

# A Photographer's Guide to Computer Specifications for Photo Editing

We get asked the question all the time, "What kinds of specs should I look for on a computer if I plan to use it for post processing of images?". There are certainly some specifications we are going to suggest below but before that, let's cover two important general considerations:

## Desktop or Laptop

The transition from most of our photography students using desktop computers to using laptops has been a major shift in the last couple of years. This change is due to people wanting portability and the fact that the premium price for laptops over desktops seems to have dropped some as well. Both options are valid, and the main question I think that should be considered is "Do you plan to do lots of computer editing while traveling (or away from your desktop) or at home?" If when you travel, you simply want a device to surf online, backup images or maybe even view the photos from the day of shooting; a fairly inexpensive or older laptop will likely do just fine. However, if you plan to do quite a bit of editing, the level of the components you would want in the laptop can move the price up rapidly.

If you decide a laptop is the way you want to go, you do want to make sure you consider the recommendations below and get a machine that both has the storage capacity as well as the horsepower to make editing efficient whether you are on the road or at home. If at home, I would also strongly consider purchasing a larger external monitor to get the most out of the on screen workspace, color quality, view angle, etc. Often a 24-26" monitor does not cost that much and can easily be left on a desk at home and the laptop can plug into when in use. This gives you a much larger image to work with and likely a more enjoyable experience. If you know you are going to be using an external screen at home, this also might cause you to buy a smaller screen size in the laptop itself knowing that it will be sufficient and portable on the road. Therefore, you would not need a large screen laptop when you are home because of the external monitor.

If you decide a desktop is the way to go, you obviously would need to use a monitor you already have or purchase a monitor when you buy the desktop box itself. There are a couple of advantages to a desktop configuration. One is that often the price is a little less for the same or even better specifications than a laptop. Also, desktops are always much more upgradable both in storage space (actually multiple internal hard drives can be added to the desktop unit) as well as RAM, graphics cards, etc. Nicer desktops like laptops are hard to find in retail stores so for both options, you might have to go to a company store like the Apple or Microsoft stores or purchase online.

## Apple or PC

This question is one of the most debated questions of all time, whether an Apple or a PC is better. Similar to Ford vs. Chevy or Canon vs. Nikon, let me be clear, they do the same thing. In fact, while there is a myth out there that Apple is better for image editing, we have to realize that the software options that we might likely be using such as Adobe Lightroom, Photoshop CC or Photoshop Elements are identical for either platform. Also, please understand that nowadays, the internal components including the processor, RAM, graphics card and hard drive are the same (both in brands and models of

components) between both as well. This debunks the other myth that Apple's will last longer. The replacement time frames will be about the same, but the cost of each replacement will be higher with Apple

Therefore the bigger questions are what is your budget? What are you used to? Are there any other reasons you might use one or the other? In general, Apple's are much more expensive for a computer with the same specifications. While an iMac may provide a stunning monitor image, even this moves up the cost. As we stated before, the cost is something to consider. I have met many students that did not own a laptop or did not upgrade over the course of probably too many years all due to the fact they could not afford to because of the amount spent on the original purchase of their Apple computer.

Secondly, what are you familiar with using? It can be hard to be a PC user and try to understand the more simplified (and sometimes less featured) interface of an Apple. At the same time, moving from an Apple to a PC might be confusing and frustrating to do even familiar tasks. So your choice here boils down to staying with what you are familiar with or switching and spending the time learning a new system.

Finally, we see one more issue that might affect this decision especially related to photographers. This issue is what I call file management. What I am referring to is downloading the photos from a memory card, storing them in folders on the hard drive, easily viewing the images and linking in with other software for the sake of the previous action and/or editing. In this case, Apple tends to take over the process with its built-in software, iPhotos but this then leads to confusion and a limited process. We have found from working with our students, taking control of your photos in these regards is much more difficult on an Apple. Now in all fairness, while a PC is more open for these tasks, we still recommend a software called ACDSee to assist in these items. Unfortunately, ACDSee in a full version is not really available for Mac but It is a great option for a PC. At \$35 cost, it is also reasonable. While there are other software offering similar features as ACDSee on the Mac platform, they are more in the range of \$150 +.

## **Recommended specifications**

Knowing that there are a lot of options out there and that the cost is always a factor, we have broken down each specification into good and better. Obviously, the options in the best category will not only be more expensive but will also be harder to find as many competitive options in the marketplace

### **Processor**

#### Good

Intel I5 or I7 (4<sup>th</sup>-6<sup>th</sup> generation) 4 Core standard for desktop system and 2 Core standard for laptop

#### Better

Intel I7 (6<sup>th</sup>-7<sup>th</sup> generation) 6 core for desktop and 4 core for laptop

### **RAM**

### Good

8 Gb minimum on a laptop and 12 Gb or more on a desktop

### Better

16 GB minimum

## **Graphics card**

### Good

Built-in graphics card on a laptop and built-in or 2 GB on a desktop

### Better

Dedicated graphics card with 4-8 Gb

## **Hard drive**

### Good

A HDD (traditional hard drive that spins) of 500 Gb minimum on a laptop and likely a 1 Tb minimum on a desktop

### Better

A SSD (solid state drive with no moving parts) of 256 Gb on a laptop or the same plus an HDD of 1 Tb on a desktop

## **What computers do I use and purchase**

I have and love a desktop as my main computer and surprisingly, outside of class presentations and downloading images as when I travel, don't do a lot of editing when I am away from my office. My current desktop (and the last few machines) is a Dell XPS 9000 series model usually with an I7 processor, 16 GB of RAM, 4 GB graphics card and a main hard drive of 1TB. I have added two more 3tb hard drives into the machine allowing me to have dedicated hard drives for photos and multiple years of photos at that. I have that connected to a Dell 24" monitor that cost about \$200 at the time. The computer has performed well for over 3 years now without any problems. The other reason I bought Dell is that it had more USB 3.0 ports on it than comparable models by other brands.

When it came time to upgrade my laptop last year, I did more research than I had done before on any computer. I wanted very portable, and I wanted performance, all of that led me to the Dell XPS 13. The computer has a 13" screen but only weighs 2.8lbs and actually about the size of a large tablet. Dell has done something really neat with the screen in that the image space goes almost to the edge of the screen. They did this by almost eliminating the bezel (or frame surrounding the image) and this causes

the look and size of the computer to be simply amazing. This combined with a super high resolution monitor, a nice i7 processor and a SSD (solid state drive) the machine not only looks good but runs like a dream. This being said, if I were to do it again, I might consider the Dell XPS 15. While I would give up the super-thin size, the computer still has the Infinity edge screen (having a larger screen might be nice when traveling. More importantly, the 15" XPS models have a dedicated graphics card rather than the one built into the motherboard and have a 4 core processors rather than the 2 core laptop processors. While you might think I only recommend Dell computers for a PC option based on what I own, I have had good experiences with Asus, HP, Lenovo, etc. For the desktop, there are tons of similar computer options. For the laptop, the screen going to the edge as well as the super small size has certainly steered me to Dell.

For those buying a PC, I would strongly recommend looking first at the Microsoft Store in SouthPark Mall in Charlotte or even online. Buying from the company store has a couple of advantages. One is they carry some nicer machines than what you can find at the local big box stores. They also have many on display where it is easy to look at, compare and to most importantly talk to someone in person. All of their computers do not have advertising and demo software installed, so you are getting the computer with just the operating system and none of the other annoying software you don't need. They offer a damage warranty that provides additional coverage for both accidents and repair issues. Finally, with the last 3 computers my family has purchased there, the price was less than what I would have paid many places online and certainly at other retailers in town.

In conclusion, the computer side of the digital photography process is not only a necessary part of the image creating process but is also one to not skimp on. If you plan to do a lot of editing and work with a wide variety of images, your speed and overall experience could be greatly influenced by the type and quality of computer you buy. Hopefully, this article is helpful in that process.

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