

Filter Presentation :

Polarizer

- A) increase contrast such as fluffy white clouds
- B) reduces glare on water and glare of tree leaves
- C) reduces exposure by approximately 1 1/3f stops.
- D) turn filter till you see reduced glare or increased cloud contrast
- E) best effect is if sun is 90 degrees left or right of the direction of taking photo.
- F) purchase filter diameter for the widest lens filter diameter of your lenses (eg: 82mm - then use step up rings for all your smaller diameter lenses.)

ND Filters:

ND filters or neutral density filters are like sunglasses for your camera.

1. Why use Nd filters? The camera originally was designed to “Freeze a moment in time.” As we can lengthen our exposure with ND filters we can stretch out that moment in time. Waves, waterfalls, clouds get a perception of motion and smoothing out any waves or water in motion. It gives a very different view point as our human eye can only perceive a split second of time. With the ND filter we can slow shutter speeds and thereby lengthen this moment in time. The photograph then changes from a reality to a creative fantasy. The length of exposure can vary from 1/2 a second to over 4 minutes. By so doing, clouds get elongated in their movement through the sky. Waterfalls get a perception of smooth flowing water. ND filters are also nice in travel photos as you can remove or ghost out people walking through a scene you are photographing.

2. Circular ND filters are available in solid and variable. Most of the solid ones are available in 3f stops, 6f stops, or 10f stops. Variable filters are usually 8-11f stops depending on the manufacture or brand. The Pros of these filters are that they are light and easy to use. The Cons are that variable filters, at the maximum darkness or density, begin getting light and dark bars across the image. This becomes more prominent when used with lenses 20mm or wider. The wider the lenses the worse the bars are.

3. STC is a company that began manufacturing filters made to fit in front of the camera sensor. These are small thin filters made to fit in between the lens and the sensor. For DSLRs the mirror must first be locked in the up position. For mirrorless cameras this is much easier as the camera and lens mount area are larger and it's easier to access. These filters come with a small tool to insert and remove them. I haven't used them yet. The Pros would be that one filter size fits all your lenses. Cons would be you can't put them on in dusty or moist conditions, also it's too easy to damage the sensor.

Large Square ND Filters

1. Manufacturers are, Nicci, Lee, K&F, and Haida. These filters come in 100 or 150mm square. You need a filter holder to attach these to the front of the lens. Haida holder will also attach their brand of polarizer into the holder and can be rotated by a small wheel. Lee has a square polarizer and you rotate the whole filter holder. I have the Lee and Audrey has the K& F system. I find with the narrow pro polarizers I can attach the filter first and then the filter holder after. Once I get the brand adapter ring screwed onto the lens I can now turn and adjust the polarizer then attach the holder.

Steps to using the filters in a shooting situation.

1. Tripod mount camera and set up composition
2. Focus camera either manually or with back button focus

3. Turn all settings to manual including ISO. Turn off auto ISO as this will jump up your ISO and ruin the effect. Set ISO to your lowest setting for your camera (60 or 100 for most models)

4. Take an exposure reading after camera is focused. You're only two exposure variables will be your f stop and shutter speed.

- remember (you cannot get the camera to focus after ND filters are attached).

Filters typically come in 3 stop, 6 stop, 10 stop 15 stop. Lee filters has 6,10, 15 stop. They call theirs, little stopper, big stopper, super stopper. I typically use the 6 & 10 stopper as well as a gradient filter of 3 stops to darken the sky. (Gradient filters come in hard which is a very definitive line to soft which has a less definitive line. I usually use the soft one.

- Download an ND filter calculator app to your phone. (Love the Lee filter app)

- Set camera to a delay timer setting of 2-3 seconds or use a remote shutter

Attach ND filter in holder slot closest to camera lens. If adding a (Grad filter this goes in the outer slot away from the lens.

- Determine or guess your length of exposure.
- Waterfalls usually are 1/2 to 15 seconds.
- Rapids or small waterfalls 10-30 seconds.
- Ocean waves 10-30 seconds for foamy lines in receding waves
- Smooth lakes 30 seconds to 1 minute or so.
- Smooth milky oceans 1-5 minutes.
- Take your exposure and check if you should lengthen or shorten exposure. It's a bit of a guessing game.
- Practice practice practice and have fun playing with the settings!