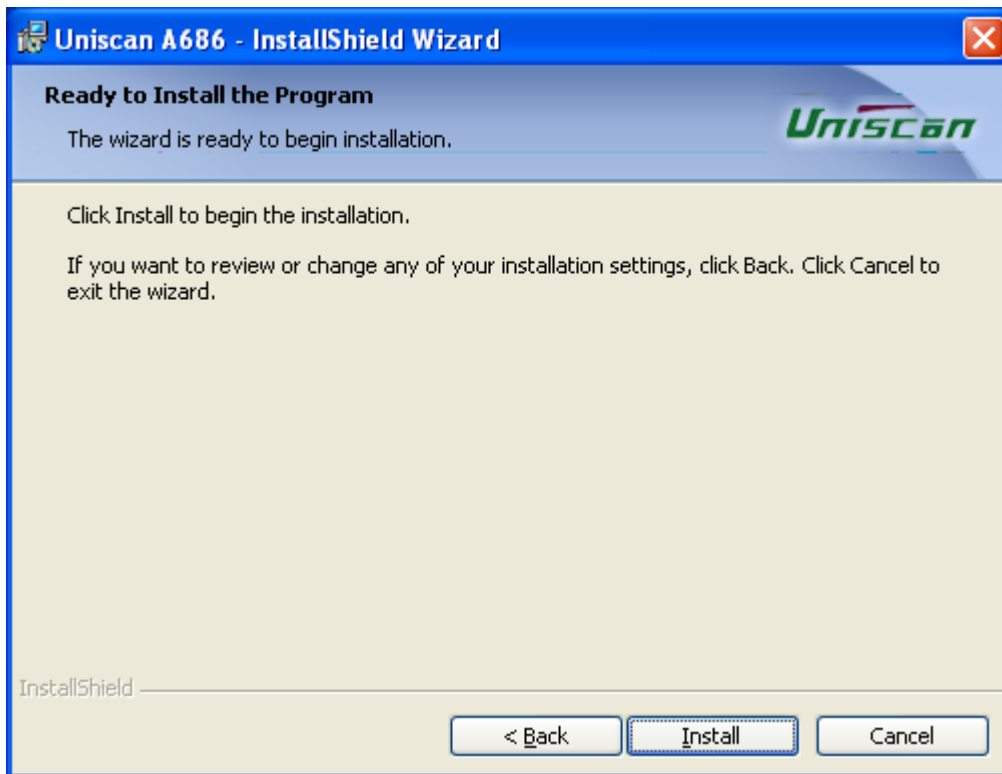
For PC (MS Windows system): Insert the Setup/Application CD into your CD-ROM, the CD will run automatically, and display the Installing Interface. Please setup as following:

1. Click on the **“Setup/Application Driver ”** Button, the system start to prepare for installing the process. After the interface **“Uniscan A686-Installshield Wizard”** is displayed, click on the **“NEXT”** button.



2. After ensuring to install, click on **“INSTALL”**, the system will install the Setup/Application CD. When the system completes the installation, click on the **“FINISH”** button.

ATTENTION: Install the Setup/Application Driver first, and then connect the scanner to your computer.



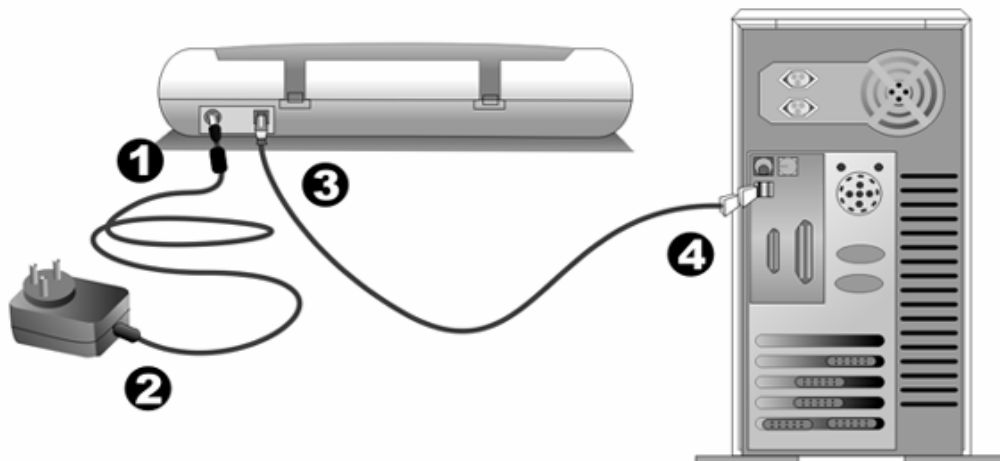
If your computer CD-ROM can't run automatically, please install as following:

1. Click "**START**" from taskbar, select "**RUN**"
2. Key in "**DRIVE:\ Setup.EXE**", DRIVE is drive letter assigned to the CD-ROM

of your computer, such as “E”. Press “**ENTER**”, the installing interface will display. You can install the Setup/Application driver according to the on-screen instruction.

Step 3: Connecting the scanner to your computer

1. Plug one side of the power adapter into the scanner's power receptor.
2. Plug the other side of power adapter into appropriate power outlet.
3. Plug one side of supplied USB cable to USB port at the rear of the scanner.
4. Plug the other side to the free USB port on the back of your computer.

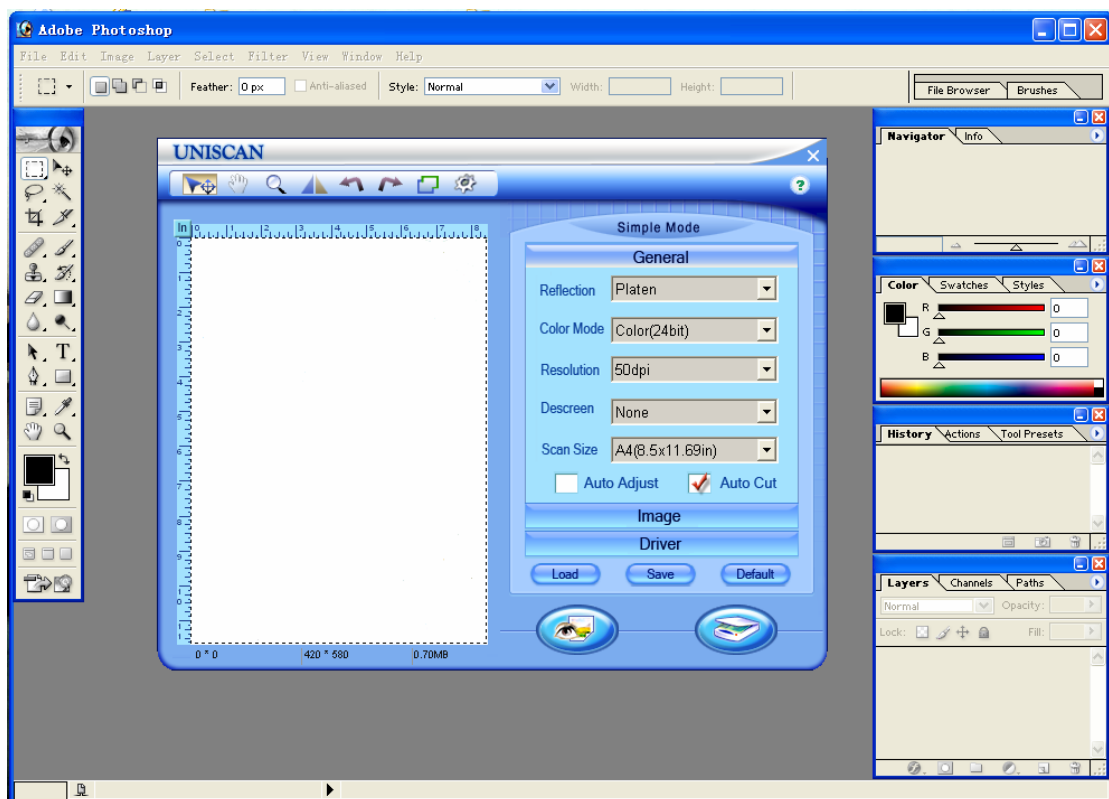


Testing the scanner

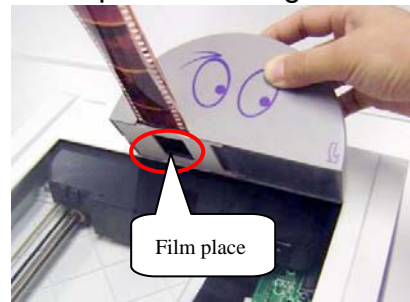
The following test procedure checks to see if the scanner is properly functioning with your computer and the scanning software. Before testing your scanner, double check to make sure that all connections are securely fastened.

To properly test your scanner, please perform the following steps:

1. Open the scanner's document cover and place a picture onto the scanner glass face-down.
2. Gently close the document cover.
3. Open the scanner's image-editing program; click on following options **START/PROGRAM/ADOBE PHOTOSHOP** (or other image-editing program)
4. When Adobe Photoshop opens, click on **FILE/ INPUT/ Uniscan A686**
5. Then Uniscan TWAIN open
6. If an image appears on your screen (as shown), your scanner is working properly.



7. When scan film, please place S1350 adapter according to the following picture



8. To scan film, choose positive or negative film item in TWAIN UI, first click preview button on the user interface, and then click scan button to start to scan.

II. Operating the Scanner and Maintenance

Your scanner accepts A4-sized documents, but some software programs have limitations as to the information they can handle. The capacity of the computer's memory and free space on your hard drive can also limit the physical size of the document that you can scan.

There are two different ways to operate the scanner.

1. From within an image-editing program that acquire images from the scanner.
2. From Smart Panel, which is automatically installed as your scanner software.

Smart Panel is a program that allows you to conveniently scan images and text without working directly within any image-editing application. It also includes copy function.

Using Scanner Buttons


ATTENTION: Before you use the button, you should install Smart Panel included in the DRIVE, otherwise some buttons are unavailable

The scanner you purchased has four buttons, when you press any button, relative function window will display, which make your scanning more simple, fast and convenient.


The original setting is done based on common work. You can get more change in "Smart Panel" window to meet your requirement.

E-mail Button

1. Place a document or image face-down on the scanner glass.
2. Press the **E-mail** button.
3. **【E-mail】** interface of Smart Panel will display automatically, then refer to **"III.Setting Scanner Buttons"**

4. Adjust other settings according to your requirement, and press  button to scan
5. Your E-mail program will be launched, and a new message will be created with the scanned image already inserted as an attachment.


Scan Button

1. Place a document or image face-down on the scanner glass.
2. Press the **Scan** button.
3. **【Scan】** interface of Smart Panel will display automatically, then refer to “III. **Setting Scanner Buttons**”
4. Adjust other settings according to your requirement, and press  button to scan
5. The scanner work based on your setting.

OCR Button

ATTENTION: Before using the OCR function, please install OCR Recognition Program first.

OCR program can edits image, scan printed text, and save as text file. OCR Recognition Program can transfer the image file into text file, can check, edit and save on word processing program.


1. Place a document or image face-down on the scanner glass.
2. Press **OCR** button
3. **【OCR】** interface of Smart Panel will display automatically, then refer to “III. **Setting Scanner Buttons**”
4. Adjust other settings according to your requirement, and press  button to scan
5. Use OCR software to edit image or text.

Copy Button

ATTENTION: Install your printer hardware and Driver, then Copy button can work.

1. Place a document or image face-down on the scanner glass.
2. Press **Copy** Button
3. **【Copy】** interface of Smart Panel will display automatically, and then refer to “III.

Setting Scanner Buttons”

4. Adjust other settings according to your requirement, and press  button to scan.
5. Then document or picture will transferred to appointed printer automatically and be printed out.

Maintenance

To keep your scanner working smoothly, take a moment to review the following maintenance tips:

- Avoid using the scanner in a dusty environment. When it is not in use, keep the scanner covered. Dust particles and other foreign objects may damage the unit.
- Do not attempt to disassemble the scanner. There is danger of an electrical shock and opening your scanner will void your warranty.
- Do not subject the scanner to excessive vibration. It may damage the internal components.
- Be sure not to bump or knock the scanner glass as it is fragile and could break.
- Clean the scanner glass by lightly spraying a non-abrasive glass cleaner onto a soft lint-free cloth. Then, wipe the glass thoroughly with the cloth. Do not spray cleaner directly onto the scanner glass. Excess liquid residue may fog or damage the scanner.
- Your scanner is allowed to operate in temperatures between 5° C and 35° C, the best temperature to operate is 25° C.

III. Setting Scanner Buttons

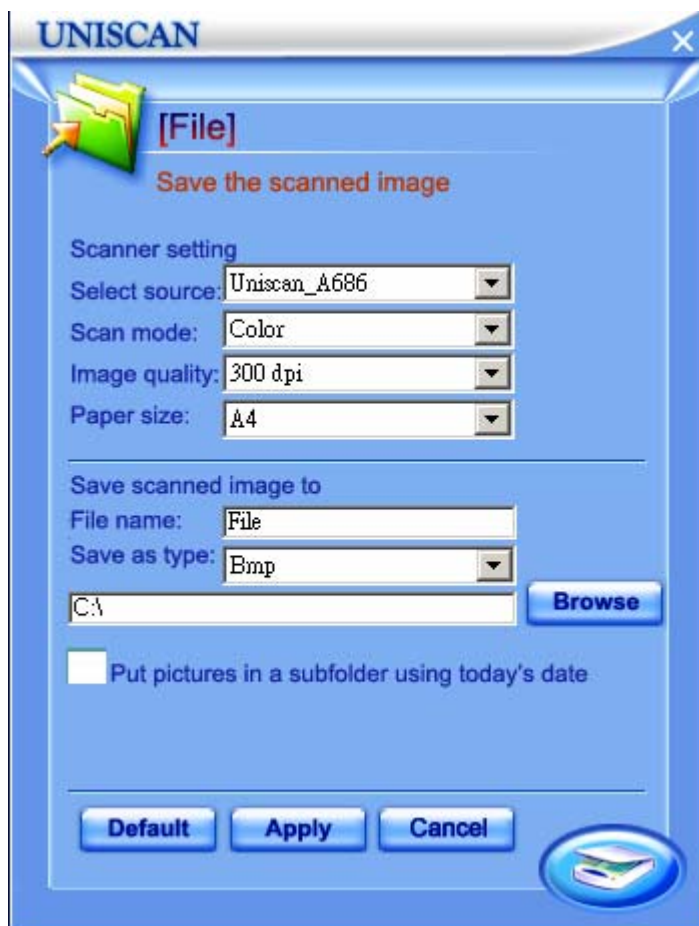
Before setting, please ensure the Smart Panel icon is on your computer screen or not. When you install the Setup/Application Drive, the icon will display on the desktop. If not, Please follow these steps to acquire Smart Panel Program: Click Windows **START/ PROGRAM/ UNISCAN A686/Smart Panel**.

Setting File Button

1. Double-click Smart Panel icon, Smart Panel window appear:



2. Click **【File】**, the following window appear



3.If you want to do more setting to scanned image, please operate in this interface:

Select source: Choose scanner you want to use

Scan mode: Tell your scanner what kind of mode you want to scan, there are three

modes Color, Gray, B/W for your choice.

Image quality: Choose the resolution of scanned image. There are following items to choose: 50,100,150,200,300,400,600,1200dpi.

Scan size: The scan size is defaulted as A4.

4. You can save the file name and choose save type, too.

5. If you want save the picture a subfolder using today's date automatically,

Please tick in following frame:

☐ Put pictures in a subfolder using today's date

Setting Application Button

1. Double-click Smart Panel icon, Smart Panel window appear

2. Click **【Application】** , the following interface appear



3. You can link the image to some appointed position

4. Other setting please refer to Part 3、 4 and 5 of **【File】** interface

Setting Fax Button

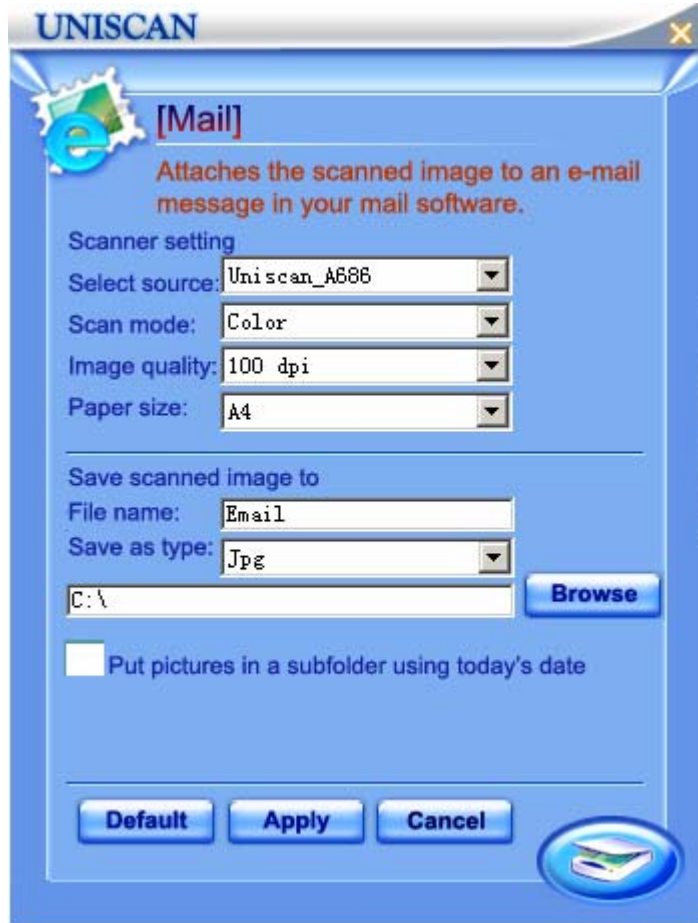
1. Double-click Smart Panel icon, Smart Panel window appear
2. Click **【Fax】** , the following interface appear



3. The setting of this interface is different from others, Select source, Scan mode, Image quality and Paper size is defaulted as one fixed mode.

Setting Mail Button

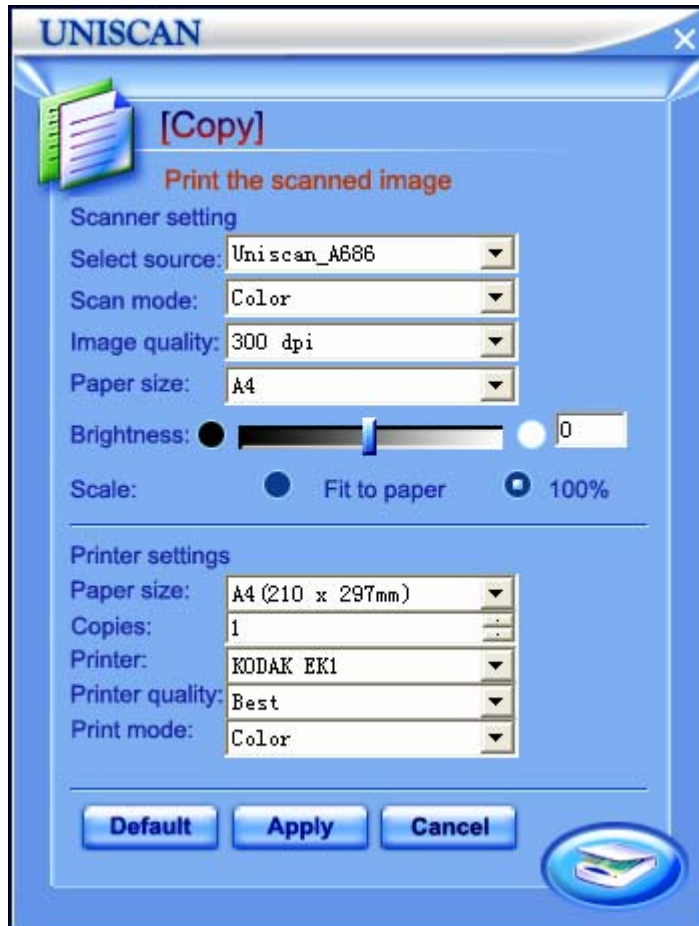
1. Double-click Smart Panel icon, Smart Panel window appear
2. Click **【Mail】** , the following interface appear



3. Other setting please refer to Part 3、4 and 5 of **【File】** interface

Setting Copy Button

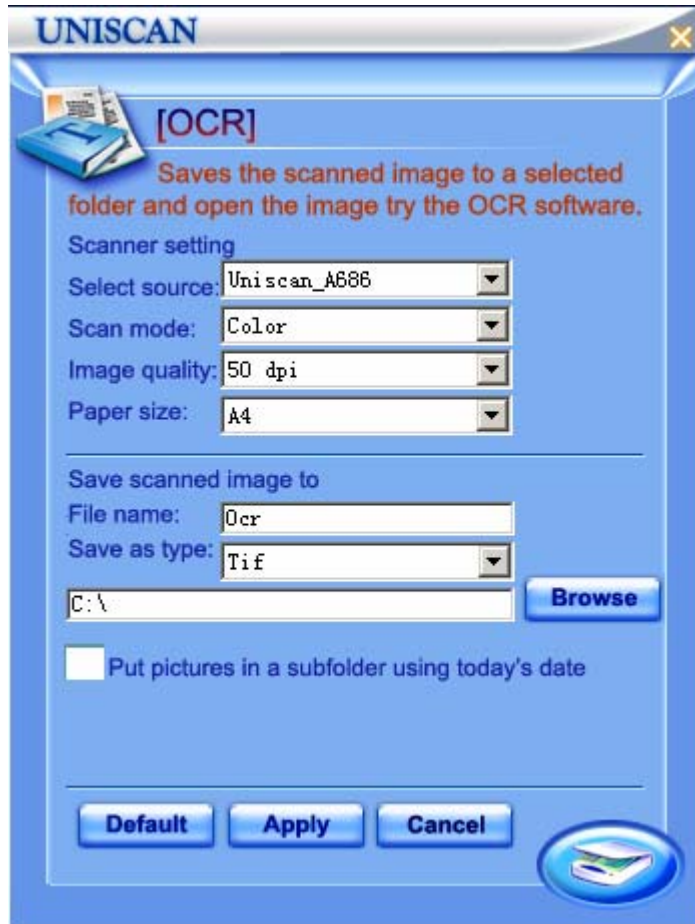
1. Double-click Smart Panel icon, Smart Panel window appear
2. Click **【Copy】** , the following interface appear



3. Other setting please refer to Part 3 of **【File】** interface
4. You can do Printer settings, such as adjust paper size, and choose printer, print quality and print mode.

Setting OCR Button

1. Double-click Smart Panel icon, Smart Panel window appear
2. Click **【OCR】** , the following interface appear

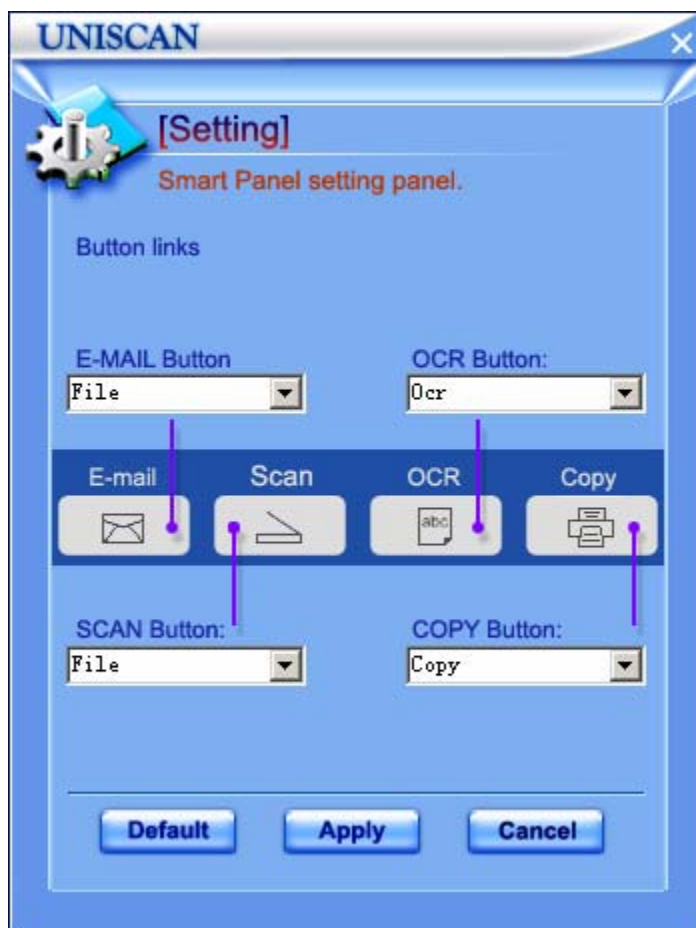


3. Other setting please refer to Part 3、 4 and 5 of **【File】** interface

Setting Setting Button

This interface is custom function interface, by using it, you can choose two more Fax, Application function besides four button functions.

1. Double-click Smart Panel icon, Smart Panel window appear
2. Click **【Setting】** , the following interface appear



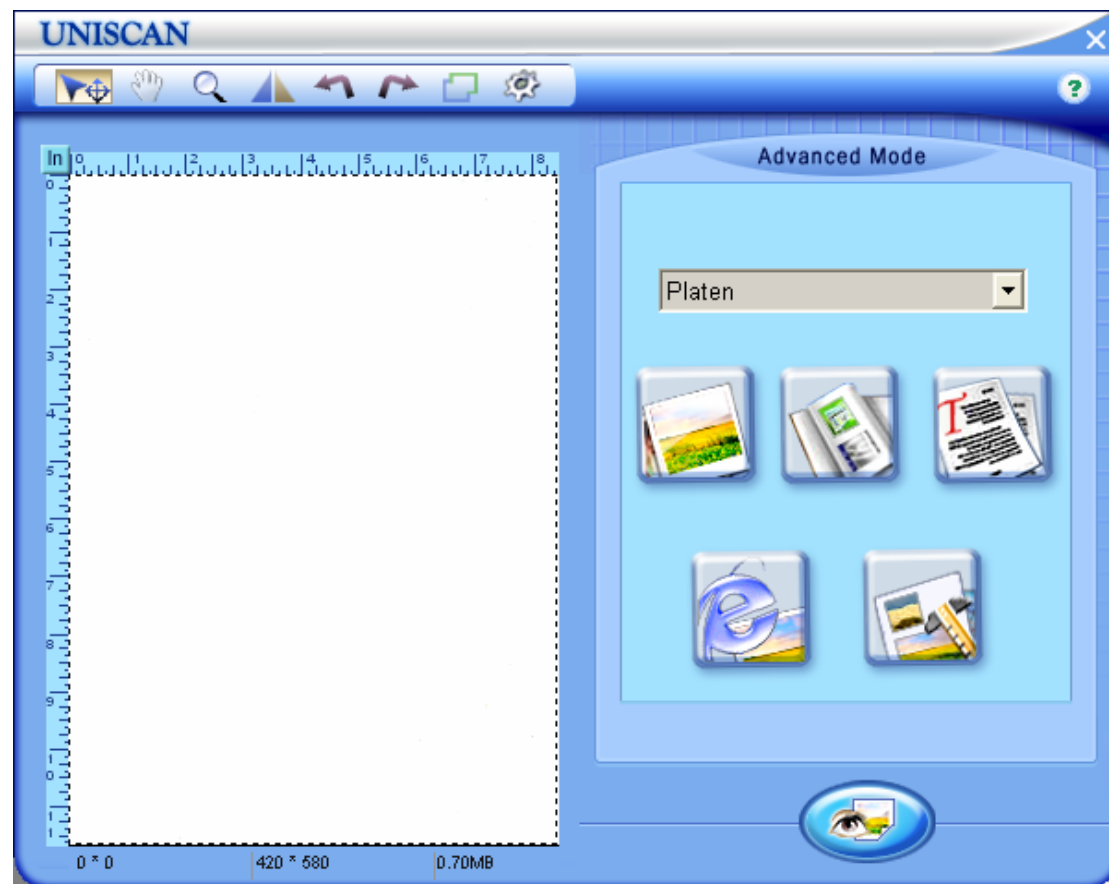
3. In this interface, you can link all the buttons. Click Mail menu, six items appear: Mail, File, Application, Copy, OCR, Fax. When choose Fax item and press **Mail** button on this interface, **【Fax】** interface will appear, you can do more setting on this interface, then press **Scan** Button on smart panel, you can send the scanned image by fax. As the same, click OCR menu, you can choose any item. If you choose Application and press **OCR** button, **【Application】** interface will appear. On the analogy of Setting interface, you can use Mail, File, Application, Copy, OCR and Fax six functions with four buttons on the scanner.

IV. Twain Interface

You can use software included in CD or TWAIN Interface to scan. Twain program allows you to adjust a number of settings to define the quality of the scanned image. The following chapter describes the TWAIN interface, which automatically opens when you acquire from image-editing application.

The Twain program of this scanner has two modes-----Simple Mode and Advanced Mode

1. Simple Mode



Crop

Selects the cropping tool. With this tool selected, click and drag with the left mouse button in the preview window to define the area to be scanned.

Drag

Selects the Drag tool. With this tool selected, click and drag with the left mouse button to move the selection.

Zoom

Zoom in by clicking the left mouse button in the preview window; at most it can zoom in four times.

Flip

With this tool selected, you can flip the scanned image around the central vertical axis. It is available both to reflectance and Slides and Negatives

Rotate-L

With this tool selected, it will rotate the scanned image 90 degree counter-clockwise. It is available both to reflectance and Slides and Negatives

Rotate-R

With this tool selected, it will rotate the scanned image 90 degree clockwise. It is available both to reflectance and Slides and Negatives

Batch

Select the Batch tool. With this tool selected, you can choose several scan areas to scan, and adjust Color Mode, Resolution, Descreen etc., to each area. At most, it can support eight scan areas.

Setting

Open the Setting dialog box. From this dialog box, you can configure preset scanning icons for one-click scanning from the simple mode.

Help

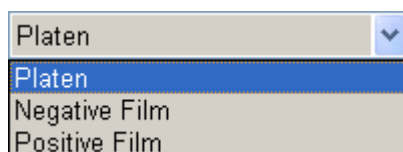
Open TWAIN online help.

[Select Source] In Simple mode, there is a frame for you to choose to scan the following mode:

Platen: Use this setting to scan normal sheets of paper or any non-transparency material

Negative Film: Use this mode for scanning 35 mm negative film

Positive Film: Use this mode for scanning 35 mm positive film, e.g. slides.



In Simple Mode, if you choose platen mode, you can click one of the five preset icons to scan depending on your desired type of output.

The five icons are: Scan Photograph, Scan Magazine, Scan Data for OCR, Scan photo for Internet and Custom.



Scan Photograph



Scan Magazine



Scan Data for OCR



Scan photo for Internet



Custom

In Simple Mode, if you choose Negative Film or Positive Film mode, there's a button for you to scan film.



Scan film

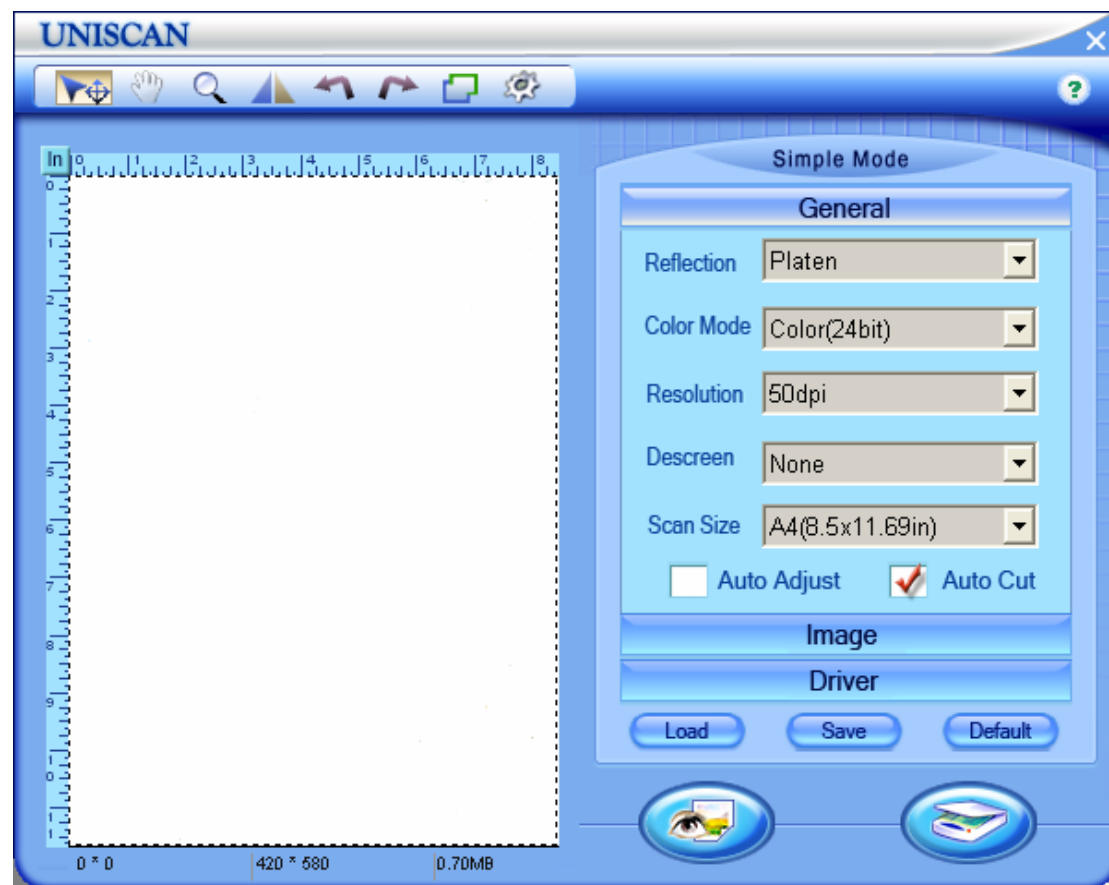


Preview button.

Clicking this button, you can review the image in Preview Window, so that you can change the scan area and foresee the image.

2. Advanced Mode

In Advanced mode, you can set specific settings for this particular scanning instance.



(1) **General Settings**

General Settings provides the following general configuration options:



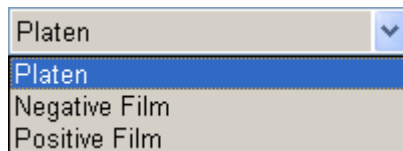
Reflection

In Advanced mode, there is a frame for you to choose to scan in following mode:

Platen: Use this setting to scan normal sheets of paper or any non-transparency material

Negative Film: Use this mode for scanning 35 mm negatives

Positive Film: Use this mode for scanning 35 mm Positive



Color Mode

Color Mode determines the amount of color information collected from your original. Choose this option based on whether the original is color or black & white, and on the purpose of your scanned image (i.e., color display, black & white printing, OCR, etc.). Your choice also influences file size; true-color creates the largest files, while grayscale creates smaller files and black & white creates the smallest. When you change this option, notice the projected file size in the message bar: true-color images are three times larger than grayscale and twenty-four times larger than black & white!

Color 48-Bit

Your scanner is capable of scanning images using 48-bit color depth. This provides a more dynamic color and tonal range, giving your scanned images a smoother and more colorful appearance.

The 48-bit color mode is disabled by default because currently only a few application programs (such as Adobe PhotoShop) can accept 48-bit image data. When disabled, your images will be scanned in 24-bit color mode. To scan images in 48-bit color simply

Color 24-Bit

This color mode collects a large amount of color information from the original, up to around 16.7 million colors! Choose this option for a color original that you want to display, print or edit in color.

Grey 16-Bit and Grey 8-Bit

Use either of these modes for black & white photos or for scanning color material to print on a black & white printer. Choose 8-Bit for lower quality and smaller file size black & white images.

B & W

Use this mode to scan text or line drawings - a picture or text containing black lines only, with no colors or shades of gray.

Resolution

Resolution determines the amount of detail collected from an original. There are 50,100,150,200,300,400,600,1200,2400,4800dpi and Custom options. If choose "Custom", there is a window that inform you to fill in a number between 50 and 24000. If the number is less than 50 or more than 24000, the caution word appear: Please fill in the number between 50 and 24000.If the image size is larger than 1.7G, the driver will request user to select a lower resolution or select a smaller scan size. The higher the resolution, the greater the detail. Select a value based on the purpose of your scan. In general, we recommend you keep the resolution as low as possible, because the higher the resolution, the slower your scan and the larger the resulting file size. Furthermore, a lower resolution (100-200dpi) when using True Color or Grayscale can capture more color and detail than most printers or monitors can show. When you adjust the resolution, keep an eye on the projected file size in the message bar. The following are suggested settings for various scan file types:

Document Type	Resolution
Text (printed)	300 dpi
Text (fax)	200 dpi
Text for OCR	300 dpi
Black & White or grayscale image	150 dpi
Color photo or image	150 dpi

100 dpi

For images to display on screen at about the same size as the original in a presentation or on your web page. Also use this for larger images that you will reduce in size to include in a report or presentation and print out on a normal color or black & white printer

200 dpi

For small images to display at a larger size on screen, or for any image to be printed out at original size on a color or black & white printer (up to 720dpi print resolution). Also use 200dpi (with black & white scan mode) for clear OCR text (larger than 10pt); for smaller text, use 300dpi.

300 dpi

When quality is critical and a lower resolution is inadequate, choose 300dpi for any size image and for any use (to determine if the resolution is too low, look for squares in the image; see below). Also use 300dpi (with black & white scan mode) for optimum OCR results.

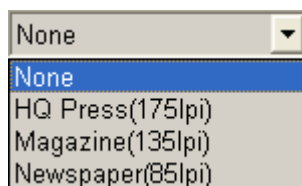
Over 300 dpi

Unless you have a specific reason for selecting a higher resolution, we suggest you do not, as the resulting file size may be very large and take up a lot of your hard disk space.

Descreen

There are four modes for your choice:

1. Non-setting, do not choose Descreen function.
2. Descreen for delicate printed image.
3. Descreen for magazines
4. Descreen for papers



Descreen is used to reduce the effects of Moiré patterns. Although not always obvious, Moiré patterns interfere with the quality of your scanned image. Depending on their severity, they can appear as waves or patterns superimposed over your image, or simply make the image fuzzier. Moiré is a form of interference caused by the imperfect alignment between pixels sent from the video card and the screen. They appear in all color scan displays, and more often affect scans of printed images than text, as well as scans at higher resolutions as compared to those of lower resolutions.

Moiré patterns are an inevitable result of scanning, and will not be completely eliminated until significant improvements in monitor technology can be made. If your

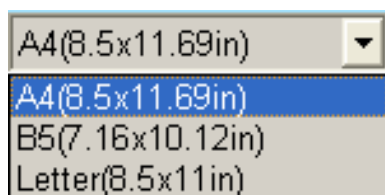
scanned image is overlaid with a ripple, wave, dot or other odd pattern, select **Descreen** and scan again to remove this phenomenon and produce a cleaner image.

The scanner scanning in half tone pixels causes moiré, which the screen is not able to display well. **Descreen** operates by replacing half tone pixels with full tone pixels. Use higher levels of Moiré Reduction for objects printed in Matt finish or on plain paper, while lower levels can be used for originals such as gloss finish photographs. A side effect of using the **Descreen** feature is a loss in quality of the scanned image; try different settings until you find a setting that gives the best compromise between quality and clarity

Over 1200dpi, there is no Descreen function, for its effect is not so obvious. For B/W scan mode, the descreen function doesn't work.

Scan Size

There are below items for your choice:



Choose a Scan Size depending on the size of paper you wish to output to (if output is to be printed). You can also adjust scan size by cropping the image in the preview window, which will set scan size to Custom. You can move the area by dragging the box.

Auto Cut  Auto Cut

The auto adjust function is disabled by default. Select this option to let the scanner automatically determine the size of the item being scanned. When **Auto Cut** is selected, the scanner makes two passes. The first pass detects the item's size and the second pass scans the item. To enable **Auto Cut**, simply check the **Auto Cut** box in the general settings window.

Auto Adjust  Auto Adjust

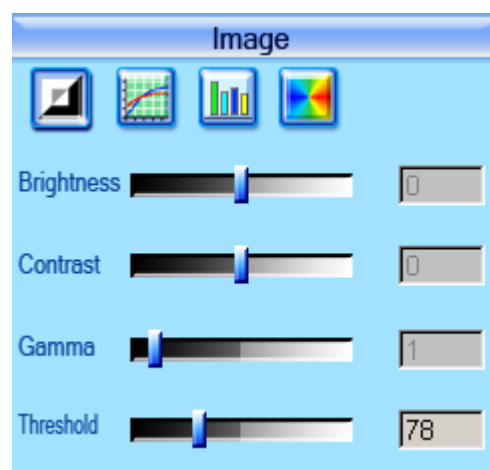
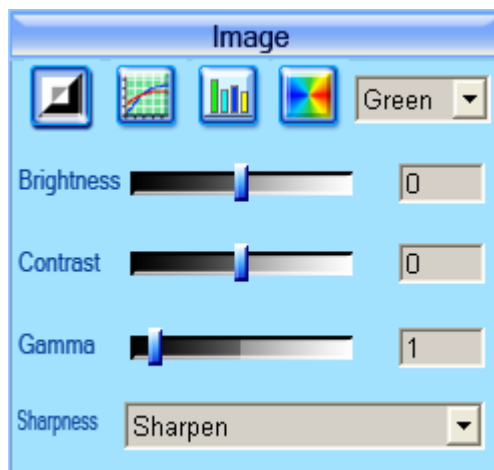
Select this option to adjust automatically the Histogram to make the scanned image clearer. It does this by increasing the difference between color tones.

(2) Image Adjust

Image Adjust is used to make specific alterations to the quality and coloration of the output image. When you are satisfied with the adjustments you have made, you can save the configuration for later use by clicking **Save** and selecting a file name and directory. Image Adjust contains 4 option screens: General Adjust, Curves, Level and HSB



General Adjust



General Adjust allows you to adjust the Brightness, Contrast, Gamma and Threshold/Sharpness of the output image.

Brightness

Brightness is a measure, ranging from -127 to 127 , of the relative lightness or darkness of the image. Increasing the brightness will bleach the scanning image, while decreasing it will result in a darker final image. Move the slider to adjust the brightness of the overall image or the selected color.

Contrast

The higher the Contrast, the clearer the image, while lower Contrast results in blurry images. Increasing the Contrast decreases the mid-range hues, and increases the high and low hues. Generally, adjusting Contrast is used to eliminate spots and shadows from scanned black & white or grayscale images, or to "clean" color images. Move the slider to adjust the Contrast of the overall image or the selected color. This function is not suitable for line drawings or other pure black & white images.

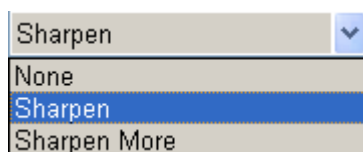
Gamma

Moving the **Gamma** slider will affect the colors in your image as seen on the monitor. Although the default Gamma setting is ideal for most scans, the computer does not always receive the precise color information from the scanning hardware, and some distortion in color may occur. Through altering the gamma of either the overall image or the selected color, you can achieve the exact coloration you desire.

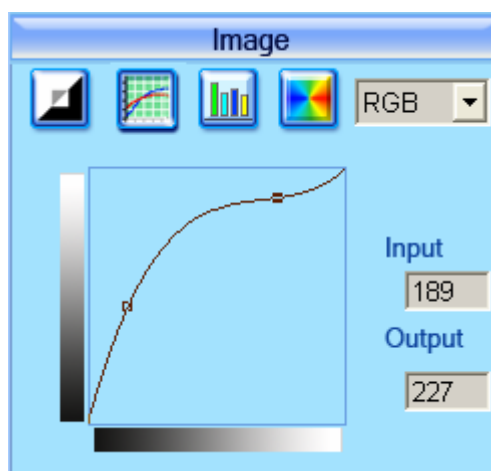
Threshold/Sharpness

If you choose Black and White in color mode combo box, move the slider of threshold to make the image sharper or fuzzier.

Note: If you choose Grayscale (8 bit), Grayscale (16 bit), Color (24 bit) or Color (48 Bit) in Color Mode combo box, the sharpness setting is as below, there are three choices: None, Sharpen, Sharpen more.

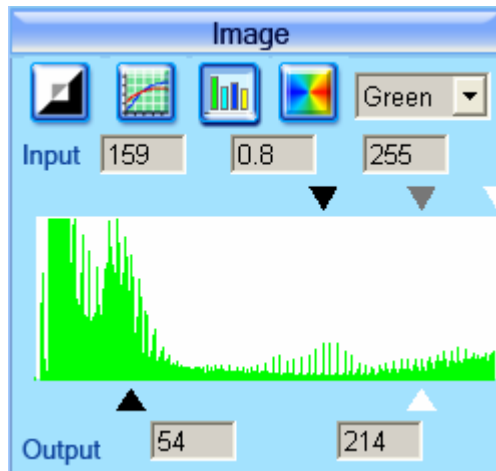


Curves



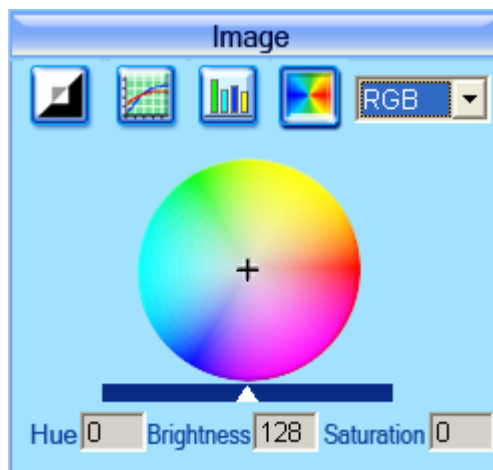
Select Curves to display the red, green, or blue color curve. The mixed color will be displayed in black. **Note:** changing the color curve will affect the results of all scanner output.

Level



Level displays a histogram of the distribution of red, green, blue, grayscale, hue, saturation, and/or lightness values in an image. The horizontal axis represents the lightness values of the image from black to white (0 to 255). The vertical axis indicates the number of pixels at each value. At a lightness level where there are many pixels of one of the values, the corresponding line spikes; where there are few pixels, it appears close to the horizontal axis. In dark images, most of the pixels are grouped at the left side. If an image is too light, the pixels are grouped at the right.

HSB (Hue, Saturation and Brightness)



Saturation is the intensity or purity of the colors displayed in the image. The intensity of the color refers to the color's distance from the shade of gray; a value of 0 represents gray, while a value of 255 represents the most intense color.

Hue indicates a color's position on the standard color wheel. At a value of 0, the colors stay true to the original image. Changing hue rotates the color's position by the appropriate number of degrees along the color wheel. For example, selecting a hue value of 30 rotates the color's position 30 degrees, while a hue value of 330 represents a clockwise rotation of 30 degrees. Obviously, the smallest hue value is 0, the greatest hue value is 360, which changes all the image's colors to the exact opposite colors according to the color wheel.

Brightness is a measure, ranging from 0 to 255, of the relative lightness or darkness of the image. Increasing the brightness will bleach the scanning image, while decreasing it will result in a darker final image. Move the slider to adjust the brightness of the overall image or the selected color.

(3) **About Driver**

This window tells some information about Diver, such as Port, Model, Version, Hardware, Manufacture.



Uniscan A686 Specification

Items	Parameter
Scanner type	Flatbed Scanner
Connection	USB 2.0
Scan Size	Reflective 216 mm×297mm
Optical Resolution	1200dpi (H) ×4800dpi (V)
Max. Resolution	24000dpi (H) ×24000dpi (V)
Scan Mode	Color: 24 bit, 48bit ; Grayscale: 8bit, 16bit ; Black&White: 1bit
Light Source	CCFL
Drive	TWAIN
Power consumption	15W
Operating Voltage	AC 220V ±10% , 50Hz
Power Adapter	Power output DC12V 1.25A
Buttons	Scan, E-mail, Copy, OCR
Operating temperature	5℃ - 35℃
Operating Humidity	20%-80% RH
Exterior Dimension	461mm (L) ×298mm (W) × 60mm (H)
Net Weight	2.5kg

Minimum System Requirement:

Computer Type	PC(IBM PC orPentium Compatible Machine)
CPU	400MHz
RAM	128 MB
Hard Disk Memory	150MB
Display Card	True Color Display Card
Connection type	USB 2.0/1.1 Port
Operating System	Windows 98/Me/ 2000 /XP