

SHAW ACADEMY

Lesson 7 Course Notes

Diploma in Photography



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White Balance and Mastering Focus

What is white balance?

When we photograph something, the main objective is to take the scene and represent it in just the way that we see it with our eyes. That means, along with the amount of light, you also want to represent the colours to be just the way you see it. This is where white balance comes in.

White balance, helps us balance the colour tones in an image. An image with proper white balance will give a nice colour depth in an image. Otherwise the images will tend to have a colour cast over them which will make the colours appear flat and the overall photograph, unappealing.

Why should we learn about white balance?

Different light sources around us create a different kind of colour on the objects they illuminate. A simple way of understanding this is by using a white sheet of paper. If you see white paper under a fluorescent light and then under a tungsten lamp, you will see a huge difference between that shade of white on that paper. This is how light sources impact the colour of all the objects that they illuminate.

Even sunlight for that matter illuminates objects differently depending on the time of the day and the weather conditions. Such lighting will create a tint of light that is either yellow or blue in colour, all over the image, thus resulting in making all the colours in a scene go flat. This is especially a big concern when you handle a commercial project where you want to make sure that your images are consistent in quality. That is why, understanding white balance is very important.

Managing colour tones

So basically, we must ensure that the light sources are not impacting on the colour of the objects in our image. In simple terms, we have to ensure that whites in our image appear as white and not contaminated with a colour cast if we want them to appear neutral in our scene.

Auto white balance: This is the setting that is available in all the cameras. The cameras will automatically detect the colour cast in the scene and constantly adjust the white balance. How does a camera do it? It is something that is based on a complex algorithm. However, to explain it simply, the camera accesses the colour of the brightest object in the scene and assumes it's colour as white. Then it adjusts the colour temperature of the overall scene to ensure that the bright object appears as pure white. Most of the time and in most of the cameras that are available today, the AWB does a pretty good job at calibrating the white balance.

White balance pre-sets: To give you a bit of manual control, cameras also come with white balance pre-sets. Most commonly found pre-sets in today's cameras are

- Day light
- Shade
- Cloudy



Fluorescent
Tungsten
Flash

These pre-sets are designed for common light situations. These pre-sets can be quite useful when auto doesn't get it right.

Manual white balance: As you progress in your photography skills, you will feel the need to take manual control in setting the camera's white balance. This is where manual white balance comes in. Basically, you will use something called a grey card or white card. By taking a picture of the cards in the same light situation as you are about to take your picture, you can ask the camera to analyse the picture of that grey card and tell you which is the best white balance setting to use.

Another method of manually controlling white balance is in post-production. You can use image editing tools and software to set the white balance later.

Auto focus

When you press the shutter button half way down, you will see that the camera starts adjusting the focus of the scene. In most camera models, the focus indicator will be in form of a square or a dot that continues to blink if the focus is not right and stops blinking when the camera has focused properly. Some cameras also give out a beep sound when the camera has finished focusing.

Focus point selection: When you are composing the scene through the view finder, you will see a grid of dots or small squares all over the scene. These dots / squares are called focus points. From your camera, you will be able to select the exact point where you want the camera to focus. This is especially useful when the distance between the subject and the background is large. Selecting a wrong focus point in this scenario will focus on the background resulting in the main subject going blur. Therefore, you can select the exact focus point which is on the subject to ensure that you get a properly focused image.

Centre point focus: In this focus mode, the camera will only focus on whatever is in the centre of the scene. To get best results out of this mode, you need to ensure that the main subject that you are trying to focus is in the centre. When your main subject is not in the centre of the frame, you will need to first focus on the main subject in the centre, press the shutter button halfway and lock in the focus, then move the camera to get your desired composition. While recomposing continue to press the shutter button halfway and then press the shutter button further down to get the picture.

Servo mode / focus tracking mode: In this mode, the camera is in the constant state of focus. This is especially helpful when you are trying to get the picture of moving subjects. As long as hold that shutter button half way down, the camera will continue to focus and will constantly keep changing as it tracks the movement of the subject in the frame. In this mode, if you have the focus beep sound turned on, you will not hear it. Because the camera is continuously focusing and will never actually come to a locking state. It just keeps focusing until you take the picture.





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