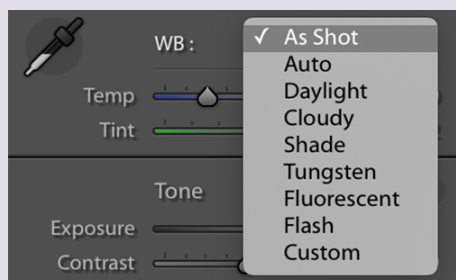


WHITE BALANCE

BLUEPRINT

Although our eyes do not notice it, light has many different colors depending on its source. Unlike our eyes, camera sensors do not adapt to changes in the color of light, they need the help of the camera's built-in color metering, also known as white balance.



Lets quickly look at how we determine the color of light. We use a temperature scale in Kelvin (K) and our typical reference point is daylight at noon in sunny conditions. This is considered to be 5500K. If our light is more reddish, for example at sunset or using a tungsten light, this is lower on the Kelvin scale, from around 2000K to 5000K. If our light is more blue, this is higher on the Kelvin scale. A typical example of this is light from a flash gun which can reach 10,000K.

Examples of proper white balance in photography



1 WHITE BALANCE PRESETS

Your camera will have a number of presets for color balance. These will include:



- Daylight, a setting for color temperatures around 5500K.
- Shade or cloudy, deals with the blue end of the color spectrum, around 6500K.
- Flash, deals with light that is 10000K and above.
- Fluorescent, used for getting warmer shots while compensating for the cool shade of fluorescent light (4000-5000K).
- Tungsten, deals with the warmest part of the color spectrum (2500K).

TIP:

If your AWB is not giving you great results, you can use these presets. You can also use them to intentionally modify your white balance even when it's correct.

2 MANUAL WHITE BALANCE

Another way to develop your custom white balance is to use manual white balance. All modern cameras have this available and it is carried out by pointing your camera towards the subject, then placing a piece of pure white paper or card in front of the lens.



Depending on your camera, the manual white balance setup will be either using buttons or more likely through the menu system. Because the white card does not contain any colors, it gives a correct representation of the color of the light falling on the subject.

TIP:

Using a white card can give you a highly accurate indication of the white balance, in case the light is not changing during the shoot.

THE 3 ESSENTIALS

3 SHOOTING RAW

Many people advocate shooting RAW files as the solution to white balance issues. They are partially correct. RAW files do not apply any white balance to the image file. You carry out that in post production.



This is good as it enables you to change that white balance to something more suitable and gives you greater control. There is however a problem - if you shoot in auto white balance, you will have to rely on your memory.

TIP:

When you pull up the RAW image it applies the white balance that was set at the time of shooting and embedded into the JPEG preview file.