

Mastering MANUAL MODE

Module 4 ISO

ISO

ISO When to Use it

I already mentioned that I would consider using ISO to increase image exposure as a bit of a last resort. So what are the circumstances that it is acceptable or necessary to use it?

If you're in a scenario that you need to use a small aperture and you also want to use a fast shutter speed - which means that the door is only open for a short length of time - which means again, not much light is getting through, but you're also in a scenario with low lighting. You really have no other option, but to use ISO to increase the exposure level.



Another scenario that you might adjust your ISO for is actually part of an exercise we will do later, so listen carefully. If for example, you wanted to sprinkle some powdered sugar on top of a stack of waffles and you wanted to freeze the movement of the grains of sugar as they sprinkle onto your waffles. So you really don't want to have motion blur at all just sharp grains of sugar. In order to do that, you're probably going to use a medium size aperture to be able to get the waffles and the fingertips and the sugar to appear in focus, but then you're going to need to use quite a fast shutter speed in order to freeze that moment. In this case, it's likely you'll need to adjust the ISO because there's no other option to get the light in. Another reason you might choose to increase your ISO is that you might find that even in a relatively well lit room on a cloudy day, that you're actually not getting enough light into the sensor to use the settings that you'd like to.



WHEN YOU MIGHT USE ISO

You want to:

Freeze a moment = Fast shutter speed AND
To have a large area of focus = Small Aperture
BUT you need more light = Adjust ISO

And maybe it's raining or really cold or even hot outside, so you can't go out to increase the light and you've no other window with stronger light in your environment. Plus maybe the day is getting on a bit and the light will start to decrease even further soon. So the only real option that you're left with in this scenario is to increase your ISO.

Earlier I described how film based ISO ratings usually went up as far as 3,200 as a maximum. Well now with digital cameras, the maximum achievable apertures go radically beyond that point with some high end digital SLR cameras offering ISO ratings in the hundreds of thousands.



With a camera like this, you have quite a bit of scope in terms of being able to bump your ISO up without an unacceptable loss of image quality, but in every camera there is the point that the degradation becomes a lot more evident. So it's good to do some tests with your camera because, depending on the quality and technical emphasis, it will depend on what point really unacceptable image degradation kicks in. What I mean by that is that in one camera you might that you could take a shot at 1600 ISO and it will still look acceptable, but from another camera it could actually look pretty poor. The other thing is that if you're taking shots predominantly for online use, like social media and blogs, for example, you're going to get away with much higher ISO values than you would if you're going to print. Because printing is a much higher resolution, output and poor ISO quality will be much more evident in that scenario.