



Ely Photographic
Club

WHITE BALANCE

White balance is a difficult issue to pin down as it's partly about perception but can also be an unwanted colour cast.

There are standard settings both on your camera and in Lightroom these may need to be varied depending on the situation. Sometimes you may want a colour cast if this is how you want to image to be, but it's good to know how to identify a colour cast and how to remove it if it's not required.

White balance is shown in Lightroom using the Kelvin scale with lower numbers being colder / blue and higher numbers being warm / yellow.

With RAW images Lightroom displays the Kelvin temperature value that was used by your camera to capture the photo. This will depend on the settings you used. Auto white balance can do a good job but can also get confused especially when things are not quite as the camera expects.

For example, skies are generally shades of blue so when you have a yellow or red sunset what white balance setting does the auto white balance use. If you take a few photos including different parts of the sky you will see the white balance change.

It can help to use one of your camera manual settings. On my Sony I have, Daylight; Shade; Cloudy; Incandescent; Fluorescent-Warm White; Fluorescent-Cool White; Fluorescent-Daylight; Flash; Underwater Auto; Plus a few Custom settings where you can specify a Kelvin value.

I probably use Auto most often but if I think the light is not close to normal daylight I will change to one of the manual settings. Shade seems to work best in winter for obvious reasons.

Normal white balance is 5500 Kelvin, which is the neutral daylight value.

According to the YouTube video's I list at the end of this note on Canon Cameras adding +5 Magenta tint works well and on Sony and Fuji adding +10 Magenta seems to give a reasonable result.

However, these numbers do not always work so try experimenting with your own camera to see what numbers work best.

The other issue is that you may not want a natural daylight setting if for example you are photographing a sunrise, sunset or the blue hour.

Snow can also cause issues if you use the natural daylight numbers.

Therefore, when shooting sunrise, sunset or snow using one of the manual white balance settings gives more consistency of outcome rather than auto changing for every image.

Blue hour is approximately 4500 Kelvin.

The other time to use one of the manual / fixed white balance settings is when shooting panoramas as you don't want the white balance to change between the series of shots because when you stitch the photos together the colours will be different across the finished panorama.

With individual shots its not quite as important as things can be adjusted later in post processing depending on the camera capture system you use.

If you shoot in RAW you can always adjust the Kelvin figure in post processing but if you shoot in jpeg the white balance is fixed and can't be changed in post processing.

All is not lost with jpegs as you can still add blue or yellow to the image, which can improve the colours.

When viewing a RAW image, the Kelvin value allocated by your camera will be shown to the right on the temperature panel. When using jpeg, the same slider just shows + or – adjustment.

To check, in Lightroom, if the image has a colour cast move the contrast slider to the right and the colour will be exaggerated. Return the contrast slider to the central position and then move the temperature slider left or right as required.

If it's a blue cast then move the temperature slider to the right, if it's a yellow or magenta cast move the slider to the left. Then add a small amount of magenta using the tint slider if it's necessary.

The other way to select what Lightroom thinks is the correct white balance is to take the white balance selector eyedropper tool and click on a neutral mid-grey area on the image. This will set a white balance. This may work or may look dreadful but its often worth trying to start with this and then adjusting from there if the image has a bad colour cast.

For example, using the eyedropper tool method, snow will always appear too warm, and a neutral white balance will make it look grey or even yellow. A touch of blue will be required to correct this. It may then appear to have slight colour cast but having a slight blue / cold feel to the snow is usually a good thing but be careful not to go too far.

Lower colour temperatures tend to show the differences in colour better than warmer temperatures which can tend to blend the colours together.

Two YouTube videos to watch on this topic are by Alex Nail dated 31/01/2021 & 05/02/2021