



Understanding White Balance

This is where technique varies between film and digital, making digital a little more tricky yet more powerful and versatile than film. With film, you simply put the canister in your camera and shoot. Film is a physical material and captures light based upon its physical make-up. As a photographer, you have no control how the film will record light because the manufacturer decided that for you when they made the film. Digital is very different. Unlike film the sensor uses one more piece of information when capturing light. That information is what kind of light are you capturing? This question is defined as White Balance, and the sensor needs this information in order to expose the image properly. Most photographers just set white balance to AUTO, mostly because they do not understand it, but white balance settings can be very powerful.



Do you remember in high school science class learning about temperature scales? Fahrenheit, Celsius and Kelvin. The digital industry uses the Kelvin scale as the standard, probably because of the high temperature scale. In the world of photography blue light is considered Cold and red light is considered Warm. The white balance Kelvin scale is a measurement as to what temperature the light is from cool to warm. I have had people think it has something to do with the air temperature outside. If it is cold outside use a cool setting or warm outside use a warm setting. This is absolutely not correct! You need to look about and decide if you are photographing in Cool light (blue-left) or Warm light (yellow-right). This can be tricky at first and will require a bit of experimentation until you figure it out. (See images above Cool on left to Warm on right)

Let me try and explain this in an easy way. Lets pretend you take a piece of white paper outside on a clear day at high noon. Now when you look at the paper your brain is smart enough to convert all the colors and say yes that is white. Lets pretend you take the same piece of white paper outside during a cloudy day, your brain will still register it as white. If you did the same thing with film you will see the first white paper is actually blue and the second will be a slightly orange color. With a digital camera, white balance simply tells the sensor what color the white paper is. The first scenario you would say it is cool and the second warm. This setting insures that white is truly white, not blue!

Remember when shooting film, in cold light you often used a warming filter to help filter out the blue light and warm up the scene? Well with digital white balance, you can simply change your setting to warm and walla, you have just warmed up your image without any filtering. This white balance setting is worth getting to know, and worth perfecting, and will help you take your photography to a new level that you could not always control with film.