

USB Scanner Installation Guide

FOR WINDOWS

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This equipment has been tested and found to comply with the limits for the class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against 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 and 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.

This equipment has been certified to comply with the limits for a class B computing device, pursuant to FCC Rules. In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this 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.

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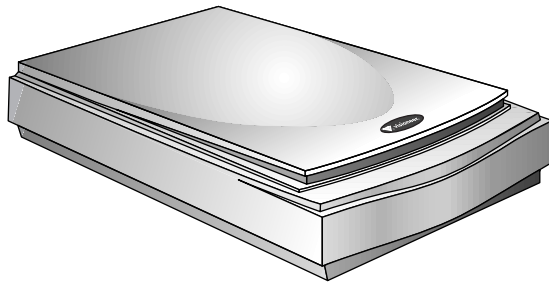
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WELCOME

Congratulations on purchasing your USB flatbed scanner. With your scanner, you can quickly scan paper documents and color photos to place their electronic images on your computer.

WHAT'S IN THE BOX

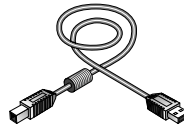
Before starting the installation, check the contents of the box to make sure that all parts are included. If any items are missing or damaged, contact the dealer where you purchased the scanner.



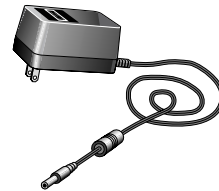
USB Scanner



Software CD



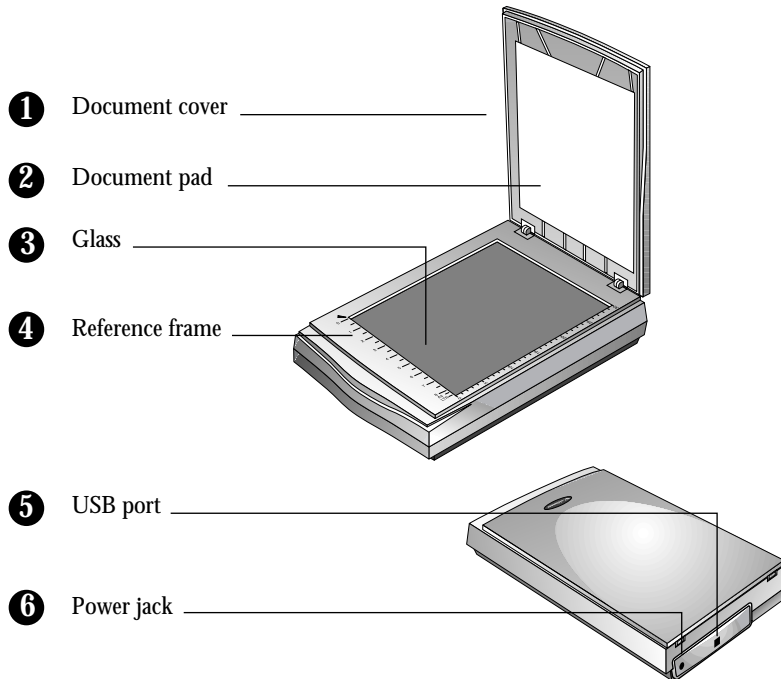
USB cable



Power supply

Note: The CD includes all the software you need for installing the scanner and scanning pages, photos, and other items.

THE USB SCANNER



-
- ① **Document cover.** Close the document cover after placing items on the scanner glass.
 - ② **Document pad.** Helps to secure the document in place on the scanner glass.
 - ③ **Glass.** Place items face down on the glass, aligned at the lower left corner.
 - ④ **Reference frame.** Place items face down within this frame. Markings for inches and centimeters appear along the border of the frame.
 - ⑤ **Universal Serial Bus (USB) port.** Plug the scanner end of the USB cable into this port, plug the other end into the computer's USB port.
 - ⑥ **Power jack.** Plug the scanner's power supply into this jack.

Note: The scanner does not have an on/off switch. Simply start a software application that supports scanning and scan from it. For more information, see "Setting Up the Scanner" on page 7.

WHAT YOU NEED

To use the scanner and software, you need the following:

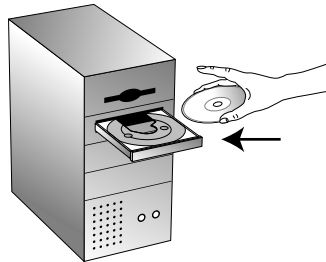
- IBM PC (or 100-percent compatible) Pentium or equivalent
- Microsoft Windows 98 or Windows 2000
- One available Universal Serial Bus (USB) port on your computer
- 32 megabytes (MB) or more of available internal memory (RAM)
- 70 MB of free hard disk space
- A VGA or SVGA monitor. Recommended settings for your monitor are as many colors as possible—High Color (16-bit), True Color (24-bit or 32-bit). Set the resolution to at least 800 by 600 pixels. To set your monitor's colors and resolution, open the Windows Control Panel, double-click Display, and then click the Settings tab.
- A CD-ROM drive

INSTALLING THE SCANNER SOFTWARE

Note: You must install the scanner software **before** connecting the scanner to your computer. Otherwise, the correct driver software for your scanner will not be installed and it may not work properly.

To install the scanner software:

1. Start Microsoft Windows 98 or Microsoft 2000 and make sure that no other applications are running.
2. Insert the CD into your computer's CD-ROM drive. The CD automatically starts.



Note: If the CD does not automatically start, make sure the CD drive's door is completely shut. If the CD still doesn't start, click the Windows icon that shows the drives on your computer. (Usually, the icon is named My Computer.) The window shows the drives available on your computer. Double-click the icon for your CD-ROM drive to see the list of files on the CD. Double-click the file named START32.EXE. The CD starts.

3. Follow the instructions on the screen to install the scanner software on your computer.

When you are finished installing the software, a message on the screen instructs you to connect the scanner to the computer.

4. Do not remove the CD from the computer yet. Later, after Windows 98 or Windows 2000 finds the scanner, you can install the other applications on the CD.

CONNECTING THE SCANNER AFTER INSTALLING THE SOFTWARE

Your USB scanner connects to any available USB port. Check your computer's manual for the USB port location.

Note: You do not have to shut off the power to your computer when connecting the scanner.

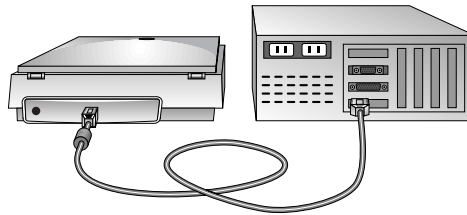
To connect the USB scanner:

1. Notice that the two ends of the USB cable are not the same. The flatter end connects to the computer, and the other end connects to the scanner.
2. Plug the scanner end of the USB cable into the USB port on the back of the scanner.

If the plug does not attach easily, make sure that you are plugging it in correctly. Do not force the plug into the connection.

3. Plug the other end of the USB cable into an available USB port on your computer.

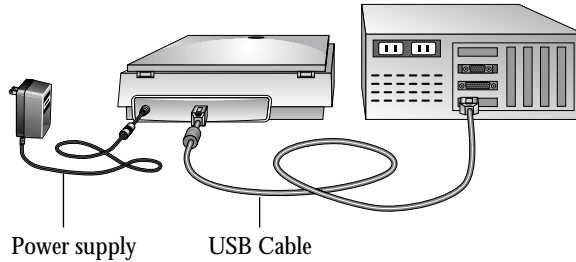
Make sure that end of the cable is also plugged in correctly. Do not force the plug into the connection.



Note: If you have not installed the software yet, unplug the cable from the computer and install the software now. When the software installation is complete a message tells you to connect the scanner.

4. Plug the power supply cable into the jack on the back of the scanner, then plug the power supply into a wall outlet.

The following diagram shows the completed cable connections.



A progress message appears saying that the USB scanner has been found. The scanner is now correctly installed.

5. From the CD, install the other software applications to your computer.

Make sure to install the application named *MGI PhotoSuite III SE*. The instructions on the next few pages use it as an example application to show how to set up your scanner for scanning.

6. When you are finished installing the other software, remove the CD from your computer and store it in a safe place.

SETTING UP THE SCANNER

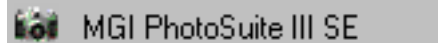
You can use your USB scanner with applications that support Twain scanning. Twain is a standard method that computers use to receive images from scanners, digital cameras, and other image-capture devices.

To set up the scanner to work with an application, you must first select the scanner as the one to use for Twain scanning. Setting up with an application is normally a one-time-only process. Setting up again is usually only necessary if you changed the set up to a different scanner, camera, or other device.

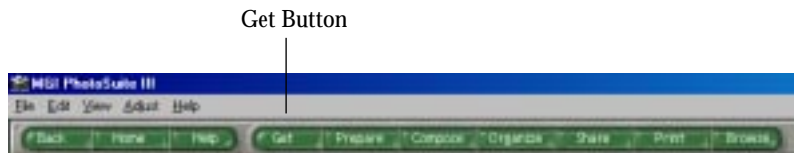
Note: The following instructions are for setting up the scanner with the MGI PhotoSuite III SE software that you received on the CD with your USB scanner. You can use the scanner with other applications, but the setup steps for each application may be different. For example, several applications use a **Select Source** command from the **File** menu to set up the scanner. Please see the user's manual that you received with an application to determine how to set up a Twain scanner with that application.

To set up the scanner with the MGI PhotoSuite III SE application:

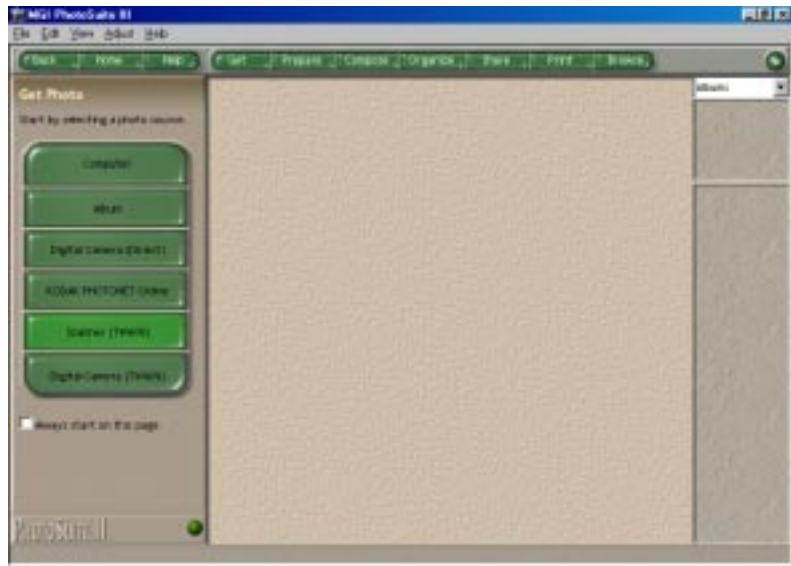
1. From the Windows Desktop, click the **Start** button, select **Programs** and select **MGI PhotoSuite III SE**.



2. After the MGI PhotoSuite III application starts, click the **Get** button at the top of the window.

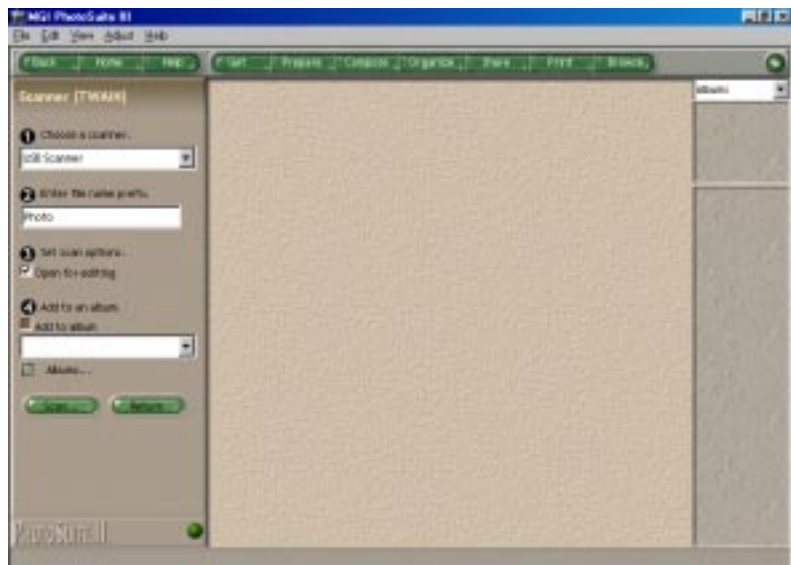


The panel on the left side of the window shows several buttons for getting photos or other images.



3. Click the **Scanner (Twain)** button.

The panel shows options for choosing the scanner and for scanning.



4. At the option **Choose a scanner**, click the drop-down arrow and choose **USB Scanner**.

The MGI PhotoSuite III SE application is now set up to scan with your scanner.

Please see the MGI PhotoSuite III SE user's manual for details about the other features on the window.

5. To scan, click the **Scan** button on the window. The next section explains how to scan with your USB scanner.

SCANNING AN ITEM

You can scan many types of items, from small business cards to A4-sized pages. Your USB scanner also has special settings for scanning color photos and text documents. For more information about scanner settings, see "Adjusting Scanner Settings" on page 12.

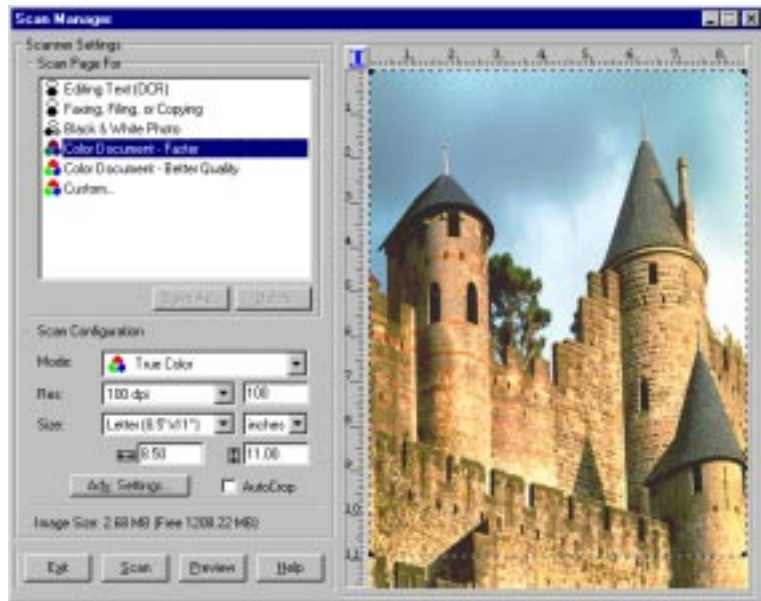
To scan an item:

1. Open the scanner cover, place the item you want to scan face down aligned at the lower left corner of the scanner glass, and close the cover.
2. If you are using the MGI PhotoSuite III SE application to scan, click the **Scan** button on the PhotoSuite window. See the figure on page 8.



If you are using another application to scan with your scanner, please see the user's guide that you received with that application for the steps to scan.

The Scan Manager appears.



3. From the list of Scanner Settings labeled “Scan Page For,” select the most appropriate setting for the item you’re scanning. In the example above, the selected setting is “Color Document-Faster.”
4. Click the **Preview** button.
The scanner scans a preview of the item on the scanner glass and displays it in the Scan Manager. In the following example, the picture being scanned is a close-up of a friendly cow.
5. You can now fine-tune the options on the Scan Manager for the item you’re scanning.

Select another scanner setting if you think it's more appropriate for the item being scanned.

Select other settings here if you think they are more appropriate for the item being scanned. You also use these settings to customize a scan setting.



If you want to adjust the size of the scan area, or crop the image, drag the borders of the selection rectangle surrounding the item.

Click **Scan** to scan the item and display it in the application.

Click **Preview** to check the image again until it's what you want for scanning.

6. Check the preview image. If you want to change the scanner setting for the item, click one of the options in the list to "Scan Page For."

For example, to scan a black and white image instead of a color photo, select Black & White Photo in the list.

See the table in the section "Selecting a Predefined Scanner Setting" on page 13 for a description of these predefined settings.

7. Select the area of the item you want to scan.

When you preview an item to scan, the selection rectangle around the image indicates the scan area. However, you may want to select only a certain area of an item to scan. Selecting an appropriate scan area can result in a faster scan and a smaller file size.

The scanned image's file size and available space on your computer's hard drive are shown at the bottom left side of the Scan Manager.

8. To select the area you want to scan, drag the borders of the selection rectangle surrounding the preview image to reduce or enlarge the area.
9. If you want to preview the item again with the new settings, click the **Preview** button again on the Scan Manager.
10. When you are satisfied with the preview image, click the **Scan** button on the Scan Manager.
11. If you're using the MGI PhotoSuite III SE application to scan, the scanned image is available in PhotoSuite. Choose **Open** from the PhotoSuite **File** menu and open the scanned image file.

See the PhotoSuite help information for more details about opening scanned images. If you're using another application to scan, see its help information or user's guide for the steps to open a scanned image.

Note: For additional details about the Scan Manager's features click the **Help** button on the Scan Manager.

ADJUSTING SCANNER SETTINGS

You can adjust the scanner settings to fine tune the scanned item. This section tells you how to:

- Select a predefined scanner setting.
- Select scan configuration options.
- Customize a scanner setting.
- Adjust the brightness and contrast.
- Select the area of the item you want to scan.

SELECTING A PREDEFINED SCANNER SETTING

In the Scan Manager, you can select one of the predefined scanner settings from the list “Scan Page For.” The settings are described in the following table.

Scan Page For	Default Setting	To Scan	Description
Editing Text (OCR)	Black-and-white 300 dpi	Business letters, contracts, memos, and other documents that you want to edit	Enhances the use of OCR software for converting item text to editable text. Provides higher quality and a larger file size than the Faxing, Filing or Copying scan setting.
Faxing, Filing, or Copying	Black-and-white 200 dpi	Newspaper and magazine articles, receipts, forms, and other text items	Provides the fastest scan time and smallest file size.
Black & White Photo	Grayscale 100 dpi	Black-and-white photos	Provides the best setting for black-and-white photos.
Color Document—Faster	Color 100 dpi	Color pages with many graphics, or mixed graphics and text, line art, or photos that require a quick scan	Creates a reasonable scanned color item in a file that is not too large. This is the scanner's default setting.
Color Document—Better Quality	Color 200 dpi	Photographs and color items	Provides the ideal setting for color items, item editing, desktop publishing, and high-quality output. Results in a color scan with slower scan time and a larger file size.
Custom	Color 100 dpi	Any item	You select all the options for scanning. Also used to create and add a new scan setting to the list.



Color Grayscale B&W

Selecting the proper scanner setting before scanning produces the best results for a scanned item. The scanner setting determines the resolution of the item and the number of possible shades of gray or color. The symbols next to the setting names indicate the scan mode—color, grayscale, or black and white. The scanner settings affect the speed of the scan and the file size. The Scan Manager shows the approximate file size of a scanned item to help you decide whether to use a particular scanner setting.

Note: Your scanner is initially set to scan with the setting Color Document—Faster. To scan at a higher resolution, select Color Document—Better Quality. Note, however, that scanning at a higher resolution creates a larger file size, takes longer to scan, and may not print any better. To minimize the file size and the time required to get a better quality scan, select just the area of the item that you want to scan. For more information about selecting the area of an item, see “Selecting the Area of the Item You Want to Scan” on page 17.

SELECTING SCAN CONFIGURATION OPTIONS

The scan configuration options provide you with additional settings when scanning an image. Note that when you select one of the predefined scanner settings, these options show what is already selected for that setting, but you can change them as you wish.

The options are:

Mode—Shows the scan mode such as color, grayscale, and black-and-white. Click the drop-down arrow to see your choices for the scan mode. The symbols next to the selections indicate their mode setting. Choose one of the modes for scanning from the list.

Res—This is the resolution setting for the scan in dots-per-inch (dpi). The higher the dpi, the sharper the image. But higher dpi settings also produce larger files sizes. Usually the higher resolution settings are used for precision work, such as photographs or fine artwork. Click the drop-down arrow and choose one of the resolution settings from the list.

Size—The page size for the image. If you want to use one of the preset sizes, click the drop-down arrow and choose the size from the list. If you want to create a custom size, click on the picture window and drag the mouse. A dotted box on the window indicates the page size, and the two number boxes—with the vertical and horizontal symbols next to them—show the actual page size in inches. You can also enter the vertical and horizontal sizes in those two number boxes. To set the units for the sizes, click the drop-down arrow for the size units. The choices are inches, cm (for centimeters), and pixels.

AutoCrop—Select this option to let the scanner automatically determine the size of the item being scanned. For example, if you put a photo in the middle of the glass, the scanner will automatically determine the size of the photo. When AutoCrop is selected, the scanner makes two passes—the first pass senses the item's size, and the second pass scans the image. This option overrides the selections for Size.

Adv. Settings—Click this button to see advanced settings for scanning. See the online Help information for details about the advanced settings.

CUSTOMIZING A SCANNER SETTING

You can create custom settings to add to the list of options on the Scan Manager.

Note: Predefined settings can not be customized.

To create a new scanner setting:

1. In the **Scan Page For** options, select **Custom** to create a new scanner setting.
2. In the **Scan Configuration** options, select the options you want for your custom setting.
3. If you want to adjust the advanced settings for your custom setting, click the **Adv. Setting** button. Click the **Help** button to see more information about the advanced settings.

4. Click the **Save As** button.
The Save As dialog box appears.
5. Type a name for the new scanner setting.
6. Click **Save**.

The new setting is added to the list of “Scan Page For” options at the top of the dialog box.

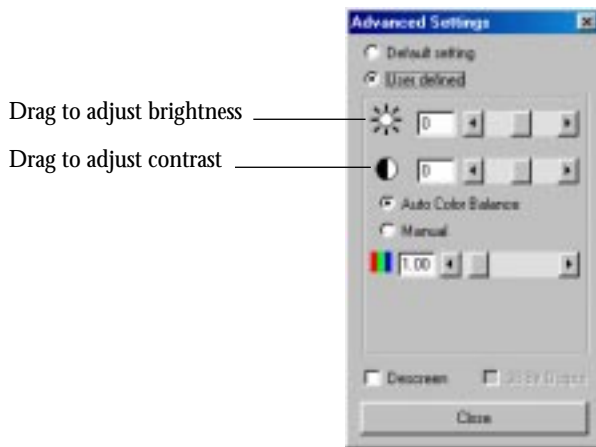
ADJUSTING THE BRIGHTNESS AND CONTRAST

Sometimes an item is scanned with the brightness and contrast set to be too light or too dark. For example, a note written with a light pencil may need to be scanned darker to improve legibility.

You can adjust the brightness and contrast at which grayscale and color items are scanned. You can also adjust the brightness for black-and-white items.

To adjust brightness and contrast:

1. Click the **Adv. Settings** button on the Scan Manager. The Advanced Settings dialog box appears.



2. Select the **User Defined** option.

3. Drag the **Brightness** slider to the left to make the item darker or to the right to make the item lighter.
4. Drag the **Contrast** slider to the left to decrease the contrast or to the right to increase the contrast.
5. Click **OK** on the Advanced Settings dialog box.

Note: For more detailed information on advanced settings, click the **Help** button on the Scan Manager.

SELECTING THE AREA OF THE ITEM YOU WANT TO SCAN

When you preview an item to scan, the selection rectangle around the image indicates the scan area. However, you may want to select only a certain area of an item to scan. Selecting an appropriate scan area can result in a faster scan and a smaller file size.

To select the area you want to scan:

1. Click the **Preview** button. An image of the scanned item appears in the Preview area. A selection rectangle shows the current scan area.
2. (optional) In the **Scan Configuration** settings, select the units of measure you want to use for the scan area. You can select either inches, centimeters, or pixels.
3. To change the dimensions of the rectangle, click the rectangle, and then drag the borders of the rectangle to resize it. This effectively allows you to crop the item. The dimensions of the selected area appear in the Scan Configuration settings.

You can also type length and width dimensions directly into the boxes that show the dimensions of the selection area. Use this process to produce a precise scan area size.

4. To position the rectangle over the area you want to scan, click and hold the left mouse button and drag to the location desired.
5. Click the **Scan** button to scan the image.

CLEANING THE SCANNER GLASS

Scanning items that have excessive amounts of dirt or dust may dirty the glass. To ensure the best quality scanned item, wipe the scanner glass with a soft clean cloth to rid the glass of dust or other debris.

USB SCANNER SPECIFICATIONS

Bit Depth	36-Bit color (internal), 12-Bit gray (internal), 1-Bit line art/text
Scanning resolution	Optical resolution: 600 x 1200 dpi Maximum resolution (interpolated): 9600 x 9600 dpi
Maximum Item sizes	8.5 x 11.69 inches (21.6 x 29.7 cm)
Scanner dimensions	
Height	3.4 inches (8.5 cm)
Width	11.4 inches (29.0 cm)
Length	17.5 inches (45.0 cm)
Weight	5.6 pounds (2.5 kg)
Operating temperature	50°–104° F (5°–35° C without condensation)
Relative humidity	20%–80% (@35° C without condensation)
Power supply	
Input voltage/frequency	100 Vac, 50/60 Hz (Japan) 120 Vac, 60 Hz (North America) 230 Vac, 50 Hz (Europe)
Output voltage/watt	12 V DC, 15 watt maximum
Safety and agency certifications	UL, ULc, FCC Class B, VCCI Class B, CE
Hardware warranty	One-year limited warranty