High Dynamic Range Photography

In this lesson, we'll be taking a look at
High Dynamic Range Photography.

If you see a magnifying glass at the bottom right corner of a photo, click on that photo to make it full screen.

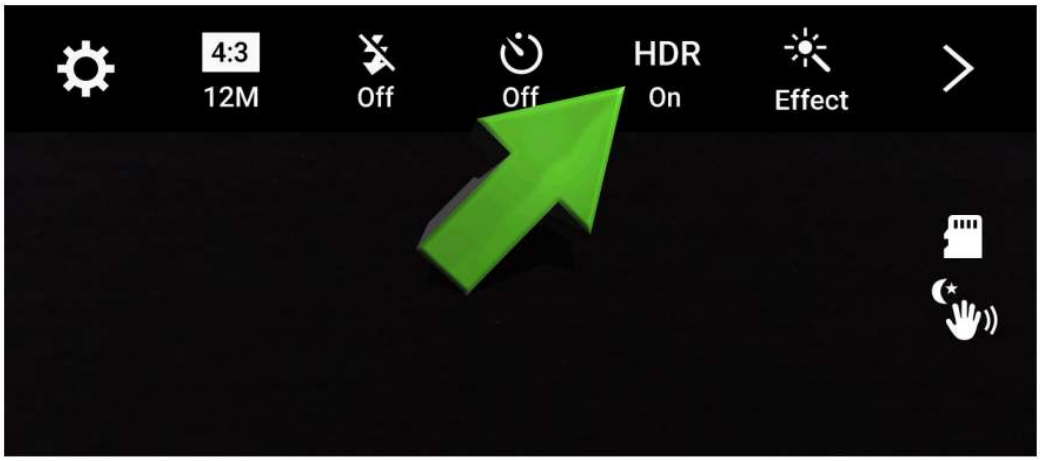
High Dynamic Range Photography

High dynamic range photography is a process whereby multiple photographs are combined - or processed, to create a single photograph that contains a dynamic color and lighting range that is generally unobtainable with a single photograph.

This photograph has been taken using HDR.

High Dynamic Range Photography

All modern phone cameras support HDR photography. It may be set to auto - where the camera decides whether to use HDR, or it may allow you to set HDR as a default setting.



The option to take photos in HDR mode is generally very apparent in most camera software - here, we have used the Samsung camera software to turn HDR on.

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Below - two almost identical shots. On the left, no HDR. On the right, HDR.

Note that the image on the right (HDR) contains more of a color, contrast and exposure range.

These are unretouched photos taken on an iPhone. On the left, the original image. Note the washed out areas behind the dog. On the right is the HDR version of the same photograph. Note the area behind the dog in this shot and compare to the image on the left.

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Because the HDR photo is made up of two or images, not only does it contain a better color range, but also less noise - and quite often, less blur. This is because the two images increase the amount of available light - but are also taken at a quicker shutter speed - reducing blur - so that when the images are combined (automatically), the result is not overexposed.

On the left, the final HDR image. The other three images are used by the camera to construct the final HDR image. It underexposes and overexposes a series of shots to ensure it contains information from both highlights and shadows in the final photo.

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Because HDR photos contain more color information, they are also easier to edit - you have more color to work with.

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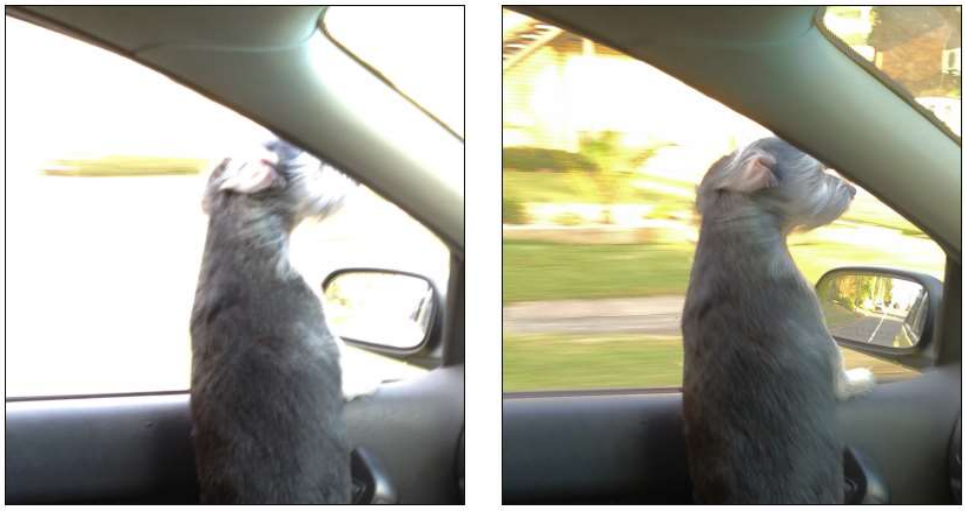
HDR works by the camera taking several shots in quick succession, using different exposures for each. The camera combines these images, allowing for darker and lighter areas that might normally be over or underexposed to be combined in the one photograph.



In these shots, look at the background. On the right, the HDR version gives a much better result - the original version is almost completely washed out.

High Dynamic Range Photography

HDR does not always get you a better shot. This is why some software will allow you to save an original, and a HDR version of a photo, if you wish. You can then decide which is better.

Because, in HDR mode, the camera takes several shots in quick succession, you increase the chance of blur, or double image. HDR does not work that well where the subject or camera is moving.

High Dynamic Range Photography

Non HDR.

HDR.

High Dynamic Range Photography

Non HDR.

HDR.

High Dynamic Range Photography

Non HDR - close-up.

HDR - close-up.

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HDR Mode will work when taking any photo - with or without the flash. If you are unsure, leave HDR mode in your camera software to auto, and let the camera decide.

They can be especially useful in photos where not a lot of light is available, or there is a lot of contrast - say sunshine, and shadow together.

High Dynamic Range Photography

You've now completed this lesson.

In this lesson, we took a look at **High Dynamic Range Photography.**