

Photoshop and Lightroom for Photographers

Topic 3 – Introduction to Prime Lenses

Learning Outcomes

By the end of this topic you will you will also have a better understanding of prime lenses and be able to identify the pros and cons with this type of lens.

A Definition of Prime Lenses

A prime lens is one that has just one focal length only (in contrast to a zoom lens that covers a wider range of lengths).

Prime lenses come in a wide range of focal lengths from wide angles through to the very longest of tele-photo lenses used by many sports photographers and paparazzi work. While zoom lenses have become increasingly popular and come as the standard kit lens with most DSLRs sold today – prime lenses remain the favourite of many professional photographers.

Maximum Aperture – one of the biggest arguments used by prime lens lovers is the speed that prime lenses are able to offer. For example, in the Canon range the fastest lenses available are all prime lenses (down to f/1.2) where as in the zoom range f/2.8 is as fast as you'll get. This is a big difference in terms of speed.

Quality – traditionally speaking, prime lenses are known for their advanced optics and quality. They generally have less moving parts and so manufacturers are able to concentrate their efforts on adding quality glass and mechanisms to the product.

Other Factors

Price – in general prime lenses are simpler in terms of construction and as a result they can be cheaper to buy. Of course, it's not as simple as this and quality is



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determined by many factors and as a result price varies a lot even in the prime lens range of most manufacturers. Very good prime lenses will be noticeably more expensive. Like a lot of things, you must pay for quality. Optical glass is one of the most expensive things on the market for a working professional in the multimedia or arts industry.

Weight – once again, a simple lens with less moving parts can mean that in many cases prime lenses are smaller and lighter than zooms.

Prime Lenses Reject Lazy Photography

When you have a zoom lens attached to your camera the temptation is to let your zoom do all the work so that you can remain in the one place. This is what is attractive about zooms – however it can also lead to laziness and I've heard a few prime lens users argue that when they have a prime lens attached that it makes them more creative with their framing as they are forced to look more actively for the best shot.

Drawbacks

Weight and Price – while the arguments above on price and weight are fairly convincing – it's also worth considering that you might need to buy two or three prime lenses to cover the same focal range as you could achieve the same spread as could be achieved with a zoom lens.

Flexibility – perhaps the most convincing argument against prime lenses is that they can limit the possibilities of the photographer.

There are some key questions to consider when purchasing, not only prime lenses, but also zoom lenses.



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Questions To Consider

- **What will I use the lens for** (what style of photography)? – If you're into macro you'll probably want a purpose built macro prime lens, if you're into photographing wildlife or sport, then the flexibility of a zoom might be handy)
- **Do I need fast aperture?** – if you shoot a lot in low light and the f/2.8 is not enough – a prime lens will be your best bet, especially if you want to capture sporting events.
- **Do I want to be changing lenses all the time?** – something like three prime lenses means a lot of swapping over of lenses which opens your camera up to the risk of dust which can be a drawback for sure. This is another trade off.
- **How many lenses do I want to carry?** – The answer to this question is entirely dependent on the individual photographer. Will weight an issue? Will you be walking on foot with your gear? Will you have a tripod to also carry?
- **How much is my budget?** – This is the key question, unfortunately, for any photographer. The cost of either prime or zoom options can be restrictive depending upon the quality and number of lenses that you want to have.



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What have we learned today? A Summary

We have learned about the pros and cons to prime lens by comparing them to zoom lenses.

We have also learned about the key questions we need to consider when purchasing a lens, whether it is a prime or zoom lens.

