



Model : DX250

User Manual

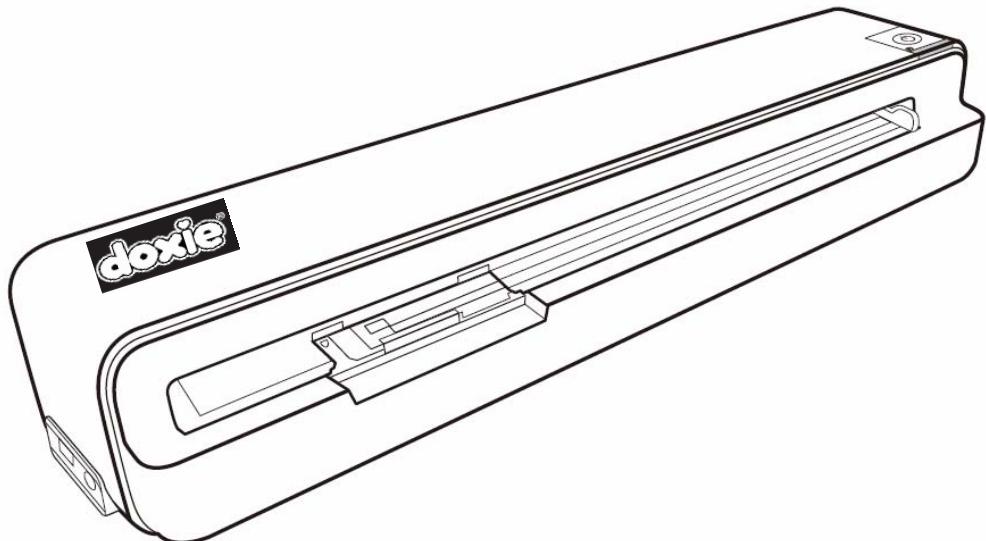


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Read This First

Please read the following important safety instructions carefully before using this scanner. Failure to observe these instructions may result in personal injuries or damages to the scanner.

Important safety instructions

Always follow these basic safety precautions when using the scanner. This will reduce the risk of fire, electric shock, and injury.



Do not place this scanner under direct sunlight or near heat sources, such as in a closed car under sunlight or near a stove. The outer casing of this device may become deformed and the sophisticated sensors inside may become damaged due to excessive heat.



Do not use this device near water, in the rain or allow any liquid to get inside this device. Water and moisture may cause short-circuit to the electronic components and lead to malfunctions.



Do not use this device in dusty environments. Dust grains may cover this device and scratch the original. Do not scan originals that are contaminated by dusts or other particles.



Do not use this device near strong electromagnetic sources, such as a microwave oven or television. The electromagnetic interference may cause this device to malfunction.



Do not attempt to disassemble or modify this device. There are no user serviceable parts inside this device, and unauthorized modifications will void your warranty.



Do not drop or apply shock/vibration to this device. Strong impacts may damage the components inside.



Do not insert objects other than compatible memory cards into the memory card slot of this device. The metal contacts inside the slot can easily become damaged by foreign objects.



This scanner contains a rechargeable built-in Li-Polymer battery. The battery should only be charged via the USB connection to a PC. If the battery needs replacement, the operation should only be performed by an authorized and qualified serviceperson. Do not attempt to replace the battery by yourself.



The USB port on this device is designed solely for connecting to the USB cable. Do not insert any other objects into this port.



If there are strange odors or heat emitting from this device or any signs of malfunction, turn this device off immediately and contact your dealer for inspection or service.

Disclaimer

This company makes no representations or warranties, either expressed or implied, with respect to the contents of this publication. This company reserves the right to revise this publication and to make changes from time to time in the contents thereof without obligation to notify any person of such revision or changes.

Copyright

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Notes about copyrighted materials

Avoid scanning and re-distributing copyrighted originals and images or those of unknown sources. Doing so may violate your local copyright laws and related regulations. **This company** cannot be made liable for the losses that may result from breaching the laws described above.

Disposal of this product

To help protect the environment, dispose of this scanner properly according to your local regulations regarding the disposal of waste products.

Package Contents

Check the package for the following items. If there are any items missing or damaged, please contact your place of purchase immediately.

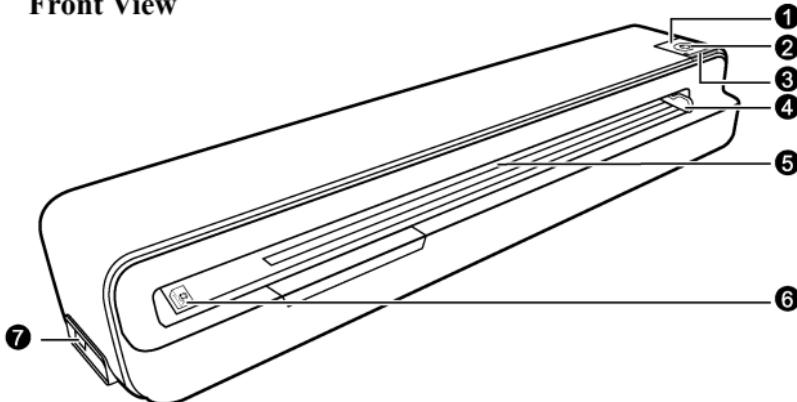
- Scanner x 1
- Quick start guide x 1
- Plastic sheath x 1
- Calibration card x 1
- Sensor cleaning swab x 1
- USB cable x 1

<Memo>

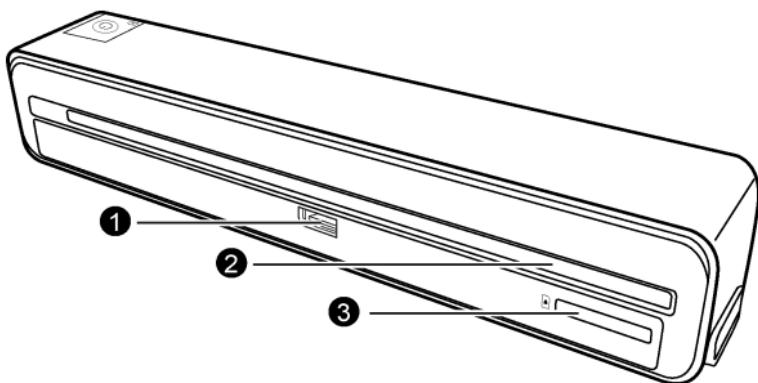
Introduction

Scanner Diagram

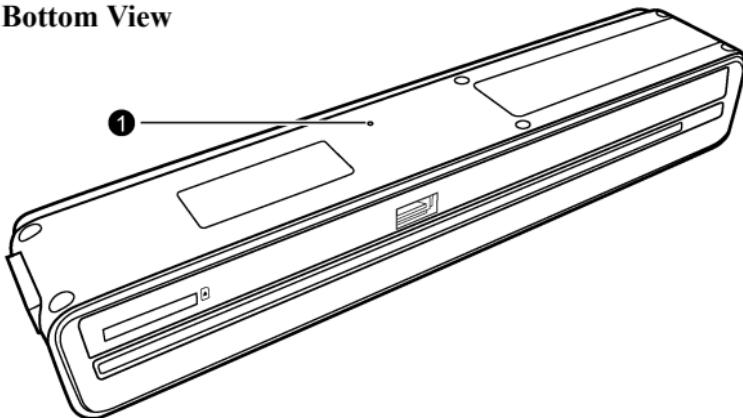
Front View



No.	Name	Function/description
①	Power button	<ul style="list-style-type: none"> Press to power on the scanner. When scanner power is on, press and release to change scanning resolution. Press and hold for one second to power off the scanner. When the original jams in the feeding slot ⑤, press to back it out from the scanner.
②	Power indicator	Indicates the power status of the scanner. Refer to "Indicator Lights" on page 7.
③	Status/Card indicator	Indicates the operating status of the scanner and memory card. Refer to "Indicator Lights" on page 7.
④	Paper guide slide	Slide the guide to adjust for smaller originals to ensure the proper alignment.
⑤	Feeding slot	Insert an original into this slot to begin scanning.
⑥	Orientation mark	Indicates the correct original orientation for scanning.
⑦	Mini USB socket	For connecting to a computer via a USB cable.

Rear View

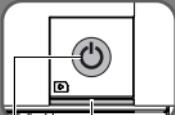
No.	Name	Function/description
①	USB socket	For connecting a USB flash drive.
②	Output slot	The scanned original comes out from this slot.
③	SD/xD/MMC/MS card slot	Accepts the following types of memory cards: SD, xD, MMC and MS. Refer to "Supported Memory Card Types" on page 18 for details.

Bottom View

No.	Name	Function/description
①	Reset button	In case there is no response from the scanner, insert a pointed object into this hole to trigger the reset button and reset the scanner.

Indicator Lights

Please see below for the indicator lighting patterns and the functions they represent.

Indicator lighting patterns and the functions they represent	 Power Status/card		<ul style="list-style-type: none"> ---: Blinking slowly ***: Blinking rapidly • : Steadily on ● : Off
	● (color)	○ (color)	<p>The battery is fully charged (when scanner power is on and connected to a computer) and is ready for use; the scanning resolution setting is indicated by color:</p> <ul style="list-style-type: none"> • Green - 300dpi (default setting) • Orange - 600dpi.
	-○- (green)	○ (color)	<p>Scanning current original; color indicates current resolution setting:</p> <ul style="list-style-type: none"> • Green = 300dpi • Orange = 600dpi
	○ (orange)	○ (color)	<p>The battery is being charged when scanner power is on.</p>
	○ (orange)	●	<p>The battery is being charged when scanner power is off.</p>
	-○- (orange)	○ (color)	<p>The battery power is low.</p>
	● (color)	●	<ul style="list-style-type: none"> • The scanner is powered off. • The battery is fully charged (when scanner power is off and connected to a computer).
	-○- (green)	-○- (color)	<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 file. Please wait until the process is complete before scanning another original.

	● (green)	● (color)	<ul style="list-style-type: none"> • Paper jam. Press the Power button. The scanner will back out the original so you can remove the jammed original from the Feeding slot. • Calibration error. Please contact your nearest service center for help.
	●	● (color)	No memory card, card full (free space below 10MB), card error, card locked or the file system is not supported. Remove files from the card to free up space, unlock the card if it is locked, or try another card.
	● (orange)	○ (color)	The battery power is extremely low, and the scanner will power off automatically in 5 seconds. Charge the battery immediately.

Suitable and Unsuitable Original Types

This scanner is designed to obtain the best scanning results with the following types of originals:

- Photos (From 3" x 5", 4" x 6", 5" x 7" up to A4/Letter size)
- Business cards (Standard 3.5" x 2" (8.9 x 5 cm) or larger)

Do not use the following types of originals for scanning. Otherwise the scanner will malfunction or cause the original to jam in the slot.

- Originals thicker than 1.0mm
- Originals with either side shorter than 55mm
- Originals with lots of black or dark colors
- Originals with dark colors surrounding the edges
- Printed images (pictures on newspapers, magazines, etc.)
- Soft and thin materials (thin paper, cloth, etc.)
- Originals that exceed the following acceptable size:

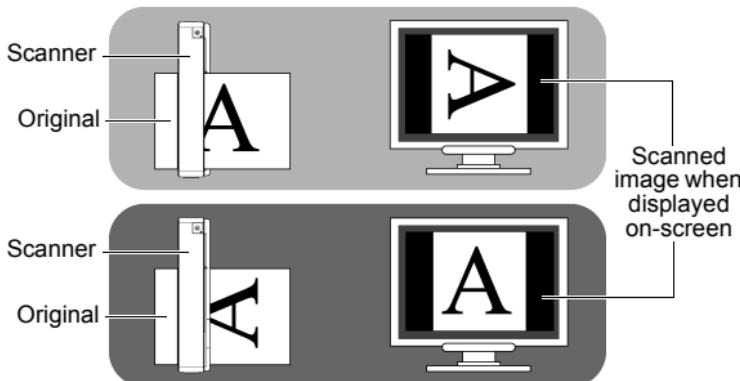
Length: 12 inches (304.8mm)



Width: 8.5 inches (216mm)

Orientation of the Original and Scanned Image

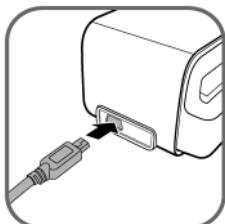
Refer to the illustrations below for the relationship between the orientation of the original when scanning and that of the scanned image when displayed on the computer screen.



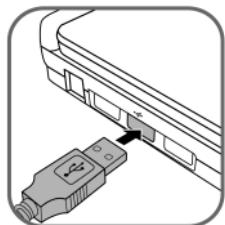
NOTE: Scanning the same original in different orientations may produce scanned images that look slightly different in color tones and brightness. This is not a malfunction.

Using the Scanner

Preparation and Initial Setup



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



2. Power on your computer, and then connect the large end of the USB cable to a USB port on your computer to start charging the built-in battery of the scanner.

After the battery is fully charged, disconnect the scanner from the computer.

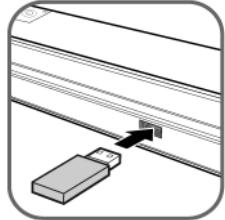
 **NOTE:** It takes approximately 3 to 4 hours to fully charge the scanner's battery. See "Indicator Lights" on page 7 to identify the charging status.



3. Insert an unlocked (writable) memory card into the memory card slot, or a USB flash drive into the USB port on the scanner.

 **NOTE:**

- You can also use this scanner without a memory card or USB storage device. The scanner has a built-in 512MB memory.
- If a USB flash drive and a memory card are both inserted, the scanner will take the following priority when saving the scanned images:
USB flash drive > Memory card > Built-in memory
- The scanner only accepts memory cards in FAT16 or FAT32 format. NTFS and other file systems are not supported.
- See "Supported Memory Card Types" on page 18 for all supported memory card types.



Power on the Scanner



1. Press the Power button. The Power and Status/Card indicators blink.



NOTE: For more information on the indicator lights, refer to "Indicator Lights" on page 7.



2. Wait until the Power indicator stops blinking and then goes off. The Status/Card indicator will stay on steady, indicating that the scanner is ready.



NOTE: Do not insert any original into the feeding slot when the Power indicator is blinking; the original will not be scanned.

Set the Scanning Resolution

The scanning resolution is measured in dpi (dots per inch). The higher the dpi, the more details on the original will be captured by the scanner and produce a higher quality scanned image. However, a higher dpi will also result in a larger image size and occupy more space on the memory card.

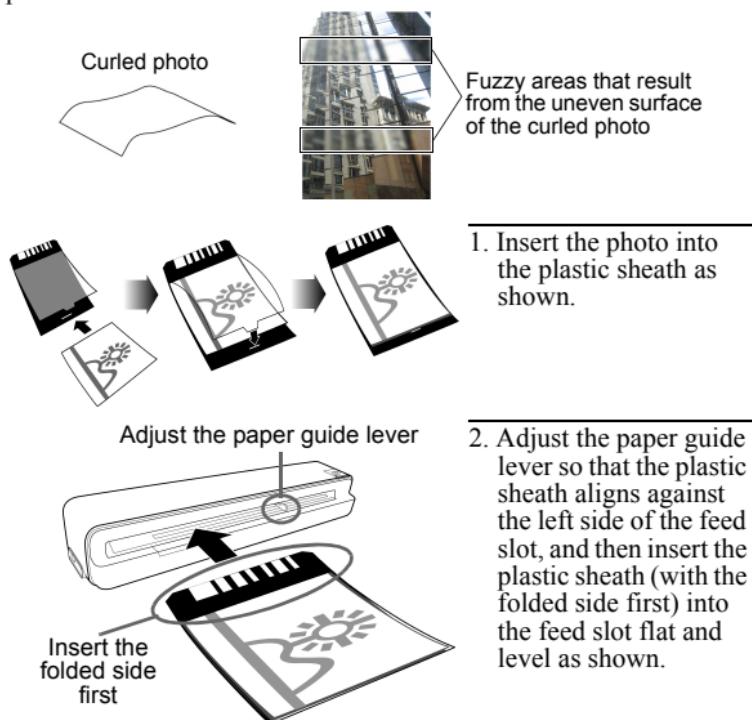


To change the scanning resolution, press and release the Power button. The scanning resolution changes by each press of the button, and the color of the Status/Card indicator will also change according to the resolution selected:

- Green: 300dpi (normal mode, default setting)
- Orange: 600dpi (fine mode)

Using the Plastic Sheath

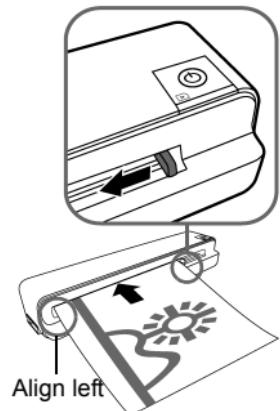
Always use the clear plastic sheath (included) when scanning photos to ensure the best scanning results. The sheath helps eliminate the possibility of de-focusing due to the uneven surface of curled photos.



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.

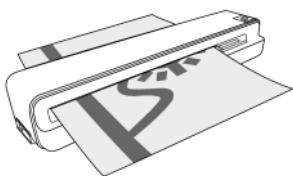
Scan an Original



1. With the side to be scanned facing upward and in correct orientation (refer to "Orientation of the Original and Scanned Image" on page 9), place one edge of the original on the scanner and adjust the paper guide slide so that the original aligns against the left side of the feeding slot.



CAUTION: Do not scan glossy photos in humid environments (humidity higher than 70% RH). Otherwise the surface of the photo will become sticky and cause the scanner to jam.



2. Insert the original into the feeding slot. The original will be fed through the slot and scanned automatically. The Power indicator blinks while scanning.



NOTE: To prevent poor image quality, reserve adequate space behind the scanner for the photo to complete the scan feeds.



3. When scanning is completed, the Power and Status/Card indicator lights will keep blinking momentarily, indicating that the scanner is processing the image and storing the file onto the memory card. Wait until the indicator lights stop blinking before inserting and scanning the next original.



CAUTION:
Insert only one original at a time.
Insert the next original only when the previous one is done. Otherwise the scanner may malfunction.

**NOTE:**

- Always place the scanner on a flat surface for scanning. Do not hold the scanner while scanning.
- Do not remove the memory card or USB flash drive (if connected) while the indicators are blinking.
- This scanner is not guaranteed to compatible with all USB flash drives on the market.
- A fully charged battery can sustain up to 100 scans of A4/Letter size plain paper at 300dpi. This is a factory test value for your reference, and actual battery performance may vary.
- This scanner only supports output images in JPEG (.jpg) format, and the date/ time attribute will not be added.
- For more information on how this scanner stores the scanned image files on the memory card, refer to "File naming and storage rules" on page 18.
- If the memory space is near full (lower than 10MB), the Status/ Card indicator blinks (refer to "Indicator Lights" on page 7). Use another card or delete some files on it if necessary.



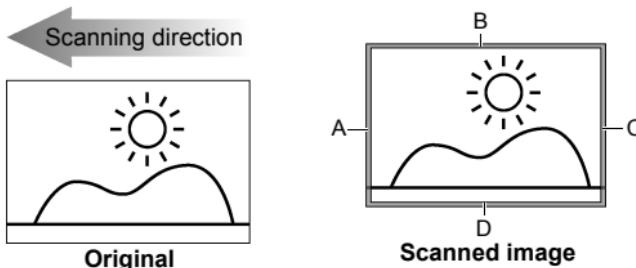
4. To power down the scanner after all originals are scanned, press and hold the Power button for one second. The power indicator will blink and then go off.



NOTE: The scanner will automatically power off if it is left idle for 5 minutes (if not connected to a computer).

Automatic Image Cropping

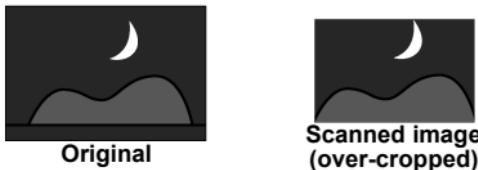
This scanner has a built-in cropping function that detects and crops dark edges of an original during the scan process. See the illustration below.



Scanning resolution	Cropping size (as measured on the original)			
	A	B	C	D
300dpi/600dpi (when the original's size is larger than 5" x 7")	3 mm	3 mm	3 mm	3 mm
300dpi/600dpi (when the original's size is smaller than 5" x 7")	1.5 mm	1.5 mm	1.5 mm	1.5 mm



NOTE: When scanning darker originals (for example, a photo of the night sky), over-cropping may occur. Please insert the original in a different direction (orientation) and try again.



Connecting the Scanner to a Computer

By connecting the scanner to a computer, you can access the scanned images on the memory card, USB flash drive and scanner's internal memory directly, or use the scanner as a memory card reader, so that you can freely copy, paste or delete files using the computer.

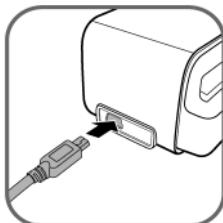
System Requirements

- Operating system:

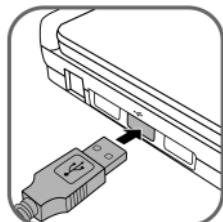
Windows: Windows XP, Vista, 7 or later versions (32-bit)

Macintosh: Mac OS 10.5, 10.6 or later versions

- USB port supported: USB 1.1 or 2.0 port



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



2. Power on your computer, and then connect the large end of the USB cable to a USB port on your computer.



3. Press the Power button. The Power and Status/Card indicators blink.



NOTE: For more information on the indicators, refer to "Indicator Lights" on page 7.

4. The scanner will be recognized by the computer as removable disks. When the Status/Card indicator stops blinking, you are ready to view or edit the files.

 **NOTE:** Do not remove the memory card or USB flash drive while the computer is accessing the files on them.

For Windows Vista Users

When the computer recognizes the scanner, with an inserted SD card or USB flash drive, a pop-up “AutoPlay” window will appear. To view photos on the computer while scanning, change Windows Explorer’s setting as follows:

1. Check the **Always do this for pictures** checkbox.
2. Select **Open folder to view files** option.

For Windows XP Users

When the computer recognizes the scanner with an inserted SD card or USB flash drive, a pop-up window will appear. To view photos on the computer while scanning, change Windows Explorer’s setting as follows:

1. Select **Open folder to view files using Windows Explorer**.
2. Select the **Always do the selected action** checkbox.

For Macintosh Users

When the computer recognizes the scanner with an inserted SD card or USB flash drive, the volume icon will appear on the desktop. To view the contents, double-click the icon to open a Finder’s window.

5. To safely disconnect the scanner from the computer:

For Windows Users

- a. On Windows System Tray, click the hardware removal icon as indicated below.



- b. Click to select the **Safely remove USB Mass Storage Device** option that appears.

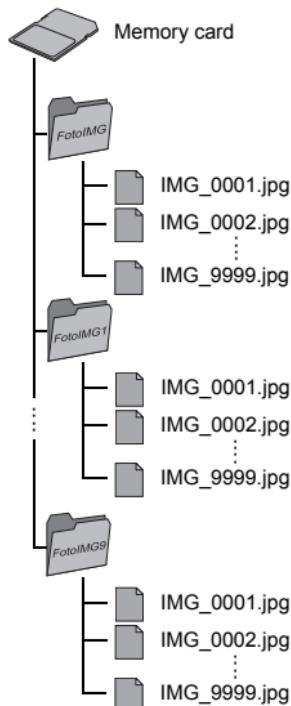


- c. When the following message displays on-screen, you can safely unplug the scanner from your computer.



For Macintosh Users:

- Click and drag the volume icon to Trash.
- Disconnect the scanner from your computer.

More Information**File naming and storage rules**

- If the memory card is used with the scanner for the first time, the scanner creates a folder named “FotoIMG” in the root directory to store the scanned image files. Each image file has a prefix “IMG_” followed by a 4-digit serial number in the sequence the image is stored.
- If the file name reaches IMG_9999.jpg in the “FotoIMG” folder, another new folder named “FotoIMG1” will automatically be created to store subsequent new files, and so on.
- If the memory card already contains folders created by the scanner, the scanner will store the images in the last folder created.
- There can be up to 10 folders (FotoIMG, FotoIMG1... FotoIMG9) on a memory card. If exceeded, the Status/card indicator light blinks. Delete some files on the memory card or use another one if necessary.

Supported Memory Card Types

- MS (MemoryStick)
- MS Pro
- MS Pro Duo (adapter required)
- MS Duo (adapter required)
- MMC (MultiMediaCard)
- RS-MMC (adapter needed)
- xD (extreme Digital, H-type and M-type)
- SD (SecureDigital)
- Mini SD (adapter required)
- micro SD/T-Flash (adapter required)

Care and Maintenance

Cleaning the Scanner

In order to maintain the scanned image quality and prevent dust accumulation, it is recommended that you clean the scanner (outer casing and image sensor inside the scanner) approximately every 50-100 scans, or if vertical lines or stripes appear on the scanned image. Use only the recommended and supplied tools to clean the scanner.



WARNING: Do not use any solvents or corrosive liquid (i.e., alcohol, kerosene, etc.) to clean any part of the scanner. Otherwise the plastic material will be permanently damaged.

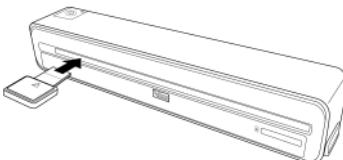
Cleaning the Outer Casing

Please follow the instructions below to clean the outer casing of the scanner when necessary.

1. Use a suitable dust blower to blow off the dust on the scanner.
2. Use a slightly dampened cloth to wipe off any smear on the surface of the scanner.
3. Wipe the scanner with a dry and clean lint-free cloth.

Cleaning the Image Sensor

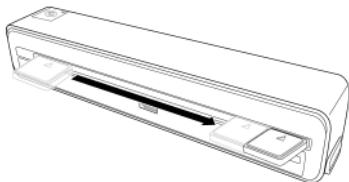
1. Clean the scanner's outer casing first.



2. With the scanner power off and disconnected from the power supply, insert the sensor cleaning swab into one end of the output slot.

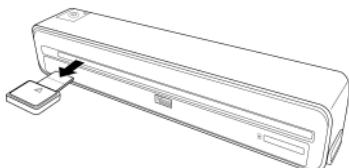


NOTE: Make sure that there is no visible dust on the swab before inserting it into the output slot.



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

 **NOTE:** Do not apply too much force on the swab.

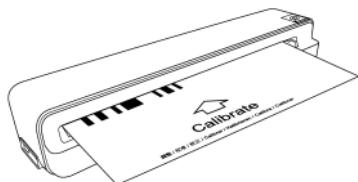


4. Remove the sensor cleaning swab from the slot, and store it in a safe place and protect it from dust.

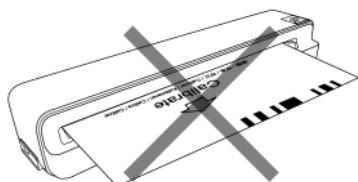
Calibrating the Scanner

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 beginning on page 19 to clean the image sensor, and then follow the instructions in "Preparation and Initial Setup" on page 10 to prepare the scanner for scanning.



2. Insert the calibration card as shown.



3. The scanner will scan the pattern on the calibration card and perform calibration to the sensor inside automatically.

 **NOTE:** Make sure that the calibration card is inserted in the correct direction and aligned against the left side of the feeding slot. Otherwise the calibration won't work.

Storing the Scanner

If the scanner will not be used for a prolonged period of time, follow the instructions below to store the scanner for future use.

1. Disconnect the scanner from power supply.
2. Place the scanner and power adapter in a box or bag to keep them from accumulation of dust.
3. Place it in a cool and dry place where inaccessible to small children. To avoid warping the top housing, do not place heavy objects on top of the scanner.
4. After long-term storage, it is recommended that you clean and calibrate the scanner before use.

Battery maintenance

This scanner has a built-in Li-Polymer rechargeable battery. The capacity of the battery normally decreases each time you use it. Nevertheless, you can still follow the suggestions below to extend the battery's lifetime as long as possible:

- Use the scanner at least once per week.
- Charge the battery regularly. Never leave the battery fully discharged for a long time.
- Keep the battery fully charged when not in use. If the scanner will not be used for several weeks, partially-discharge the battery before storage.
- Keep the scanner and battery away from heat.
- If the scanner will only work when the power adapter is connected, contact your dealer to replace the battery.



WARNING: Do not attempt to replace the battery by yourself. Incorrect handling of the battery or using a wrong type of battery may cause damages to the product or result in personal injuries.

Frequently Asked Questions/Troubleshooting

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

Solution: Please ensure the following:

- Are there scratches on the original, or is the original clean? Remove any stains or dust from the original before scanning.
- Did you insert your original into the plastic sheath before scanning?
- Has the scanner been used for a long period of time without cleaning and calibration? Follow the instructions for "Cleaning the Scanner" on page 19 and "Calibrating the Scanner" on page 20, and then try again.

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

Solution: Press and release the Power button. The scanner will back out the original so you can remove the jammed original from the Feeding slot.

Problem: The Status/Card indicator blinks rapidly and no scan is possible.

Solution: Check the following:

- Is the memory card inserted properly into the memory card slot? Re-insert the card and try again.
- Is the memory 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 10MB. 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? Refer to "Suitable and Unsuitable Original Types" on page 8 for more information.

Problem: The scanner feels warm to the touch.

Solution: It is normal for the scanner to emit a small amount of heat (around 30-45°C) 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 computer.

Specifications

Document feeding	Sheet-fed type (single-pass)
Resolution	<ul style="list-style-type: none">• 300 dpi (default setting)• 600 dpi
Dimensions (approx. value)	59 (L) x 269 (W) x 44 (H) mm (scanner only)
Weight (approx. value)	396g (scanner only)
Supported original types	Refer to "Suitable and Unsuitable Original Types" on page 8
Supported memory card types	Refer to "Supported Memory Card Types" on page 18
Supported output image format	JPEG with compression
Internal memory size	512 MB
USB port	Mini USB port compatible with the USB 2.0 specification
Operating temperature	15°C ~ 35°C (59°F ~ 95°F)
Operating humidity	20% ~70% RH
Storage temperature	-20°C ~ 60°C (-4°F ~ 140°F)
Storage humidity	10% ~ 90% RH

Mini photo scanner is to make print photos/negative/slide easy to digitize and share and furthermore the elderly or children with mirror instruction are easy to operate it simply and easily and also extend to A4/Letter size to cover most of print photos and the support of negative/slide scanning.

This device of operation is to meet the below

- Easy to Use, Fast to share, and Excellent for digitizing physical media (photo, film, slide)
- Mobility and Scan anywhere and anytime
- PC-Free and OS-free (standalone mode).
- Built-in Li Battery Powered.
- Power charged from USB Bus-powered
- Add-on Application Program (e.g. BCR, OCR, and so on)
- WIFI connections

Notice:

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.**

Any changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

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 installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC RF Radiation Exposure Statement:

1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
2. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.