

BONUS
MATERIAL



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What Are These Mini E-Books About?

Tons of stuff. The information will be especially useful for beginners, but some advanced photographers will get a kick out of it as well.

This e-book will be going over the following:

- Core fundamental principles about your camera you MUST know before touching it (Most of these principles are already included in the [Trick Photography and Special Effects](#) e-book, but I have added some extra material here. You need to know this stuff by heart anyway, so it doesn't hurt to go over it if you are new to photography)
- Cool products and accessories for your camera, so you can get more creative: Filters, Photoshop plug-ins, and external flashes.
- Several ways to make passive income with photographs

Let us first start off with the basic fundamental principles we must master: “Core Photography Fundamentals”. If you don't know how to use these without thinking then you should stop taking pictures and learn these things right away! I recommend watching [my video on shutter-speed, aperture, and ISO](#) in addition to reading the content that lies ahead.

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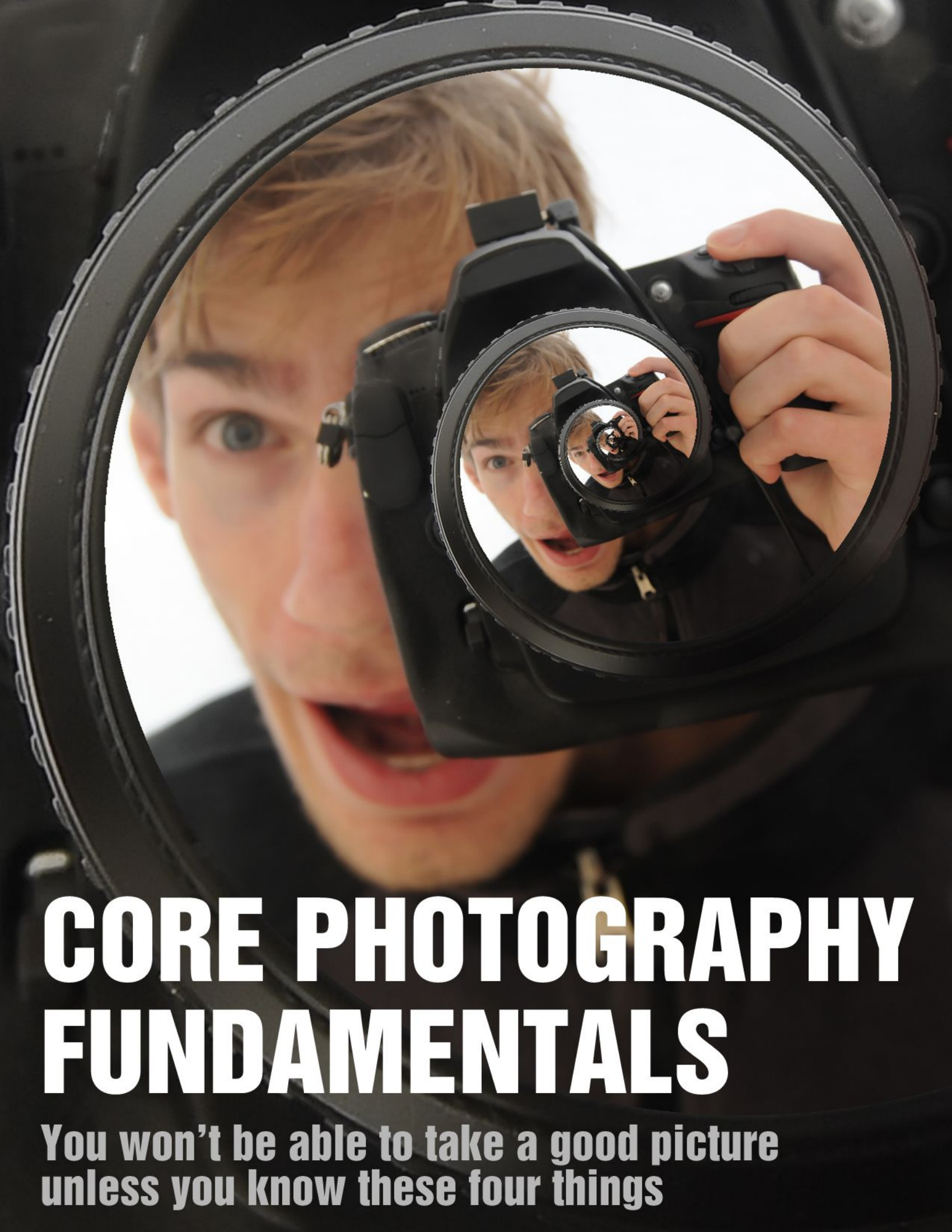
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How to Make Money with Photography

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CORE PHOTOGRAPHY FUNDAMENTALS

**You won't be able to take a good picture
unless you know these four things**

1. Shutter speed

The [shutter speed](#) is also referred to as the **exposure time**, or sometimes just an **exposure**. In all DSLR cameras, there is a piece of cloth or plastic that is between the lens and the camera's sensor. This cloth is called the “shutter”. When you push the button on your camera to take a picture, it opens the shutter for a duration of time and records the light that is being exposed to your camera's sensor. After that, the shutter shuts back up again to stop the exposure from taking place and saves the picture to your memory card.

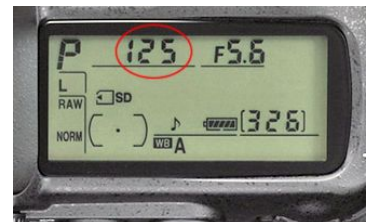
You can set your camera to take different durations of shutter speed. Here are some examples:

B or BULB, 30”, 25”, 20”, 10”, 5”, 1”, ½, 1/5, 1/10, 1/100, 1/250, 1/500, 1/1000, 1/4000, 1/8000

Let's go over this chart from left to right. On the very left we see “B or BULB”. BULB mode is basically a manual setting for shutter speed. It means that if you hold your finger down on the shutter button for 5 seconds, the exposure will be taking place during the 5 seconds you have your finger on the button. If you hold it down for 50 seconds, the exposure will be 50 seconds.

After BULB mode, moving to the right of the scale, we see 30”. This obviously means 30 seconds, and is the usually longest shutter speed available on most DSLR cameras. You can get into longer exposure times by either using a cable release, a wireless remote, or simply holding the shutter button down for a really long time in BULB mode. When it comes to going past the camera's maximum shutter speed, not all cameras are alike, so you will have to figure out which method works with your specific camera.

Next, after 30”, the shutter speed simply gets faster and faster. As you can see, everything after 1” turns into fractions of a second. Most camera's just display a number like “125” to represent “1/125th of a second”, so don't get confused and mistake “125” for “125 seconds”. Look at it as a fraction.



- Shorter shutter speed = darker image / freeze frame
- Longer shutter speed = brighter image / motion blur
- You will need to use a tripod in order to get a good result if your shutter speed is longer than 1/60th of a second. Anything longer than 1/60th is too slow in most circumstances.



Here is a popular long exposure trick that you have probably seen a dozen times: Traffic.

The reason why the moving car lights look like long lines is because this photograph had an exposure time of 15 seconds. If the exposure time was $1/200^{\text{th}}$ of a second, the car lights would look like dots and not lines (just like they do in real life).

You might be asking “How come I can’t see the actual cars?”. The reason why you can’t see the actual bodies of the cars is because they are in constant motion and not enough light was shining on them to make a noticeable trail. This technique is called “light painting” and is the same technique used when waving a flashlight in front of a camera. The reason why you can’t see the hand waving the light in front of the camera is because they don’t have enough light hitting them while they are moving around. If they were wearing glowing clothing, however, then that would be a different story.



The opposite is also true. If you were holding a candle in front of you but you were completely *still*, then your body would appear in the photograph. This is why we can see the trees and in the photograph above, because the foreground was stationary and was being lit up by the sky (and also a little bit by the traffic as well).

Check out my [blog post about various long exposure effects](#) to get some ideas.

- *Additional Resources on Shutter-speed:*
http://en.wikipedia.org/wiki/Shutter_speed
- <http://www.digital-photography-school.com/shutter-speed>
- <http://www.smashingmagazine.com/2008/08/24/45-beautiful-motion-blur-photos/>



Here's a trick you can put away in your bag of tricks: Put your camera into Shutter Priority mode and set the shutter speed anywhere between $1/5^{\text{th}}$ of a second to $1/30^{\text{th}}$ of a second and then take a picture of a moving car or bicyclist in motion. Make sure to start your pan before you take the picture, so the pan is already taking place before you hit the shutter button. Everything will appear smooth, and if you nailed it just right, the bicyclist will be clear but the background will be blurred. Using a tripod helps.

2. Aperture

The [aperture](#) is how wide the hole in your lens is. It is very similar to your eyeball's pupil. The bigger the diameter, the more light comes through your lens and onto the sensor. So, the bigger the opening = the brighter the image! Sometimes you will hear people refer to the aperture as the "F-Stop" number. It's the same thing.



[video](#)



A higher f-number (like f16) = a smaller aperture = less light

A lower f-number (like f2.8) = a larger aperture = more light

There is also a side effect that comes with the aperture, and that is called [Depth of Field](#). To give an example of what depth of field is, take a look at the two examples below. The one on the left has an aperture opening of F11, and the one on the right has an aperture of 2.8.



F11



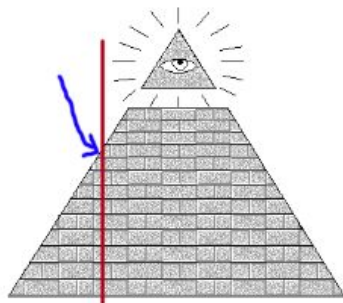
F2.8

As you can see, the depth of field determines how deep or shallow your plane of focus is. Using smaller F numbers (F1.8 etc.) will make the hole (aperture) in your lens wider, thus making your depth of field more shallow. Using larger F numbers (F16 etc.) will make the aperture smaller, creating a wider depth of field, making everything more sharp and in focus.

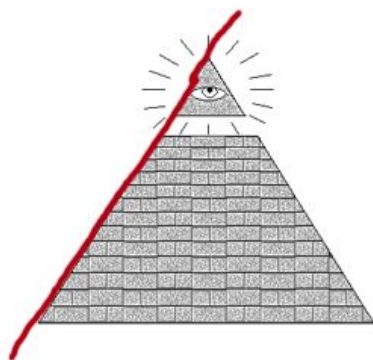
In order to make your depth of field as shallow as possible, do these things:

- Go down to the lowest F number your lens allows, like F1.8, 2.8, or 3.5, etc.
- Zoom in all the way if you are using a zoom lens - A 200mm lens at F2.8 will give a blurrier effect than a 50mm lens at F1.8.
- Get as close to your subject as possible with it still being in focus. - This will increase the distance between your subject and background, making the background more blurry.

Another thing you want to consider about depth of field is the angle at which your lens is facing your object.



Depth of field is always in the form of a plane and is parallel to the lens. In this example, the only area that will be 100% in focus is where the blue arrow is pointing, because that is where the focus plane meets the pyramid.



In this example, however, the camera lens lines up with the surface of the pyramid, so everything on the surface will be in focus. Keep this concept in mind when you are taking pictures, and you will know what to expect before your image is displayed on your preview screen.

Depth of field is very useful for isolating your subject from the background. It puts much more attention on the main subject rather than the distracting busy background.



200mm lens / F2.8 / 1/640 sec / ISO 400



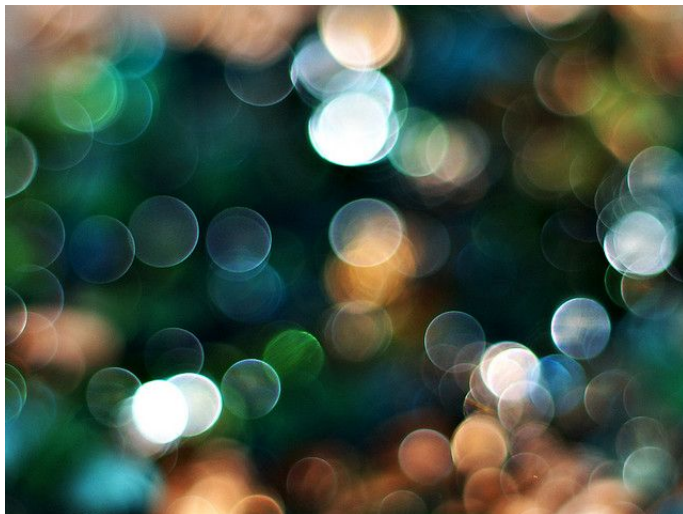


One other thing that is really cool about using shallow depth of field is that if you are ever in a city at night time, the city lights will come out as big blurry blotchy dots. This effect is commonly referred to as [bokeh](#). Although the generic shallow depth of field effect is technically bokeh as well, it is just not as commonly referred to as bokeh.

What makes a good bokeh lens?

The cheapest solution is currently what I use, and that is a [Nikon 50mm F1.8](#). The same lens is also available for [Canon](#).

There are thousands of different lenses and I simply don't have time to test them. Plus, the better ones can get very expensive. So for right now, my recommendation to you is a 50mm F1.8. If you got cash you want to spend, do a Google search for “good bokeh lens”.



I've heard that these lenses are also very good, but the quality really depends on what brand, structure of lens, etc:

50mm f1.4

35mm f1.4

85mm f1.2

A 70-200mm f2.8 will also work great.

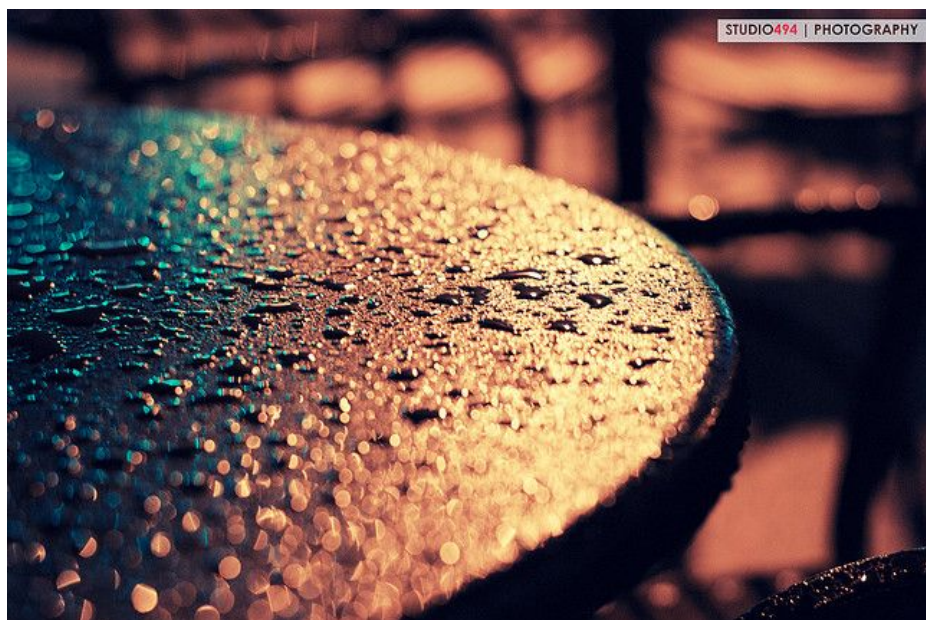
Some articles about bokeh:

[Comparison of bokeh lenses](#)

[Bokeh Tests](#)

[Understanding Bokeh and your Lenses](#)

[Bokeh Charazterizations](#)



Getting Tack Sharp Photos with Deep Depth of Field

Okay, we've talked about using small apertures like f1.8 to get shots with *shallow* depth of field, but what about using apertures like F16 to get shots with a *deep* depth of field?

One draw-back is that the more you stop down the size of the aperture, the longer the shutter speed will have to be in order to compensate for the lack of light entering the lens. Using apertures like F8 and F11 can only be hand-held only if it is sunny outside. If it is darker or you are using an aperture smaller than F8 or maybe F11, you will have to use a tripod in order to keep everything sharp, which is always a good idea anyway.

Using deep depth of field is especially useful for two situations: Landscape Photography and Studio Photography.



It's good for landscapes because, in most cases, you want to get as much in focus as possible. It's also good for studio photography because you usually have a lot of light to work with and don't need to worry too much about motion blur because everything is frozen due to the flash burst.

There are two things to keep in mind when using small apertures: lens dust and lens diffraction. We'll talk about them on the next page.



Lens Dust

No, that isn't smoke coming out of that chimney, that is either a little spec of dust or a little piece of hair on the lens or sensor. These little guys will start showing up the more you stop down your aperture, so remember to keep your lens and sensor clean.

There are two tools that I recommend getting that will help eliminate dust: Number 1 is the [Lenspen](#). There is a brush on one side, used to wipe dust away, and a soft smooth granite cleaning side on the other, perfect for removing smudges. It's very inexpensive and works great.



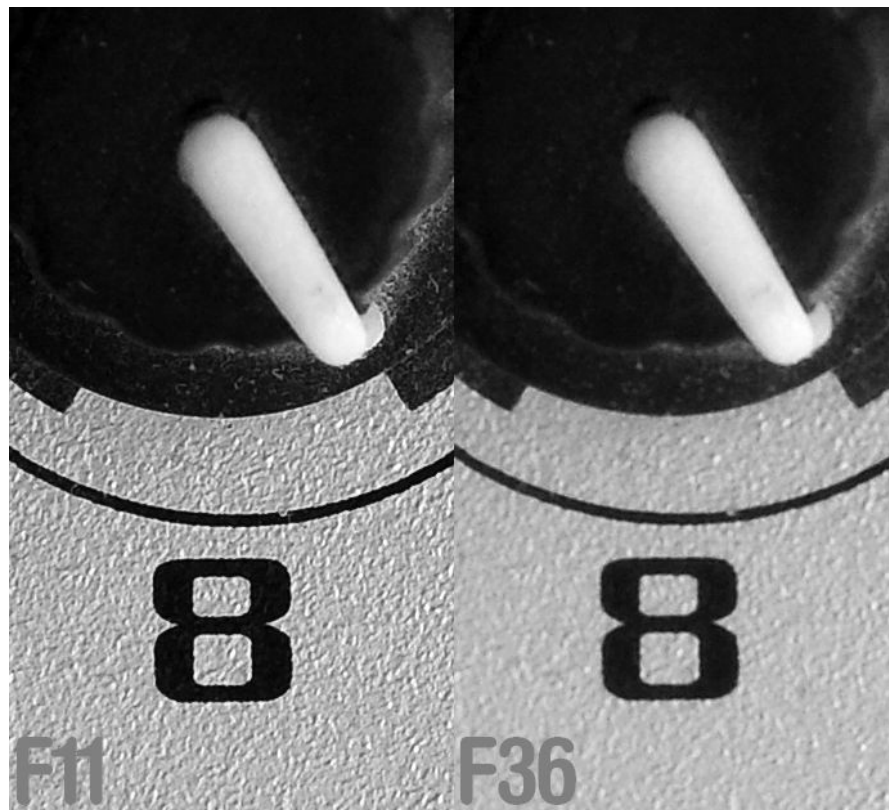
Another tool you can use is the [Giottos AA1900 Rocket Air Blaster](#). This is even better than the brush side of the Lenspen because you are not making any contact with the lens or filter, you simply blow away the dust, and then use the Lenspen to remove any remaining smudges. This tool was originally made for cleaning camera sensors, but I honestly do not recommend cleaning camera sensors by yourself because there are just too many things that can go wrong. If at all possible, go to a camera shop and get it professionally cleaned instead.

Lens Diffraction

Stopping all the way down to F36 isn't necessarily the sharpest spot on the lens. It will give you the most depth of field but that doesn't mean that it will be crystal clear tack-sharp with details-galore.

In order to test your lens for yourself, put your camera on a tripod and set it to Aperture Priority mode and then take a shot of the same scene with different F-Numbers, such as 2.8, 5.6, 8, 11, 16, and 36. Zoom in to 100% on your preview LCD screen and see which shot appears to be the sharpest. It varies from lens to lens, but I have found that F8 and F11 is the sweet-spot most of the time.

Another additional technique you can use for getting the sharpest photo possible is to use a wireless remote for your camera in addition to using the “mirror lock up” mode or “exposure delay mode”. Mid-range and High-end DSLR cameras should have this feature, Low-end DSLRs unfortunately do not. This was a big determining factor for me when I bought my [D300s](#). The D300s came with a mode that lifts up the mirror first, waits a second, and then takes the exposure after that one second. This helps eliminate all camera vibrations, thus giving you a tack-sharp image.



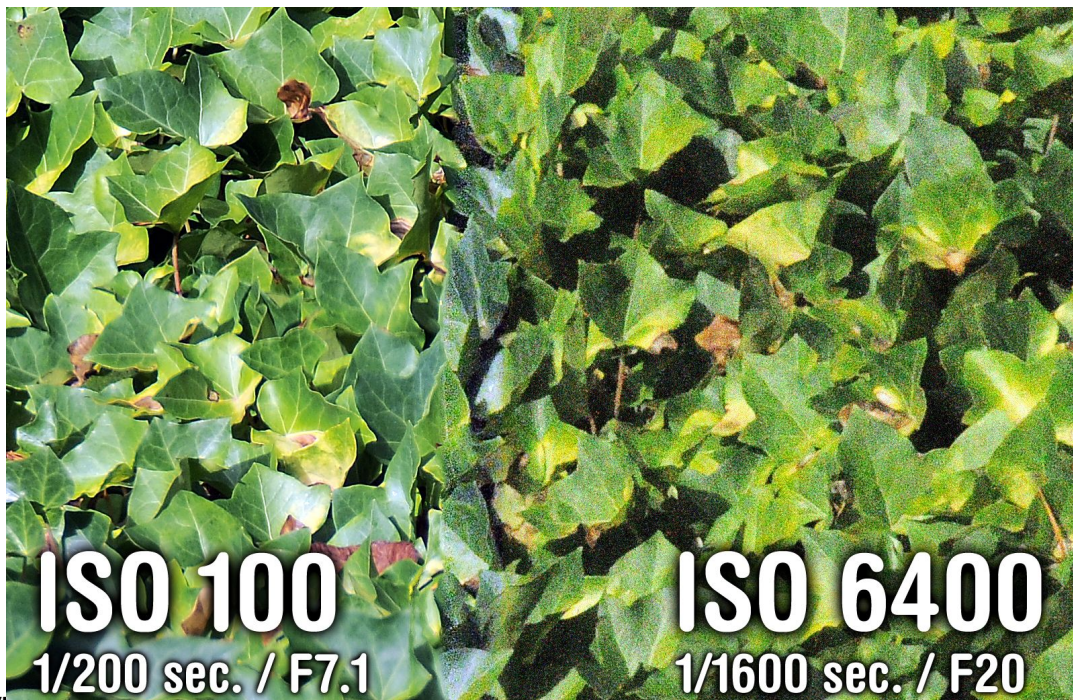
3. ISO

The ISO (also known as 'ASA' or simply '[film speed](#)') determines how sensitive your sensor is to light. The higher the ISO number, the brighter your image will be. The lower the ISO number, the darker your image will be.

Now I know you are thinking “Great! I'll just use the highest ISO possible to make my image as bright as I can, then I'll just stop down my F stop to make up for the difference!” Well, sadly but surely there is a side effect that comes along with ISO, and that is called [noise](#).

Noise is basically color grain that destroys the fine detail and color in your photographs. Always try to use the lowest ISO number you can, especially when doing long exposure work. I usually keep my ISO in the 100-400 range, with 100 being the goal.

The only situation where you will need to use higher ISO numbers is when you are in a dark environment and have no tripod available. Without using a high ISO number, your camera will try opening up the aperture all the way to let as much light in as it can, and then set the shutter speed for several seconds to let in even more light. Because we humans can't hold a camera perfectly in place for several seconds, our image would be very blurry. So, in order to get around that, we would *have* to use higher ISO numbers in order to compensate for the long shutter speed. If we had a tripod however, this would not be an issue. If you want professional quality photos that were taken in dark environments, you will have to use a tripod and a low ISO.



To wrap it all up, shutter speed, aperture, and ISO all work together. All of them have the same effect (making the photo brighter or darker) but they also all have a special side effect (**motion blur** is a side-effect of increasing exposure time, **depth of field** is the side-effect of adjusting aperture, and **noise** is a side effect of raising the ISO).

When you are photographing different subjects in different lighting conditions, you will find yourself changing each variable according to the conditions. For example, if I am deep in the woods photographing a woman, I would want to first start off with Aperture Priority Mode with a wide aperture like F1.8 or F2.8 to let in lots of light into my camera, because I know that when it is dark my camera will want to increase the shutter speed length, and I don't want that to happen because my pictures will look all blurry from camera shake.

So, the first thing I would do is change the mode to Aperture Priority and use f2.8 to let in more light. If the shutter speed ends up being anything faster than $1/60^{\text{th}}$ of a second, then I know I'm okay. If it is *slower* than $1/60^{\text{th}}$ of a second, I'll need to increase my ISO to raise the brightness. This will in turn shorten my shutter-speed, and I will be able to take sharper pictures, even though there will be some extra noise added to the image. You will always find yourself adjusting the aperture, shutter-speed, and ISO for each different situation you are in.

If you need more help in this area, – the most fundamental concept you must know how to use when using a camera – Google search the term “[exposure triangle](#)”.

4. White Balance

White balance is basically color correction right in your camera. If the light you are photographing has more cold/blue tones, you will want to raise the white balance to a warmer/redder color temperature to even out the tones.

Look in your camera's manual to figure out how to change the white balance preset and set your own custom white balance. The process for setting the white balance is different for every camera so I cannot explain how to do it in this ebook. Use Google or your camera's manual instead. Of course, if you don't want to mess around with it, just leave it on Automatic.

The photographs on the right were taken on a sunny day. The rocks were only *slightly* shaded by a tree.

These basic white balance presets should be on your DSLR and are probably ordered in the exact same way:

- Incandescent/Tungsten (2500-3000K)
- Fluorescent (~4000-5000K)
- Daylight (~5200)
- Flash (~5400K)
- Cloudy (~6500-8000K)
- Shade (~8000-10000K)
- Custom / Saved Preset / Set Color Temperature

In order to make a 100% custom white-balance correction, you will need to get an 18% gray card. These cards are color calibrated for cameras and are meant for the sole purpose of getting an accurate white balance metering. If you don't have a gray card, just take a closeup picture of a white sheet of paper so it fills the frame using manual focus. You will have to do this each time you move into a new environment with different lighting conditions. Check your camera's manual to learn how to take a custom white-balance metering. The process is a little different for each DSLR out there.



INTRODUCTION TO



EXTERNAL FLASH

Tip #1: Do NOT blast it directly into your face!

Using Off-Camera Flash

There are a ton of things you can do with external flashes. I'm only going to go show a couple of applications (the basics) so you can get an understanding on why using them can make a huge difference in your photos.

Why use an off-camera flash when you could simply use the on-camera pop-up flash that already comes with your DSLR? The reason is simply because on-camera flashes looks horrible in 95% of all circumstances. Here's why:

The on camera flash is a very small light source, meaning that the light will look very harsh on the subject you are photographing (whether it be a person or object) and will create annoying harsh shadows. The on camera flash is too bright in most circumstances and looks completely unprofessional. The on camera flash points *directly* at the subject you are photographing, which looks ugly and amateurish.

The *external* flash, however, cranks up the quality a few hundred notches. First of all, the light is not coming directly from the camera, but rather at an angle. This makes things look more natural and enables you to direct the shadows how you want them.

Second of all, you can point the external flash to the ceiling or the wall, and the light will bounce off that surface and then hit your subject. This makes it so that the light is very soft and diffused, meaning that the harsh shadows will be completely eliminated, making your subject much more flattering!

Third, you can put use large diffusion material over your external flash, weather it be outside or inside, and it will get rid of the harsh shadows. Doing these things will definitely get your photos looking much more pro.

You can use brand new flashes if you want to, but I like the simple ones with old school manual controls (as do many others). The reason why is that it gives *you* the control of how much or how little light you want to add to a subject, and really isn't difficult to understand in a short period of time. Personally, I find that the using a camera or a flash on automatic mode is more complicated than manual.



Pop-up Flash



External Flash

Using External Flashes Indoors

Using an external flash is just as useful indoors too. Usually the light that is available indoors is simply not bright enough to take a high quality photo. You would have to increase your shutter speed or ISO, and that would in turn would cause motion blur or noise; not good.

Using an external flash unit will fix that problem by giving you lots of light, plus a prettier light.



This is a super quick example to demonstrate the power of using flash. In the first photograph, I was holding the camera in my right hand with the flash in my left. The flash was pointing towards the wall.

In the second photo, I was holding the flash out in front of me just like in the first one, only this time it was directed toward the ceiling. Normally results would be better because if you were photographing a model or object, you would be able to be further away from the subject. In this case however, I was both the model and also the photographer, so the light source had to be pretty close to me.

The third photo is obviously horrendous. Look how ugly it makes people look! It's not just me, the light is harsh and direct! Yuck!



This shot could have been taken indoors or outdoors, it doesn't really matter. This photograph was taken with a simple Nikon SB-24 external flash. The brightness level was set to 1/16th power, which isn't that bright. The flash was placed below the model's face and was shot through an umbrella.

EXIF:

Exposure 0.005 sec (1/200)

Aperture f/2.8

Focal Length 50 mm

ISO Speed 100

Why External Flashes Make Your Photos Look Awesome Outside

When you use an external flash outside, you will be able to get both your subject and background exposed correctly.

In this photograph, there was a bare flash high above the right of the camera (you can tell by looking at the shadows on his inner shirt and neck). The photographer first adjusted the settings on his camera to take a photo of the background correctly exposed, then he simply closed the aperture a few stops to make the background darker. After that, he adjusted his flash power so that it would illuminate his subject properly.

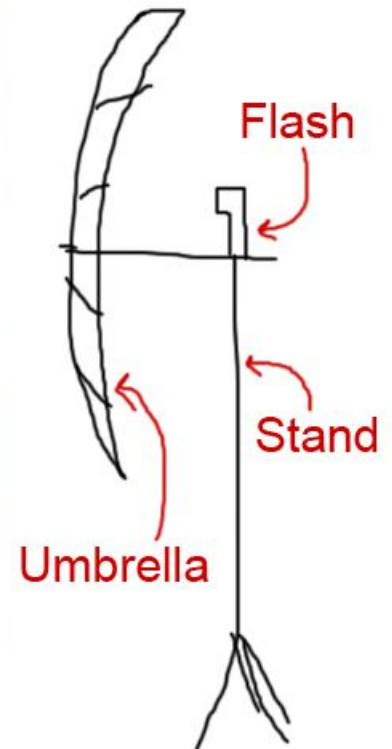
Why make the background darker than what your meter says? Because it looks great! It makes the model pop and also makes it so the highlights in the clouds are actually visible and not blown out white. This shot **WOULD NOT** be possible without an external flash. It would look very different and wouldn't look *nearly* as cool.



1 flash on the right (tripod held)



Reflector



This time the photographer decided to expose for the land and not the sky (as you can see, the sky is blown out white, while the land is pretty much properly exposed). After he got the background looking properly exposed, all he did was throw in a flash somewhat to the right side and adjusted the power until it looked good.

See the little bit of light on the left (his right) side of his forehead? That little bit of light was caused by a [reflector](#) that was located to the left (his right) side. All it did was bounce back the light coming from the flash back onto the left (his right) side of his head. Boom! Instant fill light.

The umbrella is used for diffusing the light coming from the flash. It is much more flattering to use diffusion material (like an umbrella) in front of your flash because it softens and spreads out the light, making it more natural looking and flattering.

Let's go over **the equipment** you need for your DSLR to start taking shots like this.

The Flash

The first row of products below this paragraph are the essentials. You get a flash, a hot-shoe adapter for your camera, and a sync cord so you can plug in your flash to the adapter. With these three things you will be able to start using your flash right away. Total price? \$177.88 plus shipping. If you want to know a little bit more about how all these things work together, read [this short blog post](#) before you buy.



= \$159.95

[LumoPro LP160 Manual Flash](#)



= \$15.99

[Hot Shoe Universal Translator](#)



= \$1.94

[Sync cord](#)

Light Stand and Diffusion Kit

With this kit, you get a stand, some diffusion material (a shoot through umbrella), and a mount, so you can mount your flash on the stand. Having the stand will eliminate the need for someone else to hold the flash for you. This kit is only \$30.99!



[CowboyStudio Strobist Kit. Stand + Umbrella + Mount](#)

RF-602

This is an optional accessory but it makes things a hundred times easier. Instead of using the hot-shoe adapter and sync cord to sync your flash up with your camera, you can do it **wirelessly** with this unit.



= \$44.99

The [RF-602](#) comes with a transmitter and a receiver. The transmitter attaches to your camera's hot-shoe mount, and the receiver attaches to the bottom of your external flash.

[RF-602 Wireless Flash Trigger](#)

Whenever you push the shutter button, your flash will fire at the exact time you take the picture, *wirelessly*! No more tripping over cords and knocking down your light stand! The wireless signals go through walls and have a very wide range up to 100 meters as well. It does cost a little bit more than the cord, but I highly recommend it.

Another cool thing about the RF-602 is that it can also be used as a wireless remote for your camera! It is basically a 2-in-1 product.

There are several [video demonstrations](#) of the product if you want to get a closer glimpse before you buy it.

Reflector

And finally, you can get a [reflector](#). You can use these things in any situation, not just when working with flash. When lights hit the reflector, it does just that: reflects it back onto your subject.

It comes with diffusion material with a metal ring around it so it acts like a solid “wall” that you can easily hold. You can use the bare diffusion material between the sun and your subject if you want to remove harsh shadows. You can also just place it in front of any light and it will instantly make the light more flattering.

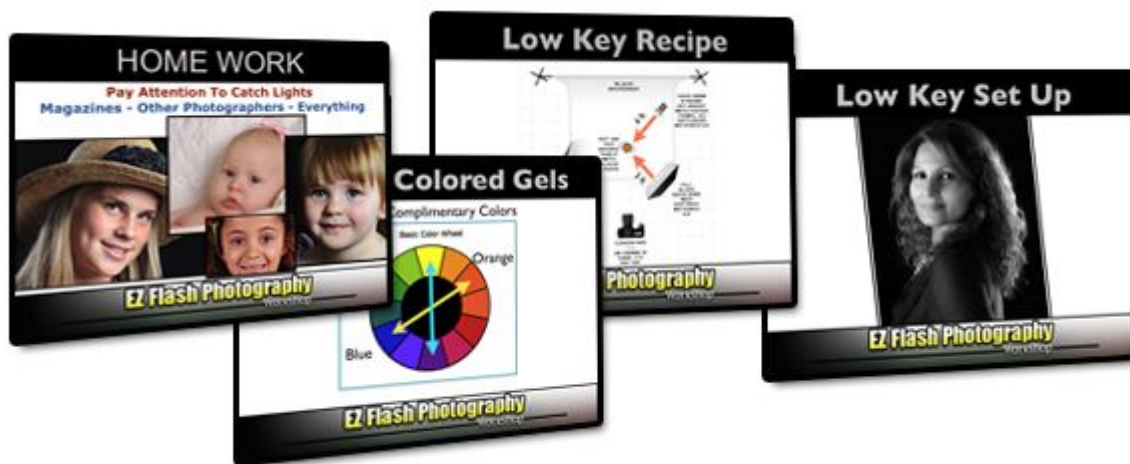


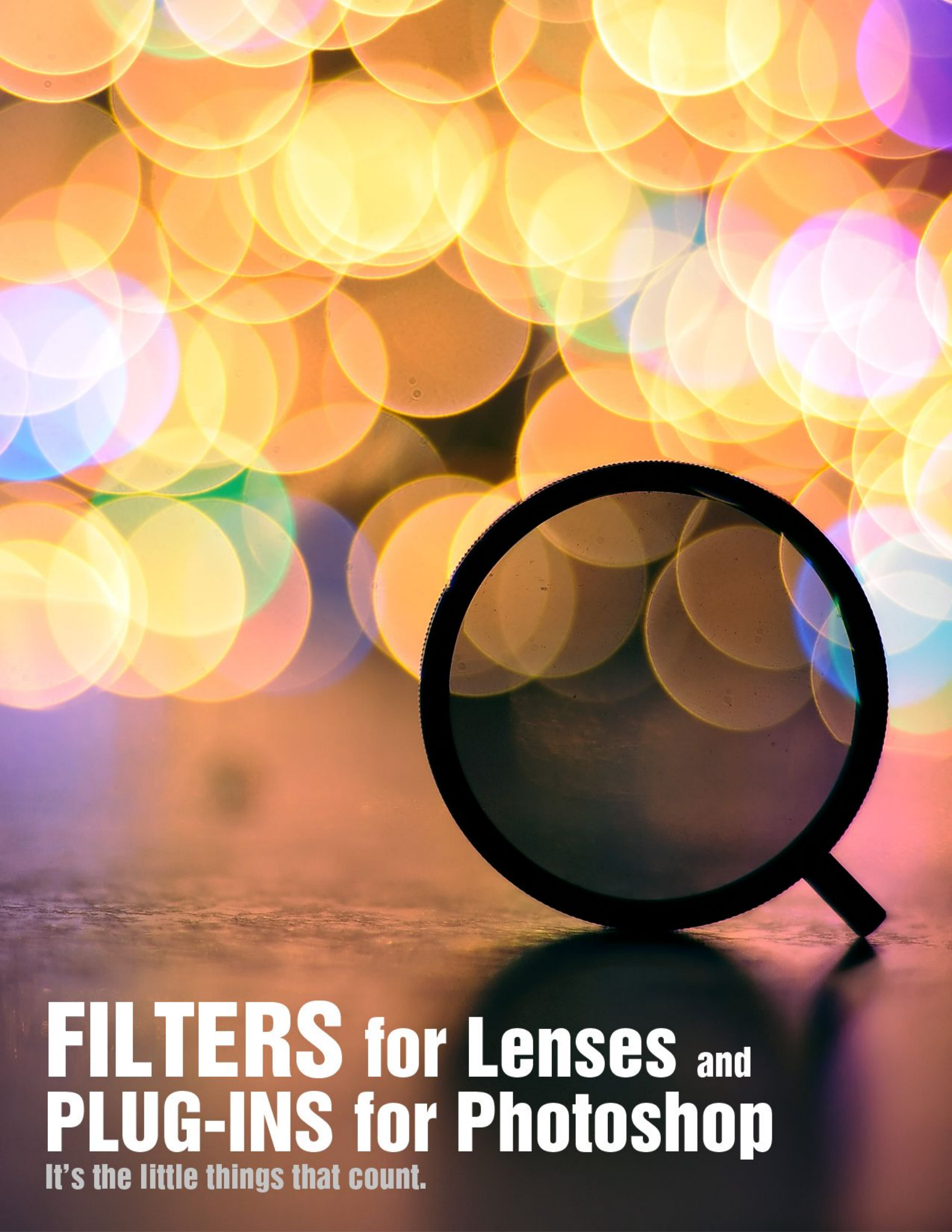
= \$18.09

The “big circle” of diffusion material also comes with a zip-up covering. The covering has a reflective gold side, a silver side, and can be turned inside out to reveal a half-white-half-silver side, and a black side. Pretty awesome stuff, and a lot of bang for the buck!

If off-camera flash is something you end up being interested in, check out the [Strobist blog](#). It's a blog solely dedicated to off-camera lighting and has a big how-to section for both beginners and advanced "Strobists". Lots of free information available on that site.

There is also an online course called [EZ Flash Photography Workshop](#) by Joe Marshall. It's all in video format and you can get ask questions to both other members and the teachers, so it's well worth the money. If you were to take the course at a college, it would probably cost much more. Plus, colleges don't come with a "no questions asked money back guarantee", so this is a no brainer.





FILTERS for Lenses and **PLUG-INS** for Photoshop

It's the little things that count.

UV Blocking Filter



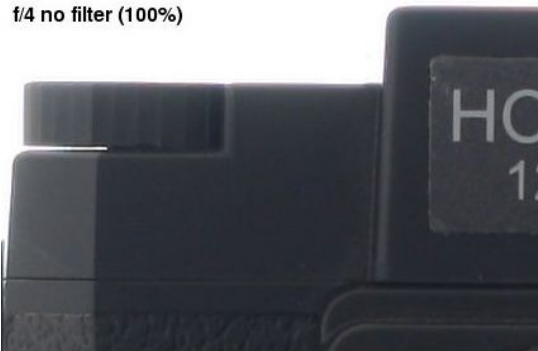
[UV Blocking Filters](#) are simply filters that block out Ultraviolet light rays from the sun. They were originally made for film cameras, because film didn't cope to well with UV light. Now that we have DSLRs though, it doesn't matter as much. The reason why people use these filters nowadays is to simply protect your lens from scratches.

Using a cheap one can have a disadvantage though, take a look at the example below. On the left, there is no filter on the lens. In the middle, there is a high quality UV filter, and on the right there is a cheap UV filter. Using any kind of UV filter will decrease contrast, but I would rather have some decreased contrast than a bunch of scratches on my \$1000+ lens that won't be re-sell-able in the future! It really is up to you, everyone has their own preference.

I personally used UV filters for a while but then got annoyed with them. Now I don't use any UV filters on any of my lenses, but I probably will in certain situations in the future when I buy a really expensive lens and I'm using it in a desert or beach or something.

100% crop

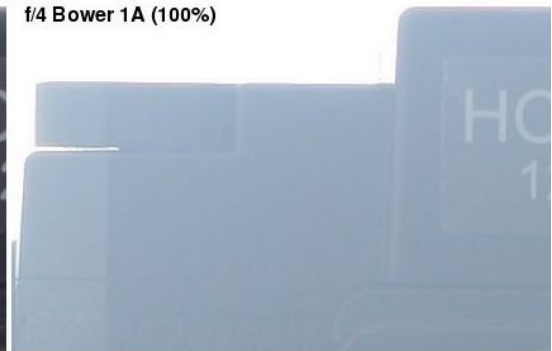
f/4 no filter (100%)



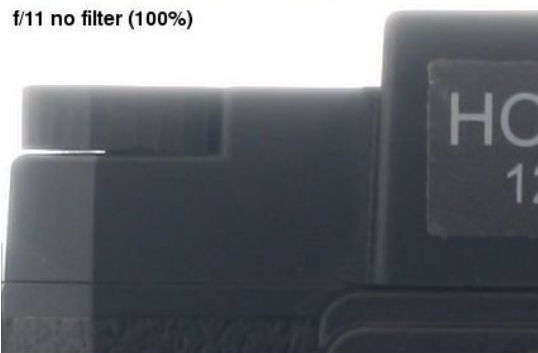
f/4 B+W 010 MRC (100%)



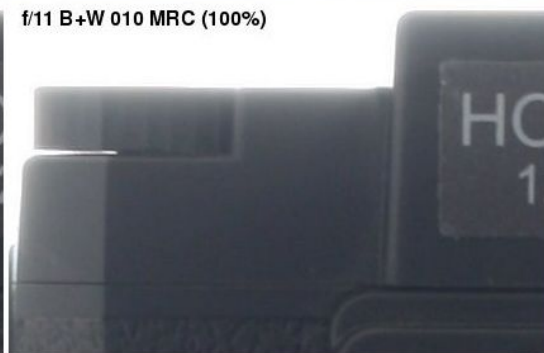
f/4 Bower 1A (100%)



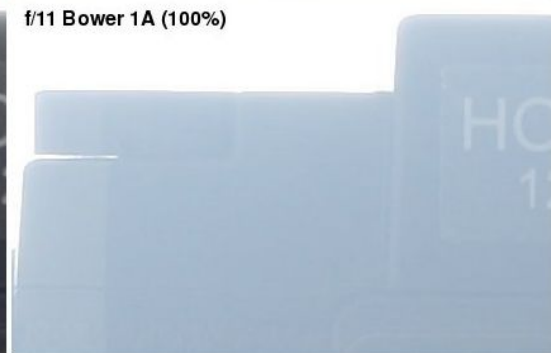
f/11 no filter (100%)



f/11 B+W 010 MRC (100%)

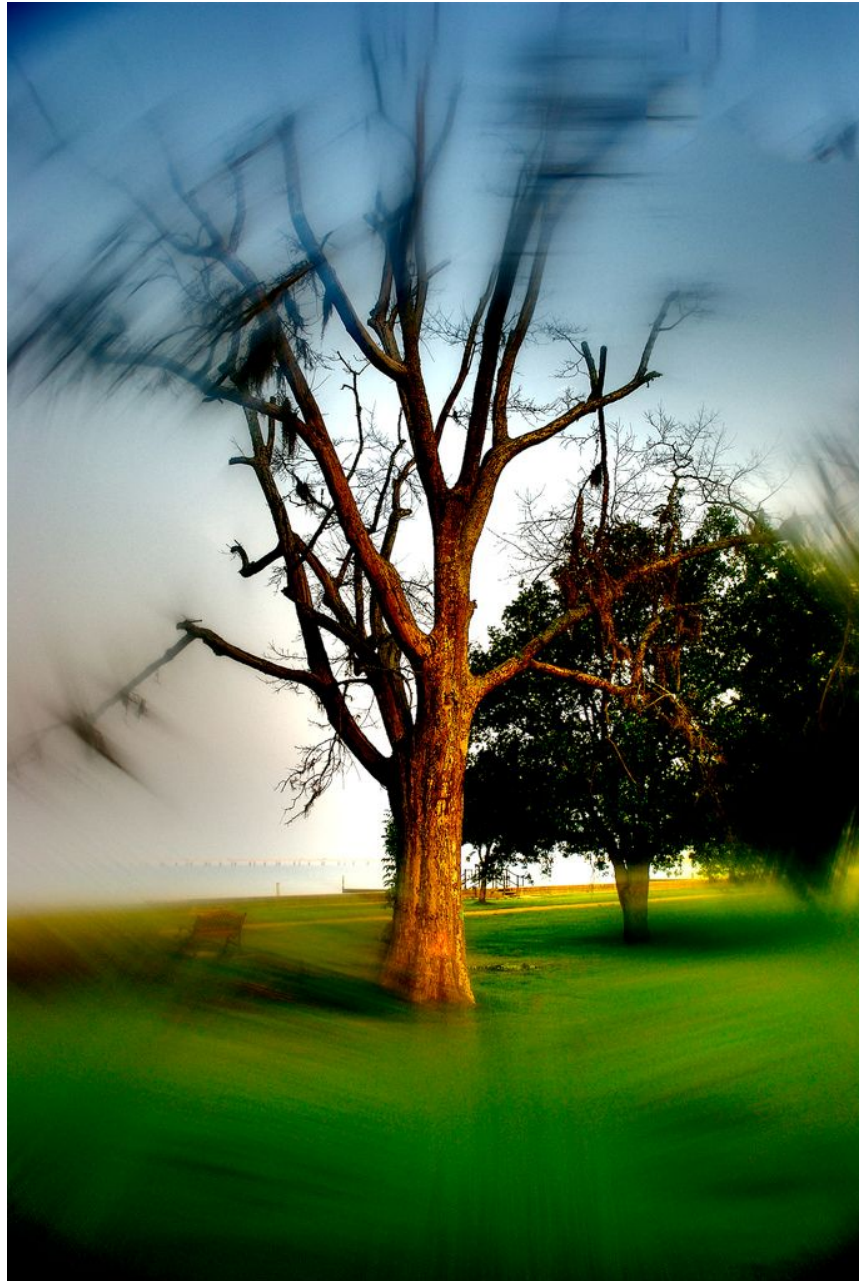


f/11 Bower 1A (100%)



There is a creative trick you can do with a UV filter as well, and that is to put some CARMEX lip balm on the front of the filter to warp the light hitting the filter.

This works with vaseline, hair gel, and nail polish. Anything clear and goopy. This could mess up your filter though. I highly recommend watching [this video](#) and reading the comments below it if you want to get more information on this effect.



Polarizing Filter



This is the holy-grail of all filters. If I only had one filter to bring along with me, it would be a good [polarizing filter](#). These babies reduce reflections from surfaces, removes haze, darken the sky (getting a better dynamic range), and saturates the image more. There are linear polarizers and circular polarizers -- get a circular one because these work best with digital cameras.

Make sure you [read this article](#) and [watch some videos](#) to get more information on how to use polarizing filters before you go out and buy one.

After

Before



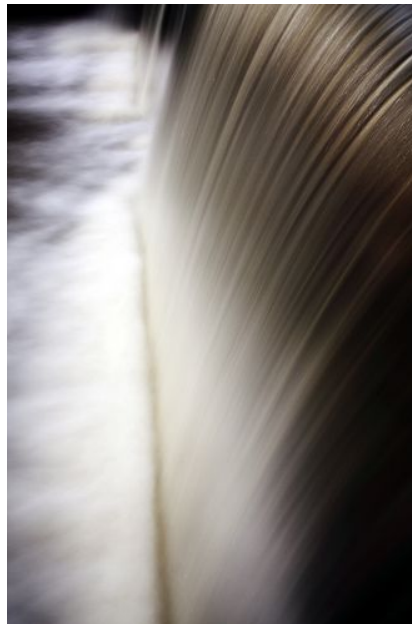
Neutral Density Filter

A [neutral density filter](#) (ND Filter) is simply a gray filter that limits the light passing through it. That's all it does. This filter will give you the freedom to change the aperture in order to get shallow depth of field shots in daylight, take long exposures during in daylight and blur any subject that moves. You can get filters that come in different darkness levels. A filter that is labeled "ND400" will be much darker than a filter that says "ND4".



	Fraction of aperture opening	Filter Optical Density	f-Stop Reduction	% transmittance
	1	0.0		100%
ND2	1/2	0.3	1	50%
ND4	1/4	0.6	2	25%
ND8	1/8	0.9	3	12.5%
ND16	1/16	1.2	4	6.25%
ND32	1/32	1.5	5	3.125%
ND64	1/64	1.8	6	1.563%
ND128	1/128	2.1	7	0.781%
ND256	1/256	2.4	8	0.391%
ND512	1/512	2.7	9	0.195%

I really like the [ND1000 filter](#) because it allows you to take really long 30 second exposures in pure daylight. You can make moving clouds and bodies of water (including waterfalls) appear very ghost-like. Plus, if you photograph a moving subject, the subject will be rendered invisible (an example would be traffic, or a walking person). The other filters only darken the filter a little bit, which is only useful for minor adjustments.



Infrared Filter

This [Hoya R72 filter](#) allows you to capture near infrared light and will give you the option to make the colors very wild in post-production. This filter works differently with different cameras. Sometimes it works very well (usually with older cameras), and other times it doesn't work as well (usually with newer cameras). I talk about this filter in detail in the [Trick Photography and Special Effects](#) ebook, but there is also a [very informative tutorial on how to use the filter](#) available on my blog as well.



Star Filter



There are star filters available that turn streetlights (or any kind of non-diffused light, really) into stars/crosses. You can buy the filters with different crossings. 4X, 6X, and 8X are the most well known. The image on the left was taken with a 6X. Do a search on Amazon for [cross filter](#) or [star filter](#) and you can take a look around and get the one you like. Pretty awesome stuff!



Lens Reverser Adapter Ring



Ever wanted to get really close up on something but didn't want to spend hundreds, if not thousands of dollars for a new macro lens? Get a [lens reverser](#)! It is a simple adapter ring that screws on the end of your lens so you can put it on backwards on your camera. These things are inexpensive, easy, fun, and the quality is amazing. It is very much worth the money!



The only thing different from an actual macro lens is that you will have to physically move your camera in and out in order to focus on your subject because the focus ring doesn't work when the lens is on backwards.

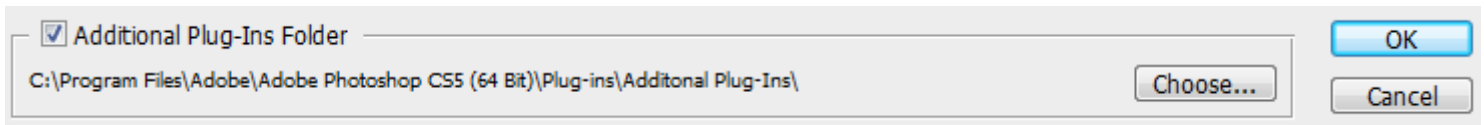
If you want to get even closer, you can get some [extension tubes](#) to place between your camera and your lens reverser adapter ring. Extension tubes simply move your lens further away from your camera, which in turn makes everything more 'zoomed in'. Extension tubes work when your lens is on forward with no adapter ring as well.



Using a lens reverser is common with the use of a 50mm lens because most 50mm lenses can *manually* control the aperture to let more light in – This is ideal when working with an adapter ring.

Photoshop Plug-Ins

If you own a copy of Adobe Photoshop CS, you can download plug-ins and put them in your Additional Plug-Ins folder. You can assign this folder in Photoshop by clicking *Edit > Preferences > Additional Plug-Ins*. You'll then see a dialog box that looks like this:



Simply create a new folder and make that your Additional Plug-Ins folder, then restart Photoshop. Your plug-ins should now appear at the bottom of the drop-down list when you click "Filter".

There are a ton of plug-ins available on the internet for you to download. Simply do a [Google search](#) or take a look at these websites:

- [Massive List of Free Photoshop-compatible Plugins \(ratings included\)](#)
- [Free Plug-Ins by FlamingPear](#)
- [Adobe Photoshop Marketplace filled with plug-ins](#)

Here are some cool plug-ins that I use and recommend. The example images are either by me, a flickr member, or are examples located on the plug-in website.

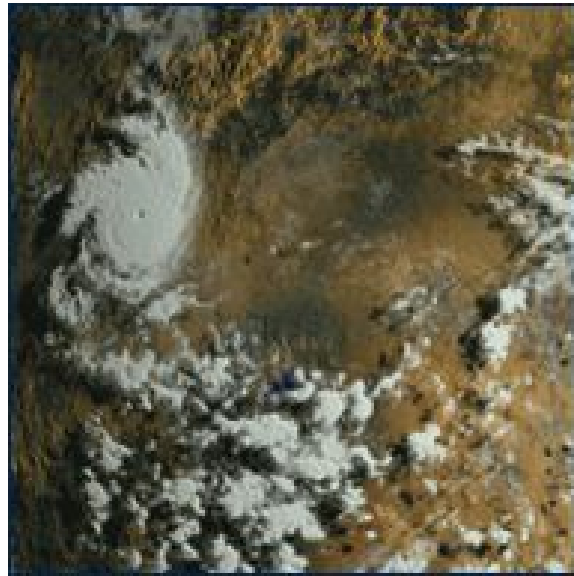
Flood by FlamingPear (free)

Easily add water reflections to any image.



LunarCell by FlamingPear (free)

Create a computer generated planet. You get to control cloud formations, water levels, the way the land looks, etc.



QuickMirror by Mehdi (free)

Quickly and easily mirror images with a click of a button. This is much faster than mirroring images manually.



Photomatix (Use coupon code “photoex” to get 15% off on any purchase)

This program can be purchased as either stand-alone application (so you won't need Photoshop at all), or as a Photoshop plug-in. It creates High Dynamic Range (HDR) images so that you can see every little detail in the shadows, mid-tones, and highlights of your image. Very easy to use. Awesome program/plug-in. Spectacular results without question.



Alien Skin Exposure (\$229)

This plug-in has hundreds of awesome presets that give your photos a vintage feel. Over 500 analog techniques and organic looks like cross processing, Polaroid and vintage Daguerreotype. Each preset is based off of preexisting old film stocks.



HOW TO MAKE MONEY WITH PHOTOGRAPHY



By Evan Sharboneau

Stock Photography

Have you ever heard of “stock photography”? You might have never thought about it before, but stock photography is absolutely everywhere. On billboards, advertisements, blogs, magazines, fliers, book covers, etc. Graphic designers need imagery for their designs to help businesses communicate, and artists need them for their Photoshop creations.

A stock “agency” is simply a company that owns a website that has tons of photos and illustrations up “for sale”. These are JPEG, RAW, and EPS files, not physical prints. The photos, illustrations, and footage clips in these stock agencies belong to thousands of photographers and illustrators worldwide, people just like you and me.

So then, who buys the images? The answer: Anyone who needs it. Here are some examples of how the images get used in case you don't already know:

This is a picture that my friend took of me when I was playing video games. After uploading the image to the agency, someone purchased the license to use it in their blog.

Zdaniem profesor Daphne Bavelier, prowadzącej całonocne sympozjum Games for Learning, u osób, które grają w gry komputerowe, funkcje mózgu odpowiadające za uwagę i koncentrację są bardziej aktywne. W niektórych przypadkach zwiększają się nawet nasze zdolności matematyczne. A to dopiero niespodzianka, prawda?

O zbawienim... gier komputerowych przekonali się już chociażby izraelskie siły lotnicze. Studenci grający w grę **Fortress** wykazywali się lepszymi wynikami w treningach pilotów niż ci, którzy nigdy w to nie grali. Co więcej, grający w gry sieciowych trybach kooperacyjnych są bardziej skłonni do pomocy innym w rzeczywistości i aktywnego reagowania na krzywdę drugiego człowieka.



Badanie, którego wyniki przedstawiono na nowojorskim sympozjum opierało się na grach typu FPS takich jak **Unreal Tournament** oraz **Medal of Honor**. Zdaniem Daphne Bavelier, gry typu "zabij-albo-gin" mogą nawet pomagać w leczeniu chorób oczu, takich jak **Amblyopia** (tzw. lenwe oko, czyli osłabienie zdolności widzenia w jednym oku).

Poprzez rozrywkę gry wideo testują naszą pamięć, koordynację wzrokowo ruchową, umiejętność wykrywania niewielkiej aktywności na ekranie, a także uczyć zarządzania dostępnymi zasobami.

I co powiecie na to? Graliście już dziś w jakąś rozwijającą mózg strzelankę?

Źródło: Yahoo! News
Fot. Wue | Dreamstime.com

This photo is by Yuri Arcurs



Pobierz najnowsze programy

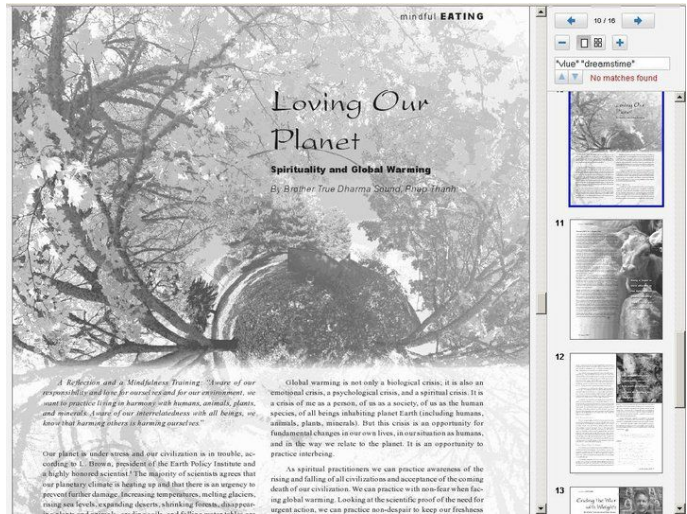
1. TeamSpeak 3 Server dla Windows 3.0.0-beta25 32-bit
2. TeamSpeak 3 Server dla Windows 3.0.0-beta25 64-bit
3. TeamSpeak 3 Client dla Windows 3.0.0-beta22 32-bit
4. TeamSpeak 3 Client dla Windows 3.0.0-beta22 64-bit



www.shutterstock.com · 3778609

Woah, did you just see that? My photo was used in a blog article, but there was another stock photograph being used in a banner advertisement right next to mine on the same page! This demonstrates how stock photography is just like air, it's everywhere and easily accessible. In case you didn't know, Yuri Arcurs is the best selling stock photographer in the world. He has a massive image library of people and lifestyle shots. You can see his portfolio [here](#).




This is a planet panorama photo I took in my backyard in October, it looks like it was used in an article about spirituality and global warming.



You can upload photos of just about anything. Here is me when I had crooked teeth and braces on. It was used on the header of a website showcasing a product that helps reduce lag when playing online video games. There's a caption that says "let the nerd rage begin!" Hilarious stuff!



www.shutterstock.com · 40977874



PWN MMO Lag!
Let The Nerd Rage BEGIN!

- ✓ INSTANTLY LOWER YOUR PING BY 60-90%
- ✓ IMPROVE YOUR RESPONSE TIME UP TO A FULL SECOND OR MORE
- ✓ STOP LAGGING IN HIGH POPULATION AREAS AND RAIDS
- ✓ NO MORE MISSED CLICKS, MISSED OPPORTUNITIES
- ✓ DRAMATICALLY IMPROVE YOUR PVP PERFORMANCE
- ✓ NO MORE DISCONNECTS!

MADE BY hardcore gamers, for hardcore gamers.

We have the best technology, the best talent, and the best connection available. We streamline your data to the game servers so you can PWN the enemy before they can say WTFast!?!?

USER RESULTS

Every millisecond (ms) your ping improves is like giving you a 2 ms better response time while playing WoW. The

"The Cure For WoW Lag."
- MARKEE DRAGON


TRY WTFast FOR FREE!



E-Mail

Password

Password (Repeat)

Subscribe to WTFast Newsletter: ☒

DOWNLOAD FOR FREE NOW! 

"Dang this WTFast is great, ms went from 430 to around 112." - Ron from Alberta

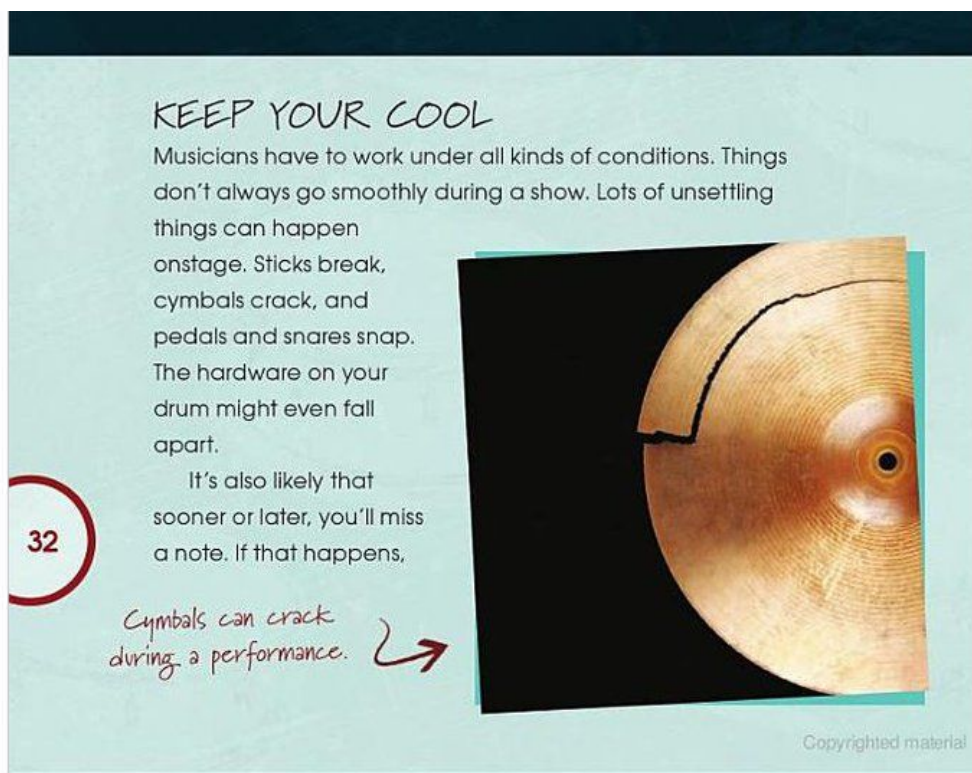
"Game speed is now around 300-400ms. Before it was 800-1500ms." - John from China

After seeing the last photo you might ask “Well jeez... I don't want pictures of friends, family, and myself being used in weird ways that I don't like...” don't worry, it is actually illegal to use stock photos for defamatory or pornographic purposes. Also, if you don't want photos of you, your friends or family used in weird ways, don't take photos of yourself doing weird things! Simple.

In case you are still wondering how stock images can and cannot be used, check out these articles:

- [Restricted Uses for Royalty Free Stock Photos](#)
- [Acceptable Uses for Royalty Free Stock Photos](#)

You don't have to take photos of just people (although they will generally sell the best). I'm a drummer and have a drum set. So, naturally, I took some stock photographs of it. This image of one of my cracked cymbals was used in a book about drums.



If you would like to see more stock images being used, check out this [Facebook group](#).

Getting Started

Now that you have a basic understanding of how stock photography works, where do you start? There are probably hundreds of stock agencies out there, but you should only submit your images to the top players because they will give you the biggest return. All the other small agencies are pointless submitting images to unless you have a massive library of 7,000+ images or something. Let's talk about the good agencies instead:

[Shutterstock](#) – This is by far the best agency. You will get the most amount of money from them. Efficient submission process. Accepts JPEG photos, .EPS vectors, and footage. The footage submission process could be improved.

[Dreamstime](#) – This was the first agency I started submitting photos to. They can be pretty picky but their site is the most visually pleasing :). Accepts JPEG, RAW and EPS vector files.

[Fotolia](#) – These guys seem to put an emphasis on having a worldwide presence. This is 3rd best on the list as far as earnings, next to Dreamstime. Submitting stock *footage* isn't worthwhile though because you have to copy and paste all the meta data in without knowing what clip you are applying the meta data too. Completely worthless and inefficient for footage. The footage section of their site shouldn't even be on there. Don't waste your time.

[123RF](#) - 4th place in earnings. Efficient. JPEG and EPS Vectors.

[BigStockPhoto](#) – Another agency. Inefficient submission process. They accept almost everything you submit.

[CanStockPhoto](#) – Great agency! Welcoming, fast submission process, extremely efficient, excellent customer support, accepts most photos submitted. I really like this agency.

Optional:

[Pond5](#) – This is by far the best agency for submitting footage clips and audio clips (yes, stock *audio* exists too). The reason why is that they pay the best and also automatically include the metadata inside of your footage clips. No other agency does this for footage, and I have no idea why not. Efficient and most practical submission process compared to all other agencies that accept footage clips. JPEG photos, RAW photos, and EPS vectors are *not* accepted.

[iStockPhoto](#) – The most extremely inefficient site out of all agencies and the most picky. Very anal submission process. I definitely would NOT recommend this agency to anyone starting out in stock photography. They are very well known, they pay alright, and they have the most buyers, but I honestly don't think it is worth it. Submitting just one photo here takes a long time. If you are doing stock photography full-time or you are a really amazing photographer with astronomical images with extremely high commercial value that have been executed perfectly in every way imaginable, you will want to submit photos here, but don't be disappointed if they reject 90% of your images after you spent an hour submitting 20 to their site.

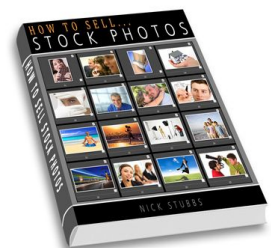
Now, that's a lot of sites I listed. All the sites require photographers to submit a set of 3-10 of their best stock photographs. After that, they review those images and decide to either approve the photographer or reject the photographer for the time being. You can re-apply at a later time with better images.

Most photographers will get rejected the first time, especially if you try to get into Shutterstock, Dreamstime, Fotolia, or iStockPhoto right away without knowing much about how stock photography works. I would start out with CanStockPhoto, BigStockPhoto, 123RF, or maybe Dreamstime if this is your first try at stock photography. After you get accepted into one agency, make more images, get the hang of how things work, and then slowly apply to get into more agencies as time progresses.

Also, one side note: You can sign up with an agency with an “exclusive” contract or “non-exclusive”. If you want to submit images to multiple agencies, you will need to sign up with a non-exclusive contract. Exclusive contract means you will get a higher commission for each sale but are limited to that one agency. You may choose to go that route in order to make your life easier, it's all up to you!

The stock agencies have high standards, and they (and their contributors) are losing a lot of revenue because of it. No one likes it, but you are going to have to jump through hoops and play by their rules in order to get images accepted. I'll list some guidelines to follow on the next page.

- **Make sure your shots are taken at ISO 200 or lower.** Most photos above ISO 200 will get rejected. Use a noise removal tool if you have to, but don't over-do it.
- **Make sure your images are focused properly and are sharp.** If you are photographing a person, put the focus point on their eyeball. Don't use sharpening in Photoshop unless you have to, and if you do, don't over-do it. Remember that using F11 is generally the sharpest aperture, so use it when you can. If there is any amount of camera-shake in your photo, it will immediately be rejected.
- **No harsh lighting.** If there are sharp shadows, forget it. If one part of the photo is in shadow and is dark, while the other part is bright, the photo will get rejected. Use external flashes and use diffusion material over your lights if you have to light up your subject better.
- **Dreamstime is really picky on skin blemishes and skin imperfections.** I don't think the other agencies are as picky. I have acne and submit photos of myself to agencies frequently, but Dreamstime isn't always the most impressed.
- **Make sure your photo is properly exposed.** This is a given. Not too dark, not too bright. Also, don't "over post-process" your images too much. No extreme HDRs or added artistic grain or anything.
- **Images with commercial value will sell more.** This is a subjective topic, but in general, images with commercial value sell more. When you are looking through a magazine or see a banner ad, take note of how the picture is being used. Chances are that image got accepted into the agency and sold because it had commercial value.
- **Get the e-book ["How to Sell Stock Photos" by Nick Stubbs.](#)**
I've given you the tip of the iceberg of how to get started in stock photography, but this guide will tell you everything you need to know to get started and will also give you a number of strategies you can use to help you create images that sell really well. Highly recommended for beginners and pros. It's also filled with examples to help you get a feel for knowing how to get an image accepted and how to get it selling well.



How much money can you make?

You make how much you put into it. You will need to learn how to edit your photos, how to properly keyword them, how to submit them, and how to get your images accepted before you start to earn any money. It's a skill that needs to be learned.

If you can produce a *ton* of great images like Yuri Arcurs, you could potentially make a million dollars a year just like he does. If you have a much smaller portfolio with images that aren't so hot, you won't make anywhere *near* one million dollars a year, but you still will make something; even if it is a few bucks.

Keep in mind that Yuri Arcurs also has several employees working for him, has high-end professional models, and has a really awesome studio, so he has a lot of expenses. Not all of that million dollars is profit. When he retires though, those people won't be working for him any more so he won't have expenses, but he will still be collecting royalties from all the photographs he took in his lifetime.

Yuri got his hands dirty, went for it, and built a business. Not a lot of other people can throw themselves out there like that and be a risk-taker. I'm thinking 99% of people. I myself do stock photography but I don't have employees, don't have *any* kind of models other than myself and some immediate family members, and don't have a studio. I would be making way more money if I had those three things and used them as efficiently as possible, daily. Instead, I just semi-casually/semi-professionally shoot what is around me, then add those images to my portfolio. Simple.

Selling Your Photos As Art

Now, I've only done this a few times, so I am by no means a pro at it, but I do have some tips to share. Here is my basic little "strategy" for selling artwork to average people:

Select 24 of your best photos (ones that have artistic quality) and print them out on 24 separate 8"x10" prints. You can upload your photos online to SmugMug.com and they will send your images to you printed on high quality paper back in the mail. You can also get images printed at a grocery store like Fred Meyer, Bi-Mart, Walmart or at a regular photo printing shop. As of the time of this writing, if you ordered 24 8"x10" prints from SmugMug.com, it would cost you \$40.56 + shipping.

Next, we need some frames to put the photos in. The cheapest frames you can get is a pack of [12 8"x10" MCS frames](#). Order two packs of 12 so you get 24 in all. This will roughly cost you \$47 + shipping. These frames should also be available at Walmart if you don't want to order them online.



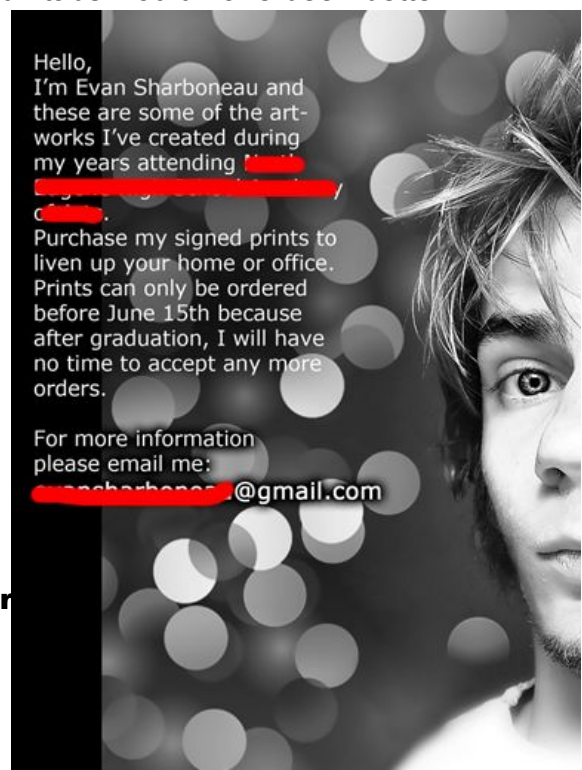
These are just a few of the prints that I have stored away in boxes in my closet, ready to sell. The total cost to produce 24 framed prints is a little over \$100, so you will only need to sell 4 or 5 prints to break even. After you sell at least 4 or 5, the rest is profit. Oh and – if you sell one print, order it again and replace it with the same image so you always have the same 24 images. Some images will sell over and over again, others not so much.

Congrats! You have 24 awesome framed photographs, which only costs you about \$100 to produce. Now what? Now we need to figure out how to sell them. Here are some ideas:

- If you are a middle school, high school, or college art student, sometimes the teacher will notify their students of any art contests happening around the local area. If this ever happens, enter in some photos. In general, having a photo that is emotional, unique, or creative will usually get you more points in a contest *wink wink*. Sometimes these contests have cash prizes, other times you can get paid if you sell a print. Most importantly though, it gives you exposure. This can and will open up opportunities for you. I was in an art contest a while ago and won first place, and someone who works at a concert hall happened to see my artwork on display and then contacted me via Facebook the same night asking if I would be interested in having my work on display in their building for a month. I think I sold \$150 worth of prints at the end of the month (I price them at \$30 each, so that means I sold 5). In another art contest I was in, someone contacted me wanting me to speak at their photo club.
- Ask staff members who work at your school if you can hang up your artwork in certain generic areas of the school, such as the main office, staff lounge, or student counseling area. If you get the staff lounge, put the majority of your photos there. Make sure to have a sign or print taped up to the wall letting people know your name (and that you are a student at the school), and where to contact you if they want to buy a picture. Making a flier with pull-tabs should work well. You can also leave a note that says you have other photos in different areas around the school or on your website, but make 100% sure that you leave them an email address or phone number so they can contact you! Here are two that I've made in the past, pull-tabs would have been better:



rights r



- Sell the prints at flea markets or “local gatherings”. If you live in a tourist town, your chances of selling stuff will potentially increase.
- Go to local restaurants and ask if you can hang up your art work there. Brand new restaurants that just have opened might be the best ones available because they get a lot of business when they first open up. After you are done eating there, just ask someone who works there if they would be interested in displaying your artwork. If you don't want to physically go “door-to-door”, use the phone book and call all the restaurants instead (this isn't always the best idea... If you haven't been to the restaurant before, it could turn out to be a bad place for artwork.)
- Create a [Craiglist](#) posting and either sell your artwork or trade it for something else.
- If any building/place/organization/gallery features local artists, try getting your stuff on display, especially if there is no fee. All you have to do is drive over there once, hang up your stuff for a while, and if it sells, great! If not, put your stuff on display somewhere else. If nothing ends up selling, there will surely be an event waiting for you in the future where you can display your artwork. It doesn't hurt to have some “inventory in stock”, even if you don't sell anything for a decade. You can hang the artwork around your house in the meantime!

These are just some of the things that I have done in the past (I've only actually done the first two ideas back when I was still in high-school and have a bunch of prints left over, so I'll get around to implementing the other ideas at a later time). If you have any experience or tips that you would like to share on selling prints, please e-mail me at admin@photoextremist.com.

And of course, if you are *looking* for more tips, just do a [Google search](#).

Selling Art Online

You can also sell your artwork online using print-on-demand services. All you have to do is upload your images, keyword them, and hope someone will buy. These places print and frame the artwork for you, so you don't have to do anything except upload the images. Most of them also offer your work to be printed on other things too, such as mugs, puzzles, mouse-pads, calenders, etc. Let us review some of these sites:

[ImageKind](#) – This site integrates with Flickr. This means you can just import your entire pre-existing photo gallery onto this site right away. The titles and keywords get imported as well!



[Fine Art America](#) – This site apparently has the most traffic compared to all the other sites, however you will need to pay around \$30 to host an unlimited amount of images each year. You only can host like 10-40 images for free.



[DeviantART](#) – This site is good only if you get a Premium account (\$30/year) because you get to set the markup yourself and keep a very large proportion of the royalties. Otherwise the profits are just too slim and not worth it. You need many great photos to make any sales.



[RedBubble](#) – You can sell T-Shirts and prints on this site. As of the time of this writing, this is the only site I've experimented with, but I've gotten a few sales from it already so I plan on adding some more stuff. Not much of a profit margin but their stuff is really high quality, so it costs more produce.



Thanks for reading my ebook! It's been fun writing it. Remember to check up on [PhotoExtremist.com](#) once in a while!

Talk soon,
Evan