

ND or grad ND ?

I was asked this week whether I had used an ND for some Sunset images during a club outing. As it happens, I had but not for the purpose that would normally be the catalyst for this question.

A 'standard' ND (ie constant power) simply reduces the amount of light entering the lens for any given settings. As such, if your camera was set manually and you made no adjustments, using an ND *would* darken the image.

However, if using, for instance, Aperture priority and not making any alterations to your ISO or Aperture (F number) then your camera would *attempt* to find an appropriate shutter speed for the required exposure. If this was successful then the *image exposure would look the same as without the ND*, but it would have taken more time to do it.

You would not generally be doing either of the above of course due to the limitations of camera settings, these are simply examples to hopefully focus you back to the magic-triangle.

Please refer to our separate ND / slow shutter guide for settings.

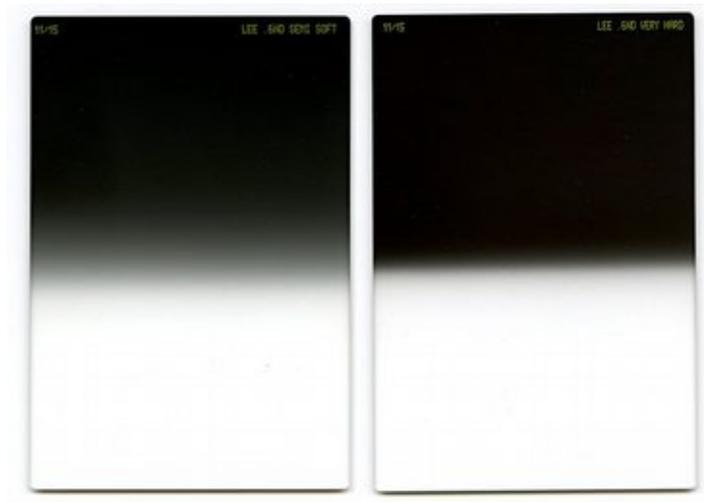
In the case of a sunset and the potential issue of the sun being “too bright” an ND will not offer anything that could not potentially be achieved without one – unless you wish to shoot wide-open – but we will skip that here as it is less likely. You could of course argue that we have already covered it above.

As we can control the exposure of the sun in camera, the issue is more likely that the sun is too bright relative to it's surroundings.

The issue here is one of tonal range – the human eye can see c. 20 STOPS of light whereas a good, relatively modern DSLR can see a little over half that.

There are 2 main options to attempt to capture a vast tonal range, ie from bright Sun to dark beach foreground.

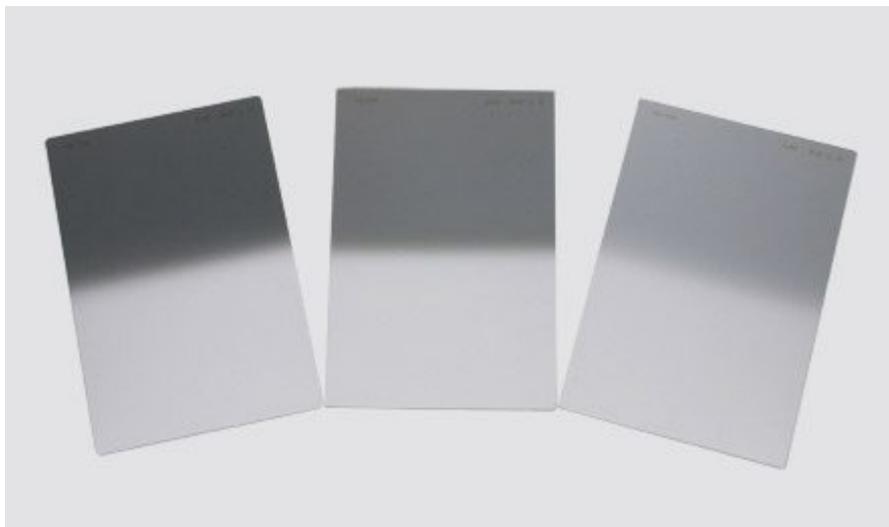
Substitute vast tonal range for High Dynamic Range and you have the first – this means taking (or emulating) images at more than one exposure setting in an attempt to capture the highlights at one end and the shadow details in the other. We already have a destructions sheet for this.



A graduated ND is simply a piece of glass or glass-substitute that we place in front of the lens, generally clear at one end and with the ND strength at the other.

A harsh ND (top right) will simply cut from zero ND to (for instance) ND8 midway across the glass whereas a soft grad will transition from one to the other more smoothly.

When shooting a scene where the sky is brighter than the land the correct way to do this is to take an exposure reading for both areas (which can be done in camera), calculate the difference between them in STOPS and then use the most appropriate grad (in terms of power)



As such, you are balancing the exposure of the sky and land. Personally I would not attempt to completely equalise the two as the resulting image would be flat - it is just a matter of reducing the differential to within the 10-11 STOPS that the camera can cope with.