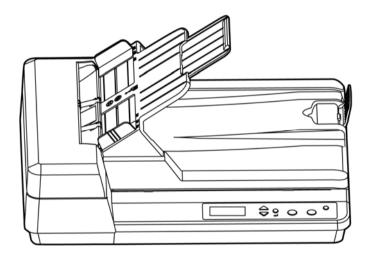
# **Avision**

# **Color Image Scanner**

# **User's Manual**



Regulatory model: DF-1015S/DF-1004S

Avision Inc.

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

- 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 your point of purchase or service representative for additional suggestions.



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



## **European Union Regulatory Notice**

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

- Low Voltage Directive 2006/95/EC
- EMC Directive 2004/108/EC

CE compliance of this product is valid if powered with the correct CE-marked AC adapter provided by Avision.

This product satisfies the Class B limits of EN55022, EN55024 and safety requirements of EN 60950.

\*This machine is certified as Class 1 LED product. This means that this machine does not produce hazardous laser radiation.

## **Disposal of Waste Equipment**



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. Fore 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.

## **System Requirements**

- > IBM compatible PC 586, Pentium or higher
- Microsoft Windows 2000, Windows XP, Windows Vista/Windows 7
- ➤ USB port 2.0 (compatible with USB 1.1)
- At least 100 MB of free hard disk space (500 MB is recommended)
- ➤ At least 128 MB of system memory (512 MB of RAM is recommended)
  - At least 1 GB of RAM for Windows Vista
- A CD-ROM drive

V

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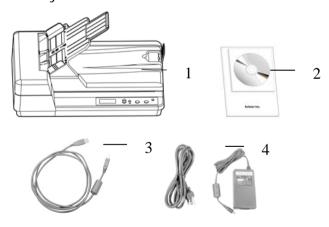
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# 1. Introduction

Congratulations on your purchase of the color image scanner. With this scanner, you can scan documents in a rated speed to increase your productivity.

Before you install and operate the new scanner, please take a few minutes to read through this manual. It provides proper instructions for you to unpack, install, operate and maintain the scanner.

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. Scanner main unit
- 2. Power adapter
- 3. Power cord
- 4. USB cable
- User's manual/CD

#### Note:

- 1. Only use the AC adapter (HEG42-240200-7L made by HiTron or DA-48M24 made by APD) included in the machine. Using other AC adapters may damage the machine and void the warranty.
- 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.

# 2. Scanner Installation

#### **Precautions**

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

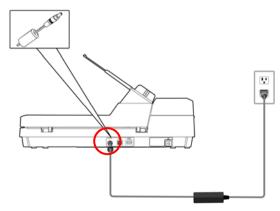
#### 2.1 Installing the Scanner Driver and Cables

#### NOTE:

- 1). The Windows system CD may be required when installing on some PC's.
- 2). To ensure your computer can identify the USB scanner, please install scanner driver first before connecting the scanner to your computer.
- 3). The scanner driver contains both TWAIN driver and WIA driver. If you are running Windows Me, Windows XP, or Windows Vista, after the installation of scanner driver is completed, this scanner allows you to scan via a TWAIN user interface or a WIA (Windows Image Acquisition) interface. Start your TWAIN-compatible image editing software application to select a TWAIN or WIA user interface. Or you might launch Microsoft's Scanner and Camera Wizard to scan via a WIA user interface.

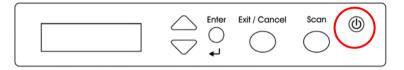
### 2.1.1 Connecting to Power

Plug the small end of the power adaptor into the power jack of your scanner. Insert the other end to an appropriate power outlet.



#### 2.1.2 Turning on the Scanner

Press the Power Switch button on the front panel, the Power LED will be lit. To turn off the scanner, press the Power Switch button for about 3 seconds, the Power LED will be off.



#### 2.1.3 Installing the Scanner Driver

- 1. Place the supplied CD-ROM onto your CD-ROM drive.
- 2. The software installation graphic appears. If not, run "setup.exe".

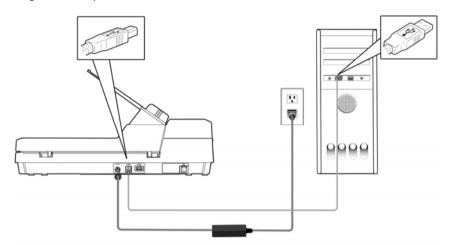


#### Contents on the installation graphic:

- Install Button Manager: To use the buttons on the scanner, you need to install Button Manager. To ensure Button Manager works properly, please FIRST install Button Manager before installing the scanner driver.
- Install Scanner Driver: To communicate with your scanner, you need to install the scanner driver. After installing the Button Manager software, click Install Scanner Driver to install the scanner driver on your computer.
- Install Adobe Reader: To view the user's manuals for the scanner and Button Manager, you need to use Adobe Reader to open and view the manuals in pdf file format. If you already have Adobe Reader installed on your computer, you may disregard this item.
- View Manual: Click "View Manual" to view or print the detailed user manual for the scanner and Button Manager respectively.
- 3. Click Install Button Manager to install the Button Manager software and then click Install Scanner Driver to install the scanner driver on your computer.

#### 2.1.4 Connecting to Computer

 Connect the square end of the USB cable to the USB port of your scanner. Connect the rectangle end to the USB port of your computer.



- 2. The computer should detect a new USB device and prompt a "New Hardware Found" message.
- In Windows XP, click the Next button to continue. When the XP certification screen appears, click Continue
   Anyway to complete the installation.

   In Windows Vista, click the Recommended option, and then click Continue button to complete the installation.
- 4. When the **Finish** dialog is prompted, click the **Finish** button.
- Click "View Manual" to view or print the detailed user manual for the scanner and bundled applications respectively.

# 3. Completing Your First Scan

#### 3.1 Loading Your Paper

#### 3.1.1 Notice on Using the ADF

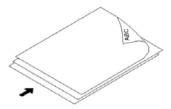
Before using the ADF, please make sure that your paper meets the following specifications:

- Document(s) can range in size from 3.5 by 3.5 inches to 8.5 by 14 inches (Legal).
- Document(s) can range in weight from 16 to 28 lbs (60~105 g/m²)
- Document(s) should be square or rectangular and in good condition (not fragile or worn).
- Document(s) should be free of curl, wrinkle, tears, wet ink, or punch holes.
- Document(s) should be free of staples, paper clips, paper sticky notes.

## 3.1.2 Placing Your Document in the ADF Paper Tray

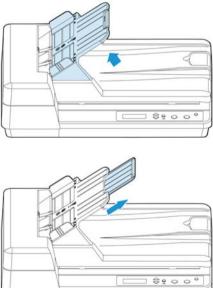
## **Fanning Your Document**

Standard paper size should feed easily through the scanner. To avoid occasional paper jam when automatically feeding multiple documents, loosen the paper before loading.

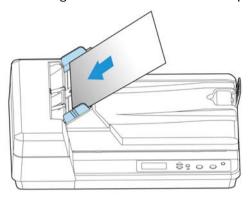


#### **Document Feeding**

1. Raise the ADF paper tray to about 45 degrees and pull the tray extension.



2. Place your document with the text face up and make the top of the page point to the document feeder as shown below. Center your document with the paper guides and make sure the edge of document touch the paper guides.



## 3.2 Placing paper on the document glass

Place your document face down on the document glass and align the document to the reference mark as indicated.



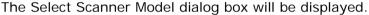
#### 3.3 Verifying Your Scanner Installation

To verify if your scanner installation is correct, Avision provides you a useful test program called Avision 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 verify your scanner installation. If the installation is not correct, please review the preceding section to check if the cable connection and scanner driver have been successfully installed.

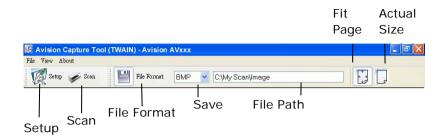
Before you begin, be sure the scanner is on.

 Select Start>Programs>Avision AVxxx Scanner>Avision Capture Tool.





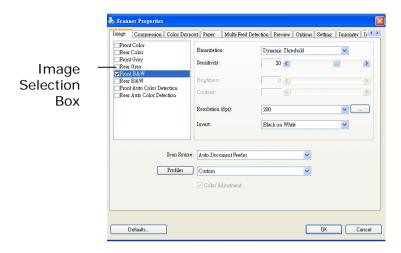
Select your driver type and scanner model and click OK. The following Avision Capture Tool dialog box will be displayed.



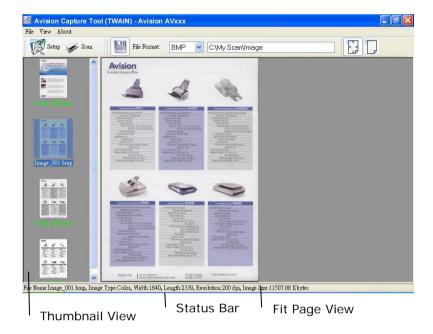
- 3. Choose your desired file format from the File Format drop down list box. (Default is BMP, other choice includes TIFF, GIF, and JPEG.)
- 4. Type your desired folder name and file name in the File Path box. (Default is C:\My Scan\Image.)

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

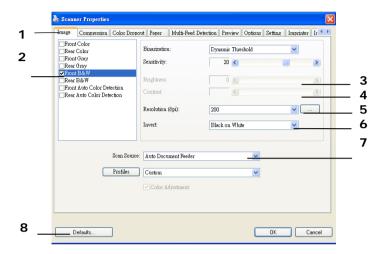


- 6. From the Image Selection Box, choose your desired image type for your scanned image. (Default is Front B&W) If you have a duplex scanner, choose Front and Rear to scan both sides of your document.
- 7. Click OK to quit the Scanner Properties dialog box. (To learn more details about the Scanner Properties 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.
- 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.



- 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.

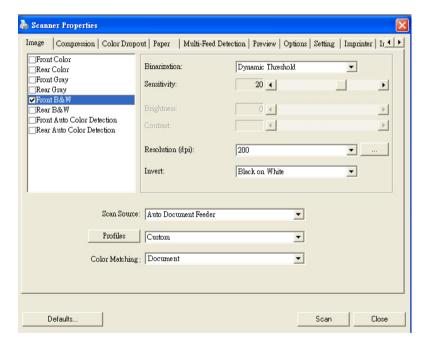
#### 3.4 A Glance of the User Interface



1. Tab Options	Choice: Image, Compression, Color Dropout,
	Paper, Options, Settings, Information.
2. Image	Choose your image type and the side of
Selection	document you wish to scan. Options vary
Box	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 (This option varies
	due to different scanner model)
8. Defaults	Reset all values on the tabs to the factory
	default settings.

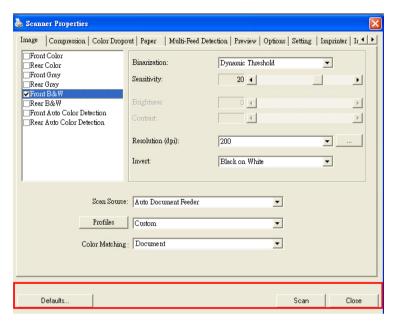
# 4. Using the Scanner Properties Dialog Box

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.



The Scanner Properties dialog box

#### 4.1 Buttons on the Scanner Properties Dialog Box



The buttons on the Scanner Properties dialog box

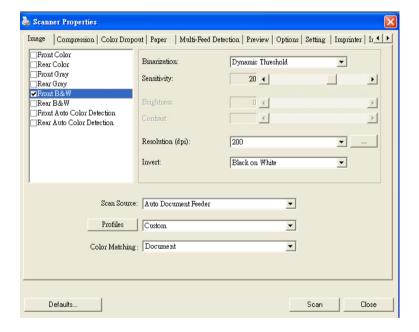
Buttons	Description
Defaults	Click the <b>Defaults</b> button, the factory default settings will be shown on each tab.
Scan	After all the scan settings are satisfactory, click the <b>Scan</b> button to start scanning your document.
Close	Click the <b>Close</b> button to leave the Scanner Properties dialog box.

# 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
<b>Color Dropout</b>	None
Paper	Cropping: Automatic Deskew: Yes Orientation: Portrait OverScan: 0.00 Multi-feed Detection: None Unit: Inch
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

### 4.2 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.



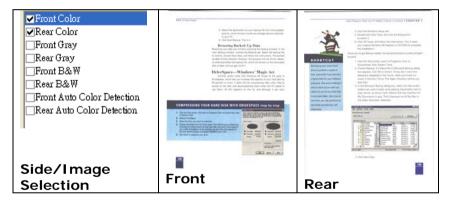
The Image tab dialog box

#### 4.2.1 The Image Selection Box



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



Example 2: Scanning a two-sided color document, one in B&W(Drop Blue Color: Threshold: 10, Background: 79), the other in color

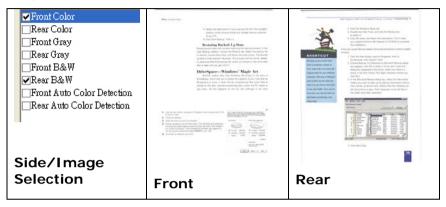
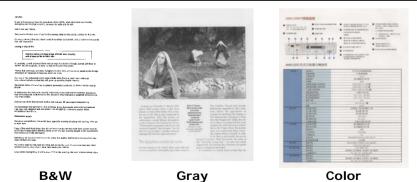


Image Type	Description
Color	Choose Color if you wish to scan a color image
	for your original in color.
Gray	Choose Gray image if your original contains
	actual shades of gray.
B&W	Choose B&W if your original contains only text
	pencil or ink sketch.



#### Front/Rear Auto Color Detection:

Click to automatically detect and scan the front or the rear page of your color document in color image mode. If your document is in colors, the scanner will automatically scan the document into a color image. If your document is non-color, you can choose the output to be either B&W or Gray from the Non-Color Selection option. This option is useful when you have a mixture of color and non-color document.

Note: If you choose Front Rear Auto Color Detection, you can not specify the image mode of your rear page and vice versas.

#### **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 reduce the sensitivity value by moving the bar to the left to let these images to be detected as B&W. The value ranges from 1 to 30. The default is 20.

#### 4.2.2 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, 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.

#### 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



F. Michelange Architecture this huge volusculpture, pai photographs, ceiling with a illus. (120 in a 10 3/4" x 14"

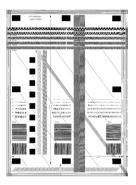
G. NEW Botti Renaissance unprecedente first lifesize m enormous nev

**Error Diffusion Image** 

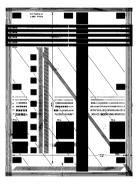
#### **Threshold**

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:80, Brightness: 0



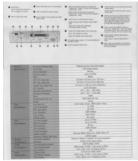
200 dpi, Threshold:170, Brightness: 0

#### 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)







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.





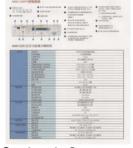


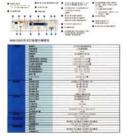
Brightness: -50

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 we who work manually, clerics and lay brothers ards being humble in all things; not to glorify in to become interforly proud because of good wis sometimes says or does in them or through that. "Do not rejoice—in the fact that the de : 10:20) Let us be firmly convinced of the fact."

#### **Black on White**

#### "I am not worthy to have you enter my

that is God, I beg all my brothers — those ver who work manually, clerics and lay brother inds being humble in all things; not to glorify to become interiorly proud because of good we sometimes says or does in them or through the fact that the decrease of the decrease of the

#### 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 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** 

# 4.2.3 Scanning color images

The following options are available for scanning color images.

- Brightness
- Contrast
- Resolution
- Invert

# 4.2.4 Scanning grayscale images

The following options are available for scanning gray images.

- Brightness
- Contrast
- Resolution
- Invert

# 4.2.5 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

# 4.2.6 Editing Profiles

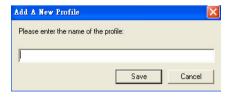
The Scanner Properties dialog box allows you to change and save your frequently used scan settings into a profile. You can edit these profiles by renaming or deleting them.

## 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.



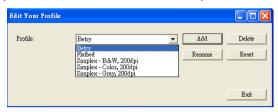
3. Click "Add" to enter the name of the profile and then choose "Save".



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

# To load a profile,

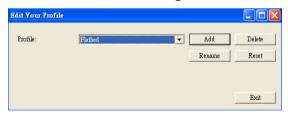
1. From the Image tab dialog box, choose your favorable profile from the "Profiles" dropdown list box.



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

## To delete a profile,

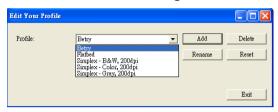
1. From the Image tab dialog box, click "Profiles" to prompt the Edit Your Profile dialog box.



- 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:

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.

# 4.3 The Compression Tab

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.

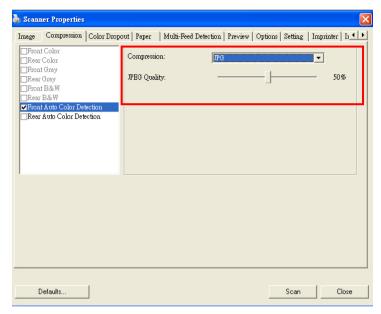
JPEG (Joint Photographic Editor Group). This group developed and lent their name to a file compression standard for color and grayscale images that is widely used by scanners, and software applications. On Microsoft Windows-based systems, a file with the extension .jpg has normally been compressed using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



The Compression tab dialog box

# 4.4 The Color Dropout Tab

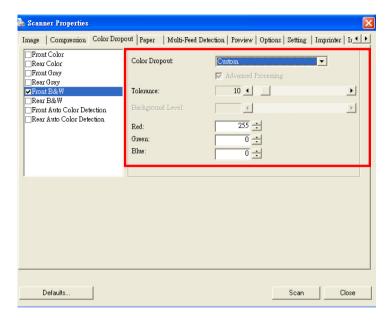
# 4.4.1 Color Dropout Selection

Color Dropout tab allows you to drop either of the red, blue, or green color in your scanned image. If your image contains red color watermark or background, choose the R (Red) channel then any red watermark or background will be removed. This feature is used to sharpen your text when using OCR (Optical Character Recognition) software.

The "Custom" option allows you to specify your desired color to be removed by entering its RGB (Red, Green, and Blue) value respectively.

Tolerance: Specify the allowable color range to be removed for the color you selected. Specified range:  $1 \sim 100$  The large the numeric value, the wider the color dropout range is.

Note that this function supports only black & white and gray images. Therefore, be sure to choose any black & white or gray image type while applying this function.



The Color Dropout dialog box

# 4.4.2 Other Color Dropout Options

**Advanced Processing** provides two options that can adjust your scanned image in the best optimal result.

# Filter Threshold

This value is used to determine the color which will be dropped out. A lower value will drop more of the selected color out, while a higher value will leave more of the selected color in.

## Background Level

The pixel which is higher than the background value will be adjusted to the lightest point. Adjust the value for both the Filter Threshold and Background Level to produce the best optimal result.

Example, slightly adjusting the background value makes your text more clear.



Original



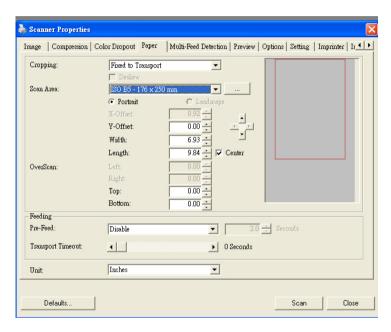
# Remove Blue, Threshold: 20, Background: 255



Remove Blue, Threshold: 20, Background Level: 210

# 4.5 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

# 4.5.1 Cropping

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

Options	Description
Automatic	Automatic adjusts the cropping window according to different document sizes. Use this option for batches of mixed-sized documents.
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	This option allows you to crop different
Document	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.

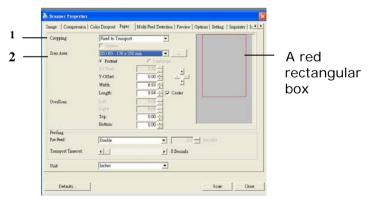
- **X-Offset** the distance from the left end of the scanner to the left edge of the scanning area.
- Y-Offset the position from the top end of the document to the top end of the scanning area.
- Width the width of the scanning area.
- **Length** the length of the scanning area.
- **Center:** automatically calculates the x-offset for centerfed 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.

**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.

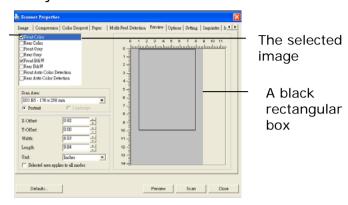
The following procedure describes how to reproduce the entire document in B&W and a portion of document (picture) in color.

- 1. On the Paper tab, choose "Relative to Document" or "Fixed to Transport" from the Cropping option.
- 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.)

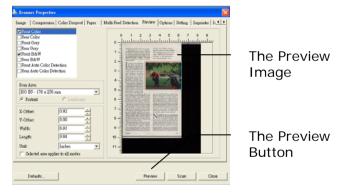


3. Click the Preview tab to display the Preview window. A black rectangular box appears to indicate the max. scan size your have just selected.

The Image Selection Box



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



- 5. Select image type from the Image Selection box. The selected image will appear in highlighted color. (For example, Front Color)
- 6. 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

1 2 3 4 5 6 7 8 9

| Section | Properties |

The Relative Area

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



The entire document in B&W

The relative area in color

## 4.5.2 Other Paper Selection

### Deskew

Use this option to automatically deskew a document.



Note: If the skew angle is too great, some of the image may be cut off.

## 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.

**Choice:** 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.

# Long Page:

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. Options: Unknown Length, Enter Length (Note: This option varies due to type of scanner.)

Choose "Unknown Length" if you have a batch of long page document with unknown length. Choose "Enter Length" to enter the length and width of your documents or your desired scan size on documents. This is useful when you have a batch of documents with the same scan size or a batch of same-sized documents.

## **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 disable

# **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.

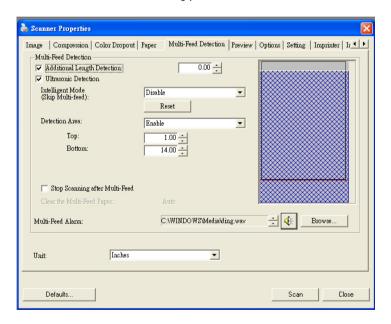
## Note:

- 1 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.

## 4.6 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.

# Intelligent Mode (Skip Multi-Feed) By Ultrasonic Detection

Some documents which are glued with a photo or a label may easily be detected as multi-feed yet you wish to bypass these multi-feed conditions. In this case, you can use the intelligent mode to let the scanner memorizes and skips these multi-feed conditions. Choice includes Disable, By Length(Paper/Object), By Position, By Length(Paper/Object)+Position.

**By Length (Paper/Object)**: When a multi-feed is detected for the first time, the scanner memorizes both the length of the document and the length of the object (photo or label) attached to the document. When you perform next scanning, this pattern of multi-feed will be bypassed.

**By Position**: When a multi-feed is detected for the first time, the scanner memorizes the position of the photo or label attached to the document. When you perform next scanning, this pattern of multi-feed will be bypassed.

**By Length (Paper/Object) + Position**: When a multi-feed is detected for the first time, the scanner memorizes the length of the document, the length and position of the object (photo or label) attached to the document. When you perform next scanning, this pattern of multi-feed will be bypassed.

# To use the intelligent mode,

- 1. Choose your desired multi-feed detecting method to bypass by.
- 2. When multi-feed occurs during scanning, a multi-feed warning message appears.
- 3. Choose **OK** to skip the multi-feed condition from next scanning and close the message.
- 4. Open your TWAIN data source in your scanning application. The same multi-feed condition will not be recognized as multi-feed.

## Note:

- You can clear the previous multi-feed conditions by clicking the **Reset** button.
- 2. The scanner can memorize to bypass up to 25 multi-feed conditions.
- 3. If you uninstall your scanner driver, the previous multifeed conditions which have been set to memorize and skip will still be valid.

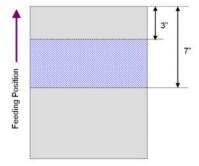
## **Detection Area**

This option allows you to specify a multi-feed detection area.

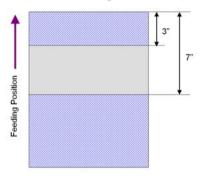
To specify a multi-feed detection area,

- Choose **Disable** from the Intelligent Mode. The Detection Area will be enabled.
- Choose Inside the Range or Outside the Range. The detection area will be highlighted.
- 3. Drag your mouse pointer on the top or the bottom of the detection area to specify your area in the display window. Or you may use the up and down arrow key of the Top and Bottom to change its size. The Top indicates the starting position of the detection range. The Bottom indicates the ending position of the detection range. Note the top value and the detection range has to be at least 1 inch.

Detection Area: Inside the Range, Box, Top: 3", Bottom: 7"



Detection Area: Outside the Range, Box, Top: 3", Bottom: 7"



## 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 display the following Warning dialog box if multi-feed is detected.



### Action:

- 1. Follow the instruction on the Warning dialog box to remove the rest pages on the feeder.
- 2. Click OK to close the Warning dialog box.
- 3. Scan the rest pages.

### 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.

If "Stop Scanning after Multi-Feed" is selected, the scanner will stop the feeder.

If "Stop Scanning after Multi-Feed" has not been selected, the scanner will continue to scan till the end of your document.

### Action:

- If "Stop Scanning after Multi-Feed" is selected, follow the action described in the preceding section "Stop Scanning after Multi-Feed" on the previous page to complete your job.
- If "Stop Scanning after Multi-Feed" has not been selected, rescan the pages where multi-feed is detected.

## 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.

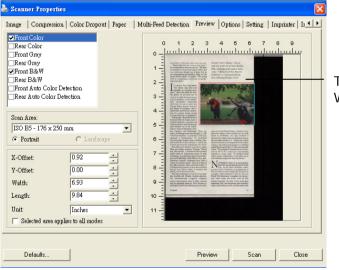
## Units

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

## 4.7 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.

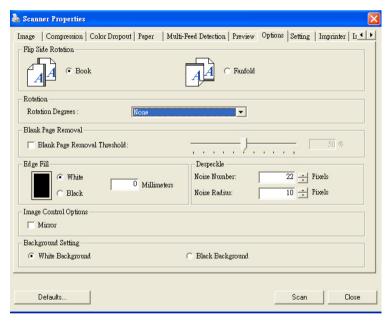


The Display Window

The Preview Tab

# 4.8 The Options Tab

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



The Option tab dialog box

# Flip Side Rotation

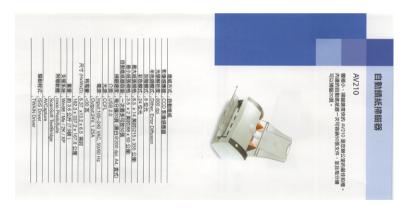
Select "fanfold" to rotate the image of the reverse side to 180 degrees.

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



## 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	<del></del>
1 4 3	2
	$\omega$
Original	Rotate 90°CW
3	
$\boldsymbol{\omega}$	E 7 I
7	
<del></del>	
Rotate 90°CCW	Rotate 180°

Auto based on contents: When Auto based on contents is selected, images can be rotated to their proper orientations based on their contents.

# 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.

# Blank Page Removal

Check if you wish to remove the blank page and move the slider to the left or right to your desired threshold.

# 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)

# Image Control Option

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



Original



The Mirror Effect

### 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.

A 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.

Before Despeckle (noise number: 0, noise radius: 1)

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.

After Despeckle (noise number: 22, noise radius: 10)

## 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.

## 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.

For details on choosing the "Auto crop" or the "Fixed to Transport" mode, please refer to section 4.5.1, Cropping.



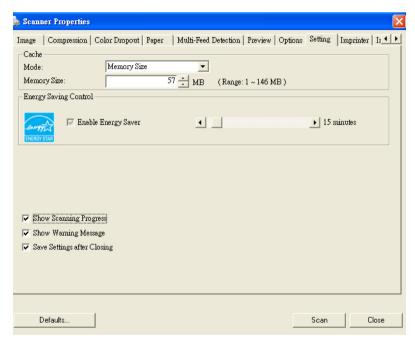
White Background



Black Background

## 4.9 The Setting Tab

The Setting tab allows you to set the following settings:



The Setting tab dialog box

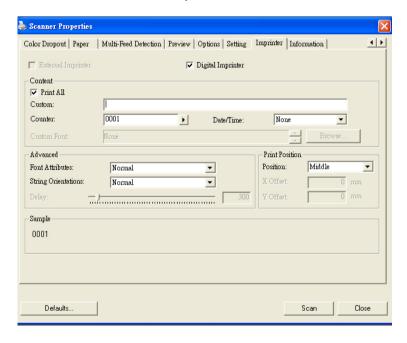
<b>Energy Saving</b>	Check the Enable Energy Saver box	
Control	and move the slider to the right to set	
	the amount of time to start the energy	
	saver after your last action. The range	
	is from 1 to 240 minutes. The default	
	is 15 minutes.	

## 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 approximates 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. Barcode Check this option to enable detecting and recognizing barcode in your document. Detection After the detecting process, an avbarcode.ini file will be generated and stored in your system drive, for example, Windows\avbarcode.ini. Note: The availability of this feature varies based on type of scanner.

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.

### 4.10 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.



Choice: External Imprinter, Digital Imprinter. If you have installed an external imprinter, choose external imprinter. If you do not have an imprinter, choose digital imprinter. Note External Imprinter provides a vertical and rear-side print capability while digital printer provides a horizontal and front-side print capability.

## **Contents**

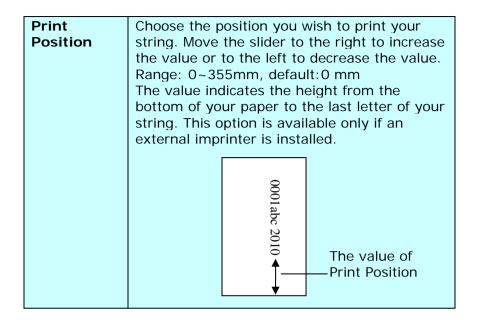
Print All	Check <b>Print All</b> to automatically print the text at all pages of your documents. Uncheck <b>Print All</b> to print the text for the first page of your documents only.
Custom	Enter your custom text to be included in your print string.
Counter	Show the document count for the scan session. 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	Choose your desired font.
Font	Choice: Normal, Fixed Width
	Fixed Width (Mono spaced) fonts have a
	fixed character spacing. So each character
	occupies the same width.

## **Advanced**

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

String Orientation	Choose your string orientation. Choice: Normal, Rotated, Vertical, Vertical Inversion, 90 degrees CW, 90 degrees CCW		
	2010abc	2010abc	
	Normal	Rotated	
	2 0 1 0 a b c	2 0 ع b	
	Vertical	Vertical Inversion	
	2010abc	2010abc	
	90 degrees CW	90 degrees CCW	
	If you check the digitatext on your scanned normal and rotated sti	I imprinter to stamp image, the illustration of	of
	2010abc	2010abc	
	Normal	Rotated	

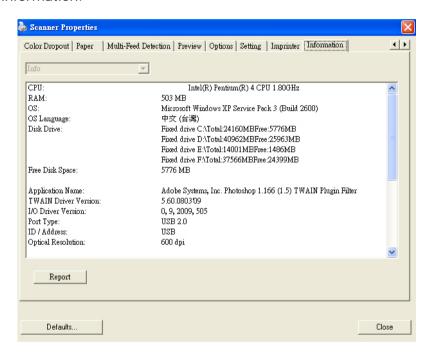


## Print Position (for digital imprinter)

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.

#### 4.11 The Information Tab

The Information tab displays the following system and scanner information.



The Information tab dialog box

## The "Report" button:

If you encounter any error message while using the scanner, click the Report button. A report.txt file (C:\AVxxx) will be generated. Please send this file to the nearest service center for trouble shooting.

#### The "Reset Pad Count" button:

After scanning approximately 50,000 pages (the number varies based on type of scanner) through the Auto Document Feeder (ADF), the ADF pad may be worn out and you may experience problems with document feeding. In this case, it is highly recommended to replace the ADF pad with a new one. (Please refer to the manual for proper replacing procedure.) For ordering the ADF pad, please consult your nearest dealer. After replacing the ADF pad, click the "Reset Pad Count" button to reset the pad count.

#### The "Reset Roller Count" button:

After scanning approximately 200,000 pages (the number varies based on type of scanner) 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. Please consult your nearest dealer for more details.

## 5. ISIS Interface Operation

The ISIS driver operation method is similar to the TWAIN's. Every function on the ISIS interface screen is briefly described as below:



**Mode:** Select one of scan modes, including B&W, gray, color options.

Dither: 5 halftone levels available, can be disabled.

**Dots per inch:** Select your desired resolution.

Paper Size: Select your desired paper size.

Brightness: Adjust your scan image brightness or darkness.

Contrast: Adjust the range between the darkest and the

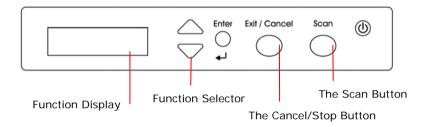
lightest shades in the image.

**Default:** Click to reset all settings.

Area: Select your desired scan area or position.

# 6. Scanning with The Buttons

The convenient buttons on the scanner is shown as below:



### 6.1 Installing Button Manager

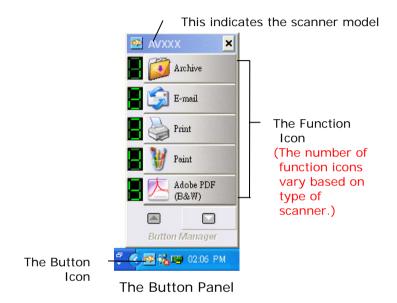
To use the buttons on the scanner, you need to install the Button Manager. To ensure the Button Manager work properly, please FIRST install Button Manager before installing the scanner driver.

Installing the Button Manager is easy. Insert the supplied CD to your CD-ROM drive and follow the instructions on the screen to complete the installation of the Button Manager.

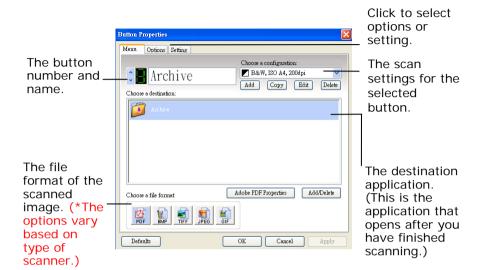
Button Manager provides you an easy way to scan your document and then link the scanned image to your designated software application. All this can be done by a simple touch of the button on the scanner. Yet, before you scan, it is recommended to check the button configurations first to ensure a proper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

## 6.2 Checking the Button Configurations Before Scanning

- 1. Click the **Scan** button on the scanner.
- 2. The Button Panel is displayed in the Windows System Tray at the bottom right corner of your computer screen.



3. The Button Panel shows the first five scanning buttons. Right-click the button (function) you wish to check. The Button Properties window appears.

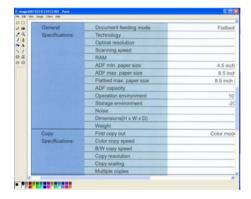


If you wish to change the setting, use this window to reset the setting for the file format, destination application, or other scan settings.

4. Click the **OK** button to leave the window.

### 6.3 Scanning From One Touch of the Buttons

- 1. Place your single-page document on the flatbed glass or your multi-page document in the auto document feeder.
- Check the button number on the LCD-display to ensure if you are selecting the proper scan settings and destination application. (For example, if you wish to scan with button #4, which open Microsoft Paint and display the scanned image in the main window of Microsoft Paint, the LCDdisplay shows "Custom").
- Press the Scan button on the scanner.
- 4. After the scanning is finished, the Microsoft Paint software will be launched and the scanned image appears in the main window of Microsoft Paint as below.



#### Note:

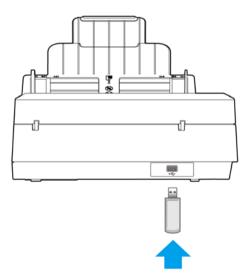
- 1. For details information on how to use the Button Manager, please refer to the user's manual in the supplied CD.
- 2. You may also using Button Manager on your desktop by starting Button Manager from All Programs or double clicking the Avision Scanner Utility from the Control Panel.

## 7. Scanning and Saving Your Images to a USB Flash Drive

After inserting the USB flash drive into the USB flash drive port at the back of the scanner, this product allows you to start instant scan immediately and save the scanned images directly to a USB flash drive without the need of a computer.

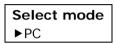
## 7.1 Connecting a USB Flash Drive

Insert your USB flash drive into the USB flash drive port at the back of the scanner as shown in below:



## 7.2 Starting an Instant Scan

- Make sure your scanner has been turn on and a USB flash drive has been inserted to the scanner.
- The LCD-display of the scanner shows "Select mode" as illustrated in below. Choice includes PC, Network, and USB disk





3. Press the **Arrow** key repeatedly until "**USB disk**" is displayed.

Select mode ►USB disk



4. Press the Enter key to confirm your selection. The LCD-display shows the following profile option. Choice includes Document, Photo, Setting. Predefined settings of "Document" mode: 200 dpi, color, PDF, letter size; "Photo" mode: 200 dpi, color, JPEG, 4"x6". If you wish to scan different size, select the "Setting" option.

Select profile

▶Document

- 5. Press the **Enter** key to confirm your selection.
- 6. The LCD-display shows the "Simplex/Duplex" option.

Simplex/Duplex
►Simplex

7. If you wish to scan the front and the rear page of your document from the auto document feeder, press the **Arrow** key repeatedly until "**Duplex**" is displayed. (If you wish to scan only one side of your document from the document glass, choose "**Simplex**".)

- 8. Press the **Enter** key to confirm your selection.
- 9. The LCD-display shows "Ready to scan". Place your document in the scanner.

Ready to scan ▶Back

Scan

- 10. Press the **Scan** button on the scanner.
- 11. The scanner starts scanning and your scanned image will be saved into your USB Flash Drive.

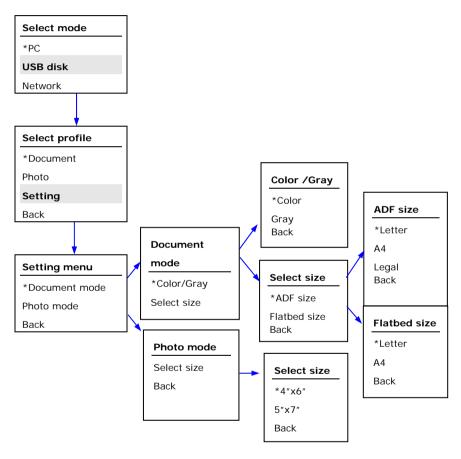
#### Note:

- If "Document mode" is selected, a main folder with its sub-folder titled "DCIM\DOC" will be created on your USB flash drive. Up to 9,999 PDF files can be stored in the folder. Each PDF file will be named with a prefix of "DOC" and followed by a 4 digit serial number. For example, DOC0001.PDF, DOC0002.PDF °)
- If "Photo mode" is selected, a main folder with its subfolder titled "DCIM\PHOTO" will be created on your USB flash drive. Up to 9,999 JPEF files can be stored in the folder. Each JPEG file will be named with a prefix of "IMG" followed by a 4 digit serial number. For example, IMG0001.jpg, and IMG0002.jpg •)

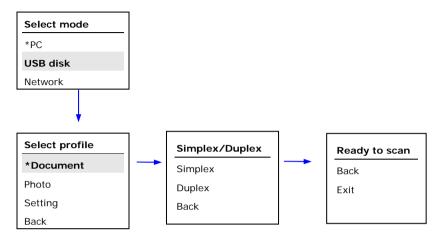
## 7.3 Viewing the Menu Map

Please see complete menu map of the "USB disk" mode:

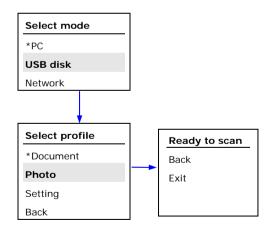
## When "USB disk" and "Setting" are selected subsequently:



## When "USB disk" and "Document" are selected subsequently:



## When "USB disk" and "Photo" are selected subsequently:



Back: Go back to last menu.

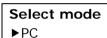
Exit: Go back to the start-menu.

\*: Indicates the default settings.

## 7.4 Changing Your Scan Size

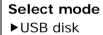
If you wish to customize the scan settings such as changing the photo size to 5"x7", please follow these steps:

- Make sure your scanner has been turn on and a USB flash drive has been inserted to the scanner.
- The LCD-display of the scanner shows "Select mode" as illustrated in below. Choice includes PC, Network, and USB disk.





3. Press the **Arrow** key repeatedly until "**USB disk**" is displayed.







4. Press the **Enter** key to confirm your selection. The LCD-display shows the following profile option. Choice includes Document, Photo, Setting.



5. Press the **Arrow** key repeatedly until "**Setting**" is displayed.



6. Press the **Enter** key to confirm your selection. The LCD-display shows the following option. Choice: Document mode, Photo mode.

## Setting menu

▶ Document mode

7. Press the **Arrow** key repeatedly until "**Photo mode**" is displayed.

### Select profile

▶Photo mode

8. Press the **Enter** key to confirm your selection. The LCD-display shows the "**Select size**" option.

#### Photo mode

▶ Select size

9. Press the **Enter** key to confirm your selection. The LCD-display shows the "**Size**" option. Choice: 4"x6", 5"x7".

## Select size

▶4"x6"\*

10. Press the **Arrow** key until "5"x7"" is displayed.

### Select size

▶5"x7"

11. Press the **Enter** key to confirm your selection. The LCD-display shows the option has been selected with an asterisk mark.

#### Select size

▶5"x7"\*

12. Press the **Arrow** key repeatedly until the LCD-display shows the "Back" option.

## Select size

▶ Back

13. Press the **Enter** key to return to the previous menu item. The LCD-display shows the previous option.

## Photo mode ▶Select size

14. Press the **Arrow** key repeatedly until the LCD-display shows the "Back" option.

## Photo mode ▶Back

15. Press the **Enter** key to return to the previous menu item. The LCD-display shows the previous option.

## Setting menu Photo

16. Press the **Arrow** key repeatedly until the LCD-display shows the "Back" option.

## Setting menu ▶Back

17. Press the **Enter** key to return to the previous option. The LCD-display shows the previous option.

## Select profile ▶Setting

18. Press the **Arrow** key until "**Photo mode**" is displayed.

Select	profile
▶ Photo	)

19. The LCD-display shows "**Ready to scan**". Place your document in the scanner.

## Ready to scan ▶Back

Scan

- 20. Press the **Scan** button on the scanner.
- 21. The scanner starts scanning and your scanned image will be saved into your USB Flash Drive.

#### Note:

Follow the similar steps to change other scan settings.

## 8. Care and Maintenance

## 8.1 Cleaning the Glass

## The procedures

- Wet a soft lint-free cloth with some isopropyl alcohol. (95%)
- 2. Open the ADF unit and document cover as shown below. Wipe the glass of flatbed.
- 3. Close the ADF unit and document cover. Your scanner is now ready for use.



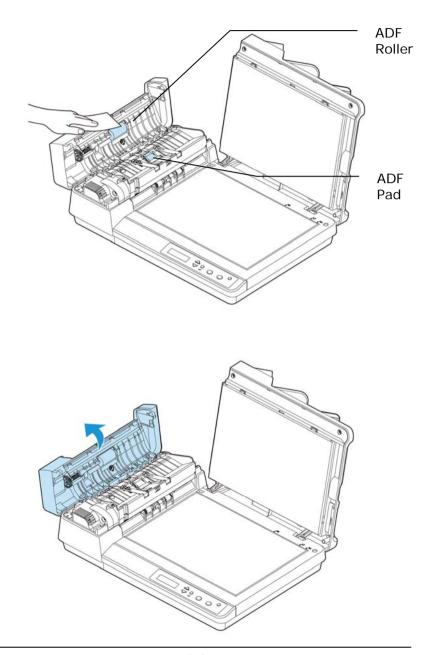
## 8.2 Cleaning the ADF

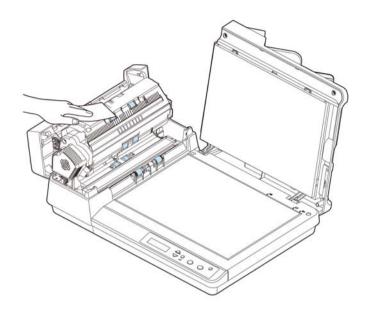
The scanner parts may be contaminated with ink, toner particles or paper coatings. As a result, the scanner needs to be cleaned occasionally particularly in the following cases:

- 1. Documents do not feed smoothly or easily;
- Several documents feed at one time.

#### The cleaning procedures

- Wet a soft lint-free cloth with some isopropyl alcohol. (95%)
- Open the front ADF unit as shown below and wipe the upper feeding roller. Rotate the roller forward with your finger and repeat the above cleaning procedures until the entire roller is cleaned. Be careful not to snag or damage the pick springs.
- 3. Wipe the pad in the direction from top to bottom. Be careful not to hook the pick springs.
- 4. Close the front ADF unit.
- 5. Open the document cover and then the bottom of the ADF unit.
- 6. Wipe the rollers until the rollers are cleaned.
- 7. Close the document cover and the bottom of the ADF unit. Your scanner is now ready for use.



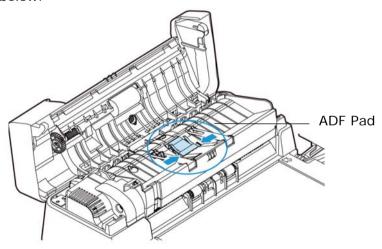


### 8.3 Replacing the ADF detachable pad module

After scanning approximately 30,000 pages through the ADF, the pad spring may be worn out and you may experience problems with document feeding. In this case, it is highly recommended to replace the pad module with a new one. For ordering the pad module, please consult your nearest dealer and follow the procedure in below to replace it.

### **Removing Procedure**

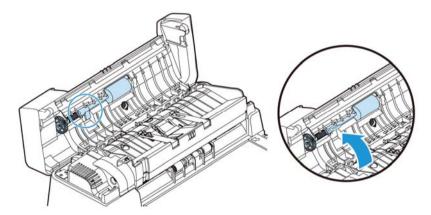
- 1. Open the ADF front cover.
- 2. Remove the ADF detachable pad module by pulling out the upper part of the pad clamp as shown in the figure below.



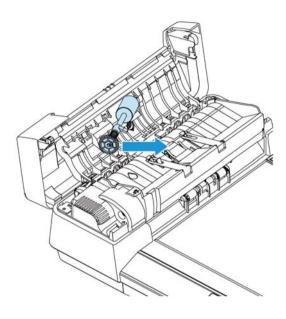
## 8.4 Replacing the ADF roller

After scanning approximately 200,000 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 roller with a new one. Please follow these steps to replace and install the ADF roller.

- 1. Open the ADF front cover.
- 2. Move the ADF roller tab up as indicated.



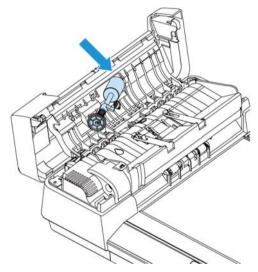
3. Hold the roller and slightly move it forward to detach the roller.



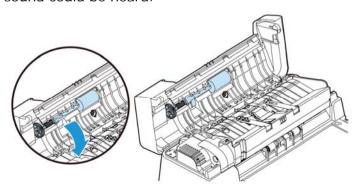
## **Assembling Procedure**

To install the ADF roller, please follow these steps.

1. Insert one end of the ADF roller to its slots and then the other end.



2. Press down the tab. If properly installed, a snap-in sound could be heard.

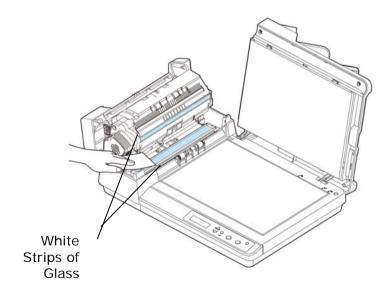


## 9. Troubleshooting

If you have problems with the operation of your scanner, please check the following troubleshooting hints.

## 9.1 Removing an Abnormal Line on the Scanned Image

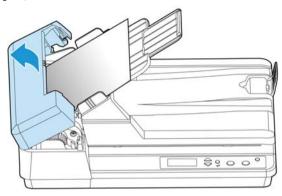
If the scanned image appears with abnormal lines on it, clean the white strips of the glass as indicated below with a clean lint-free cloth.



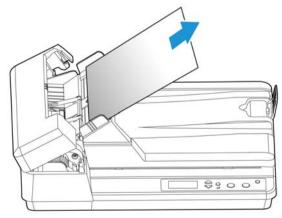
## 9.2 Clearing a Paperjam

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

1. Gently open the ADF front cover to the left.



- 2. Carefully pull the paper out of the ADF unit.
- 3. Close the ADF front cover. The product is now ready to use.



## 9.3 Frequently asked Questions

**Question:** Paper becomes jammed during scanning.

**Answer:** 1) Open the ADF unit.

2) Pull out the jammed paper carefully.

3) Close the ADF unit.

Question: More than one sheet of paper was fed into

the scanner.

**Answer:** 1) Open ADF unit.

2) Remove the multi-fed sheets of paper.

3) Close the ADF unit.

4) Flatten the corners and edges; loosen the paper before reloading it in the paper

guide.

5) Check the feeding roller condition and do

the cleaning if necessary.

**Question:** Paper becomes skewed in the scanner.

**Answer:** 1) Check the feeding roller condition; do the cleaning if necessary.

2) Use the paper guide when feeding the paper.

**Question:** The scanned image always comes out to

be too dark.

**Answer:** 1) Use your application to modify the

Gamma setting to 2.2 and 1.8 for your printer and monitor respectively.

2) Adjust Brightness setting from the TWAIN interface to get a brighter image.

**Question:** The scanner works well except for the line

art, the lines of which seem much thicker

than the original.

Answer: Increase the Brightness or adjust the

Threshold setting to adjust the line art

image.

**Question:** Paper becomes jammed during scanning.

**Answer:** 1) Open the ADF unit.

2) Pull out the jammed paper carefully.

3) Close the ADF unit.

#### 9.4 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);
- The name and version of your scanning software application;
- The version of your scanner driver.

Please call us at:

#### Headquarter

#### Avision Inc.

No. 20, Creation Road I, Science-Based Industrial Park, Hsinchu 300, Taiwan, ROC

TEL: +886 (3) 578-2388 FAX: +886 (3) 577-7017

E-MAIL: service@avision.com.tw Web Site: http://www.avision.com.tw

#### **US and Canada Area**

### Avision Labs, Inc.

6815 Mowry Ave., Newark CA 94560, USA

TEL: +1 (510) 739-2369 FAX: +1 (510) 739-6060

E-MAIL: support@avision-labs.com Web Site: http://www.avision.com

#### China Area

## Hongcai Technology Limited

7A, No. 1010, Kaixuan Road, Shanghai 200052 P.R.C.

TEL:+86-21-62816680 FAX:+86-21-62818856

E-MAIL: sales@avision.net.cn

Web Site: http://www.avision.com.cn

## **Europe Area**

## **Avision Europe GmbH**

Bischofstr. 101 D-47809 Krefeld Germany

TEL: +49-2151-56981-40 FAX: +49-2151-56981-42

E-MAIL: info@avision-europe.com Web Site: http://www.avision.de

## 10. Specifications

### All specifications are subject to change without notice.

Model Number DF-1015S (Duplex Scanner)

DF-1004S (Simplex Scanner)

Scanner Type Flatbed & ADF

Scanning Mode Color/Grey/Black & White

Optical Resolution 600 dpi

Technology Contact Image Sensor

Light Source LED

ADF Max. Scan Size 8.5" x 14" (Legal)

ADF Min. Scan Size 3.5" x 3.5"

ADF Capacity 50 pages (20 lbs)

ADF Paper Weight  $16\sim28$  lbs  $(60\sim105 \text{ g/m}^2)$ 

Interface High Speed USB 2.0

Power Requirements 24Vdc, 2A Power Consumption < 30 watts Humidity 10~85%RH

Operation Temperature 10~35°C Dimension 453\*324\*237 mm(W\*D\*H)

Weight 4.3Kg

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