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May 2025

Photoshop Tip.

Non-Destructive Editing in Photoshop

Where possible, you should always edit your photos non-destructively. This means that you can edit your image as much as you like, like when you're adding someone into an image, but can always undo any change you make.

Programs like Lightroom and Google Photos are non-destructive editors. Photoshop isn't.

- The way to do non-destructive editing in Photoshop is to use layers. Layers are like a series of transparent sheets stacked on top of your image, and you edit each one separately without touching the original picture.

Using Layers

Ideally, you should make every single edit---or group of similar edits---on a separate layer. This enables you to adjust the edits later, make them more or less visible, or remove them entirely by hiding or deleting the layer.

Things like text, or objects pasted from another image, will go on their own layer automatically. If you're using something like the paint brush tool you'll need to create a new layer manually (click the **New Layer** button in the Layers panel to do that).

For a couple of other common tools you need a few tricks to use them with layers:

- **Spot Healing Brush:** To use the Spot Healing Brush you must manually create a new layer. Pick your tool from the toolbar and make sure you've ticked **Sample All Layers** in the options bar. Now make your edits on the new empty layer.
- **Healing Brush or Clone Stamp:** To use the healing brush or clone stamp on their own layer, create a new layer manually. Pick the tool, and in the options bar at the top of the screen set **Sample** to **Current & Below**. Make your edits in the empty layer.

Dodge and burn with layers: The dodge and burn tools are used to add local contrast to parts of your image. To use them on their own layer go to **Layer > New > Layer**, then in the dialog box that opens set **Mode** to **Overlay**. Tick the box labeled **Fill with Overlay-neutral color**. Now use dodge and burn on that layer.

Links of Interest:

Viewbug - http://www.viewbug.com/
ePHOTOzine - http://www.ephotozine.com/
Federation of Camera Clubs [NSW] - http://www.photographynsw.org.au/
Australian Photographic Society - http://www.a-p-s.org.au/
Gurushots - https://gurushots.com/
Free Lessons with Serge Ramelli - http://photoserge.com/free-lessons/all

Viewfinder cover photo taken by.

Martin Hesse

Dive into water photography.

From mighty waves to tiny streams, explore how photographers who capture water photos need to be as flexible and fluid as their liquid subject.

By Aubry Healy, Giancarlo Beroldo

What is water photography?

Water photography refers to any photo that emphasises water as the main visual element. That can include landscape photography of an ocean, long exposure photos of silky waterfalls and even shots of particularly photogenic puddles. The goal of water photography is to capture the way water moves and how it interacts with light.

"It's about showing the movement of water," says photographer Aubry Healy. "You always want to see something moving. Taking photos of water is speeding it up or slowing it down. It's stopping time."

Here are a few things you'll need to know to capture great photos of raging rivers, falling raindrops and more.

How to shoot water.

Water has no single shape, speed or look. Because it's a substance that can shift to fill any space, it's not only about discovering different angles to shoot it from. It's also about focusing on the specific characteristics of water in the moment. To shoot water, a photographer needs to be malleable, just like their subject matter.

Research location, lighting and weather conditions to prepare for different water photography subjects. Landscape photographers who snap pictures of a winding river at sunrise need different gear than photographers who capture water droplets flying from the surf when a wave crests. If you need to get into the water to get the shot you want, this research will ensure that you bring along the right tools.

Lighting at water photoshoots.

Direct sunlight can pose a problem for photographers and that's especially true if you're taking pictures of water. Overhead sunlight may reflect off the water and cause glare. If you want to snap a sun-drenched ocean vista, skip midday and plan to shoot during sunrise or sunset, known as the golden hour. The soft lighting of golden hour illuminates a scene without causing any issues with reflected light. If you want to shoot a popular beach at golden hour, consider going at dawn.

But even with planning and research, you can'tcontrol lighting, weather or water conditions. Be prepared to change plans on the fly when the environment doesn't cooperate. "You have to enjoy swimming, going out and being in the water," says photographer Giancarlo Beroldo. "There are so many days when you go out and get skunked." Each day that doesn't turn out right still offers an experience you can build on next time.

Set up your camera for water photography.

Water can move lightning fast or very slowly. The right settings for water photography will change depending on whether you're photographing the ocean on a calm day or a cascading waterfall surrounded by countless water drops. Before you take pictures of water, decide what you want the final product to look like.

Landscape photos of water usually require a smaller aperture to get the deep depth of field that makes every feature in the photo, from a nearby rock to a distant cloud, look crisp and well defined.

For crystal-clear pictures of moving subjects like waves, waterskiers or WaveRunners, you need to freeze

motion. A fast shutter speed helps you to get a good shot of that surfer just exiting the tube. With the shutter open for less time, you need your camera sensor to be more sensitive to the light it lets in. So try using a higher ISO to get a better exposure with fast shutter speed shots.

Gear up for getting wet.

If you want to take pictures of water, you (and your gear) are almost certainly going to get wet. It's important to have the right equipment to protect both you and your camera.

Camera housing

If you plan to take your camera in the water, make sure to use waterproof housing. A good housing not only protects your camera from splashes and spills, but it's also essential for underwater photography. Once your camera is protected from water, you can go nearly anywhere with it.

The type of housing you use depends on what kind of lens you want to shoot with. "Are you going to shoot with a prime lens or are you going to bring something that can zoom?" says Beroldo. "It's more expensive to get a housing for a zoom."

Tripod

Since there's less light at sunrise or sunset, pictures of ocean vistas during these times usually require longer exposures. A tripod keeps your camera steady while you take long exposure shots, as any movement can lead to out-of-focus images. Stability is especially important in these shots when your shutter is open for longer durations. Even the touch of a finger on the camera body can create too much motion — but putting the shutter on delay or using a remote shutter release to prevent camera shake can help. "I always do a two-second timer when I'm doing a long exposure," says Healy.

ND filter or polarising filter

Even if you avoid shooting at midday, sometimes glare on the surface of water is inevitable. A neutral density filter (also known as an ND filter) can help to diminish increased light on the water. An ND filter reduces the intensity of light while still preserving colour — an essential feature for any photographer who shoots outdoors. A polarising filter or circular polariser, works in a similar way, but focuses on removing glare.

Muck boots

Sometimes getting the right shot requires you to venture into the cold surf of the ocean at high tide or to wade into the algae-filled shallows of a wide and wandering river. Waterproof boots help you stay dry so you can concentrate on taking photos instead of being distracted by cold feet.

Fins

Some water photography requires you to dive into the deep end, literally — and swim with a camera in hand. When that happens, it's only your legs that keep you afloat. Diving fins can help you to keep your head above water when your hands are occupied.

"When you're out in the water, you're 100% reliant on what your lower body's doing," says Beroldo, who often finds himself holding his camera with two hands while staying afloat with his fin-clad feet. Seek out fins that attach to your leg with a tether line. That way, if one comes off, you won't lose it forever.

Protective gear

If you want to photograph people hanging ten or catching waves, you may have to swim out among the surfers. With your eyes on a subject, you might not see another rider behind you. That's why you should wear a helmet in case a stray surfboard comes your way.

When you shoot in a body of water where there may be surfers, swimmers, fishers or boats, it's also important to stay visible. Reflective clothing or gear can help you to get noticed. "Not everything on your

body should be dark colours like blue or black," Beroldo explains, as these colours can blend into the water. "My camera housings are red and yellow."

Water, water everywhere.

The potential subject matter of water photography is as vast as the ocean. Start by getting your feet wet with different types of water shots. Try shooting close-up macro photography of oil and water, a seascape, river rapids or even a slow-moving creek.

Once you've captured your water photos, keep them organised and edit them to perfection in Adobe Photoshop Lightroom. Use editing tools to adjust hue, change saturation, apply filter-like Lightroom presets and more.

No matter how your water shots evolve, Lightroom can help you to ride whatever creative current you choose to follow.

https://www.adobe.com/au/creativecloud/photography/discover/water-photography.html?gclid=EAIaIQobChMI4K769-_18QIVm4NLBR20VAuGEAAYASAAEgKIbvD_BwE&ef_id=EAIaIQobChMI4K769-_18QIVm4NLBR20VAuGEAAYASAAEgKIbvD_BwE:G:s&s_kwcid=AL!3085!3!476512645597!b!!g!!!11522264563!116002145441

How to Photograph Stars: Camera Settings and Techniques

Learn how to capture beautiful images of the night sky

By

Christian Hoiberg

Photographing stars and the night sky is completely different than photographing during regular daylight or even the Golden Hour. Most of the techniques and guidelines you've learned to follow for "standard" landscape photography don't apply for nighttime photography, which makes it a hard genre to enter when you're new to photography – even more experienced daytime photographers can feel out of place during the night. However, when you're first able to capture images of the stars, the chances are that you'll get hooked!

After reading this article, you'll have a much greater understanding of how you can go out and capture beautiful images of the night sky. You'll be introduced to the ideal camera settings, recommended camera gear, how to focus, compositional guidelines and a few secrets on how you can photograph stars like a pro.

Best Camera Settings to Photograph Stars

If you've followed this, and other, websites and regularly read their content, you might have picked up that the optimal settings for landscape photography involve the lowest ISO possible and an aperture between f/7.1 and f/13 (though this may vary depending on your subject). For night photography, however, these settings will either result in a black image or require a shutter speed of hours.

Since it's most likely completely dark when photographing the night sky, it takes a longer period of time for the correct amount of light to reach the camera's sensor in order to capture a well-exposed photograph. This means that you either need to use a large aperture, high ISO or slow shutter speed – or a combination of the three.

Optimal Aperture

To capture as many details as possible in the sky, the best aperture for night photography is as open as possible. This means that if your maximum aperture is f/4 – you should use this. If it's f/2.8 – that's even better!

Using an open aperture means that there's more light getting through the lens and reaching the sensor, al-

lowing you to use a slower shutter speed or lower ISO than you otherwise would have needed. The amount of details you're able to capture with an aperture such as f/2.8 is incredible and once you correctly capture an image of the night sky – you'll be blown away.

You can use apertures such as f/8 when photographing the night sky but this requires a much longer shutter speed, which results in what's known as star trails (I'll come back to this later in the article).

Optimal ISO

During daytime landscape photography the ideal ISO is always the lowest number possible. A higher ISO introduces a significant amount of noise to the image which eventually has the power to make an image "useless", which is why we always strive to keep it as low as possible.

This doesn't quite work for night photography. Since there's a lack of light, we need to increase the shutter speed more than what you might feel comfortable with. Depending on how dark the night is, this typically is somewhere between ISO1600 and ISO3200, but on particularly dark nights, you might find yourself using an ISO above 6000.

Optimal Shutter Speed

While the shutter speed is a little more flexible, you need to be aware of the "consequences" when using an either too short or too long exposure time.

When we're talking about short and long exposures in this context, a short exposure is considered 10 seconds or less while a long exposure is considered to be more than 30 seconds.

Using a short exposure means that you need to increase the ISO and introduce more noise than necessary. Despite the stars being sharp and not having any visible motion, entry-level cameras will have a hard time handling this amount of noise and you'll soon see that it becomes too distracting.

On the opposite side, a shutter speed above 30 seconds leads to the stars beginning to be slightly blurry. Due to the rotation of the earth, it doesn't take much more than 30 seconds before you start noticing a small amount of motion in the stars. For most lenses, 30 to 45 seconds will be ok but even this is pushing the limit if you want razor-sharp images. Ideally, the shutter speed should be somewhere around 15-30 seconds to get the best results. That being said, it does depend on the lens you're using. The narrower focal length you're using, the quicker the shutter speed needs to be.

A simple method of calculating the maximal shutter speed you can use before introducing star trails is by using the 500 rule: Divide 500 by the focal length of your lens. I.e. the maximum shutter speed for a 14mm lens is 500/14=35,7 and for a 20mm lens it's 500/20=25.

Equipment to Photograph Stars

To be quite honest, there isn't any equipment that you need only for night time photography. The required equipment for photographing stars is more or less the same as what I recommend using for landscape photography in general.

A Tripod

Since you're capturing images with a shutter speed of multiple seconds, you need to use a tripod in order to maintain sharpness. You're simply not able to hold the camera completely still for 15 seconds without any movement. Using a tripod lets you use a shutter speed of minutes, or even hours, without having to worry about camera shake and blurry images.

A Remote Shutter

Using a remote shutter isn't essential when photographing stars but I recommend having one as it might come in handy. If you choose to use an exposure of more than 30 seconds, you have to use Bulb mode and in that case, you may depend on a remote shutter. This doesn't have to be anything expensive; a simple remote shutter will do the job.

Focusing in the Dark

Focusing is what many novice photographers find to be the most challenging about night photography. The lens's autofocus struggles and it's likely that you've ended up with more than one completely blurry image and perhaps even given up since you can't get an in-focus image.

Luckily, it's not as hard to focus in the dark as you might fear. The easiest way of getting a focused image at night is to switch your camera's focus mode to manual and twist the focus ring to infinity. Take a test shot and, if needed, fine tune the focus until it's correct. It might be a good idea to mark this spot by using a piece of tape or use a marker and draw a line – this makes it easy for you to find the sharpest focus again at any time.

The lights from the distant towns were easy to use as focal points

The second option is to look for any distant light sources within your frame. Use Live View to zoom in on this spot and twist the focus ring until the light seems to be at its sharpest. Again, take a test shot to see if you need further refining.

Working with Light Pollution

Those of you who live in large cities are most likely not used to looking up at the sky and seeing millions of stars. In areas with dense population, the light pollution is significant which reduces our visibility of the crisp night sky – instead, there's an orange haze, which is far less photogenic.

In order to capture a crisp and detailed night sky, you need to get as far away from light pollution as possible. Even just getting to an open field outside the town is better than staying in the middle of the city center.

There are two ways to work around the light pollution and combining the two techniques can result in impressive images even close to cities.

1. First of all, you need to manually adjust the White Balance. Set it to Kelvin Mode and use a low Kelvin such as 3200K – take a test shot to see if it's too blue, still too orange or acceptable – and adjust accordingly.

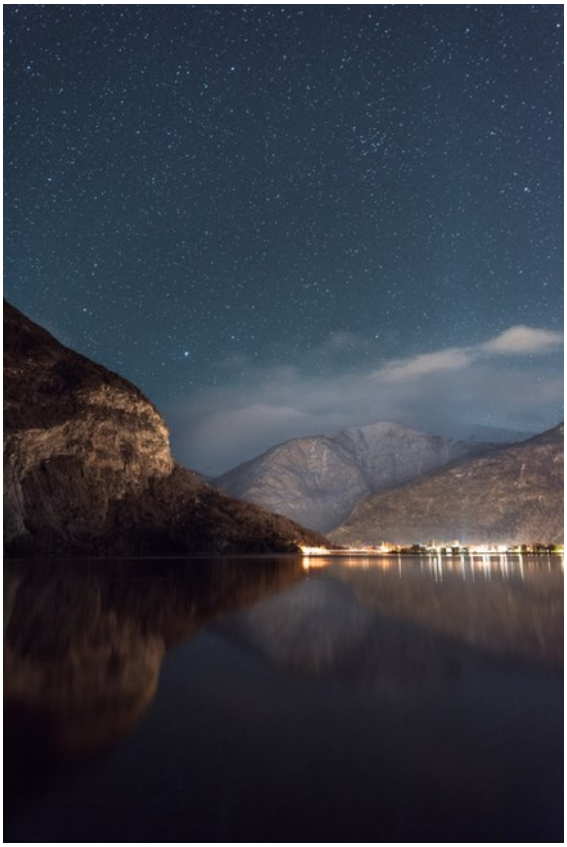
There are accessories available that help reduce or even remove the light pollution from your image. The NiSi Natural Night Filter is one of these. Place the filter in front of the lens and you see that it effectively reduces the dominant light pollution and brings back details in the sky.

Compositional Tips

The most common mistake I see amongst beginning photographers who go out to shoot the night sky is that they become so fascinated by the stars that they forget about the composition. A sky full of stars is beautiful but the image still needs more than just a sky over a random, unplanned subject.

Treat the image just as you would if you were photographing during daytime; analyze the scene, set up a composition and aim to make the image easy to view for the viewer. Try this: look at some of your favorite images captured during the night. Do they have other elements than the sky? How much of the frame does the sky fill? Most likely, the sky is just a part of the image. There's still a foreground and lines that lead to the main subject – the sky is just part of what makes the image that beautiful.

Photographing Star Trails



When talking about the shutter speed, I briefly mentioned something called star trails. This is an effect when you see the actual movement of the stars (due to the earth's rotation) as lines dragged across the sky but we'll come back to this further on in the article.

Sometimes this is an effect you wish to achieve and you don't want a crisp sky. To photograph the star trails you need to use a slower shutter speed. How slow depends on how long you want the star trails to be but typically you need at least a 5-10 minutes shutter speed to begin making the star trails appealing. In fact, you can use a shutter speed of one or two hours to capture even more of the trails!

In order to achieve longer exposures than 15-25 seconds during the night, you can lower the exposure and use a narrower aperture. For example, you can aim for an ISO of 400 and aperture of f/8 – adjust the shutter speed accordingly and you'll most likely have a nice star trail when you're done.

Processing Night Photography

Another tricky part of photographing stars is that the foreground is often much darker than the sky. Normally, a Graduated ND Filter would be the solution but in this case, that would mean using a longer exposure or increasing the ISO a significant amount. In other words, it's not ideal.

My preferred workaround for this requires some knowledge of Photoshop but its idea is rather simple: Capture one image where you expose for the sky and another where you increase the shutter speed and expose for the foreground. You should now have one image where the foreground is brighter and one where the sky is crisp and well-exposed.

Take the two exposures into Photoshop and by using Layers, blend them together. You're now left with an image that has both a well-exposed foreground and sky. It might sound a little tricky but after trying this a couple times you'll have the hang of it.

Certain top-level cameras have a very good Dynamic Range which means that instead of blending the two images, you can capture only one and increase the shadows/darks in Lightroom or a RAW editor – still, for the optimal quality, it's better to capture two separate shots.

https://www.capturelandscapes.com/how-to-photograph-stars/

Pet photography: Best tips to take the best photos of your four legged-friend

Pictures are a great way of preserving beautiful memories. So how can you get the best pictures of your dog? Follow these simple rules and you'll be the best photographer your dog can get!

Dogs are both the most popular pets and our most loyal companions. For this reason alone, they should always have a permanent place in our photo memories. Do you want to know how to take the best photos of your four-legged friend? Here are a few tips & tricks.

Choose the right camera

Since camera technology is improving rapidly, it's easier than ever to catch a great moment and get a good

picture. Thanks to modern digital cameras with multiple programs, various features, and digital technology, it is possible to shoot high-quality photos of your pup – and as many as you like!
There are so many different types of cameras, all with different quality levels. The so-called Consumer Camera is a basic compact, small–format camera mainly used by hobby photographers. The Prosumer Camera is closely connected to the previous model, but has a slightly higher quality, especially in regard to settings & functions. The semi-professional SLR cameras, as well as the pro-SLR cameras, have the best features, offer the highest photo quality and various camera settings, as well as interchangeable lenses. So, if you want to take the best photos of your pet, using professional equipment for a high-quality result, you should definitely use an SLR camera.

Creating the best perspectives

Animal photos are most effective if they create an intimate connection between the topic and the viewer. The best way to do this is to take your photo at your pet's eye level. This way, your photo can create the illusion of sharing a moment inside the world of your pet, rather than from the outside looking in. Shooting a photo below your pet's eye level also makes beautiful animal portraits.
Pictures taken from above – also called bird's eye view – often makes the animal look small and helpless. The head appears larger than normal and, all in all, the proportion of the body looks a bit funny. Therefore, simply go down on your knees or place yourself in the grass to get a great shot … It's definitely worth it!

Equipment and settings

How to choose the right equipment? Here are a few tips:

- It is very important that you use a fast shutter speed. This will let you capture the moment before it escapes you – suitable for a pet in movement.
- For pictures in motion, the camera should have a fast auto focus. When you want to take a picture of your pet, you have to consider the focal length as well.
- A large focal length will contribute to camera shake and unless you have in-camera image stabilization, you should consider your shutter speed depending on the focal length. For longer focal lengths, you will probably need faster shutter speeds. The best would be to keep the focal length between 80 mm and 200 mm.
- If the focal length is longer, a tripod should be used, as it is difficult to keep the camera completely still for several seconds. You can also place your camera on the ground or on a table.
- If you want to take a picture of your four-legged while running or playing, you should use a really fast shutter speed of at least 1/500 sec, or even better 1/1000 sec. Changing the ISO setting on your camera changes the sensitivity to light of the image sensor inside of it. As a general rule, you should choose the lowest ISO possible for smooth and grain-free shots. when you increase the ISO you'll notice that the 'noise' or 'grain' in your shots also begins to increase.

Last but not least, if your surroundings are a bit darker, it's better to experiment with the shutter speed.

Choose the perfect lighting for your photos

Paying more attention to light is perhaps the single most important step you can take to improve your photography, and it is highly important when it comes to wildlife photo shootings. You should, therefore, always pay attention to the weather, the time of the day, the position of the sun and other reflections. The harsh rays of the sun can work against your photos, especially when coupled with the reflection of water, sand or snow. In such circumstances, your photos might come out looking less than perfect—contrasts

might be too harsh, colors might appear washed-out and overall, your pictures might seem overexposed. As a general rule you should never take a photo against the light, but always with the light – with the sun in the back.
The best light conditions in the summer are early morning or late evening – shortly after sunrise or just before sunset. In the spring and fall, when the sun doesn't climb very high in the sky, you'll find good light during more of the day. Of course, it still depends on the weather. Winter also offers a beautiful time of the year for photography, particularly landscapes, portraits and wildlife. However, be aware of snow! While it looks beautiful, crisp, and white to the human eye, your camera doesn't always see it in the same way. It often happens that snow in a photograph can have a blue tint to it or look grayed out.

Am I allowed to photograph my dog with a flash?

In the era of Instagram & Co, we want to share the beauty of our pets with the world. Truth is: a good flash will make your pictures more clear. But camera flashes also have a big disadvantage: many people are sensitive to the unnatural stimulation of nerves and flashes can also be perceived as painful. Dogs and cats have similar reactions to flashes.
Avoid using too much flash when photographing your pet, since their eyes are even more light-sensitive than human eyes.
A great tip for getting good pictures with less use of the flash is to find a very bright spot for your photo session. Keep in mind the consequences of using the flash for your dog:

- stress
- agitated behavior

raised risk of an epileptic accident

The best tips on how to make your dog love the camera

Turn your dog into a photography star with these 5 tips:

- Equip yourself with lots of patience: Give your dog time to get used to the new setting. He's not human and cannot understand in words what you intend to do.
- Get help: Get a friend who can distract your dog, since dogs react well to distractions.
- Reward your dog: Doggie snacks are a great way to reward your furry friend for his good behavior. They will keep your dog's attention and help him to stand still longer.
- Be a good observer: Just like humans, all dogs are different. Some dogs are more relaxed, while others simply can't stand still. Treat your dog with patience and act according to his own type of behavior.

Don't forget to have fun: create a fun environment for your dog, where he also feel comfortable and entertained. Should your dog feel agitated, you will notice this in the pictures as well.

https://tractive.com/blog/en/good-to-know/how-to-take-the-best-photos-of-your-pet

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Understanding Lens Filters

by Jonathan Ives

Have you ever been out photographing when another photographer turns up and starts screwing random filters onto their lenses, or slipping semi-transparent squares in front? UV filters, polarising filters, neutral-density filters, graduated ND filters... What do all these filters do? How do you use them? And most frustratingly of all, "How come my photos don't look like that?"

The ability to confidently and successfully utilise filters is definitely a skill worth having. Filters allow the photographer to overcome limitations in the photographic process and to capture creative and beautiful effects in a photograph, such as the silky appearance of a flowing waterfall or the beauty of the coral just beneath the glare of the waves. Progressing by order of (in my opinion) most important to least, I hope this tutorial will help you understand the different types of filters out there, what they do and how to use them to get professional looking photos.

What are Filters?:

Filters are mostly made of high quality glass (or resin) and when attached to the front of a lens, are used to

block (filter) certain colours or types of light coming into the camera. Some filters (eg ND filters) are designed to reduce the overall light intensity coming into the camera. Filters in general have lost a bit of popularity in our age of digital photography because many believe the effects can just be added in post-processing through editing software. While this is sometimes true (Adobe Lightroom for example allows you to put a 'graduated' filter over your images which is VERY handy!) many effects, such as that created by a polarising filter (see below), simply can't be replicated digitally. Besides, there is always a limit to the amount of digital manipulation possible before image quality is severely affected anyway.

Most filters are available in circular form and screw directly onto your lens. The size required depends on the diameter of the lens. Each lens you own will have its filter thread diameter marked in millimetres near the front element.

An alternative filter design is known as the 'system filter' whereby you purchase an entire system from the same manufacturer. The filter plates are usually square and can be changed by sliding them in and out of the holder in front of your lens. This is a necessary design for graduated filters (see below), but for the rest, the design you choose is up to you.

UV Filters:

Personally, I recommend everyone put a UV filter on all their lens AND keep it there as an almost permanent fixture. UV filters are basically just clear glass, which traditionally helped lessen the amount of UV light hitting film. Humans can't see UV light, but film was sensitive to it, resulting in unexpected blue tints. Today though, digital sensors are not sensitive to UV, so there is no real visual benefit from having a UV filter attached to your lens. So why have one?

Only weeks ago I was swapping my macro lens for a wider angle. I rested the macro lens 'safely' on the table, only for it to be bumped moments later by a family member and tumble spectacularly to the floor, landing 'face first' on the ground. I looked in dismay at the fragments of broken glass surrounding it. My lens, however, was completely intact. The (MUCH) cheaper and easily replaceable UV filter had saved the day - as it has for countless other people. In short: UV filters protect your lens! Anyone who shoots outside the safety of a clean, calm studio (which, let's face it, is pretty much everyone) should have one fixed to the front of every lens. It keeps dust, salt spray, rain, greasy fingers and stray branches off the expensive front glass of the lens. Lenses have very delicate, thin coatings on their front elements designed to reduce reflections etc, and not only is it way too easy to scratch these compared to the more durable glass of a filter, but it's also a lot easier to wipe marks from a filter. I personally always feel more secure in the knowledge that the stray speck of sand I just accidentally scraped across the front of my lens didn't actually scratch the lens at all, only my replaceable UV filter.

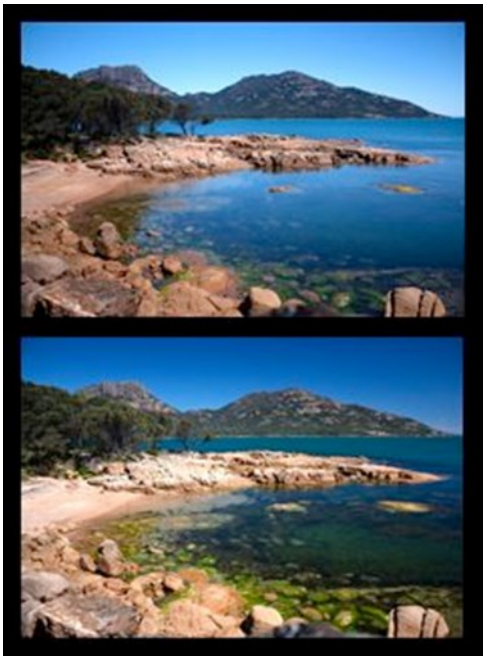
A couple of things to note, though. Firstly, you do get what you pay for. Some of the very cheap UV filters (e.g online for a couple of $s) do reduce image quality a little in terms of sharpness. Every extra piece of glass that light has to pass through may alter image quality, particularly if the glass is a little rough, not perfectly flat or not 'optically clear'. In my opinion, it's worth paying a little more - even the most expensive ones though are still MUCH cheaper than replacing an entire lens which got scratched or dropped! Secondly, every glass/air interface means there is another chance for reflection and lens 'flare'. Higher quality filters tend to be multicoated to reduce this. If you're getting unwanted flare in one particular shot, with the sun or moon in shot for example, you can always screw the filter off for just a moment.

Quick tip:

While UV filters have a thread on their outer rim too, allowing you to screw on more and more filters at the same time, one after the other, when using a different filter (below) consider taking off the UV temporarily. This is partly to reduce the layers of glass that the light has to pass through and also prevents shadowing in the corners of your image (called Vignetting). Vignetting happens, particularly with wide-angle lenses,

when you restrict the lens's field of view by a tunnel of filters.

Polarising Filters:



This type of filter will enhance an image in ways that cannot be achieved by any other method. As its name suggests, a polariser is a special type of filter that has the ability to block polarised (i.e reflected) light - often seen as 'glare'. Even once screwed on tight to your lens, the glass part is rotatable via the outside rim so that you can look through the camera's viewfinder while rotating it and choose how intensely you'd like to filter the polarised light. The resulting effects are the darkening of skies so that the rich blues are brought out vibrantly in contrast to clouds, as well as reducing reflections on the surface of water or many other reflective surfaces. They are also VERY handy for bringing out the colours of rainbows. You don't even have to put the polariser on your lens to see the effect this filter brings, just hold it up to your eye and rotate it... you'll be amazed. Just like wearing polarised sunglasses, it can make landscape scenes look much more impressive.

Polarisers show most effect when the camera is shooting 90 degrees from the sun (so the sun is at your right or left, not behind or in front). However don't use it constantly with the assumption that it will always enhance the image. Over-use of a polariser can sometimes have an unnatural effect, particularly when shooting on a very wide lens and the polarisation in the sky changes dramatically across the image.

It's important to note that because polarising filters are not clear (they look quite dark) they do actually cut out the amount of light reaching your camera - but not as dramatically as an ND filter (see below). This means that in order for your camera to create a properly exposed image it will need to compensate a little by either using a lower f-stop (larger aperture hole) if you're controlling your shutter speed (S or Tv mode), or using a slower shutter speed if you're in Aperture mode (A or Av). You can help make your shutter speed faster by selecting a higher ISO, enabling you to hand hold your camera. Regardless though, if the shutter speed becomes too slow to hand-hold (for example late afternoon when light is already low), and you still want the effects of the polariser, consider mounting your camera on a tripod.

Quick tip:

Polarising filters can sometimes be used effectively in situations where most people would overlook their benefit. For example, they can prove helpful when wanting to reduce glare on overcast days, when photographing after (or during) rain or when wanting to bring out more colour saturation. They are also handy for reducing the glare on plant leaves - a great tip for photographing in a rainforest - revealing richer, darker greens.

Neutral Density (ND) Filters:

Unlike the polarising filter which changes the way the image looks, ND filters aim to remain 'neutral' and simply reduce the overall amount of light coming through the lens. Like dark sunglasses for a camera, by reducing the amount of light coming through the lens, ND filters allow the photographer to purposefully compensate by slowing the shutter speed down and achieving motion blur effects, even in situations of bright light. When elements in the scene are moving, such as a waterfall, waves, clouds or even people, a range of creative possibilities are opened up.

There are a number of ND filters on the market. Typically they come numbered (ND2, ND4, ND8 etc.) These numbers signify how much light the filter cuts out. An ND2 is supposed to transmit only 1/2 of the available light and is therefore the equivalent of 1 f-stop. An ND4 (twice as dark) will transmit Â¼ of the light (allowing 4x longer shutter speeds) and is equivalent to 2 f-stops. ND8 (twice as dark again) will therefore only let in 1/8 of available light (8x longer shutter speeds) and is the equivalent to 3 f-stops and

so on. Depending on the situation, these filters can be stacked on top of each other to reduce the light even further. If shooting on Av (aperture) mode, the camera will alter its selected shutter speed accordingly, lengthening it as the darker filter is applied.

ND #	Light Collection	Optical Density	f-stop Reduction	Transmittance (%)
0	1	0.0	0	100%
2	1/2	0.3	1	50%
4	1/4	0.6	2	25%
8	1/8	0.9	3	12.5%

There is also the option of purchasing a variable ND filter. These screw onto the lens but have an adjustable outer ring (like the polarising filter design) which can be adjusted to darken the filter (i.e into an ND2, or ND4, whatever) depending on your needs. While less accurate than a fixed ND filter, it removes the risk of tunnelling and loss of image quality that can occur when stacking filters. (Tunnelling or vignetting, as mentioned earlier, is the problem that occurs with wide angled lenses when the filter starts to become visible in the corners or sides of the final image).

ND filters have limits, particularly in the variable ND filters. When pushed to the extreme (in bright light), when the ND filter needs to be exceptionally dark, the resulting image can sometimes become uneven. Occasionally the camera also assumes you're trying to take a dark image and you may have to adjust your exposure compensation a little until you get the settings you're after. Alternatively you could play around in manual (M) mode with test shots until you reach an exposure you're happy with.

Because everything looks so dark through exceptionally strong ND filters, you may find that a) it becomes impossible for your camera to auto-focus (AF) through it, and b) impossible for you to see your composition. In these cases, it's best to frame up your composition and pre-focus (using AF) before you put on the ND filter. As you'd be using a tripod anyway with such slow photos, neither the focus nor composition will change. To prevent the lens hunting for focus once the filter is applied, after you've pre-focused with AF it's best to switch your lens to manual focus (MF). This will 'lock' your focus. Alternatively, some lenses also have a focus distance scale physically displayed on the lens, allowing you twist the focus ring to approximately the right focus distance.

Quick tip:

Look for creative compositions that are created by movement eg. leading lines resulting from the water movement, or the flow of people.

Graduated ND Filters:

ND Grads', as they are sometimes referred to, are ND filters which provide a gradually changing ND gradient across the glass plate i.e. a darker ND number at the top changing to clear glass at the bottom. They are always square or rectangular and therefore require a 'system' mount (or awkwardly hand-held in front of the lens). In today's world of digital post processing, ND grads are far less common, but shouldn't be entirely overlooked.

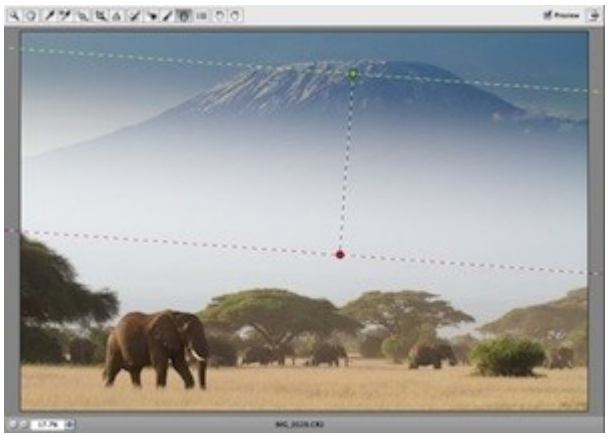
System filter with ND Grad

When watching a beautiful sunset through your own eyes, despite the light and colours being extreme, as you look around you'll find it easy to see into both the bright sky and the darker shadows equally well. Our minds are very intelligent and balance the bright areas and the shadows for us subconsciously. However for a camera, it's impossible to capture both the bright sky and dark foreground evenly. All cameras, of every make, continue to struggle when confronted with high-contrast conditions or scenes where the brightness range varies dramatically across the image. Unless something is used to reduce the brightness of the sky down to a similar level to that of the rest

of the scene, the photographer is faced with the option of 'correctly' exposing the shadows (which results in bleaching the sky) or 'correctly' exposing the sky (blackening the shadows and creating silhouettes). ND Grads help to overcome this issue by their ND gradient, allowing the photographer to darken the brighter areas of the photograph (sky) through the filter while keeping the darker shadows unchanged, giving 'correct' exposure across the entire image.

Quick tip:

Adobe Lightroom and Adobe Photoshop (RAW) provide a convenient graduated filter you can apply in post-production with a simple click and drag. It won't completely solve your problems, and post processing is always going to affect your image quality to some degree, but it's a very helpful tool nonetheless! You can also digitally apply other graduated effects too - not only ND. For example you could opt to make the sky more saturated or bluer. The creative options are numerous.



Tips for all filters:

Be selective in your filter use. While a UV should be a near permanent fixture, don't always just assume using a creative filter will make for a better photo. A filter won't necessarily bail you out from a taking a bad photo, but it will help you take GREAT photos.

Be keen to maintain image quality. Don't stack filters on top of each other unless you have to. The more pieces of glass that the light has to pass through, the lower the image quality will be.

Be wary of 'tunnelling' or vignetting when using wide angle lenses.

Be on the lookout for quality. You get what you pay for. There are cheap options out there which are great fun and perhaps good to start experimenting with if you're not too serious or are on a tight budget, but the old rule of thumb definitely applies here. The better the filter the more it will bring to the task, and the less image quality will degrade.

https://chrisbrayphotography.com/tips/lens_filters.php

Tripod Buying Guide – 6 Vital Features to Look For

A Post By: Suzi Pratt

A tripod is one of the first accessories people like to buy when they get a new camera. But there are hundreds of thousands of tripods out there, all with different features and price points. How do you go about choosing the best tripod for you? This tripod buying guide will highlight 6 features to consider before purchasing a new tripod.

Why use a tripod?

There are a couple of reasons why you might need a tripod in the first place.

First, you should use a tripod if you plan to shoot slow shutter speeds or high f-stops (apertures). Conditions like this are typically real estate, interior, architectural, and landscape photography, where you need your scene to be as sharp as possible, often in low light conditions.

You should also use a tripod when shooting bracketed photos for compositing or HDR in post-production, or when taking selfies or group photos that you want to be a part of.

There are certainly more reasons to consider using a tripod, but hopefully, these give you good examples to start thinking about.

1. Payload (or load capacity)

The very first feature to consider when researching tripods is its payload or maximum load capacity. In other words, how much weight is it able to support? The payload is typically found in the product description of each tripod. To come up with this number, consider the heaviest and largest camera setup that you plan to use on the tripod. Camera and lens weights can easily be found via a Google search or examining their respective product descriptions.

For example, my Sony A7rIII camera body alone weighs 23.2 oz (657 grams). My heaviest lens, the Sony

70-200mm f/2.8 weighs 52.16 oz (1480 grams). So together, my heaviest camera setup would be 75.36 ounces (2137 grams). That means I should find a tripod with a payload of at least that amount.

It is also important to look at the payload of the tripod head or the piece that attaches your camera to the tripod legs. Some tripods come with a head included, or you can replace it with a head that you buy separately. Many tripod heads have their own payloads specified, so be sure to consider that number as well.

2. Tripod minimum and maximum height

All tripods have a minimum and maximum height expressed in their product descriptions. Some tripods can get ultra-tall, others can get ultra-low to the ground. Think about what kind of subjects you will be photographing, and the optimal height you would want your tripod to be.

If you are tall or plan to shoot tall subjects, aim to get the tallest tripod you can find. However, if you shoot subjects that are lower to the ground, you may want to consider tripods with a low minimum height. There are even new tripods like the upcoming Peak Design Travel Tripod designed to get extremely low, down to 5.5 inches.

3. How stable is the tripod?

The next quality to consider is how stable the tripod is. First, consider the payload or weight capacity mentioned above – this will give you a good idea of whether the tripod can support your camera and lens combination. But there are other features that can enhance tripod stability.

Some tripods come with retractable or removable spikes in the tripod feet. These provide extra stability by sticking into the dirt or soft ground if you happen to be shooting outside.

Tripods can also come with a retractable hook in the center column of the tripod, allowing you to hang weight to stabilize the tripod. Attaching a heavy sandbag to the hook is often the optimal option, but you can also get creative by using other items like a heavy water bottle or even your camera bag.

4. How easy is it to carry the tripod?

If you plan to travel a lot with your tripod, or use it on the go, it's important to consider the overall weight and folded length of the tripod. If you opt for a heavy, large tripod, you might get optimal stability, but you will likely struggle to carry that tripod around.

Consider the material the tripod is made from. Most tripods are made of aluminum (cheaper, but heavier) or carbon fiber (lightweight, but more expensive). Many tripod models are available in either construction material, so think about your budget and how important the weight saving is to you.

Also, look at the overall ease of folding the tripod up. Most tripod legs are three sections meaning they get taller with each section you open, but some can be two sections or even five sections. The more leg sections you have to deploy equates to a longer time to set up and put away. Along the lines of tripod legs, look at the mechanism they use to deploy. Most tripods use a twist-lock mechanism, which can get confusing about which direction locks or unlocks the legs. Meanwhile, other tripods have a simple clip lock that is much easier to unlock and lock.

5. Tripod head quality?

Some tripods come with a tripod head, and others require that you buy it separately. In some cases, you may even want to buy your own tripod head if you have a preference in the best type to use.

A ball head is the most common type of tripod head, allowing for 360-degree rotation to position the camera where you want it. However, many ball heads, especially cheap or low-quality ones, will slip over time and be less stable. Thus, it may be worth buying a high-end ball head or looking at another type of head to use on your tripod.

Examples include the Manfrotto 3-Way (my favorite), or a pistol grip tripod head. Pretty much every large tripod allows you to replace the tripod head with one of your choosing.The final piece of the tripod head to consider is the tripod plate or the piece that mounts directly to your camera. Arca-Swiss type plates are among the most common and universal, but they often come with the need to use an Allen wrench to tighten the plate to your camera.On the other hand, there are other tripod plates such as those made by Manfrotto or Joby that includes a twist screw that you can easily secure without the need for an extra tool.

In conclusion

There are a plethora of tripods out there and it is not an easy task to find the right one for you. Ultimately, this tripod buying guide is intended to help you think of all of the situations in which you plan to use a tripod and encourage you to carefully research all six features above. And while there are plenty of cheap tripods out there, consider investing in a high-quality tripod to begin with. Your camera equipment is expensive, and you don't want to risk dropping or damaging it due to placing it on a cheap tripod.

Do you know your rights ?????

This site is an analysis of legal issues which apply to street photography in NSW Australia.
You need to read this, print it out and carry it in your camera bag.

Australian street photography legal issues
by Andrew Nemeth BSc (Hons) LLB MTeach
http://www.4020.net/words/photorights.php

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