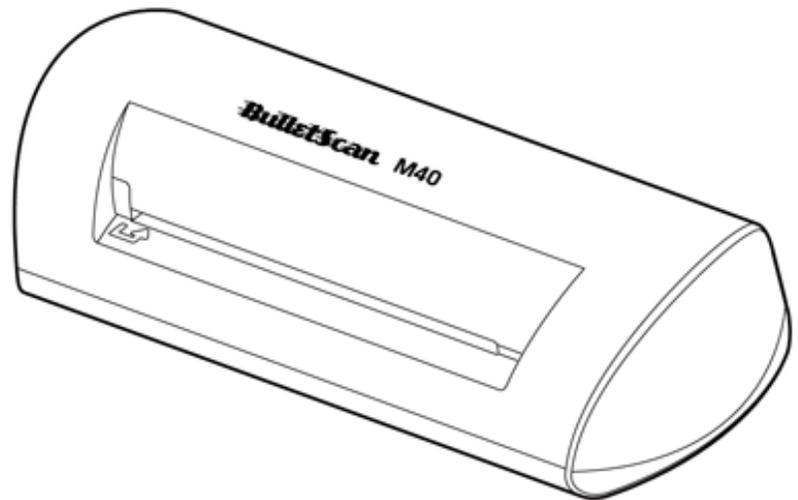


iVina **BulletScan™**

M40

Portable Photo Scanner

User Manual



Regulatory model: FS-0913B

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This product has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. The FCC Class B limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult your point of purchase or service representative for additional suggestions.

CE Warning

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

Disposal of Waste Equipment by Users in Private Union



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

System Requirements

- Microsoft Windows XP/Vista/7
- 1.2 GHz CPU or greater
- 512 MB RAM for Windows XP (2+ GB RAM recommended)
- 1 GB RAM for Windows Vista and 7 (2+ GB RAM recommended)
- 500 MB available on the Hard Drive for complete software installation
- USB 2.0 Port
- CD-Rom drive
- Display supporting full color (32 bit) at 800 x 600

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1. Introduction

Congratulations on your purchase of the BulletScan M40 scanner. Now you can scan and store your printed photos directly to your memory card or USB flash drive without connecting to any computer.

Simply insert a memory card or USB flash drive into the scanner, and power it on. When the scanner is ready, feed your printed photo into the scanner and your images will be stored in the memory card or USB flash drive. If you want to store your photos directly into your computer, just plug in a USB cable and use the supplied Scan To PC utility.

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

The following figure indicates the package contents. Please check all the items against your checklist. If you do not receive all the items, please contact your authorized local dealer immediately.



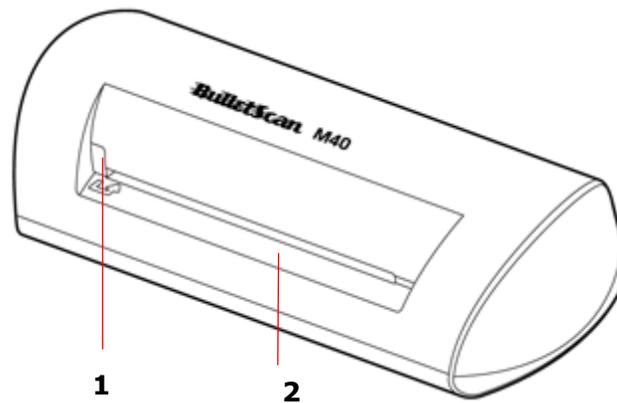
1. Scanner
2. Sensor Cleaning Swab
3. Roller Cleaning Tool
4. Calibration Chart
5. Power Adapter
6. USB Cable
7. Black Plastic Sheath/White Plastic Sheath

Note:

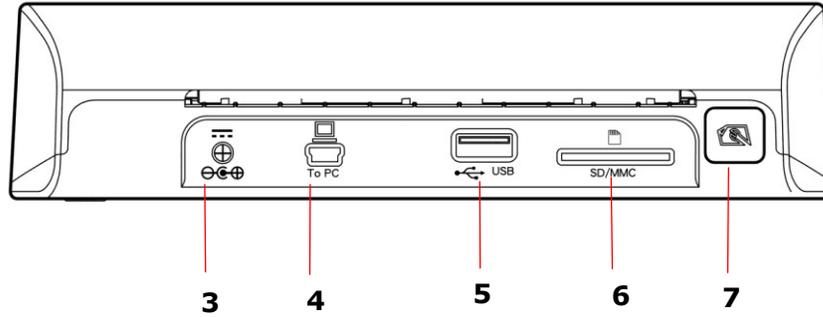
1. Only use the **BulletScan Type 5 AC adapter** (DSA-12PFA-05 FUS 050200 DEE VAN) included in the box. Using other AC adapters may damage the scanner and void the warranty.
 2. Please unpack the packing carefully, and check the contents against the checklist. If any items are missing or damaged, please contact your dealer immediately.
-

2. Scanner Overview

2.1 Scanner View



No.	Name	Function/ Description
1	Indicator light	Indicates the operating status of the scanner.
2	Feeding Slot	Insert an original to begin scanning.



No.	Name	Function / Description
3	Power connector	To power on the scanner, connect the supplied power adapter to the scanner. To power off the scanner, disconnect the supplied power adapter from the scanner.
4	Mini USB connector	For connecting to a computer via a USB cable.
5	Flash drive slot	For connecting a USB flash drive.
6	Memory card slot	For SD cards and Micro SD cards using the supplied adapter.
7	Function Button	Press to start cleaning the scanner's roller (Refer to the Cleaning the roller section on page 6-1). Press to eject paper during paper jam condition. (Refer to the 2-blink description of The indicator light pattern section on page 7-2). Press until the indicator light starts blinking to calibrate the scanner. (Refer to the Calibrating the scanner section on page 6-2).

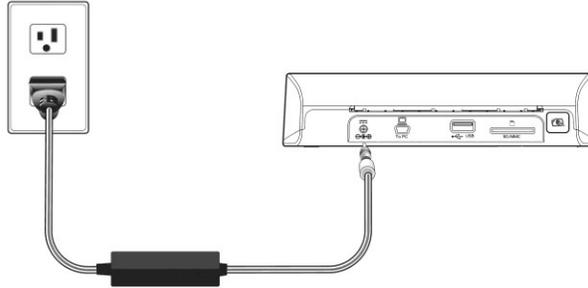
3. Installation & Operation

Precautions

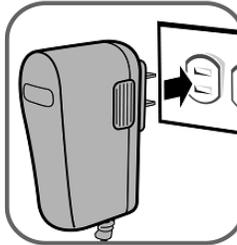
- Keep the product out of direct sunlight. Direct exposure to the sun or excessive heat may cause damage to the unit.
- Do not install the product in a humid or dusty place.
- Be sure to use the proper AC power source.
- Place the product securely on an even, flat surface. Tilted or uneven surfaces may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

3.1 Initial setup

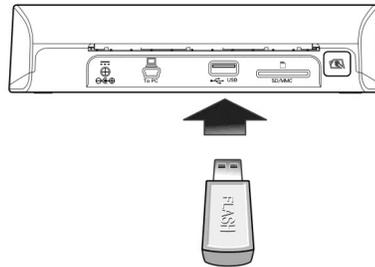
1. Connect the plug on the power adapter cable to the power connector on the scanner.



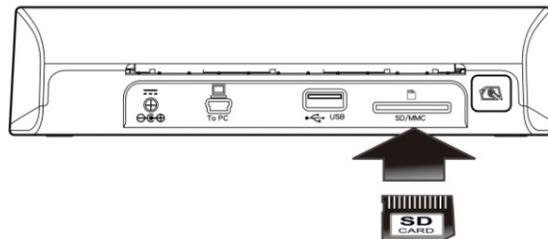
2. Plug the power adapter into a power outlet. Wait until the indicator light on the scanner stops blinking and stays on steady, indicating the scanner is ready.



3. Insert a memory card into the memory card slot or a USB flash drive into the USB Port. (If you connect a memory card and a USB flash drive to the product at the same time, the scanned image will be stored in the memory card.)



Connect a USB flash drive into the USB Port.



Insert a memory card into the memory card slot.

3.2 Scan an original

1. Insert your photo into the plastic sheath supplied with the scanner.
(The detailed usage of the plastic sheath is described in the next page.)



2. With the side to be scanned facing upward and in correct orientation, place the left edge of the original against the left edge of the feeding slot.
3. Simply let go the original when it begins to feed into the slot.
4. When the scan is completed, the scanner will automatically create a folder titled "**Photo1**" on your memory card or flash card, which will hold the first 9999 scans. Then "**Photo2**" folder will be created for the next 9999 scans, and so on.

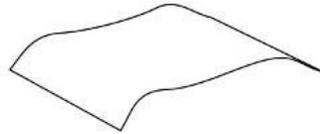
(Each scanned image is given a file name with the prefix **img** followed by a 4- digit sequential number in the order the images are stored. For example, **img0001.jpg**, **img0002.jpg**, etc.)

Note:

- Do not remove the memory card or disconnect the power supply while the scanner is processing an image and the lights are blinking.
- This scanner only supports output images in JPEG (.jpg) format.
- If the memory card is near full (lower than 1MB), the indicator light blinks. Use another card or delete some files on it if necessary.
- Insert only one item at a time, and insert the next original only when the previous one is done and the blinking has stopped.
- Remove any items attached to the photo, such as staples, paper clips, and paper sticky notes before feeding it into the scanner due to possible damage to the scanner.

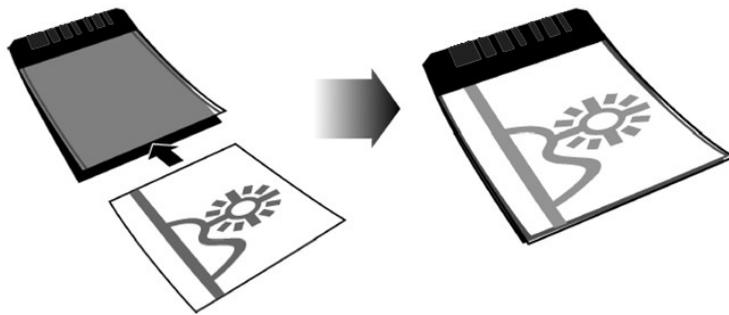
3.3 Using Plastic sheaths

Always use the clear plastic sheath (*included*) when scanning photos to ensure the best scanning results. The sheath helps eliminate the possibility of de-focusing due to the uneven surface of curled photos.



Curled photo

1. Insert the photo into the plastic sheath as shown below.



2. Insert the plastic sheath, flat and level, into the scanner's feeding slot, folded side first, image facing up.

Note:

- Keeping the original flat and level when feeding prevents possible jamming.
- Keep originals free from finger prints, oil, dirt, and dust for optimum scanned image quality.
- Remove photos from the plastic sheath after scanning to prevent the sheath from sticking to the photos over time.
- If the plastic sheaths are not in use, store them in a safe place and keep them protected from accumulating dust.

3.4 Scanning dark or night pictures

When you need to scan very dark or night pictures, be sure to use the white plastic sheath to avoid an incomplete scanned image. However, using the white plastic sheath will disable the auto crop (automatically cropping your image according to your photo size) and deskew (auto straighten) functions. You may need to use a 3rd party graphic editing program to perform the cropping and straightening.



The scanned image using white plastic sheath

3.5 Power off the scanner

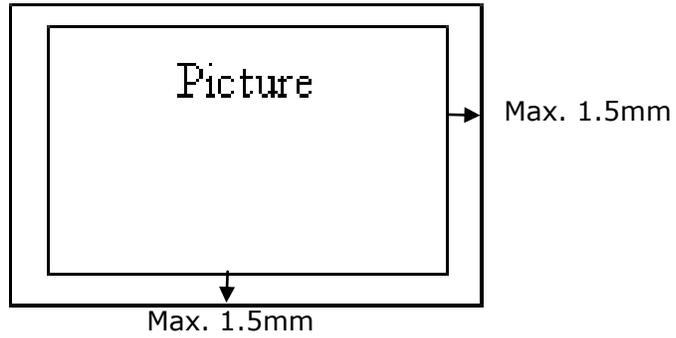
After all originals are scanned, disconnect the supplied power adapter from the scanner. Now the scanner has been safely powered off.

Important:

- (1) Insert only one photo at a time, and insert the next one only when the previous one is done. Otherwise, the scanner may malfunction.
- (2) The paper detector is quite sensitive. Please do not push your photo or card into the feeding slot or the top of your image will be cut. Simply let go the photo (card) when it begins to feed into the slot.
- (3) The acceptable original size is 2"x 2" ~ 4" x 8".
- (4) Do not use the following types of originals for scanning; otherwise the scanner may malfunction or cause the original to jam in the slot.
 - Originals thicker than 0.5mm
 - Originals with either side shorter than 2" (55mm)
 - Originals with lots of black or dark colors*
 - Originals with dark colors surrounding the edges*
 - Newspaper clippings*
 - Soft and thin materials (thin paper, cloth, etc.)*
 - Originals that exceed the acceptable size
 - Torn or folded originals*
 - Post-it® type "Sticky Notes"*
 - Carbon copies*

*Without the clear plastic sheath

- (5) The scanner has a built-in cropping function that is capable to detect and crop the edges of an original. The max cropping size is 1.5mm per edge, as illustrated below:



- (6) If the photo is very crooked, you will see black edges like in the picture below:



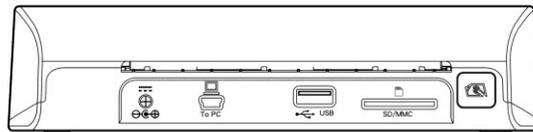
4.

Connecting to a Computer

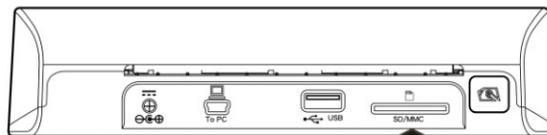
By connecting the scanner to a computer, you can access the pictures and other files on the memory card directly allowing you to freely copy, paste or delete files to and from the memory card using the computer.

4.1 How to connect to a computer

1. Connect the plug on the power adapter cable to the power connector on the scanner.
2. Plug the power adapter into a power outlet. Wait until the indicator light on the scanner stops blinking and stays on steady, indicating the scanner is ready.
3. Insert a memory card into the memory card slot or a USB flash drive into the USB port.

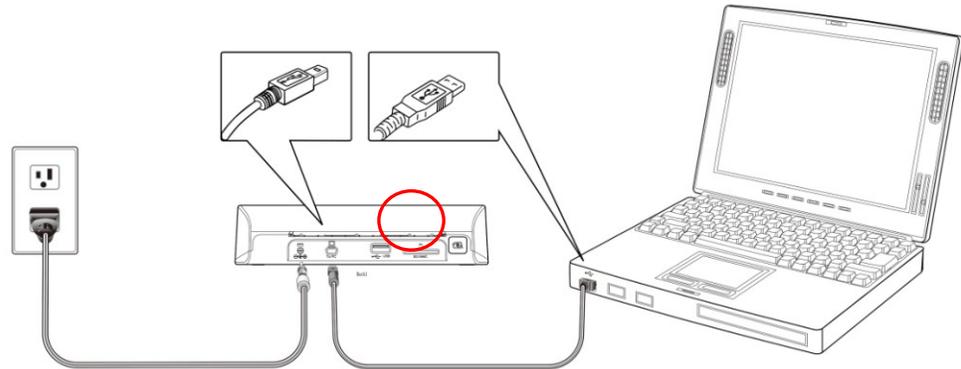


Insert a USB flash drive into the USB port.



Insert a memory card into the memory card slot.

4. Connect the mini end of the USB cable (included with scanner) to the Mini USB connector on the scanner.



5. Power on your PC, and then connect the large end of the USB cable to a USB port on your PC.
6. When the scanner connects successfully with a computer, a Removable Disk (F:) (F: represents the removable drive letter) will be shown in Windows Explorer or Finder. If a memory card or USB flash drive is inserted to the scanner, the Removable Disk will be replaced with the name of the memory card or USB flash drive.
7. After your scan, a folder titled PHOTO1 is added to the memory card or USB flash drive and the scanned image will be saved in JPEG file format.

Each scanned image is given a file name with the prefix scan followed by a 4- digit sequential number in the order the images are stored. For example, **img0001.jpg**, **img0002.jpg**. If the file name reaches **img9999.jpg** in the Photo1 folder, a new folder titled Photo2 will automatically be created to store subsequent new files, and so on.

8. You can now view or edit the files on the memory card or USB flash drive using your own graphic editing software.

4.2 Disconnecting the scanner from a computer

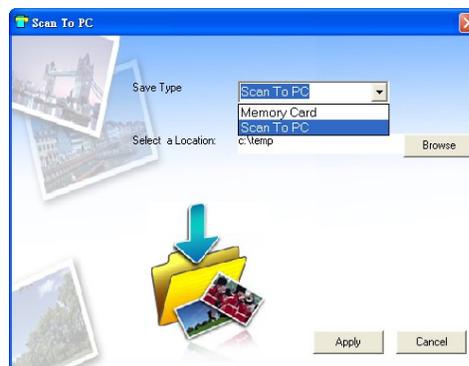
1. On the Windows System Tray, click the hardware removal icon.
2. Click the 'Safely remove USB mass Storage device' message with the corresponding Drive.
3. When the 'Safe to Remove Hardware' message appears, you can safely remove the scanner's USB cable.

5. Scan To PC Manager

With the Scan To PC Manager, you can easily scan photos and save the scanned images directly to the connected PC. You can also choose the location where the scanned images will be saved.

5.1 Starting the Scan To PC Manager

1. Connect the scanner to your computer with a USB cable. If successfully installed, a Removable Disk (F:) (the drive letter may change depending on your system) will be shown in the Windows Explorer. If a memory card is inserted to the scanner, the Removable Disk will be show the name of the memory card.
2. From the Start Menu, go to programs, BulletScan, and launch the Scan to PC Utility. The Scan To PC Utility will launch and you will see the icon  in the system tray.
3. Right click the icon  in the system tray and select **Setting** to launch the Scan To PC Utility screen, as shown below:



4. To save the scanned images to your computer, select Scan To PC in the drop-down menu of Save Type.
To save the scanned images to your memory card connected to the scanner, select **Memory Card** in the drop-down menu of **Save Type**.

Important: Once you have installed the Scan To PC Manager and you wish to save your scanned images to a memory card, you still need to use Scan To PC Manager and select Memory Card in the drop-down menu of Save Type.

5. Click the **Browse** button to save your scanned images to a specified location. (Default is your My Documents)
6. Click **Apply** to save the settings or **Cancel** to leave the Setting screen without saving the changes. Note the Scan to PC Utility icon is still running in your system tray.
7. Scan your photo described.
After your scan, a folder titled **Photo1** to save the scanned images is added to the specified location.
Note each scanned image is given a file name with the prefix **scan** followed by a 4-digit sequential number. For example, img0001.jpg, img0002.jpg.
8. To exit the Scan To PC Manager, right-click the icon  in the system tray and select Exit.

Note:

- If you have not inserted a memory card to the scanner, an empty removable disk drive will still be shown in the Windows Explorer.
- If you have inserted a memory card to the scanner, the name of memory card will be shown in Explorer window.

5.2 Uninstalling the Scan To PC Manager

1. From the PC **Start** menu, select:
All Programs > Scan To PC > Uninstall Driver
2. Follow the uninstall wizard to uninstall the software.
3. **Restart your PC** when prompted to do so.

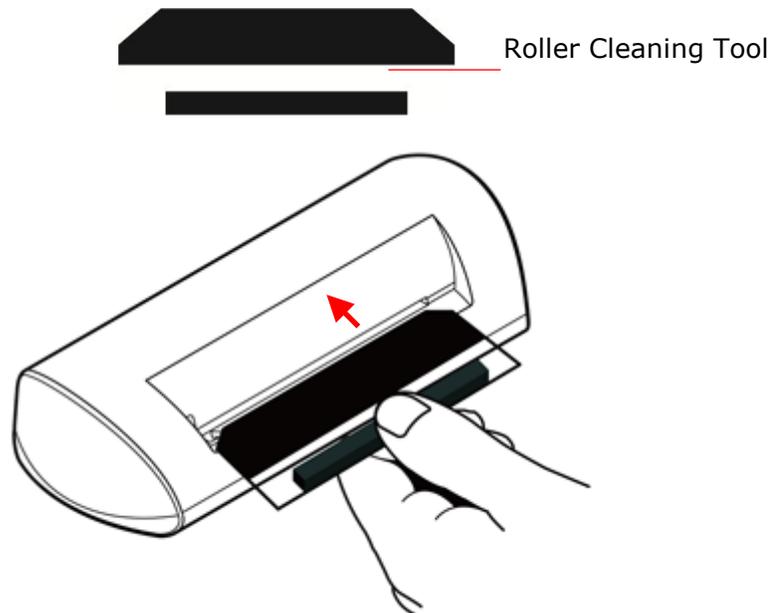
6. Maintenance

6.1 Cleaning the roller

Clean the scanner roller on the following conditions:

- The scanned images have streaks or scratches that are not on the original.
- The scanner does not feed the original smoothly.

1. Connect the power supply to the scanner.
2. Press the **Function** button.
3. Place the supplied roller cleaning tool on the feeding slot, with the bigger sponge inserted first, as shown below:



4. The cleaning tool will be brought into the feeding slot automatically, and the cleaning process will begin.
5. When the cleaning process is completed, the cleaning tool will be ejected from the feeding slot.

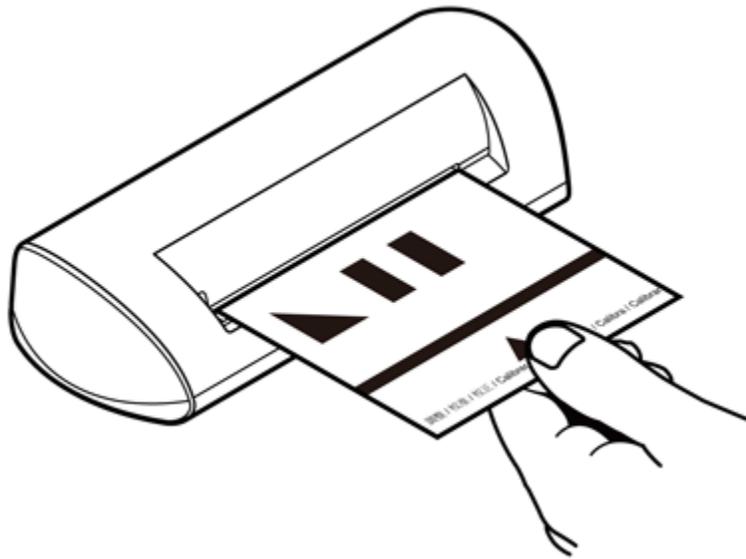
Note:

Adding some isopropyl alcohol (95%) on the roller cleaning tool improves results when cleaning the roller.

6.2 Calibrating the scanner

If the scanned image looks fuzzy or there are strange stripes on it, the scanner may need calibrating in order for the sensor to resume its original precision. To calibrate the scanner:

1. Follow the instructions of Cleaning the Roller on the preceding section to clean the roller.
2. Press the **Function** button until the indicator light starts blinking.
3. Insert the calibration chart to the feeding slot, as shown below:



4. The scanner starts calibrating.

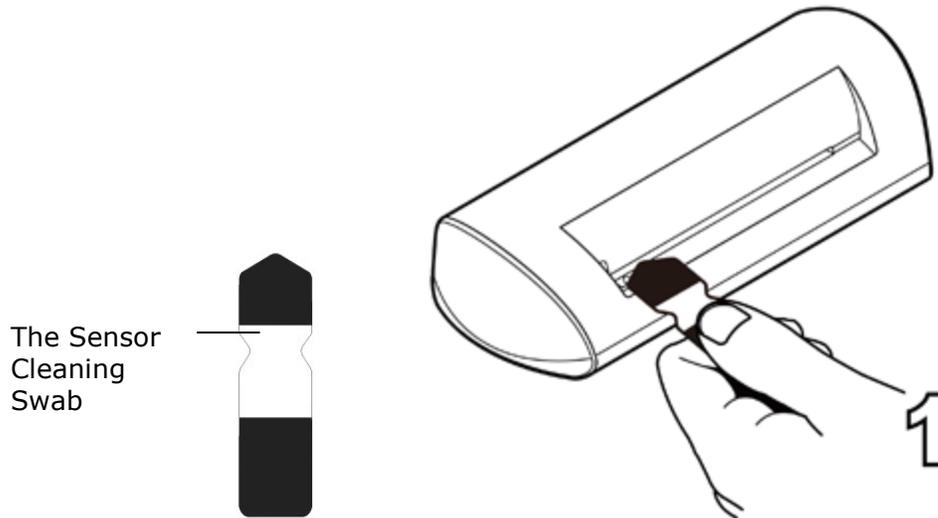
Note:

Keep the calibration chart clean. Any dirt may make the calibration chart invalid or impact the calibration result.

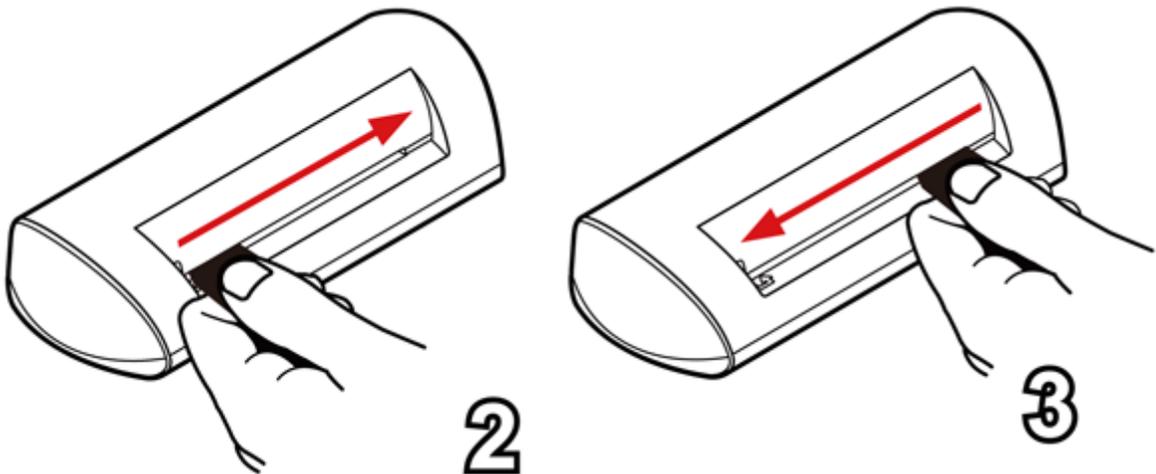
If you do not have your calibration chart, you will need to order a replacement online.

6.3 Cleaning the image sensor

1. Make sure the scanner is disconnected from the power supply.
2. With one hand pressing the product, insert the sensor cleaning swab into one end of the feeding slot with the other hand, as shown below:



3. Gently slide the sensor cleaning swab back and forth from one end of the feeding slot to the other five or six times consecutively.



4. Remove the sensor cleaning swab, store it in a safe place and protect it from dust.

7. Troubleshooting

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

7.1 Frequently asked questions

Question: There are strange lines on the scanned image, or the image is not clear.

Answer: Check the following:

- Are there scratches on the original, or is the original clean? Remove any stains or dust from the original before scanning.
- Has the scanner been used for a long period of time without cleaning and calibration? Follow the instructions for "Cleaning the Scanner" and "Calibrating the Scanner", and then try again.

Question: The original gets stuck halfway in the feeding slot.

Answer: Press the Custom button. The scanner will back out the original so you can remove the jammed original from the output slot.

Question: The indicator light blinks rapidly and no scan is possible.

Answer: Check the following:

- Is the memory card inserted properly into the memory card slot? Re-insert the card and try again.
- Is the SD card locked (set to write-protect)? Unlock the card.
- Is the memory card full? The indicator blinks when the free space on the memory card is below 1MB. Use another card if necessary.
- Make sure the memory cards are in FAT or FAT32 file formats only, not NTFS or any other file format.
- Did you insert the next original before the scanning process of the previous one was completed? Power the scanner off and back on and try again. Make sure that you scan the next original only after the scanning process of the previous one has completed. Does the length of the original exceed the maximum acceptable size?

Question: The scanned image is cut off when I scan dark or night pictures.

Answer: Please insert your photo to the white plastic sheath to get a complete image.

Question: The scanner feels warm to the touch.

Answer: It is normal for the scanner to emit a small amount of heat (around 30-45 Celsius) after prolonged use. However, if there are strange odors coming from the scanner or the scanner feels hot to the touch, disconnect the scanner immediately from the power supply or the computer.

7.2 The indicator light pattern

The indicator light patterns represent function status as follows:

Light	Description
Steadily on	The scanner is ready for use.
Blinks continuously	<ul style="list-style-type: none">▪ Initializing system and memory card. Please wait until the initialization process is complete before using the scanner.▪ Busy scanning and storing image files. Please wait until the process is complete before scanning another original.▪ Sensor cleaning in progress. Please wait until the process is complete before performing any operations.
2 Blinks	Paper jam. Press the Function button for about 0.5 seconds; the scanner will back out the original so you can remove it from the input slot.
3 Blinks	Memory card error. Remove the memory card to clear this error status.
4 Blinks	Calibration failed. Error indication only.
5 Blinks	Scan To PC failed. The PC may be busy or unavailable.

8. Specifications

All specifications are subject to change without notice.

Specification		Sheet-fed type Photo Scanner
Acceptable paper size		2"x 2" ~ 4" x 8"
Output image format		JPEG with compression
Memory	Flash	512KB
	Internal	64MB (DDR1)
Resolution	Scanned image	300 dpi (dots per inch)
Color	Scan color depth	Color - 48 bit
	Output format	Color - 24 bit (JPEG)
Interfaces	Memory Cards	SD / SDHC / MMC
	USB	Mini USB port compatible with the USB 2.0 / 1.1 Device specification
USB Mass Storage Supported		Windows XP/Vista/7, Mac OS 10.5.x
Power	Input	100-240W
	Output	5Vdc, 2.0A
Photo feeding		Sheet feed type
Weight		0.2 Kg (0.4 lb)
Dimensions (WxDxH)		183 × 74 × 43 mm (7.2 × 2.9 × 1.7 in)
Paper Thickness (g/m ² or lb)		34~127 g/m ² (9 to 34 lb) up to 0.5mm
Recommended Operating Environment		15°C ~ 35°C (59°F~95°F); 20% RH ~ 70% RH