SCANNER BUYING GUIDE

Read This Guide Before You Buy A New Scanner

Inside You'll Discover...

HowToScan.ca

Do you have old slides of your parents in their younger years?
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Here's What You'll Get After Reading This Consumer Buying Guide To Scanners...

- ☑ Do you need to upgrade your scanner?
- ☑ Maybe the one you got is good enough?
- ☑ This ONE number will tell you everything you need to know if the scanner is any good – hint... it's not resolution or DPI
- ☑ How to cut through all the marketing BS so you don't get swayed into spending more than you need
- ☑ How to read technical jargon so you can compare scanner brands from each other
- ☑ See the difference between a $200 scanner vs a $32,000 scanner – is it worth it?
- ☑ What you're really paying for when buying any scanner
- ☑ 3 Mistakes to avoid when looking for a new scanner
- ☑ 3 Recommendations so you avoid making these mistakes
- ☑ 3 Step System to follow so you make a smarter buying decision

If you're not sure what to look for when buying a scanner, you may pay more than what you need. If you get swayed by the marketing on the box, then you may have wasted your money on features you'll never use.

But, if you understand some technical parts of a scanner, than you can compare brands. If you know how brands market their scanners, you can see past their hype. And then you can make a smarter buying decision, and not waste your money.

Ready? Let's discover something new about scanners...

Forget DPI, Resolution, Mega Pixels...
THIS Is The Only Number You Need To Look At

There's one number you need to look at every time you're comparing scanners or looking for a new one.

What I'm talking is called **pixel depth**. Some brands call it dmax... optical depth... or density range.

Scan Specifications

Scanner Type: Flatbed color scanner with TPU
Optical Resolution: 6400 dpi with Epson MatrixCCD®
Hardware Resolution: 6400 x 9600 dpi with Micro Step Drive™ technology
Maximum Resolution: 12,800 dpi
Effective Pixels: 54,400 x 74,880 (6400 dpi)
Color Bit Depth: 48-bits per pixel internal / external
Grayscale Bit Depth: 16-bits per pixel internal / external
Optical Density: 3.4 Dmax

Scanning/Signal processing

Scanning time	55 sec. at 4,000 dpi (35mm, FH-835M) Approx. 170 sec. at 4,000 dpi (6 x 9, FH-869S) (typical scanning time with display, Windows, 8 bits, CMS on, positive film)
Density range	4.2
Thumbnail scanning and batch scanning	35mm strip film: 1 to 12 frames (2 strips) 35mm mount film: 1 to 5 frames 120/220 strip film (6 x 4.5 size): 1 to 4 frames 120/220 mount film: 1 to 2 frames 16mm film: 1 to 60 frames (3 strips)
A/D conversion	14 bits

It's usually a number between 3.0 and 4.9. And it's buried deep in the technical jargon and fine print.

What's pixel depth, and why should you care about it?

That's next...

What's Pixel Depth?

Dmax / pixel depth / optical depth / maximum depth is a TRUE measure of every scanner. It's the best way to compare scanner brands.

THIS is the only number you should look at.

But what about DPI and resolution? Isn't that more important?

Nope.

And here's why...

Every scanner can do 4000 DPI... or more. But DPI isn't what makes a scanner better than the other. It's the QUALITY of every pixel. And that's what pixel depth is.

Let me show you...

Why Does A 2400 DPI Scanner Cost $3200?

Here's an example of what I mean...

The Epson 11000XL does only 2400 DPI.
But it will cost you, $3200.

The Epson V550 does 6400 DPI.
And it will only cost you, $200.

What's going on?

Marketers know that most consumers care about DPI and resolution. So that's why they pump up this number... that's why DPI is the first number you see.

But remember I told you about pixel depth (density range / dmax / etc.)?

Knowing this, let's see those scanner specs again...

You Can't Compare DPI Because Pixel Depth Changes Things...

So, the Epson 1000XL does only 2400 DPI.

BUT...

The pixel depth is 3.9.

The Epson V550 pixel dept is only 3.4.

Let's compare again...

Epson 11000XL
- $3200
- 2400 DPI
- Pixel depth 3.9

Epson V550
- ~$200
- 6400 DPI
- Pixel depth 3.4

Why Is Pixel Depth The Most Important Number?

DPI is how many pixels your scanner will pickup. Pixel depth is the QUALITY of those pixels. That's why the Epson 11000XL is more expensive. Every scan will have more shadows and highlights.

Here's an example...

The scan on the left is less detailed because of it has less shadows and highlights. Remember, more pixel depth = more shadows highlights = more detail.

Is The Difference Between 3.4 and 3.9 Worth An Extra 3000?

But wait, you might be thinking...

"So what? 3.4 vs. 3.9 isn't a big difference!".

Going from 3.4 to 3.9 is a HUGE leap. Let's look at my example again, zoomed in a bit...

But, still...is it worth spending an extra $3000 because the image has more shadows and highlights?

The geek in me says YEAH. And if you do this for a living, or want the best possible scans you, the extra quality is worth it.

Can You Have Both High DPI and Pixel Depth?

You can't have both. You can't have a high pixel depth AND high DPI. If you want both pixel depth and DPI at high levels, you'll pay for it. That's why some scanners are above $500. They have both a high DPI and a high pixel depth.

For example...

Hasselblad Flextight X5
- Costs $32,000
- Scans at 8000 DPI
- Pixel depth is 4.9

Nikon CoolScan ED 8000
- Costs $8,999
- Scans at 4000 DPI
- Pixel depth is 4.2

Epson 11000XL
- Costs $3200
- Scans at 2400 DPI
- Pixel depth is 3.9

Plustek 8200
- Costs $600
- Scans at 7200 DPI
- Pixel depth is 3.6

So now you know why you can get a 6400 DPI scanner for less... the pixel depth is lower, that's why the scanners are less in price.

But pixel depth is NOT the only reason why some scanners are more expensive than others.

There are other important little things they don't tell you about in their marketing.

That's next...

Does Your Scanner Do Bigger Sized Slides, Negatives, Photos?

Now that you know about pixel depth, it's easy to compare scanner brands and models.

But pixel depth isn't the only thing to look at.

Another important factor in scanning is, how big is the scanning area -- especially for slides and negatives?

Let me explain...

The Cheaper The Scanner, The Less They Can Scan

Another reason why some scanners are around $200 is because they are not equipped to scan all formats.

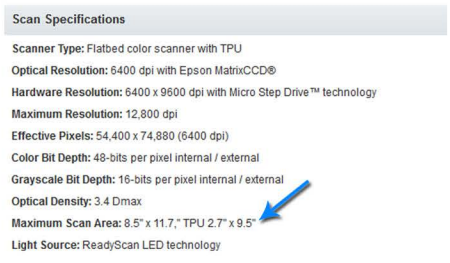
What am I talking about?

Well, do you have negatives bigger than 35mm? You know, the standard size? What if you have 75mm? Or have 4x6 medium format negatives?

Well, the cheaper scanners won't be able to scan them. Not only will you NOT get the templates to scan them. The scanning area is too small.

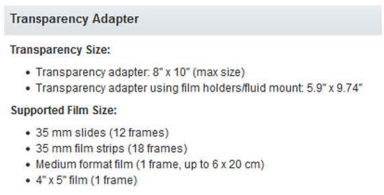
That's how they get you to up-sell, so you buy the more expensive model.

For example, the Epson V550 has a scan area if 2.7″ x 9.5″.



So, if you have slides / negatives bigger than 2.7″, you can't scan them.

You'll need the V800. It has a scan area of 5.9″ x 9.74″. And templates for any size of film.



What About Scan Software?

All right, I talked a lot about the hardware. But there's another reason there's a price difference between brands and models.

That's next...

What You're Really Paying For When Buying Any Scanner

Scanner brands know that their machine can do the SAME thing their competitors can. They know that a consumer can compare DPI with DPI, and price with price, and then decide which is worth it.

How do you compete when your machine has become a commodity? Well, you add bells and whistles. You make up buzzwords that competitors can't copy. You hype up the marketing on the front of the box.

Let me show you the best example of this hype...

You'll notice a lot of scanners come with Digital ICE, or some sort of dust removal feature.

You see, Digital ICE is owned by Kodak. And they license their propitiatory software to scanner brands.

But there's a catch...

The better the version of Digital ICE, the more the scanner brand has to pay for that license. That means, YOU end up paying more.

So what's wrong with that?

Well, if you want an inexpensive scanner that will do a good job fixing dust, forget it. Most cheap scanners come with the basic version of Digital ICE. And if you ever tried the basic version of Digital ICE, it's not the best.

It's the same with other scan software like Silverfast and Vuescan. The more expensive the scanner, the better version you'll get.

Biggest Marketing Lie Is This...

My point here is, what sounds good on the box is not what you get in real life. There is no ONE BUTTON fix.

There is no magic software that will make every scan look perfect. And if you ever tried scanning, you know how frustrating scanning software is. What you see in the Preview Scan is NOT what you actually get when your scan is done.

This pain and frustration is why I started using Photoshop to fix my scans (or GIMP). And that's why I encourage you to use it, and made those ebooks for you.

This leads me into mistakes people make when buying a scanner. That's next...

3 Mistakes When Buying A Scanner

Mistake #1: Don't get those all-in-one printer / copier / scanners.

Yeah, they're great to scan your receipts or a few photos here and there. But if you have a family scanning project, these scanners won't do a good job.

This also includes those hand-held mobile slide / negative scanners. Sure, they're cheap and convenient. But they won't do a good job.

Mistake #2: Looking at the SPEED of the scanner.

Here's something counter intuitive...

The more expensive the scanner the SLOWER it is.

The $32,000 Hasselblad takes 1.55 seconds to scan ONE slide. Some $200 scanner brands say they can do it in 20 seconds.

My point is, don't look at scanning speeds. Actually, the number they show you is a "natural" scan speed. Meaning, they don't apply any Digital ICE, etc.

And marketers know that speed is another thing consumer look it. So they pump it up by not telling you that the scan speeds are "natural" scans.

Mistake #3: If you are looking at DPI, make sure it is NOT interpolated.

Interpolated means SOFTWARE is adding in more DPI.

For example, you know how your digital camera has an optical zoom? When the optical zoom can't go any farther, then the digital zoom kicks in.

Same with scanners.

The optical lens has a limited DPI. When the scanner hits its limited DPI, software kicks in and fudges more DPI. So, make sure the DPI they show you isn't "interpolated"... and look for the "optical resolution".

3 Recommendations To Help You Make A Smarter Buying Decision

Recommendation #1: Look for the scanners pixel depth... density range... dmax... optical depth... etc. Brands call this number different things.

So, you're looking for a number between 3.0 – 4.9.

The higher the number, the better quality the pixels you'll get. The more shadows and highlights you'll see. And shadows and highlights your scans will have more details.

Recommendation #2: Look at the scanning area size.

Are you scanning slides / negatives bigger than 35mm?

Double check that the scanner you're looking at will have a big enough light source, and is capable of doing large format scans.

Most scanners make it look like they scan everything. But it's up to the consumer to make sure that they don't buy a cheap scanner and later find out that it only does 35mm.

Recommendation #3: Don't bother with those all-in-one or mobile scanners.

They are cheap. Yeah. But the brand hopes that you think...

"It's only $97... They say it does 4000 DPI... Maybe I'll give it a try... it's only 97 bucks... I got nothing to lose"

But when you get it, you'll soon find out that these scanners don't do what they promise.

Look for "flat-bed" scanners. Or "film" scanners for slides and negatives.

3 Action Steps To Take Right NOW

You've learned a lot. And the best way NOT to forget what you just learned is to put that knowledge into ACTION.

So...

Action Step 1:
What scanner do you have right now?

Google your scanner and model. Look for your scanner's specifications. Forget about "Key Features" and other marketing hype.

Under specifications, find your scanners pixel depth (or optical range, depth range, dmax).

Next, what's your scanners DPI?

The reason I'm asking you this is because maybe the scanner you have is good enough!

Meaning, if you have a scanner that does 4800 dpi and has a pixel depth of 3.5... then why get a new one?

Instead of getting a new scanner, you may want to upgrade your software (Silverfast, Vuescan). Or better yet, use Photoshop, GIMP, Lightroom, Elements.

Action Step 2:

Goolge two scanners you're thinking of buying. Look for the pixel depth of both scanners. Remember, try to avoid comparing DPI (or scanner speed).

The scanner with the better pixel depth will give you better quality pixels with every DPI.

Also, double check that each scanner can do large format scans (bigger than 35mm). In other words, check the scanning surface size. Make sure it's bigger than 2" if you have large format slides and negatives.

Action Step #3:

Still not sure about a scanner? In this step, I invite you to email me back and let me know what scanner you're thinking of getting.

I'll be glad to give you the pros and cons for that scanner.

Again, my email is: help@howtoscan.ca. In the subject put, "HELP". I'll respond back faster if I see that in the subject.

Thanks for reading!

Konrad

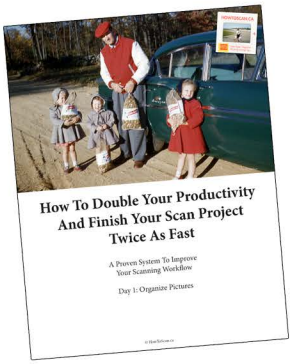
If You Are Not Getting The Quality Scans That You Expected, Then You Need This New Innovative Scan System

Dear friend,

If you're finding that your scan project is getting frustrating and time consuming, then I have a NEW scan training program to help... all free. Here are the details...

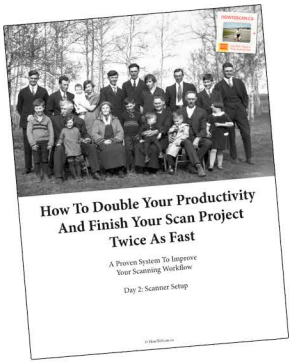
What You'll Learn In This Free Scan Productivity Training Program

Want a proven scan system that will improve your workflow and give you expert advice on how to professionally edit your scans? Then please expect these ebooks in your email soon...



Day 1: How To Organize Your Pictures Before Scanning

- ☑ It's 10x more productive to organize your original photos BEFORE you scan them
- ☑ By organizing your pictures now, you will reduce inefficiencies later when you start scanning
- ☑ Learn how to safely clean your pictures before scanning them to reduce dust and debris
- ☑ Learn how to quickly remove your slides, negatives, photos from albums and carousels without damaging them

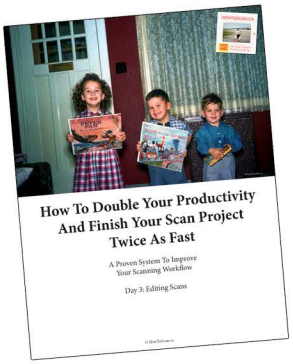


Day 2: How To Setup Your Scanner To Save Time Loading

- ☑ How to load slides and negatives so you don't scan them backwards
- ☑ How to load photos so when they're scanned they're in order
- ☑ Best resolution when scanning slides, negatives, photos -- no matter what size they are
- ☑ How to make sure your scans are not getting cut or cropped off

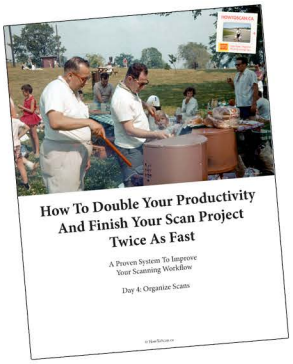
Keep reading for details about Day 2 and 3... and more free books!

Scan Productivity Training Program Cont'd



Book 3: How To Edit Your Scans Fast

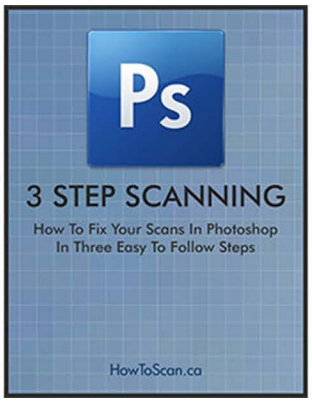
- ☑ How to fix color so your scans don't look flat and dull
- ☑ How to fix lighting so you see more details and definition
- ☑ How to remove dust and scratches
- ☑ Learn how to edit your scans using scan software, Photoshop, and GIMP (Lightroom, Elements, CorelDRAW editing tips coming soon!)

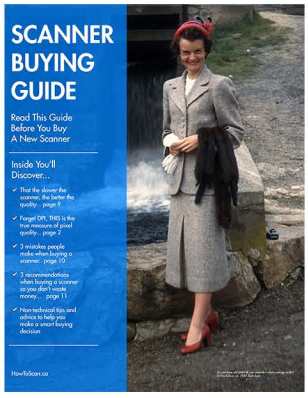


Book 4: How To Organize Your Digital Photo Files

- ☑ Don't name your files manually... learn how to do this task using Batch Naming
- ☑ Learn how to add more information like places, dates, names, events, and other keywords using Meta Data
- ☑ Learn how to neatly organize your files so you can find your scans fast using keywords

PLUS You Get These Bonus Ebooks To Help You Even More...





Get All of This For FREE!

The value of these ebooks is $97.00. However, since you've signed up, you'll get it free! So, check your email in a few days to download your free scan training program.

Thanks for signing up! Talk to you soon.

Konrad