

## **Transcript for: CAMERA BASICS**

### **Video Runs 7:33**

One of the most frequent questions I get is, what kind of video camera should I buy? Well, I cannot tell any one person precisely which camera to buy but I can tell them this. Video cameras can be broken down into 4 basic categories. Which one is right for you depends on how much effort you want to go to, how much artistic and manual control you want, how demanding you are going to be of technical superiority and what your budget is.

Let me define the 4 categories and you can see which one is best for you.

**Webcams, flip cams, pocket cameras and cellphone cameras,** I'm going to put all of those in the very first category. They're all drop dead easy to use and very inexpensive. You can put cell phone cameras in this category too. A web cam of course is plugged directly into your computer, so as you record, the file is recorded onto your hard drive, or even uploaded directly to the web. That means you never have to hassle with the separate step of capturing the video from your camera onto your hard drive after you shoot. Of course it also means you cannot use it without it being plugged into a computer. A flip cam can be put in your pocket and taken anywhere. That's where the nickname pocket camera came from. A flip cam has the USB on a flip out arm and you upload it to your computer through that, you don't need a separate cord like you would with a higher grade camera.

These simple cameras often have remarkably good image quality for their size. But their ease of use is absolutely their best feature. That is a HUGE benefit in so many ways. With a web or flip cam, you can skip the editing

and conversion phases and upload straight to the web, which is a HUGE time saver, plus conversion gets complex and drives a lot of people batty.

The drawback to these cameras is that they have fewer features and they're flimsy. Some do not have zoom lenses at all, and if they do they might just be a small 2:1 zoom. You certainly do not have features like built in lights or manual shutter control. Some are fairly high resolution, even HD.

Now the next grade of camera is the **Consumer Grade Cameras**. They are also fairly easy to use but give you a lot more features than a web or flip. Most consumer-level cameras will be totally automatic in regards to stuff like exposure and focus. That can be great if you don't really know what you're doing and don't want to learn and that's fine. A consumer grade camera will have a decent sized zoom lens and probably a few additional features such as a built-in light, image stabilization, and multiple modes for different conditions.

Consumer cameras pack a lot into a little body. Their biggest drawback is they do not usually have any place to plug in a separate microphone so you are limited to using the onboard microphone. That makes it harder to get good sound of someone speaking. If you are going to be doing a lot of talking heads and so forth, you really should get a camera that has the capacity to plug in a second microphone. That's very important. A few lower grade cameras, like the Kodak zi8, which is a pocket camera, that has the ability to input for a second mic, but that feature is rare until you get up to the next level of camera up which is called the prosumer level and then they all have mic inputs, maybe even up to 4.

**Prosumer grade**, is the next level up. If you want to really get into video making from an artistic standpoint, you absolutely need to look into one of these cameras, at least eventually. You can start with a simpler camera but you'll want one of these. I love them.

With these kinds of cameras, you can shoot on automatic OR switch over to an easy manual control over everything like the exposure and focus. You also have manual control over the shutter, helps get better slow mo shots, the gain, which gives you the ability to get a shot in almost no light by injecting grain into the picture, or little tiny white dots. Cameras like this also have things like internal filters, which can be very handy. An internal neutral density filter and other kinds of filters. A camera like this is also going to have a MUCH better lens than any consumer grade camera. In short, having all of this manual control gives you more artistic options so there's a bigger learning curve. These cameras are more involved to use, so if you want easy, stick with one of the lower grades. The biggest difference between these prosumer level cameras and the consumer grade cameras is NOT that they get a tons better picture on a purely technical level, it's that you as the videographer have more control and options and so therefore you're more likely to be able to get high quality and artistic shots. But on a purely technical level, in terms of standard definition or high definition or whatever, the lower grade cameras can match these cameras. So only use these kinds of cameras if you want the artistic control.

**Professional grade cameras** are sturdier, bigger, higher quality versions of the prosumer cameras. Professional grade cameras are fantastic but you do not even need to THINK about using one unless you are really doing a high level project. Prosumer grade can do the basics of what these do, they are just smaller and less expensive so a little bit flimsier, but for the most part but functions are there. So unless you're a really big budget guy, stick with a prosumer level camera.

Now, considering all four levels of camera, the differences you find are not necessarily drastic differences in the final image quality, at least from a purely technical perspective. Perhaps you've seen demonstrations online where someone will show the image taken from a small camera and compare it with the image from a professional grade camera AND SAY LOOK, THERE'S NO DIFFERENCE! To the untrained eye, which is most people, they're not going to notice the differences. So yes, the main differences come in options, manual control and sturdiness and bigger and more diverse lenses, and all of that affect your shooting greatly but not in the same way that just resolution does. Don't expect a \$100 Flip cam to last too long, however professional grade cameras will last a good long time, even if you take them out in hurricanes. So those are the main differences, how sturdy they are and how many features you have.

So, with that information, you can first figure out what grade of camera you want, and then select one that meets your needs within the grade.