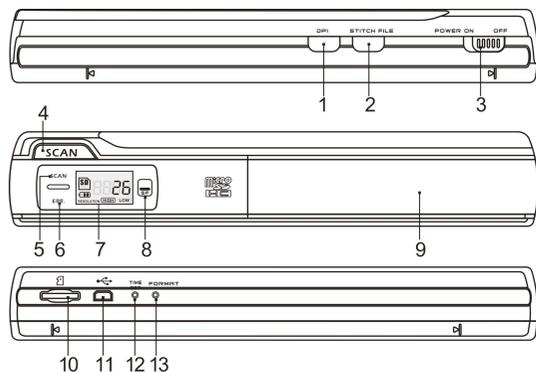


TSN510 Manual

1. Key features

600/300 dpi resolution scan selection
 Directly save JPEG file to microSD/SDHC card
 Support microSD/SDHC card up to 32GB
 Driver free to download for Windows® XP, Windows® Vista™, Windows® 7 and Mac OS® 10.4 or above
 (direct plug-in, driver installation not required)

2. Functional parts



Part	Function
1	Resolution Select High(600dpi) / Low(300dpi) resolution; High / Low resolution mode icon will be displayed on status LCD screen.
2	Stitch file Create new folder for file storage.
3	Power button Power On/Off: Switch this key left or right to turn scanner on or off.
4	Scan In power on mode, press this button to start scanning, press this button again to stop scanning
5	Scan LED indicator Ready for scan: Green LED on
6	Error LED indicator Over speed: Red LED on
7	LCD screen Scanning status display
8	SF LED indicator Stitch file: White LED on
9	Battery door For 4.2V rechargeable battery
10	microSD card slot microSD/SDHC card storage location.
11	USB interface Download photo to a computer via USB cable provided.
12	Time set Press to enter Time and Date setting mode
13	Format button Press this button to format the microSD/SDHC card.

3. Explanation of the status icons

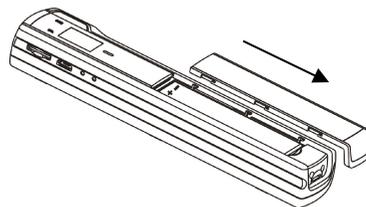


Item	Function	Description
1	SD card indicator	Photos will be stored in microSD card
2	Battery indicator	Battery is full Empty battery
3	Counting indicator	Show scanned files in microSD card
4	Selected resolution	High:600 dpi / Low:300 dpi

4. Using the scanner

4.1 Installing the battery

- Open the battery door by sliding the battery compartment downwards as indicated by the arrow in the diagram below.
- Make sure battery is in the battery compartment. If not, insert 4.2V rechargeable lithium polymer battery into compartment.
- Turn on the scanner by switching the [POWER] button left.

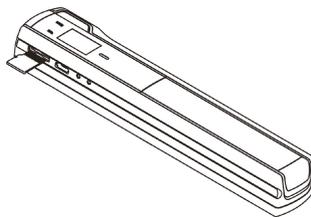


4.2 Inserting a microSD memory card (not included)

To operate the scanner, you must insert a microSD Card (not supplied) to record and store your pictures. Inserting the microSD memory card:

- Turn OFF the scanner.
- Insert the microSD card into the microSD card slot (with metal side facing upwards). Gently press in until card is latched.

Note: Do not force the card into the slot; forcing may damage scanner and the microSD memory card. Align microSD card position (as marked) and try again.



4.3 Time setting

- Press [TIME SET] button to enter time setting mode by using a thin, blunt object, such as a paperclip to access the button. The LCD screen will read "1##" for the year. "##" is a set of number that would be changed to correspond to the actual time/date setting.
- Press the [STITCH FILE] or [DPI] buttons to select the current Year.
- Press [SCAN] button to confirm setting. The LCD screen will now read "2##."
- Repeat steps 2 and 3 to select the Month, Date, Hour, and Minute.

Indicator	Setting
1##	Year
2##	Month
3##	Date
4##	Hour
5##	Minute

- After setting the Minute, "5##", press the [TIME SET] button again to complete the Time and Date setting.

4.4 Formatting the microSD memory card

Note: All contents on the microSD card will be erased during formatting.

- Insert a microSD card into the scanner with metal side facing upwards. Then power on the scanner.
- Press the [FORMAT] button with a thin, blunt object, such as the end of a paperclip to access the button. An "F" shows on the LCD screen.
- Press the [SCAN] button once to begin formatting microSD card.
- The microSD card indicator will blink until the formatting process is complete.

4.5 Calibrating your scanner

Note: Perform calibration only when white balance needs adjustment.

- Turn on the scanner by sliding the [POWER] button to ON. Then place the scanner on the provided "White Balance Calibration" paper.
- Click and hold onto the [STITCH FILE] button. While holding onto the [STITCH FILE] button, press the [SCAN] button once and then release both buttons. SD symbol will

- flash and "GREEN" and "RED" LED light will turn on.
- Do not move the scanner. Wait until the "RED" LED light turns off. "GREEN" LED light will stay on.
- With only the "GREEN" LED light on, start scanning the white paper by sliding the scanner across the paper until the "GREEN" LED light turns off. (Slide the scanner backwards if necessary).
- Slide the [POWER] button to OFF to turn off the scanner. Calibration is complete.

4.6 Setting the resolution

- By pressing the [DPI] resolution button on the scanner, you may choose between high resolution (600 dpi) and low resolution (300 dpi).
- The high or low resolution mode will be displayed on the LCD screen to reflect your choice.

4.7 Stitch file

To group scanned files into a new folder within the microSD card use the Stitch file function.

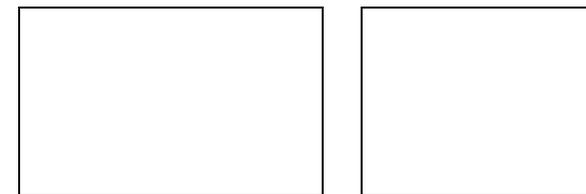
- Press the [STITCH FILE] button to create a new folder within the microSD card for files storage. SF white LED light will turn on.
- Then scan your documents. Your files will be saved into the new folder.
- To save another new set of scans in another folder, press the [STITCH FILE] button again to generate a new folder.

For free optional stitching software, please download the program from the following link: <http://research.microsoft.com/en-us/um/redmond/groups/ivm/ice/>

4.8 How to scan

Note: To scan, make sure your scanner is not connected to the computer.

- Turn on the scanner by sliding the [POWER] button to ON.
- Place the document on a flat surface and hold down the document with one hand.
- Place the scanner on the edge of the paper approximately 5/8 to 3/4 of an inch onto the paper to ensure the most of the document can be scanned. Make sure to keep the scanning area in between the scanning width indicator marked on the side of the scanner.

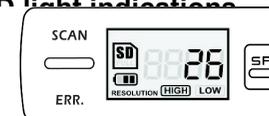


- Hold the scanner flat against the material and then press the [SCAN] button once.



- Slide the scanner slowly, keeping you hand stable to get the best quality picture.
- Press the [SCAN] button again to stop scanning.

5. LED light indications



- SCAN
- "GREEN" SCAN LED ON → Scan in progress.
 - "GREEN" SCAN LED OFF → Standby/Scan is complete.
- ERR.
- "RED" ERROR LED ON → Scanning too fast, may cause scanning error. Restart and scan again.
 - "RED" ERROR LED OFF → No error in scanning speed. Continue scanning process.
- SF
- "WHITE" SF LED ON/OFF → A new folder created.

* scan will START when **SCAN** button is pressed

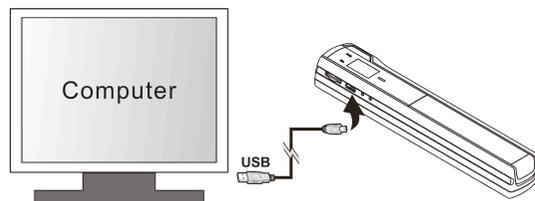
* to END scan, press **SCAN** button again

6. Viewing your scans

1. Connect your scanner to your computer and then turn on your scanner.
2. Your computer should recognize the scanner as a "Removable Disk." Click "Open folder to view files" to view and import scans.

NOTE: If the Removable Device window did not launch automatically, go to your "My Computer" (PC) and find the device under Removable Storage.

NOTE: In power off mode, connect your scanner to your computer to charge the battery. OR use the power adapter that is included.



7. Specifications

Image sensor	Color Contact Image Sensor
Number of sensor	6048 dots
Resolution	Low resolution : 300x300 dpi(default) High resolution: 600x600 dpi
Maximum scanning speed for A5 size document	Color High resolution: 6 Seconds Color Low resolution: 5 Seconds
Capacity (Based on 1GB microSD card. Scan A5 size file, the quantity of scans varies depending on the content complexity)	600dpi color: 550 Photos(Min.) 300dpi color: 1200 Photos(Min.)
Scan width	Approx. 5"
Scan length	300DPI: 53"(Max), 600DPI: 26"(Max)
File format	JPEG
LCD	Scanning status display
Auto Power Off	3 Minutes
USB Port	USB 2.0 high speed
External memory	microSD Card
Standard Battery	4.2V Rechargeable Lithium Polymer battery

8. Computer system minimum requirement

Operating System	Windows® XP, Windows® Vista™, Windows® 7 and Mac OS® 10.4 or above (direct plug-in, driver installation not required)
CPU	Pentium III or above
RAM	At least 256MB
Interface	USB port

9. Troubleshooting

Problem	Cause	Solution
Cannot turn on the scanner	1. Low battery. 2. Battery not inserted properly	1. Recharge the battery by connecting scanner to the computer via USB cable. 2. Replace or install the battery correctly
Pictures cannot be saved when you are scanning them	1. microSD card has not been installed correctly. 2. Memory is full 3. The microSD card has not been formatted properly	1. Install microSD card with metal side facing upwards. 2. Download the pictures from the scanner to the computer to create storage space 3. Format your microSD card. Refer to section 4.4
Computer does not recognize your scanner when connected. (You cannot find removable disk)	Connection failure.	1. Make sure all cable connections are secured. Restart the computer if necessary 2. Try a different USB port.
The battery life is very short	Use wrong type of battery	Replace with new 4.2V rechargeable battery
Blurry images	The lens of the scanner is dirty.	1. Clean the lens with soft dry cloth 2. Recalibrate the scanner. Refer to section 4.5
ERR. LED is on when scanning a document	Scanning speed is too fast	Press the [SCAN] button to reset and try re-scanning the document more slowly
ERR. LED is on after powering on the scanner	The calibration data is reset.	Recalibrate the scanner. Refer to section 4.5