

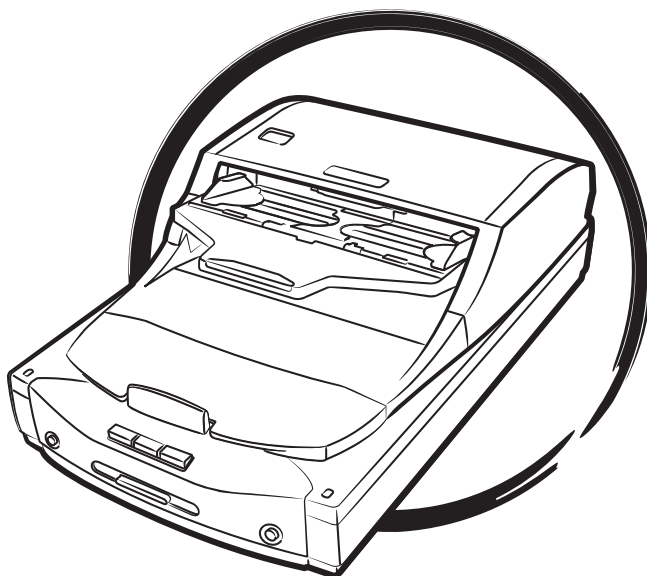


# Document Imaging Scanner

## **ArtixScan*D*/4020 Plus** **ArtixScan*D*/2020 Plus**

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### **User's Manual**



# Preface

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## Disclaimer

The contents of this manual have been checked carefully for accuracy, and every effort has been made to ensure that there are no errors. However, Microtek makes no guarantee as to the accuracy of the contents of this document and reserves the right to make changes to the contents without prior warning.

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## FCC Compliance Statement

This equipment (Model: MSS-1200T4ADF) 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 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 the dealer or an experienced radio/TV technician for help.

**Note:** A shielded Hi-Speed USB interface cable with ferrite core installed on the scanner connector end must be used with this equipment.

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

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.

## Safety Precautions

Before using your scanner, read the following safety guides carefully, which detail the proper operation of the scanner and its accessories to prevent injuries or damage to users or equipment.

### Power Source and AC Power Cord:

- Use a power source only with a power rating specified on the marking label.
- Insert the plug completely into the outlet, as a loose connection may cause arcing and result in fire.
- Place and route the power supply cord such that it is not likely to be walked on or pinched by items placed upon or against them, paying particular attention to the cord near the power plugs, convenience receptacles, and at the point where it exits from the outlet.
- When the scanner is left unattended and unused for long periods of time, unplug it from the wall outlet.

### Moving and Storing the Scanner:

- Always lock the scanner when shipping or moving the scanner. Quick stops, excessive force, and uneven surfaces may cause the product to overturn when moving.
- When locking or unlocking the scanner back, do not turn the scanner upside down.
- Do not place the scanner on any slippery, slanted, or unstable surface. The product may slide or fall, causing serious injury to people as well as serious damage to the product.
- Do not use this scanner near water. Never spill liquid of any kinds on the product, or it may result in electric shock or other hazards.
- This scanner should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

### Service:

- When you need a repair service, unplug the scanner from the power outlet and consult qualified service personnel.
- When replacement parts are required, use replacement parts that are specified by the manufacturer or have the same characteristics as the original parts.

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# Knowing about Your Scanner

The ArtixScan DI 4020 Plus/2020 Plus is a color document scanner with an built-in Automatic Document Feeder that can hold up to 100 sheets of papers for the unattended volume scanning. It features optical resolution of 1200-dpi (flatbed) and 600-dpi (ADF), delivers fast scanning of up to 40 ppm/80 ipm in color (for ArtixScan DI 4020 Plus) or 30 ppm/60 ipm (for ArtixScan DI 2020 Plus), and supports long page up to 25" (635 mm).

## Features of the Scanner

The scanner comes with several important features, including the following:

- **Energy-saving LED light source:** Adopting LEDs as the light source, when the scanner is detected by the system, there are no requirements for any warm-up time before carrying out the scan, which boots your productivity and reduces energy costs amazingly. With its stable performance, the image quality will remain consistent even after used for a certain period of time.
- **Automatic Document Feeder (ADF)** — The high-capacity ADF for the ArtixScan DI 4020 Plus/2020 Plus holds up to 100 sheets of paper, supporting dimensions from 4.33" x 4.33" (110 mm x 110 mm) up to 8.5" x 25" (215.9 mm x 635 mm).
- **Advanced feeding technology** — Equipped with an ultrasonic sensor, the ArtixScan DI 4020 Plus/2020 Plus is able to detect the gap between overlapping pages and to prevent multiple pages from being fed together, efficiently preventing the happens of mis-feed or double-feed when delivering papers through the ADF.
- **Three programmable function buttons** — The programmable function buttons on the front panel of the scanner provide you an intuitive and easy way to access scanner functions.
- **Duplex scanning in a single pass**— Allows to scan both sides of one sheet in a single pass. With this feature, the scanner can handle up to 80 ipm (ArtixScan DI 4020 Plus) or 60 ipm (ArtixScan DI 2020 Plus) in grayscale, black & white and color at 200 dpi.
- **Automatic paper loading** — Paper placed in the Document Feed Tray of the ADF is automatically sensed by the scanner, and the tray automatically rises to the correct position in preparation for scanning.
- **Hi-Speed USB port** — Hi-Speed USB is capable of high data transfer rates of up to 480 Mbit/sec, providing the high data transfer rate via the included Hi-Speed USB cable.
- **New and Advanced Microtek ScanWizard DI software** — All-in-one control panel offers a host of features and image adjustment controls. It comes out several distinguished advantages:

- Quick Scan — This feature enables the scanner to scan and save the images directly as a single PDF file, no more comprehensive settings required.
- Auto Document Rotation — With this feature, the scanner automatically rotates every saved files in a readable direction based on a specific OCR language selected.
- Smart Threshold — This feature enables the software to specify the best level for a threshold used in high-contrast and black-and-white images automatically, improving the clearance and readability of black-and-white documents.
- Combine Images — This feature enables the software to merge two separate images as one united image. With this function, you do not need other after-scan editing program to modify your scanned documents.
- Smart Document Enhancement — With this feature, the scanner automatically brings out and improves readability of text and removes unwanted background color (i.e., green, red, or blue) in/from a document that includes multi image elements.
- Barcode Separator — With this feature, you can batch scan documents without starting and stopping each time a new file begins by using barcode numbers on the documents. It saves you huge amounts of time and money to organize, to index and to search files of documents in seconds, enhancing the efficiency and productivity of file management.
- Remove Blank Page — With this feature, blank pages are automatically detected and removed by the software when scanning a stack of documents. This function is quite helpful especially when users are scanning double-sided documents and some of the pages only have text on the front side.
- Remove Punch Hole — With this feature, the software automatically detects the location of the punch holes on the scanned documents and fills them in white. This function works for most common hole puncher standards.
- Save multiple images as a single file : This advanced feature allows user to save multiple scanned images as a single file, depending on the number of the scanned images that are defined for document archival.
- Auto-crop and auto-deskew : The auto-crop function automatically detects the size of the original image, crops the full scan frame to fit the image, and removes unwanted black borders. The auto-deskew function automatically corrects distorted images for proper alignment.
- Color dropout : Red, green and blue colors can be dropped out to allow for clearer and more accurate forms processing with problematic color documents. number of the scanned images that are defined for document archival.



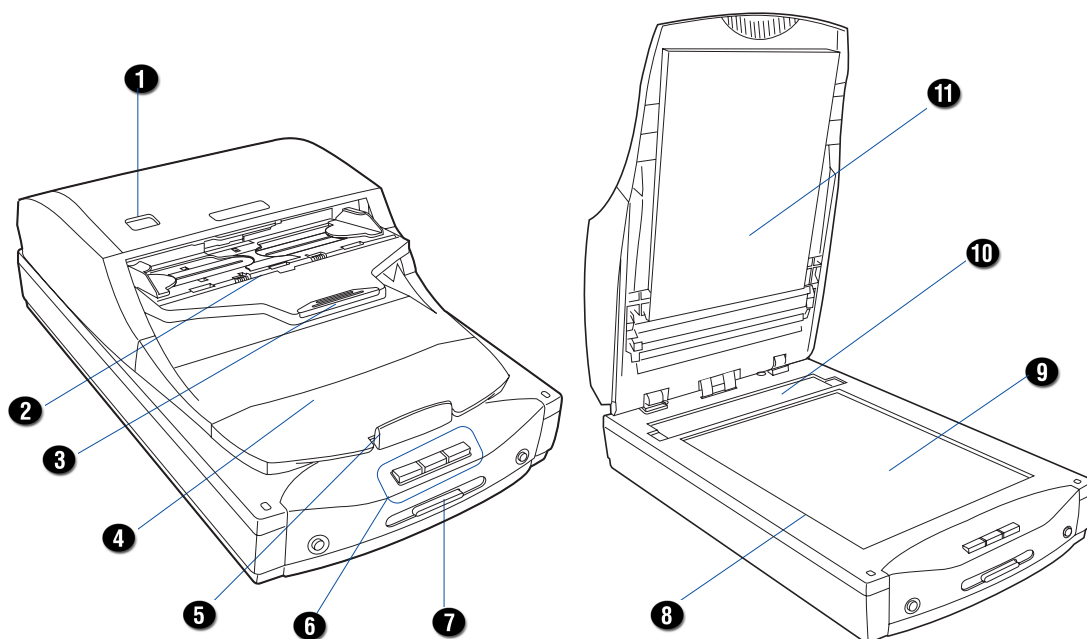
## Installation Requirements

In order to use your ArtixScan DI 4020 Plus/2020 Plus, your computer must satisfy the following system requirements:

- DVD-ROM drive (for installing software)
- Color display with 24-bit color output capability
- 512 MB RAM or above
- Pentium IV PC or higher with Hi-Speed USB (USB 2.0) port
- Microsoft Windows XP, Vista, and Windows 7

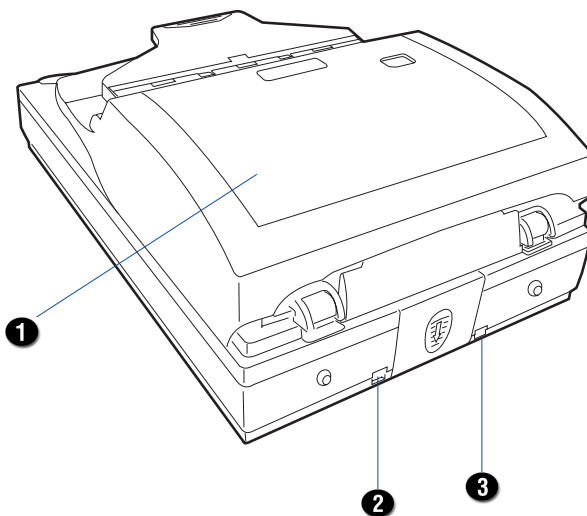
# Taking a Closer Look

## Front/Top View



No.	Names of Parts	Functions of Parts
1	Button	Presses to open or closes the ADF cover.
2	Document Feed Tray	Holds the high-volume documents to be scanned. <del>into the ADF.</del>
3	Feed Tray Extender	Extends the Document Feed Tray when loading long documents.
4	Document Output Tray	Stores the stacked documents which have been scanned.
5	Output Tray Extender	Extends the Document Output Tray when loading amounts of documents.
6	Programmable Function Buttons	Allows users to perform the function that was previously defined or customize the buttons to perform their preferred functions via software settings. These function buttons are F1, F2 and F3.
7	Power Button	Turns the scanner on or off.
8	Vertical Ruler	Used to measure the length of a scanned document.
9	Front Glass Surface	For one single-sheet document scanning.
10	Rear Glass Surface	The place where the calibration cartridge is stored.
11	Scanner Lid (ADF)	The top cover of the scanner.

## Rear/Side View



No.	Names of Parts	Functions of Parts
1	ADF	Automatic Document Feeder
2	Hi-Speed USB Port	Connects the Hi-Speed USB (USB 2.0) cable to the computer.
3	Power Connector	Connects the scanner to the power adapter.

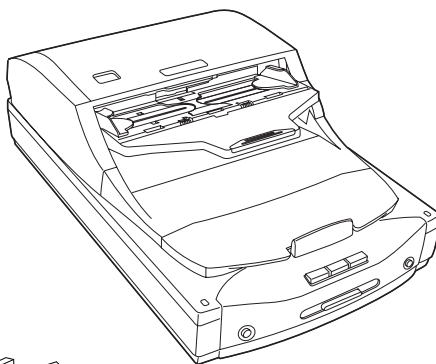
# Initial Setup

## Following the Four Easy Steps

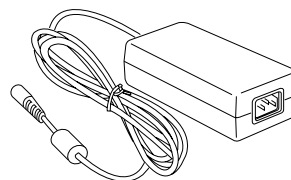
After unpacking your scanner package, you should see four yellow stickers, which are marked from Step 1 to Step 4 and are placed on your scanner contents. Follow the steps in order for a quick and easy installation process.

### Step 1: Unpacking Package Contents

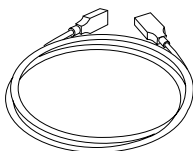
After unpacking your scanner package, please check for the major components listed below.



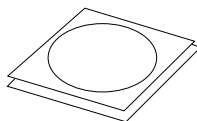
Document scanner



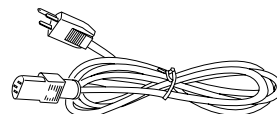
Power adapter



Hi-Speed USB cable



Software CDs/DVDs



Power cord

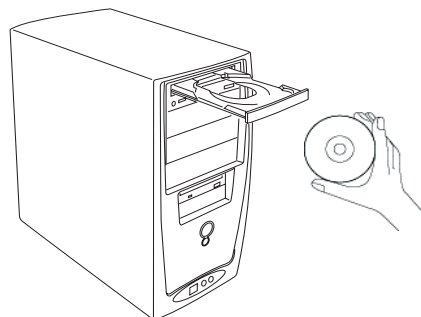
## Step 2: Installing the Software

**Important:** Do not remove the yellow stickers from your scanner until you are told to do so. You must install all software before connecting your scanner.

Always close any open programs and turn off Anti-virus utilities before installing software.

1. Turn on your computer.
2. Place the **Microtek Software CD/DVD** into a drive.
3. Follow the on-screen instructions to install the driver and software.

**Note:** If the Microtek Software Installer screen does not come up automatically, double-click the following in succession: "My Computer"; the CD/DVD-ROM icon; then cdsetup.exe to start the installer program.



4. To install the software on the **Microtek Software CD/DVD**, click each software program in the order that it appears on the screen to install, and follow the on-screen instructions.
5. Click **EXIT** on the Microtek Software Installer screen when all the software has been installed.
6. Restart your computer.

## Drivers & Software Upgrades

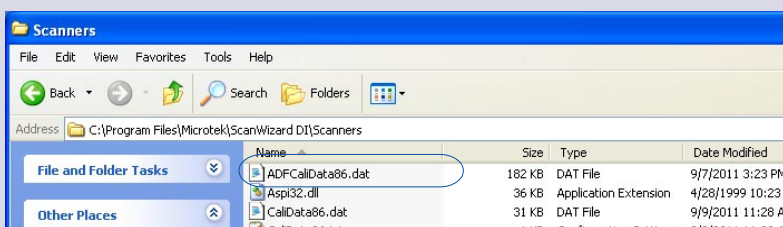
After you finish the installation of software, if you found that the installed drivers and software cannot run your product or your computer system properly later, please go to the Microtek **Download Service** site at [ww7.microtek.com.tw/service.php](http://ww7.microtek.com.tw/service.php) to download and install any updates you may require.

For additional information about Microtek products, please visit our website at [www.microtek.com](http://www.microtek.com).

## Notice for Calibration Data

It is strongly recommended that you should duplicate a copy of calibration data for your scanner after installing the software in case if you lose the **Microtek Software CD/DVD** or a newer version of ScanWizard DI is required in the future. You can find the calibration data in either of these two locations:

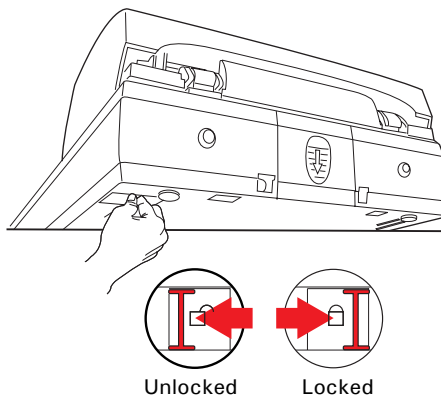
- After the software has been installed, go to the drive where it is installed and look for a folder named "Scanners". Double-click "Scanners" to open it, look for a data named "ADFCalData86\_xxxx.dat" for ArtixScan DI 4020 Plus or "ADFCalData87\_xxxx.dat" for ArtixScan DI 2020 Plus, and then copy it out from the folder.



- Look for the same folder "Scanners" in your Microtek Software CD/DVD, open it to look for a data named as same as that mentioned above, and then copy it out from the folder.

## Step 3: Unlocking the Scanner

1. Remove the yellow "Step 3" sticker from your scanner.
2. With the scanner power off, tilt the scanner and locate the locking switch at the bottom left corner of the scanner. Do not turn the scanner upside down when attempting to unlock, as this may damage the scanner's mechanism.
3. Push the locking switch to the position as indicated in the graphic, with the icon on the lock showing as "unlocked".

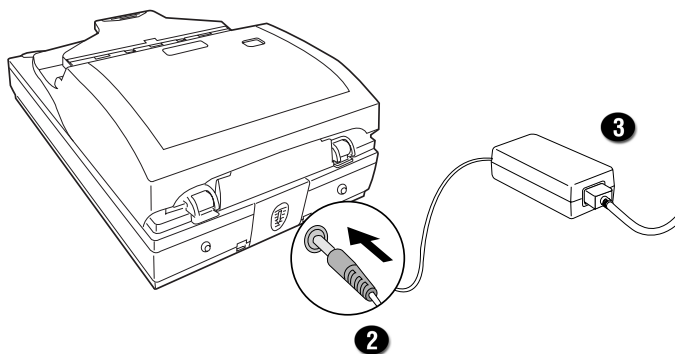


**Note:** To lock the scanner (for shipping and other purposes), turn the locking switch to the "Locked" position. When unlocking the scanner, do not turn the scanner upside down when locking the scanner back.

## Step 4: Connecting the Scanner

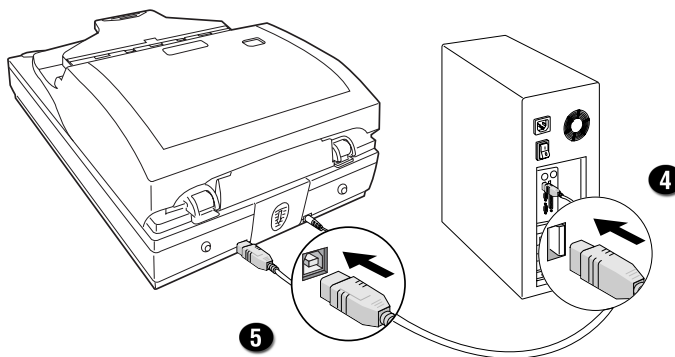
### To the Power Adapter

1. Remove the yellow "Step 4" sticker from your scanner.
2. Connect the power adapter to the back of the scanner.
3. Plug one end of the power cord into the power adapter, and plug the other end of the power cord into a wall outlet or other power source.



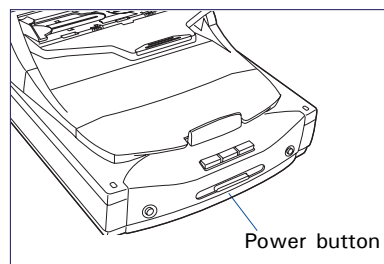
## To the Hi-Speed USB Cable

4. Connect one end of the Hi-Speed USB cable to your computer.
5. Connect the other end of the Hi-Speed USB cable to the scanner's USB port.



6. Press the Power button at the front panel of your scanner to turn on the scanner; the LED (orange) lights at the button panel.

The system will detect your scanner automatically..



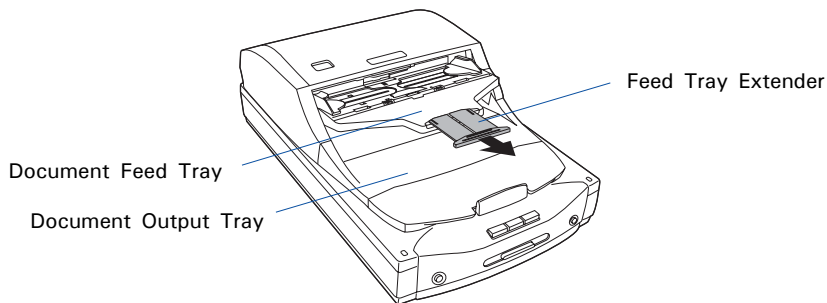


# Positioning Documents

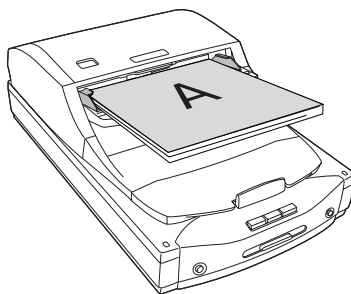
## Into the ADF (Automatic Document Feeder)

This section shows you how to position a single-sheet document, as well as a stack of documents, into the ADF (Automatic Document Feeder).

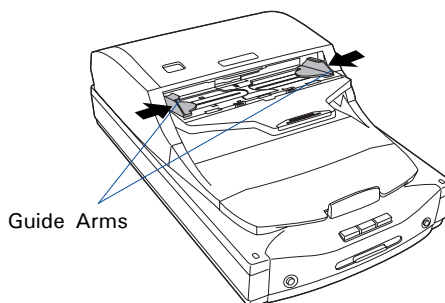
1. Pull out the Feed Tray Extender for better paper support if the length of the originals exceeds 10 inches.



2. Load the stack of originals onto the Document Feed Tray, with the side to be scanned facing up. Push the stack of papers into the tray until the edge of the stack touches the front edge of the Document Feed Tray.

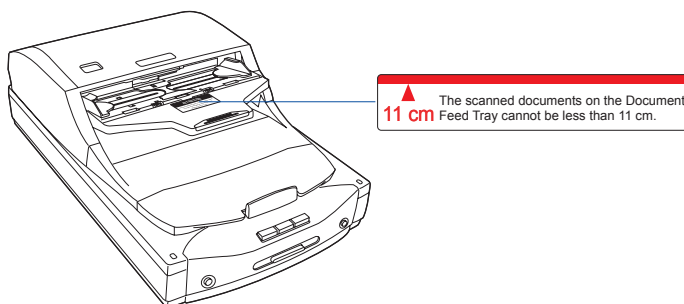


3. Align stack of originals with the center of the Document Feed Tray by sliding the two Guide Arms toward the stacked papers if the width of the originals is less than 8.5 inches.

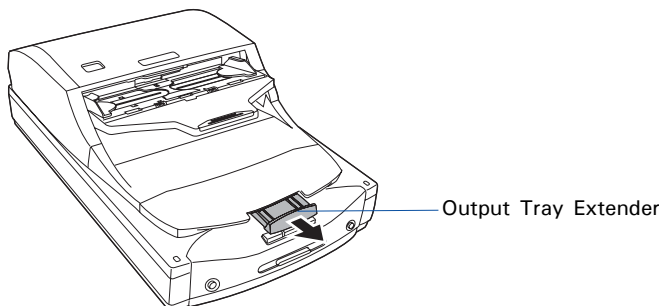


**Note:** There are several precautions and reminders about using the ADF correctly. Please refer to the section as below for the detail.

- The document feeder is not designed for scanning photos; doing so may damage your originals. Microtek accepts no responsibility for damage that may arise from misuse of equipment.
- Do not use the ADF to scan documents shorter than 4.33" (110 mm). A label attached on the ADF marks the length of 4.33" (110 mm). Make sure that the documents to be scanned on the ADF are longer than the label.



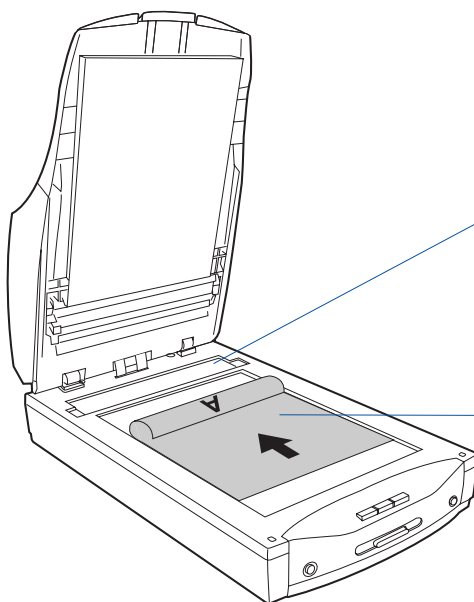
- The ADF can handle paper within the following specifications:
  - Width: 4.33" to 8.5" (110 to 215.9 mm)
  - Length: 4.33" to 25" (110 to 635 mm)
  - Weight: 10 to 30 lbs. (38 to 110 g/m<sup>2</sup>)
  - Feeder capacity: Up to 100 sheets of 24 lbs (90 g/m<sup>2</sup>)
- If the documents are torn, curled, or wrinkled, do not put them into the ADF to scan, because they may cause paper jams.
- Remove paper clips or staples before placing documents into the ADF. DO NOT use the ADF to scan documents with paper clips or staples because they may cause paper jams or damage the scanner.
- If you plan to scan quite amounts of documents, please pull out the Output Tray Extender for better paper organization.



## On the Flatbed

This section shows you how to position a single-sheet document, such as a single photograph or a page from a book, on the flatbed:

1. Raise the scanner lid, and place the document to be scanned face down on the scanner glass surface.
2. Place the top end of the document towards the back of the scanner, then lower the scanner lid on the scanner glass surface.



When scanning, the Rear Glass Surface should be kept clear and free of obstruction at all times.

With the document face down on the scanning glass, align the document against the top edge of Front Glass Surface of the scanner.

# Scanning Documents

## Using ScanWizard DI

ScanWizard DI is a scanning software designed by Microtek for document scanning in color, black and white, and grayscale in both duplex and simplex modes. Its user-friendly interface enables you to easily start the scanning process. Refer to the ScanWizard DI software manual for more details.

### Warning:

- Do not place photos or fragile materials in the feed tray, for it will damage the originals when performing the feeding process. Always place frail originals on the scanner's glass surface and choose "Flatbed" as your Scan Source.
- Before scanning the document from the ADF, make sure the flatbed scanning area is clear from any obstructions. Otherwise, a scanning error may occur.
- Before using the ScanWizard DI, make sure that your anti-virus software program has been turned off. Otherwise, the scanning speed may be affected.

The following sections will show you step by step how to use ScanWizard DI.

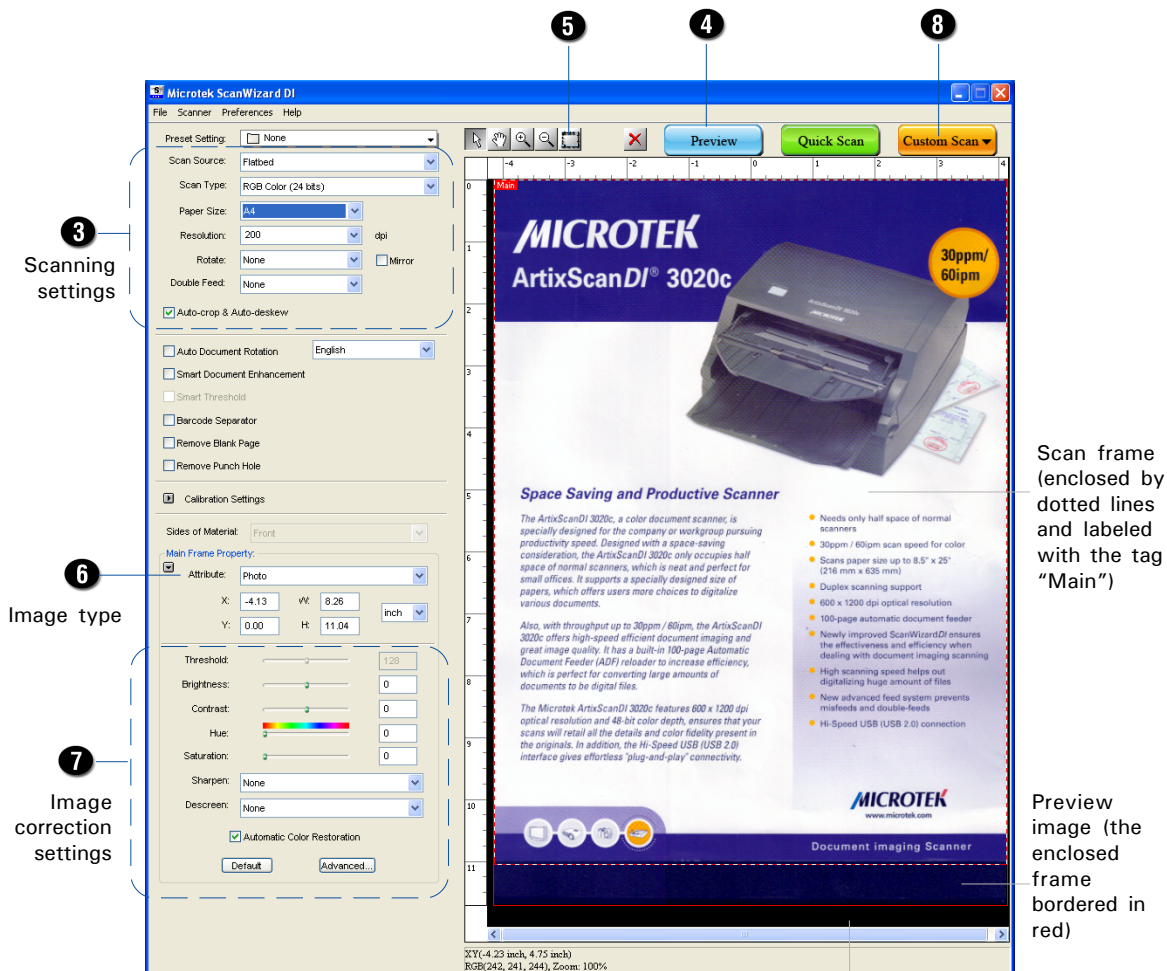
## Scanning a Single-sheet Document

1. Place the single-sheet document to be scanned on either the scanner glass surface or on the ADF's Document Feed Tray.
2. Launch ScanWizard DI (either as a stand-alone by clicking the program icon, or by using the "File-Import" or "Scan" command from an application program).
3. Specify your scanning requirements in the ScanWizard DI control panel.
  - a) Select your image input device in the Scan Source drop-down menu.
    - Select *Flatbed* if you place the document on the scanner's glass surface.
    - Select *ADF (Simplex)* or *ADF (Duplex)* if the document is fed from the ADF's Document Feed Tray.

Select *ADF (Simplex)* to scan one side of the document.

Select *ADF (Duplex)* to scan both sides of the document.

- b) Select your image output type in the Scan Type drop-down menu.
    - Select *RGB Color (24 bits)* to scan the image in color.
    - Select *Grayscale (8 bits)* to scan the image in grayscale.
    - Select *Black & White (1 bit)* to scan the image in black-and-white.
  - c) Select a dimension in the Paper Size drop-down menu as your preview image size.
  - d) Select your desired image output resolution in the Resolution drop-down menu.
  - e) If the “Auto-crop & Auto deskew” option is selected, the scanner automatically detects the size of the original image, crops the full scan frame to fit the image, and removes unwanted black borders after the scan, as well as corrects the distorted image for proper alignment.
4. Click the *Preview* button to perform a preliminary view of the entire image. When done, a preview image appears in the preview window.
  5. If necessary, click the *Scan Frame* tool button to adjust the size of the scan frame (enclosed within the red dotted lines and labeled with the tag “Main”). Drag on the edge or corner of the scan frame to resize the scan frame.
  6. Select your image type in the Attribute drop-down menu.
    - Select *Line Art* to scan line art images (images in one color or in black-and-white, such as logos or mechanical blueprints).
    - Select *Photo* to scan color prints.
    - Select *Text* to scan text.
  7. If necessary, adjust image quality by using the image correction tools.
  8. Click the *Scan* button, or click the *Custom Scan* button and select *Save to File* to start scanning.
    - If ScanWizard DI is launched as a Plug-In from an image-editing program, the scanned image is delivered after the scan to your application, where the image can be saved, printed, or modified further.
    - If ScanWizard DI is launched as a stand-alone program, the scanned image can be saved after the scan to a file or opened in an image-editing program.



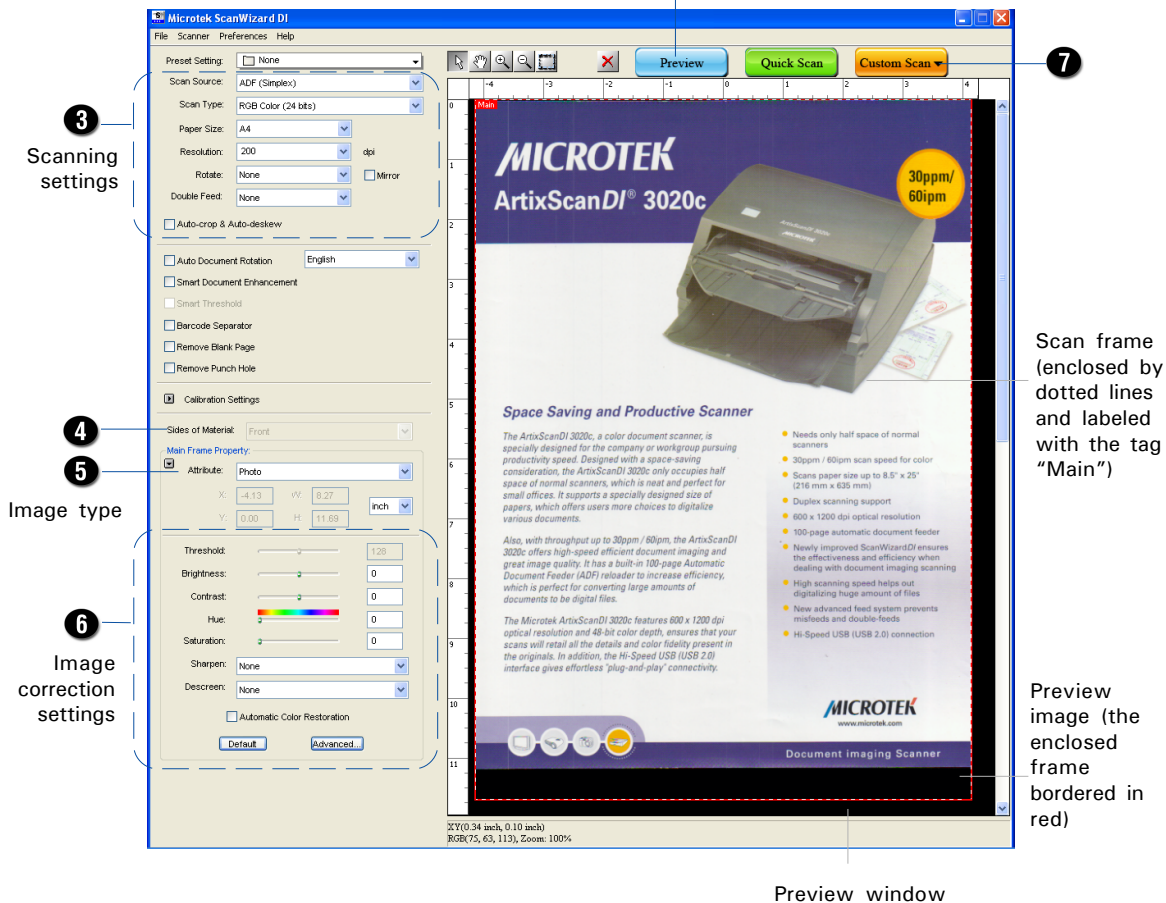
## Scanning a Stack of Documents

1. Place the stack of documents to be scanned on the ADF's Document Feed Tray.
2. Launch ScanWizard DI (either as a stand-alone by clicking the program icon, or by using the "File-Import" or "Scan" command from an application program).
3. Follow the procedures (steps 3a through 3e) for "Scanning a Single-sheet Document" to specify your scanning requirements in the ScanWizard DI control panel.
  - a) Select *ADF (Simplex)* or Select *ADF (Duplex)* in the Scan Source drop-down menu as your image input device.
    - Select *ADF (Simplex)* to scan one side of the document.
    - Select *ADF (Duplex)* to scan both sides of the document.
  - b) Select your image output type in the Scan Type drop-down menu.
  - c) Select a dimension in the Paper Size drop-down menu as your preview image size.
  - d) Select your desired image output resolution in the Resolution drop-down menu.
  - e) If the Auto-crop & Auto deskew option is selected, the scanner automatically detects the size of the original image, crops the full scan frame to fit the image, and removes unwanted black borders after the scan, as well as corrects the distorted image for proper alignment.
  - f) If necessary, select a level of paper thickness for the ultrasonic double-feed detection in the Double Feed drop-down menu.
4. If necessary, specify the image settings for the front or back side of papers separately by using the "Sides of Material" control when the Scan Source is set as the ADF (Duplex).
5. Select the your image type in the Attribute drop-down menu.
6. If necessary, adjust image quality by using the image correction tools.
7. Click the *Scan* button, or click the *Custom Scan* button and select *Save to File* to start scanning.

If ScanWizard DI is launched as a plug-in from an image-editing program, the scanned image is delivered after the scan to your application, where the image can be saved, printed, or modified further.

If ScanWizard DI is launched as a stand-alone program, the scanned image can be saved after the scan to a file, or opened in an image-editing program.

For preview purposes only



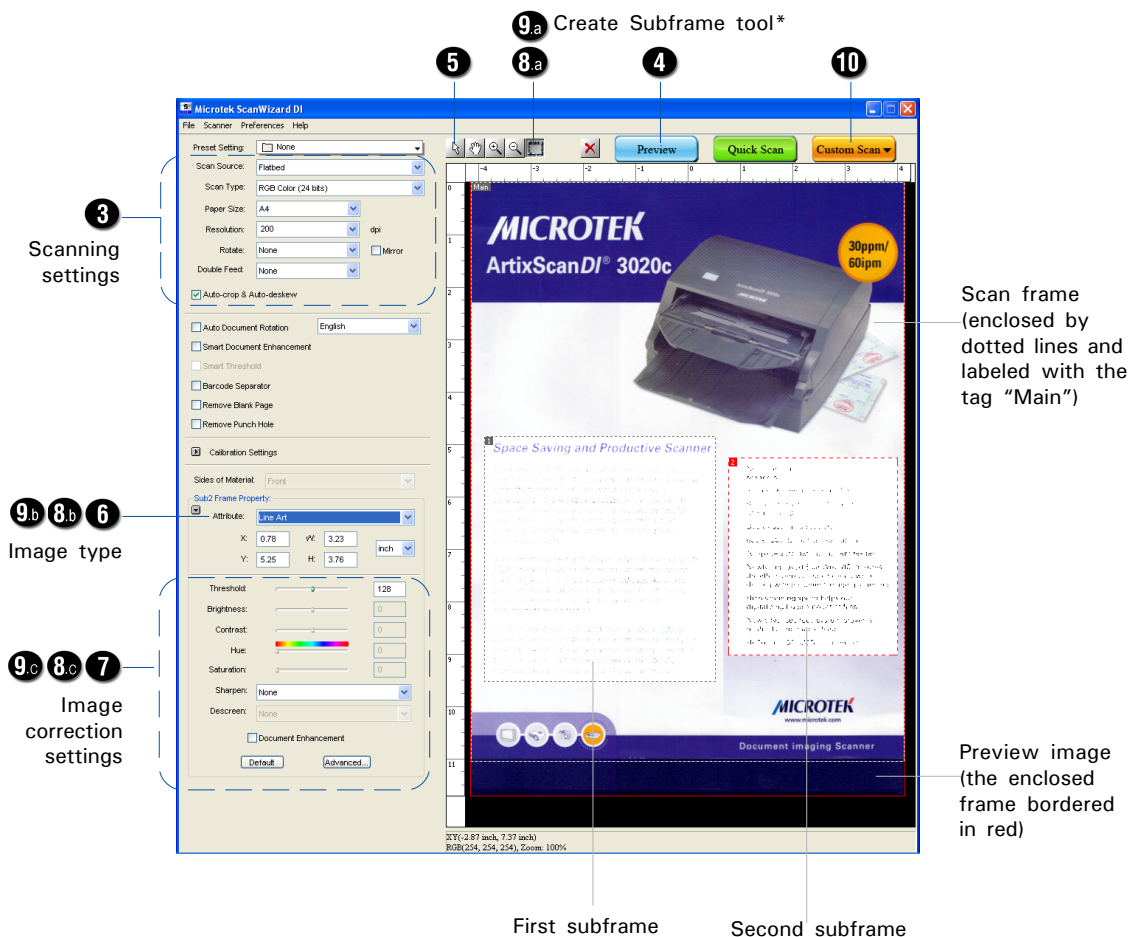
Preview window



## Scanning Documents with Mixed Contents

Many documents contain mixed content with both text and pictures on the same page. You can use a function named "Multiple Scan Frames" to scan different types of documents at the same time.

1. Place the single-sheet color print to be scanned on either the scanner glass surface or on the ADF's Document Feed Tray.
2. Launch ScanWizard DI (either as a stand-alone by clicking the program icon, or by using the "File-Import" or "Scan" command from an application program).
3. Follow the procedures (steps 3a through 3e) for "Scanning a Single-sheet Document" to specify your scanning requirements in the ScanWizard DI control panel.
4. Click the *Preview* button to perform a preliminary view of the entire image. When done, a preview image appears in the preview window.
5. Click the *Scan Frame* tool button to adjust the size of the scan frame (enclosed within the dotted lines and labeled with the tag "Main"). Drag on the edge or corner to resize the scan frame.
6. Select *Photo* in the Attribute drop-down menu as your image type for the main scan frame.
7. If necessary, adjust image quality by using the image correction tools.
8. Specify the **first** subframe.
  - a) Click the *Create Subframe* tool button. Move the mouse pointer to the text area, then drag to create a rectangle and enclose the text area.
  - b) Select *Text* in the Attribute drop-down menu as your image type for the selected scan frame.
  - c) If necessary, adjust image quality by using the image correction tools.
9. Specify the **second** subframe.
  - a) Click the *Create Subframe* tool button. Move the mouse pointer to the drawing picture area, then drag to create a rectangle and enclose the picture area.
  - b) Select *Line Art* in the Attribute drop-down menu as your image type for the selected scan frame.
  - c) If necessary, adjust image quality by using the image correction tools.
10. Click the *Scan* button, or click the *Custom Scan* button and select *Save to File* to start scanning.



#### \*Create Subframe tool

The Create Subframe tool lets you create a new scan frame within the enclosed scan frame that is labeled with the tag "Main". When a new scan frame is generated, the enclosed scan frame is selected in red dotted lines. The newly added subframe is automatically labeled in series (with tag "1", "2", etc.).

## Scanning Documents with Barcodes

When there is a barcode on a document, you can use “Barcode Separator” function to batch scan documents without starting and stopping each time a new file begins. This scanning scenario is useful for the scanned documents to be filed with barcode numbers.

1. Place the documents with a barcode on the ADF’s Document Feed Tray.
2. Launch *ScanWizard DI* as a stand-alone by clicking on the program icon on the desktop.
3. Follow the procedures (steps 3a through 3e) for “Scanning a Single-sheet Document” to specify your scanning requirements in the ScanWizard DI control panel.
4. Click the *Preview* button to perform a preliminary view of the entire image. When done, a preview image appears in the preview window.
5. Click the *Scan Frame* tool button to adjust the size of the scan frame (enclosed within the red dotted lines and labeled with the tag “Main”). Drag on the edge or corner of the scan frame to resize the scan frame.
6. Follow the step 6 for “Scanning a Single-sheet Document” to select your image type in the Attribute drop-down menu.
7. If necessary, adjust image quality by using the image correction tools.
8. Check the “Barcode Separator” option to activate the Barcode Frame tool button.
9. Click the *Barcode Frame* tool button to adjust the size of the barcode frame (enclosed within the red dotted lines and labeled with the tag “BarCode”). Drag on the edge or corner to determine the final size of the actual scan for the barcode.

If you have more than one page with a barcode on, make sure if the selected area of the barcode frame covers enough space. If not, when it performs a scan job, your scanner will not detect the barcode which appears outside the selected area of the barcode frame.

10. Click the *Scan* button, or click the *Custom Scan* button and select *Save to File* to start scanning.

If the “Save Barcode as Directory” is checked, the program will recognize and use the barcode on the scanned document to generate a file directory, where the scanned document will appear with any predefined prefix and/or serial number.

If the “Save Barcode as Directory” is unchecked, the program will recognize and use the barcode on the scanned document to name the scanned document. You can append any predefined prefix and/or serial number to the output filename in order to differentiate the documents containing same barcode.

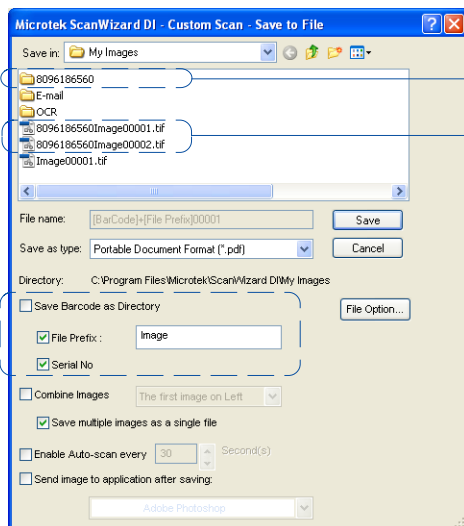
Select Frame tool

Scanning settings

Image type

Image correction settings

Barcode Separator

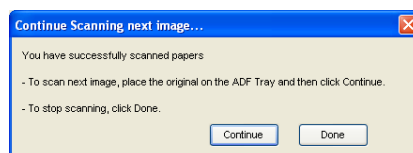
Scan frame  
(enclosed by  
dotted lines and  
labeled with the  
tag "Main")Barcode  
Frame toolBarcode number is used as  
a file directory nameBarcode number is used as  
a file nameBarcode frame  
(enclosed by dotted  
lines and labeled  
with the tag "BarCode")

## Scanning Documents Directly to a PDF

This scanning scenario guides users to scan documents directly to a PDF file, which helps users to avoid complicated after-scan settings if they just want to transform stacks of valuable data and papers into a single PDF file.

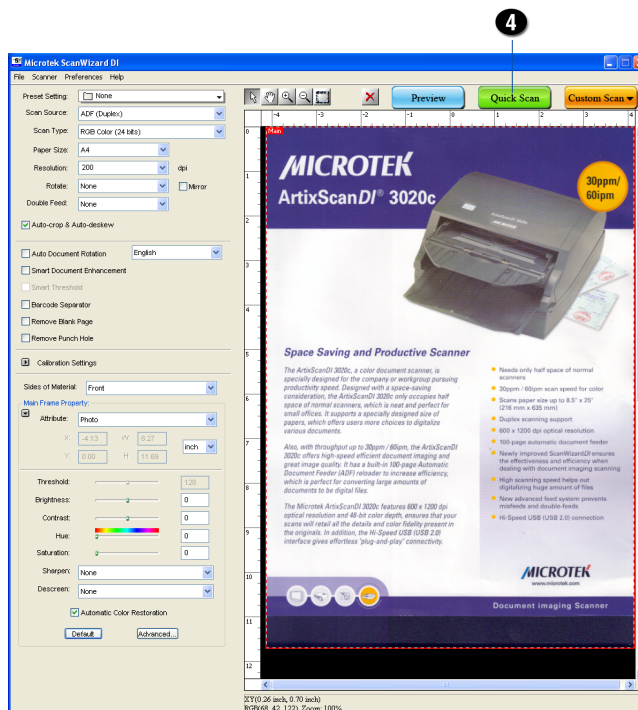
1. Place the stack of documents to be scanned on the ADF's Document Feed Tray.
2. Launch ScanWizard DI as a stand-alone by clicking the program icon.
3. Follow the procedures (steps 3 through 6) for "Scanning a Stack of Documents" to specify your scanning requirements in the ScanWizard DI control panel.
4. Click the *Quick Scan* button to start scanning.

Immediately, your scanner starts scanning automatically. When the scanning is finished, ScanWizard DI will prompt you a window to ask if you want to place the next page.



Click the **Continue** button to scan more pages or click the **Done** button to terminate the scanning job.

If your computer has been installed a PDF Reader program, the scanned PDF file will be opened automatically on the screen for the further use.



The **Quick Scan** button appears only when ScanWizard DI is launched as stand-alone program

# Utilizing Scanned Documents

Depending on your needs, you may save your scanned documents into the following purposes:

## Scanning for Archiving

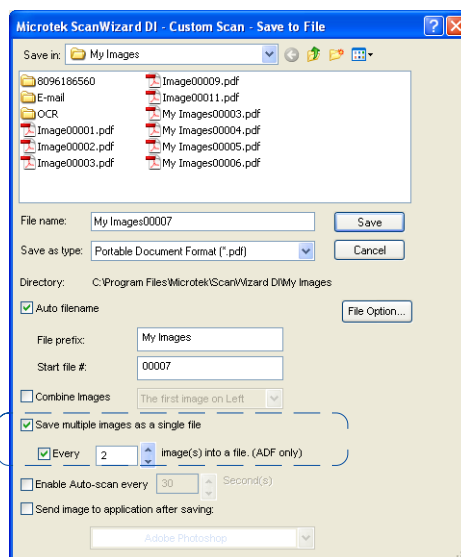
The archiving function allows the scanner to scan documents for recording purposes. For instance, an image “record” can be kept of multiple-page documents or of other important documents, such as birth certificates and tax records.

1. Place the documents to be scanned on the ADF's Document Feed Tray.
2. Launch ScanWizard DI in stand-alone mode by clicking the program icon on the desktop.
3. Follow the procedures (steps 3 through 6) for “Scanning a Stack of Documents” to specify your scanning requirements.
4. Click the *Custom Scan* button and select *Save to File* to open the “Custom Scan-Save to File” dialog box.

In the “Custom Scan-Save to File” dialog box, specify the following settings:

- a) Key in your preferred file name in the “File prefix” edit box, or use the default “Image” as a root file name.
- b) Select your required export file format. Save the file as TIF, PDF, or DCX, which enables the “Save multiple images as a single file” option in the next step.
- c) Check the “Save multiple images as a single file” option to store all the scanned images as a single file if desired.

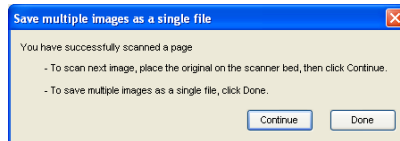
If you scan the documents through the ADF and enable “Save multiple images as a single file”, you are allowed to specify how many images you would like to be saved in a single file after scan.



Check the “Every %image(s) into a file ” option, and then enter your desired number in the edit box directly or click the up/down arrow to increase/decrease the number. The range is from 2 to 100 images.

- Click the **Save** button to start the scanning.

If the “**Save multiple images as a single file**” option is checked, when the scanning is finished, **ScanWizard DI** will prompt you a window to ask if you want to place the next page. Click the **Continue** button to scan or click the **Done** button to save multiple images as a single file.

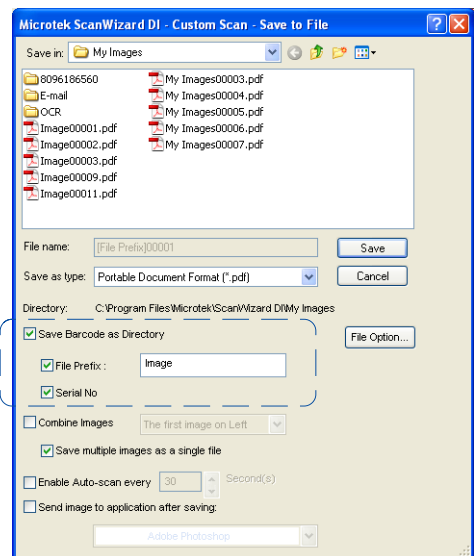


The saved file can be viewed from the default folder (or your selected folder).

When the Barcode Separator function is checked, the “**Scan To: Save As**” dialog box should look like the one as shown below. The “**Auto filename**” option will be replaced by the “**Save Barcode as Directory**”.

**Save Barcode as Directory:** If “**Save Barcode as Directory**” is checked, the value of the scanned barcode is saved and used as a file directory. If unchecked, the value of the scanned barcode is saved and used as a file’s name.

When “**Save Barcode as Directory**” is checked, you have to assign at least one of the “**File Prefix**” or “**Serial No.**” to be your output filename. They cannot be null at the same time.



If “**Save Barcode as Directory**” is unchecked and if you do not assign either one of the “**File Prefix**” or “**Serial No.**” to be a file’s name, the new saved file will overwrite the old one.

**Note:** No matter if you check “**Save Barcode as Directory**” or not, it is strongly recommended to check “**Serial No.**” in order to add it as part in your file’s name. For if you do so, the system will automatically generate a sequential number based on when the file is saved. Otherwise, if you do not do so, when you scan another document with the same barcode value as that on the old one and you forget to name it in different file prefix, the new scanned document will overwrite the old one immediately.

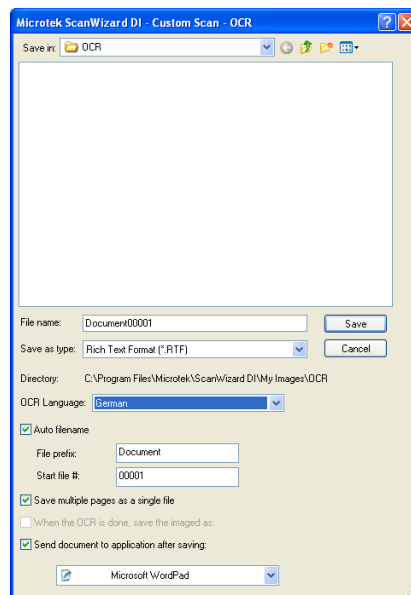
## Scanning for OCR

The OCR (Optical Character Recognition) function allows the scanner to convert a scanned document into text that can be edited from any word processing application.

1. Place the documents with text to be scanned on the ADF's Document Feed Tray.
2. Launch ScanWizard DI in stand-alone mode by clicking the program icon on the desktop.
3. Follow the procedures (steps 3 through 6) for "Scanning a Stack of Documents" to specify your scanning requirements.
  - a) In step 3d, the recommended resolution is 300 dpi or above for OCR.
  - b) In step 6, from the Attribute options menu, choose *Line Art* as your image type to obtain best OCR results. When *Black & White* is your chosen mode in the Scan Type options, *Line Art* should be the selected image type.
4. Click the *Custom Scan* button and select *OCR* to open the "Custom Scan-OCR" dialog box.

In the "Custom Scan-OCR" dialog box, specify the following settings:

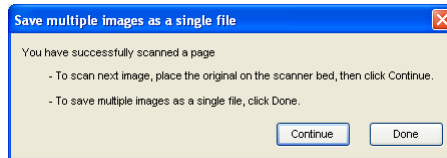
- a) Key in your preferred file name in the "File prefix" edit box, or use the default "Document" as a root file name.
- b) Select your required export file format.
- c) Check the "Save multiple pages as a single file" option to store all the scanned images as a single file if desired.
- d) Select your preferred language from the "OCR Language" options. The available options are English, German, French, Italian, Spanish, and Chinese.
- e) Check the "Send document to application after saving" option, then choose your word processing application from the options.





5. Click the *Save* button to start the scanning.

**If the “Save multiple images as a single file” option is checked, when the scanning is finished, ScanWizard DI will prompt you a window to ask if you want to place the next page. Click the Continue button to scan or click the Done button to save multiple images as a single file.**



The saved file can now be opened from your chosen application and is ready to be edited.

## Scanning for PDF

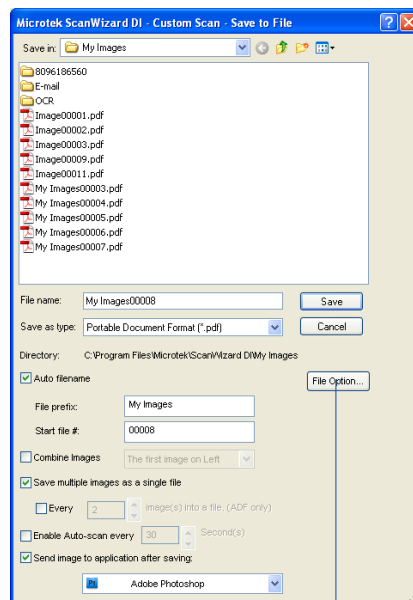
The scanner can easily convert any paper document into an image and saves it as an Adobe Portable Document Format (PDF) file for viewing with the Adobe application software. It also offers variable compression levels for full controls over file sizes and image quality.

1. Place the documents to be scanned on the ADF's Document Feed Tray.
2. Launch ScanWizard DI in stand-alone mode by clicking the program icon on the desktop.
3. Follow the procedures (steps 3 through 6) for "Scanning a Stack of Documents" to specify your scanning requirements.
4. Click the *Custom Scan* button and select *Save to File* to open the "Custom Scan-Save to File" dialog box.

In the "Custom Scan-Save to File" dialog box, specify the following settings:

- a) Key in your preferred file name in the "File name" edit box, or use the default "Image" as a root file name.
  - b) Select "Portable Document Format" as your file-saving format from the "Save as type" drop-down menu.
  - c) Check the "Save multiple images as a single file" option to store all the scanned images as a single file if desired.
  - d) Check the "Send image to application after saving" option, then choose your Adobe application software from the options.
5. Click the *Save* button.

The originals are sequentially scanned until the stack of documents is depleted; when finished, all the scanned images are saved as a single file. The saved file can now be opened from your chosen application and is ready to be viewed.



The File Option button is active when the "RGB Color" or "Grayscale" is set as your image output type and the PDF is chosen. With this function, you can control the image quality compression as your desired.

**Note:** The scanner also allows you to scan a text document and convert it to an editable PDF file for editing with the Adobe Acrobat writer. Follow the procedures for "Scanning for OCR", in step 4b, select the "PDF with hidden text" as your file-saving format.

## Scanning for E-mail

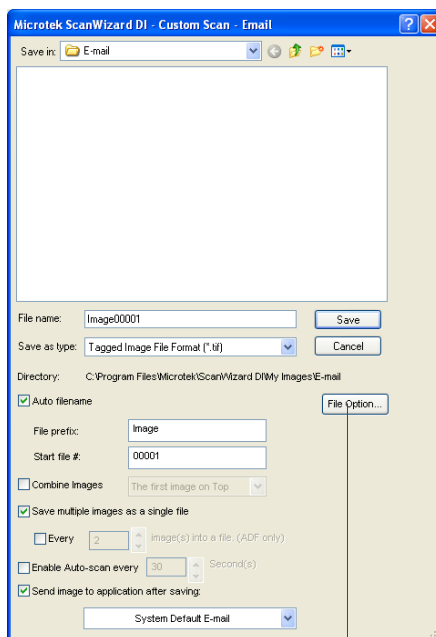
The e-mail function allows the scanner to save and send the scanned images to your preferred e-mail application program in one simple step. This lets you share your scanning results with others fast and easily.

1. Load the documents to be scanned on the scanner glass surface.
2. Launch ScanWizard DI in stand-alone mode by clicking the program icon on the desktop.
3. Follow the procedures (steps 3 through 6) for “Scanning a Stack of Documents” to specify your scanning requirements.
4. Click the *Custom Scan* button and select *E-mail* to open the “Custom Scan-E-mail” dialog box.

In the “Custom Scan-E-mail” dialog box, specify the following settings:

- a) Key in your preferred file name in the “File name” edit box, or use the default “Image” as a root file name.
  - b) Select your required export file format.
  - c) Check the “Save multiple images as a single file” option to store all the scanned images as a single file if desired.
  - d) If the “Send image to application after saving” option is checked, the scanner will send your scanned and saved image file to the e-mail application program assigned in the system.
5. Click the *Save* button.

When finished, all the scanned images are saved as a single file. The saved file can now be sent from your chosen e-mail application to others and is ready to be viewed.



The File Option button is active when the “RGB Color” or “Grayscale” is set as your image output type and the PDF is chosen. With this function, you can control the image quality compression as your desired.

## Scanning for Copying

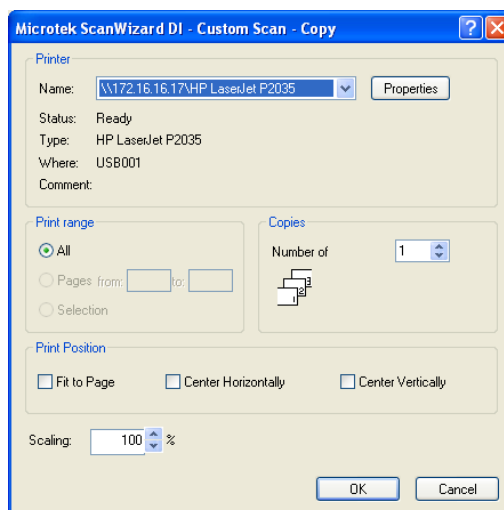
The copy function allows the scanner to work like a copier using your printer, with documents printed successively without interruption. This lets you transform your scanner and printer into a convenient copy station.

1. Place the documents to be scanned on the ADF's Document Feed Tray.
2. Launch ScanWizard DI in stand-alone mode by clicking the program icon on the desktop.
3. Follow the procedures (steps 3 through 6) for "Scanning a Stack of Documents" to specify your scanning requirements.
4. Click the *Custom Scan* button and select *Copy* to open the "Custom Scan-Copy" dialog box.

In the "Custom Scan-Copy" dialog box, specify the following settings:

- a) Select a default printer or any alternative printer from the options.
- b) Specify the number of copies to be made.
- c) Select a scale ratio for increasing or reducing the size of the scanned image.

If the "Fit to Page" option is checked, the "Scaling" setting is disabled.

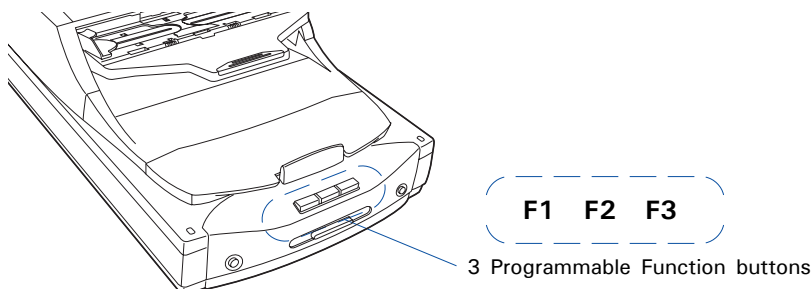


5. Click the *OK* button.

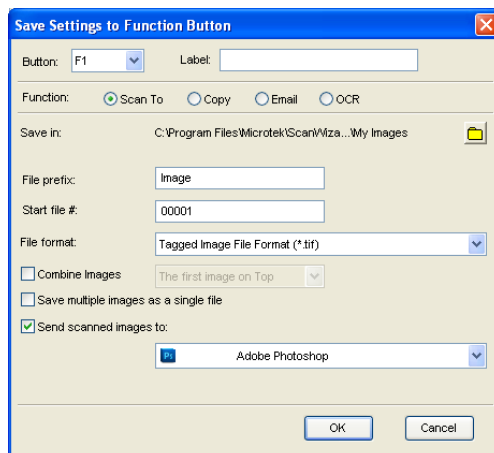
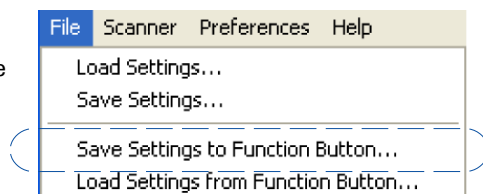
The originals are sequentially scanned until the stack of documents is depleted; when finished, all the scanned images are sent to the specified printer.

# Customizing the Function Buttons

The ArtixScan DI 4020 Plus/2020 Plus is equipped with 3 programmable function buttons (F1, F2, and F3) that can be customized to automate a number of predefined operations, such as scanning to a file, sending an image to your printer, scanning for OCR, etc. Customizing is done through the “Save Settings to Function Button” command, as explained below.



1. Launch ScanWizard DI (either as a stand-alone by clicking the program icon, or by using the “File-Import” or “Scan” command from an application program).
2. Follow the procedures (steps 3 through 7) for the “Scanning a Single-sheet Document” section to specify your scanning requirements in the ScanWizard DI panel.
3. When you finish specifying the scanning settings, choose the “Save Settings to Function Button” command from the File menu. The dialog box appears.

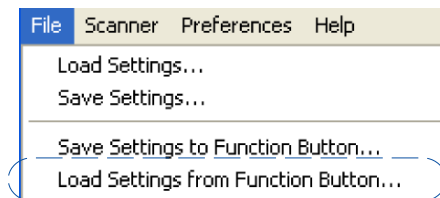


4. In the dialog box, specify your requirements for the button that you wish to define (F1, F2, or F3).
  - a) Select F1, F2, or F3 (e. g., F1) to be defined from the *Button* options.
  - b) Key in your preferred string in the *Label* edit box for the selected function button.
  - c) Make your selection among the *Function* radio buttons below to define your selected button. The four functions provided are:
    - **Scan To:** Captures images that can be automatically saved as files or sent to another application for further processing. This is the default selection.
    - **Copy:** Scans the image and sends it to your printer, transforming your scanner and printer into a convenient copy station. Simply specify the number of copies you want.
    - **Email:** Captures images that can be automatically saved as files or sent to the system default E-mail application.
    - **OCR:** Performs OCR (Optical Character Recognition) of a document and converts it to a fully editable digital file. Saves time from retyping documents into your word processor.
5. Specify the function settings according to your requirements, then click the OK button. The parameters currently specified for your selected function button are saved. To define another custom function button if desired, follow steps 2 through 5 of this section.

**Note:** When you have finished the settings for the desired function buttons, you will need to exit ScanWizard DI before pressing the function button on the scanner to carry out the defined task. If you press a function button on the scanner while ScanWizard DI is activated, the scanner only performs a preliminary scan of the image.

To browse the settings of your original function button (in case you do not remember the settings that you assigned previously), use the “Load Settings to Function Button” feature.

To do this, select the “Load Settings to Function Button” command from the File menu, choose the function button to be previewed, and click the OK button.



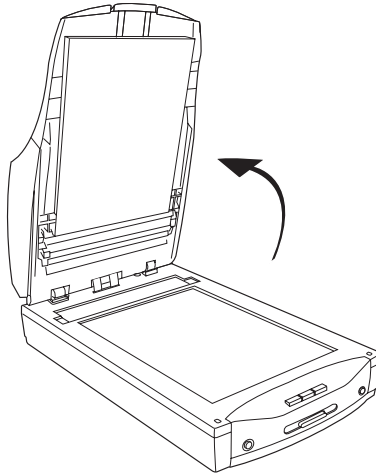
The saved function button settings are restored to the ScanWizard DI control panel. You can then continue to use these settings until you need to specify new settings for the buttons.

# Care and Cleaning

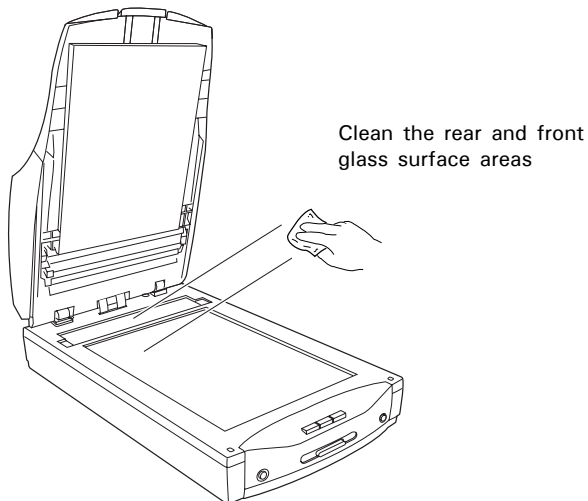
To ensure optimal performance from the ArtixScan DI 4020 Plus/2020 Plus, it is important to clean several critical parts of the scanner on a regular basis.

## Cleaning the Scanner Glass Surface

1. Lift the ADF.



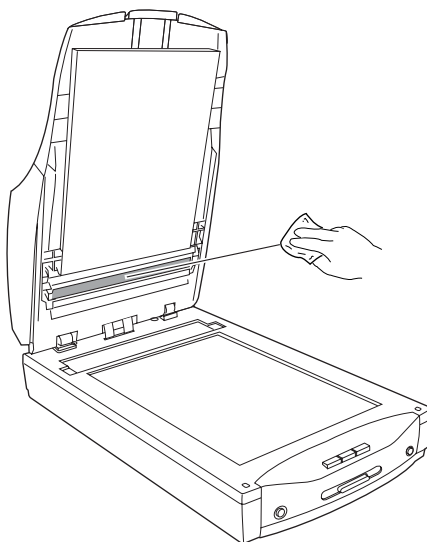
2. Then use a soft, non-abrasive and lint-free cloth to gently wipe the rear and front glass surface areas on the scanner flatbed.



**Note:** Do not use any detergents, synthetic cleaning solutions, cleaning naphtha, or other solvents to clean the glass surface directly.

## Cleaning the Mylar Cartridge

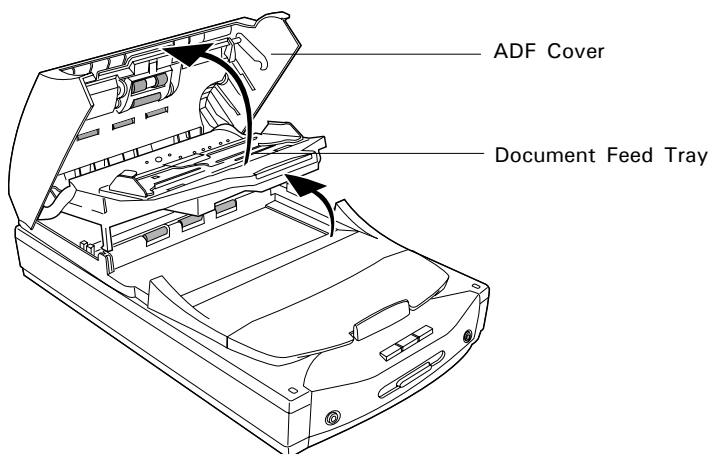
Use the same kind of cloth for cleaning the scanner glass surface to clean the black Mylar cartridge located at the bottom of the ADF.



## Cleaning the Rollers

Prolonged use of the ADF may result in accumulation of ink and other residue on the feeder's rollers, affecting their efficiency. Clean the rollers periodically to maintain performance.

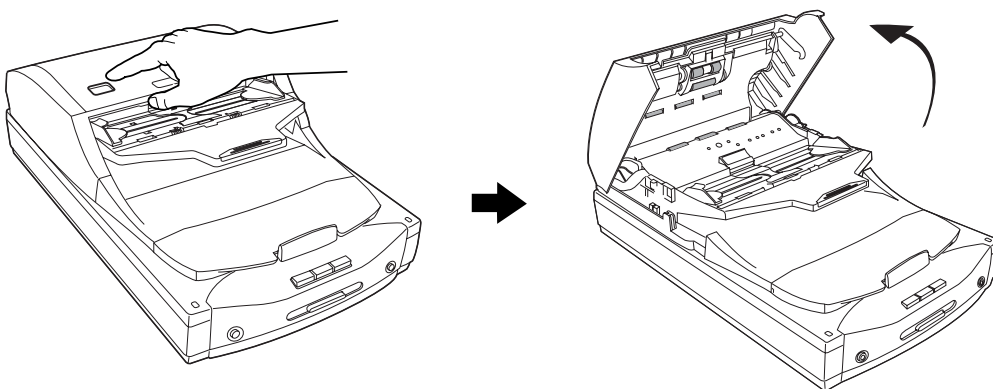
**Note:** Rollers are found in two areas of the ArtixScan DI 4020 Plus/2020 Plus: Directly under the ADF cover, and under the Document Feed Tray.



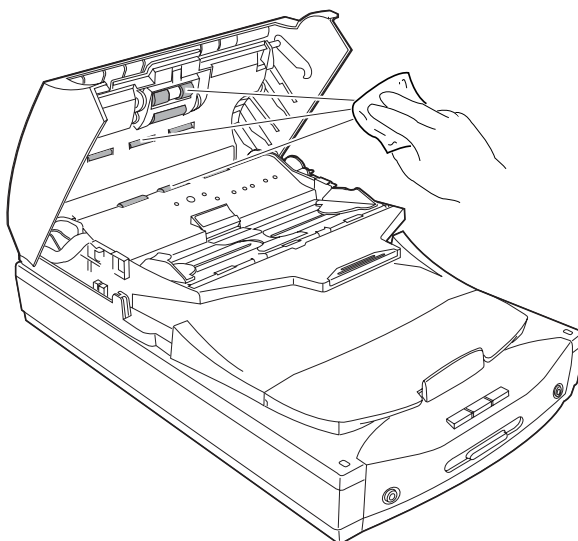


**To clean the rollers under the ADF cover:**

1. Push the button at the top of the ADF to release and lift up the ADF cover.

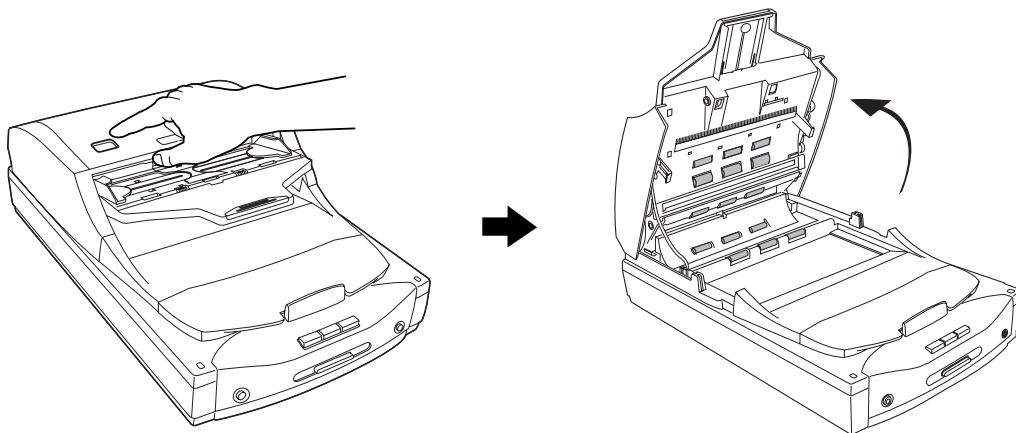


2. Clean the rollers with a lint-free cloth or a swab moistened with alcohol or ECO cleaner, as shown in the graphic below.

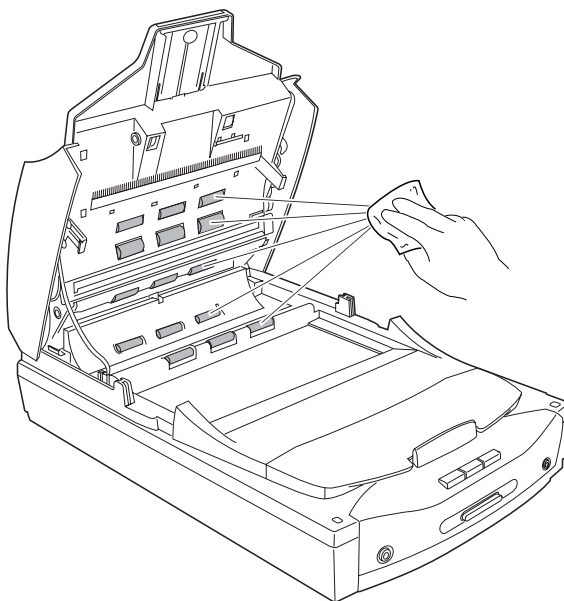


**To clean the rollers under the Document Feed Tray:**

1. Push the button at the top of the ADF, then lift the Document Feed Tray along with the ADF cover.

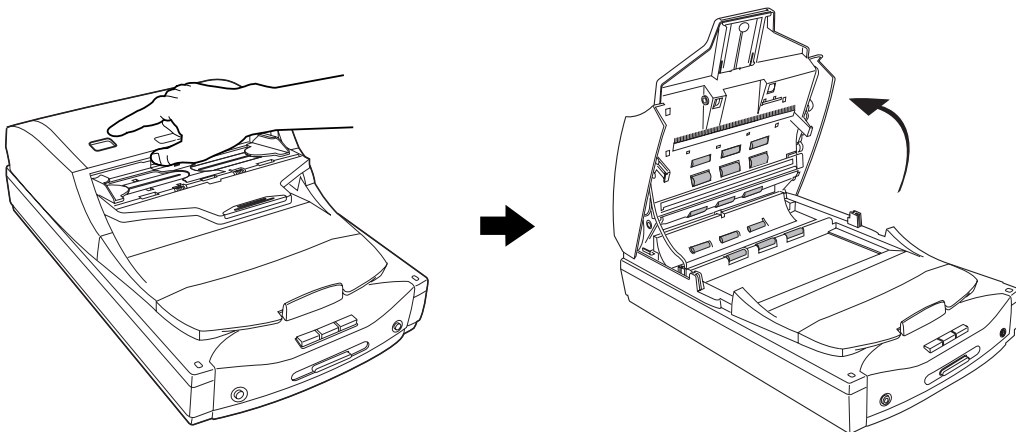


2. Clean the rollers with a lint-free cloth or a swab moistened with alcohol or ECO cleaner, as shown in the graphic below.

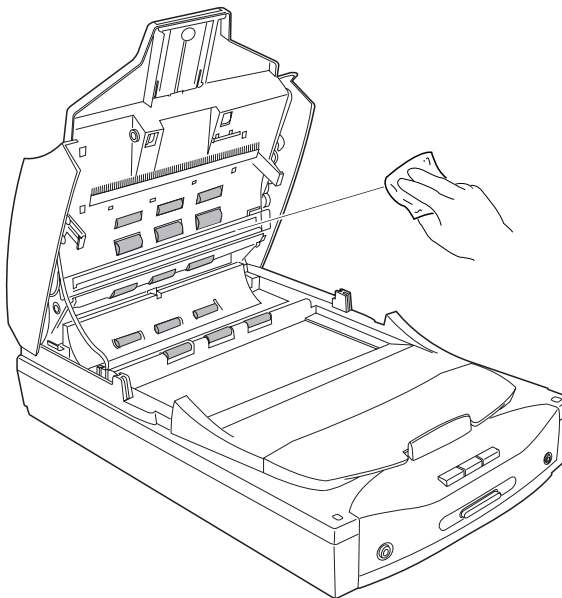


## Cleaning the ADF Glass Surface

1. Push the button at the top of the ADF, then lift the Document Feed Tray along with the ADF cover.



2. Using a soft and non-abrasive, lint-free cloth, clean the inner glass surface of the ADF gently and carefully.

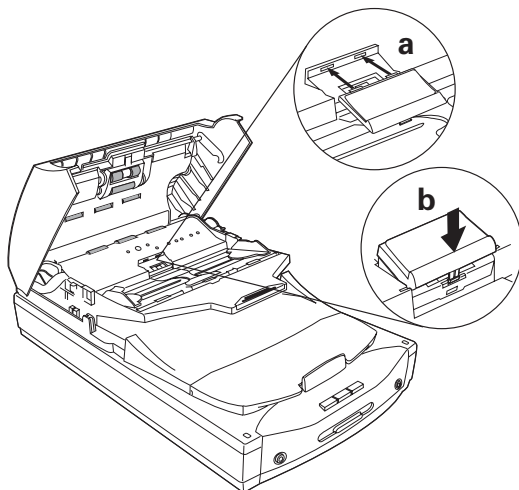
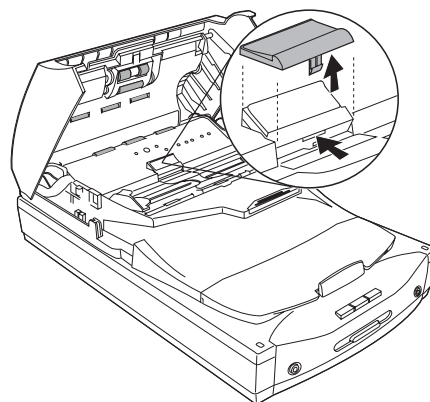


# Maintenance

The separation pad assembly and the feed-roller assembly in your Automatic Document Feeder (ADF) are designed to make document feeding smooth. After usage for a period of time, the separation pad assembly and feed-roller assembly may become worn, and a problem such as document double-feed may occur. In this case, check either the separation pad assembly or the feed-roller assembly, and replace them if needed. Follow the procedure below for replacement of the separation pad assembly and feed-roller assembly.

## Replacing the Separation Pad Assembly

1. Push the button at the top of the ADF, then move the cover of the ADF up to see the separation pad assembly, as indicated in the graphic below.
2. With the cover fully opened, use your fingers to nip off the separation pad assembly and pull it out from its compartment.



3. Insert (as shown in "a") and push down (as shown in "b") the new separation pad assembly into its compartment, making sure that the separation pad assembly snaps into place.
4. Close the cover.

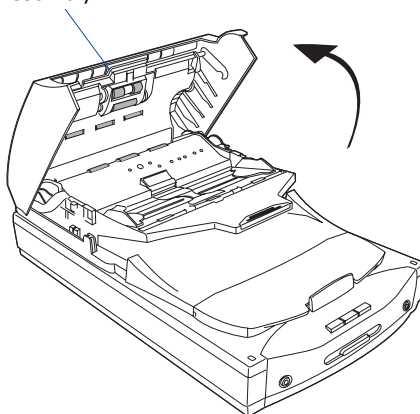
### Note:

- A grey separation pad assembly comes installed with the ArtixScan DI 4020 Plus/2020 Plus for use with scanning paper that weighs from 10 to 30 lbs. An additional grey separation pad assembly also comes with your scanner package for replacement.
- The recommended replacement point for the two separation pad assemblies is approximately 30,000 sheets.
- Please contact your local resellers for purchasing new separation pad assembly for replacement.

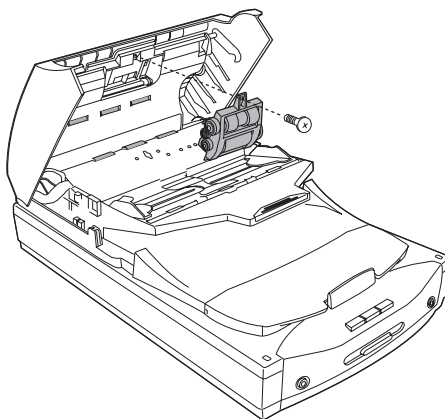
## Replacing the Feed-Roller Assembly

1. Press the button at the top of the ADF, then move the cover of the feeder up to see the feed-roller assembly, as indicated in the graphic below.

Feed-Roller Assembly



2. With the cover fully opened, loosen the screw on the cover with a screwdriver, and pull out the feed-roller assembly carefully.



3. Insert and push down the new feed-roller assembly into its compartment, making sure the feed-roller assembly snaps into place. Tighten the screw back on the cover.
4. Make sure the feed-roller assembly is attached to the feed cover properly, then close the feed cover.

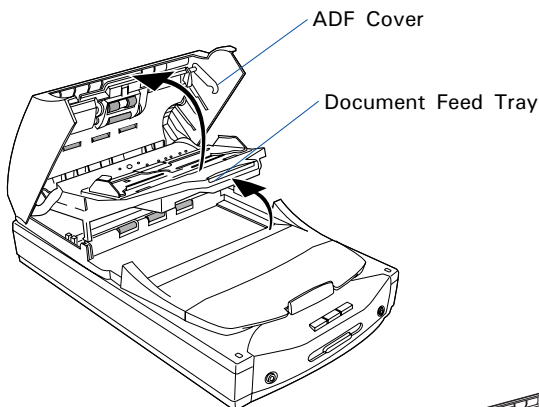
**Note:** The recommended replacement point for your feed-roller assembly is after scanning approximately 150,000 sheets through the ADF.

# Appendix

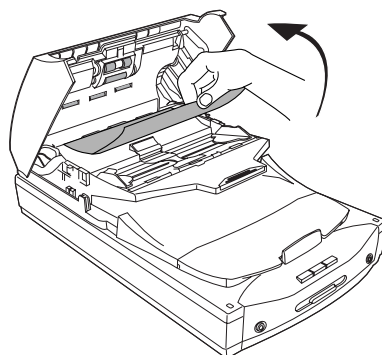
## Fixing Paper Jams

Open the ADF cover by pressing the button on the top of the ADF.

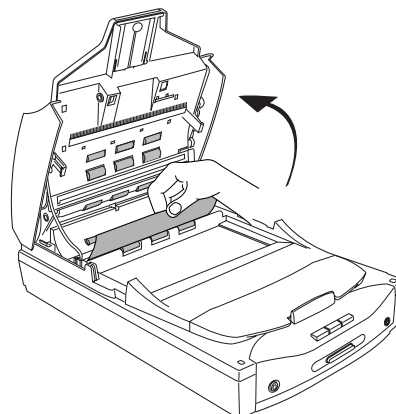
Paper jams can occur in either of two places: Directly under the ADF cover, or under the Document Feed Tray.



- If a paper jam has occurred in the rollers under the ADF cover, pull out the paper by using a forward-moving direction.









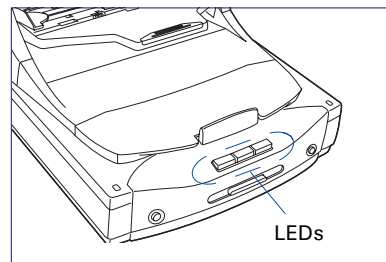
- If a paper jam has occurred in the rollers directly under the Document Feed Tray, lift the Document Feed Tray, then pull out the paper by using a forward or backward motion until the paper has been pulled free.



# Troubleshooting

The LEDs on the button panel indicates the status of the scanner.

		<b>On</b> - Ready to scan
		<b>Flashing Green</b> - Scanning
		<b>Off</b> - Scanner is off



**First, make sure that you have followed Steps 1 to 4 as described in the “Initial Setup” section of this document (unpack, install, unlock, connect). Then if your problem is listed here, try the suggested solution.**

- 1. No light comes on when the scanner is turned on.**

Make sure your scanner is connected to your computer and plugged into a power source.
- 2. The Add/Remove Hardware Wizard appears on your screen.**

Click the “Cancel” button and close the ScanWizard DI Control Panel. Disconnect the Hi-Speed USB cable from the back of your computer, and refer to the installation instructions in this document.
- 3. When trying to scan, an error message appears on your screen that reads, “Can’t Find Scanners”.**

Make sure your scanner is unlocked (see Step 3 in the “Initial Setup” section).

Make sure your scanner is connected to your computer and plugged in to a power source (see Step 4 in the “Initial Setup” section).

Uninstall and reinstall the ScanWizard DI software.
- 4. After clicking “Scan,” a blank screen appears.**

Make sure your scanner is unlocked (see Step 3 in the “Initial Setup” section).

Uninstall and reinstall the ScanWizard DI software.
- 5. When trying to scan with the ADF (Auto Document Feeder) , an error message appears on your screen that reads, “Code -206, ADF paper jam or roller failure.”**

Click OK first; then open the ADF cover, as illustrated in the “Fixing Paper Jams” section.

  - If the problem is occurring from a paper jam, follow the procedures laid out in the “Fixing Paper Jams” section of this document.
  - If the problem is occurring from situations other than a paper jam, follow the procedures laid out in the “Positioning Documents” section.

Finally, close the ADF cover and restart scanning.

## Specifications

Type	Flatbed with ADF scanner
Scanning Modes	Color, grayscale, and black-and-white in a single scanning pass Input: 48-bit color input (Approx. 281 trillion colors) 16-bit grayscale (Approx. 65,536 shades of gray) Output: 24-bit color (Approx. 16 million colors) 8-bit grayscale (Approx. 256 shades of gray)
Resolution	Flatbed: 1200 (H) x 1200 (V) dpi ADF: 600 (H) dpi x 600 (V) dpi
Scanning Speed	<ul style="list-style-type: none"> <li>• <b>For ArtixScan DI 4020 Plus</b> Simplex: 40 ppm, at 200 dpi, A4/line art; grayscale; color Duplex: 80 ipm, at 200 dpi, A4/line art; grayscale; color</li> <li>• <b>For ArtixScan DI 2020 Plus</b> Simplex: 30 ppm, at 200 dpi, A4/line art; grayscale; color Duplex: 60 ipm, at 200 dpi, A4/line art; grayscale; color</li> </ul>
Scanning Area	Flatbed: 8.5" x 11.7" (215.9 mm x 297.2 mm) ADF: 8.5" x 25" (215.9 mm x 635 mm)
Feeder Capacity	100 sheets of copy bond paper (Unfolded)
Paper Weight	10 to 30 lbs. (38 to 110 g/m <sup>2</sup> )
ADF Paper Size	Min: 4.33" x 4.33" (110 mm x 110 mm) Max: 8.5" x 25" (215.9 mm x 635 mm)
Duty cycle	2000 pages per day
Rubber Pad Life	30,000 scans
Roller Life	150,000 scans
Interface	Hi-Speed USB (USB 2.0)
Dimensions (L x W x H)	18.90" x 11.81" x 6.10" (480 mm x 300 mm x 155 mm)
Weight	13.4 lbs. (6.1 kg)
Voltage	AC 100V to 240V, 50/60 Hz, 1.5A Max (Input) 15V DC, 2.5A (Output)
Power Consumption	38 W (Max)
Power Supply (AC/DC adapter)	Voltage                      Manufacturer              Model No. 100V to 240V              HARD                      HDAD38W101
Environment	Operating temperature: 50° to 95°F (10° to 35°C) Relative humidity: 20% to 85%