



The 3 Factors That Determine Exposure

1. ISO setting

All digital cameras contain a micro-chip that is made of millions of light sensitive pixels. The number of individual pixels is measured in millions and can vary from 2 up to 50+ for professional cameras.

The iso setting is a measure of how sensitive this chip is to light. A higher number indicates a higher sensitivity - so less light is required to create the correct exposure.

Despite many advances in technology, all cameras still provide the best possible quality images at their lowest iso setting. Increasing the iso is useful in low light situations, but the downside is that there will be an increase in 'digital noise' which can be visible on large prints as multi coloured 'snow'.

2. Shutter speed

The shutter speed is a measure of how long the light sensitive chip in your camera is exposed to light. It is usually measured in fractions of a second, but can be much longer in low light situations. A short shutter speed (i.e. 1/1000th of a second) is referred to as a fast shutter speed, and a long shutter speed (i.e. 1 second) is sometimes called a slow shutter speed. Photographers will also sometimes describe a long shutter speed as 'dragging the shutter'.

The longer the shutter is open, the more light enters the camera, and the brighter the exposure will be.

3. Aperture

The light passes through the lens on your camera before hitting the light sensitive chip in the back. The aperture is a measure of how wide the hole is through which the light passes.

Apertures are measured in f-stops. Confusingly, a small f-stop number (i.e. 2.8) is a wider/larger 'hole' than a higher f-stop (i.e. f16).

If the aperture is wider, more light enters the camera, and the resulting exposure will be brighter.

	In dark conditions	In bright conditions
ISO setting	Higher ISO setting	Lower ISO setting
Shutter speed	Longer shutter speed	Shorter shutter speed
Aperture	Wider aperture (lower f-stop number)	Smaller aperture (higher f-stop number)