

The Sky is 10,000* Kelvin

By Richard Diaz

You thought it was blue didn't you? We're both right actually; white light is a combination of all the colors of the rainbow, just not in equal amounts. Some light has more red (incandescent light bulb) or more blue (the sun in the afternoon) and there's a ton of shades in between. In the 19th Century Lord Kelvin (this is straight from the encyclopedia, I admit) killed time by heating up an imaginary "black body" and compared the color it gave off to the temperature, ranging from 1200K candlelight to 10,000K clear sunlight. His reward was the "K" by those numbers. Here's the confusing part: we often call reddish light "warm" and blueish light "cool" when (according to temperature) it's the other way around!

So what? Your eyes don't notice these differences, because nature designed us with some kick-butt biological circuitry. Video cameras, on the other hand, need help. That's why white balance is so important, you need to tell the camera what color temperature it's seeing. Always adjust it manually for the most accuracy; the Auto-white feature does a pretty good job, but it'll constantly readjust for whatever light it detects.

With all that said, here are some tips when white balancing your camera:

- Place your white paper near your subject, in the lighting it will be in, i.e. don't WB off a white car in the shade if you're shooting people in the sun.
- To remember to WB in the first place, use this four point checklist: Filter, Focus, Iris, WB. These are the adjustments you need to make whenever you set up to record.
- Zoom in as far as you can on the white object, and de-focus.
- Watch for sun changes and re-WB sporadically if you are taping throughout the day.
- At night, use the "indoor" 3200K filter- just because you're outdoors doesn't mean you use the "outdoor" 5600K filter.
- Use the Outdoor filter an hour after sunrise through an hour before sunset. FYI, the sky is usually around 7000K.
- Definitely use the manual controls when taping in mixed-lighting situations (such as rooms with windows). Camcorders are known to strobe colors as you pan the camera through different light. Move the camera or talent to avoid this, or shut the curtains..
- If you plan to use gels, WB first, then put them on. Otherwise the camera will adjust for the tinted light it sees.
- Want funky looking video for "artistic" effect? Go ahead and WB in the opposite environment, or put a gel in front of the lens as you WB.