

# Scanners and Scanning: A Review

TONY BANDY LOOKS AT THE LATEST  
SCANNERS AVAILABLE FOR THE  
GENEALOGIST BIG AND SMALL!

AS GENEALOGISTS, WE'RE always coming across primary source materials such as diaries, letters, and books, in our research. Very often, we find that these documents are fragile, hard to store and not very easy to share with others who might be working with us. So what do we do? While it's always possible to photocopy original pieces, the best method I've found of using and preserving these materials is to scan them and make digital copies. This way, you can post them online, share with others via e-mail and even store a copy away for safekeeping.

But the scanning process is not an easy one to get started with or even sometimes understand. You have to consider the hardware, the software, the technical aspects and what you hope your final project will accomplish once you are finished. With these things in mind, this article aims to provide you with background information and knowledge on the process of scanning, as well as additional technical information. Following this information are some reviews of different types and brands of scanners, to help give you ideas as to price, capabilities and things to look. While by no means exhaustive, this should prepare you for your next scanning project!



## SCANNING NEEDS

From small handheld scanners that are completely portable to large stationary scanning devices used at your local genealogical society or library, it's easy to get confused about what type of scanner you really need and how to get the best buy for your money. To figure this out, it's best to ask yourself some of the following questions: First, how will you be using your scanner? Will you be scanning loose documents such as papers, wills and other paper documents? If this is the case, then you will want to consider units that can scan multiple pages at once or that contain document feeders and/or duplexers units.

This way, you can load your scanner with bundles of documents and let it digitize them while you go back to your research.

Or, will you be scanning bound items, such as books, magazines and other resources? If you find yourself scanning items such as these on a consistent basis, then a scanner that includes options to hold the spine of the object would be essential for good imagery. Without these, your scanned pages might be off-center, crooked or just plain blurry. Scanners such as this also help to support the surfaces often found in fragile, acid-based historical documents that are so prevalent.

Other questions include:

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Where will you do your most scanning? Will this be a personal desk or office? If so, then a permanent, heavy-duty scanner might be the best option, giving you many more capabilities and the ability to scan legal size documents or even larger tabloid shaped resources. The drawback here is the lost portability, especially if you have to travel to get to the documents and cannot borrow them.

If you do travel often, and plan on taking your scanner with you, then a portable scanner such as a wand or other similar hardware might be the best idea. This would give you flexibility and be lightweight, but there might be some trade-offs with capabilities.

Lastly, don't overlook the physical connection of the scanner to your computer. To be able to transfer scans to your laptop, desktop or device of choice, options include USB, wireless, and even Bluetooth in some cases. Ensure that any scanner you're thinking about purchasing has the ability to be connected to your main device where you will be doing most of the scanning work.

### SCANNING SETTINGS

If you've decided on a scanner and/or already purchased the hardware, your next step will be how to start scanning items for your project. First, consider the format or output of your scanning. Most scanners give you three options:

- Full-color image
- "Gray-scale" images
- Black and White text

If you are scanning color photos or any document where the color is important, then naturally you will want to create a full color image. This gives you true-to-life results and the most details. However, these files will take longer to scan and can result in large file sizes. If your storage options are limited, this can become an issue.

If you are scanning black and white photos or documents where clarity is most important, such as handwritten documents, then "gray-scale" scans will help to give you the best results. Items are

represented after the scan in shades of gray. Once again, file sizes will be a bit larger, but not as much as full-color scans.

Lastly, if most of the information you want to scan consists mainly of typewritten documents and your goal is to simply acquire data without regards to the look of the results, scanning in black and white text is your fastest option and results in smaller file size.

You should practice on a few documents first before deciding on a particular setting, and know that this may change, especially if you run across different types of documents. For more information on these and other options, try the following links for additional details: Miles' Genealogy Tips (Scanning Old Photos), <http://miles.genealogy.blogspot.com/2009/01/scanning-old-photos.html>, or ProGenealogists (Scanning Settings, Photos and more), [www.progenealogists.com/scanphotos.htm](http://www.progenealogists.com/scanphotos.htm).

### RESOLUTION AND DPI/PPI

We all want our scanned items to look good on the computer screen. Resolution plays a major factor in this. Resolution, according to dictionary.com, is a measure of pixels on a screen or dots on a paper, usually discussed in terms of PPI (pixels-per-inch) or DPI (dots-per-inch). Up to a certain point, the higher the resolution you scan your items at, the better the image will look, giving details both to handwritten documents and images.

However, don't be misled by scanning hardware that advertises resolution measured in the thousands. As a general rule of thumb, once beyond 600 PPI, the differences between images are almost negligible, unless under special circumstances or you have certain special requirements for your project. 300 DPI is a good starting point for most images and adjustments can easily be made as you scan more items.

Lastly, it's also important to remember that the higher the resolution you scan your items, the bigger the file size and the more unwieldy it will be to work with. This is important, especially if you

plan on e-mailing or uploading the images to social networking sites or other people. For more information on resolution as well as DPI and PPI, try the following links: Resolution (from About.Com), <http://desktoppub.about.com/od/resolution/a/resolutiondots.htm>; Pixels per inch (from Wikipedia), [http://en.wikipedia.org/wiki/Pixel\\_density](http://en.wikipedia.org/wiki/Pixel_density); Dots per inch (from Wikipedia), [http://en.wikipedia.org/wiki/Dots\\_per\\_inch](http://en.wikipedia.org/wiki/Dots_per_inch).

### SOFTWARE

One of the most essential pieces in digitizing your family project is figuring out which software to use. Many scanners you purchase will come with some form of included software, either on CD or downloadable from the Internet. Some of this can be extremely helpful and useful, while others consist of just demo or "trial" software. Examine what came with your scanner and see if it will work for your needs. Ask yourself questions such as:

- How will I use the software?
- What will the software help me to accomplish?
- Where will I use this software?

If you're just scanning items as images, such as pictures of the family, are you planning on adjusting for overexposure, underexposure or correcting other image flaws such as red-eye? Your choice of software to accomplish this is vital. If you have mostly data files, will your software of choice work with this equally as well?

After working with your scanner for a while, you may find that the software just doesn't work or help you accomplish the needed tasks. If so, consider purchasing additional software. Image editors, scanning software — there's a lot out there to consider. Look for reviews on popular computing sites or even consider contacting your local historical or genealogical society to see what they would recommend.

While we're talking about software, I should also mention OCR. OCR, or optical character recognition, enables your scanned items to be searched for individual

words or phrases. If you have a lot of data that you need to extract information from at some point, then OCR might be a necessity. However, the process of OCR is somewhat tricky and not always 100 percent accurate. Evaluate any OCR software before purchase to make sure it will work for your needs.

Below are some links to help you evaluate the types of software that might work best for your scanning project:

- ABBYY FineReader (OCR software):

<http://finereader.abbyy.com>

- Optical Character Recognition (from Wikipedia):

[http://en.wikipedia.org/wiki/Optical\\_character\\_recognition](http://en.wikipedia.org/wiki/Optical_character_recognition)

- Omnipage Professional (OCR software) Review:

<http://www.pcmag.com/article2/0,2817,2355546,00.asp>

- Picasa (from Google):

<http://picasa.google.com>

- Scanning Software Tips (from About.Com):

[http://graphicssoft.about.com/od/scanning/Scanning\\_Software\\_Tips\\_and\\_Help.htm](http://graphicssoft.about.com/od/scanning/Scanning_Software_Tips_and_Help.htm)

### HARDWARE REVIEWS

Purchasing a scanner for use with your family research can be a daunting task. With dozens of manufacturers and models to choose from, it's easy to get confused when you start shopping. To help yourself as you begin searching, know what specific hardware features you are looking for as far as resolution, DPI and type of scanner (desktop, portable, etc.). In addition, don't forget to consider the output of your scanning as well as any additional software that might be needed. Remember, most scanners come with software packages in addition to the unit itself, so you might not have to purchase anything extra.

While by no means complete, I've assembled a "mini-guide" as to different types of scanner categories and sample models for each. These are newer units and I've included highlights for each, including price, manufacturer and reviews where I could find them. Use this to give yourself a starting

[www.internet-genealogy.com](http://www.internet-genealogy.com)

point for more investigation.

### CATEGORY: MOBILE SCANNERS

Genealogy is sometimes about mobility, moving from library to site to genealogical society. With this being a fact, mobile scanning options become more and more of a necessity, not to mention time-saving and efficient. Here are three portable scanners that might work for you:

### More Information:

[www.shopping.hp.com/store/product/product\\_detail/L2722A%2523BGJ?](http://www.shopping.hp.com/store/product/product_detail/L2722A%2523BGJ?)

### Review:

HP has made innumerable scanners over the years and this particular model has earned rave reviews. USB powered and weighing only around 1.5 lbs., the device includes scanning software, such as PaperPort and Omnipage, and resolutions up to 600 DPI. For

*The Flip-Pal Mobile Scanner has everything a genealogist needs!*

- Flip-Pal Mobile Scanner

Manufacturer: Flip-Pal

Price: \$149.99 USD

More Information:

<http://flip-pal.com>

### Review:

With no cord and battery powered, this portable scanning solution might become your traveling digital friend. A single button will scan your object, picture, or document to a standard memory card from which you can then move to your computer or even upload online. With 300-600 DPI resolution and a "see-through" window, what's not to like about this tiny device! For more information and to see the scanner in use, go to [www.youtube.com/watch?v=GMjnKVUGIBI](http://www.youtube.com/watch?v=GMjnKVUGIBI).

- HP Scanjet Professional 1000

Mobile Scanner

Manufacturer: HP

Price: \$250 USD

more information, try the following review from Hardware Central: [www.hardwarecentral.com/hardwarecentral/reviews/article.php/3876131](http://www.hardwarecentral.com/hardwarecentral/reviews/article.php/3876131).

- VuPoint Magic Wand Portable Scanner (PDS-ST410A-VP)

Manufacturer: VuPoint Solutions

Price: \$85-\$100 USD

More information: [www.vupoint.com/PDS-ST410-VP.asp](http://www.vupoint.com/PDS-ST410-VP.asp)

### Review:

Labeled a "magic wand", the VuPoint portable scanner is a handheld USB battery powered scanner in a fresh new format. Simply "wave" the device over the document(s) you need to scan and the job is done. You can find this scanner almost anywhere, including Wal-Mart, Target, Amazon and other locations. For a review and user's comments on this device, visit [www.scannerslide.net/vupoint-solutions-%E2%80%9Cmagic-](http://www.scannerslide.net/vupoint-solutions-%E2%80%9Cmagic-)

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wand%E2%80%9D-portable-scanner-vpspsst410wm.

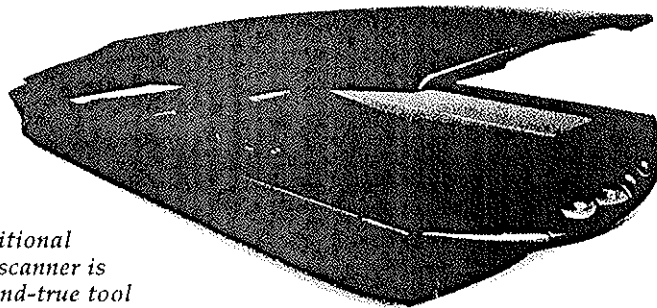
### CATEGORY: DESKTOP SCANNERS

Probably the device and format that most of us think about when scanners are mentioned, desktop scanning devices offer the most flexibility and tools for the family researcher or genealogist looking to scan various amounts of documents. These scanners can be found in various formats, including "flatbed" style, printer/scanner combinations (often known as MFP devices) and others. Features for these devices also include high dpi, duplexing units and more. What follows are some highlighted models to consider.

- HP Officejet 6500 Wireless All-in-One Printer (Scanner)  
Manufacturer: HP  
Price: \$149 USD  
More Information:  
[www.shopping.hp.com/product/printer/Officejet/1/storefronts/CB057A%2523B1H](http://www.shopping.hp.com/product/printer/Officejet/1/storefronts/CB057A%2523B1H)  
Review:  
HP has long been involved in both scanning and printing hardware. This particular model, although being primarily a printer, includes a document scanner with flatbed and multi-sheet feeder options, making this a great addition to any scanning project. Includes HP Scanning software, PDF output, OCR options and much more. Wireless capabilities included with the unit enable you to send scans to any computer on your local network or home. For more information and reviews, go to [www.amazon.com/HP-Officejet-Wireless-Inkjet-Printer/product-reviews/B001PO6JN2](http://www.amazon.com/HP-Officejet-Wireless-Inkjet-Printer/product-reviews/B001PO6JN2).

- Epson Artisan 810 All-in-One Printer (Scanner)  
Manufacturer: Epson  
Price: \$169 USD  
More Information:  
[www.epson.com/cgi-bin/Store/jsp/Product.do?BV\\_UseBVCookie=yes&sku=C11CA52201](http://www.epson.com/cgi-bin/Store/jsp/Product.do?BV_UseBVCookie=yes&sku=C11CA52201)

Review:  
Yet another MFP product, this device has gathered praise for the scanning capabilities built into it.



The traditional desktop scanner is a tried-and-true tool for genealogists.

Options include multi-sheet feeder or flatbed scanning options along with some amazing DPI options. Included is the ability to scan documents and photos to your memory card, USB drive or wirelessly to different devices on your network. For more information and a great review on this device, visit [www.imaging-resource.com/PRINT/A810/A810.HTM](http://www.imaging-resource.com/PRINT/A810/A810.HTM).

- Canon CanoScan LiDE Series  
Manufacturer: Canon  
Price: \$59-\$89 USD  
More Information:  
[www.usa.canon.com/cusa/consumer/products/scanners/photo\\_scanners](http://www.usa.canon.com/cusa/consumer/products/scanners/photo_scanners)  
Review:  
USB connected to your desktop computer, this Canon series of scanners has been gathering good reviews just about everywhere. Excellent for both photo and docu-

ment scanning, these inexpensive series of printers include some impressive amounts of software as well as ease of use, especially if

you are new to the scanning world. Other options include scan to PDF, document correction and up to 4,800 DPI. For more information, visit [www.amazon.com/Canon-CanoScan-LiDE210-Scanner-4508B002/dp/B003VQR1TS](http://www.amazon.com/Canon-CanoScan-LiDE210-Scanner-4508B002/dp/B003VQR1TS).

### CATEGORY: UNIQUE SCANNERS

While looking at both mobile and desktop scanners, there are other devices that don't fit in a single category or perhaps contain features from both categories. These are scanners that may be unique in their approach, design and the goals they are tasked to accomplish. I've included three that define this category and certainly offer a great approach to digitization.

- Your Mobile Phone!  
Manufacturer: Many  
Price: Varies  
Review:  
The facts are that mobile phone technology, and the power of the device that fits in the palm of your hand, is directly challenging traditional scanning assumptions about hardware. With image stabiliza-



tion, megapixel cameras and even photo scanning "apps", your mobile phone may be the only scanner you will ever need! If you have an Android or Apple iPhone, the amount of software available to use in conjunction with your built-in camera is amazing! Even regular manufacturers like HP are making specialized applications which enable you to wirelessly send photos directly to your computer, printer, memory card or other devices. Don't overlook this category!

• ATIZ BookDrive Mini  
 Manufacturer: ATIZ  
 Price: (Call for quote)  
 More Information:  
<http://mini.atiz.com>  
 Review:

While the focus of our article has been on consumer level scanning needs and devices, historical and genealogical societies often have a different series of requirements. The ATIZ series of scanners can help fill these needs. A unique "cradle", combined with the ability to process up to 1,000 pages per hour, makes this hardware a great choice for getting the project done. Not a traditional scanner in the sense of a desktop or portable model, the ATIZ approach to scanning offers several advantages. For more information, visit [www.atiz.com/customers](http://www.atiz.com/customers).

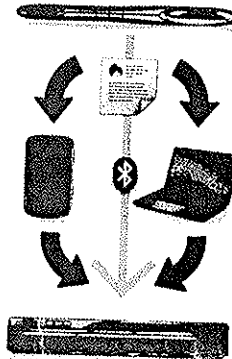
• Docupen (X Series and others)  
 Manufacturer: PlanOn  
 Price: \$130-\$270 USD  
 More Information:  
[www.planon.com/v2/products/docupen/xseries](http://www.planon.com/v2/products/docupen/xseries)  
 Review:

One of the more unique devices I've come across in doing my research, this scanner is pen-based, the hardware components built into the body of the pen. With the ability to scan your documents to an onboard memory card, this might just fit your needs for smaller projects! However, reviews on this scanner have been mixed, with some users reporting great successes and others being somewhat disappointed in the performance. For more information, try this extensive review:

[www.internet-genealogy.com](http://www.internet-genealogy.com)

### DocuPen X Series

Planon's DocuPen Xtreme X Series takes portable scanning power to a whole new level of productivity and professionalism. The Xtreme-series of scanners provides higher quality images, improved efficiency and functionality for today's professional. The X05 has maintained the small "Pen-sized" profile but now packs in a lot more with 200MHz computer processor, 64 MB of fast SD Ram, with a microSD expansion slot that make this by far the fastest ever. Not only that, but now includes Bluetooth for easy sending to your BlackBerry, Windows Mobile smart phones, Laptop and other devices. Image quality up to 600DPI utilizing Planon's Crystal Line Contact technology provides extremely accurate imaging, that far exceed cameras and other portable scanners for professional reproductions of contracts, receipts, invoices, color pictures and more.



### OLED Display

Select Button

Ultra clear OLED displays many functions including:

- Battery Level
- Memory Level
- Date & Time
- Resolution
- Scan to PrintStik
- Scan Modes

Next Button



The DocuPen Xtreme is packed with many selectable functions that are displayed on a bright OLED screen. Users can now select file names, date and time, battery and memory levels, color and mono modes, compression level. Also has a copy function that can send an image directly to Planon's PrintStik portable printer to help complete your "Office in a Pocket" solution. DocuPen is your tool to help you become more organized and efficient for many uses: use it to quickly scan a signed document at your desk and email it - rather than finding a scanner somewhere in your office; use in your hotel room - rather than find a business office; real estate, banking and insurance sales professionals can scan needed identification and documents right at their client's home - and save

*The Docupen by PlanOn features components that are built directly into the body of the pen!*

[www.geardiary.com/2010/02/05/docupen-x-series-review](http://www.geardiary.com/2010/02/05/docupen-x-series-review).

### NEED MORE INFORMATION?

As you can see from what we've spoken about already, scanning is a detailed topic that you should take some time to investigate. To help you out, consider the following links for more information, details and reviews:

- About.com (Scanners):  
<http://printscan.about.com>
- Android Scanning Applications:  
[www.androidpolice.com/2010/08/18/app-roundup-5-apps-that-turn-your-android-phone-into-a-portable-document-scanner/](http://www.androidpolice.com/2010/08/18/app-roundup-5-apps-that-turn-your-android-phone-into-a-portable-document-scanner/)
- Background Information on Scanners:  
[http://en.wikipedia.org/wiki/Image\\_scanner](http://en.wikipedia.org/wiki/Image_scanner)
- Cyndi's List (Scanners):  
[www.cyndislist.com/scanners.htm](http://www.cyndislist.com/scanners.htm)
- How Stuff Works: Scanners:  
<http://computer.howstuffworks.com/scanner.htm>
- HP Introduction to Photo Scanning:  
[www.hp.com/united-states/consumer/digital\\_photography/organize\\_archive\\_photos/tips/scan\\_resize\\_share.html](http://www.hp.com/united-states/consumer/digital_photography/organize_archive_photos/tips/scan_resize_share.html)
- iPhone and Prizmo OCR Scanning Applications:  
[http://news.cnet.com/8301-27076\\_3-20011079-248.html](http://news.cnet.com/8301-27076_3-20011079-248.html)
- PCMAG.COM Portable

### Scanners Review:

[www.pcmag.com/article2/0,2817,2369305,00.asp](http://www.pcmag.com/article2/0,2817,2369305,00.asp)

- Scanning and Digitizing Old Photographs:  
[http://genealogy.about.com/cs/digital\\_photo/a/digital\\_photos.htm](http://genealogy.about.com/cs/digital_photo/a/digital_photos.htm)
- Scanning Tips and Tricks:  
[www.scantips.com](http://www.scantips.com)

### IN CONCLUSION

Deciding to digitize and scan documents for your family research is a good thing to do, and can help make your data safer, more accessible and easier to be shared. However, before you jump right in, it's essential to plan thoroughly to ensure success on the work that you do. Take the necessary time to investigate the hardware, software and even your approach to the scanning process. Work out the details — and then have some fun!

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*Freelance writer, librarian and historian, Tony Bandy can be found researching forgotten topics in history at [Adventures in History](http://AdventuresInHistory.com), <http://history.writingwithtony.com>, or finding more library research topics and databases at [Library Knowledge](http://LibraryKnowledge.com), [www.libraryknowledge.com](http://www.libraryknowledge.com).*