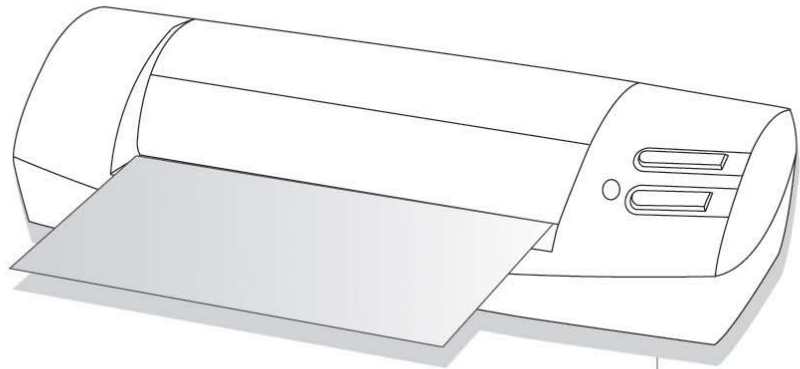


Scanner User's Guide

plustek



Plustek TR821



- ✓ **Installation**
- ✓ **Usage & Maintenance**
- ✓ **Troubleshooting**



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The scanning of certain documents, for example checks, bank notes, I.D. cards, government bonds, or public documents, may be prohibited by law and/or subject to criminal prosecution. We recommend you to be responsible and respectful of the copyrights laws when you are scanning books, magazines, journals and other materials.

The product is designed and produced to achieve sustainable environmental improvement. We strive to produce products in compliance with global environmental standards. Please consult your local authorities for proper disposal. The product packaging can be recycled.

Attention to recycling (For EU country only)

Protect your environment! This product should not be thrown into the household waste container. Please give it to the free collecting center in your community.

The screen shots in this guide were made with Windows 2000. If you are using Windows XP, Vista or 7, your screens will look somewhat different but function the same.

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Introduction

Welcome to the world of Plustek scanners – the ultimate in computer imaging. Your new scanner will improve the professionalism of your day-to-day computing tasks by allowing you to input images and electronic text into your computer system.

Like all of our products, your new scanner is thoroughly tested and backed by our reputation for unsurpassed dependability and customer satisfaction.

Please remember to register your scanner. Registration may be completed in one of three ways:

- 1) By registering online via Plustek's Web Site;
- 2) By printing out and faxing a completed registration card to Plustek's customer service center;
- 3) By printing out and mailing the registration card directly to the Plustek office nearest you.

See the last page of this user's guide for a complete list of Plustek offices worldwide.

As a registered customer, you will receive customer support, new product information and software upgrades.

Thank you for choosing us as your scanner supplier. We hope you will continue to turn to us for additional quality products as your computing needs and interests grow.

How to Use This Guide

This User's Guide provides instructions and illustrations on how to install and operate your scanner. This guide assumes the user is familiar with Microsoft Windows. If this is not the case, we suggest you learn more about Microsoft Windows by referring to your Microsoft Windows manual before using your scanner.

The Introduction section of this manual describes the box contents and minimum computer requirements to use this scanner. Before you start installing your scanner, check the box contents to make sure all parts are included. If any items are damaged or missing, please contact the vendor where you purchased your scanner or our customer service directly.

Chapter I describes how to install scanner's software and connect the scanner to your computer. Note: The scanner connects to your computer through the Universal Serial Bus (USB). If your computer does not support USB technology, you will need to purchase a USB interface card to add USB capabilities to your computer, or buy and install USB connectors if your motherboard has USB capabilities. This guide assumes that your computer is USB-ready and has a free USB port.

Chapter II describes how to use, maintain and clean your scanner.

Appendix A contains technical support information that can help you solve simple problems. Before calling for help, please read through Appendix A: Troubleshooting.

Appendix B contains the Specifications of the scanner you purchased.

Appendix C contains our limited warranty agreement and FCC statement concerning the product.

Conventions of This Guide

Bold — Important note or first use of an important term in a chapter.

[XXX] — Represents commands or contents on your computer screen.

A Note about Icons

This guide uses the following icons to point out information that deserves special attention.



Danger

Danger: A procedure that must be followed carefully to prevent injury, or accidents.



Caution

Caution: Information that, if not followed, may result in data loss or damage to the product.



Attention

Pay Special Attention: Instructions that are important to remember and may prevent mistakes.

Safety Precautions

Before using this device, please read the following important information to eliminate or reduce any possibility of causing damage and personal injury.

1. Moisture condensation may occur inside this device and cause malfunction at these conditions:
 - when this device is moved directly from a cold to a warm location;
 - after a cold room is heated;
 - when this device is placed in a damp room.

To avoid the moisture condensation, you are recommended to follow the procedure:

- 1) Seal this device in a plastic bag for it to adapt to room conditions.
- 2) Wait for 1-2 hours before removing this device from the bag.
2. Do use the USB cable provided with the scanner. Use of other cable may lead to malfunction.

3. Do not attempt to disassemble the scanner. There is danger of an electrical shock and opening your scanner will void your warranty.
4. Do not subject the scanner to excessive vibration. It may damage the internal components.
5. Unplug the device if you don't need to use for a certain period of time, such as, during night or long weekend, to avoid any risks of causing fire.

System Requirements¹

Windows/Intel Compatible Personal Computer

Pentium CPU or above

CD-ROM Drive

64 MB RAM (128 MB Recommended)

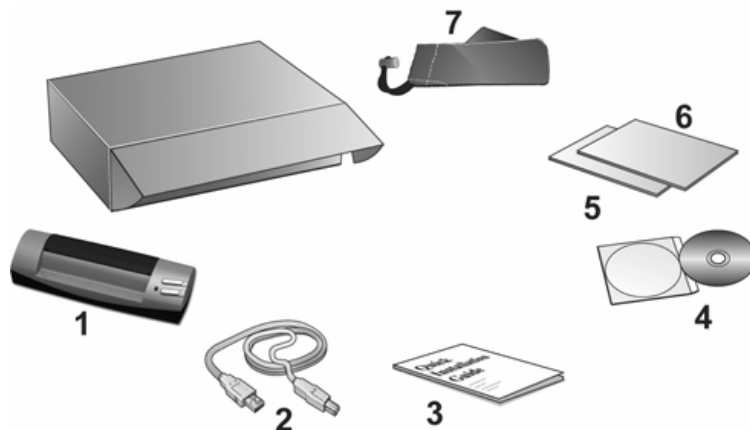
500 MB Free Hard Disk Space(600 MB Recommended)

USB Port

Microsoft™ Windows 2000 Professional, XP, Vista and 7

Video card that supports 16-bit color or greater

Box Contents²



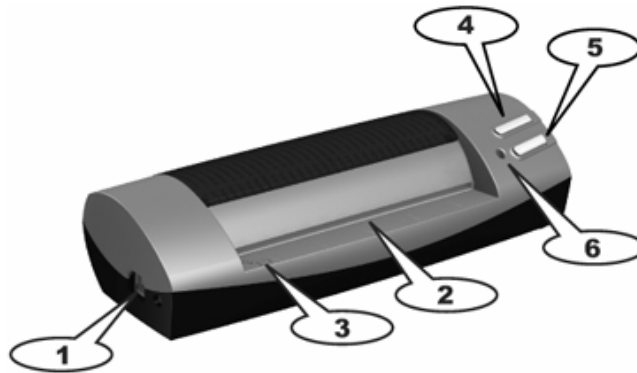
1. Scanner
2. USB Cable
3. Quick Guide (Scanner)
4. Setup / Application CD-ROM

¹ Higher requirements might be needed when scanning or editing a large quantity of image data. The system requirements here are only a guideline, as in general the better the computer (motherboard, processor, hard disk, RAM, video graphic card), the better the results.

² Save the box and packing materials in case you need to transport this scanner in the future.

5. Calibration Sheet
6. Cleaning paper
7. Travel Pouch

The Scanner's Features



1. **USB port:** It connects the scanner to a USB port on your computer by the included USB cable.
2. **Page feed slot:** Feed the document into the scanner from this direction. You can feel the document being grabbed by the scanner.
3. **Alignment arrow:** Always align the edges of your documents to this arrow sign.
4. **SCAN button:** Press this button to start scanning and save the images into your computer.
5. **Custom Button:** Press this button to start scanning for business card reading.
6. **LED indicator:** It indicates the scanner's current status.

Product Information

Please fill in the following information for your own records. You will need it when you contact your dealer or our service center in the future.

Serial Number:

(Located at the bottom of the scanner)

Date of Purchase: - -

Chapter I. Installing the Scanner

Before installing your scanner, please verify that you have all of the proper components. A list of the package contents is provided in the *Box Contents* section of this guide.

Software Installation Requirements

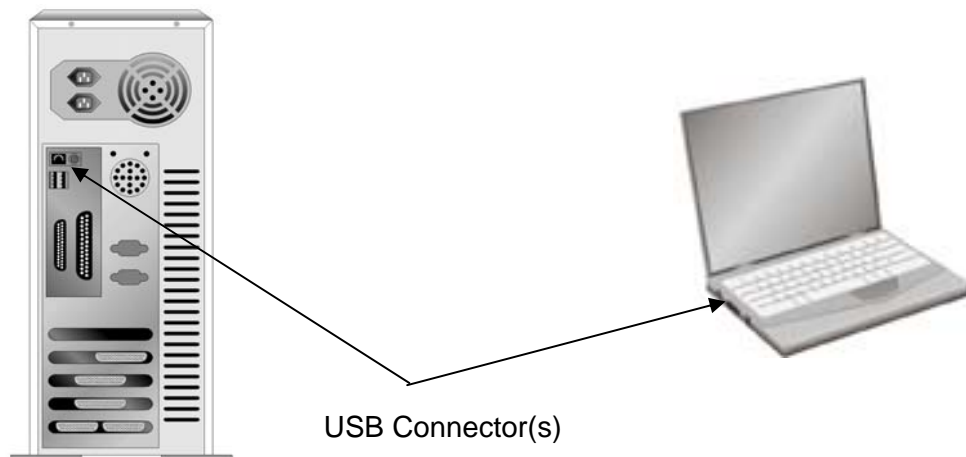
Your scanner comes with the image-editing software, BCR software, the scanner's driver, and the DigiScan software. All of these software applications use approximately 250 megabytes of hard disk space after they are installed into your computer. To ensure ample room for the installation, as well as for scanning and saving images, a minimum of 350 megabytes of hard disk space is recommended.

The USB scanner can only operate under the Microsoft Windows 2000 Professional, XP, Vista or 7 operating system.

Hardware Requirements

This scanner connects to your computer through the Universal Serial Bus (USB) which supports *hot Plug and Play*. To determine whether your computer is USB-capable, you must check the rear of your PC to locate a USB jack that looks the same as the one pictured below. Note that on some computers, the USB port at the rear of the computer may be occupied and additional ports may be found on the monitor or keyboard. If you are having trouble in locating the USB port on your computer, please refer to the hardware manual that came with your computer.

Upon examination, you should find one or two rectangular USB ports, which usually appear as shown below.

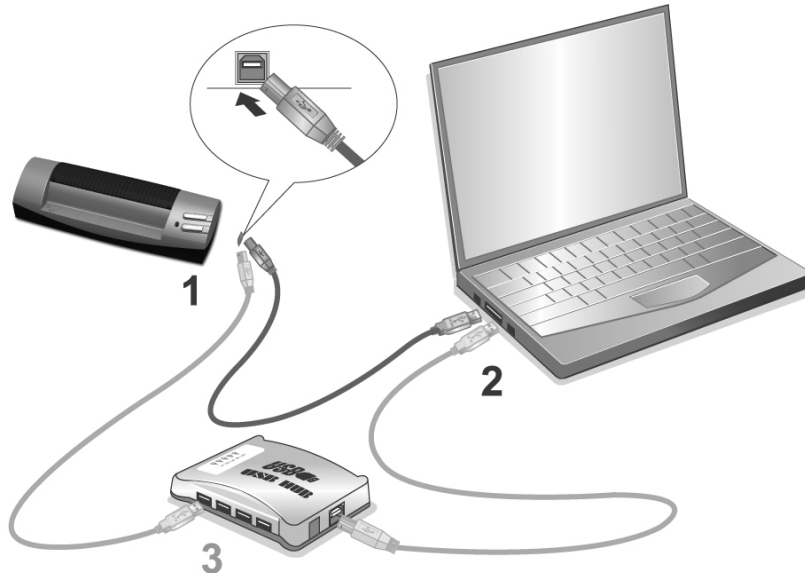


If you don't find such USB ports on your computer, then you need to purchase a certified USB interface card to add USB capabilities to your computer.

Installing and Setting up the Scanner

Please follow the step-by-step procedures described below to install the Plustek scanner.

Step 1. Connecting the Scanner to Your Computer



1. Plug the square end of the included USB cable to the USB port of the scanner.
2. Plug the rectangular end of the USB cable to the USB port on the back of your computer.
Note: If there is another USB device connected to the computer, connect the scanner to an available USB port.
3. If you plan to connect your scanner to a USB hub³, make sure that the hub is connected to the USB port in your computer. Next, connect the scanner to the USB hub.

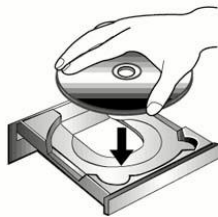
Note: If you do not have a USB port available, you might need to buy a USB port.

Step 2. Installing the Software

1. If the USB components on your computer are functioning correctly, they will automatically detect the scanner causing the "Add New Hardware Wizard" or "Found New Hardware Wizard" to be launched. Note: If your computer was off when you connected the scanner, the "Add New Hardware Wizard" message will be displayed when you turn the computer on and when Windows starts.
2. **For Windows 2000**

³ The USB hub is not included with the scanner. If using a hub, you are recommended to use a hub with its own external power adapter.

- a. Click on the [Next] button when the “Add New Hardware Wizard” window is displayed.
- b. Select “Search For The Best Driver For Your Device [Recommended]” and click on the [Next] button.
- c. The next window will ask you where to search to find the drive. Select [CD-ROM drive], and deselect [Floppy disk drives] if it is checked.
- d. Insert the Setup/Application CD-ROM, included with your scanner, into your CD-ROM drive and then click on the [Next] button.



- e. Click on the [Next] button in the window that appears. Afterwards, please skip to Step 6.

3. **For Windows XP**

- a. Insert the Setup/Application CD-ROM, included with your scanner, into your CD-ROM drive.



- b. Select “Install The Software Automatically [Recommended]” and click on the [Next] button.
- c. Click on the [Next] button in the window that appears. Afterwards, please skip to Step 6.

4. **For Windows Vista**

- a. Select “Locate and install driver software (recommended)” when the “Found New Hardware” window is displayed.
- b. Click on the [Continue] button when the “User Account Control” dialog pops up.
- c. Insert the Setup/Application CD-ROM, included with your scanner, into your CD-ROM drive when the system prompts you “Insert the disc that came with your USB Scanner”, and click on the [Next] button.
- d. During the process of the installation, a message “Windows can’t verify the publisher of this driver software” might be prompted. Please ignore it, and click on [Install this driver software anyway] to continue the installation without any

misgiving at your scanner functioning. Afterwards, please skip to Step 6.

5. For Windows 7

- a. Insert the Setup/Application CD-ROM, included with your scanner, into your CD-ROM drive. Close the **AutoPlay** window that appears.
 - b. From the Windows **Start** menu, right click on the **Computer** and select **Properties** from the pop-up menu. Click **Device Manager** on the following screen.
 - c. In the **Device Manager** window, right click on this scanner under **Other devices** item and select **Update Driver Software** from the pop-up menu. Click **Browse my computer for driver software** in the window that appears, and click the **Browse** button.
 - d. In the **Browse For Folder** window, select the folder that contains this scanner driver and click the **OK** button to return to the previous screen. Click the **Next** button.
6. During the process of the installation, a message “Windows Logo authorization required” or “Digital Signature required” might be prompted. Please ignore it, and click on [Continue Anyway] to continue the installation without any misgiving at your scanner functioning.
 7. When the system completes the installation, click on the [Finish] button.
 8. Follow the on-screen instructions to install all software that your new USB scanner requires.
 9. After the software is installed, close all open applications and click on the [Finish] button to restart your computer.
 10. After the computer is restarted, you will be prompted to perform the scanner calibration.
 11. Insert the special calibration sheet, included with the scanner, face up into the page feed of the scanner.



12. Follow the on-screen instructions to complete the scanner calibration.

Note: The buttons on the scanner are designed to work with bundled software.

**Attention**

If the scanner installation is not started and displayed automatically on the screen, click [START], select [Run] and type in [d:\setup] (where d: is the drive letter assigned to the CD-ROM drive of your computer.)

Step 3. Testing the Scanner

The following test procedure checks to see if the scanner is properly functioning with your computer and the scanning software. Before testing your scanner, double check to make sure that all connections are securely fastened.

To properly test your scanner, please perform the following steps:

1. Insert the document or image face up into the scanner. Align the paper to the arrow sign on the left of the scanner.



2. Press the SCAN button on the scanner. The scanning starts immediately.
 3. If an image appears on your screen, your scanner is working properly.
-

**Attention**

If the test failed in any way, please refer to “Appendix A: Troubleshooting” section of this manual and follow the instructions therein.

Software Setup Troubleshooting

Carefully review the steps outlined in this guide and the Quick Guide that accompanied your scanner.

If you are still having problems, please check that:

- You have 500MB of free space on your hard disk drive.
- The scanner is plugged in and has power.
- You are using the USB cable supplied with the scanner.
- The square end of the USB cable is plugged into the rear of the scanner.
- The rectangular end of the USB cable is plugged into the back of your computer.

If you deviated from the installation procedures defined in this manual, please unplug the USB cable from the scanner and reinstall the software from the CD-ROM. To reinstall your scanner's software, click [Start], [Run], then type D:\Setup (where D represents the letter of your CD-ROM drive). Carefully follow all the installation instructions presented in the Setup Wizard. Reboot your computer when prompted, and plug the USB cable back into the scanner while your computer is still turned on.

Installing Additional Software

Your scanner is TWAIN compliant and functions with virtually all available TWAIN compatible software. If you purchase additional software to be used with your scanner, please make sure that it conforms to the TWAIN standard.

Chapter II.

Usage and Maintenance

Operating the Scanner

Your scanner accepts documents as small as business cards and as large as 4"x6" photographs. However, some software programs have limitations as to the information they can handle. The capacity of the computer's memory and free space on your hard drive can also limit the physical size of the document that you scan.

There are two different ways to operate the scanner:

1. From within an image-editing program that can acquire images from the scanner.
2. By pressing either of the two action buttons on the scanner. You may configure the button settings individually to your personal needs within the DigiScan program that is automatically installed as your scanner software.

Your scanner needs to be driven by some type of software program. Since all documents or images (whether text or pictures) that are acquired from the scanner are treated by your computer as images, most scanning will probably be done from an image-editing program where you can view, edit, save and output the scanned images. An image-editing program has been bundled with your scanner on the included Setup/Application CD-ROM. It will allow you to alter and correct any scanned images by using a variety of filters, tools and effects.

What about scanning text documents and editing them in a word processor? This is the role of Optical Character Recognition (OCR) software. OCR software converts the image files that are created from scanning text documents into text files that can be viewed, edited and saved by word processors. An OCR program has also been bundled on the included Setup/Application CD-ROM, and if you wish to use the scanner in this way you should install the OCR software that is included.

DigiScan is a program that allows you to conveniently scan images and text without the need to work directly within any image-editing application. DigiScan also includes features to allow you to use your scanner as a copy machine⁴ and to scan documents or photos for e-mail.

DigiScan

⁴ A printer is required for the copy function.

You may configure the scanning properties for each individual scanner button within the DigiScan window.

There are two ways to access the DigiScan window:

1. Double-click the DigiScan  icon in the Windows system tray.
2. Single-click or right-click the DigiScan  icon in the Windows system tray, and then choose Properties in the pop-up menu that opens.



The DigiScan program comprises several scanner button functions. More than that, if you have installed the bundled software to your system, the DigiScan program may enable more functions. All functions are designed to two accessible tabs: SCAN and CUSTOM. (Refer to the section of “Using the Scanner Buttons”.)



Attention

Changes you make in the DigiScan window are automatically saved immediately after you close the DigiScan window. Afterwards, with a single touch of the button, you can have the scanner complete your scanning jobs by the settings you configured within the DigiScan window. If you decide to quit DigiScan program entirely, the same settings can be enabled for your quick access next time you open the DigiScan window.

Configure SCAN Settings

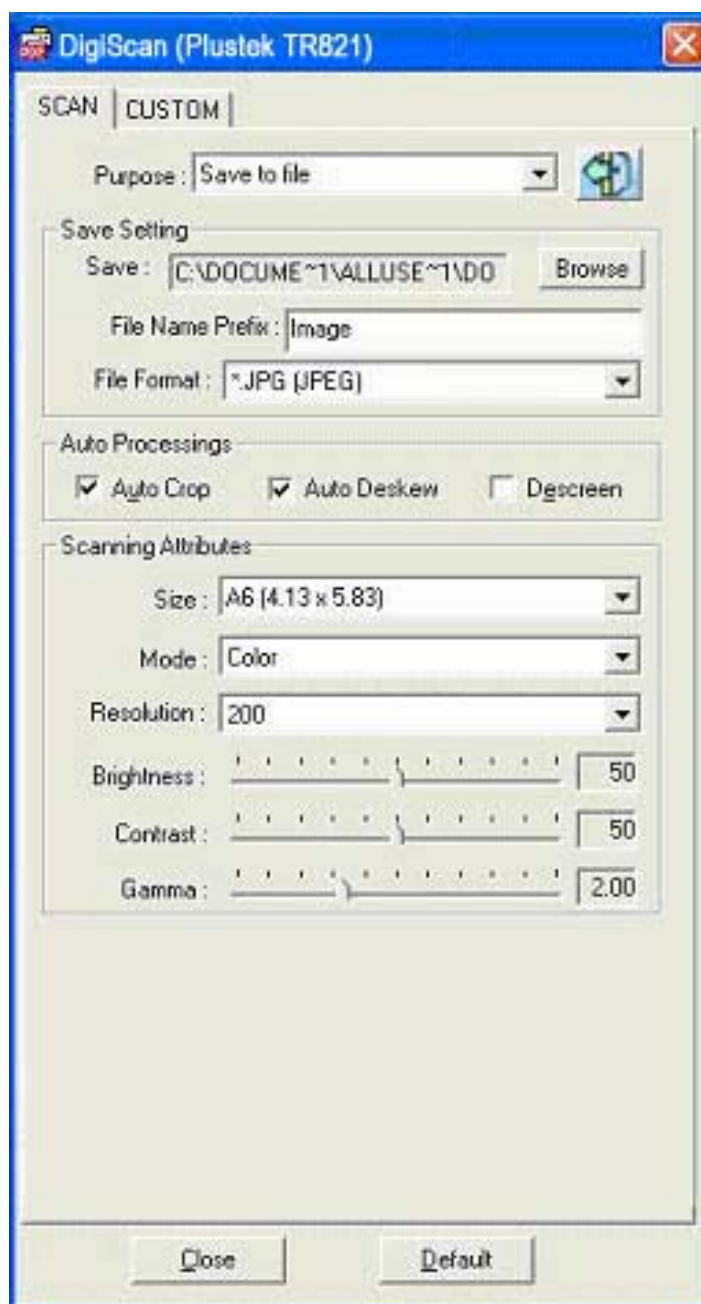
There are several functions available in the SCAN tab. You may configure them, as you like to shape the settings for later scanning.

- **Save to File**
- **E-mail**
- **Copy**
- **Other Image Editing Functions**

Select SCAN tab from the opened DigiScan window to start the configuration as you desire. The configuration steps of the functions are largely identical but with minor differences. So, we'll give you a typical example for your reference:

Configure Copy Function

Select the Copy (Save to File, E-mail or Image Processing) from the Purpose drop-down menu.



1. Specify a destination file path by clicking the **Browse** button at the right end of the **Save** option, enter a **File Name Prefix** and select a **File Format** accordingly.
2. Check the boxes of **Auto Crop**, **Auto Deskew** and/or **Descreen**, if desired.
3. Adjust the Scanning Attributes (**Size**, **Mode**, **Resolution**, **Brightness**, **Contrast** and **Gamma**).


4. Select a printer from the **Printer** drop-down menu; drag the Scaling Slider Bar, check the **Fit-in** box or check **Center on Page** box, if appropriate.

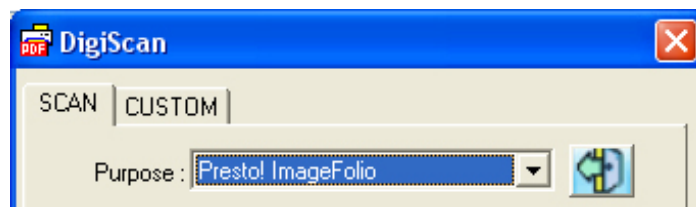
Note: The Printer menu is enabled only for the Copy function. If you select other functions, please skip to the step7.

5. Click the **Default** button if you desire to return to the default settings.
6. Click the **Close** button to save the final settings and exit the DigiScan window.

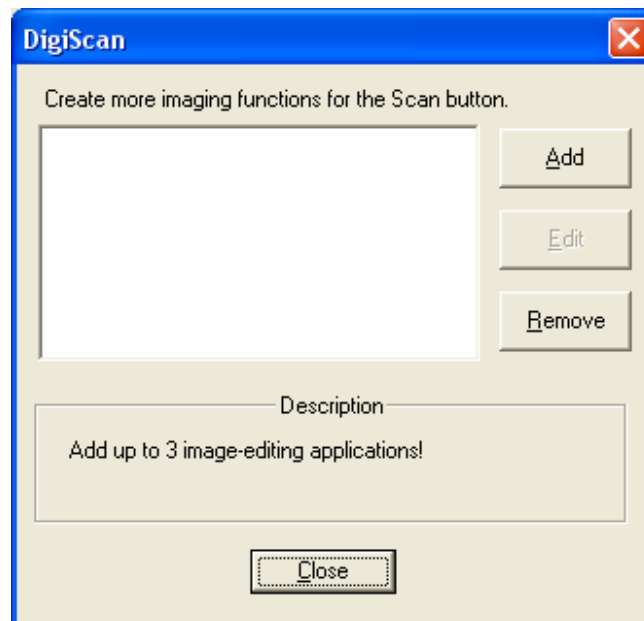
Add Other Image Editing Software

To add more image editing functions for the SCAN button, follow the steps described below:

1. Click the button  at the far right end of the **Purpose** drop-down menu.



2. Click **Add** button in the prompted out window to select an existing application from your system.



3. The program name you have chosen displays in the list.
Note: You are allowed to add at most 3 image editing software in this list.
4. Click **Edit** button to rename the displayed name of the application, if desired.
5. Click **Remove** button to remove the option you have created, if necessary.
6. Click **Close** to accept the changes and close the window.

Configure Custom Settings

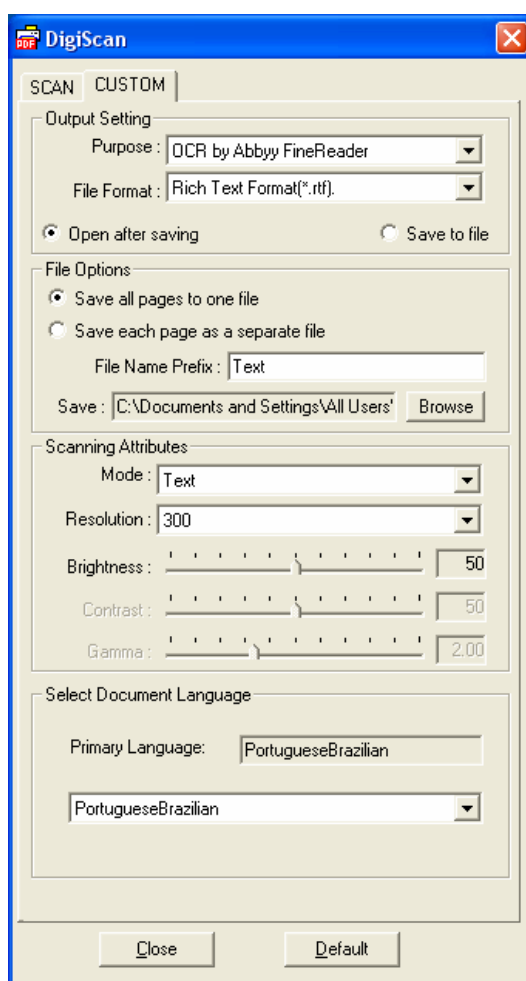
There are various file formats for your choice, which could be supported by different BCR and OCR (e.g. FineReader). The scanned image(s) may be transferred into the following file format:

- **Acrobat Searchable PDF (*.pdf)**
- **Microsoft Excel (*.xls)**
- **Plain Text (*.txt)**
- **Rich Text Format (*.rtf)**

Select CUSTOM tab from the opened DigiScan window to begin your configuration as your need. The principle to configure each option within Custom tab is basically identical with a few differences. We'll introduce two ways to you to select your preferable to shape the settings for later scanning.

Example:

- **Select FineReader from the Purpose drop-down menu:**

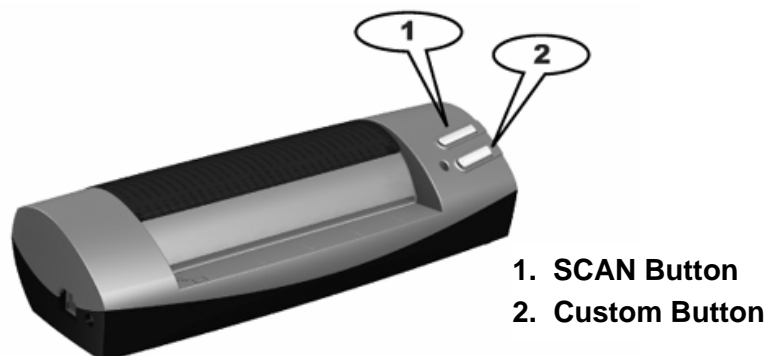


1. Select the **Microsoft Excel (Acrobat Searchable PDF, Rich Text Format or Plain Text)** from the **File Format** drop-down menu.

2. Specify a destination file path by clicking the **Browse** button at the right end of the **Save** option.
3. Enter the file name in **File Name Prefix** section.
4. Select **Open after saving** to review the result or **Save to File** to save the result.
5. Adjust the Scanning Attributes (**Mode**, **Resolution**, **Brightness**, **Contrast** and **Gamma**).
6. Select the needed language in **Select Document Language**.
7. Click the **Default** button if you desire to return to the default settings.
8. Click the **Close** button to save the final settings and exit the DigiScan window.

Using the Scanner Buttons

Your scanner is equipped with two function buttons designed to make your scanning experience more convenient and efficient. With simply one touch of the button, you can scan to file, copy, OCR, BCR or e-mail.



Either button launches a specialized utility. Default button settings are optimized for most frequently scanning jobs, such as size, mode, resolution, ... You may, however, change the settings as the methods described *ibid* to tailor your every scan by accessing the DigiScan window.



Attention

To use the buttons, ensure you have installed the relevant software (e.g., the printer driver is required for using the copy function) beforehand.

Scan Button

The SCAN button can automate a scanning and proceed saving the scanned image(s) to a destination file path, sending to a MAPI based E-mail programs (which currently include Microsoft Outlook, Eudora, etc.), a printer or an image editing

software, depending on the settings you have defined for the SCAN button in the DigiScan window.

To use the SCAN button, please follow the steps:

1. Make desired adjustment in Scan tab for the scanning purpose that the SCAN button will execute later. (Please refer to the “DigiScan” section for more information on adjustments.)
2. Insert the document or image face up into the scanner. Align the paper to the arrow sign on the left of the scanner.



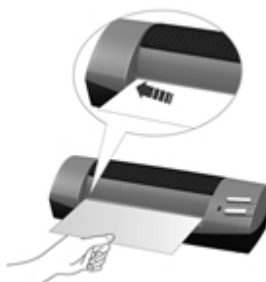
3. Press the **SCAN** button on the scanner. The scanning starts immediately.
4. If you have the “Continuous Scan” option checked, follow the on-screen instructions to insert another document or image until you have scanned all.
5. When the scan completes, the scanned images will be save to the defined file path as separate image files and sent to the assigned post-processing software (e.g. Save to File, E-mail, Copy, or other image editing software).

Custom Button

The CUSTOM button provides a solution for converting your printed document into texts searchable electronic document, such as *.pdf, *.doc, *.rtf or other text formats supported by the bundled OCR or BCR software.

To use the Custom button, please follow the steps:

1. Select the desired OCR or BCR firstly, and then make desired adjustments in Custom tab for the scanning purpose that the Custom button will execute later. (Please refer the “Configure CUSTOM Settings” section for more information on adjustments.)
2. Insert the document or image face up into the scanner. Align the paper to the arrow sign on the left of the scanner.



3. Press the **Custom** button on the scanner. The scanning starts immediately.
4. If you have the “Continuous Scan” option checked, follow the on-screen instructions to insert another document or image until you have scanned all.
5. When the scan completes, the scanned image(s) will be sent to the OCR or BCR you select for recognition or conversion.
6. The processed file will be saved to the file path as a single file.



Attention

When you scan by the CUSTOM button of DigiScan program, in each batch you can scan up to either 50 sheets of paper for single-sided scans or 25 sheets of paper for double-sided scans because of the limit from ABBYY FineReader 6.0 Sprint Plus.

Function Features

The section introduces all of the options on the DigiScan window. We will still describe them according to the SCAN tab and CUSTOM tab separately.

SCAN tab

Purpose

This menu includes Save to File, E-mail, Copy, Imaging Processing functions, which allows you to determine which software you would like to use for the post-processing of the scanned image(s).

- **Save to File:** The “Save to File” function enables you to conveniently scan documents or images, save them automatically to the destination file path with specified file name prefix and file format.
- **E-mail:** The E-mail function lets you scan documents and images directly to your MAPI-based E-mail programs (which currently include Microsoft Outlook, Eudora, etc.) that have already been installed on your computer.

Note: If you like to change to the MAIP-based E-mail system, please go to **IE>Tools>Internet Options...>Programs** tab>**E-mail** drop-down menu to choose destination E-mail program.

- **Copy:** The Copy function allows you to scan images directly to the printer without saving them to your hard disk, making it ideal for getting a quick copy of a document or image.

Note: The scanner and printer must be installed correctly in Windows for the Copy button to work properly.

- **Imaging Processing:** The Imaging Processing Function allows you to scan the image directly to the image editing application you have defined.

Note: You are recommended to add image-editing software to achieve scanning efficiency and assure the DigiScan program work properly. How the post-processing works will depend on the application you have assigned for the new function, you may refer to the guide of more instructions.

Save Setting

Save - This setting is for saving the scanned image(s) to a specified folder for further management. Clicking the **Browse** button to choose a destination folder, you may view, edit, or manage the scanned images later in a more efficient way.

File Name Prefix - The file name of the scanned images will be a combination of your own defined file name prefix and the four digits number issued by the system.

File Format - Choose which file format you want the scanned image to be. The following file formats are available from the drop-down menu:

- **JPG (JPEG)** - (Joint Photographic Experts Group) JPEG (pronounced "jay-peg") is a format that is commonly used for color images displayed on the Internet. JPEG reduces the file size of an image by discarding some of the non-critical data of the image. JPEG retains all of the color information of an image and offers varying degrees of compression.
- **TIF (Aldus Tiff)** - (Tagged Image File Format) is a widely-used bitmapped graphics file format developed by Aldus and Microsoft that handles monochrome, gray scale, and 8/24-bit color.
- **PCX (Paintbrush)** - PCX is a popular bitmapped graphics file format that handles monochrome, and 2-, 4-, 8-, and 24-bit color. PCX uses Run Length Encoding (RLE) to achieve compression ratios of approximately 1.1:1 to 1.5:1. RLE is best used with images that have large blocks of solid colors.
- **BMP (Windows Bitmap)** - (Bitmap file - also known as a "bump" file) is a Windows and OS/2 bitmapped graphics file format. BMP is the Windows native bitmap format. BMP files provide formats for 2, 16, 256 or 16 million colors (1-, 4-, 8-, and 24-bit color).

Auto Processings

Auto Crop - Alternatively you may check the **Auto Crop** option to have the scanner program automatically identify the dimensions of the image you scanned and crop around the edges. The crop shape will be a square or rectangle and it will not trace the edges of oddly shaped images. This command can be useful when scanning smaller images such as photographs.

Auto Deskew - You'll find this option useful when you find the scanned image slanted. Tick the box of this option and rescan the image; the DigiScan program will automatically straighten the skewed image(s).

Descreen - applies filtering to images that contain moiré patterns (or herringbone). A moiré pattern is created from scanning pictures in magazines, or printed material that use color dithering. The descreen filter is not needed when scanning original photographs or black and white images and text, but is recommended when scanning any printed color graphics, such as a page from a magazine, in order to remove the unsightly interference patterns which may occur.

Scanning Attributes

Size - enables you to alter the scan area. It is preferable to scan the exact area of the document or image so the file size is the smallest possible and there are no large blank areas on the page.

Mode – tells the scanner the type of document you are scanning. There are three settings to choose from:

- **Color** – scans the document in 24-bit, RGB color. This mode takes the longest time and uses the most memory but results in the highest quality images.
- **Grayscale** – scans images in black and white and can simulate 256 different shades of gray using dithering. This mode is best used when color isn't necessary for the scanned image since color images take so much time to scan and process, or when no color printer is available. Using this mode, even to scan color images, will result in high-quality black, white, and gray output (the color will automatically be converted to gray).
- **Text** – is preferable when scanning text documents. It results in clear black and white documents suitable for printing and faxing.

Resolution – is measures in dots per inch (dpi). The higher the resolution, the more detailed the image, and the more memory and drive space the image will use.

Brightness – This is amount of light that is concentrated onto a document while it is being scanned. Raising the brightness increases the amount of white in an image, making it appear more washed out. Lowering the brightness may help you read light or faint text.

Contrast – adjusts the tonal range of an image by lowering mid-tone values and increasing values for high and low tones. The higher the contrast, the sharper the image will be. The lower the contrast, the blurrier an image will be.

Gamma – Use the slider to adjust the image gamma for the scanned image. Gamma values are primarily a measure for the color brightness. The larger the gamma value, the brighter the color becomes. Changing the image's gamma value allows you to change the brightness of the colors IN THE IMAGE ITSELF.

Printer

This pull-down menu contains all the printers that have been installed in Windows. Simply click on the down-arrow at the right of the box and choose the printer you wish to use. (Only if you select the Copy from the Purpose drop-down menu, will the option be enabled.)

If the printer you wish to use does not appear in the pull-down list of printers, then it is not installed in Windows. To install a printer, click on the Windows START button; choose Settings and then Printers. In the window that opens, double-click on the Add New Printer icon and follow the instructions carefully.

Scaling and Position

The slider bar is used to reduce or enlarge the scanned image on the printed page. The reduce/enlarge value is displayed in a box to the right of the slider bar and denotes the percentage that the image will be resized. Thus, a value of 200 (%) will cause the scanned image to be printed twice as large as its size when scanned. A value of 50 will reduce the size of the printed image by half, and so on. The slider bar can be moved by using the mouse or by using the arrow keys on your keyboard.

Fit-in – This option is used to reduce or enlarge the scanned document or image to fit on the printer paper. Smaller images will be enlarged to fill the entire printed page and larger documents will be reduced to fit on the printed page. This option is most often used when scanning an A6-sized document and printing it on letter-sized paper (or vice-versa).

Center on Page – This function centers the scanned image on the printed page.

Default

Clicking this button resets the values of all settings of this function to their default values. The values of settings for the other scanning functions are not influenced.

Custom tab

Purpose – list the OCR(s) that the scanner supports.

File Format – stands for the file style you prefer the scanned image(s) to be after transfer processing, and is supported by the software you have installed in your system. For example, you have to install Microsoft Word in your system before selecting *.doc file format.

- **Acrobat Searchable PDF:** enables the page analysis (defining zones of graphics, tables, texts, artwork, space and etc. in the scanned document), OCR process and PDF conversion, and then outputs the transferred result in text-searchable PDF document. Different from Acrobat PDF Image Function, this function can also produce a PDF converted image on the top of the searchable texts.

When your document contains images and texts, you are recommended to choose this file format to get better transferred result.

Note: PDF stands for Portable Document Format.

- **Rich Text Format:** When this file format is chosen, the scan result may be output into *.rtf file after OCR process. You may review and edit the result in the word processor Microsoft Word.

Note: Rich Text Format (RTF) is a file format that lets you exchange text files between different word processors in different operating systems.

Save - Clicking the Browse button to locate a destination folder for the scan or transfer results, and the file path will be shown in the Save section.

Open after saving - Save the result to the pointed file path and open with relevant software.

Save to File - Save the result to the pointed file path.

Data Export - Export the BCR results as a record in the address book of MS Outlook Express.

Language - This option allows you to set an appropriate language for the business card recognition. The language options include English/Chinese, European, Japanese and English. (This option will be functioned under BCR by HotCard.)

Select Document Language

This option will be functioned under OCR by Abbyy FineReader.


Primary Language: This option allows you to set an appropriate primary language for the document recognition. Those language options cover all American and European languages.



Status Indicator

The green LED indicator (located beside Custom Button) indicates the status of the scanner, as described below:

Light	Status
On	The scanner is connected with the computer, ready to scan images.
Flashing	The scanner is busy scanning.
Off	The scanner is off, either because of disconnection with the computer, or because the computer being turned off.

Scanner Connection

The first step to take when troubleshooting connection problems with your scanner is to check all physical connections. The DigiScan icon , located on the Windows system tray, indicates if the scanner software is properly launched and the scanner and computer are communicating with each other.


Appearance	Status
	The DigiScan program has been successfully launched and the scanner is connected with the computer, ready to scan mages.
	The scanner is not connected with the computer.
No Display	You have chosen to terminate the DigiScan program, no matter the scanner is connected or disconnected with the computer.

If the Windows system starts and detects the scanner unconnected, the following message will appear to remind you:




If you prefer not to see this reminder message again, you may:

- Check the box of [Do not show this message again] within this message window, and then click [OK] button.

- Click on the DigiScan icon  located on the Windows system tray. Uncheck [Enable Warning] from the menu that pops up. Click the [No] button in the message box that appears.



Attention

If you would like to be prompted with this message again, you may click on the DigiScan icon  and check [Enable Warning] from the menu that pops up. Click the [Yes] button in the message box that appears.

Maintenance

Calibrating the Scanner

Calibrate the scanner if colors appear in areas that should be white, or colors of the scanned image and the original vary a lot. This allows you to adjust and compensate for variations which can occur in the optical component over time by its nature.


The following describes how to calibrate the scanner:

1. Insert the special calibration sheet face up into the page feed slot of the scanner.



Attention

Please insert the special calibration sheet included with the scanner. Alternatively you may also use any plain white sheet of paper sized in A6 (105 by 148 mm) instead; however, the calibration effect may be less good than the special calibration sheet.

2. Click on the DigiScan icon  located on the Windows system tray.
3. Click [Calibrate] from the menu that pops up.
4. The scanner pulls the calibration sheet through the scanner, which completes this scanner calibration.

Cleaning the Scanner

When you use this scanner for the very first time after installation, you are suggested to clean the scanner before use.

If unusual dots or lines are found in your scanned image, it is very likely that dust particles or other foreign objects have been brought inside the scanner. You may clean the scanner to rectify the problem.

The following describes how to clean the scanner:


1. Insert the special cleaning paper into the page feed slot of the scanner.



Caution

Do use the cleaning paper included in our package box. Remember to replace the cleaning paper in a safe and clean place when you finish using it.

Do not use anything other than our cleaning paper to clean your scanner. Using other sheet will influence the scan quality or even lead to scanner malfunction.

2. Click on the DigiScan icon  located on the Windows system tray.
3. Click [Clean] from the menu that pops up.
4. The scanner pulls the cleaning paper through the scanner, which completes this scanner cleaning.

Usage & Maintenance Tips



To keep your scanner working smoothly, take a moment to review the following usage & maintenance tips.

Caution

Avoid using the scanner in a dusty environment. Dust particles and other foreign objects may damage the unit. If you will not use the scanner for some time, please place it in the travel pouch.

Do not insert any document into the scanner with small objects such as paper clips, pins, staples or any other fasteners attached.

Do not insert damp, curled or wrinkled documents into the scanner for scanning.

These documents can cause paper jams and possibly damage the unit.

Your scanner operates best in temperatures between 10° C and 40° C (50° F and 104° F).

Appendix A: Troubleshooting

Scanning Problems

Most problems are easily solved, and some of the most common questions and their recommended solutions are listed below.

Symptom: After following the installation instructions, my computer cannot find the scanner.

Cause 1: Your software may have not been successfully installed.

Solution 1: Please insert the CD-ROM and reinstall the scanner software. Follow the on-screen instructions carefully when installing the software.

Cause 2: Some aspect of your computer system does not support USB.

Solution 2: Download and execute the file USBREADY.EXE at <http://www.usb.org/home> to determine the level of your computer's USB support.

Cause 3: USB is not enabled in your BIOS settings.

Solution 3: Enable the USB controller in your BIOS settings. This is typically done by pressing a key⁵ (usually , <F1> or <F10>) during startup. In the BIOS Settings screen that appears, find the option for USB and enable it. Exit and Save the changes you made. Your computer is rebooted automatically. Please consult your computer vendor before attempting to do this change.

Cause 4: The USB controller was improperly installed on your computer.

Solution 4: To reinstall the USB controller, click on the Start button, choose Settings and select Control Panel. In the window that opens, double-click on the Add New Hardware icon. Carefully follow the instructions that appear on your screen.

Symptom: The scanned image looks grainy on the screen.

Cause: Your video mode is not set to show more than 256 colors.

Solution: We recommend that you set your video mode to 16 bits per pixel (65536 colors) or higher. Please consult your video card, computer or Windows documentation to change the video mode.

Symptom: The scanner scans very slowly.

Cause 1: You are running other applications in the background.

Solution1: Close all the other applications that are running in the background.

⁵ Please consult your computer manual on how to modify your BIOS/CMOS settings.

Cause 2: You are scanning at a high resolution (DPI).

Solution 2: Reduce the resolution.

Symptom: The scanner is not in the list of supported scanners in other commercial software.

Solution: Select TWAIN as the scanner.

Symptom: Unable to scan from other software other than the one that came with the scanner.

Solution: Enter the Scanner Setup within the program, Select TWAIN and you will see your scanner listed.

Symptom: Unable to save to a floppy diskette.

Cause 1: The floppy disk might be writing protected.

Solution 1: Move the write protection tab, located in the back of the diskette, to the closed position.

Cause 2: Your disk might not be formatted.

Solution 2: Format the diskette.

Cause 3: There is not enough space available in the disk to save the document.

Solution 3: Delete any files that you do not need from the floppy disk.

Cause 4: You might be scanning your document at a high resolution. Documents scanned using higher resolution modes will take a considerable amount of disk space.

Solution 4: Reduce the resolution.

Symptom: The image looks good in the software that came with the scanner but it does not look good when I export the image to another program.

Cause: Different imaging programs use different Monitor Gamma settings.

Solution: Change the Monitor Gamma settings in either of the programs so that they match. Please consult the help files for each program to find out how to adjust the Monitor Gamma.

Symptom: The image looks good in the screen but is very dark when printed.

Cause1: The Monitor Gamma Settings or the scanner brightness settings are not set properly.

Solution 1: 1) Change the Monitor Gamma to a value between 1.0 and 1.5. Please consult your help file for information on how to adjust the Monitor Gamma.

2) Adjust the brightness control in the TWAIN window before scanning.

Cause2: The printer brightness setting is not set properly.
Solution 2: Adjust the brightness in the printer. Some printers allow you to change the brightness settings. Please consult your printer documentation.

Symptom: The scanned image takes too long to be sent with an email message.

Cause1: The image was scanned at a high resolution or is physically large.

Solution1: Scan at a lower resolution (DPI).

Cause 2: The Internet might be congested.

Solution 2: Try sending the message at a later time.

Symptom: The image that I sent through email looks good in my computer but it looks dark in the recipient computer.

Solution: The Monitor gamma settings should be approximately the same in your and the recipient computer.

Symptom: A. -Disk is full- error is displayed when I click on the scan button.

Cause: Your computer is running low in resources. Your computer hard disk drive does not have enough space to process the image. This may be because you are scanning at too high of a resolution.

Solution: Obtain a larger hard disk or rescan at a lower resolution.

Symptom: A -Disk I/O error- message is displayed.

Cause 1: This error is caused if the hard disk drive does not have enough space available to process the image.

Solution 1: Make some space available in the hard disk drive by deleting any programs or files that you do not need.

Cause 2: Your hard disk drive might be heavily fragmented or it might contain some bad sectors.

Solution 2: Run the Scan Disk utility that came with your Windows computer. Please consult your computer documentation or the Windows help files on how to run the Scan Disk Utility.

Symptom: The error “Scanner not Found” that is displayed.

Cause 1: The USB cables are not connected properly.

Solution 1: Make sure that the cables are connected tightly and to the proper port.

Cause 2: The USB cable might be too long.

Solution 2: Please use the USB cable that comes with your scanner.

Cause 3: The scanner’s power cord is not connected properly.

Solution 3: Make sure that the AC adapter is connected to an outlet. If the scanner is connected to a Surge Protector, make sure that the Surge Protector is turned on.

Symptom: **The document or photo has been inserted into the scanner but is not fed through the scanner.**

Cause 1: The document or photo was not correctly inserted into the scanner.

Solution 1: Make sure the document or photo is properly inserted into the page feed of the scanner.

Solution 2: The paper may be too thin or too thick.

Cause 2: The thickness of the paper is out of scanner specifications.

Symptom: **The document or photo got jammed while getting fed into the scanner.**

Cause: The document or photo was not correctly inserted into the scanner.

Solution: Grab ahold of the jammed paper and pull it through the scanner. Try to avoid creasing, wrinkling or tearing the paper.

Common -How-to- Questions

Symptom: **How do I save the scanned image in JPG format?**

Solution:

- 1) In the Image-editor, click on [File] and then [Save As].
- 2) Select the folder where you want to save your image.
- 3) Select JPEG or JPG under Save as type:
- 4) Type the name of the file name for your image.

Symptom: **How do I cut an image and paste in another program?**

Solution:

- 1) Select the area that you want to cut.
- 2) Click on [Edit].
- 3) Click on [Cut].
- 4) Start the program and open the document where you want to paste your image.
- 5) Click on [Edit].
- 6) Click on [Paste].

Please consult your program documentation on how to Cut and Paste if you have any more questions.

Symptom: **How do I place a scanned image into my word processor?**

Solution:

- 1) Find out what formats are supported by your word processor.
- 2) Write the name and the location of the file before you save it.
- 3) Save in a format supported by your word processor.
- 4) Depending on your word processor, select [Insert] or [Import] from your menu, then select [Image] or [Picture].

Consult your Word Processor documentation for more information on how to import images.

Symptom: **How do I send a scanned image using my email program?**

Solution: Save your scanned image in a format that is supported by your email program (JPG, GIF or PNG are recommended). Once your picture is saved, consult the documentation of your email program on how to attach a file to a message.

Appendix B: Specifications⁶

Plustek TR821	
Physical dimensions	174.5mm x 60.5mm x 38.5 mm (6.9" x 2.4" x 1.5")
Weight	194g
Operating Temperature	10° C to 40° C (50° F to 104° F)
Scan Area	Maximum 105 mm x 148 mm (4.13" x 5.83") Minimum 33mm x 43 mm (1.3 " x1.7")
Scan Method	Single –Pass
Scan Modes	Color: Input 48-bit; Output 24/48-bit Grayscale: Input 16-bit; Output 8/16-bit Black & White: 1-bit
Resolution	Optical 600 dpi
Scanning Materials	Reflective color or black-and-white originals Paper Thickness: from 0.08 mm to 0.9 mm Card Thickness: up to 1.2mm
Protocols	TWAIN Compliant
Connection	USB 2.0
Light Source	Three-color RGB LEDs
Power Requirement	Powered through USB port. No AC power adaptor is required.
Power Consumption	Operation: 2.5 watts maximum Idle: 0.7 watts
EMI	FCC Class B/CE/C-Tick/BSMI
Environment Requirement	RoHS/WEEE

⁶ Hardware specifications may change at any time without prior notice.

Appendix C: Customer Service and Warranty

If you encounter problems with your scanner, please review the installation instructions and troubleshooting suggestions contained in this guide.

For further assistance call our customer support phone number listed on the last page of this guide. One of our representatives will be happy to assist you from Monday through Friday in office working hours as shown below:

Europe	9:00 a.m. – 5:30 p.m. (CET)
Other Countries or Areas	9:00 a.m. – 6:00 p.m. Taiwan Time

To avoid delays, please have the following information available before calling:

- Scanner name and model number
- Scanner serial number (Located at the bottom of the scanner)
- A detailed description of the problem
- Your computer manufacturer and its model number
- The speed of your CPU (Pentium 133, etc.)
- Your current operating system and BIOS (optional)
- Name of software package(s), version or release number and manufacturer of the software
- Other USB devices installed

Statement of Limited Warranty

This Statement of Limited Warranty applies only to the options you originally purchase for your use, and not for resale, from an authorized reseller.

The manufacturer warranty includes all parts and labor, and is not valid without the receipt of original purchase. To obtain warranty service, you may contact the authorized dealer or distributor, or visit our website to check out the available service information, or send a request via E-mail for further help.

If you transfer this product to another user, warranty service is available to that user for the remainder of the warranty period. You should give your proof of purchase and this statement to that user.

We warrant that this machine will be in good working order and will conform to its functional descriptions in the documentation provided. Upon provision of proof of purchase, replacement parts assume the remaining warranty of the parts they replace.

Before presenting this product for warranty service, you must remove all programmes, data and removable storage media. Products returned without guides and software will be replaced without guides and software.

This Limited Warranty service does not provide for carry-in exchange when the problem results from accident, disaster, vandalism, misuse, abuse, unsuitable environment, programme modification, another machine or non-vendor modification for this product.

If this product is an optional feature, this Limited Warranty applies only when the feature is used in a machine for which it was designed.

If you have any questions about your Limited Warranty, contact the approved retailer from whom you bought the product or the manufacturer.

THIS LIMITED WARRANTY REPLACES ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. HOWEVER, SOME LAWS DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES. IF THESE LAWS APPLY, THEN ALL EXPRESS AND IMPLIED WARRANTIES ARE LIMITED IN DURATION TO THE WARRANTY PERIOD. NO OTHER WARRANTIES APPLY AFTER THAT PERIOD.

Some jurisdictions do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply.

Under no circumstances are we liable for any of the following:

1. Third party claims against you for losses or damages.
2. Loss of, or damage to, your records or data; or
3. Economic consequential damages (including lost profits or savings) or incidental damages, even if we are informed of their possibility.

Some jurisdictions do not allow the exclusion or limitations of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This Limited Warranty gives you specific legal rights, and you may also have other rights that vary from jurisdiction to jurisdiction.

FCC Radio Frequency Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular 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 to an outlet on a circuit different from that which the receiver is connected.
- Shielded interconnect cables and shielded power cord which are supplied with this equipment must be employed with this equipment to ensure compliance with the pertinent RF emission limits governing this device.
- Consult the dealer or an experienced radio/TV technician for help if the conditions persist.
- Changes or modifications not expressly approved by the manufacturer or authorized service center could void the user's authority to operate this equipment.

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for more customer service information.