PageExpress 4800 Pro

High Speed Document Scanner

[For Windows & Mac]

USER GUIDE
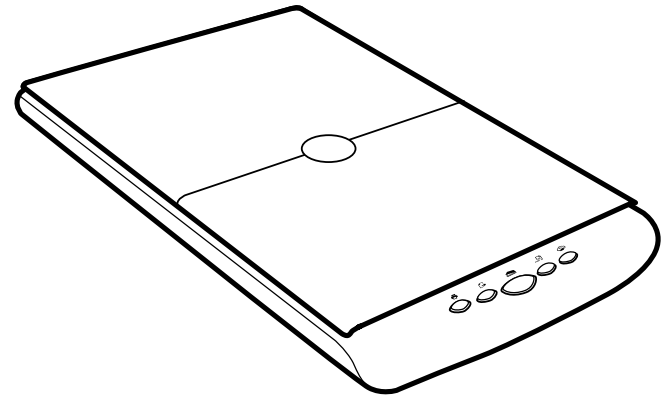
Images and screenshots shown inside this User Guide are example only, which may vary according to the devices used and its operating system.

All contents and specifications of this User Guide are subject to change without notice.

V1.4

SAFETY AND PRECAUTIONS

General Precautions

- Keep away from water or moisture and dusty areas.
- Never store in hot and very cold areas.
- Only use attachments/accessories specified by the manufacturer.
- No objects filled with liquids, such as vases, shall be placed on the Scanner.
- Avoid dust contamination when the Scanner is not in use.
- When left unused for a long period of time, unplug the Scanner from the computer.
- Avoid environments where the Scanner would be exposed to direct sunlight (or any other source of excessive heat) for long periods of time.
- Protect the Scanner from potential liquid spills such as soda, coffee, tea, and etc.
- Be carefully to keep it without dropping it or strong impact.
- Operate the Scanner on a level, well-grounded work surface, free of excessive vibration.
- Do not open the Scanner case alone without technical support because there is danger of electrical shock.
- Position the Scanner near the computer where it can be easily accessed when plugged in.
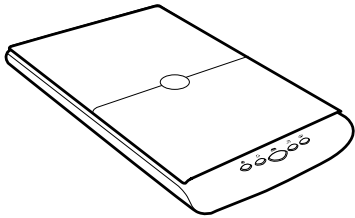
Environmental Information

Discarded electrical and electronic appliances are recyclable and should separate from the household waste. Please actively support in conserving resources and protecting the environment by returning this appliance to the collection centers (if available).
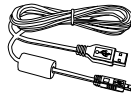
CONTENTS

UNPACKING THE SCANNER

Make sure following items are included in this package.

Scanner	AC Adapter (see Connecting the Scanner)	Installation DVD (see Installing Drivers and Software)	Quick Start Guide

BUNDLED DRIVERS AND SOFTWARE

YOU MUST FIRST INSTALL SCANNER DRIVER IN ORDER TO USE THE SCANNER ON YOUR COMPUTER.

[Windows]

1. Scanner Driver - Scanner Driver includes following:

   a. TWAIN and WIA driver: it comes with TWAIN interface to use the Scanner from within any WIA or TWAIN-compliant host software applications such as MediaImpression, Photoshop.
   b. iDocScan Touch: it is consisted of 5 Scan-to functions, including Scan to Folder, Scan to PDF, Scan to Application (Default: E-Mail), Scan to Cloud, and Scan to Print destinations, and Advanced Scan with a Preview Window for displaying the prescanned image.
   c. Help files: this includes detailed instructions of iDocScan Touch and of the TWAIN interface.
   d. Clean Calibration: Run this tool to clear the calibration data left from the previous scanner, when you use another same model scanner on the same computer with a previous driver.

2. ArcSoft MediaImpression - this TWAIN-compliant application serves as a host application that enables image scanning via the TWAIN interface. For detailed information of this application, see the "Help" file integrated within this application.

3. ABBYY FineReader - this application converts scanned text into searchable text when using the PDF function. For detailed information of this application, see the "Help" file integrated within this application.

4. Adobe Acrobat Reader - this application opens the scanned image that is converted into a PDF format using the PDF function.

[Mac]

1. ImageAcquire - this TWAIN-compliant application serves as a host application that enables image scanning via the TWAIN interface. For detailed instructions of ImageAcquire, see the PDF file inside the ImageAcquire folder.

2. Scanner Driver - it comes with TWAIN interface to use the Scanner from within any TWAIN-compliant host application such as ImageAcquire, Photoshop. Refer to the PDF file inside the Scanner Driver folder for detailed instructions of TWAIN interface.

3. ScanMust - this application allows you to easily scan from the Scanner buttons or within this software. For the detailed instructions of ScanMust, see the "Help" file integrated within this software.

SYSTEM REQUIREMENTS

Following minimum system requirements are recommended to achieve the best performance from the Scanner.
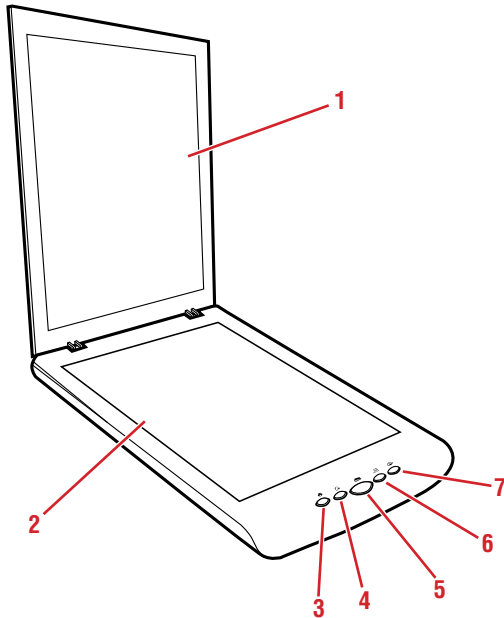
	Windows	Mac
Processor	Intel Core Duo or faster	Intel Core Duo or faster
Support OS	Windows XP (Service Pack 3) / Vista / 7 / 8 / 8.1 /10	Mac OS X 10.7 to 10.11 and above
Color Display	1024 x 768 resolution or above	1024 x 768 resolution or above
RAM	4GB RAM or greater	4GB RAM or greater
Free Hard Drive Space	2GB	1GB
Drive	DVD-ROM Drive for software installation	DVD-ROM Drive for software installation
Interface	Available USB port	Available USB port

📝 **NOTE**

The scanning speed and performance are determined by the specifications of your computer. The higher specification of your computer, the better the Scanner will be performed.

SCANNER PARTS

1	Scanner Lid	Opens to reveal the Flatbed Glass.
2	Flatbed Glass	Used to scan single pages or book pages.
3	🖨	Scan directly to your printer to make copies of a scan.
4	↪	Scan directly to your email program. For Windows, you can select either email or application (default: MS Paint) as the destination of your scan.
5		Scan directly to the selected folder.
6	PDF	Scan directly to the PDF file format.
7	☁	For Windows, scan directly to either Google Drive or Dropbox shared folder in your computer. For Mac, scan directly to the selected application (default: Preview).
8	USB Port	Connect the USB Cable to a computer for power supply.

Rear Side

INSTALLING DRIVERS AND SOFTWARE

PLEASE COMPLETE THE DRIVERS AND SOFTWARE INSTALLATION BEFORE CONNECTING THE SCANNER. DO NOT CONNECT THE USB CABLE TO THE SCANNER OR COMPUTER AT THIS MOMENT.

[Windows]

1. Insert the Installation DVD into the DVD-ROM drive of the computer. The DVD will run automatically, and then the installation window appears on the screen as following:

    📝 **NOTE**

    If the DVD does not run automatically, locate the drive on the computer and double click on "AUTORUN.exe" file.

2. Click "Scanner Driver" from the installation window.

3. Select a preferred language from the "Choose Setup Language" list.

4. Click "Next" when the Welcome screen appears, and then follow on-screen instructions to complete installation.

5. Return to the installation window to install other software to your computer to enable certain functions.

[Mac]

1. Insert the Installation DVD into the DVD-ROM drive of the Mac.

    The Autorun disc icon appears on your desktop.

2. Double click on the Autorun disc icon.

    The content of the disc is displayed in the Autorun folder as following:
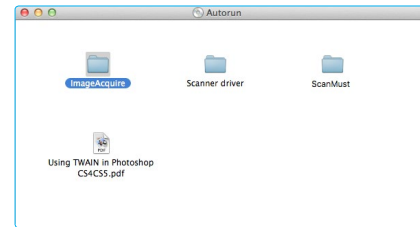
3. Double click the "Scanner Driver" folder, then "PageExpress 4800 Pro.pkg" to start the installation process.

    Follow on screen instructions to complete the installation procedures.

4. Return to the Autorun folder. Double click the "ScanMust" folder, and then "ScanMust Installer.pkg" to start the installation process.

    Follow on screen instructions to complete the installation procedures.

5. Return to the Autorun folder. Double click the "ImageAcquire" folder, and then **"**ImageAcquire.pkg" icon to start the installation process.

    Follow on screen instructions to complete the installation procedures.

How to Uninstall the Drivers and Software

When you need to remove the scanner drivers and software from your computer, uninstall as following:

[Windows]

1. Unplug the USB Cable connecting from the computer.
2. Exit all running applications.
3. Go to the "Start" menu, select "(All) Programs", "PageExpress 4800 Pro", and then click "Uninstall".
4. Follow the on-screen instructions to remove the Scanner Driver.

[Mac]

1. Unplug the USB Cable connecting from the computer.
2. Exit all running applications.
3. Insert the Installation DVD.
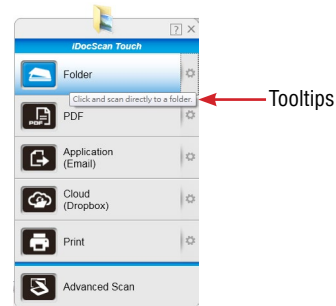4. Double click on the UninstallDriver icon in the Scanner Driver folder to remove it.

Uninstall Driver
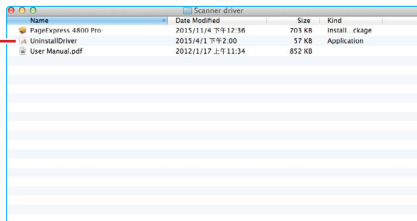
5. Drag ImageAcquire icon and ScanMust icon from the "Application" folder to Trash.
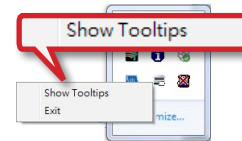
Showing/Hiding Tooltips

You can show (default) or hide the tooltips for the iDocScan Touch panel and the settings page when you are familiar with the instructions.

Tooltips

Right-click on the Scanner icon [ ] from the system tray to bring up the following menu, then click on **Show Tooltips**.
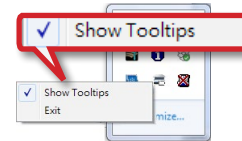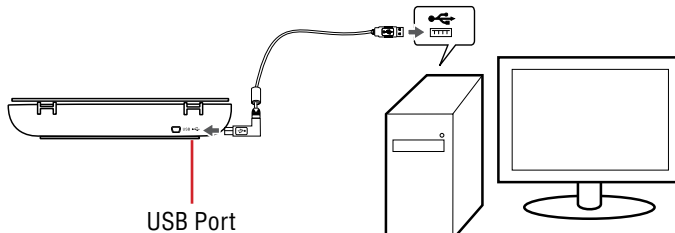
The check mark disappears, indicating that the tooltips is hidden.

To show the tooltips again, click on **Show Tooltips** to check mark it.

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CONNECTING THE SCANNER

1. With the computer on, connect supplied USB Cable to the Scanner's USB Port and the other end to the computer.

USB Port

2. After a few moments, your computer will automatically detect your scanner:

   (a) Windows computer will detect the Scanner as a Removable Disk and automatically loads iDocScan Touch [ ] in the system tray.

   iDocScan Touch(PE4800 Pro)
   Scanner is ready for use.
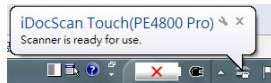
   iDocScan Touch icon might be hidden, and require that you click the arrow in the system tray to reveal it.

   Customize...
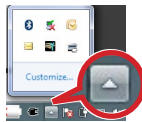
   (b) Mac computers will automatically launch the ScanMust software in the menu bar.

   100%   Tue 4:3

📝 **NOTE**

- If your Windows computer does not appear the Scanner icon [ ] in the system tray, from the "Start" menu, click "(All) Programs" > "PageExpress 4800 Pro" > "iDocScan Touch(PE4800 Pro)".

- If your Mac computer does not appear the Scanner icon [ ] in the menu bar, open "Finder"and then click "Applications". Find ScanMust in the Application folder, and then double click on it to open it in the menu bar.

Turning Power Off

To turn off the power, unplug the USB Cable from the computer.

PLACING THE ORIGINALS

1. Open the Scanner Lid.
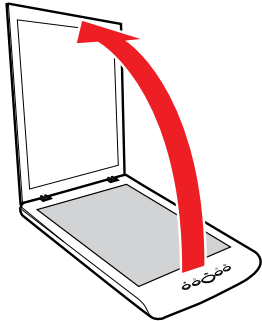
2. Place the original facing down on the Flatbed Glass, and then align the original at the top right corner.
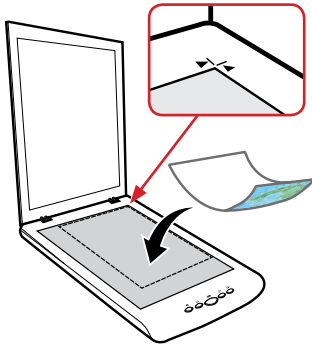
3. Close the Scanner Lid.

NOTE

- Do not place heavy items on the Scanner Glass or press on the Scanner Glass with too much force as this will cause damage to the glass surface.
- Do not place any objects which may scratch the glass on the scanner.

SCANNING PROCEDURES IN WINDOWS

Setting iDocScan Touch and Buttons
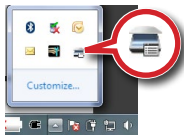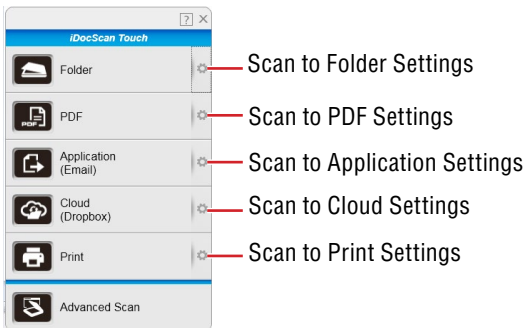
You can setup the scanner buttons to perform certain actions within the iDocScan Touch software.

1. Click the Scanner icon [🖨] from the system tray to bring up the iDocScan Touch panel.

2. Click [⚙] (Settings) by the following 5 scan to functions to open the Settings dialog box.

   Scan to Folder Settings

   Scan to PDF Settings

   Scan to Application Settings
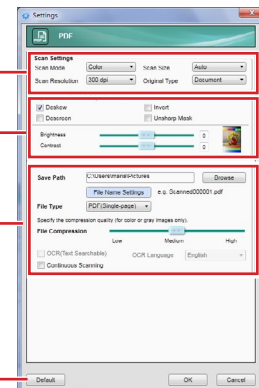
   Scan to Cloud Settings

   Scan to Print Settings

3. The Settings window appears. You can change the settings as following:
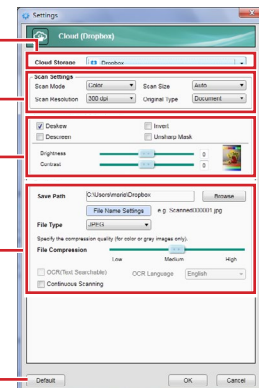
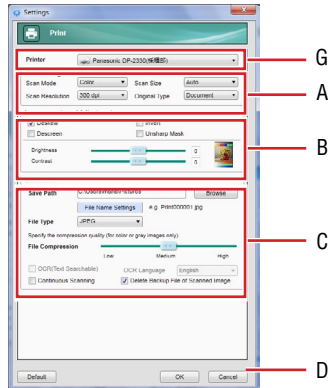**Scan to Folder Settings**

A
B
C
D

Scan to PDF Settings

A
B
C
D

Scan to Application Settings

F
E
A
B
C
D
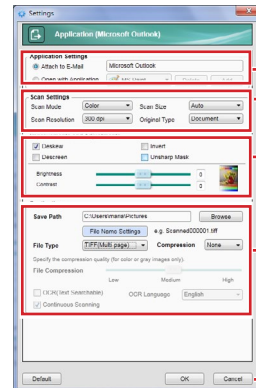
Scan to Cloud Settings

Scan to Print Settings

A. Scan Settings	
Scan Mode	Select a mode to scan your originals with following choices: "Color", "Gray", "B/W" . • **Color:** Select it to scan the color photographs, documents, and items containing colors in full color. • **Gray:** Select it to scan the image in grayscale using varying shades of gray. • **B/W:** Select it to scan text-only originals or line drawings.
Scan Resolution	Select the resolution of the image to be scanned with following choices: "100dpi", "200dpi", "300dpi", "600dpi", "1200dpi". • The higher the resolution, the bigger the file size. • "100dpi" is disabled when "OCR (Text Searchable)" is checked.

Scan Size	Select the output size of the image to be scanned with following choices: "Auto", "A4", "B5", "Letter" • Select "Auto" to automatically detect the paper size and crop scanned image. When scanning darker originals (i.e. night scenery photos), over-cropping may occur.
Original Type	Select an option according to the type of original to auto-adjust overall brightness and contrast for the scanned image. • **Document**: Originals with mainly text. • **Photo**: Originals with mainly color pictures. • **Magazine**: Originals with both text and color pictures.

B. Improvements and Adjustments	
Deskew	Correct the skew image approximately +/-15 degrees. (The results of Deskew do not appear in the preview image, only in the scanned image.) Original Deskew applied • Deskew is enabled when the Scan Size set to "Auto". • Originals with darker backgrounds and dark text are difficult to deskew. Deskew may not work properly when deskewing dark images. • Deskew can only correct one skew image at a time. • This function cannot work with a large skew angle.

Descreen	Descreening helps to reduce moire patterns in magazines or other printed materials. After descreening, the image may appear blurry. Example: Original Descreen applied **NOTE** • If the "Unsharp Mask" function is enabled, some moire pattern may not reduce even when the Descreen is enabled. In such cases, disable the "Unsharp Mask". • Scanning takes longer than usual when you enable the Descreen function.

Invert	This function reverses the colors of the scanned image to the opposite colors. Example of black text with white background to be inverted: Original Invert applied Example of grayscale picture to be inverted: Original Invert applied Example of colored picture to be inverted: Original Invert applied

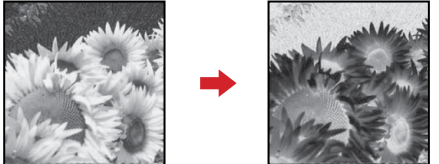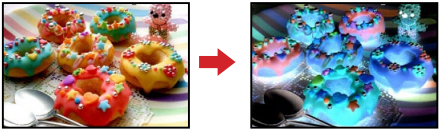| Unsharp Mask	This function helps to emphasize edges in the image more clearly for an overall sharper image. Example: Original Unsharp Mask applied **📝 NOTE** • The Unsharp Mask may not work properly for poorly focused or out of focus images. • You are recommended to disable the Unsharp Mask when the moire is not being reduced even with the "Descreen" function enabled.
Brightness	Use the slider to increase or decrease the value (-127 ~ +127) and to adjust the image brighter or darker. You can view the sample image to the right side of the slider for the result of the value. **📝 NOTE** Brightness is enabled in "Color" and "Gray" mode, but not in the B/W mode.

Contrast	Use the slider to increase or decrease the value (-127 ~ +127) and to adjust the contrast higher or lower. The bigger the value is to set towards +127, the more contrast is between lighter and darker areas. You can view the sample image to the right side of the slider for the result of the value. **📝 NOTE** Contrast is enabled in "Color" and "Gray" mode, but not in the B/W mode.
C. Destination	
Save Path	Indicate the folder where image files are saved. Click **Browse** to specify a file folder to save the scanned image. **📝 NOTE** • You cannot specify folders where root privileges are required.
File Name Setting	The filename can be created with a prefix in the **Prefix** field up to 20 characters, i.e. Scanned000001.jpg

File Type	Select a file format to save scanned image with following choices: "JPEG", "BMP","TIFF (Single-page)", "TIFF (Multi-page)", "PDF (Single-page)", "PDF (Multi-page)". **NOTE** • PDF (Single-page) and TIFF (Single-page) are used for splitting the multi-page originals into single files. • PDF (Multi-page) and TIFF (Multi-page) are used for combining multiple scans into one file. The "Continuous Scanning" dialog will be triggered automatically for scanning more page.
Compression	When TIFF file is selected in the File Type, the Compression format is enabled with following choices: • **None:** No compression is used. • **LZW:** LZW is a compression method that results in no loss of data. The file size is closer to the actual size of the color data. • **JPEG:** JPEG is a lossy compression method that results in some data is lost. This method is best used to reduce the large file size. **NOTE** • The Compression is only available in the Color and Gray mode. • TIFF (JPEG compression) is enabled up to 600 dpi. This option to compress 1200 dpi is not available.

Compression Quality slider	When JPEG, PDF or TIFF (Compression: JPEG) file is selected in the File Type, the Compression Quality slider is enabled. Use the slider to compress a file to reduce the total size in **High**, **Medium**, or **Low**. The higher the compression level, the lower the file size, and vice versa. **NOTE** The Compression Quality is only available in the Color and Gray mode, but not in the B/W mode.
OCR (Text Searchable)	This function is checked by default when selecting PDF (Multi-page) and PDF (Single-page) file in the File Type. It can recognize and convert your scanned image into a text based file that can be searched and edited.
OCR Language	This function is enabled when OCR (Text Searchable) is selected. Ensure to select the correct language of the original text from the drop-down menu to perform text recognition.
Continuous Scanning	Check this option to trigger the continuous scanning dialog box after the current page is scanned, allowing you to continue scanning for more pages. (See Continue to Scan More pages).

SCANNING PROCEDURES IN WINDOWS (CONTINUED)

Delete Backup File of Scanned Image	This function is enabled when Scan to Application (Email) or Scan to Print is selected. Check this option to trigger the delete backup file dialog box after the scanning process completes, allowing you to delete the backup file (See Delete the Backup Files).

D. Buttons

Default	Reset the Settings to the default for respective scan-to function.
Cancel	Cancel the changes, and close the Settings window.
OK	Apply the scan-to function with the settings you changed, and close the Settings window.

E. Application Settings (Available in Scan to Application)

Attach to E-Mail	Select "Attach to E-Mail" as the destination of your scan. The system detects and displays the default email client (e.g. Outlook) on your computer. **NOTE** Make sure an email account has been configured.

Open with Application	Select "Open with Application" (default: MS Paint) as the destination of your scan. To add a new application, click **Add** and navigate to the .exe files in the Program folder, then select it to add in the application list. To delete the application, select it from the dropdown menu, then click **Delete** to remove the application. **NOTE** • Please make sure the application supports the File Type selected. • The default application (MS Paint) cannot be deleted.

F. Cloud Storage (Available in Scan to Cloud)

Cloud Storage	Select either "Dropbox" or "Google Drive" from the dropdown menu as the destination of your scan. **NOTE** • To use this function, you must have a Dropbox and a Google Drive account. Dropbox and Google Drive must be installed on your computer and has been logged in. • If Dropbox or Google Drive shared folder is not detected, a warning message will appear.

G. Printer (Available in Scan to Print)

Printer	Select an available printer as the destination of your scan. The system can detect and display the default printer which is connected to your computer.

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Scanning Using iDocScan Touch and Buttons

1. Place the original on the Flatbed Glass (see Placing the Originals).

2. Click a scan-to function from the iDocScan Touch panel to start scanning to the destination with the Settings you previously configured (see Setting iDocScan Touch and Buttons).
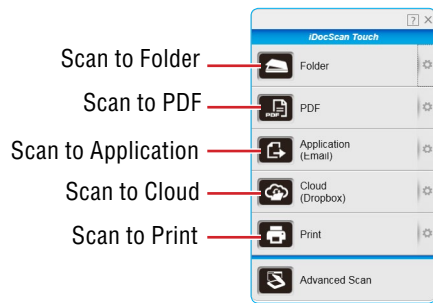
Scan to Folder

Scan to PDF

Scan to Application

Scan to Cloud

Scan to Print

Alternatively, you can press a button on the Scanner to start scanning to the destination.

Scan to Cloud

Scan to PDF

Scan to Folder

Scan to Print Scan to Application (Default: Email)
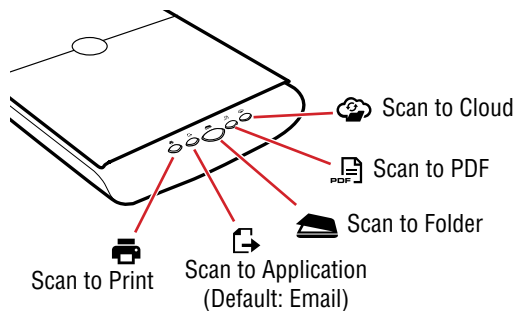
The "Processing..." bar appears showing the current scan status.
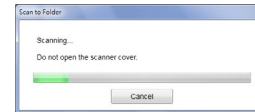
3. After scanning completes, the scanned image is saved and opened according to the scan-to function you select as below:

Scan to Folder

The specified folder opens automatically with the scanned image selected in it.

Scan to PDF

The scanned image is saved in the PDF format and opened automatically in the Acrobat Reader.

Scan to Application

The scanned image opens automatically in the specified application (default: Email). The default email application opens up with the scanned image attached in a blank email.

If you set the Application Settings to "Open with Application", the scanned image opens automatically in the specified application (default: MS Paint).

📝 NOTE

- Maximum of 20 files can be attached within an email.
- If the total file size is exceeded the attachment size limit set at the mail server, the file cannot be sent.

- Applications that do not support multi-page scanning will open and display only the first page of the originals.
- If the application cannot support the File Type selected, an error message will appear. Refer to the instructions of the application for the formats supported.

Scan to Cloud

The scanned image opens automatically in the specified cloud folder (default: Dropbox). You can specify either Google Drive or Dropbox in the Settings.

NOTE: To use this function, you must have a Dropbox and a Google Drive account. Dropbox and Google Drive must be installed on your computer and has been logged in prior to scanning.

Scan to Print

The computer's print dialog box opens up with the image in it. Use the print dialog box to set the available settings of the printer driver to print the scanned image.

Setting iDocScan Touch (Advanced Scan)

The Advanced Scan is only available by using the iDocScan Touch panel. It includes a Preview Window with controls and tools. You can preview the image after you make any changes in the Settings window.

Click Advanced Scan to open the Settings dialog box.
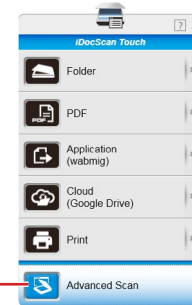
Advanced Scan

The Settings window appears. You can change the settings as following in the **Destination** and **Scan Settings** tabs:

Destination Tab

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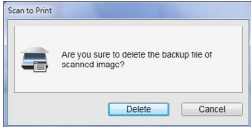
1	Destination Tab	Click the **Destination** tab to display the settings options.
2	Save Path	Indicates the folder where image files are saved. Click **Browse** to specify a file folder to save the scanned image. 📝 **NOTE** ● You cannot specify folders where root privileges are required.
3	File Name Setting	The filename can be created with a prefix in the **Prefix** field up to 20 characters, i.e. Scanned000001.jpg.
4	File Type	Select a file format to save scanned image with following choices: "JPEG", "BMP","TIFF (Single-page)", "TIFF (Multi-page)", "PDF (Single-page)", "PDF (Multi-page)" 📝 **NOTE** ● PDF (Single-page) and TIFF (Single-page) are used for splitting the multi-page originals into single files. ● PDF (Multi-page) and TIFF (Multi-page) are used for combining multiple originals into one file.

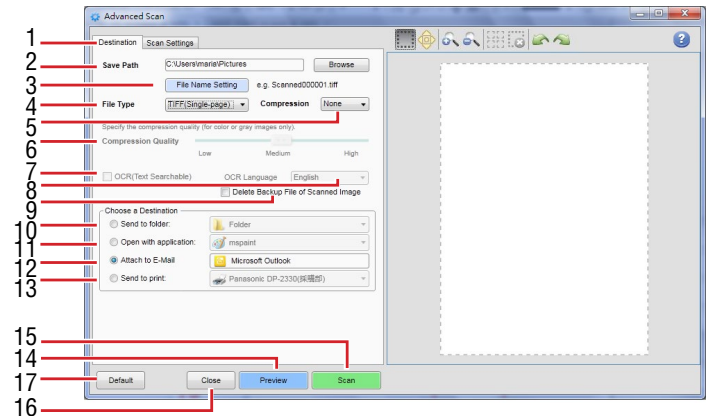| 5	Compression	When TIFF file is selected in the File Type, the Compression format is enabled with following choices: ● **None:** No compression is used. ● **LZW:** LZW is a compression method that results in no loss of data. The file size is closer to the actual size of the color data. ● **JPEG:** JPEG is a lossy compression method that results in some data is lost. This method is best used to reduce the large file size. 📝 **NOTE** ● The Compression is only available in the Color and Gray mode. ● TIFF (JPEG compression) is enabled up to 600 dpi. This option to compress 1200 dpi is not available.
6	Compression Quality slider	When JPEG, PDF or TIFF (Compression: JPEG) file is selected in the File Type, the Compression Quality slider is enabled. Use the slider to compress a file to reduce the total size in **High**, **Medium**, or **Low**. The higher the compression level, the lower the file size, and vice versa. 📝 **NOTE** The Compression Quality is only available in the Color and Gray mode.

7	OCR (Text Searchable)	This function is checked by default when selecting PDF (Multi-page) and PDF (Single-page) file in the File Type. It can recognize and convert your scanned image into a text based file that can be searched and edited. **📝 NOTE** • The function is not available when "Scan Resolution' is set to 100 dpi. • It is recommended to use 300 dpi resolution for the OCR function.
8	OCR Language	This function is enabled when OCR (Text Searchable) is selected. Ensure to select the correct language of the original text from the drop-down menu to perform text recognition.
9	Delete Backup File of Scanned Image	This function is enabled when Scan to Application (Email) or Scan to Print is selected. This will trigger the delete backup file dialog box after the scanning process completes, asking if you want to delete the backup file. Click "**Delete**" to delete the backup file. Click "**Cancel**" not to delete the file.

10	Scan to Folder	Select "Scan to Folder" as the destination of your scan.
11	Open with Application	Select "Open with Application (default: MS Paint)" as the destination of your scan. To add a new application, click **Add…** from the dropdown menu. Click **Add** to navigate to the .exe files in the Program folder, then select it to add in the application list. To delete the application, select it from the dropdown menu, then click **Delete** to remove the application. **📝 NOTE** • Please make sure the application supports the File Type selected. • The default application (MS Paint) cannot be deleted.
12	Attach to Email	Select "Attach to E-Mail" as the destination of your scan. The system detects and displays the default email client (e.g. Outlook) on your computer. **📝 NOTE** Make sure an email account has been configured.

SCANNING PROCEDURES IN WINDOWS (CONTINUED)
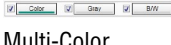
13	Sent to Print	Select "Send to Print" as the destination of your scan. Select an available printer from the dropdown menu as the destination of your scan. The system can detect and display the default printer which is connected to your computer.
14	Preview	Click to preview the image using the current settings.
15	Scan	Click to scan the final image using the current settings.
16	Close	Click to save the settings you changed and close the Settings window.
17	Default	Reset **Destination** and **Scan Settings** to the default settings.

Scan Settings Tab

1	Scan Settings Tab	Click the **Scan Settings** tab to display the settings options.
2	Scan Mode	• **Color**: Select it to scan the color photographs, documents, and items containing colors in full color. • **Gray**: Select it to scan the image in grayscale using varying shades of gray. • **B/W**: Select it to scan black and white documents or photos, and render the image in black and white color. • **Multi-Color Output**: Select it to enable the Multi-Color Output controls.

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3	Multi-Color Output Controls	Tick the checkbox to select the modes including: "Color", "Gray", "B/W". You can make a single scan to be saved up to 3 separate images simultaneously. Press the "Color", "Gray", or "B/W" button to change the settings for each mode. A thick line will appear on the button pressed (i.e., ☑ Color). You can set different settings for each mode to be scanned. Original One scan into 3 images
4	Scan Size	Select the output size of the image to be scanned with the following choices: "Custom", "A4", "B5", "Letter". 📝 **NOTE** • Select "**Custom**" to automatically detect the paper size and crop scanned image. When scanning darker originals (i.e. night scenery photos), over-cropping may occur. • Select "**Custom**" to specify a custom page size by resizing the cropping frame in the Preview Window.

5	Scan Resolution	Select the resolution of the image to be scanned with following choices: "100dpi", "200dpi", "300dpi", "600dpi", "1200dpi", "2400dpi", "4800dpi". • The higher the resolution, the bigger the file size. • "100dpi" is disabled when "OCR (Text Searchable)" is checked. 📝 **NOTE** The change of Scan Resolution will apply to the selected cropping frame only.
6	Original Type	Select an option according to the type of original to auto-adjust overall brightness and contrast for the scanned image. • **Document**: Originals with mainly text. • **Photo**: Originals with mainly color pictures. • **Magazine**: Originals with both text and color pictures. 📝 **NOTE** Press the Preview button to update the preview image with the change made in the Original Type.
7	Output Size	Display the width and height of the cropping frame. You can adjust the output size by dragging the edges or corners of the cropping frame in the Preview Window.

| 8 | (Brightness/Contrast) | **Brightness**: use the slider to increase or decrease the value (-127 ~ +127) and to adjust the image brighter or darker.
Example:
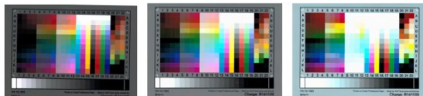
Brightness: -50 Brightness: 0 Brightness: +50

Contrast: use the slider to increase or decrease the value (-127 ~ +127) to adjust the contrast higher or lower. The bigger the value is to set towards +127, the more contrast is between lighter and darker areas.
Example:
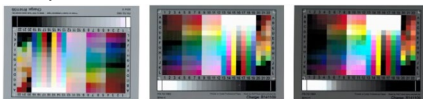
Contrast: -50 Contrast: 0 Contrast: +50

📝 **NOTE**

Brightness/Contrast is enabled in "Color" and "Gray" mode only. |

| 9 | (B/W Conversion Settings) | This function is only available when scanning in B/W, or Multi-color Output (B/W) mode. You can convert the scanned image in black and white using following method:

Auto Threshold: It finds an adequate threshold value automatically to obtain a clear image and remove dark backgrounds from the image.
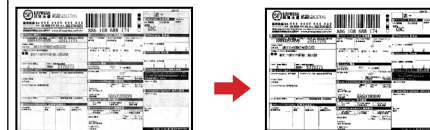
Original   After processed

Manual Threshold: You may manually adjust the Threshold value (-127 ~ +127) until you are satisfied with the result.

Halftone: This provide 5 halftone patterns, each creates a halftone effect using a pattern of black and white dots that can represent darker or lighter color values. Check the **Advanced** to enable the **Edge Refinement** value (-127~+127) if you want to increase or decrease the edge weight of patterns.

Original   After processed |

10	(Color Dropout)	This setting removes a single color (Red, Green or Blue) such as marks, stamps and retains the black text. If "**None**" is selected, No color is dropped out. Example of removing the red stamp: Original Color Dropout applied Check the **Advanced** checkbox to activate the **Filter Threshold** slider when the color selected cannot drop out. Drag the slider toward "Maximum" to remove more selected color, and toward "Minimum" to keep more selected color in.
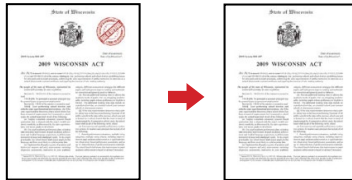
> ### 📝 NOTE
> - Color Dropout can only be specified in "Gray" and "B/W" mode.
> - Color Dropout may not remove all of the contents for the selected color when scanning colored backgrounds, or colored paper.

11	Invert	This function reverses the colors of the scanned image to the opposite colors. Example of black text with white background to be inverted: Original Invert applied Example of grayscale picture to be inverted: Original Invert applied Example of colored picture to be inverted: Original Invert applied

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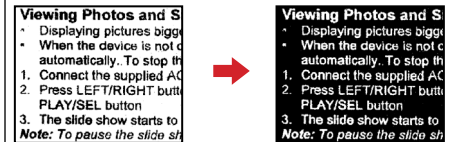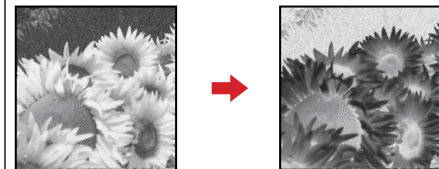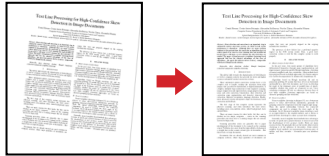
	12 Deskew	Correct the skew image approximately +/-15 degrees. (The results of Deskew do not appear in the preview image, only in the scanned image.) Original Deskew applied • Deskew is enabled when the Scan Size set to "Custom". • Originals with darker backgrounds and dark text are difficult to deskew. Deskew may not work properly when deskewing dark images. • This function cannot work with a large skew angle.

	13 Descreen	Descreening helps to reduce moire patterns in magazines or other printed materials. After descreening, the image may appear blurry. Example: Original Descreen applied **NOTE** • If the Unsharp Mask function is enabled, some moire pattern may not reduce even when the Descreen is enabled. In such cases, disable the Unsharp Mask. • Scanning takes longer than usual when you enable the Descreen function.

14	Unsharp Mask	This function helps to emphasize edges in the image more clearly for an overall sharper image. Example: Original Unsharp Mask applied 📝 **NOTE** • The Unsharp Mask may not work properly for poorly focused or out of focus images. • You are recommended to disable the Unsharp Mask when the moire is not being reduced even with the Descreen enabled.
15	Color Match	This function helps to more accurately reflect the actual colors of the original image. • Color Match is only enabled when the Scan Mode set to "Color".
16	Photo Refresh	This function helps to automatically lighten and sharpen the scanned image. • Photo Refresh is only enabled when the Scan Mode set to "Color".

17	Scan	Click to scan the final image using the current settings.
18	Preview	Click to preview the image using the current settings.
19	Close	Click to save the settings you changed and to close the Settings window.
20	Default	Reset **Destination** and **Scan Settings** to the default settings.

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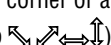
Scanning in Advanced Scan Mode

The Advanced Scan mode includes a Preview Window allowing you to preview the image before scanning the final image.

1. Place the original on the Flatbed Glass (see Placing the Originals).

2. Click on the **Preview** button to prescan and preview your original. A quick, low-resolution preview of your original will be made and appear in the Preview Window.
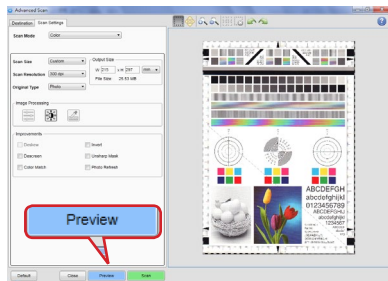
3. Adjust or add the cropping frames as following methods.

   - Move the cursor to a corner or an edge of the crop frame (the cursor will change to ⤡ ⤢ ⟷ ↕). Click and drag the cursor to enlarge or shrink the cropping frame to the desired size.

Enlarge/shrink cursor
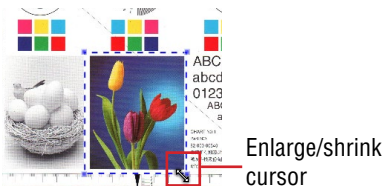
- Move the cursor within the cropping frame (the cursor will change to ✛). Click and drag the cursor to move the entire cropping frame to the desired area.

Move cursor
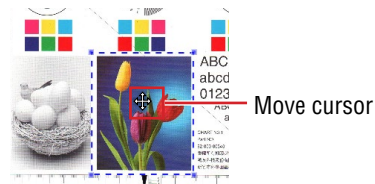
- If more than one originals are placed on the Flatbed, all images will be contained in one cropping frame. click the ▦ in the Preview toolbar to adjust the frame size and add another cropping frame to the image.

Multiple Cropping Frames
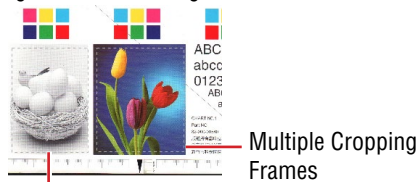
4. You can make changes in the Settings as necessary. Your changes are automatically reflected in the Preview Window.

📝 **NOTE**

- The Deskew function cannot show in the Preview Window, and the results can only be seen after scanning.

- The change of Scan Resolution you made will apply to the selected cropping frame only, and the change of the other settings will apply to the selected and unselected cropping frames.

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5. When you are satisfied with the results, click the **Scan** button to start scanning with the settings.
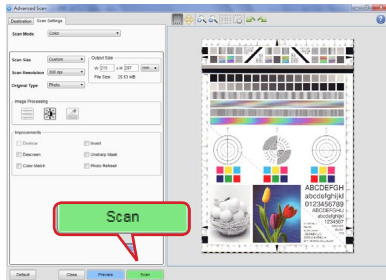
The "Processing..." bar appears showing the current scan status.
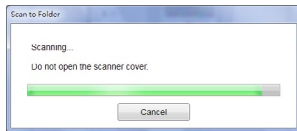
6. After scanning completes, the scanned image is saved and opened according to the Choose a Destination you select.

◉ Scan to folder

The specified folder opens automatically with the scanned image selected in it.

◉ Open with application

The scanned image opens automatically in the specified application (default: MSPaint).

> 📝 **NOTE**

If the application cannot support to open the File Type, an error message may appear. The scanned image is saved, but cannot be opened.

◉ Attach to E-Mail

The scanned image opens automatically in the default email application. The default email application opens up with the scanned image attached in a blank email.

> 📝 **NOTE**

- Maximum of 20 files can be attached within an email.
- If the total file size is exceeded the attachment size limit set at the mail server, the file cannot be sent.
- Applications that do not support multi-page scanning will open and display only the first page of the originals.
- If the application cannot support the File Type selected, an error message will appear. Refer to the instructions of the application for the formats supported.

◉ Sent to Print

The computer's print dialog box opens up with the image in it. Use the print dialog box to set the available settings of the printer driver to print the scanned image.

Preview Window Controls

There are several useful tools in the Preview toolbar to assist you to check the details of the preview image.

5		Select all cropping frames. This is available when two or more cropping frames are created. All frames turns into thick dashed lines, which allows you to change the Scan Resolution to all cropping frames.
6		Delete the selected cropping frame(s).
7		Rotate the image 90° counterclockwise.
8		Rotate the image 90° clockwise.
9	Preview Area	Display the preview image.
10	Thin dashed lines	Represent the unselected cropping frame.
11	Moving thick dashed lines	Represent the currently selected cropping frame. You can enlarge or shrink the cropping frame by dragging the corners or edges of the cropping frame. The change of Scan Resolution you made will apply to the selected cropping frame only.
12	Multi-color output controls	Click the "Color", "Gray", or "B/W" button to view the preview image in the Preview Window in color, grayscale, or black and white. A thick line will appear on the button pressed (i.e., Color).
13		Close the Advanced Scan window.
14		Display the preview help information.

1		Create a new cropping frame in the Preview Area. You can create maximum 12 cropping frames in the Preview Area.
2		Click and drag to move the image when zoomed in.
3		Zoom in on the image. The image will be enlarged every time you click it.
4		Zoom out on the image. The image will reduce every time you click it.

Continue to Scan More Pages

When "Continuous Scanning" is checked in the Setting, a dialog box appears after the previous scan finishes, asking if you want to scan the next document.

To continue the next scan, place the next original on the Scanner's Flatbed Glass. Select "Scan more pages (put the next document)", then click **OK**.

To finish the scan, select "Scanning complete", and then click **OK**. The scanned image will be sent to the destination selected.
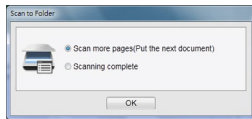
Delete the Backup Files

When "Delete Backup File of Scanned Image" is checked in the Settings, a dialog box appears after the scanning to Email application or printer, asking if you want to delete the scanned image.
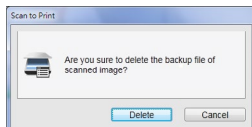
To confirm the deletion, click **Delete**.

To keep the scanned image without deletion, click **Cancel**.

Cancel a Scan

To stop the scanning process, click **Cancel** during scanning.
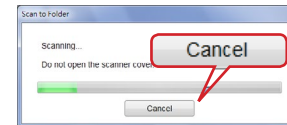
A "Scan has been cancelled." dialog box appears and the scanned image is cancelled. Click **OK** to close the dialog box.
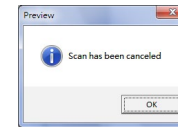
If you cancel a scan during the continuous scanning process, the following cancel dialog box appears, asking if you want to save the image already scanned before cancelling the scan. Click **Yes** to save the file, otherwise click **No** to discard the file.
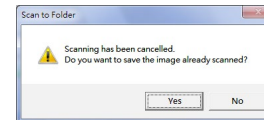
SCANNING PROCEDURES IN MAC

Setting ScanMust and Buttons

You can setup the scanner buttons to perform certain actions within the ScanMust software.

1. Click the Scanner icon [ ] in the menu bar of your computer to bring up the ScanMust menu.

2. Click **Settings…** in the ScanMust menu.
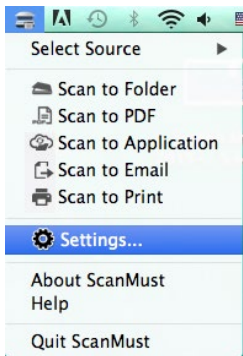
The Settings window appears, in which you can change settings for each Scan-to function in the **Destination** and **Scan Settings** tabs.

Destination

Click the **Destination** tab to bring up the setting page for the Scan-to option selected. You can make change as following:

Scan to Folder
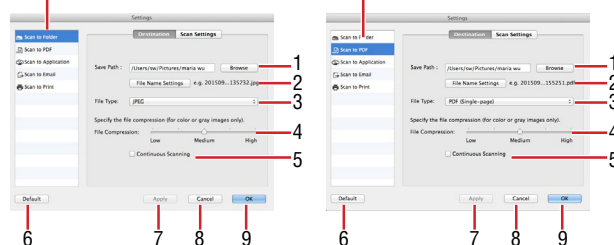
Scan to PDF

Scan to Application

Scan to Email
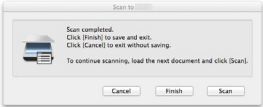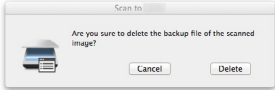
Scan to Print

1	Save Path	Indicates the folder where image files are saved. Click **Browse** to specify a file folder to save the scanned image.

📝 NOTE

- You cannot specify folders where root privileges are required.
- **Save Path** cannot reset to the default folder once changed.

2	File Name Settings	You can create a filename format for the scanned image with either one of this setting.

- **yyyyMMddHHmmss:** The filename is created in the "yyyyMMddHHmmss" format, i.e. 20150811-154649.jpg.
- **Custom:** The filename is created with a prefix specified in the **File Name**, i.e. Scanned000001.jpg

3	File Type	Select a file format to save scanned image. Availability of the File Type may vary in different scan-to destination.

Choices: "JPEG", "TIFF (Single-page)", "TIFF (Multi-page)", "PDF (Single-page)", "PDF (Multi-page)", "PNG"

📝 NOTE

- PDF (Single-page) and TIFF (Single-page) are used for saving originals into single page PDF and TIFF files.
- PDF (Multi-page) and TIFF (Multi-page) are used for combining multiple scans into one file. The "Continuous Scanning" dialog will be triggered automatically for scanning more page.
- JPEG is not available for "B&W" images.

4	File Compression	Move the slider to compress and reduce the JPEG or PDF file size into a smaller size. The higher the compression, the lower the file size, and vice versa.

📝 NOTE

The File Compression is only available in the Color and Gray mode.

5	Continuous Scanning	Check this option to trigger the continuous scanning dialog box after the current page is scanned, allowing you to continue scanning for more pages. (See Continue to Scan More Pages)
6	Default	Reset both **Destination** and **Scan Settings** to the default for the currently selected scan-to function.
7	Apply	Apply the selected scan-to function with the settings you changed. **NOTE** If you did not apply the changes to the currently selected scan-to function, and then select another scan-to function, the following setting change dialog box appears asking if you want to save the changes.
8	Cancel	Cancel the changes and close the Settings window.
9	OK	Apply the selected scan-to function with the settings you changed and close the Settings window.

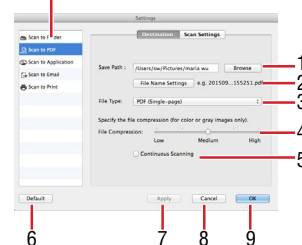| 10	Application	The system detects and displays the applications installed in your computer which support to open the File Type. To add a new application, click **Add** and navigate to the .exe files in the Application's folder, then click "Add" to add it to the application list. To delete the application, select the application, then click **Delete**. **NOTE** Make sure to add the application which can open the File Type.
11	Email Client	The system detects and displays the default email client using either Mail or Outlook that has been installed on your computer. **NOTE:** Make sure an email account has been configured properly.
12	Delete Backup File of Scanned Image	Check this option to trigger the delete backup file dialog box after the scanning process completes, asking if you want to delete the backup file (See Delete the Backup Files).
13	Printer	The system detects and displays the default printer which is connected to your computer.

Scan Settings

Click the **Scan Settings** tab to bring up the setting page for the Scan-to option selected. You can make change as following:
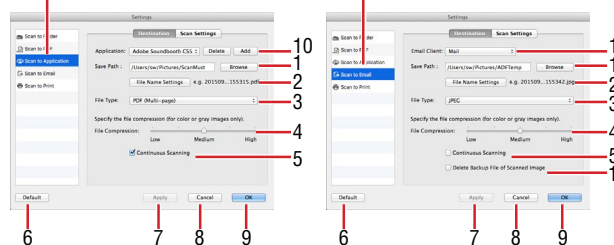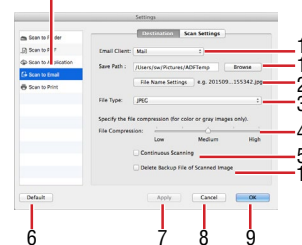

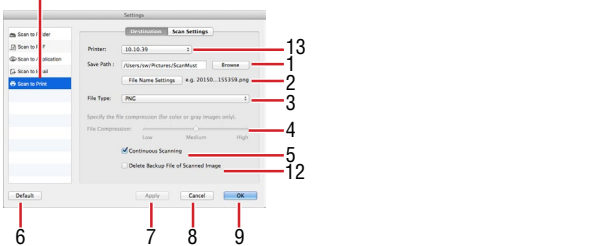| 1	Scan Mode	Choices: "Color", "Gray", "B&W" • Select "Color" to scan the color photographs, documents, and items containing colors in full color. • Select "Gray" to scan the image in grayscale using varying shades of gray. • Select "B&W" to scan text-only originals or line drawings.
2	Scan Size	Select the output size of the image to be scanned. Choices: "Auto Detect", "A4(210x297mm)", "B5(176x250mm)", "Letter(216x279mm)" 📝 **NOTE** Select "Auto Detect" to automatically detect the paper size and crop the image. When scanning darker originals, over-cropping may occur.
3	File Size	The File Size is calculated based on the Scan Size and Scan Resolution you select. The File Size given here is only an estimate. The actual file size can be different than the estimate.
4	Scan Resolution	Select the resolution of the image to be scanned. Choices : "100", "200", "300", "600", "1200" 📝 **NOTE** The higher the resolution, the bigger the file size.
5	Image Adjustments	**Brightness**: Use the slider to increase or decrease the value (-100 ~ +100) and to adjust the image brighter or darker. You can view the test image to the right side of the slider for the result of the value. **Contrast**: Use the slider to increase or decrease the value (-100 ~ +100) and to adjust the contrast higher or lower. The bigger the value is to set towards +100, the more contrast is between lighter and darker areas. You can view the test image to the right side of the slider for the result of the value. 📝 **NOTE** Brightness/Contrast is enabled in "Color" and "Gray" mode, but not in the B/W mode.
6	Default	Reset both **Destination** and **Scan Settings** to the default for the currently selected scan-to function.

7	Apply	Apply the selected scan-to function with the settings you changed.
		📝 NOTE
		If you did not apply the changes to the currently selected scan-to function, and then select another scan-to function, the following setting change dialog box appears asking if you want to save the changes.
		Scan to Folder The settings have been changed. Do you want to save the changes? [No] [Yes]
8	Cancel	Cancel the changes and close the Settings window.
9	OK	Apply the selected scan-to function with the settings you changed and close the Settings window.

Scanning Using ScanMust and Buttons

1. Place the original on the Flatbed Glass (see Placing the Originals).

2. Click a scan-to function from the ScanMust menu to start scanning to the destination with the Settings you previously configured (see Setting ScanMust and Buttons).
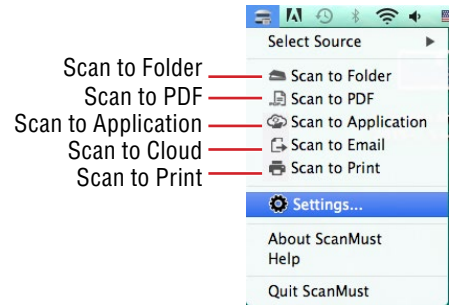
Scan to Folder — Scan to Folder
Scan to PDF — Scan to PDF
Scan to Application — Scan to Application
Scan to Cloud — Scan to Email
Scan to Print — Scan to Print
Settings...
About ScanMust
Help
Quit ScanMust

Alternatively, you can press a button on the Scanner to start scanning to the destination.

Scan to Application
Scan to PDF
Scan to Folder
Scan to Print   Scan to Email
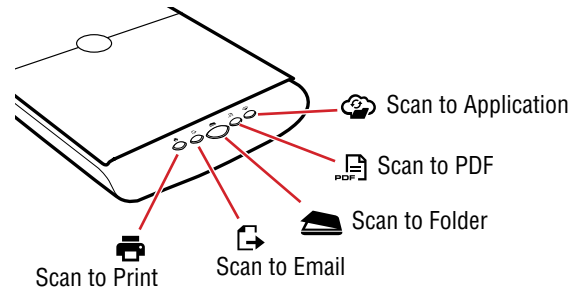
The "Processing..." bar appears showing the current scan status.
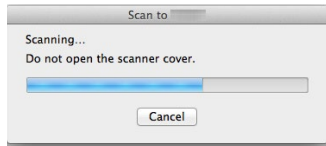
3. After scanning completes, the scanned image is saved and opened according to the scan-to function you select.

Scan to Folder

The specified folder opens automatically with the scanned image selected in it.

Scan to PDF

The scanned image is saved in the PDF format and opened automatically in the Acrobat Reader.

Scan to Application

The scanned image opens automatically in the specified application (default: Preview).

📝 NOTE

If the application cannot support to open the File Type, an error message will appear. The scanned image is saved, but cannot be opened.

Scan to Email

The default email application opens automatically with the scanned image attached in a blank email. Use the send email method of the email application to send the scanned image.

📝 NOTE

- If the file size of the scanned image exceeds the attachment size limit set at your mail server, then the image cannot be sent.
- Scan to Email only supports Apple Mail and MS Outlook as Email clients.

Scan to Print

Your computer's print dialog box opens automatically. Use the print dialog box to set the available settings of the printer driver to print the scanned image.

Continue to Scan More Pages

When "Continuous Scanning" is checked in the **Destination** tab, a dialog box appears after the previous scan finishes asking if you want to scan the next document.
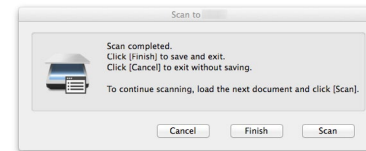
To continue the next scan, place the next original on the scanner, then click **Scan**.

To finish the scan, click **Finish** to complete the scanning process. The scanned image will be saved to the folder specified in the **Destination** tab.

To cancel the scan without saving, click **Cancel**.

Cancel a Scan

To stop the scanning process, click **Cancel** during scanning.
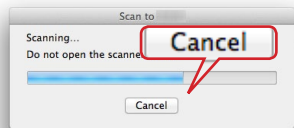
A "Scanning has been cancelled" dialog box appears and the scanned image is cancelled. Click **OK** to close the dialog box.
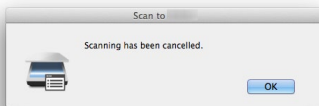
If you cancel a scan during the continuous scanning process, the following cancel dialog box appears, asking if you want to save the image already scanned before cancelling the scan. Click **Yes** to save the file, otherwise click **No** to discard the file.

Delete the Backup Files

When "Delete Backup File of Scanned Image" is checked in the Settings, a dialog box appears after the scanning to Email application or printer, asking if you want to delete the scanned image.
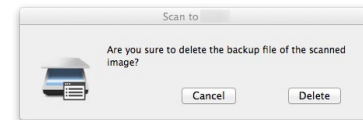
To confirm the deletion, click **Delete**.

To keep the scanned image without deletion, click **Cancel**.

Acquire the Scanner TWAIN Interface

The TWAIN driver is the scanning module provided with your scanner. It is easily accessed from within the bundled scanner software or from within any TWAIN-compliant program, such as MediaImpression, Photoshop. Before you start with the steps below, be sure you have installed and configured the bundled scanner software from the DVD included.

Following is an example of using MediaImpression.

1. Launch MediaImpression, and then click "Pictures" in the start screen.

2. Click on Import icon, and then select "Acquire".
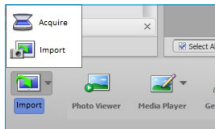
3. Under the Select the device, select "PageExpress 4800 Pro", then click "Acquire" to open the TWAIN interface.

> **NOTE**
>
> In some programs, the Acquire command will appear in a submenu under the Import command.

Select "PageExpress 4800 Pro"
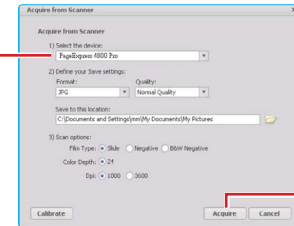
Acquire

The TWAIN interface appears as following.

The TWAIN interface contains control settings, which you must set prior to scanning a document. The basic steps to scan a document are:

1. Click on the **Preview** button to prescan and preview your original.

2. Set the desired image area to be scanned.

3. Select the scan source.

4. Select the scan mode.

5. Select the resolution.

6. Click on the **Scan** button.

The TWAIN Interface

The TWAIN interface is divided into two sections: the left section where most of the control settings are located, and the right section, which is the Preview Area.
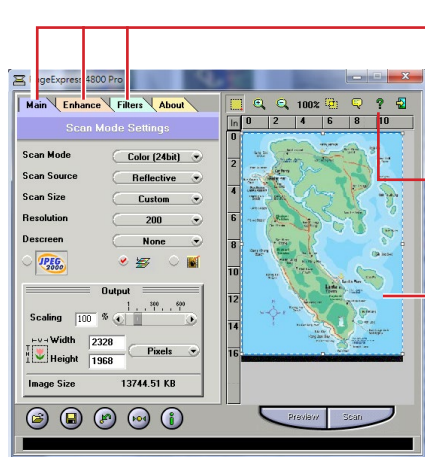
Settings Tabs
Contain different control settings, including Main, Enhance, and Filters.

Help
Click to open the detailed instructions of TWAIN dialog box.

Preview Area
Used for viewing the prescan image.

📝 **NOTE**

For the detailed instructions of TWAIN dialog box, please click "?" (Help) on the TWAIN interface to open the Help file.

The Main Tab

Scan Mode
Determines how the scanner will read the image and refers to how the image will be reproduced after it is scanned.

Scan Source
Sets the media type of the document to be scanned.

Scan Size
Refers to the size of the image or document that you are about to scan.

JPEG2000 Scan
The latest image compression standard that usually provides smaller file size and higher image quality than the original JPEG.

Width and Length
Show the dimensions of the image area inside the Cropping Frame.

Picture Dithering
Converts lineart image into a series of dots with different densities to represent the image. This function is available in B/W mode.
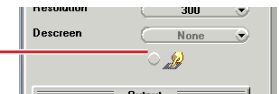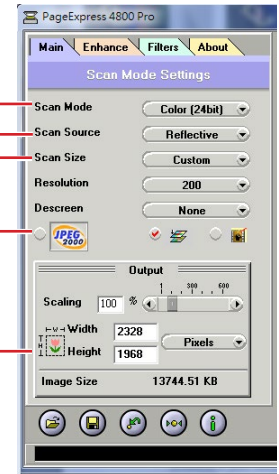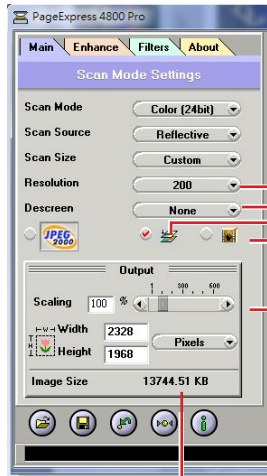
Resolution
Sets the resolution in dots per inch (dpi).

Descreen
Sets the media type of the document to be scanned to reduce image noise.

Color Matching Control
Color Matching allows the scanner to more accurately reflect the actual colors of the original image.

Photo Refresh
Enables to automatically lighten and sharpen the scanned image. This function is applicable when you are scanning images in Color 24bit.

Output Scaling
Changes the dimensions of the final output.

Image Size
Displays the amount of computer space needed to display or save the selected image area.

Whiten Background
Removes the unpleasant background shade. This function is available in Gray mode.

The Enhance Tab

Brightness/Contrast Control

Brightness/Contrast Control

Thumbnails
Are used to see the effects of any changes in the control settings.

Channel Selector Control
Allows you to select the channel layers (red, green and blue) that make up a color image. You can choose to change the channels individually or choose master to change all channels equally and simultaneously.

Brightness Control
Allows you to adjust the overall amount of light in the image through a range of values (–127 ~0~+127).

Contrast Control
The Contrast Control allows you to adjust the overall amount of black areas or white areas in the image through a range of values (–127~0~+127).

Preview Button
This button allows you to see the effect of any changes made to the image.

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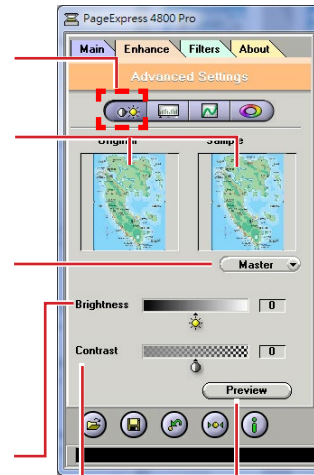
Level Control

**Level Control
Thumbnails**
Are used to see the effects of any changes in the control settings.

Channel Selector Control
Allows you to select the channel layers (red, green and blue) that make up a color image. You can choose to change the channels individually or choose master to change all channels equally and simultaneously.

Histogram
Shows the distribution of the brightness levels in the image.

Level Control
Use the level slider to adjust an image's contrast and brightness.

Eyedropper tools
Eyedroppers are used to identify an image's highlights and shadows.

Preview Button
This button allows you to see the effect of any changes made to the image.
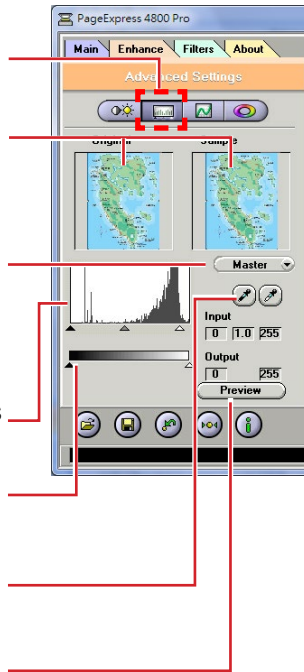
Curve Control

**Curve Control
Thumbnails**
Are used to see the effects of any changes in the control settings.

Channel Selector Control
Allows you to select the channel layers (red, green and blue) that make up a color image. You can choose to change the channels individually or choose master to change all channels equally and simultaneously.

Curve Control
Applying a curve to an image enhances favored brightness ranges at the cost of others.

Add Anchor
To make a curve, simply place an anchor on the diagonal line and adjust its position. Add more anchors if you have to make a more complex curve.

Remove Anchor
You can also remove anchors.

Preview Button
This button allows you to see the effect of any changes made to the image.
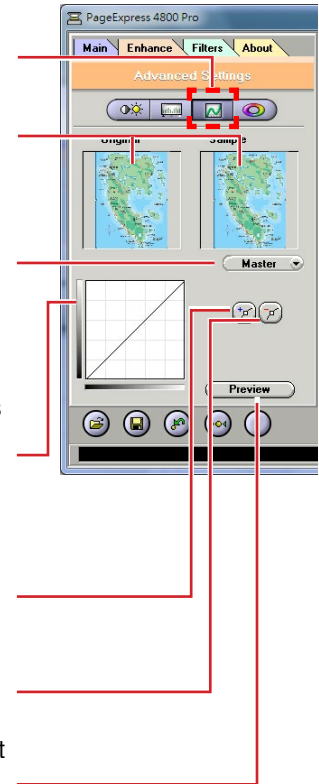
Hue/Saturation Control

Hue/Saturation Control Thumbnails
Are used to see the effects of any changes in the control settings.

Channel Selector Control
Allows you to select the channel layers (red, green and blue) that make up a color image. You can choose to change the channels individually or choose master to change all channels equally and simultaneously.

Hue Slider
is composed of two color bars. The upper one is static and the lower one movable. Slide the latter, and you will see the image shift its overall coloring.

Saturation Slider
Lets you adjust an image's color purity.

Preview Button
This button allows you to see the effect of any changes made to the image.
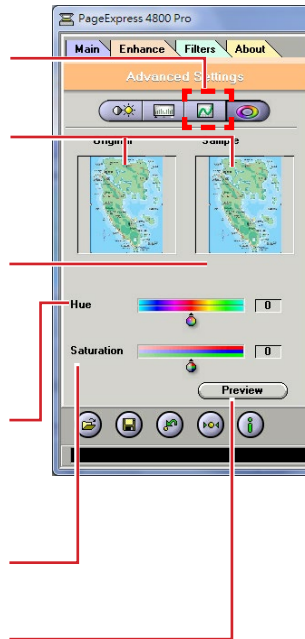
The Filters Tab

The Filters Tab allows you to adjust the individual effects of the scanned image by applying various filters to the image, prior to scanning.

Thumbnails
Are used to see the effects of any changes in the control settings.

Filter Control Buttons
Use these buttons to add /subtract a degree of the Blur or Sharpen filter.

None
No filter is applied.

Blur
Smooths or softens the image.

Sharpen
Enhances the detail in the image.

Invert
Reverses an image to its negative or compliment.

Flip
Creates a mirror image of the original.

Emboss
Makes the elements in the image appear raised or sunken.

Unsharp Mask
Emphasizes shape edges and color boundaries.
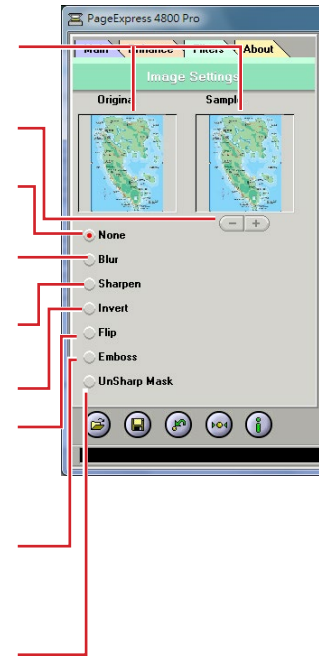
The Preview Window and Controls

Cropping Tool
Selects the area in the Preview Window that will be used as the final scan.

Zoom Tool Button
Allows you to enlarge/shrink an area of the image in the Preview Window.

Crop Frame
Outlines the scan area or region that will be included in the final scan.

Preview Button
Allows you to see the effect of any changes made to the image.

Load Button
Loads previously saved image settings.

Save Button
Saves the current image settings.

Previous Button
Returns the most recent selection to its previous setting. (Reloads the last saved image settings.)

Info Button
Lists information about the current settings being used.

Reset Button
Returns settings to their default values.
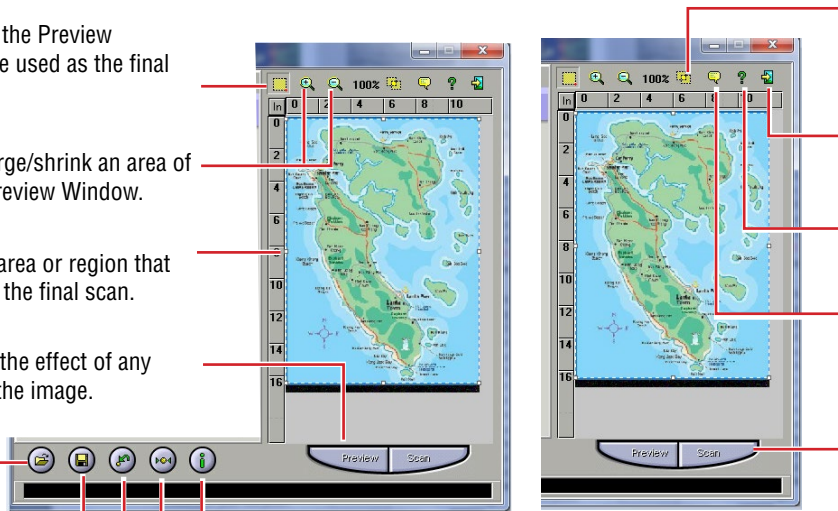
Batch Scan Button
Allows creation of up to 30 scan regions (or Crop Frames) for multiple scanning.

Language Setting
Allows you to select the desired language that the dialog box will be displayed in.

Help Button
Provides On-line Help.

Exit Button
Click to exit (or close) the TWAIN or Batch Scan Dialog boxes.

Scan Button
processes the pre-scanned image, and displays it in the host software (where you opened up the TWAIN dialog box).

Prescan the Image

A Preview is a quick low-resolution scan of the entire original image. From this low-resolution scan you can get a clearer idea of the image area you want to include when you click Scan.

To Preview, the steps are:

1. Place the document face down on the scan window glass.

2. Click the Preview button in the dialog box. After the scanner has scanned the document, the scanned image will appear in the Preview Window. From the preview image, you can now set the exact image area you wish to include in your final scan.

Set Up the Scan Parameters

1. **Set the desired image area to be scanned.**

   Use the Crop Frame in the Preview Window to outline the image area you wish to scan. Click one of the sides or corners of the Crop Frame and drag it out or in to the desired length and width.

   Crop frame ─

   To move the entire Crop Frame, position the mouse cursor inside it and drag with the left mouse button.

   Only the area inside the Crop Frame will be included in the resulting scanned image when you click Scan. The size information at the bottom of the dialog box is automatically updated when the Crop Frame is resized.

2. **Select the scan source.**

   Since we are going to scan a color photograph, choose Reflective.

   Reflective:
   when scanning paper-based documents such as photographs or text (magazines, books, or images).

3. **Select the desired scan mode.**

   The Scan Mode determines how the scanner will read the image.

   - Color (48-bit) captures 48 bits of color image information for every pixel in the screen image. Reproduce billion of colors.

     This option is disabled when the TWAIN-compliant program you used does not support 48-bit color output.

   - Color (24-bit) captures 24 bits of color image information for every pixel in the screen image. Reproduce over 16.7 million colors.

   - Gray (16-bit) captures 16 bits of grayscale image information for every pixel in the screen image. Reproduce up to 65536 shades of gray.

     This option is disabled when the TWAIN-compliant program you used does not support 16-bit grayscale output.

   - Gray (8-bit) captures 8 bits of grayscale image information for every pixel in the screen image. Reproduce up to 256 shades of gray.

   - Lineart (1-bit) is used for text documents or black-and-white images.

4. **Select the desired resolution.**

Resolution is a measure of how much image detail information the scanner is to capture in a scan. A higher resolution results to a sharper image but requires more disk space for file saving. For this session, set the resolution to 300 dpi.

Execute the Scan Command

When you are finished with the control settings, click on the Scan button. The scanner begins to scan the document and a message box appears on the screen displaying the progress of the scan.

When the scan is finished, the image will be displayed in the main screen of the host software.

Using Batch Scan

Batch scanning is an easy way to multi-scan any part of your document using different scan modes and resolutions. In batch scanning, you can specify up to a maximum of 30 scan regions, or you can scan a single region several times using different combinations of scan modes and resolutions.

To activate batch scanning, click on the Batch Scan button. This will bring up the Batch Scan dialog box.

The Batch Scan Dialog Box

The Batch Scan dialog box contains several controls that make batch scanning simple and easy to use. It will also display the number of batch jobs that you make when you create the scan regions.

- **New Batch Button**
  Click on this button to create a new scan region on the image in the Preview Window.

- **Duplicate Batch Button**
  Click on this button to duplicate a batch job. You can then specify different control settings for this particular batch job.

- **Trash Batch Button**
  Click on this button to delete the selected or highlighted batch job.

● **Cancel Batch Button**

Click on this button to cancel batch scan and exit the Batch Scan dialog box.

To perform a batch scan, the steps are:

1. Click the Batch Scan button. The Batch Scan dialog box appears.

2. Create a scan region:

   (a) Move the cursor inside the Preview Window.

   (b) Hold down the Shift key, press the left mouse button and drag the mouse to create a crop frame.

   (c) Reposition or resize the crop frame if necessary.

3. Set the desired scan mode and resolution for the current scan region.

4. Repeat steps 2 and 3 if you wish to create additional scan regions.

📝 **NOTE**

Using the Batch Scan arrows allows you to view the different batch jobs.

5. Click Scan. The scanner will begin to scan the batch jobs one after the other.

The Batch Box contains the thumbnail image, DPI, scan mode and image size of each batch scan. The batch number (e.g. 1/3, number one out of three) is always displayed at the top of the batch box along with the Batch Scan Status.

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Acquire the Scanner TWAIN Interface

The TWAIN driver is the scanning module provided with your scanner. It is easily accessed from within the bundled scanner software or from within any TWAIN-compliant program, such as ImageAcquire, Photoshop. Before you start with the steps below, be sure you have installed and configured the bundled scanner software from the DVD included.

Following is an example of using ImageAcquire.

1. Open "Finder", and then click "Applications". Find ImageAcquire [ ] icon in the Application folder, and then double click on it.

2. Select the Scanner model from the Image Acquire window, and then click "Acquire" to open the TWAIN interface.

✎ NOTE

In some programs, the Acquire command will appear in a submenu under the Import command.

Select "PageExpress 4800 Pro"

Acquire

3. The TWAIN interface appears as following.
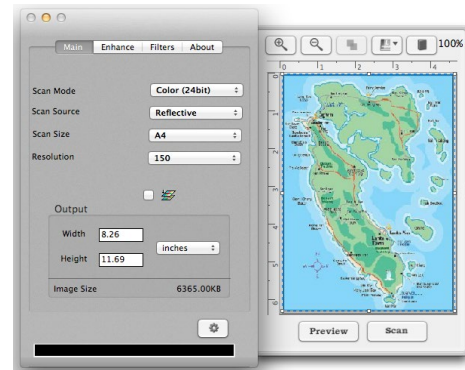
The TWAIN interface contains control settings, which you must set prior to scanning a document. The basic steps to scan a document are:

1. Click on the **Preview** button to prescan and preview your original.

2. Set the desired image area to be scanned.

3. Select the scan source.

4. Select the scan mode.

5. Select the resolution.

6. Click on the **Scan** button.

The TWAIN Interface

The TWAIN interface is divided into two sections: the left section where most of the control settings are located, and the right section, which is the Preview Window.
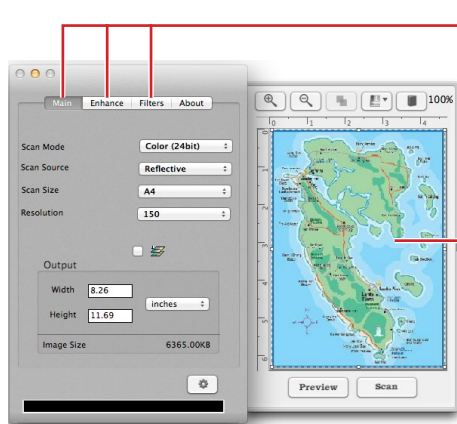
Settings Tabs
Contain different control settings, including Main, Enhance, and Filters.

Preview Window
Used for viewing the prescan image.

The Main Tab

The main folder contains the control settings needed for specifying the scanning parameters such as scan mode, resolution, etc.

Scan Mode
Sets the scanner to read color, grayscale, lineart, etc.

Scan Source
Sets the media type of the document to be scanned.

Scan Size
Refers to the size of the image or document that you are about to scan.

Resolution
Sets the resolution in dots per inch (dpi).

Color Matching Control
Color Matching allows the scanner to more accurately reflect the actual colors of the original image.

Image Size
Displays the amount of computer space needed to display or save the selected image area.

Width and Length
Show the dimensions of the image area inside the Cropping Frame.
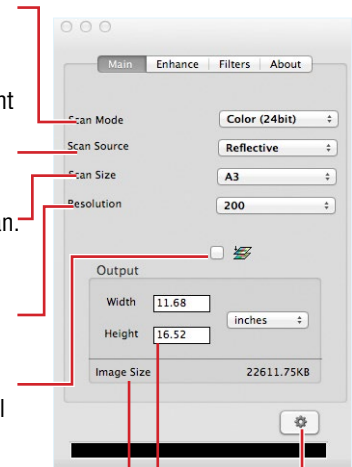
Reset Button
Returns settings to their default values.

The Enhance Tab

The Enhancement folder contains preprocessing controls you can apply to the image before making your final scan.

Thumbnails
Are used to see the effects of any changes in the control settings.

Channel Selector Control
Allows you to select the channel layers (red, green and blue) that make up a color image. You can choose to change the channels individually or choose master to change all channels equally and simultaneously.

Brightness Control
Allows you to adjust the overall amount of light in the image through a range of values (–127 ~0~+127).

Contrast Control
The Contrast Control allows you to adjust the overall amount of black areas or white areas in the image through a range of values (–127~0~+127).

Gamma Control
Adjusts the brightness level in the highlights, midtones, and shadows of the image.(0.1~7.9)
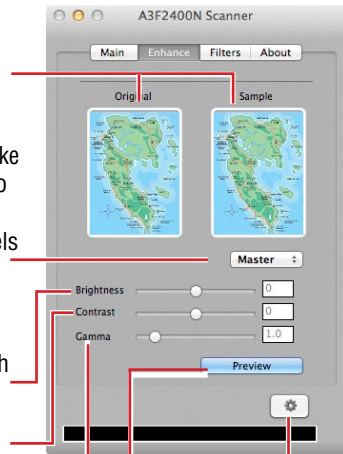
Preview Button
This button allows you to see the effect of any changes made to the image.

Reset Button
Returns settings to their default values.

The Filters Tab

The Filters folder contains preprocessing controls that allow you to apply special effects to the image before making your final scan.

Thumbnails
Are used to see the effects of any changes in the control settings.

None
No filter is applied.

Blur
Smooths or softens the image.

Sharpen
Enhances the detail in the image.

Invert
Reverses an image to its negative or compliment.

Flip
Creates a mirror image of the original.

Emboss
Makes the elements in the image appear raised or sunken.

Unsharp Mask
Emphasizes shape edges and color boundaries.
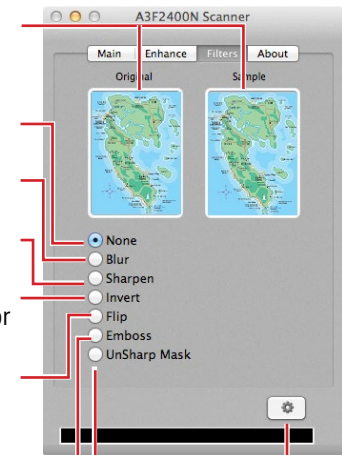
Reset Button
Returns settings to their default values.

The Preview Window

The Preview Window is where you can view the prescanned image. The first time you want to scan a document, it is better that you do a precan.

Zoom Tool Button
Allows you to enlarge/shrink an area of the image in the Preview Window.

Batch Scan Button
Allows creation of up to 10 scan regions for Crop Frames for multiple scanning.

Language Setting
Allows you to select the desired language that the dialog box will be displayed in.

Exit Button
Click to exit (or close) the TWAIN or Batch Scan Dialog boxes.

Crop Frame
Outlines the scan area or region that will be included in the final scan.

Previous Button
Allows you to see the effect of any changes made to the image prior to scanning.

Save Button
Processes the pre-scanned image, and displays it in the host software (where you opened up the TWAIN dialog box).

Prescan the Image

A Preview is a quick low-resolution scan of the entire original image. From this low-resolution scan you can get a clearer idea of the image area you want to include when you click Scan.

To Preview, the steps are:

1. Place the document face down on the scan window glass.

2. Click the Preview button in the dialog box. After the scanner has scanned the document, the scanned image will appear in the Preview Window. From the preview image, you can now set the exact image area you wish to include in your final scan.

Set Up the Scan Parameters

1. **Set the desired image area to be scanned.**

   Use the Crop Frame in the Preview Window to outline the image area you wish to scan. Click one of the sides or corners of the Crop Frame and drag it out or in to the desired length and width.

   Crop frame

   Only the area inside the Crop Frame will be included in the resulting scanned image when you click Scan. The size information at the bottom of the dialog box is automatically updated when the Crop Frame is resized.

2. **Select the scan source.**

Since we are going to scan a color photograph, choose Reflective.

Reflective:

when scanning paper-based documents such as photographs or text (magazines, books, or images).

3. **Select the desired scan mode.**

The Scan Mode determines how the scanner will read the image.

- Color (48-bit) captures 48 bits of color image information for every pixel in the screen image. Reproduce billion of colors.

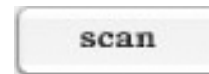 This option is disabled when the TWAIN-compliant program you used does not support 48-bit color output.

- Color (24-bit) captures 24 bits of color image information for every pixel in the screen image. Reproduce over 16.7 million colors.

- Gray (16-bit) captures 16 bits of grayscale image information for every pixel in the screen image. Reproduce up to 65536 shades of gray.

  This option is disabled when the TWAIN-compliant program you used does not support 16-bit grayscale output.

- Gray (8-bit) captures 8 bits of grayscale image information for every pixel in the screen image. Reproduce up to 256 shades of gray.

- Lineart (1-bit) is used for text documents or black-and-white images.

4. **Select the desired resolution.**

Resolution is a measure of how much image detail information the scanner is to capture in a scan. A higher resolution results to a sharper image but requires more disk space for file saving. For this session, set the resolution to 300 dpi.

Execute the Scan Command

When you are finished with the control settings, click on the Scan button. The scanner begins to scan the document and a message box appears on the screen displaying the progress of the scan.

When the scan is finished, the image will be displayed in the main screen of the host software.

Using Batch Scan

Batch scanning is an easy way to multi-scan any part of your document using different scan modes and resolutions. In batch scanning, you can specify up to a maximum of 10 scan regions, or you can scan a single region several times using different combinations of scan modes and resolutions.

To activate batch scanning, click on the Batch Scan button. This will bring up the Batch Scan dialog box (ImageAcquire does not support the Batch Scan).

The Batch Scan Dialog Box

The Batch Scan dialog box contains several controls that make batch scanning simple and easy to use. It will also display the number of batch jobs that you make when you create the scan regions.
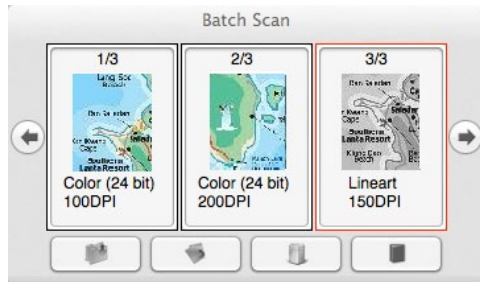
● **Copy Batch Button**
Click on this button to duplicate a batch job. You can then specify different control settings for this particular batch job.

● **New Batch Button**
Click on this button to create a new scan region on the image in the Preview Window.

● **Delete Batch Button**
Click on this button to delete the selected or highlighted batch job.

● **Exit Batch Button**
Click on this button to cancel batch scan and exit the Batch Scan dialog box.

To do a batch scan, the steps are:

1. Click the Batch Scan button. The Batch Scan dialog box appears.
2. Create a scan region:

    (a) Move the cursor inside the Preview Window.

    (b) Hold down the Shift key, press the left mouse button and drag the mouse to create a crop frame.

    (c) Reposition or resize the crop frame if necessary.

3. Set the desired scan mode and resolution for the current scan region.
4. Repeat steps 2 and 3 if you wish to create more scan regions. You can have up to 10 scan regions. If you want to duplicate the current scan region, simply click on the **Duplicate Batch** Button.
5.   Click **Scan**. The scanner will begin to scan the scan regions one after the other.

For scanning multiple documents or images, Batch Scan is equipped with an auto crop function that is not available in the regular scanning mode. Batch Scan auto-detects the borders of the images or paper edges of the documents, allowing you the option of scanning any or all of these images/documents without having manually select, and scan them individually (as required in the regular mode.)

The Batch Box contains the thumbnail image, DPI, scan mode and image size of each batch scan. The batch number (e.g. 1/3, number one out of three) is always displayed at the top of the batch box along with the Batch Scan Status.

CLEANING THE SCANNER

Dust and residues can build up on the Scanner's Flatbed Glass to affect image quality. Clean the Scanner periodically to get the best scanning performance.

📝 **CAUTION**

- Never spray the cleaner directly onto the Scanner.
- Do not use any abrasive surfaces to clean the Scanner. Doing so may damage it.
- Do not press on the Scanner Glass with too much force as this will cause damage to the glass surface.

1. Unplug the USB Cable.

2. Use a clean, soft cloth moistened with water or mild detergent to clean the outside of the Scanner.

3. Use a clean, soft cloth moistened with a small amount of glass cleaner to remove dust, grease, and stains on the Flatbed Glass. Wipe off all remaining liquid.
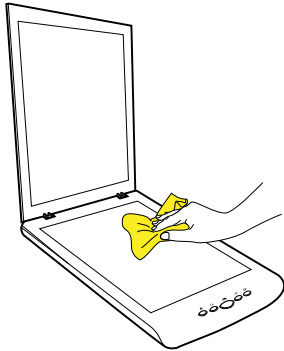
TROUBLESHOOTING

Problems	Solutions
The "Found New Hardware" appears on your Windows screen.	• Unplug the USB Cable from the computer, and click "Cancel" button to close it. Ensure to install Scanner Driver before connecting the Scanner.
Cannot scan.	• Make sure that the USB Cable between the Scanner and your computer is connected firmly. • Make sure the correct scanner is selected in the select source field.
The scanned image becomes dirty.	• Check if the document is written in lead pencil or wet ink. • Make sure to clean the Scanner's Flatbed Glass frequently.
Scanning speed is very slow.	• Scanning takes longer than usual when you scan at high resolution and large size. • Set a lower resolution in the settings to prioritize the scanning speed. • Scanning with multiple image processing can slow down the scanning speed.
Cannot acquire the Scanner from Photoshop.	• You need to install the Photoshop TWAIN plug-in prior to use. Refer to "Using TWAIN in Photoshop CS4-CC version.pdf" in the Installation DVD.
Scanned image edges are cropped.	• Make sure your original is placed correctly for scanning. • When scanning darker originals (i.e. night scenery photos), over-cropping may occur.
Text created by the OCR software is incorrect.	• Select a resolution of minimum 300 dpi in the software settings. The OCR software may not always convert all text correctly. Please check the document for any errors that the OCR may have missed. • The OCR recognition result is generally more accurate with the text-based digital images. Images with mixed content (text, images, and graphics all in the one page) may result less accurate. • Set the Scanner color settings to "B/W" if the text is black against a white background. • Check if the quality of the original document is poor through the OCR recognition process.
The preview image appears blurry or fuzzy	• The preview image appears in the Preview Area is a scaled down lower resolution image, meant to quickly display the preview image.

SPECIFICATIONS

Model	PE4800 Pro
Scanning Element	Contact Image Sensor (CIS)
Light Source	Three-color (RGB) LEDs
Scan Mode	Color: 48-bit, 24-bit Gray: 16-bit, 8-bit Line art: 1-bit * Color (48-bit) and Gray (16-bit) are available in the TWAIN interface only. * Color (48-bit) and Gray (16-bit) are disabled when the TWAIN-compliant program you used does not support 48-bit color and 16-bit output.
Scan Area (Max.)	A4 / Letter (216mm x 297mm / 8.5" x 11.68")
Effective Pixels	11744 x 11744 pixels at 4800 dpi (Scanning area in the Advanced Mode of iDocScan Touch will be restriced if the Scan Resolution setting is large)
Optical Resolution	4800 dpi x 4800 dpi
Enhanced Resolution	19200 dpi x 19200 dpi * Enhanced Resolution is available in the TWAIN interface only.
Interface	USB 2.0
Scanner Buttons	5 Function Buttons
Power Supply	by USB Bus Power (5V, 500mA)
Power Consumption	In operation : 2.5 W (Max) Standby: 1 W
Operation Temperature and Humidity	10 ℃ - 35 ℃ (50 °F - 95 °F) ; 10% to 85%
Dimension (L x W x H)	385 x 252 x 50 mm (15.16" x 9.92" x 19.69")
Weight	1.66 kgs (3.66 lbs)

PageExpress 4800 Pro