

ND Filters: Everything You Need to Know

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ND filters have been a popular topic lately, so [Action Photo School](#) decided to share how we use them and what challenges we face while using them. Using ND filters for action sports sounds like a stupid idea.. doesn't it? Why would you stop the light from hitting your sensor, when you are trying to freeze motion and get the highest shutter speed possible?

It isn't a great idea, until you introduce a flash in the scene! Generally speaking ND filters have been popular among flash fanatics trying to overpower the sun. We've all seen these edgy great looking images, captured midday with a lot of flash power.



So now you're thinking, "why not just stop down the lens?" and the answer is for shallow depth of field. Shallow depth of field is often an image characteristic of true professionals. It also helps you keep the subject separate from the surroundings.

You can always stop down the lens to f16, and get great images with a powerful enough flash, but you can't do it so there is a pleasing bokeh behind your subject in bright midday light. That's where ND filters come into play. You thread the filter on the front of the lens to bring the ambient exposure down. From our experience the best results are achieved when you underexpose the ambient light by 1-stop, but this is mostly a matter of taste.

Depending on the time of the day and the lighting situation you may need ND filter with a different light blocking power. They come in different varieties, ND2, ND4, ND8..ND512. The different ND filters are quantified by their optical density or equivalently their f-Stop reduction. ND2 = 1 stop of light reduction, ND4 = 2 stops, ND8 = 3 and so on. So what that means is that if you have an f/1.2 lens and you want to shoot midday portraits at f/1.2, you will have to use an ND filter with a high number or stack a couple of the smaller number filters on top of each other.

There are few things to keep in mind when choosing and using ND filters. First of all, by putting a dark filter on your lens, you will darken your viewfinder too, and if you stack a few of them together it could get really dark. Some cameras like the [5D mark II](#) are going to have a harder time focusing with ND filters on the lens.



Second, make sure you don't buy the cheapest EBay filters because they will downgrade the quality of your images. Why spend a ton of money for a nice camera and fast lens if you are going to put a piece of plastic in front of it all?

You can also find a single ND filter that has a rotatable ring allowing you to choose the density of the filter. These however, are pretty pricy, but they are very convenient.

When used with the built in TTL meter, the camera doesn't need any adjustments. The camera will measure through the lens and give you the correct exposure. If you are using a light meter you will have to take in to consideration the amount of light that the filter blocks and add it to your exposure value.

You usually don't want too shallow of a depth of field when shooting action sports, but if you get the focus right and combine it with shallow DOF, flash overpowering the sun, and an underexposed background you will get some "different" and pretty interesting results!

To conclude, we feel that ND Filters are not a must-have for action sports, but if you are looking for unique images with flash and shallow DOF, they are great to have. When it

comes to portraits it is a matter of choice and style so give them a shot and see for yourself if they work!

Authors Connor Walberg and Daniel Milchev are both published professional action photographers, and together run [Action Photo School](#). A website dedicated to teaching all aspects of action photography. Whether you're an established action photographer, or just

Read more: <http://www.digital-photography-school.com/nd-filters-everything-you-need-to-know#ixzz1c7NFPdv6>