Digital Media Storage: How Much is Enough?

One question that many young and aspiring filmmakers ask is how much digital media storage is enough for their film project? While computer technology and digital media storage has increased exponentially through the years and most average home computer users will rarely, if ever, max out their storage, digital film files, audio files, and images will tend to take up a tremendous amount of space, more significant than general music or jpeg files found on most average user’s computers.

The reason that these files will tend to be larger and require more storage space is that they are not compressed files. User-friendly formats, such as mp3 for music and jpeg or tiff for images, are compressed. During compression of files, different elements are either eliminated or combined with others to create a smaller file. As computer storage becomes larger on average and Internet access speeds become faster, the need for compressed files will slowly evaporate, but at this time, they are the norm for general user consumption.

Any filmmaker knows, however, that compressing files reduces the overall quality of those files, so the raw content needs to be maintained in all of its grandeur. As a result, the digital media storage requirements will be significantly more for not only the film footage, but also for audio files and images that have been captured.

*The first question is how much footage is being used?*

The filmmaker who captures twenty hours of footage is going to require far more digital media storage than one who only captures two hours’ worth. Also, when using different audio formats, one filmmaker may only be recording for stereo playback, meaning two basic tracks are being used, plus any extra isolated tracks that will be used in the final mix, but a filmmaker who plans on releasing their project in 5.1 Audio, for example, will likely have many more recording tracks, since they will have used more microphones to capture one scene.

With these factors in mind, the production crew should focus on digital media storage that measures in terabytes, rather than gigabytes. Wandering through the local office supply stores throughout the
country will yield common hard drive storage units of 500 gigabytes to 1 to 2 terabytes. These will likely store several hours of footage and audio files. More industrial suppliers will likely have media storage that will exceed those numbers.

**Backups and main storage**

When planning on using digital media storage for film and editing, the best idea to keep in mind that regardless of which type of storage device that you use, there is always the chance that something can go wrong with it. Hard drives fail, flash card formatting gets altered, and environmental hazards abound. With that being said, any time that you plan on using digital media storage, it’s best to have duplicates of everything. In fact, the best idea is to store the same information, the same footage, on three separate drives or devices. One to work with and two for safe keeping. If something happens to one of them, there are still two other backups ready to go.

Imagine filming twenty hours of footage, backup up everything onto one media device, then having one fail. You could likely lose two hours of footage or more right there. So the question isn’t about which media storage is best, but about your particular needs and demands, and whether or not you’re willing to sacrifice safety for saving money. When it comes to your digital files, don’t take chances. Duplicate and even triplicate everything you record.