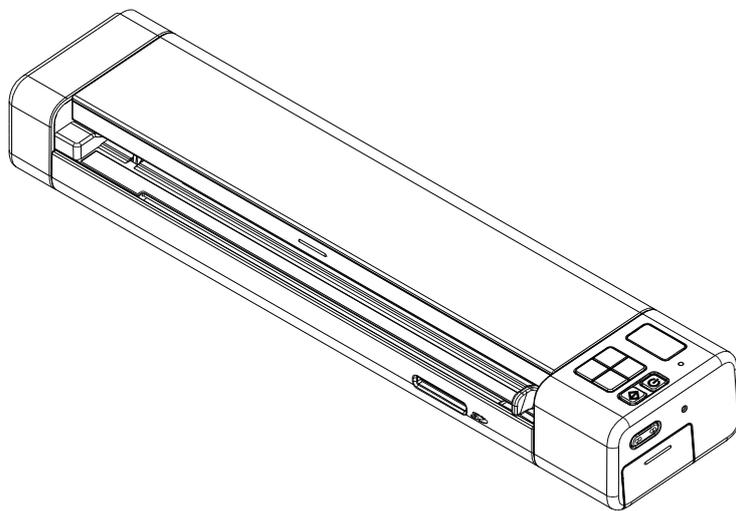




Mobile Scanner

User's Manual



Regulatory model: FF-2201B

Avision Inc.

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This symbol on the product or on its packaging indicates that the product can not be disposed of with your other household waste. Instead it should be sent to appropriate facilities for recovery and recycling in an effort to protect human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

FCC Statement:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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

FCC Caution:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device is intended only for OEM integrators under the following conditions:

- 1) The antenna must be installed such that 20 cm is maintained between the antenna and users.
- 2) The transmitter module may not be co-located with any other transmitter or antenna.

IMPORTANT NOTICE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body. To maintain compliance with FCC RF exposure compliance requirements, please avoid direct contact to the transmitting antenna during transmitting.

IC Notice:

Operation is subject to the following two conditions:

- 1) This device may not cause interference and
- 2) This device must accept any interference, including interference that may cause undesired operation of the device.

IMPORTANT NOTE:

IC Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Règlement d'Industrie Canada

Les conditions de fonctionnement sont sujettes à deux conditions:

- (1) Ce périphérique ne doit pas causer d'interférence et.
- (2) Ce périphérique doit accepter toute interférence, y compris les interférences pouvant perturber le bon fonctionnement de ce périphérique.

**European Union Regulatory Notice**

Products bearing the CE marking comply with the following EU Directives:

- Low Voltage Directive 2014/35/EC
- EMC Directive 2014/30/EC
- Restriction of the use of certain hazardous substances (RoHS) Directive 2011/65/EU

This product satisfies the Class B limits of EN55032, EN55035, and safety requirements of EN62368-1.

*This machine is certified as Class 1 LED product.



As an ENERGY STAR® Partner, Avison Inc. has determined that this product meets the ENERGY STAR guidelines for energy efficiency.

System Requirements**Windows**

CPU:	Intel® Core™ 2 Duo or higher
Memory:	32 bit: 2 GB 64 bit: 4 GB
Optical Drive:	DVD-ROM Drive
USB Port:	USB 2.0
Compatible Operating System:	Microsoft Windows 7, Windows 8 (32 bits/64 bits), Windows 10 (32 bits/64 bits)

Macintosh

OS:	Mac OS X 10.12 or later
Computer:	<ul style="list-style-type: none"> • Recommended: Intel® Core™ Duo Processor 2.4 GHz or higher • Minimum: Intel® Core™ Duo Processor 1.83 GHz PowerPC G5 1.6 GHz
Memory:	<ul style="list-style-type: none"> • Recommended: 1 GB or more • Minimum: 512 MB

Warning and Precautions of the lithium-ion battery**Warning:**

Danger warning to prevent the possibility of the battery from leaking, heating, explosion, please observe the following precautions:

- Don't immerse the battery in water and seawater. Please put it in cool and dry environment if no using.
- Do not discard or leave the battery near a heat source as fire or heater
- Being charged, using the battery charger specifically for that purpose
- Don't reverse the positive and negative terminals
- Don't connect the battery to an electrical outlet directly.
- Don't connect the positive and negative terminal directly with metal objects such as wire. Short terminals of battery is strictly prohibited, it may damage battery.
- Do not transport and store the battery together with metal objects such as necklaces, hairpins.
- Do not strike, throw or trample the battery.
- Do not directly solder the battery and pierce the battery with a nail or other sharp object.
- Do not use lithium ion battery and others different lithium polymer battery model in mixture.
- Prohibition of use of damaged cells.
- Don't bend or fold sealing edge. Don't open or deform folding edge. Don't fillet the end of the folding edge.
- Don't fall, hit, bend battery body.
- Battery pack designing and packing Prohibition injury batteries.
- Never disassemble the cells.
- Keep the battery away from babies.
- Any components contacting these two edges, they must be insulated.

Caution:

- Risk of explosion if battery is replaced by an incorrect type. Dispose the battery according to local regulations.
- Never place batteries or devices on or in heating devices, such as microwave ovens, stoves, or radiators. Batteries may explode when overheated or its performance will be degenerate and its service life will be decreased.
- Do not use it in a location where is electrostatic and magnetic greatly, otherwise, the safety devices may be damaged, causing hidden trouble of safety.
- If the battery leaks, and the electrolyte get into the eyes. Do not wipe eyes, instead, rinse the eyes with clean running water, and immediately seek medical attention. Otherwise, eyes injury can result.
- If the battery gives off an odor, generates heat, becomes discolored or deformed, or in any way appear abnormal during use, recharging or storage, immediately remove it from the device or battery charge and stop using it.
- Avoid charging batteries for more than a week, as overcharging may shorten battery life. Over time, unused batteries will discharge and must be recharged before use.
- Disconnect chargers from power sources when not in use.
- Use batteries only for their intended purposes.
- Store the battery at 0°C to 40°C.
- Avoid exposing your device and batteries to very cold or very hot temperatures. Extreme temperatures can cause the deformation of the device and reduce the charging capacity and life of your device and batteries.
- Prevent batteries from contacting metal objects, as this can create a connection between the + and – terminals of your batteries and lead to temporary or permanent battery damage.
- In case the battery terminals are dirt, clean the terminals with a dry cloth before use. Otherwise power failure or charge failure may occur due to the poor connection with the instrument.
- Be aware discharged batteries may cause fire. Follow all local regulations when disposing of used batteries or devices.
- Never crush or puncture the battery. Avoid exposing the battery to high external pressure, which can lead to an internal short circuit and overheating.

Product Safety Guide

Please clearly read all these instructions, and follow all instructions and warnings before installing and using the device.

The following indications are used in this document to obviate any chance of accident or damage to you and/or the device.

 WARNING	Indicates potentially hazardous situations, which if instructions are not followed, could result in death or serious injury.
 CAUTION	Indicates a potentially hazardous situation which, if instructions are not followed, may result in minor or moderate injury or damage to property.

WARNING

- Use only the USB cable that came with your device and avoid abrasions, cuts, fraying, crimping, and kinking. Using any other USB cable could cause fire, electrical shock, or injury.
- Place the device close enough to the computer so that the interface cable can easily reach between the device and the computer.
- Do not place or store the device:
 - Outdoors
 - Near excessive dirt or dust, water, or heat sources
 - In locations subject to shocks, vibrations, high temperature or humidity, direct sunlight, strong light sources, or rapid changes in temperature or humidity
- Do not use the device with wet hands.
- Never disassemble, modify, or attempt to repair the device or device option by yourself, except as specifically explained in the device's documentation. This could cause fire, electrical shock, or injury.
- Unplug the device and the USB cable, and refer servicing to qualified service personnel under the following conditions:
 - Liquid has entered the device.
 - Object has entered the device.
 - The device has been dropped, or the case has been damaged.
 - The device does not operate normally (i.e. appearance of smoke, strange smell, odd noise, etc.), or exhibits a distinct change in performance.
- Unplug the device and the USB cable before cleaning.

CAUTION:

- Do not locate the device on rickety or aslope tables. Do not locate the device on unstable surface. The device may fall down and this may result in injury.
- Do not place heavy objects on the unit. It may cause unbalance and the device may fall down. This may result in injury.
- Store the AC Power cord/USB cable bundled out of the reach of children to avoid the risk of injury.
- Keep plastic bags bundled out of the reach of children or throw them away to avoid the danger of suffocation.
- If you are not going to use the device for a long period, unplug the USB cable from the electrical outlet.

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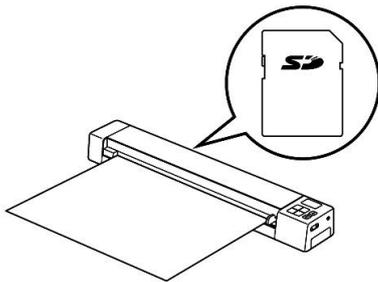
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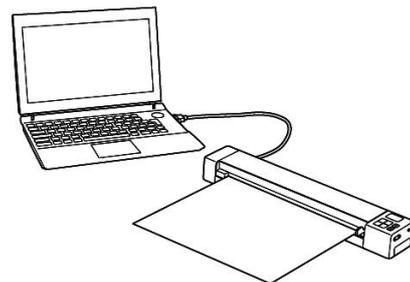
1. Overview

1.1 Introduction

Congratulations on your purchase of the mobile scanner. This scanner provides you flexibility to start easy scans (SD mode) without connecting it to a computer or you may use it like a regular scanner to start advanced scans (PC mode) by installing the scanner driver and connecting to a computer.



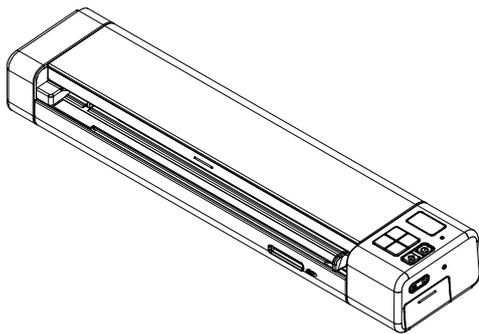
SD Mode



PC Mode

Before you install and operate the product, please take a few minutes to read through this manual. It provides proper instructions for you to install, operate and maintain the product. The following figure indicates the package contents. Please check all the items against your checklist. If you do not receive all the items, please contact your authorized local dealer immediately.

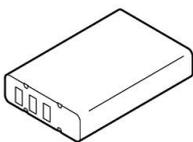
1.2 Package Contents



Scanner



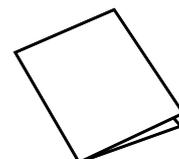
USB Cable



Li-Ion Battery



Calibration Sheet

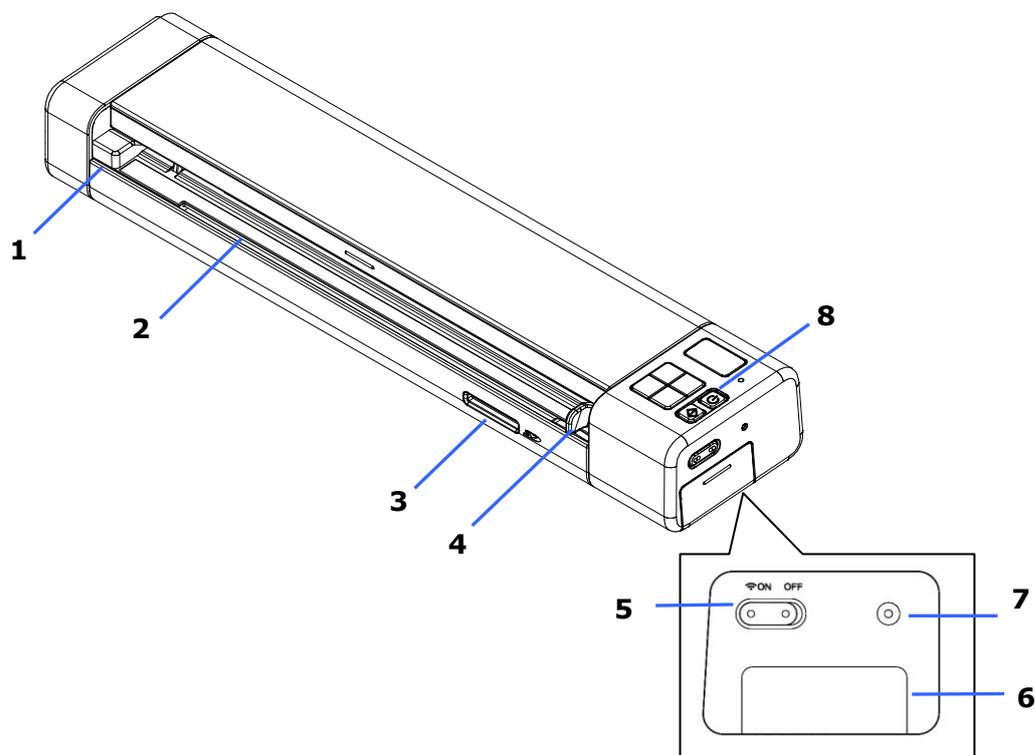


Quick Guide

Note:

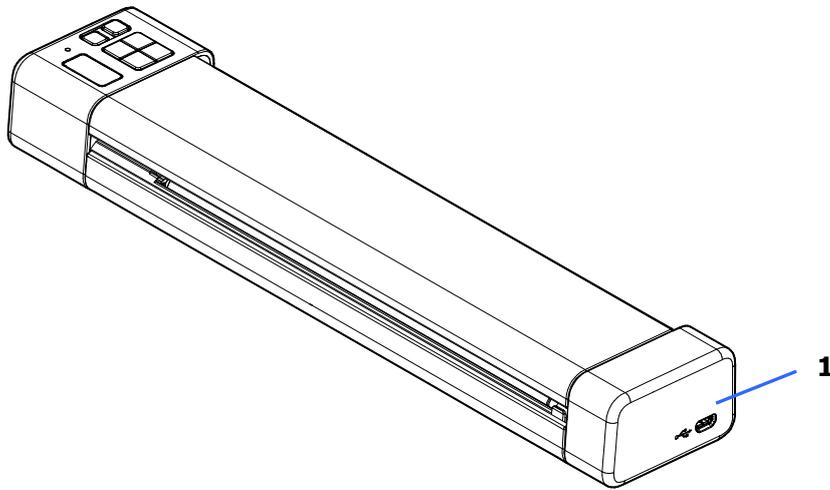
1. Only use the Li-ion Battery AP-120 made by APACK/CB-PD(NP-120) made by City Bright included in the product.
 2. Please unpack the packing carefully, and check the contents against the checklist. If any items are missing or damaged, please contact your dealer immediately.
 3. To access more service supports, visit www.avision.com to register your Avison's product.
-

1.3 Front View



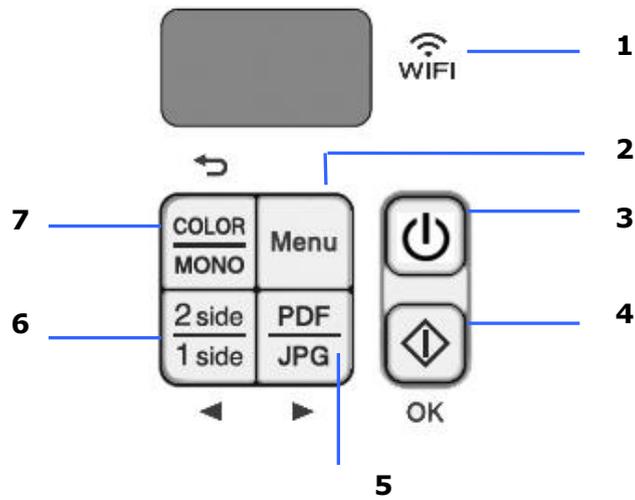
Item	Name	Description
1	Feeder slot left edge	Insert original into the feed slot, printed side UP and aligned with the left edge to begin scanning.
2	Feed slot	Feed your original to the slot.
3	Memory card slot	Used to insert a memory card.
4	Sliding paper guide	Slide the guide up to the right edge of the original before inserting original into the feed slot to ensure proper alignment when scanning.
5	Wi-Fi switch	Turn on and off the Wi-Fi connection.
6	Battery compartment	Slide to remove the cover.
7	Reset button	Press to reset Wi-Fi login to factory default settings.
8	Power button	<ul style="list-style-type: none"> ➔ Press to turn on the power. ➔ Long press to turn off the power.

1.4 Rear View



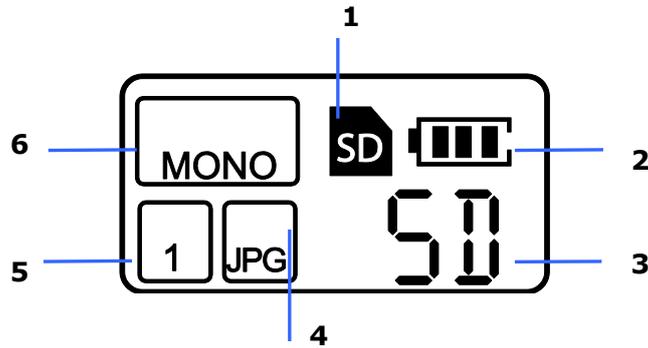
Item	Name	Description
1	Micro USB port	Used to plug the micro end of the USB cable to connect to PC.

1.5 Control Panel



Item	Name	Description
1	Wi-Fi connection	Indicate the status of the Wi-Fi connection.
2	Menu	Press to configure the menu settings.
3	Power button	<ul style="list-style-type: none"> Press to turn on the power. Long press to turn off the power.
4	Start/OK button	<ul style="list-style-type: none"> Press to start a scan. (PC mode via PaperAir V2) Press to confirm a selection.
5	PDF/JPG	<ul style="list-style-type: none"> Press to change your file format. Choice: PDF, JPG. Press to scroll through the menu and option items.
6	2 Side/1 Side	<ul style="list-style-type: none"> Press to choose 2-Side or 1-Side scan. Press to scroll through the menu and option items.
7	Color/Mono	<ul style="list-style-type: none"> Press to change your color mode. Choice: Color, Mono. Press to return to the previous screen.

1.6 LCD Display



Item	Name	Description
1	SD	Appears when the SD card is inserted.
2	Battery status	Indicates the power status of the battery.
3	SD/PC	Displays the menu item or current status. See the following LCD message.
4	PDF/JPG	Displays the file format.
5	1 / 2	Displays the scan mode (1: single-side, 2: double-side)
6	Color mode	Displays the color mode.

LCD Message

PC	The scanner is connected to your computer in TWAIN mode.
SD	The scanner is in SD mode. (Scan can be operated via the control panel and the scanned image is stored in the SD card.)
DPI	The scanner displays the menu to change your resolution.
FMT	The scanner displays the menu to format the SD card.
TME	The scanner displays the menu to set its clock. For more information on how to set the clock, see Setting the Clock on page 2-4.

CAL	The scanner displays the menu to calibrate the scanner. For more information on how to calibrate the scanner, see Calibrating the Scanner on page 9-3.
PWR	The scanner displays the menu to set auto power off. For more information on how to use this function, see Using the Auto Power Off Function on page 2-5.
-- -- --	The scanner is not connected to your computer or there is no SD card inserted.

Power Button LED Indication

No light 	The scanner is not connected to the computer or the Li-ion battery is not inserted.
Green 	The scanner is ready to scan or is charging the battery.
Blinking Green 	The scanner is scanning a document.
Blinking Red 	An error has occurred. Top cover is opened or the document is jammed.

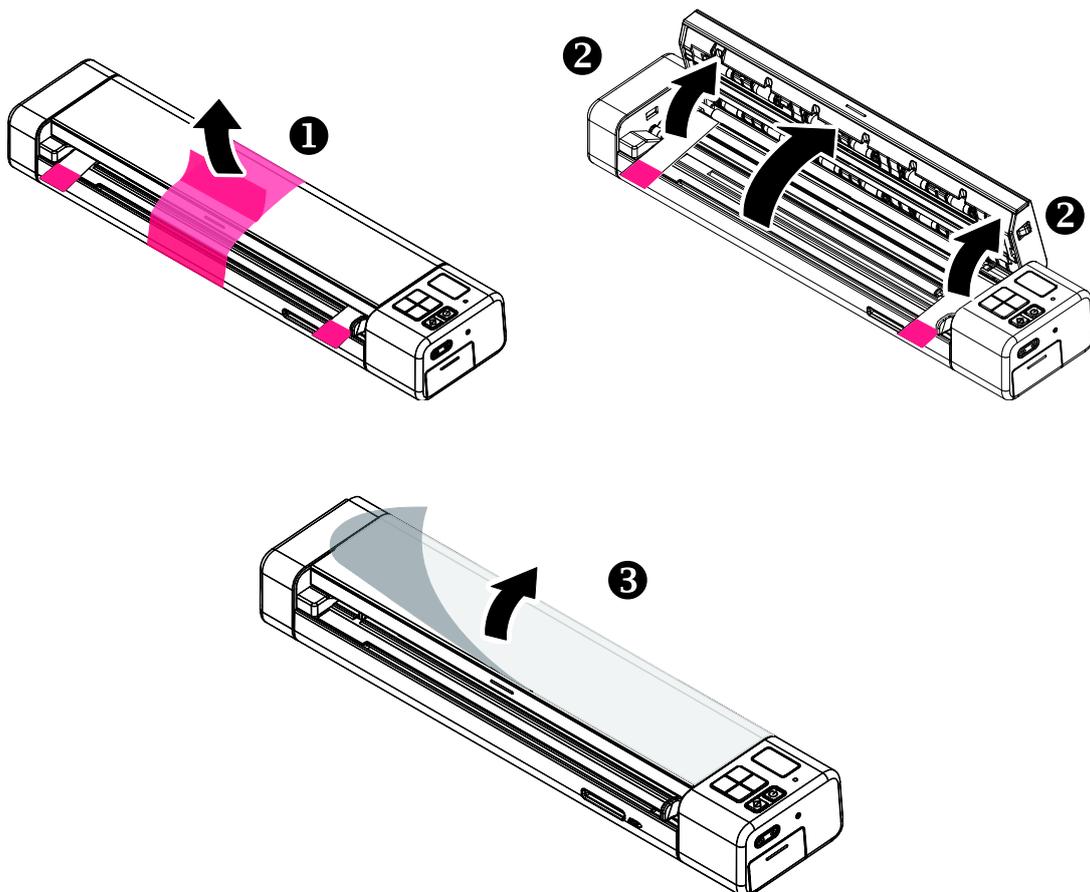
2. Installation

2.1 Precautions

- Keep the product out of direct sunlight. Direct exposure to the sun or excessive heat may cause damage to the unit.
- Do not install the product in a humid or dusty place.
- Place the product securely on an even, flat surface. Tilted or uneven surfaces may cause mechanical or paper-feeding problems.
- Retain the product box and packing materials for shipping purposes.

2.2 Removing the Protective Tape

Remove the protective tapes on the scanner and inside the document feeder as illustrated in below.

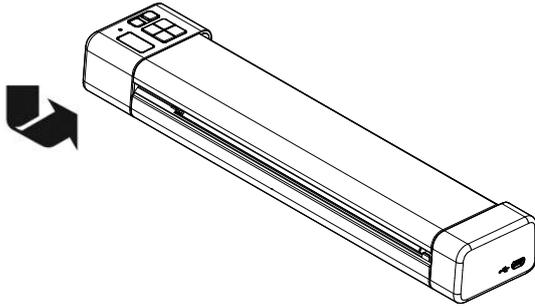


2.3 Installing the Battery

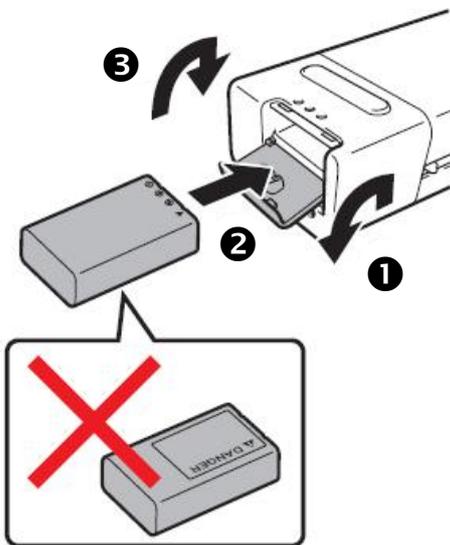
Important!

Note the scanner scans a document using the power from the battery in both the SD and PC mode. Be sure to install the battery and charge it when the battery power is getting low.

1. Turn over the scanner.



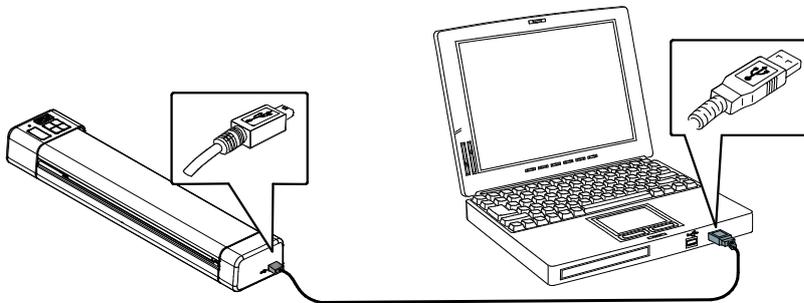
2. Open the battery cover ❶.
3. Load the battery into the battery container ❷. Make sure the battery is loaded with the correct polarity. Note the copper strips on the battery should be touching the copper strips on the device. Note: Please use only the supplied battery.



4. Close the battery cover ❸.

2.4 Charging the Battery

1. Turn off the scanner.
2. Connect the micro USB connector to the USB port of the scanner.
3. Connect the other USB connector to the USB port on your computer.

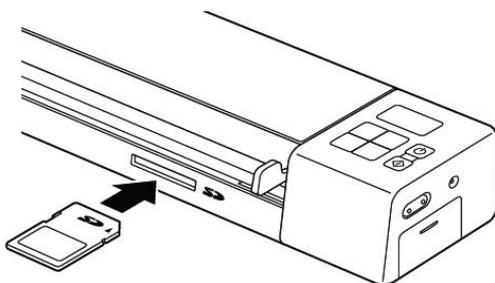


Important:

- For first-time use, please charge the battery for at least 4 hours.
- While charging the battery, the green LED light will be solidly on. After the charging is completed, the LED light will be extinguished.
- When the battery is fully charged, an A4-sized of page can be scanned for 200 times at 300 dpi (or 150 times at 600 dpi)!

2.5 Inserting a SD Card

Install a SD card to the SD. Gently press in until the SD card is latched.

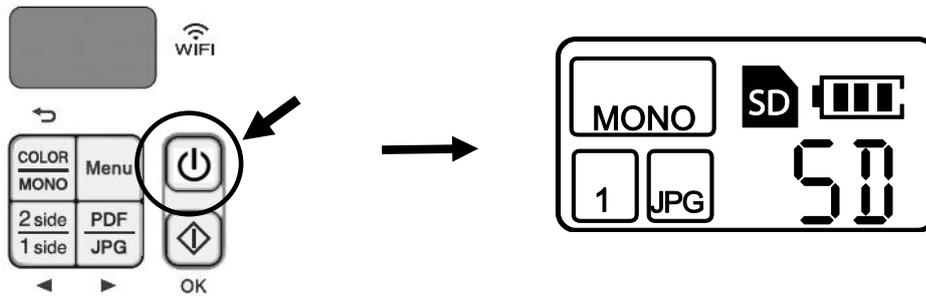


Note:

The scanner only accepts SD card in FAT16 or FAT32 format. NTFS and other file formats are not supported.

2.6 Turning on the Scanner

Press the Power button to turn on the scanner. The Power LED will be lit up and the default setting will be displayed in the LCD screen.



2.7 Setting the Clock

Before using the scanner, set the clock to the correct time.

1. Turn on the scanner.
2. On the scanner's control panel, press [**Menu**].
3. Press ◀ or ▶ until [**TME**] is displayed on the LCD screen.
4. Press [**Start/OK**].
5. Press ◀ or ▶ to set year.
6. Press [**Start/OK**].
7. Repeat step 5 and step 6 to set the month, date, hour, minutes.
8. After setting the minutes, the LCD displays **OK**, indicating the clock is set.

2.8 Using the Auto Power Off Function

1. Turn on the scanner.
2. On the scanner's control panel, press [**Menu**].
3. Press ◀ or ▶ until [**PWR**] is displayed on the LCD screen.
4. Press [**Start/OK**].
5. To enable the auto power off function, press ◀ or ▶ to select **YES**.
Or
6. To disable the auto power off function, press ◀ or ▶ to select **NO**.
7. Press [**Start/OK**].
8. The LCD displays **OK**, indicating the auto power off has been set.

2.9 Changing Your Resolution

1. Turn on the scanner.
2. On the scanner's control panel, press [**Menu**].
3. Press ◀ or ▶ until [**DPI**] is displayed on the LCD screen.
4. Press [**Start/OK**].
5. The default resolution is 300 dpi. To change your resolution to 600 dpi, press ◀ or ▶ until [**600**] is displayed on the LCD screen.
6. Press [**Start/OK**].
7. The LCD displays **OK**, indicating the resolution has been changed.

2.10 Formatting Your SD Card

If necessary, you may format your SD card on the control panel.

1. Insert a SD card into the SD card slot.
2. Turn on the scanner.
3. On the scanner's control panel, press [**Menu**].
4. Press ◀ or ▶ until [**FMT**] is displayed on the LCD screen.
5. Press [**Start/OK**].
6. To format the SD card, press ◀ or ▶ to select **YES**.
7. Press [**Start/OK**]. The Power button starts blinking.
8. The LCD displays **OK**, indicating formatting is completed.

3. Scan Preparation

3.1 Suitable and Unsuitable Original Types

Suitable Original Types

The scanner used with the feeder dock is designed to obtain the best scanning results with the following types of originals:

- Photos and documents (3"x5", 4"x6", 5"x7", 8.5"x14") (76 x 127mm, 102 x 152 mm, 127 x 177 mm, 216 x 356 mm)
- Business cards [standard 3.5" x 2" (88 x 50 mm) or larger]
- Document weight: 60 ~ 107 g/m² (16 to 28 lb)
- Long Page (216 x 916 mm) (available for 300 DPI only)

Unsuitable Original Types

Do not use the following types of originals for scanning in the feeder dock, otherwise the feeder dock may malfunction or cause the original to jam in the slot.

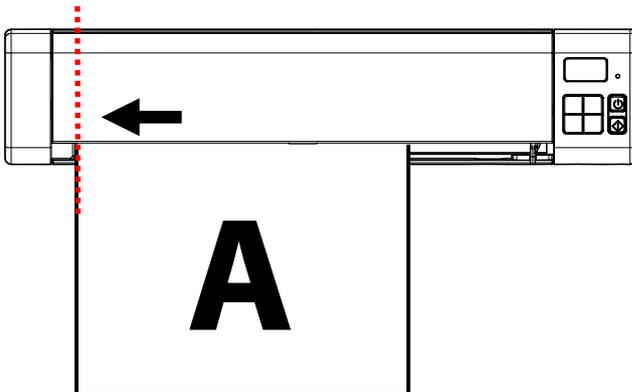
- Originals thicker than 0.08 mm
- Original with either side shorter than 50 mm
- Originals with lots of black or dark colors
- Original with dark colors surrounding the edges
- Printed media (newspapers, magazines, etc)
- Soft and thin materials (thin paper, cloth, etc.)
- Curl or wrinkle originals
- Originals with staples or paper clips.
- Originals that exceed acceptable size – 8.5" (width) x 14"(length) (216 x 356 mm) (in 600 dpi) (SD Mode)

3.2 Loading a Document

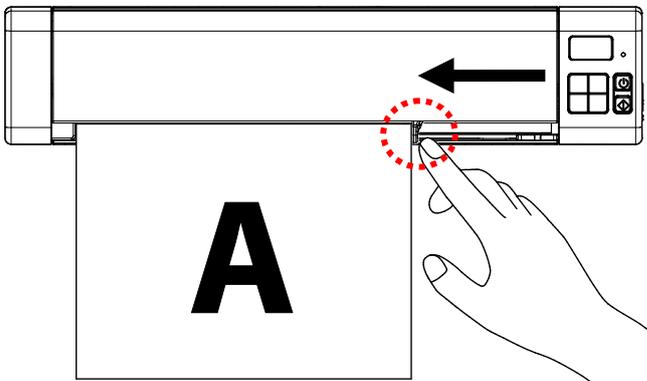
Important!

- Insert only one page at a time, and insert the next one only when the previous one is done. Otherwise, the scanner may malfunction.
- The paper detector is quite sensitive. Please do not push your document into the feeding slot or the top of your image will be cut. Simply let go the photo (card) when it begins to feed into the slot.
- Document(s) should be free of staples, paper clips, paper sticky notes.

1. Insert your document **FACE UP** to the feeder and align it to the left edge of the feeder.



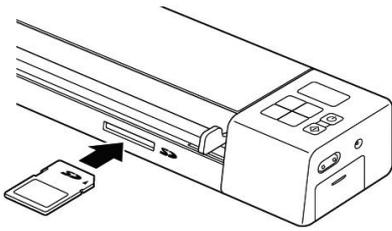
2. Slide the guide lever against the right side of the original.



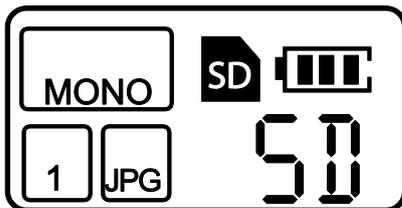
4. Scan Using the Control Panel

4.1 Start a Scan

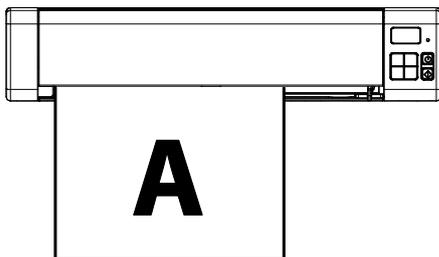
1. Insert the SD card into the SD card slot.



2. Make sure your scanner is in the following SD (Scan to SD) mode. The SD mode is also a default mode when the scanner is turned on.



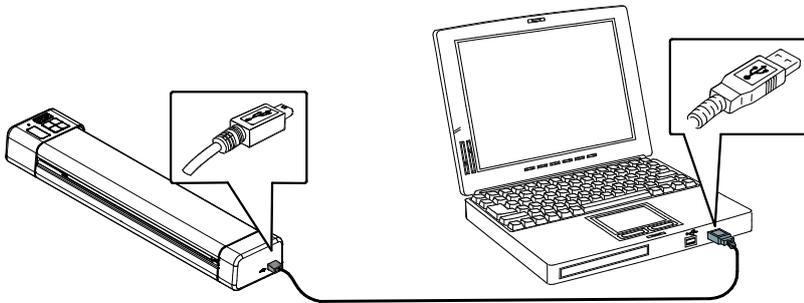
3. If necessary, change the scan settings by pressing the [**PDF/JPG**] button, [**Color/Mono**], [**2 side/1 side**] buttons on the control panel.
4. Inset your document.



5. The scanner starts scanning automatically.
6. The scanned image is stored into the SD card.

4.2 View or Download the Scanned Images

Connect the scanner to your computer to access the scanned images from the scanner's built-in disk or from the inserted memory card without using an independent card reader. While connected, you can view your scanned image files, copy and paste files from one storage area to the other, or delete files you don't wish to keep.



4.2.1 Computer System Requirements

Operating System: Windows – XP, Vista, Windows 7, Windows 8

Macintosh – Mac OS 10.5, 10.6, or later

USB Port: USB 2.0

4.2.2 Windows Operating System

1. Turn on the scanner.
2. Insert the memory card containing your scanned images into the scanner's memory card slot.
3. Connect the included USB cable to the scanner and to your computer.
4. Your computer should recognize the card or the scanner as a Removable Disk.
5. Click the Removable Disk and you will find a folder of "DCIM" is created and all the PDF files will be stored in the subfolder of "200DOC" and the JPEG files in the subfolder of "100PHOTO". File name starts from IMG_0001.pdf or IMG_0001.jpg.

4.2.3 Macintosh Operating System

When the computer recognizes the scanner's inserted memory card, the volume icon appears on the desktop.

To view the contents of the memory card, double-click the icon to open a Finders window.

4.2.4 Access Your Scanned Images

Each scanned image is given a file name with the prefix **IMG_** followed by a 4-digit sequential number in the order the images are stored. *For example, **IMG_0001.jpg**, **IMG_0002.jpg**, **IMG_0001.pdf**, **IMG_0002.pdf**, etc.*

JPG files are stored in a sub folder titled **DCIM\100PHOTO**. The folder stores 9999 photo files, and then automatically creates another sub folder titled **101PHOTO**, and so on to **199PHOTO**.

PDF files are stored in a sub folder titled **DCIM\200DOC**. The folder stores 9999 document files, and then automatically creates another sub folder titled **201DOC**, and so on to **299DOC**.

4.2.5 Disconnect the Scanner

CAUTION: Do not remove the memory card or disconnect the USB cable while the computer is accessing stored files.

Disconnect the Scanner from a Windows PC

1. On the Windows System Tray, click the hardware removal icon as indicated below.
2. Click Safely remove USB mass Storage device – **Drive (<Drive Letter:>)**
3. When the *Safe to Remove Hardware* message appears, you can safely remove the scanner's USB cable.

Disconnect the Scanner from a Macintosh

1. Click and drag the volume icon on the desktop to **Trash**.
Or
Click the eject button next to the volume name in the Finder's window.
2. Disconnect the scanner from your computer.

5. Scan Using Your Computer

By switching to the "PC" mode, installing the scanner driver and connecting the scanner to a computer, you can scan via the TWAIN user interface from your TWAIN-compliant image-editing software application and enhance your image quality with various features.

5.1 Installing the Scanner Driver

Windows

NOTE:

1. To ensure your computer can identify the USB scanner, please install scanner driver first before connecting the scanner to your computer.
2. The scanner driver contains TWAIN, and WIA driver. After the installation of scanner driver is completed, this scanner allows you to scan via a TWAIN, or a WIA interface. Start your TWAIN-compliant image editing software application to select a TWAIN or WIA user interface. You may also launch Microsoft's Scanner and Camera Wizard to scan via a WIA user interface.

1. Download the scanner driver on the Avison web site at <http://www.avision.com/download>.
2. Unzip the file and double click [**setup.exe**] file.
3. Follow the instructions on the screen to complete the installation.

Mac OS:

The Avison color image scanner comes with the following scanning software applications to help you complete your scan and enhance your scanned image.

- Avison TWAIN scanner driver**
- Avison ICA scanner driver**
- Avison Capture Tool software application**

**Note:**

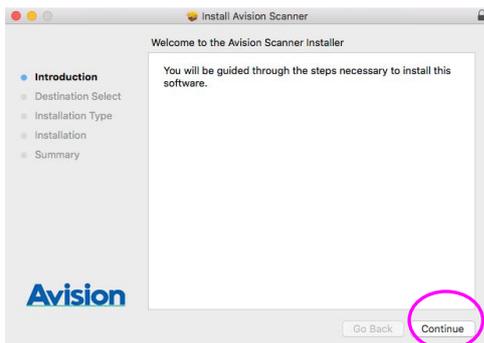
After installing the Avison's scanning software, connect the scanner to the computer. If you connect the scanner to your computer before installing the Avison's scanning software, the Avison scanning software may not run properly.

1. Download the scanner driver from the Avison web site at <http://www.avision.com/download>.
2. Check that the scanner is not connected to your computer.
3. Turn your computer on, and log in with an account that has admin rights.

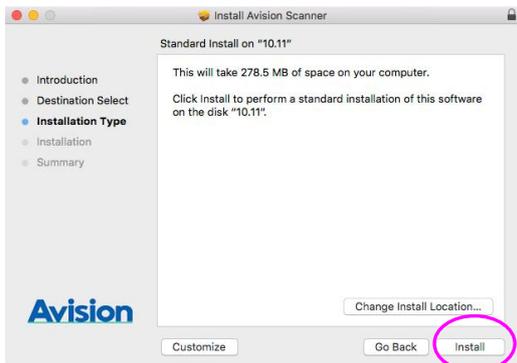
-
4. Double-click [**Avision Scanner.dmg**] and then the [**Avision Scanner**] icon and follow the on-screen instructions to complete the installation.



5. Click the [**Continue**] button on the Welcome window.



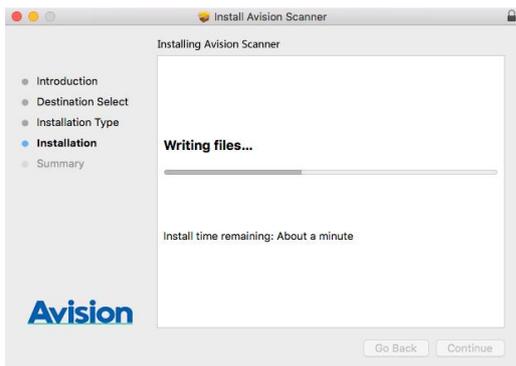
6. Click the [**Install**] button on the installation screen.



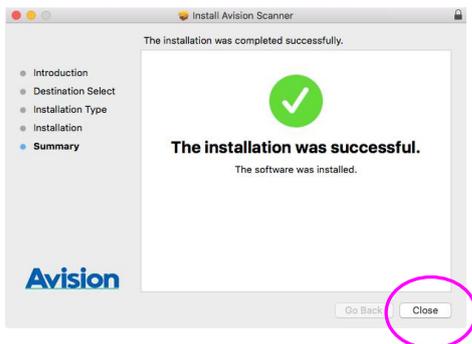
7. Log in with a password that has admin rights and click the [**Install Software**] button.



- The computer begins installing the software.



- Click the [**Close**] button when the [Installation was successful] dialog box is prompted.

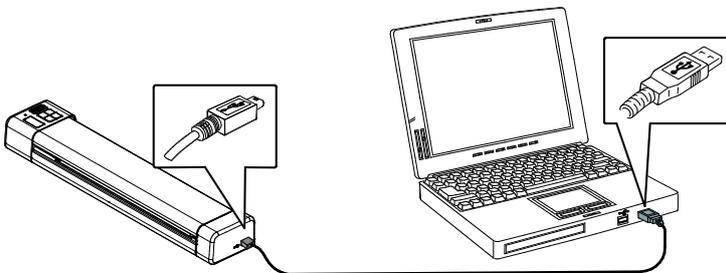


- If installation is successful, you will find the application icon display on your desktop, the Avision Capture Tool.



5.2 Connecting the Scanner to Your Computer

- Connect the micro USB connector to the USB port of the scanner.
- Connect the other USB connector to the USB port on your computer.



5.3 Switch to the PC Mode

Switch the scanner to the PC mode by pressing the **[Start/OK]** button until **[PC]** is displayed in the LCD-display as shown.



5.4 Scan a Document

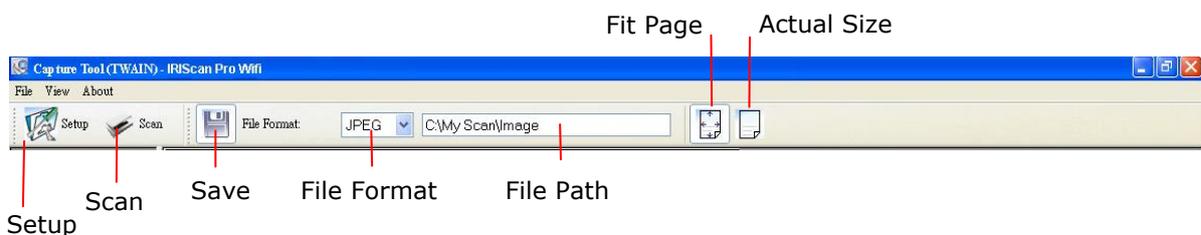
Windows

To scan a document, Avison provides you a useful program called Capture Tool. With this tool, you can perform simple scans and view the captured images. In addition, it helps you complete your scan at a rated speed.

The following procedure describes how to start a simple scan. If there is an error, please review the preceding section to check if the cable connection and scanner driver have been successfully installed.

Before you begin, be sure the scanner is on.

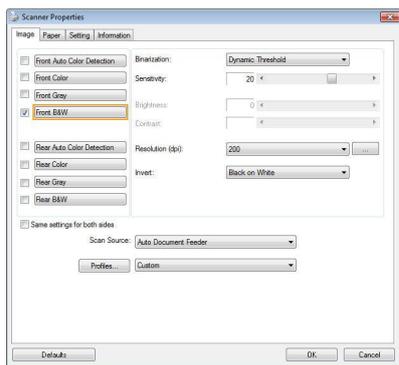
1. Select Start>Programs>Avison Meta Mobile 20>Avison Capture Tool. The Select Scanner Model dialog box will be displayed.
2. Select your driver type and scanner model and click OK. The following Capture Tool dialog box will be displayed.



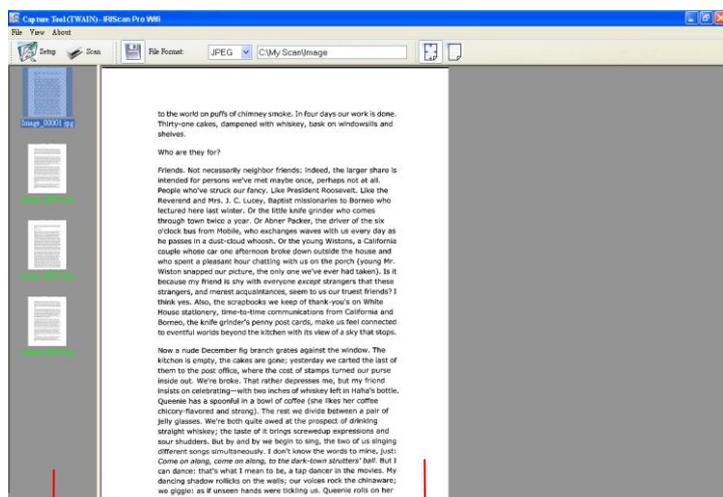
3. Choose your desired file format from the File Format drop down list box. (Default is BMP, other choice includes TIFF, GIF, and JPEG.)
4. Type your desired folder name and file name in the File Path box. (Default is C:\My Scan\Image.)

Note: If you do not wish to save the scanned image, deselect the Save button since default is Save Enable. In this case, the thumbnail view will be disabled. And therefore, after viewing all the scanned images, only the last one will remain on the screen.

5. Click the Setup button () or choose Setup from the File menu to prompt the Scanner Properties dialog box.



6. From the Image Selection Box, choose your desired image type for your scanned image. (Default is Front B&W) If you have a duplex scanner, choose Front and Rear to scan both sides of your document.
7. Click OK to quit the Scanner Properties dialog box. (To learn more details about the Scanner Properties dialog box, please see the subsequent chapter, *Using the Scanner Properties Dialog Box*.)
8. Place your document face down on the document glass or face up in the auto document feeder.
9. In the Scan Validation dialog box, click the Scan button () or choose Scan from the File menu.
10. The document will be scanned and displayed in the Scan Validation screen. After the scanned images have been displayed, your scanner installation verification is completed.

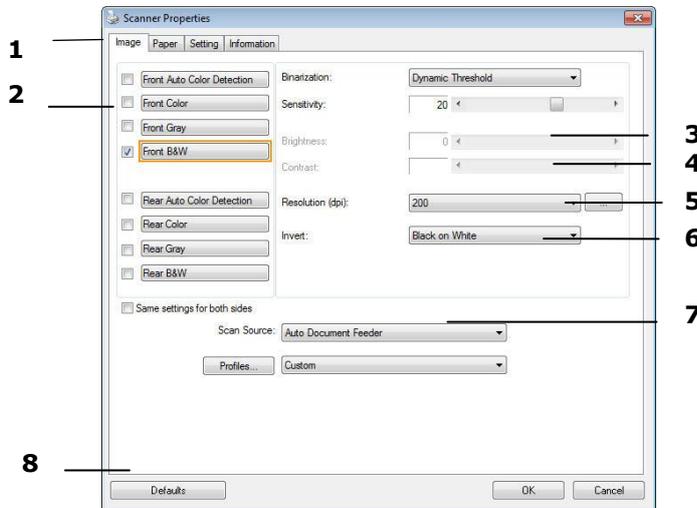


Thumbnail View

Fit Page View

11. You can view the scanned image in Fit Page () or Actual Size (100%) button () from the Viewing toolbars at the right side.
12. Click the Close box or Quit from the File menu to exit the Scan Validation Tool.

A Glance of the Scanner Properties Dialog Box



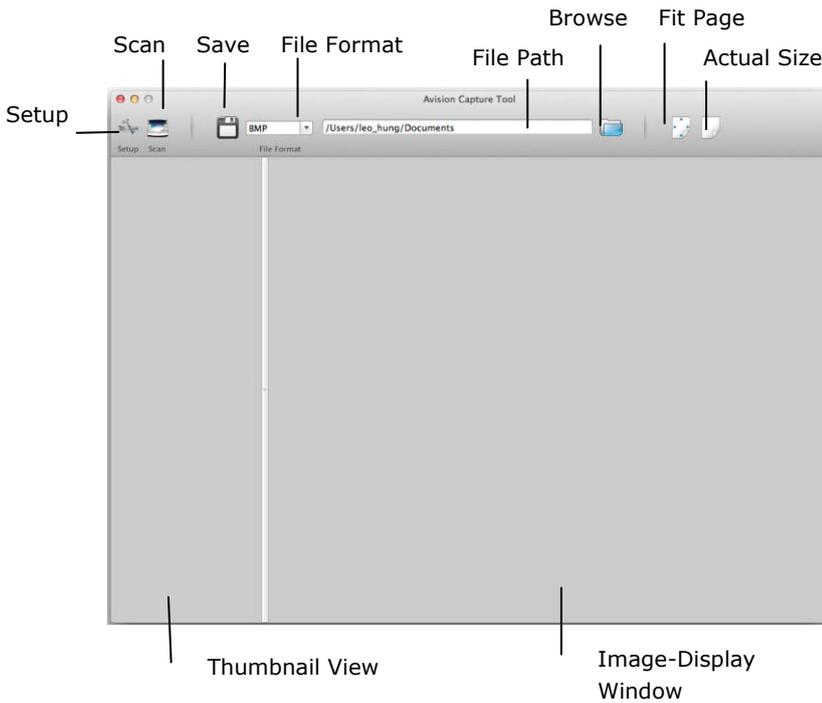
1. Tab Options	Choice: Image, Compression, Color Dropout, Paper, Preview, Options, Settings, Information.
2. Image Selection Box	Choose your image type and the side of document you wish to scan. Options vary based on type of scanner.
3. Brightness	Adjust the brightness level from -100 to +100.
4. Contrast	Adjust the contrast level from -100 to +100.
5. Resolution	Determine the quality of the scanned image. The industry standard is 200 dpi.
6. Invert	Reverse the color of your scanned image.
7. Scan Source	Choice: Auto Document Feeder.
8. Defaults	Reset all values on the tabs to the factory default settings.

Mac OS:

1. Double-click the [**Avision Capture Tool**] icon on your desktop. The following [**Avision Capture Tool**] main window will be displayed.



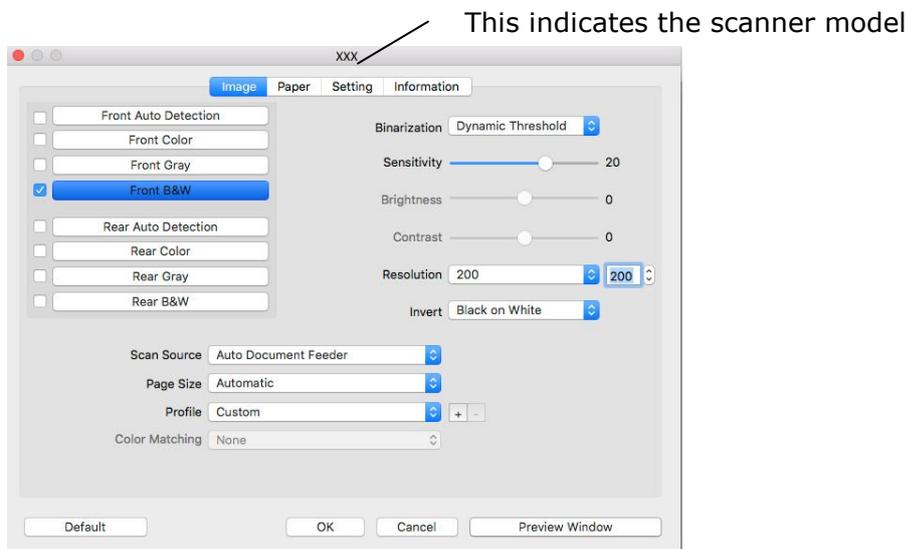
The [**Avision Capture Tool**] icon



2. To leave the TWAIN user interface, click () on the upper-left corner.

To scan a page,

1. Click the [**Setup**] button () to access the Avision Scanner Properties dialog box.



2. From the Image Selection Box, choose your desired image type for your scanned image. (Default is Front B&W) If you have a duplex scanner, choose Front and Rear to scan both sides of your document.
3. Click **OK** to quit the Avision Scanner Properties dialog box. (To learn more details about using the Avision Scanner Properties dialog box, please see the subsequent chapter, *Using the Avision Properties Dialog Box.*)
4. Place your document face down on the document glass or face up in the auto document feeder.

5. Click the Scan button ().

6. The document will be scanned and displayed in the main window of Avision Capture Tool.



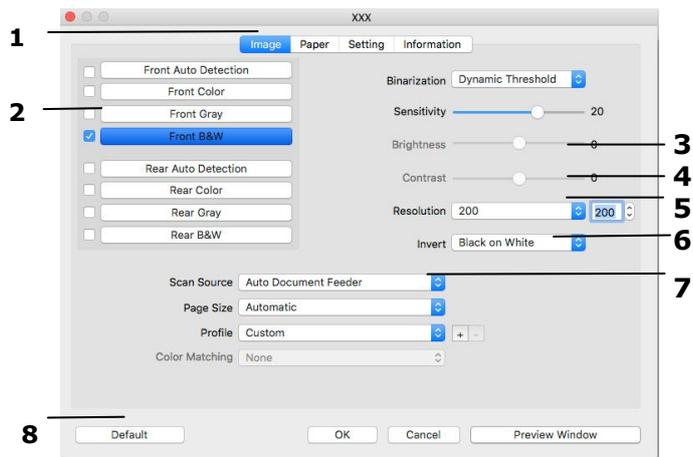
7. To leave the main window of Avision Capture Tool, click () on the upper-left corner.



Important!

- Please note the scanner buttons do not work if you start a scan via the Avision Capture Tool.
- To perform your first scan, we recommend you to use the default scan settings. When you become more familiar with the software, change the scan settings to fit your own purpose.

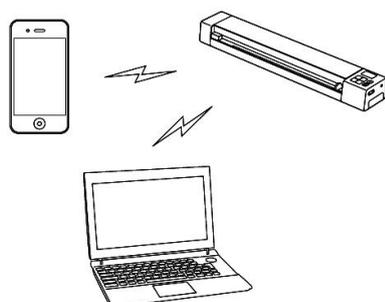
A Glance of the User Interface



- 1. Tab Options** Choice: Image, Compression, Color Dropout, Paper, Multi-Feed Detection, Preview, Options, Settings, Information.
- 2. Image Selection Box** Choose your image type and the side of document you wish to scan. Options vary based on type of scanner.
- 3. Brightness** Adjust the brightness level from -100 to +100.
- 4. Contrast** Adjust the contrast level from -100 to +100.
- 5. Resolution** Determine the quality of the scanned image. The industry standard is 200 dpi.
- 6. Invert** Reverse the color of your scanned image.
- 7. Scan Source** **Choice:** Auto Document Feeder, Flatbed, Flatbed (Book), Automatic (varies due to different scanner model)
- 8. Defaults** Reset all values on the tabs to the factory default settings.

6. Access the scanned images through Wi-Fi (SD Mode)

Using the scanner's Wi-Fi connection (available only for the SD mode), you can wirelessly connect to your private cloud to browse or download your scanned image files from the scanner to your computer, Android or iOS devices.

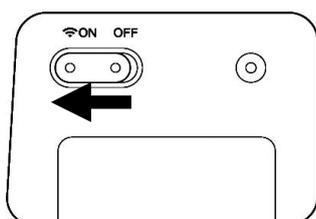


Note:

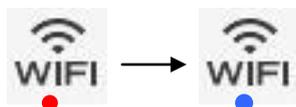
- The Scanner Wi-Fi access point is for browsing, downloading, or deleting scanner files only. It cannot be used for Internet browsing.
- The scanner does not allow you to scan and connect to Wi-Fi at the same time. If you start a scan in the Wi-Fi mode, the Wi-Fi mode will be off temporarily. When the scan is finished, the scanner automatically connects to Wi-Fi again.

6.1 Access the Scanned Image through Wi-Fi

1. Turn Wi-Fi mode on by sliding the Wi-Fi switch to the [On] position.



2. Wait approximately 40 seconds while the data is indexed, the Wi-Fi LED turns red. When the blue LED turned solidly on, this indicates that Wi-Fi status is ready.



3. To connect your computer, iPhone, iPad or Android device to the scanner, use the device's Wi-Fi settings to select the scanner's network name (SSID) "Avsion -xxxx" [last four digits of Access Point's MAC address]".
 - **PC users:** Go to the Wi-Fi Network icon and select the network name (SSID) (Avsion-XXXX). No password is required; wait for the connected status confirmation.
 - **Mac users:** Click the **Wi-Fi network** icon on the menu bar and select the network name (SSID) (Avsion -XXXX). No password is required; wait for the connected status confirmation. Make sure you are connected to only one IP interface (either Wi-Fi or Ethernet port). The Client IP would be 10.10.100.1 range.

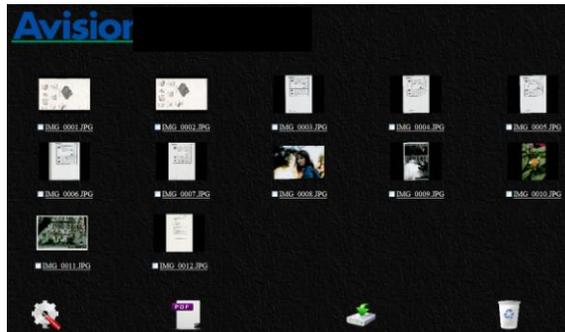
-
- **iPhone & iPad users:** Go to **Settings**→**Wi-Fi**→ select the network name (SSID) (Avision-XXXX). No password is required; wait for the check mark to confirm the connected status.
 - **Android users:** Go to **Settings**→**Wi-Fi Settings**→ select the network name (SSID) (Avision-XXXX), and then tap **Connect**. No password is required; wait for the connected status confirmation.

4. Open an Internet Explorer, the Avision PhotoView page will be displayed.

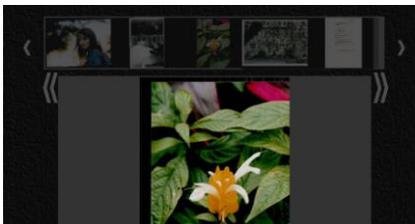
- **PC users:** Click **Start**→**Program Files**→**Internet Explorer** to open an Internet browser.
- **Mac, iPhone & iPad users:** Click or tap the **Safari** icon to launch a browser session.
- **Android users:** Device setups varied, but generally you can tap on an Internet browser icon on your Home screen, or tap on the message "Login may be required".

If you are not directed to the Avision PhotoView automatically, you must type in your default home page URL, e.g., <http://www.google.com> or type in <http://10.10.100.1>. This step will redirect you to "Avision PhotoView" page.

5. The login screen is briefly displayed, and then the image files found in the built-in storage or on a SD card are automatically displayed.



6. Click or tap on any image to view in full screen.



6.2 Use Options under Image Thumbnails



Click the Setup button to prompt the Setup page. Through the Setup page, you can change the scanner's network name (SSID) or create a user name and password to protect your data.



- The display defaults to JPG mode, displaying all JPG files. To view JPG images full screen, click or tap on an image; a slideshow automatically begins to display all images.
- To access PDF files, click or tap the **PDF Mode** button. All PDF files are displayed, but you must download PDF files before they can be opened.
- To switch back to JPG mode, click or tap the **JPG Mode** button.



You can easily download the images from the scanner to your computer or device.

1. Click or tap in the select box next to the file name(s) that you want to download.
2. Click or tap **Download**.

Computers: You are prompted to Open or Save the files. If saving, you are also prompted for the location on your computer to save the files.

Tablets & Phones: The files are automatically downloaded to your Photo Gallery into a folder titled **Download**.

iPhone/iPad Devices:

1. Open Safari Browser, the AVISION PhotoView page will be displayed.
2. Select the photo(s) to open.
3. A new browser will appear with selected photo.
4. Press on slideshow image for 1-2 seconds, select "Save Image"
5. The photo or document will now appear in your photos.

Please note only 1 photo or JPG image can be downloaded at a time with multiple selected. Additional PDF viewer application is required for download and view PDF files on iOS system.

Android Devices:

1. Open a Browser, the AVISION PhotoView page will be displayed.
2. Select the photo(s) or document(s).
3. Select the download icon ().
4. Document(s) or image(s) selected will begin downloading.
5. Document(s) or image(s) can be found in your gallery.

Please note multiple images or documents can be downloaded at a time.

Note: The file path of the downloaded photos or document may vary depending on the manufacturer of the tablet and phones. E.g., some in SD Card/download and some in internal memory User/download/.



- You can quickly delete image files from the scanner.
 1. Click or tap in the select box next to the file name(s) that you want to delete.
 2. Click or tap **Delete** (.
 3. The file(s) are automatically deleted (you won't be prompted to confirm the deletion).

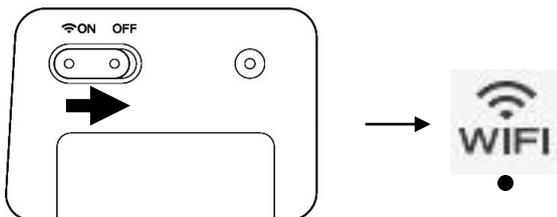
6.3 Reset Login Settings

Should you forget your login user name and password, you can press the Reset button for 10 seconds to resume to factory settings without login name and password. Press the Reset button with a pin, paperclip or pointy object. When reset is completed, the Wi-Fi LED turns off and then turns red. When the Wi-Fi connection is ready, the Wi-Fi LED turns solidly blue.



6.4 Exit the Wi-Fi Mode

To exit Wi-Fi mode, simply move the Wi-Fi switch to the [Off] position. The Wi-Fi icon in the LCD-Display will be off.



When Wi-Fi mode is on, the scanner does not time-out and automatically turns off like it does normally. Therefore, it is recommended that you connect the scanner to your computer or power adapter, via the micro USB cable, whenever you have Wi-Fi mode on.

IMPORTANT: Be sure to re-connect your computer, tablet or phone to your normal Wi-Fi network when you are finished with your scanner connection so you will be able to connect to Internet, your email and other web related locations/programs again.

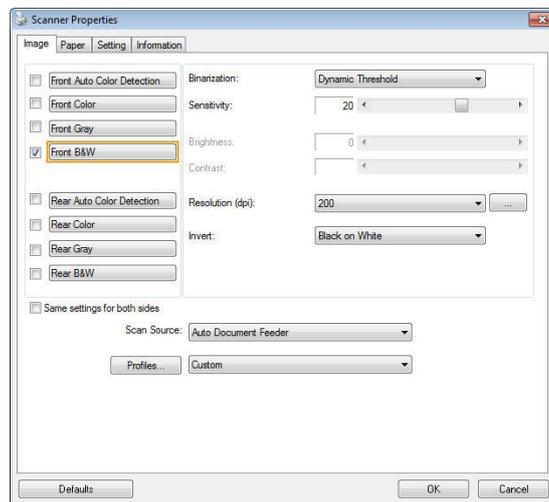
7.

Enhancing Your Image Quality Using the Scanner Properties Dialog Box

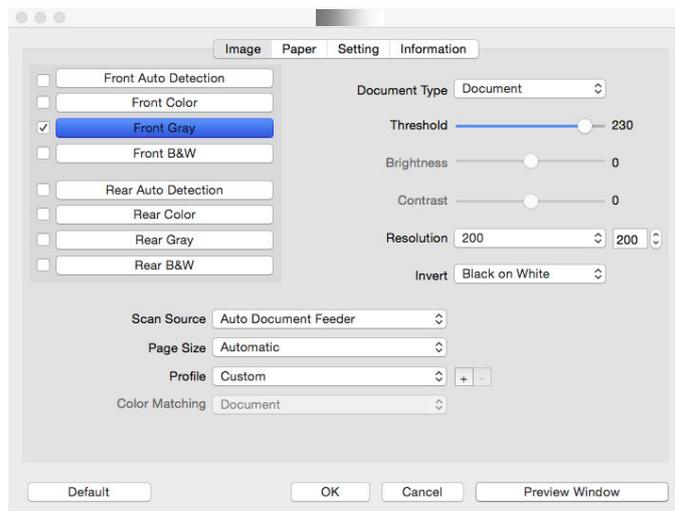
By switching the device to "PC" mode, installing the scanner driver, and connecting the scanner to the computer, the scanner allows you to scan from the TWAIN user interface (Scanner Properties dialog box) of your imaging editing application to improve the image quality with various image-enhancement features.

The Scanner Properties dialog box allows you to configure the scanner's settings. It consists of several tabbed windows each of which will be described in this chapter.

NOTE: In this chapter, all options are available based on a duplex (double-side) scanner. If you have purchased a simplex (single-side) scanner, all options are available for single sided only.

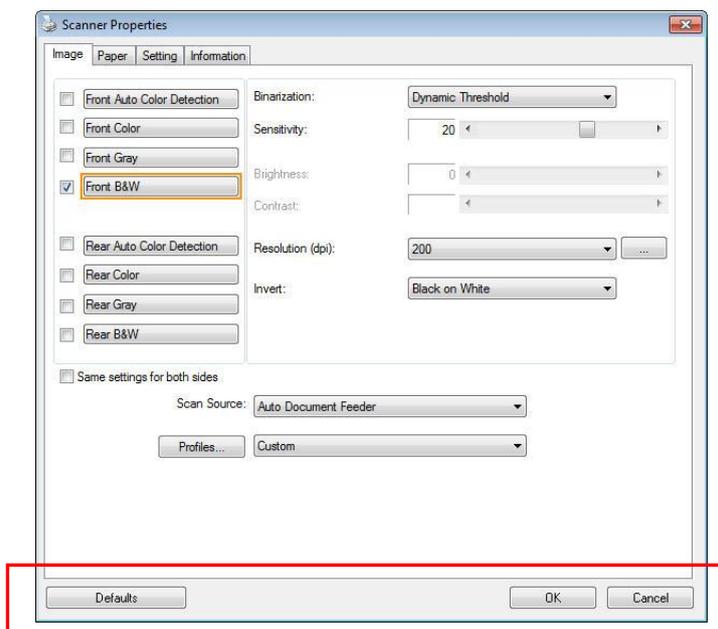


The Scanner Properties dialog box (Windows)



The Scanner Properties dialog box (Mac OS)

7.1 Buttons on the Scanner Properties Dialog Box



The buttons on the Scanner Properties dialog box

BUTTONS	DESCRIPTION
Defaults	Click the Defaults button, the factory default settings will be shown on each tab.
Cancel	Click the Cancel button to leave the Scanner Properties dialog box.
Preview Window (Mac)	Click to show a preview image in a low resolution.

The following table shows the default settings :

TAB NAME	DEFAULT SETTINGS
Image	Image : Front B&W Binarization : Dynamic Threshold Resolution : 200 dpi Invert : Blank on White Scan Source : Auto Document Feeder Threshold : None Brightness : None Contrast : None
Compression	None
Color Dropout	None
Paper	Cropping : Automatic Deskew : Yes Orientation : Portrait OverScan : 0.00 Note: The availability of this option varies due to scanner model. Unit : Inch
Multi-Feed Detection	None
Preview	None
Options	Rotation Degrees : None Blank Page Removal : None Edge Fill : White , 0 mm Image Control Option : None
Setting	Enable Energy Saver : Enable, 15 minutes after last scan action Show Scanning Progress : Yes Show Warning Message : Yes Save Settings after Closing : Yes
Imprinter	Digital Imprinter

7.2 Showing or Hiding Tabs

Windows

The [**Scanner Properties**] dialog box is displayed in default with three basic tabs - Image, Paper, and Information. To show more tabs, click the [**Scanner Properties**] icon to access more scan settings.

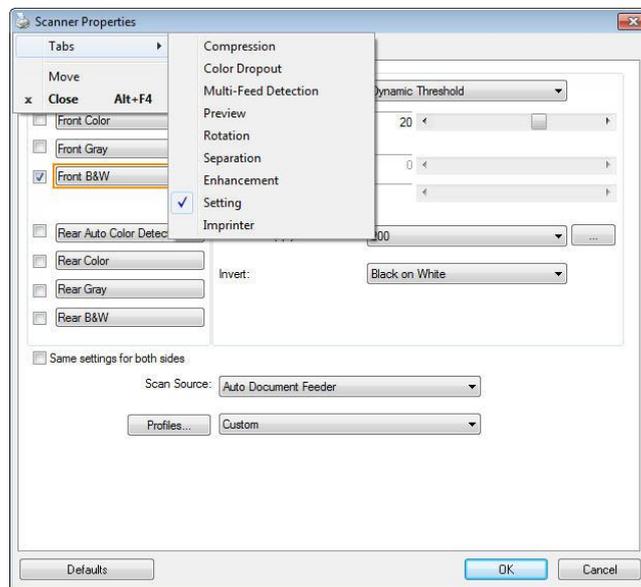
To show more tabs,

1. Click the [**Scanner Properties**] icon () on the upper left corner, and choose [**Tab**] to show available tab names. The available tabs include Compression, Color Drop out, Preview, Rotation, Separation, Multi-Feed, Options, Settings, and Imprinter. (Note: the options vary based on scanner model.)
2. Choose the tab you want to display. The selected tab will be shown with a check mark and then displayed in the [**Scanner Properties**] dialog box.
3. To access the settings, click the selected tab on the top of the [**Scanner Properties**] dialog box. The page of the selected tab will be displayed.

To hide a tab window,

1. Click the [**Scanner Properties**] icon () on the upper left corner, and choose [**Tabs**] to show available tab names.
2. Choose the tab you want to hide. Then, the selected tab will be hidden in the [**Scanner Properties**] dialog box.

Note: The [**Image**], [**Paper**], and [**Information**] tab can not be hidden since they preprogrammed to be displayed by default.



(Windows)

Mac OS

The [**Scanner Properties**] dialog box is displayed in default with four basic tabs - Image, Paper, Setting, and Information. To show more tabs, click the [**Setting**] tab to access more scan settings.

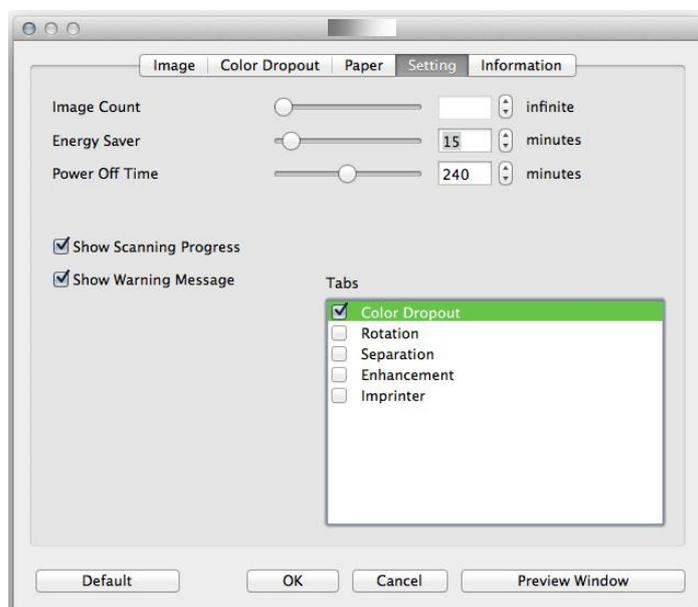
To show more tabs,

1. Click the [**Setting**] tab, the available tab names will be displayed. These tabs include Color Drop out, Rotation, Separation, Enhancement, and Imprinter. (Note: the options vary based on scanner model.)
2. Choose the tab you want to display. The selected tab will be shown with a check mark and then displayed in the [**Scanner Properties**] dialog box.
3. To access the settings, click the selected tab on the top of the [**Scanner Properties**] dialog box. The page of the selected tab will be displayed.

To hide a tab window,

1. Click the [**Setting**] tab to show available tab names.
2. Choose the tab you want to hide by deselecting the tabs which have been shown with a check mark. Then, the selected tab will be hidden in the [**Scanner Properties**] dialog box.

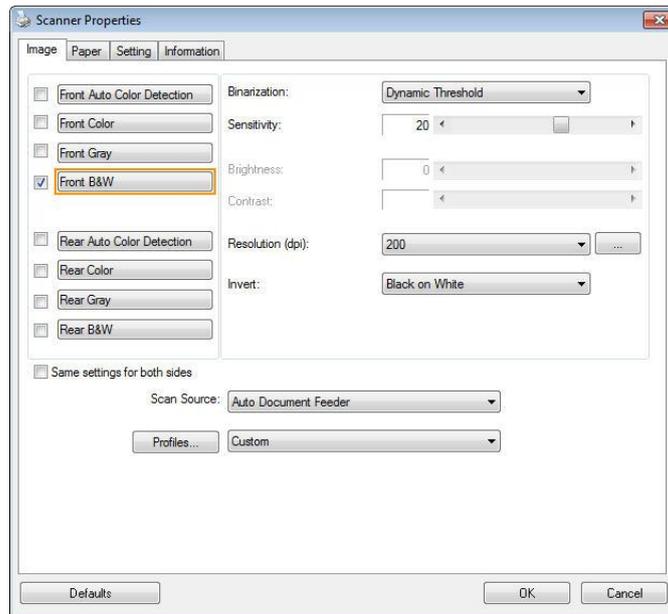
Note: The [**Image**], [**Paper**], [**Setting**], and [**Information**] tab can not be hidden since they preprogrammed to be displayed by default.



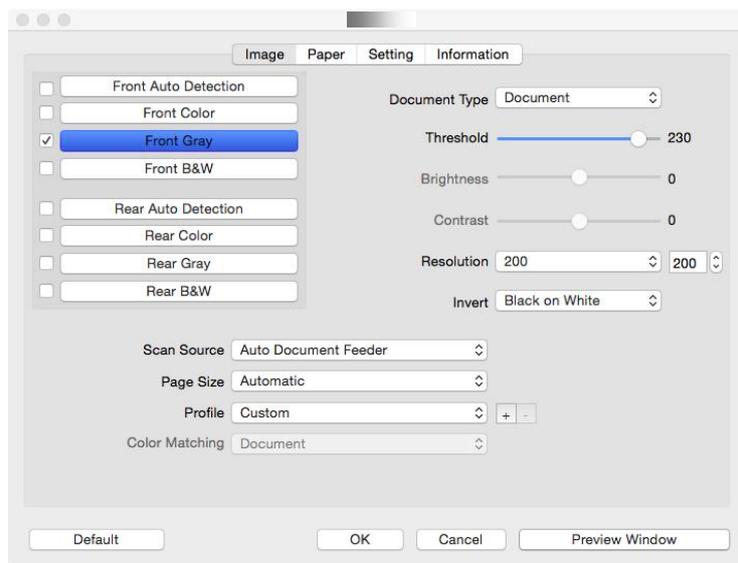
(Mac OS)

7.3 The Image Tab

The Image tab allows you to choose the front side and (or) the rear side of your document, the type of image, and to set several basic scan settings. Note that except for the resolution, you can set individual scan settings for the front side and the rear side. For example, all settings in the Image tab, Compression tab, Color Dropout tab can be set individually for the front and the rear side. However, the settings in the Paper tab, the Option tab, and the Setting tab have to be set the same for the front and rear side.



The Image tab dialog box (Windows)



The Image tab dialog box (Mac)

7.3.1 The Image Selection Box

Front Auto Color Detection
 Front Color
 Front Gray
 Front B&W

 Rear Auto Color Detection
 Rear Color
 Rear Gray
 Rear B&W

The Image Selection box includes the image type and document side option. If you wish to scan both the front side and the rear side of your color document, you can check both Front Color and Rear Color at the same time. Note the options vary based on type of scanner.

Example 1 : Scanning a two-sided color document, both sides in color

<p> <input type="checkbox"/> Front Auto Color Detection <input checked="" type="checkbox"/> Front Color <input type="checkbox"/> Front Gray <input type="checkbox"/> Front B&W <input type="checkbox"/> Rear Auto Color Detection <input checked="" type="checkbox"/> Rear Color <input type="checkbox"/> Rear Gray <input type="checkbox"/> Rear B&W </p> <p>Side/Image Selection</p>	 <p>Front</p>	 <p>Rear</p>
--	---	--

Example 2 : Scanning a two-sided color document, one in B&W, the other in color

<p> <input type="checkbox"/> Front Auto Color Detection <input checked="" type="checkbox"/> Front Color <input type="checkbox"/> Front Gray <input type="checkbox"/> Front B&W <input type="checkbox"/> Rear Auto Color Detection <input type="checkbox"/> Rear Color <input type="checkbox"/> Rear Gray <input checked="" type="checkbox"/> Rear B&W </p> <p>Side/Image Selection</p>	 <p>Front</p>	 <p>Rear</p>
--	---	--

IMAGE TYPE	DESCRIPTION
------------	-------------

Color	Choose Color if you wish to scan a color image for your original in color.
Gray	Choose Gray image if your original contains actual shades of gray.
B&W	Choose B&W if your original contains only text, pencil or ink sketch.

Sensitivity of Auto Color Detection

If your documents contain primarily B&W text and small amount of light or pale colors and you do not wish them to be recognized as color image to save the file size, you can increase the sensitivity value by moving the bar to the right to let these images to be detected as B&W. The value ranges from 1 to 100. The default is 37.

Standard	IEEE 802.11 b/g/n standards compliant
Wireless LAN	1T1R Mode
Frequency Range	2.400 ~ 2.4835GHz (subject to local regulations)
Number of Selectable Channels	802.11n: 20MHz/40MHz
	USA, Canada (FCC):11 channels (2.412GHz~2.462GHz)
	Europe (CE): 13 channels (2.412GHz~2.472GHz)
802.11b/g:	Japan (TELEC): 14 channels (2.412GHz~2.4835GHz)
Data Rate	802.11n: up to 150Mbps 802.11b: 1, 2, 5.5, 11Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps
Transmit Power(EIRP)	11n HT40 MCS7 : +13 dBm
	11g OFDM: +15 dBm
	11b CCK: +18 dBm
Security	WEP 64/128, TKIP, WPA, WPA2 mixed,802.1x and 802.11i

Original

Standard	IEEE 802.11 b/g/n standards compliant
Wireless LAN	1T1R Mode
Frequency Range	2.400 ~ 2.4835GHz (subject to local regulations)
Number of Selectable Channels	802.11n: 20MHz/40MHz
	USA, Canada (FCC):11 channels (2.412GHz~2.462GHz)
	Europe (CE): 13 channels (2.412GHz~2.472GHz)
802.11b/g:	Japan (TELEC): 14 channels (2.412GHz~2.4835GHz)
Data Rate	802.11n: up to 150Mbps 802.11b: 1, 2, 5.5, 11Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps
Transmit Power(EIRP)	11n HT40 MCS7 : +13 dBm
	11g OFDM: +15 dBm
	11b CCK: +18 dBm
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Standard	IEEE 802.11 b/g/n standards compliant
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Data Rate	802.11n: up to 150Mbps 802.11b: 1, 2, 5.5, 11Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps
Transmit Power(EIRP)	11n HT40 MCS7 : +13 dBm
	11g OFDM: +15 dBm
	11b CCK: +18 dBm
Security	WEP 64/128, TKIP, WPA, WPA2 mixed,802.1x and 802.11i

Sensitivity: 1
(The image is recognized as a color one)

Sensitivity: 100
(The image is recognized as a black and white one)

Same settings on both sides:

Click to apply same scan settings for both sides of your documents. After checking this option, any settings you have changed will automatically applied to both the front side and the rear side. For example, if you choose your ideal resolution to be 300 dpi, this will be applied both to the front side and rear side of your document.

7.3.2 Other Image Options

Binarization This is the process of converting a grayscale or color image to a bi-tonal image. There are several different methods of performing this conversion. **Options: Dynamic Threshold, Dynamic Threshold (AD), Fixed Processing, Halftone 1~5, Error Diffusion.**

Dynamic Threshold: Selecting **Dynamic Threshold** allows the scanner to dynamically evaluate each document to determine the optimal threshold value to produce the highest quality image. This is used to scan mixed document containing faint text, shaded background, or color background with a single setting. If Dynamic Threshold is selected, Threshold, Brightness, and Contrast are not available.

Dynamic Threshold (AD): Selecting **Dynamic Threshold (AD)** to perform the enhanced mode of the Dynamic Threshold feature. However, using this mode may slow down your scanning speed.

Sensitivity of Dynamic Threshold

Occasionally your scanned image may contain small dots or speckles. To remove these spots, increase the sensitivity value by moving the bar to the right. The value ranges from 1 to 30. The default is 20.

Fixed Processing: Used for black-and-white and other high contrast documents. A single level is set to determine the black-and-white transition. The threshold is programmable over the entire density range. **Fixed Processing** sets Contrast to 0. If **Fixed Processing** is selected, Contrast is not available.

Halftone: In addition to the black and white display, Halftone can present a somehow gray shade of image by using different size of dots. Halftone image looks like the picture we have seen in the newspaper. **Options include Halftone 1, Halftone 2, Halftone 3, Halftone 4, Halftone 5.**

Error Diffusion: Error Diffusion is a type of Halftone. Error Diffusion gives good image texture and makes text in images more readable than Halftone.



Halftone Image



Error Diffusion Image



Dynamic Threshold



Dynamic Threshold (AD)

Threshold Used to convert a grayscale image to a bi-tonal image. The value ranges from 0 to 255. A low threshold value produces a lighter image, and can be used to subdue backgrounds and subtle, unneeded information. A high threshold value produces a darker image, and can be used to help pick up faint images. Adjust the threshold setting by dragging the Threshold sliding bar to the left or right to achieve the desired threshold setting.



**200 dpi,
Threshold:50,
Brightness: 0**



**200 dpi,
Threshold:100,
Brightness: 0**

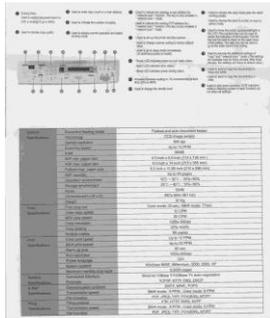
Gray

Document Type: Choice: Normal, Photo, Document

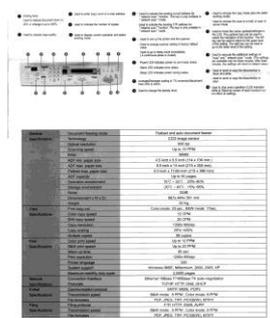
Three options of document type are provided when you choose Gray as the image type for your scanned document. **Choice: Normal, Photo, Document.**

- **Document:** Choose Document if your original contains pure text or a mixture of text and graphic since it is an optimal setting for regular business document. When using Document, only Threshold can be adjusted.
- **Photo:** Choose Photo if your original contains photo to reproduce your photo in vivid grayscale image. When using Photo, no Threshold and Contrast can be adjusted.
- **Normal:** When using **Normal**, Threshold, Brightness, and Contrast can be adjusted.

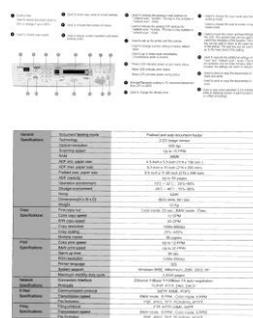
Threshold: The value ranges from 0 to 255. The default is 230. A low threshold value produces a lighter image, and can be used to subdue backgrounds and subtle, unneeded information. A high threshold value produces a darker image, and can be used to help pick up faint images. Adjust the threshold setting by dragging the **Threshold** sliding bar to the left or right to achieve the desired threshold setting.



Normal



Photo



**Document
(Threshold: 230)**



Normal



Photo



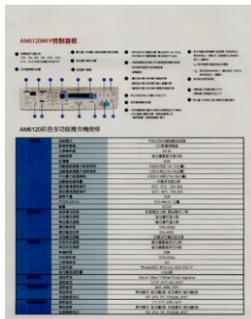
**Document
(Threshold: 230)**

Brightness

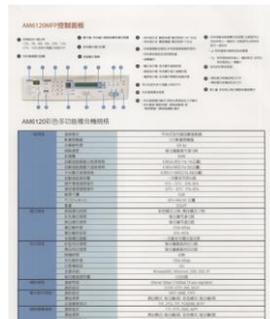
Adjusts the lightness or darkness of an image. The higher the value, the brighter the image. Drag the slider to the right or left to increase or decrease the brightness. The range is from -100 to +100.

Contrast

Adjusts the range between the darkest and the lightest shades in the image. The higher the contrast, the bigger the different grayscale. Drag the slider to the right or left to increase or decrease the contrast. The range is from -100 to +100.



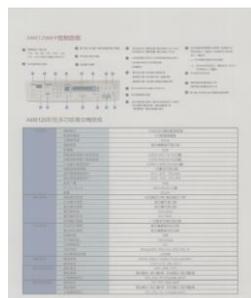
Brightness: -50



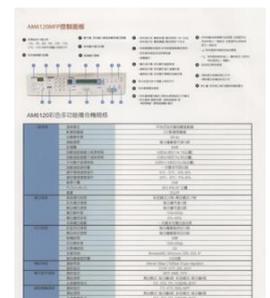
**Brightness: 0
(Normal)**



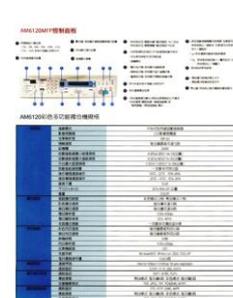
Brightness: +50



Contrast: -50



**Contrast: 0
(Normal)**



Contrast: +50

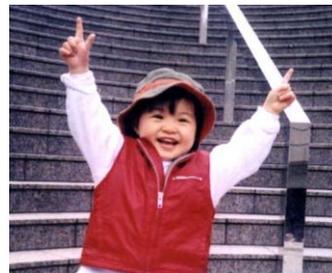
Resolution

A good control of the resolution results a good detail of an image that scans. The resolution is measured by dots per inch (dpi). Normally, the greater the dpi number, the higher the resolution and the image file size. Be aware that greater resolution takes more time to scan, and more disk space for the scanning image. For your information, an A4 size color image scanned at 300 dpi at True Color mode consumes approximately 25 MB of disk space. A higher resolution (usually means over 600 dpi) is only recommended when you need to scan a small area at True Color mode.

Choose a resolution value from the drop down list. The default value is 200 dpi. Available resolutions are 75, 100, 150, 200, 300, 400 and 600. Or you may choose your desired value by clicking the box in the right side of the drop down list and press the arrow key to select your desired value and then click the Add button to include it in the drop down list. **Note:** The resolution is up to 300 dpi if an imprinter or a MICR reader is installed or connected to the scanner.



Resolution: 75 dpi



Resolution: 150 dpi

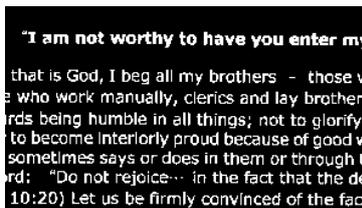
Invert

Reverses the brightness and the colors in the image. The default setting is Black on a White background. Reverse mode is White on a Black background. For color images, each pixel will be changed into its complementary color at the command of Invert.

"I am not worthy to have you enter my

that is God, I beg all my brothers - those w
e who work manually, clerics and lay brothers
ards being humble in all things; not to glorify
r to become Interiorly proud because of good w
sometimes says or does in them or through t
ord: "Do not rejoice... in the fact that the de
: 10:20) Let us be firmly convinced of the fact

Black on White



White on Black

Scan Source

Choice:

- **Auto Document Feeder:** Used to scan multiple pages.
- **Flatbed:** Used to scan a single page. For example, pages from newspaper clipping, paper with wrinkles or curls.
- **Flatbed (book):** Used to scan several inside pages from book.
- **Automatic:** Allow the scanner automatically set its scan source. If **Automatic** is selected and there is document in both the auto document feeder (ADF) and the flatbed, then the scan source will be automatically set to ADF. If **Automatic** is selected and there is document only in flatbed, then the scan source will be set to flatbed.
- **Merge Two Sides into One Image:**
If you have a sheet-fed duplex scanner with front input tray, you can scan an A3 size document with an innovative method. Thus, fold your A3 size document into A4, and then load the paper in the front tray. Choose Merge Two Sides from the Scan Source option and then the scanner is able to scan both sides of your document and merge two A4 images into one A3 image.

When you select Merge Two Sides into One Image, the Cropping or Multi-feed function will be disabled.

Note: This feature must be used with a carrier sheet. Regarding how to load a document with a Carrier Sheet, refer to Section 4.6.2, Other Paper Selection.

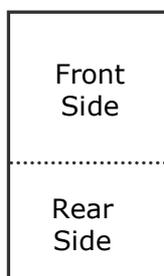
Note the options vary based on type of scanner.



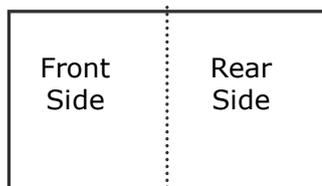
NOTE:

If you have purchased a duplex sheet-fed scanner, choose [Merge Two Sides] on the [Scan Source], then the scanner is able to scan both sides of your document and merge them into a single image.

If "Merge Two Sides into One Image" is selected, its choice will be available including "Merge Horizontally", "Merge Vertically", "Merge Vertically (Back Side Flip)". If the reverse side of your document is upside down, choose "Merge Vertically (Back Side Flip)" and the back side will be automatically rotated 180 degrees and merged.



Merge Vertically



Merge Horizontally

Note the options vary based on type of scanner.

Color Matching

The purpose of Color Matching is getting the accurate color. This option uses the default parameters (ICC profile) to adjust the colors of the image.

Choice: None, Document, Photo

- **None:** Choose "None" to disable this option.
- **Document:** Choose "Document" if your original contains pure text or a mixture of text and graphic since it is an optimal setting for regular business document.
- **Photo:** Choose "Photo" if your original contains photo to reproduce your photo in vivid color image.

**Normal****After Color Matching****7.3.3 Scanning color images**

The following options are available for scanning color images.

- Brightness
- Contrast
- Resolution
- Invert

7.3.4 Scanning grayscale images

The following options are available for scanning gray images.

- Brightness
- Contrast
- Resolution
- Invert

7.3.5 Scanning B&W images

The following options are available for scanning B&W images.

- Binarization (Dynamic Threshold)
- Resolution
- Invert

Or

- Binarization (Fix Processing)
- Threshold
- Brightness
- Resolution
- Invert

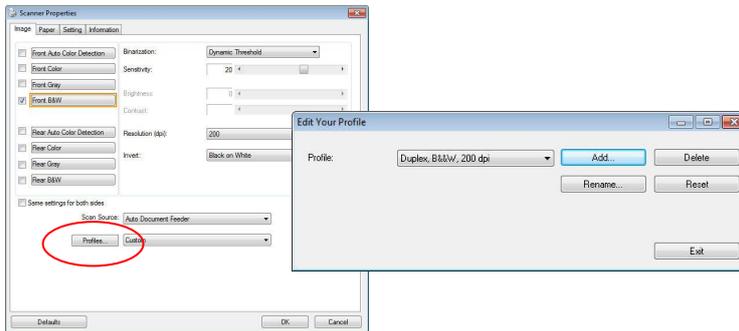
7.3.6 Editing Profiles

The Scanner Properties dialog box allows you to change and save your frequently used scan settings into a profile. You can edit these profiles by renaming or deleting them.

Windows:

To add a new profile

1. Customize your settings. (For example, change your resolution, image type, cropping method, scan size, or other scan settings.)
2. Click the Image tab and then choose "Profiles" to prompt the "Edit Your Profile" dialog box.

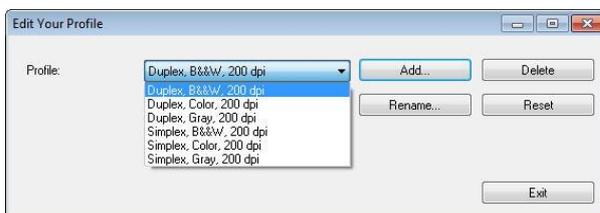


3. Click "Add" to enter the name of the profile and then choose "Save".



4. The new profile will be saved and shown in the "Profiles" dropdown list box.

5. From the Image Feeder tab dialog box, choose your favorable profile from the "Profiles" dropdown list box.



6. Your favorable profile will be immediately loaded and displayed on Scanner Properties dialog box.

To delete a profile,

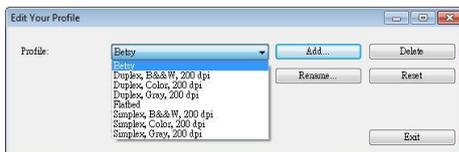
1. From the Image tab dialog box, click "Profiles" to prompt the Edit Your Profile dialog box.



2. Choose the profile you want to delete from the dropdown list box.
3. Click "Delete". A Confirm message "Are you sure you want to delete this profile?" is prompted.
4. Choose "Yes" to delete or "Cancel" to quit.

To rename a profile,

1. From the Image tab dialog box, click "Profiles" to prompt the Edit Your Profile dialog box.



2. Choose the profile you want to rename from the dropdown list box and then click the Rename button.
3. Enter new name for the profile.



4. Choose "Save" to save the new profile or "Cancel" to quit.

NOTE:

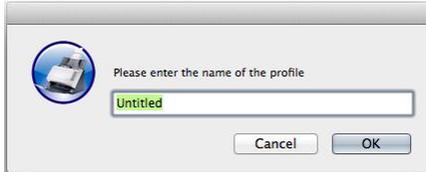


1. The preset default profiles include Flatbed, Simplex-B&W, 200 dpi, Simplex-Gray, 200 dpi, Simplex-Color, 200 dpi, Duplex-B&W, 200 dpi, Duplex-Gray, 200 dpi, Duplex-Color, 200 dpi. If you have a simplex or a sheetfed scanner, the duplex or the flatbed option will not be available.
2. If any setting for a current profile has been changed, a [*] sign will be marked before the name of current profile, for example, [*** Duplex, Color, 200 dpi**]. If desire, click the [**OK**] or [**Scan**] button and a dialog box will be prompted to let you save the new profile.

Mac OS

To load a profile (Mac)

1. Customize your settings. (For example, change your resolution, image type, cropping method, scan size, or other scan settings.)
2. Click the Image tab and click "+" on the Profile to enter the name of the profile and then choose "OK".



3. The new profile will be saved and shown in the "Profiles" dropdown list box.

To load a profile,

1. From the Image tab dialog box, choose your favorable profile from the "Profiles" dropdown list box.
2. Your favorable profile will be immediately loaded and displayed on Scanner Properties dialog box.

To delete a profile,

1. Choose the profile you want to delete from the dropdown list box.
2. Click "-". A Confirm message "Are you sure you want to delete this profile?" is prompted.
3. Choose "OK" to delete or "Cancel" to quit.

7.4 The Compression Tab

* The feature is only available for Windows operating system.

The Compression tab allows you to compress your scanned image and choose the level of compression. Bi-tonal images are normally compressed using CCITT standard called Group 4 (G4). Color and grayscale images are often compressed using JPEG technology. Move the **JPEG Quality** slider to the right or left to increase or decrease the level of compression. Note the greater the compression level, the lower image quality. Default is 50%.

Note that the compression depends on your image editing application. If your image editing application does not support the type of compression format, then either a warning message will appear or the image quality of the compressed file will not be acceptable.

JPEG (Joint Photographic Editor Group). This group developed and lent their name to a file compression standard for color and grayscale images that is widely used by scanners, and software applications. On Microsoft Windows-based systems, a file with the extension .jpg has normally been compressed using this standard.

For scanning color or gray images, the following compressions are available:

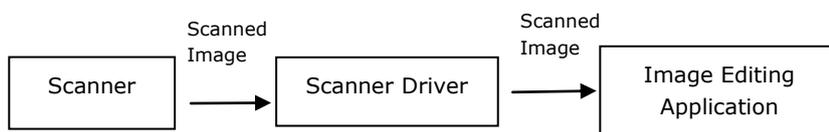
- None
- JPEG

For scanning B&W images, the following compressions are available:

- None
- G4

Compression:

To complete your scan at a rated speed, the scanned image is compressed by default during transmission. However, if you wish to obtain the highest image quality, you can choose to uncompress the image data before it is outputted.



To Application:

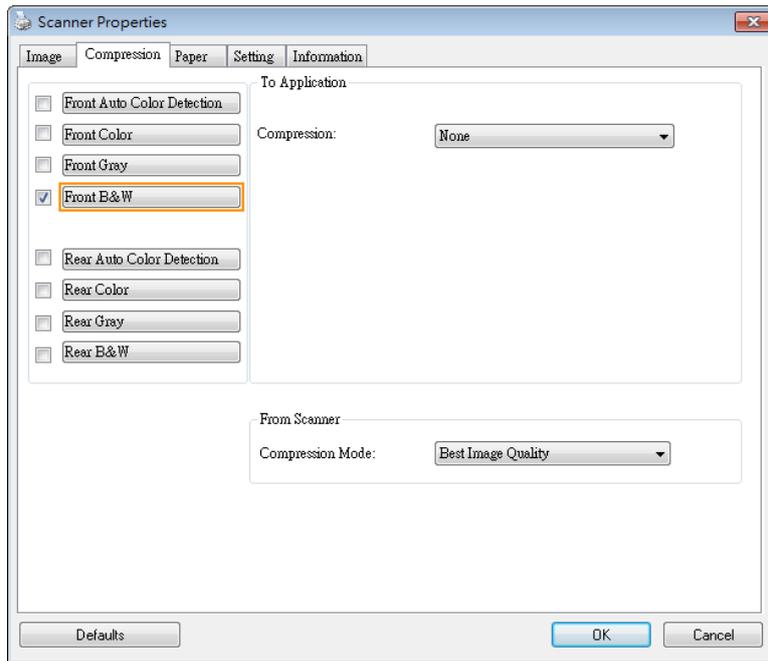
Choose if you wish to compress the image data and transfer it from the TWAIN driver to the application. Note Bi-tonal images are normally compressed using CCITT standard called Group 4 (G4). Color and grayscale images are often compressed using JPEG technology. Move the [**Image Quality**] slider to the right or left to increase or decrease your image quality. Note the greater the image quality, the lower the compression level. Default is 50%.

Note that the compression depends on your image editing application. If your image editing application does not support the type of compression format, then the image of the compressed file will look abnormal.

From Scanner: (Note: The availability of this feature varies due to scanner model.)

Choose if you wish to compress the scanned image and transfer it from the scanner to the TWAIN driver.

Choice: Uncompressed, *Best Image Quality (Low Compression Level), Better Image Quality (Normal Compression Level), Normal Image Quality (High Compression Level). (*: Factory Default)



The Compression tab dialog box

7.5 The Color Dropout Tab

7.5.1 Color Dropout Selection

The [**Color Dropout**] tab allows you to select either green, red, blue, or a color of your choice to remove the details of the selected color from a scanned image. This feature is used to sharpen your text when using OCR (Optical Character Recognition) software. Note this feature applies only to the gray or black and white image.

Choice: None, Auto, Remove Red, Remove Green, Remove Blue, Custom

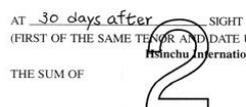
- **None:** Does not remove any color.
- **Auto:** Automatically outputs the image with the details of the primary color removed.
- **Remove Red/Remove Green/Remove Blue:** Outputs the image with the details of the specified color removed.
- **Custom:** Specify the color you wish to remove by entering its RGB (Red, Green, and Blue) value respectively.

Advanced Options:

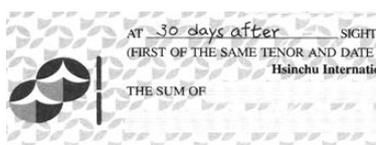
- **Quality Mode:** Range: 0~20. Default: 10
When [Quality Mode] is selected, you can determine the color to be dropped out using the [Filter Threshold] slider. A lower value will drop more of the selected color out, while a higher value will leave more of the selected color in.
- **Normal Mode:** Use an optimized setting to determine the color.



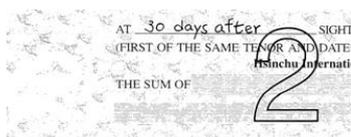
Original



**Auto/Remove Green
(normal mode)**



Remove Red (normal mode)



**Remove Green (quality
mode: Threshold: 18)**

Preview the color dropout result:

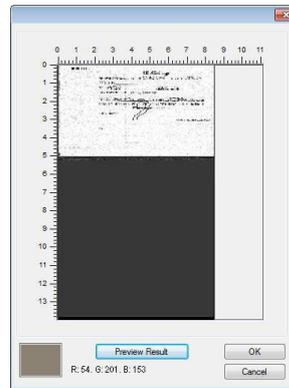
To preview the color dropout result, please follow these steps:

1. Click the [**Scanner Properties**] icon () on the upper left corner, and choose [**Tab**] to show available tab names.
2. Choose [**Preview**] to show the Preview tab.
3. Click the [**Preview**] tab to show the Preview page.
4. Load your document to the scanner and click the [**Preview**] button to get a preview image.
5. On the [Image] tab, click [Gray] or [Black and White] image mode and then choose [Custom] on the [Color Dropout] tab. A [Preview window] button will be displayed.
6. Click the [**Preview window**] button to prompt the [**Preview**] window with the previewed image.

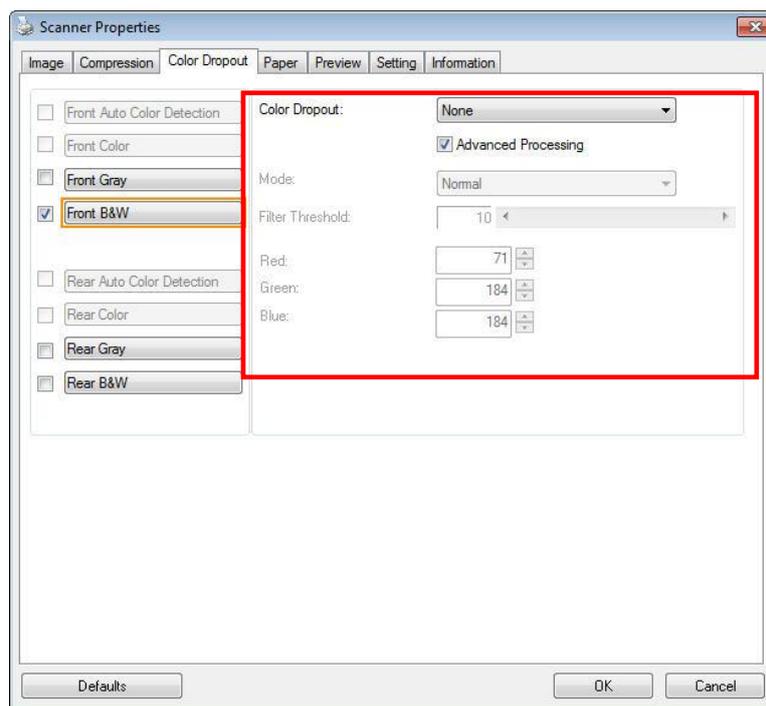
7. Move your cursor over the preview image. Your mouse cursor now becomes an Eyedropper.
8. Click to select a color which you wish to remove.
9. Click and hold your mouse button to view the result after removing the specified color. If the result is satisfactory, click **[OK]** to close the Preview window.



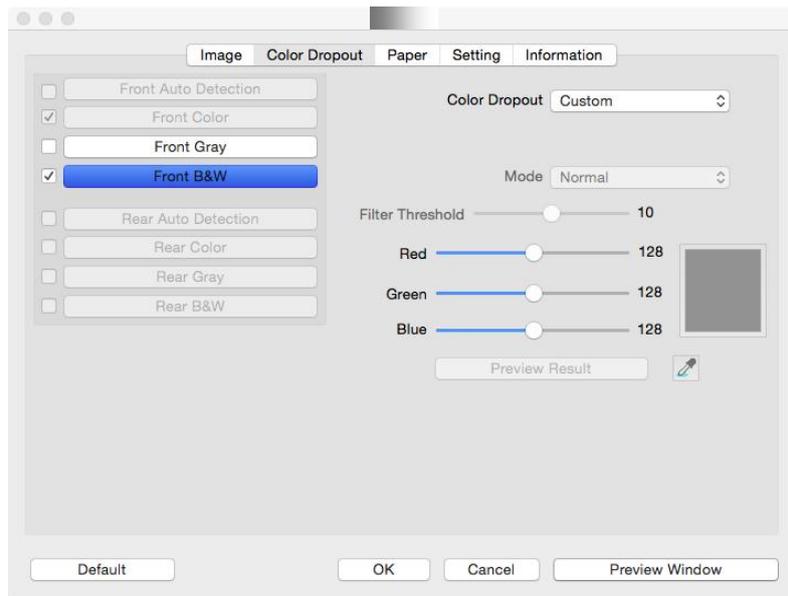
The Preview Window



The Color dropout result



The Color Dropout dialog box (Windows)

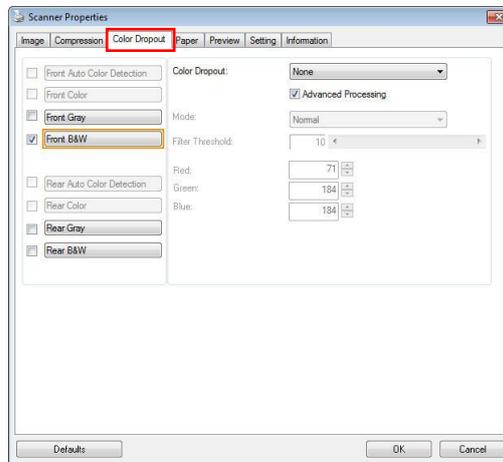


The Color Dropout dialog box (Mac OS)

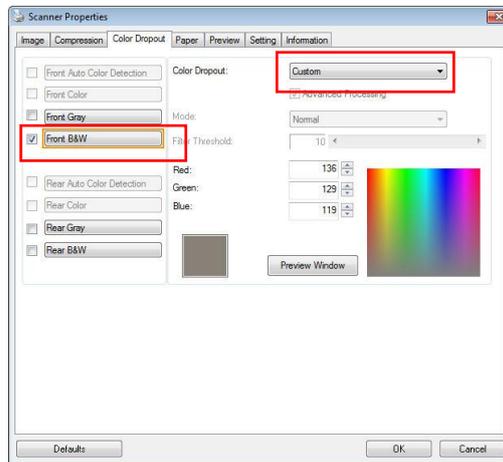
Windows:

To select a color on the Color palette,

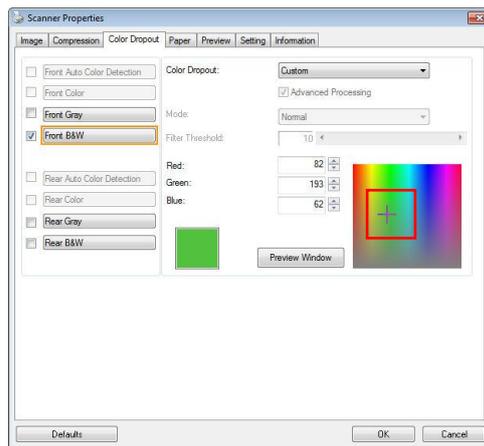
1. Click the Color Dropout tab from the Scanner Properties dialog box.



2. Choose Gray or B&W from the Image Selection box and click "Custom" from the Color Dropout drop-down menu. The Color palette appears.



3. Move your cursor over the palette. The cursor becomes a cross sign.

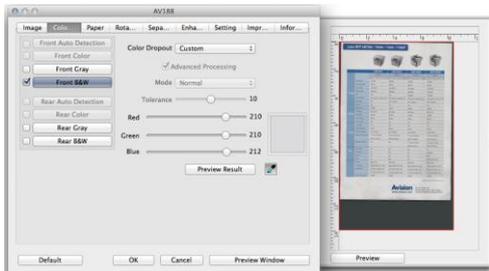


4. Click to choose a color. The RGB values are changed simultaneously.

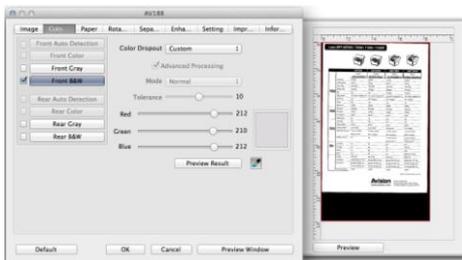
Mac OS:

To preview the color dropout result, please follow these steps:

1. Choose [**Preview Window**] to show the Preview tab.
2. Load your document to the scanner and click the [**Preview**] button to get a preview image.



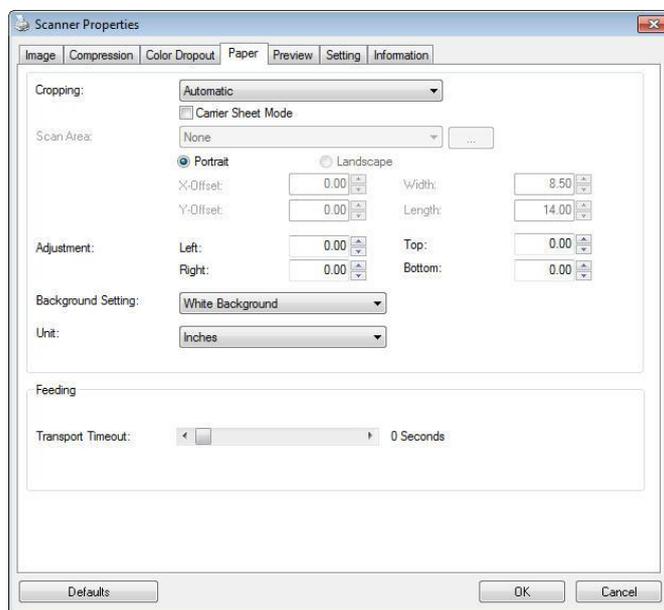
3. On the [Image] tab, click [Gray] or [Black and White] image mode and then choose [Custom] on the [Color Dropout] tab. An [Eyedropper] button will be displayed.
4. Click the [Eyedropper] button and move your cursor over the preview image. Your mouse cursor now becomes an Eyedropper.
5. Click to select a color which you wish to remove.
6. Click and hold your mouse button to view the result after removing the specified color.



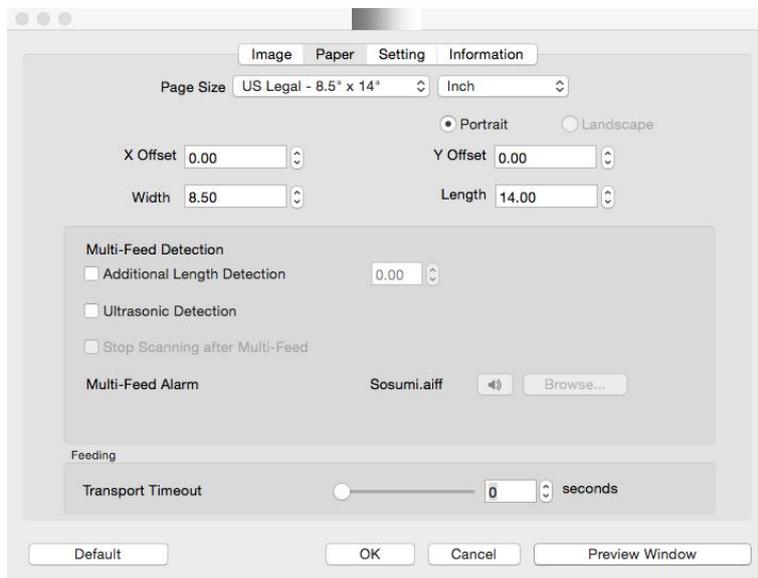
7. If the result is satisfactory, click [**OK**] to close the Avision Scanner Properties dialog box.

7.6 The Paper Tab

The Paper tab allows you to define values relating to image output (i.e., Auto Crop or not, Scan Area, OverScan, Multi-Feed Detection).



The Paper tab dialog box (Windows)



The Paper tab dialog box (Mac OS)

7.6.1 Cropping

Cropping allows you to capture a portion of the document being scanned. **Choice: Automatic, *Automatic (36"), Fixed to Transport, *EOP (End of Page) Detection, *Automatic Multiple, *Relative to Documents.**

* Windows only

OPTIONS	DESCRIPTION
Automatic	Automatic adjusts the cropping window according to different document sizes and automatically straighten a skewed document. Use this option for batches of mixed-sized documents.
Automatic (36")	Automatically adjusts the cropping window according to different document sizes smaller than 36" and automatically straighten a skewed image. Use this option for batches of mixed-sized document. Note: The availability of this feature varies due to scanner model.
Fixed to Transport	This feature allows you to define the area or zone to be imaged. Use for batches of same-sized documents. If you select this option, you can use the arrow keys to define the x and y offset values, width and length to redefine your scanned area. The Display window will show image placement as you change the values.
EOP (End of Page) Detection	This feature allows you to define the area or zone to be imaged. Use for batches of same-width but different length documents. If you select this option, you can use the arrow keys to define the x and y offset values, width and length to redefine your scanned area. The Display window will show image placement as you change the values.
Automatic Multiple	This option allows you to place various sized documents such as photos, ID Cards, or business cards on the flatbed (if available) and lets you create multiple individually cropped images in one scan. Note: To correctly create multiple images, please make sure there is at least 12mm (0.5") of space between each document.
Relative to Document	This option allows you to crop different areas on your documents and deliver these images in B&W, Gray, or Color separately. For example, there are applications which require you to store the entire document in B&W and a part of the document in color to save storage space. This is useful for documents where a photograph or signature appears in a consistent area on the document such as resumes, and so on.

The following options are only available when **Fixed to Transport** is selected.

- **X-Offset** — the distance from the left end of the scanner to the left edge of the scanning area.
- **Y-Offset** — the position from the top end of the document to the top end of the scanning area.
- **Width** — the width of the scanning area.
- **Length** — the length of the scanning area.
- **Center:** automatically calculates the x-offset for center-fed feeding based upon document size selected.



- — relocate the scan area by click the arrow key on the cross sign while retain the scan size. View the result from the Display window.

The Adjustment option is available when **Automatic** is selected.

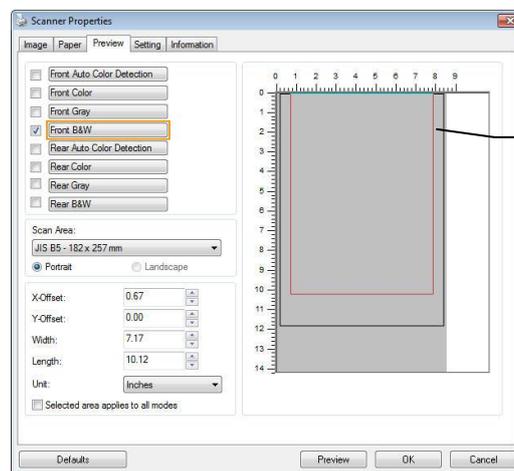
- **Adjustment** —adds a positive/negative margin value Top/Bottom or toward left/right of the image. Adjustment is used when the automatic document feeder is used. Adjustment reduces the possibility of corner clipping on skewed images. To set Adjustment values, use the UP/Down buttons to select where you want to apply Adjustment values: Top/Bottom or Left/Right, and then select the amount of inches/mm/pixels applied. Select a value within the range of 0.00 to 1.00 / -1.00.

Relative to Document: (used for batches of same-sized documents)

This option allows you to crop different areas on your documents and deliver these images in B&W, Gray, or Color separately. For example, there are applications which require you to store the entire document in B&W and a part of the document in color to save storage space. This is useful for documents where a photograph or signature appears in a consistent area on the document such as resumes, and so on.

The following procedure describes how to reproduce the entire document in B&W and a portion of document (picture) in color.

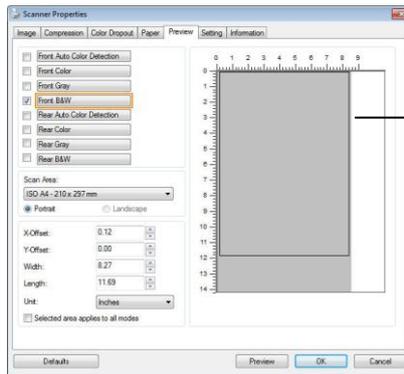
1. On the Paper tab, choose "Relative to Document" or "Fixed to Transport" from the Cropping option.
2. Choose your scan size from the Scan Area option. The selected scan size will be displayed in a red rectangular box. This is also the scan size of your entire document. (For example, ISO B5. If you have not chosen a scan area and leave the selection as None, then the default area will be the scanner's maximum.)



A red rectangular box

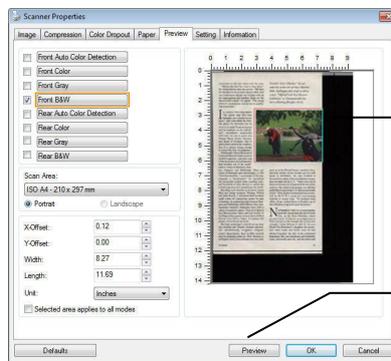
- Click the Preview tab to display the Preview window. A black rectangular box appears to indicate the max. scan size you have just selected.

The Image Selection Box



A black rectangular box

- Click the Preview button to view the entire image in low resolution to correctly crop your relative scan area.

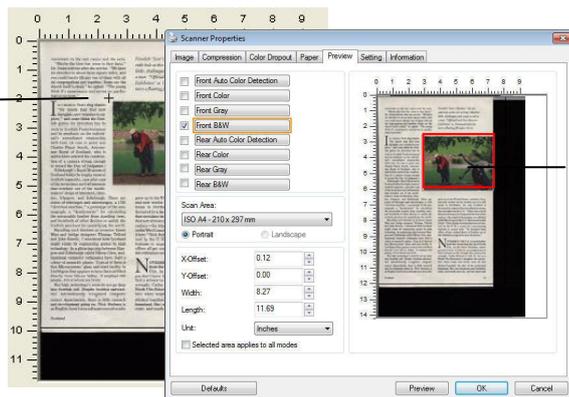


The Preview Image

The Preview Button

- Select image type from the Image Selection box. The selected image will appear in highlighted color. (For example, Front Color)
- Place your cursor on the Preview window and click your left mouse button. A cross sign will appear as illustrated. Create your relative scan size diagonally by dragging the left mouse button to your preferable size. The selected area will appear in a red box as illustrated.

A Cross Sign



The Relative Area

- Check the B&W image from the Image Selection box to scan the entire document.
- Click the Scan button to start scanning the document in two image types and sizes. (See the result in below.)

convenient to the rest rooms and the exits.
 "Maybe the time has come to face facts,"
 Dr. Duncan told me after the service. "We have
 the churches in about three square miles, and
 you could hardly fit any one of them with all
 six congregations put together. Some say the
 church itself is dead," he argued. "The young
 think it's unnecessary and serves no psycho-
 logical purpose."

In contrast Scots sing thanks
 "for medals that find new
 thoughts, new wonders to be
 done," and some think the Scot-
 tish genius for invention has its
 roots in Scottish Presbyterianism
 and its emphasis on the individual.
 The 19th-century "militarism"
 was a case in point when
 Charles Babbage (inventor of the
 first computer), James Watt (inventor
 of the steam engine), and James
 Clerk Maxwell (inventor of the
 theory of electromagnetism) were
 all born in Scotland.
 Edinburgh's Royal Museum of
 Science holds the only pieces of
 Scottish ingenuity, case after case
 of the inventions and refinements
 that hatched out of the wood-
 miller's shops of Aberdeen, Dum-
 fries, Glasgow, and Edinburgh. There are
 copies of the telescope and microscope, a 1780
 "electrical machine," a prototype of the auto-
 mobile, a "windmill" for calculating
 the intractable lumber from standing trees,
 and hundreds of other devices to testify that
 the Scottish penchant for quantifying the world
 has made it a dominant force in the world.
 Renowned math thinkers as famous as James
 Watt and bridge designer Thomas Telford
 and John Rennie, I wondered how Scotland
 might relate its engineering genius to high
 technology. The glittering city between Glas-
 gow and Edinburgh called Silicon Glen, and
 thousands of computer companies have built a
 colony of assembly plants. "Typical of them is
 Sun Microsystems' Glen and one facility in
 Llandilghow that appears to have been airlifted
 directly from Silicon Valley. It employs 400
 people, 450 of whom are Scots."
 But high technology's roots do not go deep
 into Scottish soil. Despite Scottish univer-
 sities' internationally renowned computer
 science departments, there is little research
 and development going on. Nike's chief is
 an English-born Lotus software executive who

*Ferdinand "Scott's Maiden," the sev-
 enth hole at the site of Lady's Machine
 links, challenges snobs to pull it
 a run. "Official Loch Ness Monster
 Exhibition" at Drumadochil fea-
 tures a floating Shetlandic Naze.*



grew up in the United States, married a Scot,
 and now works via his modem out of a mill
 house in Perthshire. He says Scotland is
 threatened by a lack of entrepreneurial energy
 that circulates in the U.S. "There was a lot of
 that sort of energy in Glasgow at the turn of the
 century—the kind of dynamism you still find
 on the West Coast of the U.S. But you've lost
 it here." Nick thinks Scotland has been victim-
 ized by the U.K.'s mania for cost-cutting
 business in major hubs. "In Scotland head
 offices all get tucked down to London out of
 this ridiculous urge to be near the throne."

Nowhere or there or in it much farther
 from the throne than the side of North
 Uist, in the Outer Hebrides, where
 you don't have to look for an entrepreneur to
 find a witness to the changes this century has
 wrought. Cathy Johnson is only 25, but as a
 North Uist fisherman's daughter she remem-
 bers when boats and ferries were all that
 attached together the idea of her performed
 homeland. She saw telephone and electricity
 come, and roads and cars, and hot water and



The entire document in B&W

The relative area in color

7.6.2 Other Paper Selection

Carrier Sheet Mode:

Check this option to automatically crop the scan window according to your document size when scanning non-standard document (fragile, irregular-size document) with a carrier sheet (optional). Note: The availability of this option varies due to scanner model.

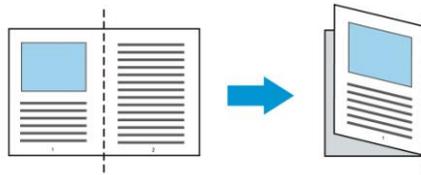
Loading Documents Using a Carrier Sheet

A Carrier Sheet is a plastic sheet specifically used for loading non-standard document onto the scanner. It allows you to scan document that can not be scanned in the regular way. Also, documents larger than A4 size, such as A3 and B4, can be scanned by folding in half, inserting into the Carrier Sheet, and scanning in duplex mode. You can also scan documents that can be damaged quite easily such as photographs, or irregular size documents that are difficult to load directly such as clippings.

To scan document using a Carrier Sheet,

For documents larger than A4/Letter size, such as A3

- a. Fold the sheet to be scanned in half.
- b. Fold the sheet tightly and smooth out crease. Otherwise, the sheet may be skewed during scanning.

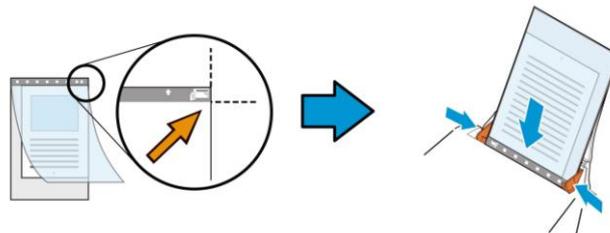


1. Open the Carrier Sheet and place the document inside.

Align the top of the document to the top of the Carrier Sheet (the printed area).

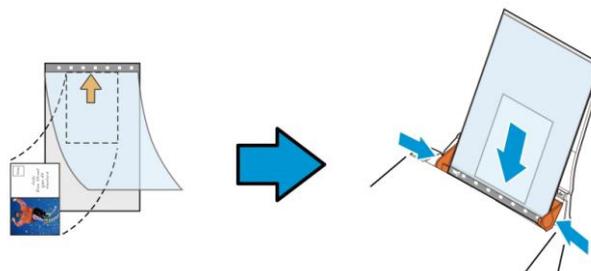
For documents larger than A4/letter size, such as A3

Align the top of the document to the top of the Carrier Sheet (the printed section) and the folded portion to the right edge of the Carrier Sheet so that the document fits into the Carrier Sheet at the upper corner.



For non-standard document

Center your document in the Carrier Sheet.



2. Load the Carrier Sheet with the gray section (printed section) facing downwards.

3. Adjust the paper guides to the width of the Carrier Sheet.
Adjust the paper guides so that there is no space between the guides and the Carrier sheet. Space between the guides and Carrier Sheet may cause the Carrier Sheet to become unaligned during scanning, and skew the scanned image.
4. Start the scan.

NOTICE:



- [Carrier Sheet] is available for the models that support the Carrier Sheet.
- Some functions are disabled when [Carrier Sheet] is checked.
- This option may not work properly on some applications.

Scan Area

Choose your desired paper size with the drop-down list box. Or you may select a custom paper size by clicking the **Scan Area** box and then click **Add** to include in the choice.

Choices are listed below:

None
US Letter- 8.5"x 11"
US Legal – 8.5" x 14"
ISO A4 – 21 x 29.7 cm
ISO A5 – 14.8 x 21 cm
ISO A6 – 10.5 x 14.8cm
ISO A7 – 7.4 x 10/5 cm
ISO B5 – 17.6 x 25 cm
ISO B6 – 12.5 x 17.6 cm
ISO B7 – 8.8 x 12.5 cm
JIS B5 – 18.2 x 25.7 cm
JIS B6 – 12.8 x 18.2 cm
JIS B7 – 9.1 x 12.8 cm
Scanner Maximum
Long Page (<118")

Long Page (<118"):

When you need to scan documents whose length exceeds scanner maximum, please choose **Long Page**. Note if **Long Page** is selected, the **Multi-Feed Detection** will not be available. (Note: This option and the maximum allowable document length vary due to type of scanner.)

When **Long Page (<118")** is selected, be sure to specify your document size in the **Length** and **Width** field.

Notice when scanning long page document:

1. Pull out the extension in the ADF Paper Tray.
 2. Secure enough space around the Output Tray to prevent the ejected paper from falling off the Output Tray.
 3. To ensure the performance, in color mode, set the resolution to be 300 dpi or lower; in Black and White mode, set the resolution to be 600 dpi or lower.
 4. Depending on your system environments, application, or your specified paper size, there may be insufficient memory to perform scanning.
-

OverScan

Overscan allows you to add a specific margin at top and bottom or right and left (Options vary based on the type of scanner) of the edge of the image. This is used to reduce possible corner clipping on the skewed images and often applied to a batch of skewed document to be scanned in the auto document feeder. Select a value between 0 and +5 mm. Note the overscan result will not be shown in the Display window and that the availability of the function varies based on type of scanner.

Pre-Feed

Choice: Enable, Disable. If enable is selected, you can set the amount of time the scanner starts pre-feeding your paper after your documents has been loaded into the feeder. The default is disabled. Note: The availability of this option varies due to scanner model.

Transport Timeout

Set the amount of time the scanner will wait and then start auto scan after the first scan job is completed. If you have many separate documents need to be scanned at the same scan settings, this feature is especially useful. The default is 0. The value ranges from 0 to 30 seconds.

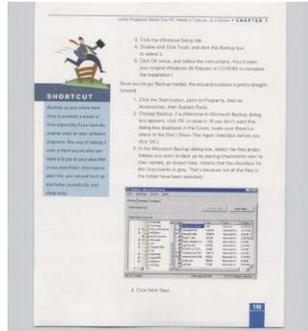
NOTE:

- Within the specified timeout period, if you load your document to the feeder, the scanner starts scanning automatically.
- If your scanner has a flatbed option and you place your paper on the flatbed, after the timeout period, you need to click the Scan button on the TWAIN user interface to start scanning.

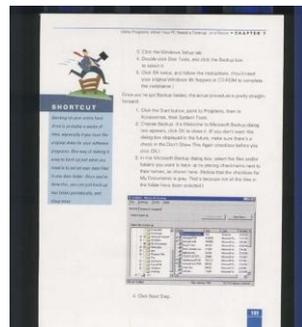
Background Setting

This option allows you to set your scan background. **Choice: White Background, Black Background.**

Note: For a sheet-fed scanner with an auto document feeder, this option is currently available only in the "Auto crop" mode. For a scanner with a flatbed platen, this option is available either in the "Auto crop" or the "Fixed to Transport" mode.



White Background

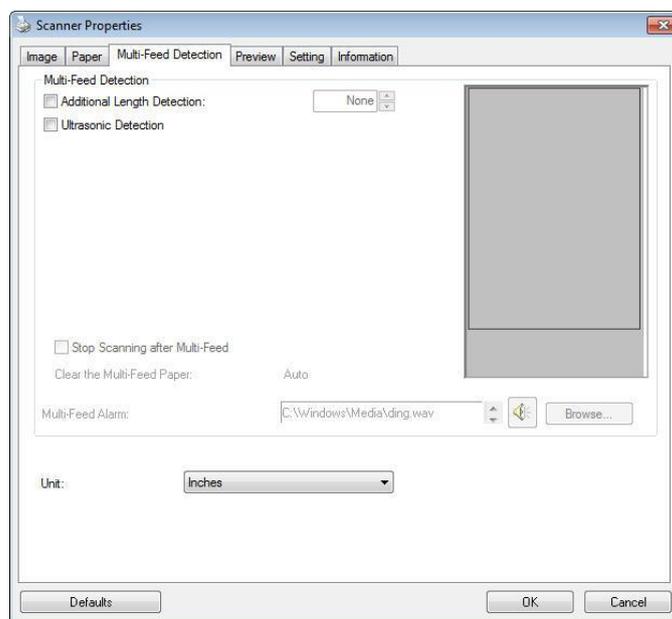


Black Background

7.7 The Multi-Feed Detection Tab

Multi-Feed Detection

Multi-Feed Detection allows you to detect overlapped document that go through the auto document feeder. Multi-Feed usually occurs due to stapled documents, adhesives on documents, or electro-statically charged document. Note : The availability of the function varies based on type of scanner.



Additional Length Detection

Additional Length Detection allows you to define the length of document being multi-fed. This value indicates the additional length exceeding your scan area. The Display window will show the size of the document as you change the value. A value of 0 indicates no additional length detection. The Additional Length Detection is best used when scanning same-size documents in the auto document feeder.

Ultrasonic Detection

Ultrasonic Detection allows you to set overlapped document by detecting paper thickness between documents. Note : The availability of the function varies based on type of scanner.

There are two options available if Multi-Feed is detected.

- **Stop Scanning after Multi-Feed**

- If this is selected, the scanner will stop the feeder and prompt a multi-feed warning message. In addition, the multi-feed paper will be ejected from the scanner automatically.

Note: The availability of the [Auto Clear Multi-Feed Paper] feature varies based on scanner type. If your scanner does not support this feature, remove the multi-feed paper manually.

- If this is not selected, the scanner will continue scanning the entire document though multi-feed is detected. After the entire document has been scanned, a multi-feed dialog box will be prompted to indicate the page number which has been detected multi-feed and need to be rescanned.

- **Multi-Feed Alarm**

If a wave file is added, the scanner will make a sound alarm if multi-feed is detected yet no Warning dialog box will be displayed.

How to add the sound alarm :

1. Click the Browse button on the right side of the speaker icon. The Open dialog box appears.
2. Choose your wave file.
3. Click the Open button. The wave file is added.

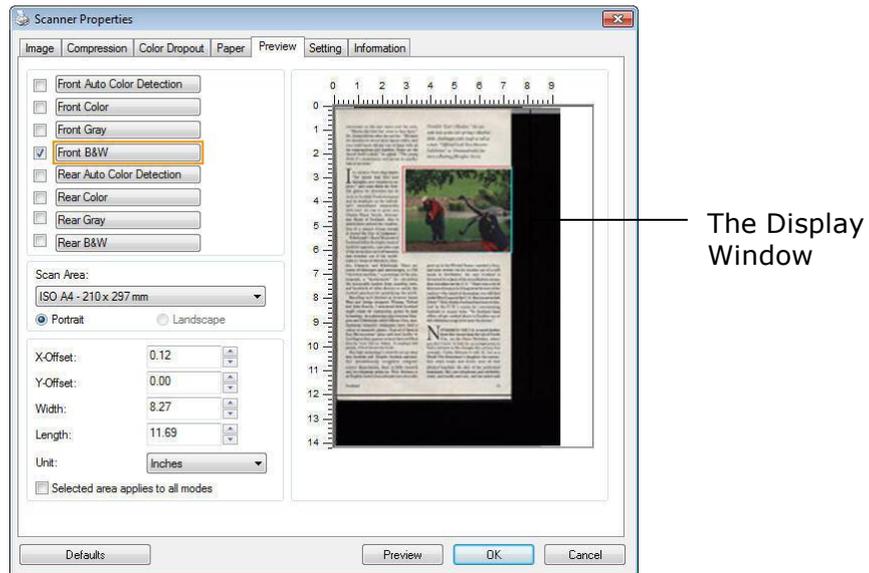
Units

Defines the primary measurement system. **Inches, Millimeters,** and **Pixels** are available.

7.8 The Preview Tab

The Preview tab allows you to preview (a low-resolution scan) your image before final scan. This preview image lets you allocate your scan area. You can choose your scan area by the "Scan Area" drop down list box or placing your cursor on the Display window and dragging it diagonally on the Display window. Then, a red rectangle box will appear to indicate the selected area.

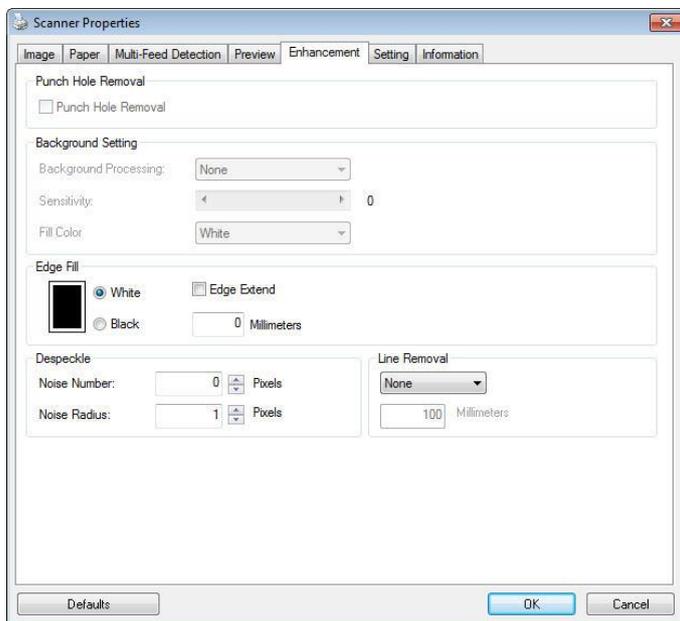
Note: If you choose "Automatic Cropping" on the "Paper Tab", then to select a scan area on the Preview tab is not allowed.



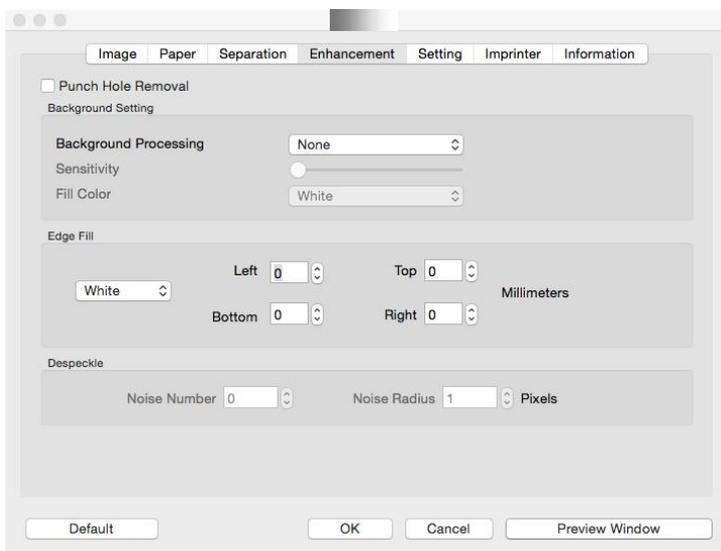
The Preview Tab (Windows)

7.9 The Enhancement Tab

The Enhancement tab allows you to set following additional image processing settings.



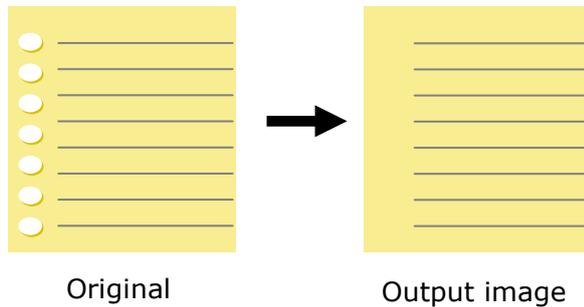
The Enhancement tab dialog box (Windows)



The Enhancement tab dialog box (Mac OS)

Punch Hole Removal

You can remove punch holes from the output scanned image when scanning punched document. Note the availability of this feature varies depending on your scanner model.



Punch holes can not be removed when:

- Resolution is set lower than 150dpi
- The hole is near the edge of the document
- The holes are not aligned along the edge of the document
- Punch Hole Removal is available only when "Auto Crop" is enabled. If either "Fixed to Transport", "EOP (End of Page) Detection", "Automatic Multiple", "Relative to Documents" is selected from the Cropping option on the Paper tab, the Punch Hole Removal option will be disabled.

Shadow Removal

When 「Flatbed」 on the 「Scan Source」 option is selected on the 「Image」 tab, the 「Shadow Removal」 option will be enabled. Click to remove the shadow on the book spine when scanning a book.



Before Shadow Removal



After Shadow Removal

Background Processing: The [**Background Processing**] option allows you to smooth background color or remove it to make image clearer. The option is especially useful for documents with color forms such as invoices.

Choices: None (default), Smooth, Removal

- **None** - no background processing will be performed (default)
- **Smooth** - produces images with a more uniform background color. This option improves image quality.
- **Removal** - identifies the background color and then removes it.

Sensitivity: Choice: 0, 1, 2, 3, 4. Default: 0

- The higher the value, the more background color will be kept.

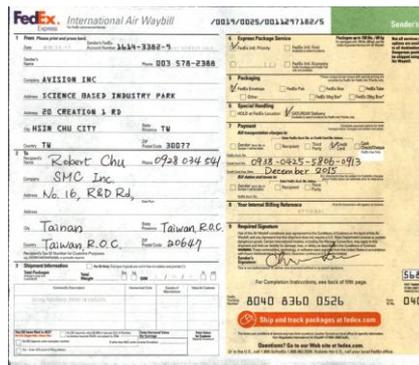
Mode: Auto, Moiré

If [**Smooth**] is selected in the [**Background Processing**] option, then the choices for the [**Mode**] option includes Auto, and Moiré.

- **Auto** - uses the factory preprogrammed mode to proceed background smoothing.
- **Moiré** - Remove the moiré patterns that appear on the background of the image when scanning printed material.

If [**Removal**] is selected in the [**Background Processing**] option, then the [**Mode**] option will be replaced with [**Fill Color**]. Choices: White, Auto.

- **White** - identifies the background color and substitutes it with white.
- **Auto** - identifies the background color and substitutes it with the color of the largest background zone.



Background Processing: None



Background Processing:
Smooth



Background Processing:
Removal
Fill Color: White

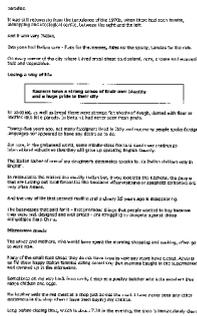


NOTE:

Background color in small zone will not be processed or removed.

Edge Fill

Check White or Black if you wish to add white or black edge on the border of your scanned image. Enter the value from 0 to 5 mm. Default value is 0.



Original

Edge Fill: 5mm (Black)

If you want to add a white or black frame on the edges of the scanned image, check "Edge Extension".

The default value is 0. The maximum value is half of the short side of the selected scan area.

For example, if you choose an A4 size (8.26 "X11.69"), then the maximum value of the white or black box is 4.14" (half of "8.26").

Despeckle

Occasionally small dots or specks appear in the background of a scanned image. Remove unwanted speckles provides a cleaner image for OCR (Optical Character Recognition) processing, and also helps to reduce compressed file size.

Define the speckles (also known as image noise) you wish to remove by specifying its number (size) and radius (range). The measuring unit is pixel. The higher the number, the more speckles will be removed.

<p><i>A</i> plague on thee! Hast thou never an eye in thy head? Canst not hear? —The First Part of King Henry the Fourth: 2.1.26–27 A carrier to Gadshill, the host of a tavern.</p>	<p><i>A</i> plague on thee! Hast thou never an eye in thy head? Canst not hear? —The First Part of King Henry the Fourth: 2.1.26–27 A carrier to Gadshill, the host of a tavern.</p>
<p>Before Despeckle (noise number:0, noise radius:1)</p>	<p>After Despeckle (noise number:22, noise radius:10)</p>

NOTE:



- The function is currently available for Black and White image only.
- To scan at rated speed, it is recommended to set the noise radius up to 10 pixels.

Line Removal: When **Black and White** image mode is selected on the [Image] tab, the [Line Removal] option will be enabled. Line Removal erases lines on the image and then reconstructs characters so the OCR (Optical Character Recognition) accuracy can be improved.

Choices: None, Form, Horizontal, Vertical

None – the default mode which does not remove any line.

Form – remove any form in the document.

Horizontal – select [Horizontal] and then enter the length of horizontal line to remove only the horizontal line exceeding your specified length.

Vertical – select [Vertical] and then enter the length of vertical line to remove only the vertical line exceeding your specified length.

Attn: Mr. David Wang

Shipped by SST Technologies Inc. For U-Line Express

Sailing on or about July 30, 2002 From Taiwan, R.O.C. to U.S.A.

L/C No. Contract No. A1233

Marks & Nos.	Description of Goods	Quantity	Unit Price	Amount
ABC	Amernet (Item No. 100)	3 sets	USD20.00	USD60.00
	Amernet (Item No. 101)	3 sets	USD20.00	USD60.00
	Amernet (Item No. 102)	3 sets	USD20.00	USD60.00
Seattle P/O No. A1233 C/O No. 1 Made in Taiwan R.O.C.				
Total		9 sets		USD120.00

None

Attn: Mr. David Wang

Shipped by SST Technologies Inc. For U-Line Express

Sailing on or about July 30, 2002 From Taiwan, R.O.C. to U.S.A.

L/C No. Contract No. A1233

Marks & Nos.	Description of Goods	Quantity	Unit Price	Amount
ABC	Amernet (Item No. 100)	3 sets	USD20.00	USD60.00
	Amernet (Item No. 101)	3 sets	USD20.00	USD60.00
	Amernet (Item No. 102)	3 sets	USD20.00	USD60.00
Seattle P/O No. A1233 C/O No. 1 Made in Taiwan R.O.C.				
Total		9 sets		USD120.00

Remove Form

Attn: Mr. David Wang

Shipped by SST Technologies Inc. For U-Line Express

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	Amernet (Item No. 101)	3 sets	USD20.00	USD60.00
	Amernet (Item No. 102)	3 sets	USD20.00	USD60.00
Seattle P/O No. A1233 C/O No. 1 Made in Taiwan R.O.C.				
Total		9 sets		USD120.00

**Remove Horizontal Line
(over 30 mm)**

Attn: Mr. David Wang

Shipped by SST Technologies Inc. For U-Line Express

Sailing on or about July 30, 2002 From Taiwan, R.O.C. to U.S.A.

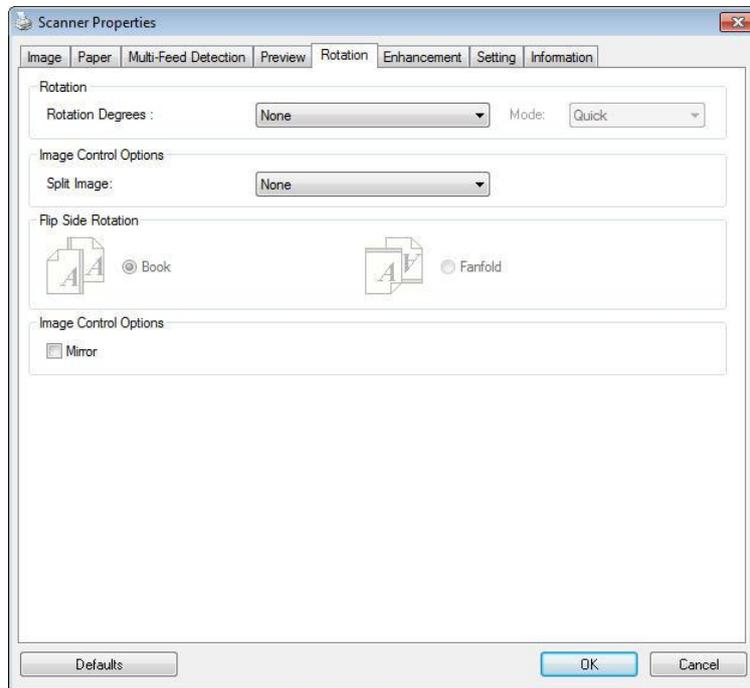
L/C No. Contract No. A1233

Marks & Nos.	Description of Goods	Quantity	Unit Price	Amount
ABC	Amernet (Item No. 100)	3 sets	USD20.00	USD60.00
	Amernet (Item No. 101)	3 sets	USD20.00	USD60.00
	Amernet (Item No. 102)	3 sets	USD20.00	USD60.00
Seattle P/O No. A1233 C/O No. 1 Made in Taiwan R.O.C.				
Total		9 sets		USD120.00

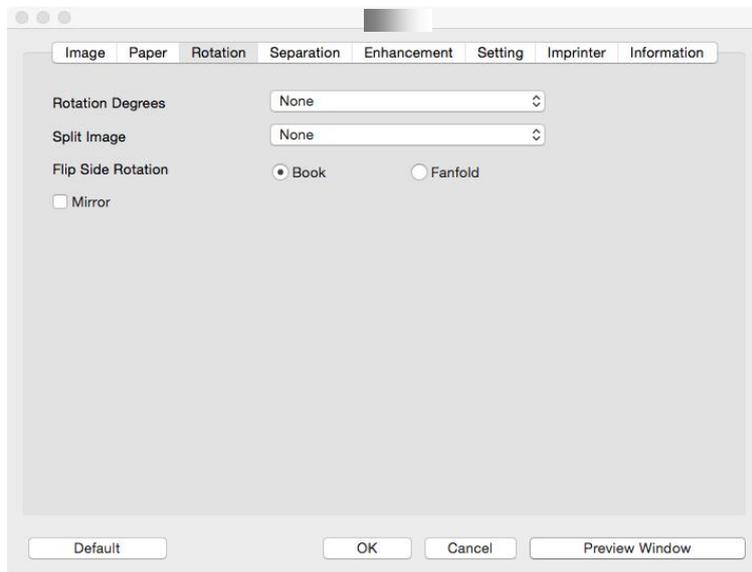
**Remove Vertical Line
(over 70 mm)**

7.10 The Rotation Tab

The Rotation tab allows you to set the following image rotating options:



The Rotation Tab (Windows)



The Rotation Tab (Mac OS)

Rotate Image

Choose the rotation angle from the drop down list if you wish to rotate your scanned image.

Choice: None, 90°CW(clockwise), 90°CCW(counter clockwise), 180°, Auto based on contents. Auto rotate every even page.

1 2 3

Original

1
2
3

Rotate 90°CW

1
2
3

Rotate 90°CCW

1 2 3

Rotate 180°

Auto based on contents: Automatically rotate images based on the contents of document. When 「 **Auto based on contents** 」 is selected, its modes will be enabled to let you select more options.

Mode: Quick, Full Text, Complexity

Quick – the default mode to let you rotate images at the fastest speed.

Full Text – the enhanced mode for documents with mixed text orientation.

Complexity – the enhanced mode yet at the slowest speed for document with complex image or text orientation.

Auto rotate every even page:

Automatically rotate 180° on every even page. This is especially useful when you scan the inside pages from a book. As a result, if you choose "Flatbed (book)" from the "Scan Source" option, "auto rotate every even page" will be selected as default.

Note: This option varies based on type of scanner.



Document with various text orientations



Document with dark or complex background

Split Image By splitting an image, two separate images are created horizontally or vertically. This is useful for documents containing two pages per image when you want to save them as two images (one page for one image). **Choice: None, Horizontal, Vertical.** Default is None.

Horizontal: Divide one image into the upper half and the lower half.

Vertical: Divide one image into the left half and the right half.



Split Horizontally

Split Vertically

Flip Side Rotation

Select "fanfold" to rotate the image of the reverse side to 180 degrees.

This is applied to double-sided document which are viewed in portrait are sometime fed into the scanner in landscape or vice versa.

Choice: Book, Fanfold.

If "Book" is selected, the image of the reverse side will not be rotated.

The following illustration shows the documents which should be viewed in portrait are fed into the scanner in landscape



**Image
Control
Option**

Check the Mirror box if you wish to reverse the right and left side of your image.



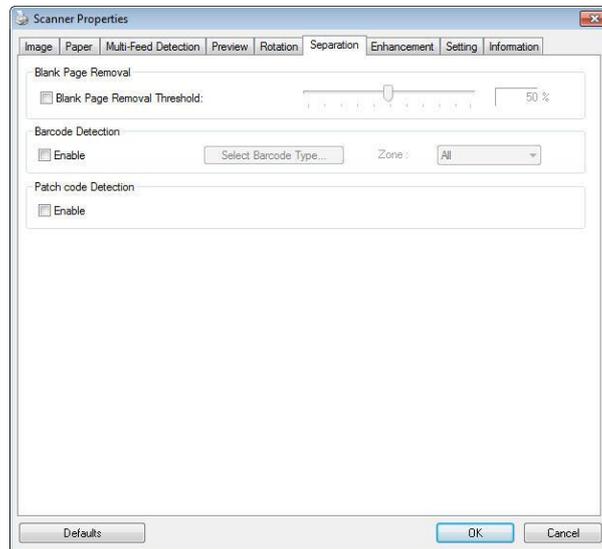
Original



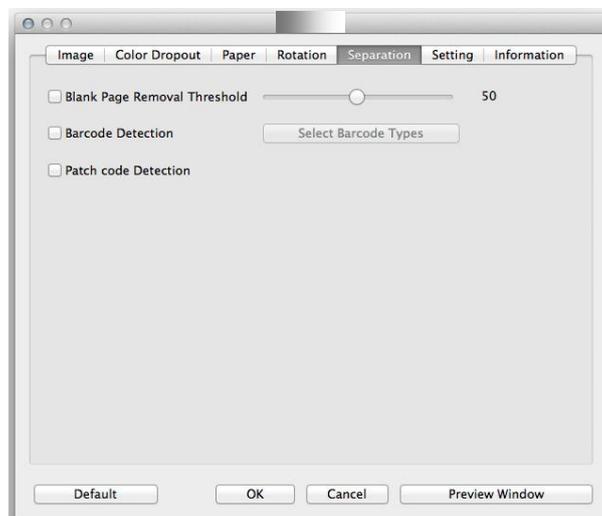
The Mirror Effect

7.11 The Separation Tab

The Separation tab allows you to enable the detection engine to detect the blank page, barcode, and patch code and then notify the software application which supports document separation to separate your multi-page documents. Choices: Blank Page Removal, Barcode Detection, Patch Code Detection.



The Separation Tab (Windows)



The Separation Tab (Mac OS)

Blank Page Removal

Choices: None, Blank Page Removal Threshold, Image Size.

None – Do not remove the blank pages.

Threshold - Move the slider to the left or right to define your threshold for the blank page.

Image Size – Range: 1~ 10000 KB. Specify your desired image size to detect the page as a blank page. For example, if 3 KB is selected, any page less than 3 KB will be recognized as blank page.

When the bar code has been detected successfully, a file [avbarcode.ini] will be created and stored in the following path (Windows):

Windows 7, Windows 8, Windows 10: C:\ProgramData\%PRODUCTNAME%

Barcode Detection:

Check [**Enable**] to detect barcode and notify the software application for advanced processing. Please note the whole document will be checked and no specific detection area needs to be designated.

Barcode Types:

The following barcode types can be detected.

Two-dimensional codes

- Aztec
- DataMatrix
- PDF417
- QR Code

One-dimensional barcodes:

- Add-2
- Add-5
- Australian Post 4-State
- BCD Matrix
- Codabar
- Code 128
- Code 32
- Code 39
- Code 93
- DataLogic 2 of 5
- EAN 128
- EAN-13
- EAN-8
- GS1 DataBar
- Industrial 2 of 5
- Intelligent Mail
- Interleaved 2 of 5
- Inverted 2 of 5
- IATA 2 of 5
- Matrix 2 of 5
- PostNet
- Royal Post 4-State
- UPC-A
- UPC-E

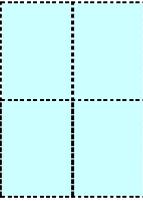
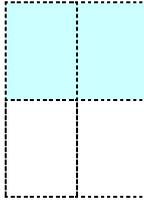
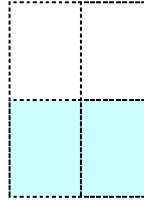
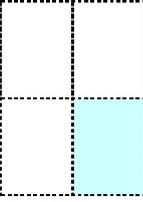
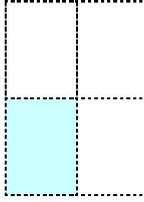
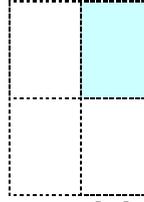
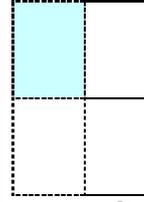
Barcode Zone:

Specify the barcode zone to be detected.

Select 「**All**」 to check the whole document and detect barcodes. Or you may speed up the process by specifying a detection area since only the specified area is checked.

Choice: All, Top, Bottom, Left, Right, Bottom Right, Bottom Left, Top Right, Top Left

Choice for barcode zone on a page:

				
All	Top	Bottom	Left	Right
				
Bottom Right	Bottom Left	Top Right	Top Left	

NOTE:

- Recommended resolution: 200~600 dpi for regular barcode, 300~600 dpi for QR code.
- Skewed barcodes may not be recognized correctly.
- Using the same sheet repeatedly may decrease the recognition accuracy due to accumulated dirt on the sheets. If the sheet is not recognized correctly or gets smudged, replace it with a new sheet.

Patch code Detection:

Check [**Enable**] to detect patch codes and notify the software application for advanced processing.

A patch code is a pattern of parallel, alternating black bars and spaces (i.e. a barcode) that is printed on a document. Patch code sheet is most commonly used as a document separator in a stack of document.

You can find various sizes of patch codes (PDF) by choosing **[Start]** menu>**[All Programs]**>**[Avision Scanner Series]**>**[Patch code]** in succession. Simply print the PDF file to produce the patch code sheet. Insert the patch code sheets to wherever you want the file to separate.



Patch code sheet

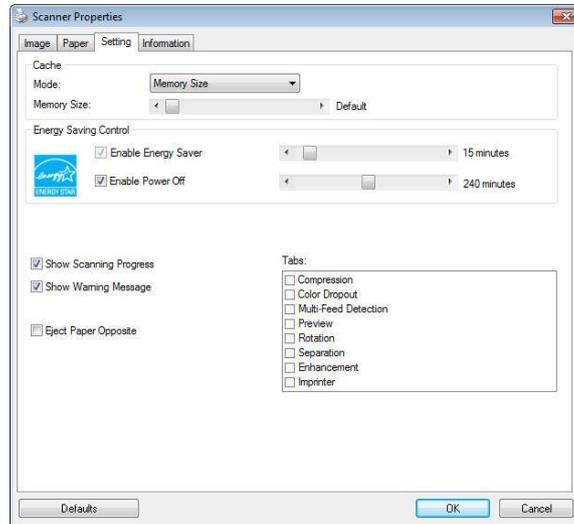
NOTES TO PRINT THE PATCH CODES:



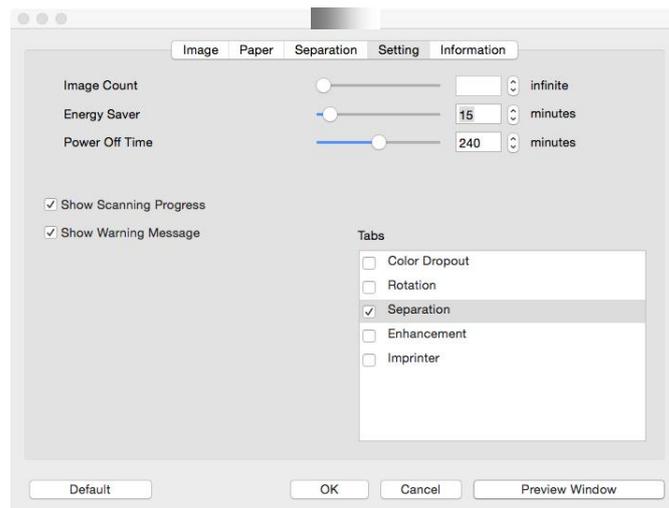
- Use blank white paper.
- Set the scaling to 100%. The sheet is not recognized correctly when printed in a size smaller than the original.
- Do not use toner saving mode. The sheet is not recognized correctly when the print is too light.
- Do not use thin paper in order to avoid bleed-through from the back.
- When you copy a patch code sheet that you printed out, make sure to copy by the same size and brightness as the original copy.
- Use the same sheet repeatedly may decrease the recognition accuracy due to accumulated dirt on the sheets. If the sheet is not recognized correctly or gets smudged, replace it with a new sheet.

7.12 The Setting Tab

The Setting tab allows you to set the following settings:



The Setting tab dialog box (Windows)



The Setting tab dialog box (Mac OS)

Energy Saving Control

Check the **Enable Energy Saver** box and move the slider to set the amount of time to start the energy saver after your last action. The range is from 1 to 60 minutes.

Enable Power Off

Check the **Enable Power Off** box and move the slider to set the amount of time to automatically turn off the scanner after your last action. The range is from 1 to 480 minutes. The default is 240 minutes (4 hours). Note the value of "Power Off" has to be greater than or equal to the value of "Energy Saving".

Cache**Mode: None, Page Number, Memory Size.**

This option allows you to assign a specified memory size from the available RAM to process the image data. By specifying a smaller memory size, you can free more memory for other applications you are running. By specifying a larger memory size, you can have more memory to process the image data especially when you have a large amount of documents needed to be scanned.

You can also specify your memory size by the page number. For your information, an A4 color document scanning at 300 dpi consumes approximately 24MB.

Image Count

When the selected cache mode is "none", the image count option allows you to assign number of pages you need to scan. For example, if you wish to scan the first two pages, simply move the page slider to 2, and the scan action will be stopped when the scanning of the first two pages have been completed.

Show Scanning Progress

Check and the scanning progress bar will be shown during scanning.

Show Warning Message

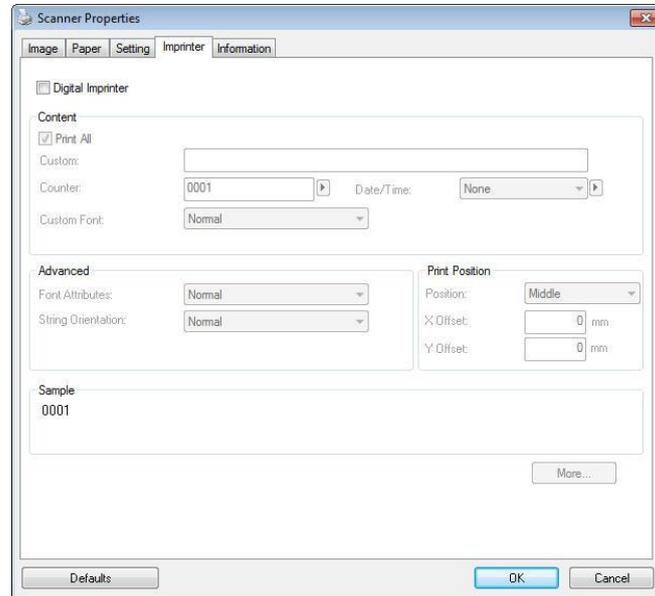
Check to show the warning messages such as "ADF pad count exceeds 50,000 scans (the number varies based on type of scanner). Please replace the ADF pad and reset the pad count."

Save Settings after Closing

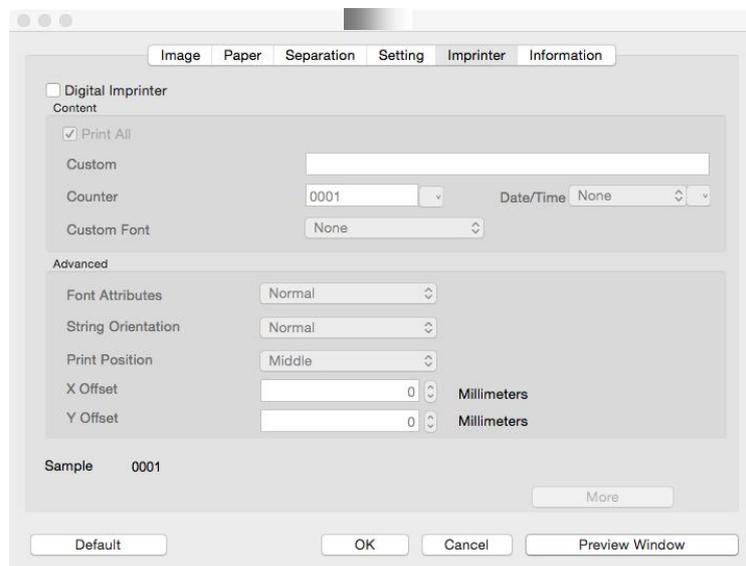
Check to save your scanner properties settings after leaving the dialog box. Next time when you open the Scanner Properties dialog box, the previously saved settings will be shown.

7.13 The Imprinter Tab

The Imprinter tab allows you to print alphanumeric characters, date, time, document count and custom message on your scanned image if digital imprinter is selected or at the back of your document if external imprinter is selected.



The Imprinter Dialog Box (Windows)



The Imprinter Dialog Box (Mac OS)

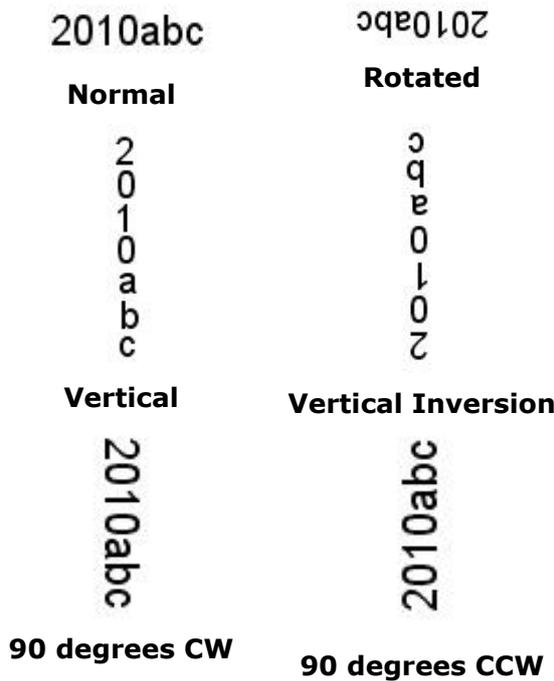
Contents

Print All	Check Print All to automatically print the text at all pages of your documents. Uncheck Print All to print the text for the first page of your documents only.
Custom	Enter your custom text to be included in your print string.
Counter	Show the document count for the scan session. This value is increased sequentially by the scanner.
Date/Time	Choose if you wish to include the date and time in your print string. Format: YYYYMMDDHHSS For example, 20090402170645-check0001 indicates year, month, date, hour, seconds, your custom text and the counter.
Custom Font	Choose your desired font. Choice: Normal, Fixed Width Fixed Width (Mono spaced) fonts have a fixed character spacing. So each character occupies the same width.

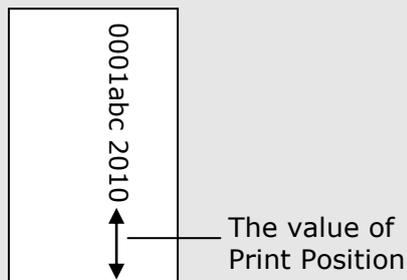
Advanced

Font Attributes	Choose your font attributes. Choice: Normal, Underline, Double, and Bold.
------------------------	--

String Orientation Choose your string orientation.
Choice: Normal, Rotated, Vertical, Vertical Inversion, 90 degrees CW, 90 degrees CCW



Print Position Choose the position you wish to print your string. Move the slider to the right to increase the value or to the left to decrease the value. Range: 0~355mm, default:0 mm
 The value indicates the height from the bottom of your paper to the last letter of your string. This option is available only if an external imprinter is installed.



Print Position (for digital imprinter)

Choose the position of your printed string. **Choice: Top, Middle, Bottom, Custom.** If Custom is selected, enter the X and Y offset value to specify the position.

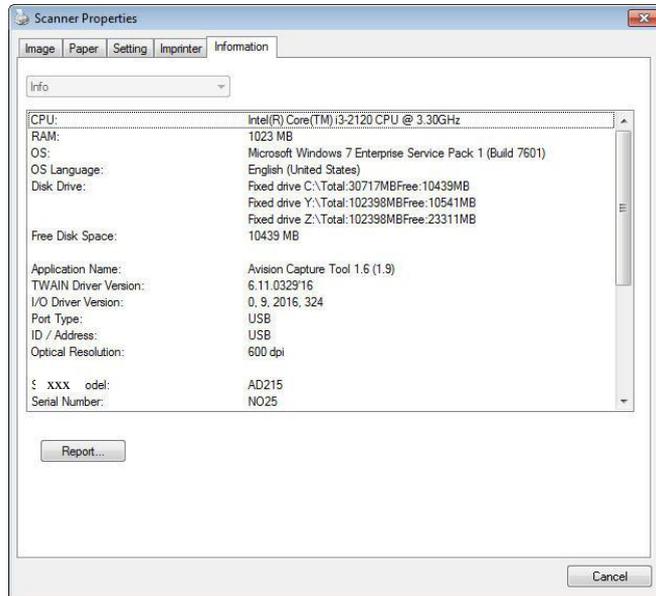
More: Click the [More] button to display more font options. This option is available for digital imprinter (stamp text on your scanned image) only. This function is not available on some models.

Font size: Move the slider to change the font size from 1 to 10. **Density:** Move the slider to change the source density from 0 to 255. The selected density will appear at the same time.

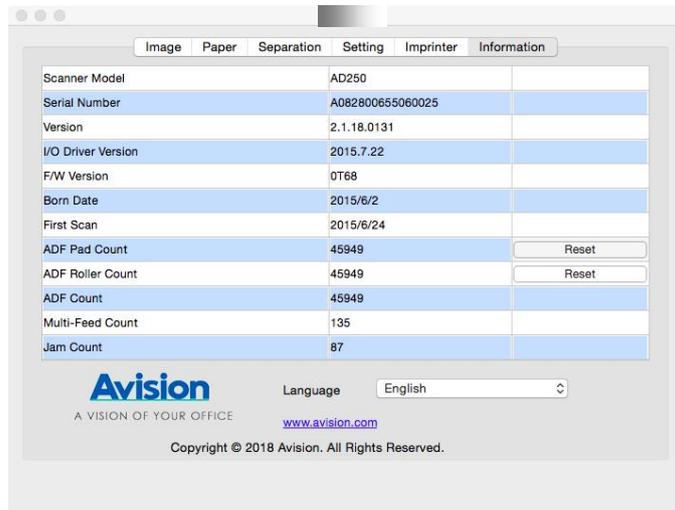
Transparency: Move the slider to choose an appropriate transparency value from 0% (not transparent) to 100% (completely transparent) so that your text can be partially transparent and you can see the background image.

7.14 The Information Tab

The Information tab displays the following system and scanner information.



The Information tab dialog box (Windows)



The Information tab dialog box (Windows)

The "Report" button : (Windows only)

If you encounter any error message while using the scanner, click the Report button. A report.txt file [Windows XP: C:\Documents and Settings\All Users\Application Data%\PRODUCTNAME%; Vista, Windows 7, Windows 8, Windows 10: C:\ProgramData%\PRODUCTNAME% (C: system drive)] will be generated. Please send this file to the nearest service center for trouble shooting.

The "Reset Roller Count" button :

After scanning over a recommended number of pages through the ADF, the ADF roller may be worn out and you may experience problems with document feeding. In this case, it is highly recommended to replace the ADF roller with a new one. (Note the replacement of the ADF roller has to be performed only by authorized service center. Therefore, please return your scanner for roller replacement.) After replacing the ADF roller, click the "**Reset Roller Count**" button to reset the roller count.

**NOTE:**

The lifetime and the replacing procedure vary based on type of scanner.

8. Using the Button

8.1 Installing the Software

Windows

Install PaperAir software application on our website at www://avision.com/download.

Mac

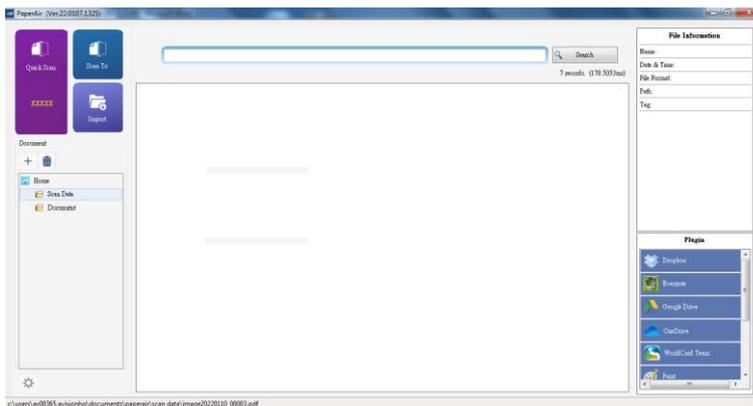
Install PaperAir software application on our website at www://avision.com/download.

PaperAir provides you an easy way to scan your document and then link the scanned image to your designated software application. All this can be done by a simple touch of the button on the scanner. Yet, before you scan, it is recommended to check the button configurations first to ensure a proper file format and a destination application.

8.2 Checking the Button Configurations before Scanning

Windows

1. Make sure that the scanner driver has been installed on your computer, the scanner has been connected to your computer, and the scanner has been turned on.
2. After the PaperAir software application has been properly installed, the PaperAir will be automatically started. The main window of PaperAir will be displayed and the PaperAir icon will be displayed both on the Start menu and the toolbar as shown in below.

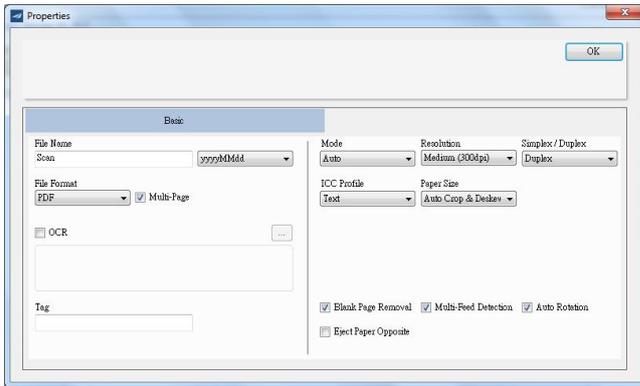


The main window of PaperAir



PaperAir icon will be displayed at the Start menu and the toolbar.

2. Right-click the [**Quick Scan**] button. A default [**Scan Setting**] dialog box will be displayed.

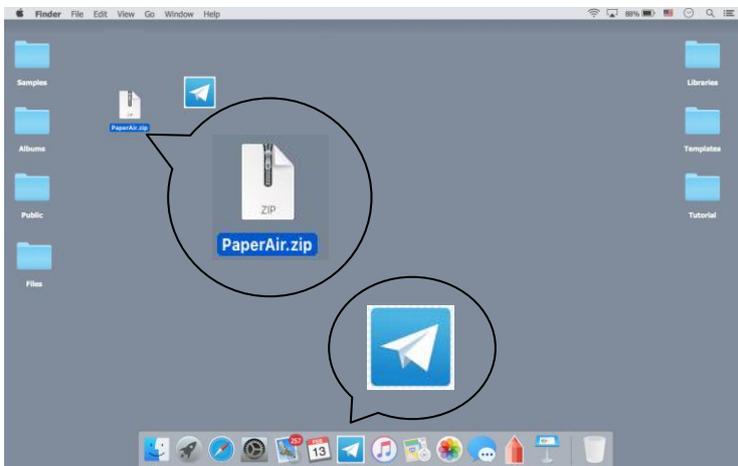


If you wish to change the setting, use this window to reset the setting for the file format, destination application, or other scan settings.

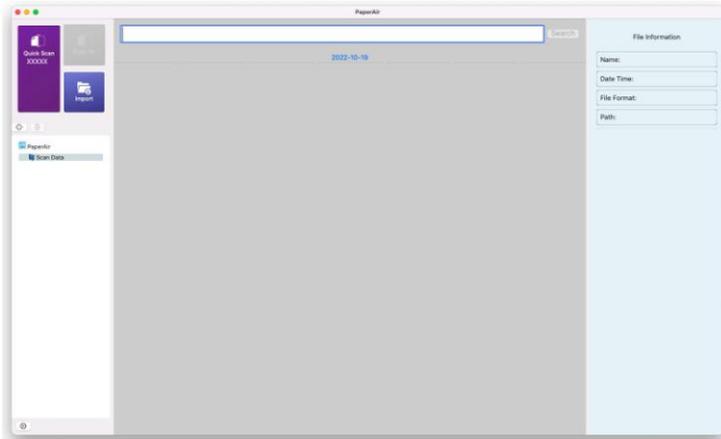
3. Click the OK button to leave the window.

Macintosh

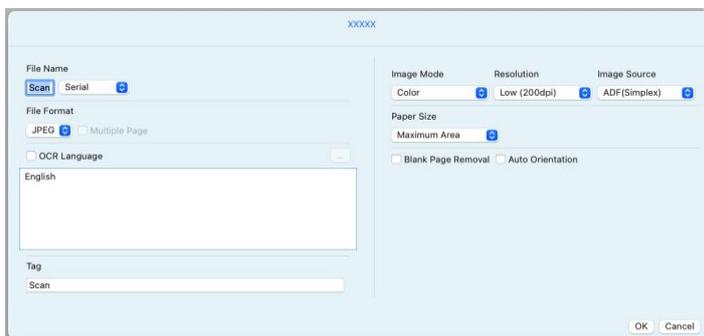
1. Open the PaperAir zip file  on your desktop. The PaperAir app icon will be prompted and the PaperAir app shortcut will be displayed on your dock.



2. Double-click the PaperAir icon , the PaperAir main window will be displayed.



3. Right-click the [Quick Scan] button. The Scan Settings window appears.



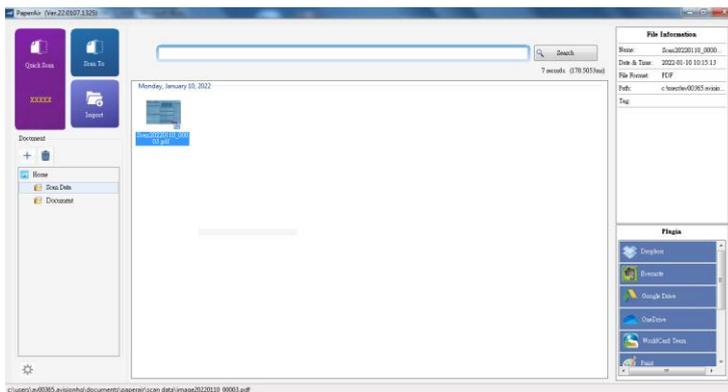
If you wish to change the setting, use this window to reset the setting for the file format, destination application, or other scan settings.

4. Click the OK button to leave the window.

8.3 Scanning From One Touch of the Buttons

Windows

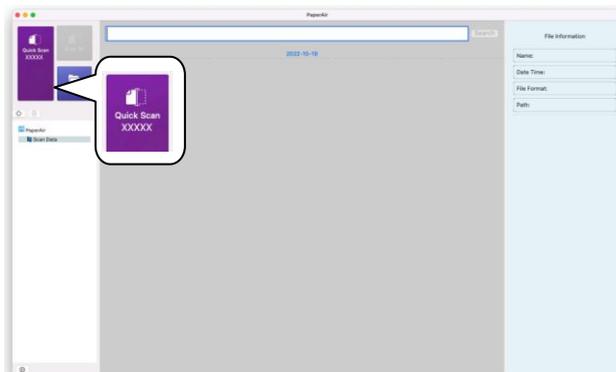
1. Click the **Quick Scan** button on the main window of PaperAir.
Or press the **Scan** button on the scanner.
2. In a second, a thumbnail image of your document will be displayed.
3. Click the thumbnail image, the file path to store the image will be displayed in the bottom-left corner and more file information will be shown in the right pane as indicated.



Note: For more detailed information on how to use PaperAir, please refer to the user's manual.

Macintosh

1. Load paper into the feeder.
2. Click the **Quick Scan** button on the main window of PaperAir.



3. A scan will be started. In a second, a thumbnail image of your document will be displayed.

9. Maintenance

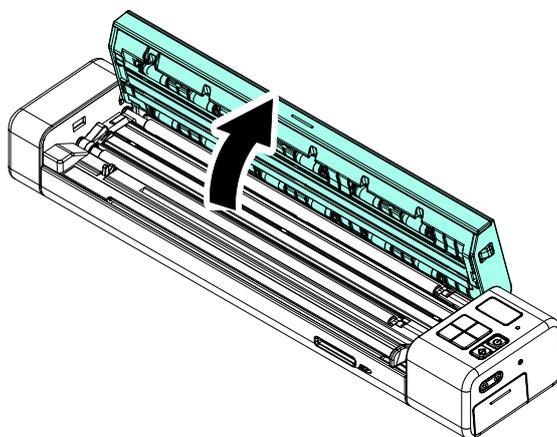
9.1 Cleaning the Scanner Glass, and Rollers

If the scanned images contain streaks or scanned documents become dirty, the scanning glass, and roller inside the scanner are likely to be dirty. Clean them periodically.

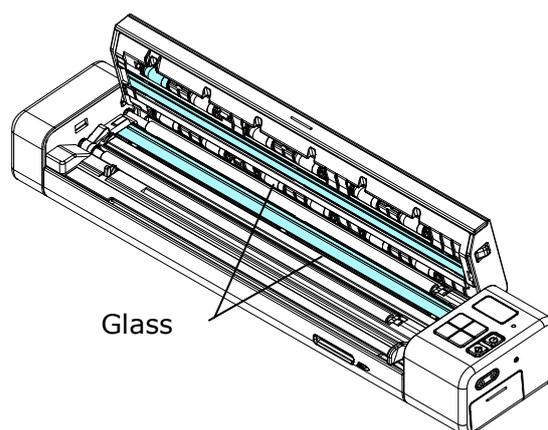
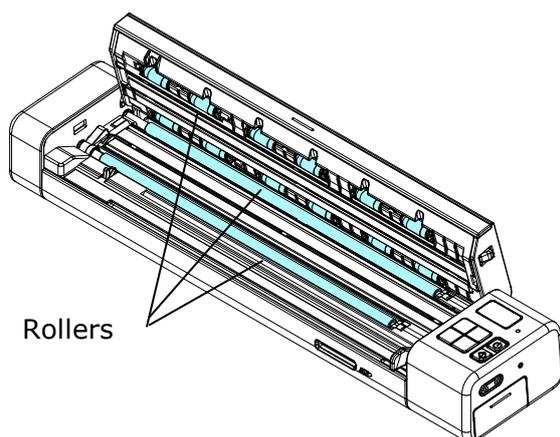
Use only the recommended or supplied tool to clean the scanner and feeder dock.

Cleaning steps:

1. Open the feeder cover.



2. Wipe rollers and the glass with the included cleaning cloth.



Note:

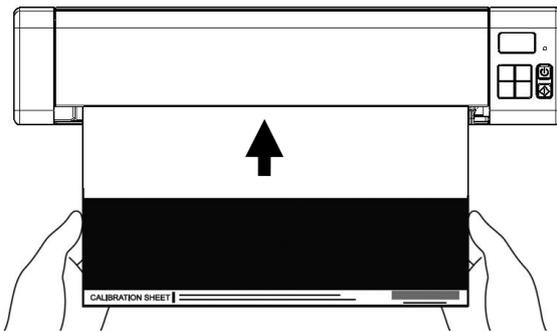
- Adding some isopropyl alcohol (95%) on the cleaning cloth is more efficient when cleaning the rollers.
- Do not use any solvents or corrosive liquid (*i.e., alcohol, kerosene, etc.*) to clean any part of the scanner, otherwise the plastic material will be permanently damaged.
- Make sure the surface of the document or photo doesn't have any paper clips, etc. or this could damage the scanner glass lens.

9.2 Calibrating the Scanner

Calibrate only if the scanned image looks fuzzy, the color looks abnormal (e.g., darker than normal), after more than 8,000 scans, or the scanner has been stored without use for a long time. The calibration process resets the Contact Image Sensor to resume its color and sharpness precision.

Calibrate the scanner on the control panel:

1. Turn on the scanner.
2. To enter the calibration mode, press [**Menu**] and ◀ / ▶ until [**CAL**] is displayed.
3. Hold the edges of the calibration sheet (*included*) and insert it with the text **FACE DOWN** and the white area feeding first to the feeder at the back of the scanner as shown.
4. Press the [**Start/OK**] button.
5. Calibration card will be fed through. The Power LED blinks in green color.

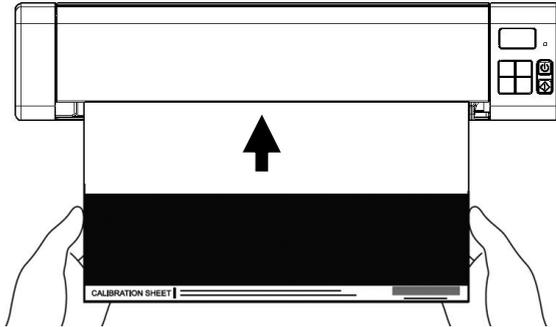


6. After the calibration process is finished, [**OK**] will be displayed on the screen.

Calibrate the Scanner in PC mode:

Alternatively, you may also follow these steps to calibrate the scanner in PC mode.

1. Turn on the scanner.
2. Switch to PC mode by pressing the [**Start/OK**] button on the scanner until the LCD screen shows [**PC**].
3. Start Capture Tool by choosing Start>All Programs>Avision Meta Mobile 20 Scanner>Avision Capture Tool.
4. Select "**Avision Metal Mobile 20**" as your scanner model. The main window of Capture Tool will be displayed.
5. Choose the "**Setting**" tab and then the "**Calibration**" button.
6. Load your calibration sheet to the feeder at the back of the scanner as shown.



7. The calibration card will be fed through and LCD screen shows "**Cal**".
8. After the calibration process is finished, [**OK**] will be displayed on the screen.

Warning:

If the calibration process failed, the Red LED will be flashing and [**E19**] will be displayed on the screen. Power off the scanner and then repeat the calibration step again.

Warning:

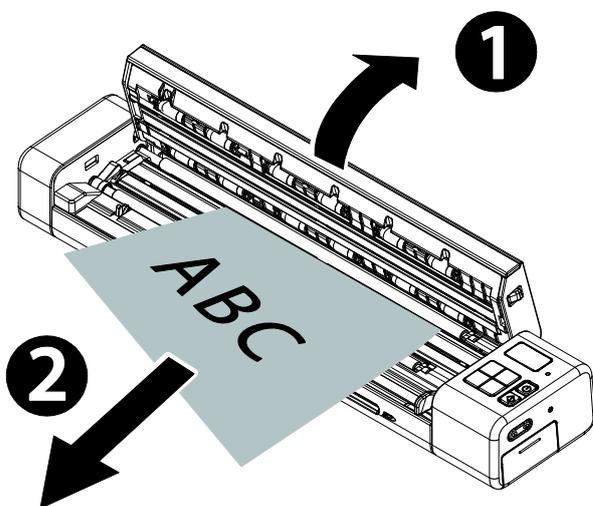
- Do not interrupt the calibration sequence or try to shut off the device while it is calibrating. If you stop the calibration before it has completed, a calibration error may occur. As a result, you will have to power off the unit and repeat the instructions in this section.
 - Calibrate the scanner only when color of the scanned image looks abnormal.
 - Keep the calibration sheet from dust and debris. Any dirt may make the calibration chart invalid or impact the calibration result.
 - Use only the included calibration sheet to calibrate the scanner.
-

10. Troubleshooting

10.1 Clearing a paper jam

In the event of a paper jam, follow the procedures below to remove the paper:

1. Gently open the feeder cover.
2. Carefully pull the paper out of the feed tray.



3. Close the feeder cover. Your Scanner is now ready to use.

10.2 Error Conditions

If there is error during scanning, the LED light will be flashing in red color and error codes will be displayed. Refer to the following table to clear the error conditions.

Error Code/Meaning	Cause	How to restore
E03 Storage error	Storage is full; can not save image to storage device. Storage device not recognized.	Free more space or insert a new SD card. Format your storage device.
E04 Paper jam	1. Original has become stuck in the feeder. 2. Original exceeds max. length [300 dpi: 36" (914mm), 600 dpi: 14" (356mm)]	Open the feeder cover and pull the original out of the feeder.
E05 No image scanned	No scan data detected.	Wait until error disappears.
E06 Cover opens	Feeder cover opens.	Close the feeder cover.
E08 Low battery	Battery power getting low.	Recharge the battery.
E19 Calibration Fails	Internal check failed and found calibration data error	Recalibrate the scanner (see the "Calibrate Scanner" section).

*** Warning:**

If "low battery" is indicated on the LCD display, it is recommended to recharge the battery to prevent possible incomplete scanned images or other operational problems.

10.3 Frequently asked questions and answers

General:

Q :	Paper becomes skewed in the scanner.
A :	<ol style="list-style-type: none">1. Align the document guides to fit the documents as closely as possible and place the documents so that they feed in straight.2. Check the condition of the feeding roller. If necessary, follow the cleaning directions in Section 9.1 and perform the cleaning.
Q :	Why does not my scanner turn on?
A :	The batteries may not enough power or may not be inserted correctly.
Q :	Why doesn't my computer recognize my scanner when it's connected via USB cable?
A :	Make sure the cable connection is correct and secure. Restart the computer if necessary.
Q :	Why there is a red or gray background with lines on my scanned image?
A :	The scanner does not enough power to perform a scan. Charge your batteries and restart the scan.

Q :	Why there are strange lines on the scanned document?
A :	<p>Please check the following:</p> <ol style="list-style-type: none"> 1. Are there scratches on the original or is the original clean ? 2. Remove any stains or dust from the original before scanning. 3. Clean the rollers and glass with the included cleaning cloth. (Refer to the section "Cleaning the Rollers and Glass))

Q :	Should the scanner feel warm to the touch?
A :	<p>It is normal for the scanner to emit a small amount of heat after prolonged use. However, if there are strange odors coming from the scanner or the scanner feels a little bit hot to the touch, turn the scanner off immediately.</p>

SD Mode:

Q :	The image can not be saved into the memory card while scanning?
A :	<p>Make sure you have a SD card inserted correctly, and that it has adequate space.</p>

PC Mode:

Q :	Why does my scanned image always come out too dark?
A :	<ol style="list-style-type: none"> 1. Please adjust the screen settings to sRGB. 2. Please adjust the brightness settings on the screen from application software.

Q :	When I choose optical resolution to be 600 dpi, the "auto crop" and "deskew" functions will be disabled.
A :	<p>Since to perform auto crop and deskew consumes a great deal of system memory, it is suggested if you wish to perform "auto crop" and "deskew" functions, please choose your optical resolution to be smaller than 600 dpi to prevent a error message.</p>

Wi-Fi Mode:

Q :	Why can't I see the Scanner's Wi-Fi Network name (SSID) [SSID]?
A :	Make sure you have slid the [Wi-Fi] switch to the [On] position and the Wi-Fi indicator light is lit on the LCD screen. If Wi-Fi Access Point is still in countdown mode, wait until the blue Wi-Fi indicator light turned solidly on.
Q :	Will the battery power get used up faster when Wi-Fi mode is on?
A :	Yes. When Wi-Fi mode is on, the scanner does automatically turn off like it does normally. Therefore, it is recommended to turn off the Wi-Fi mode when images have been downloaded onto your computer.
Q :	Why can't I connect to my email or other web related locations/programs after disconnecting from the scanner Wi-Fi network?
A :	To resume your normal Wi-Fi connection, be sure to re-connect your computer, tablet or phone to your usual local Wi-Fi network when you are finished with your scanner connection.
Q :	My browser can't access the AVISION PhotoView window and the AVISION PhotoView slideshow window?
A :	It is probably the proxy settings has been enabled in your device's browser or the URL address of your default page contains "https". In these cases, please enter http://www.google.com or http://10.10.100.1 on the URL address. The AVISION PhotoView page will be displayed.
Q :	Why can't I see my recently scanned images?
A :	Click the "Refresh" button of your browser or delete all browser session cache.

Q :	Why are my files no longer accessible through the Wi-Fi connection?
A :	If using a SD card, do not remove the SD card while you are connected via Wi-Fi. If you have done so, you must restart the scanner to reconnect with Wi-Fi.

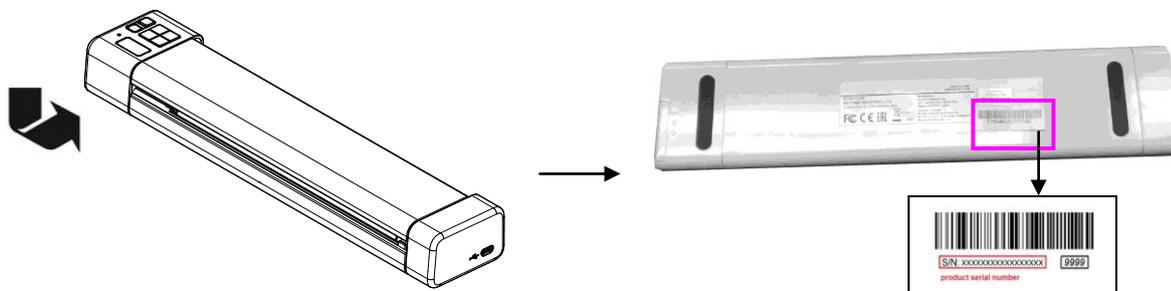
Q :	Why can I still see scanned images deleted from Internet Explorer?
A :	Certain Internet Explorer 7 or 8 SP2 has particular problem to delete selected files and they reappear on SD Card. You can delete through LCD Preview and Delete or through PC-connect to delete physical files using Windows Explorer.

Q :	Are all browsers supported?												
A :	<p>All browsers have different configurations. The following browsers have been tested.</p> <table border="1"> <thead> <tr> <th>Browser Name</th> <th>Version</th> </tr> </thead> <tbody> <tr> <td>Internet Explorer</td> <td>7.0, 8.0, & 9.0</td> </tr> <tr> <td>Chrome</td> <td>19.0 PC and Mac slideshow may not work depending on browser's settings</td> </tr> <tr> <td>Safari</td> <td>6.0 Mac, 5.1.7 PC</td> </tr> <tr> <td>iOS Safari</td> <td>5.1 or later for iPhone, iPad, or iPod</td> </tr> <tr> <td>Android WebKit</td> <td>2.3, 3.01 or later for Android Tablets</td> </tr> </tbody> </table>	Browser Name	Version	Internet Explorer	7.0, 8.0, & 9.0	Chrome	19.0 PC and Mac slideshow may not work depending on browser's settings	Safari	6.0 Mac, 5.1.7 PC	iOS Safari	5.1 or later for iPhone, iPad, or iPod	Android WebKit	2.3, 3.01 or later for Android Tablets
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10.4 Technical Service

Before contact AVISION, please prepare the following information:

- Scanner serial & revision number (located on the bottom of the scanner);



- Hardware configuration (e.g., your host CPU type, RAM size, free disk space, display card, interface card);

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11. Specifications

Specifications are subject to change without notice.

General Specifications:

Item		Description
Regulatory model number		FF-2201B
Image Technology		Contact Image Sensor (CIS)
Scanner Display		1.2" TSN LCD
Max. Document Size		8.5" x 14" (216 x 356 mm)
Long Page Mode		36" (Available for 300 dpi only)
Min. Document Size		3.5" x 2" (88 x 50 mm)
Document Weight		60 ~ 107 g/m ² (16 to 28 lb)
Card Weight		<0.8mm
Auto power off		5 minutes (when auto power off function is active)
Output File Format		JPEG/PDF
Resolution		300 dpi /600 dpi
Support Operating System		Windows XP / Vista / 7 /8, Mac OS 10.5 or later
Interfaces	Memory Card	SD card
	USB	Micro USB port compatible with the USB 2.0
USB Power		5Vdc, 500mA
Battery		Rechargeable Li-ion battery AP-120 (APACK)/CB-PD(NP-120) (City Bright) 3.7V, 1700mAh
Battery Life		200 pages (A4, Color, 300 dpi)
Net Weight		530 g (1.17 lb)
Dimensions (WxDxH)		12.1" x 2.6" x 1.6" (308 x 66.9 x 41.2 mm)
Operating Environment		Temperature: 10°C ~ 35°C (50°F~95°F) Humidity: 10%~85% RH

Wi-Fi Specifications:

Standard	IEEE 802.11 b/g/n standards compliant	
Wireless LAN	1T1R Mode	
Frequency Range	2.400 ~ 2.4835GHz (subject to local regulations)	
Number of Selectable Channels	802.11n: 20MHz/40MHz	
	802.11b/g:	USA, Canada (FCC):11 channels (2.412GHz~2.462GHz) Europe (CE): 13 channels (2.412GHz~2.472GHz) Japan (TELEC): 14 channels (2.412GHz~2.4835GHz)
Data Rate	802.11n: up to 150Mbps 802.11b: 1, 2, 5,5, 11Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps	
Transmit Power(EIRP)	11n HT40 MCS7 : +13 dBm 11g OFDM: +15 dBm 11b CCK: +18 dBm	
Security	WEP 64/128, TKIP, WPA, WPA2 mixed,802.1x and 802.11i	