

Camera Scanning Gear Guide

by Adam Pratt



**CHAOS TO
MEMORIES**

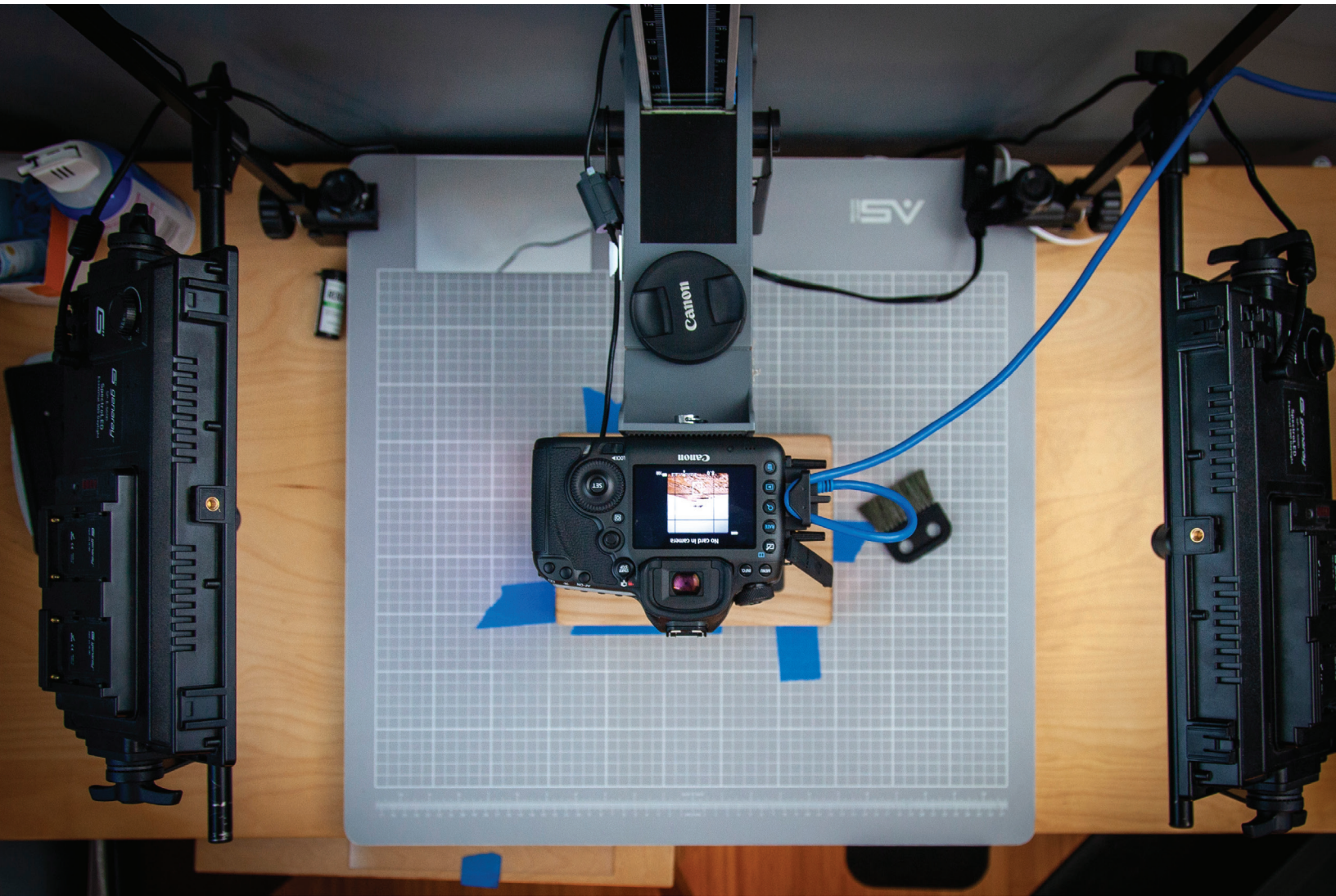


Welcome!

I'm Adam Pratt, and I'm a professional photo organizer. I've been scanning photos for 25 years with drum scanners, flatbed scanners, slide scanners, high-speed photo scanners, and DSLRs. Every year I scan tens of thousands of images for my clients in a variety of formats, including negatives, slides, and prints. I also use camera scanning to preserve less common formats including glass plate negatives, tintypes, stereo slides, and View-Master reels.

Are you interested in a scanning workflow where you scan any photo format with high quality, high resolution, and up to 800 images per hour? Imagine delivering great scans, faster, and with more profit, all with off-the-shelf gear.

To achieve these results, I've researched, bought, and tested a lot of equipment over the years, and in this guide I'm going to share it all with you! On the following pages are my top recommendations from trusted vendors who make high-quality, well-designed products.



Camera + Lens Pairings

The camera and lens you choose for camera scanning is an important decision, arguably the foundation of your setup. Good gear will last you many years, but cheap gear can cost you more than you saved in time, quality, and hassle. Generally speaking, you're looking for a digital camera with at least 24 megapixels and a macro lens in the 50-100mm range that offers 1:1 magnification.

Canon and Nikon aren't the only camera manufacturers out there, but they are two of the best and they support tethered capture with Adobe Lightroom Classic. So for the most efficient workflow, consider these camera and lens pairings for different budgets.

Canon

Best Canon		~\$4600 USD
Canon 5DSR	https://amzn.to/30cxQZw	My favorite scanning camera offers a 50.6 megapixel full-frame sensor with incredible detail
Canon 100mm L macro	https://amzn.to/372Pa4j	Sharp macro lens with 1:1 magnification and fast autofocus
Good Canon		~\$1800 USD
Canon 6D Mark II	https://amzn.to/2UduLV1	26.2 megapixel full-frame camera at a great price
Canon 100mm macro	https://amzn.to/2Xy8EL6	Macro lens with 1:1 magnification, autofocus isn't quite as good as the Canon 100mm L macro, but optically they're both excellent
Basic Canon		~\$750 USD
Canon EOS Rebel T7	https://amzn.to/30coiOv	24.1 megapixel cropped-frame camera at a budget price
Canon EF-S 60mm macro	https://amzn.to/374iGXA	Solid macro with 1:1 magnification, can only be used on cameras with a cropped-frame sensor

Nikon

Best Nikon		~\$3800 USD
Nikon D850	https://amzn.to/3eN7xgg	Professional-grade full-frame DSLR with 45.7 megapixel sensor
Nikon 105mm macro	https://amzn.to/2Xx2b38	Excellent macro lens with 1:1 magnification is ideal for film, slides, and prints
Good Nikon		~\$2100 USD
Nikon D750	https://amzn.to/2A3hmYV	24.3 megapixel full-frame DSLR
Nikon 60mm macro	https://amzn.to/2U7tCOX	Excellent macro lens with 1:1 magnification is best choice if you only scan film and slides
Basic Nikon		~\$875 USD
Nikon D5600	https://amzn.to/2Y0njxG	24.2 megapixel cropped-frame camera at a budget price
Nikon DX 40mm macro	https://amzn.to/2MwH62u	Good quality budget macro lens with 1:1 magnification, should only be used on Nikon DX cameras with a cropped-frame sensor

Copy Stand

You need a copy stand with a few important features:

- large enough base for your media
- tall enough for your lens and camera to capture your media
- rigid enough to support the combined weight of your camera and lens choice

Here are two of my favorites that are quality products at reasonable prices

~\$250-300 USD

Large Copy Stand	https://amzn.to/2z5KqgV	Smith Victor 42" Copy Stand for prints, negatives, and slides
Medium Copy Stand	https://amzn.to/2BAW4IU	Smith Victor 36" Copy Stand for negatives and slides

Continuous Power Options

Camera scanning with a battery-powered camera is possible, but if you do a lot of scanning and need to change batteries often it can disrupt your workflow. It's even worse if you have to unmount and readjust your camera every time you change your battery.

A continuous power adapter for your camera lets you power your camera from an electrical outlet and you can scan tens of thousands of images without ever swapping a battery. Note that:

- These are not popular accessories and availability is often limited
- All the options can be confusing, so verify that what you purchase is compatible with your camera model and battery type
- The power adapters from major manufacturers like Canon and Nikon are relatively expensive for such a simple device. There are many cheaper options from third-party manufacturers, but I've always been cautious about powering my expensive camera gear with a \$15 knock-off product. Do your research before you decide what to purchase.

~\$100-200 USD

Canon battery coupler (pro)	https://amzn.to/2z6ilHp	continuous power adapter for Canon 5DSR and Canon 6D Mark II cameras
Canon battery coupler (basic)	https://bhpho.to/3cAxSO3	continuous power adapter for Canon Rebel T7
Nikon battery coupler	For Nikon cameras, you should buy this power supply... https://amzn.to/2A300cU	Nikon EH-5d Power Supply for Nikon Cameras
	And Power Supply Connector that's compatible with your camera. https://amzn.to/3czsmdU	Nikon EP-5B Power Supply Connector for Nikon D850 and D750
	https://bhpho.to/3cyTB91	Nikon EP-5A Power Supply Connector for Nikon D5600

General Accessories

You'll need a few essential tools, no matter what kind of camera you use, the lens you purchase, or the formats you scan.

~\$125 USD

mirror	https://amzn.to/2Lc8ouj	for calibrating camera position
long USB cable	https://amzn.to/2SPtdzR	for tethered shooting, make sure it's compatible with your camera and computer ports
foot pedal camera remote	https://bit.ly/2Z0QD9x	camera foot pedal for hands-free capture
painter's tape	https://amzn.to/2Wix2jb	secure and removable tape to position equipment
black foamboard	https://amzn.to/2xQ7hxq	to control stray light



Accessories for Slides and Negatives

The most common film formats are 35mm and 120 (aka medium format). You can purchase everything below if you want to be ready for anything, or just pick the gear needed for the film formats you expect to capture most often.

~\$500 USD

Skier CopyBox	https://bit.ly/2y00nD	quality light source with film carriers for 35mm and 120 negatives and slides
Light panel	https://amzn.to/2MvNhUn	Kaiser Slimlite panel for sorting negatives and slides and capturing large format film
110 film carrier	https://bhpho.to/3cAUvlt	by Pana-Vue
116/616 film carrier	https://amzn.to/3eVTDsz	by Negative Solutions
126 film carrier	https://bhpho.to/2WU3CXO	by Pana-Vue
127 film carrier	https://amzn.to/2Mt2YvL	by Negative Solutions
127 slide carrier	https://amzn.to/2A7nbEL	by Negative Solutions
Disc film carrier	https://amzn.to/2Ue0bJd	by Negative Solutions
View-Master carrier	https://amzn.to/2AGJ2mt	by Negative Solutions
Stereo Realist carrier	https://ebay.to/2LUOXIE	by Negative Solutions



Accessories for Prints

Camera scanning is an excellent solution for capturing prints, not just slides and negatives. If you plan to camera scan reflective photos including prints, postcards, albums, and scrapbooks, then you'll need a pair of LED light panels to illuminate the photos and a few more accessories.

~\$500 USD

LED studio lights
tabletop light stand
polarizing sheets
circular polarizer filter
museum glass

<https://amzn.to/3gXLrJW>
<https://amzn.to/3gUEGbZ>
<https://amzn.to/3gUFbTp>
if you have silvered prints, you need the polarizing sheets above and a quality circular polarizer filter that fits your camera lens
local framing or hardware store

Genaray SpectroLED Essential 500IID Daylight LED Light (NEED TWO)
support LED studio lights with small footprint
for shooting silvered prints (NEED TWO)
10" x 12" keeps prints up to 8x10 flat, 14" x 14" is good for scrapbooks and albums

Antique prints with "silvering" decay limit what can be seen with the human eye and cannot be corrected with a conventional scanner.



The same print captured with a DSLR and cross-polarized light reveals lost details from the original photo.

Cleaning Equipment

If “an ounce of prevention is worth a pound of cure,” then a minute of cleaning is worth an hour of post-processing. I use and recommend all of the equipment below to keep your photos, negatives, camera, and workspace clean.

~\$120 USD

Film cleaner and pec pads	https://amzn.to/2XAul7P	cleaning product for dirty negatives and slides
Film cleaning brush	https://bhpho.to/3bySm8C	anti-static brush for film and lenses
Hand blower	https://amzn.to/3eQoKpi	for cleaning film, photos, and equipment
Sensor cleaner kit (full-frame)	https://amzn.to/3gY30tB	for full-frame cameras
Sensor cleaner kit (cropped frame)	https://amzn.to/2z4SiAe	for cropped-frame cameras with APS-C and DX formats
Cotton inspection gloves	https://bhpho.to/2Ay3g1L	protect photographic materials
Ammonia-free glass cleaner	https://amzn.to/2A3Qw2Q	clean glass
Microfiber towel	https://amzn.to/2U7AYSz	clean glass and copy stand



Software

There’s a lot of gear you need for camera scanning, but the software list is short and affordable.

Adobe Lightroom Classic	https://adobe.ly/2WwcyUg	The Adobe Photography Plan includes Lightroom Classic and Photoshop for only \$10/month
Negative Lab Pro	https://www.negativepro.com	If you plan to scan color negatives you need this \$99 plug-in.
Folder Publisher	https://bit.ly/2Z3MPnP	Lightroom plug-in exports nested folders of camera scans to nested folders of TIFFs or JPEGs

Notes

1. Technology changes quickly, which means new products are introduced, old products are discontinued, and prices change frequently. Visit <http://www.chaostomemories.com/tools> for the latest version of this guide.

2. Some of these links are affiliate links, which means you don’t pay any more than usual, and I might earn a small referral commission. I recommend these products based on my use and research, not whether I receive an affiliate commission.

3. If you have feedback on this guide or want to tell me about products you like, please send an email to adam@chaostomemories.com.

I Want To...

Learn How to Camera Scan

or

Have You Scan My Photos

"I want to learn how to use all this equipment to camera scan photos at high resolution, with high quality, and get it done quickly. I'm sure I could figure it out myself, but I'd prefer to learn from an expert. I want to be confident I'm doing it right the first time so I only have to do it once."

<http://chaostomemories.com/camerascanning/>

"I'm interested in what you're doing here, but I just don't have the patience, skills, or budget to set all this up. I love that you're using the latest equipment to preserve photos with the highest quality, and I'd like you to camera scan my photos ASAP so I can enjoy them today and for generations to come."

<http://chaostomemories.com/contact/>

