

THE TOP 5 CREATIVE PHOTOGRAPHY TECHNIQUES



PHOTO EXTREMIST . COM

License

Copyright © 2010 Evan Sharboneau.

Feel free to pass around this ebook and distribute it any way you like.

You can do whatever you want with this ebook under these conditions:

The ebook must be presented it's entirety. Do not modify the ebook.

Don't use any form of spam to promote it.

Don't sell it unless you get my permission first.

About The Photos Used in this E-Book

All images in this ebook are hyperlinked to their original location on the internet. This means you can click on any photo in this ebook and it will direct you to the original photo on the web! Feel free to comment the photographer's great work and ask them questions if you want to know more about their image. The photos that do not contain any hyperlinks have been created by myself.

More Boring Legal Stuff

Contents contained in this ebook may change and be updated at any time without prior notice.

The author has made every reasonable attempt to achieve accuracy of the content in this ebook, and assumes no responsibility for errors or omissions. The information contained in this document is “as-is” and should only be used as you see fit, and at your own risk.

Any trademarks, service marks, personal names or product names are the property of their respective owners, and are used only for reference. There is no implied sponsorship, affiliation, certification, approval, or endorsement if we use one of these terms.

Rather than put a trademark symbol after every occurrence of a trademarked name, we use names in an editorial fashion only, and to the benefit of the trademark owner, with no intention of infringement of the trademark. Where such designations appear in this book, they have been printed with initial caps.

THIS PRODUCT IS NOT ENDORSED OR SPONSORED BY ADOBE SYSTEMS INCORPORATED, PUBLISHER OF Adobe® Photoshop® software.

Adobe, the Adobe logo, and Adobe Photoshop are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries. All other trademarks are the property of their respective owners.

Adobe product box shot(s) reprinted with permission from Adobe Systems Incorporated.

Table of Contents

[0 - Introduction](#)

[1a - Long Exposure Effects](#)

[1b - Long Exposures During Day](#)

[1c - Other Long Exposure Effects](#)

[2 - Levitation Photography](#)

[3 - 360x180 Planet Panoramas](#)

[4 - Infrared Photography](#)

[5 - Multiplicity Photography](#)

Introduction

Hello and thank you for downloading **The Top 5 Creative Photography Techniques** ebook! I'll be showing you some creative ideas that you can apply to your photographs in a variety of different ways. This ebook is written for people with DSLR cameras who want to pump out more *creative* work. It is a collection of some of the best posts on PhotoExtremist.com.

During this ebook I will sometimes mention using Adobe® Photoshop® software. I highly recommend that if you do not have Photoshop right now, that you pick it up. Photoshop is the industry standard for editing imagery, and the most versatile compared to all other applications. Photoshop is where the magic happens, it can turn a dull photograph into a work of art, and a work of art into a masterpiece!



Basically, there are three versions of Photoshop:
[Adobe Photoshop Elements / Mac Version](#)
[Adobe Photoshop CS5 / Mac Version](#)
[Adobe Photoshop CS5 Extended / Mac Version](#)

What one should you choose?

If you have had your camera for a while and photography, photo-manipulation and art is a significant part of your life, get CS5. It has a vast number of features and gives a lot of control to the user. Most of the tutorials you see online and in this ebook will be geared toward CS users. If getting a brand new copy of CS5 from Amazon.com is too expensive, I recommend getting a used copy of CS4 or even CS3 from eBay.com. You most likely will find it with a significantly cheaper price tag. I would go with Photoshop CS4 or CS3 over the newest Photoshop Elements any day.

I wouldn't get anything below CS3 because the technology is becoming more and more outdated. If you have an older version of Photoshop, such as CS1, CS2, CS3, or CS4, you can just buy a CS5 "upgrade" and get a big discount on the price. Discounts are also available for [students](#).

What if you don't want to buy an image editing program?

If you flat out don't want to pay for Photoshop at all, you can download the free 30 day trail from Adobe.com or download the free alternative program, [GIMP](#). The GIMP has a different graphical user interface than Photoshop, so some the tutorials in this ebook will need to be done slightly differently in the GIMP.

Long Exposure Effects

Drawing with light is extremely really, really fun.

In order to get these types of shots, here is a generic combination of camera settings that you can use as a rule of thumb:

Put your camera on a tripod and use [Manual Mode](#) and [manual focus](#), lower the ISO number as low as it can go. Have your aperture at F8 and your shutter speed at 5 seconds. If you want to make the photo brighter, change the aperture to a smaller number (like F3.5). Adjust your shutter speed as necessary. Most DSLR cameras have a maximum of 30 seconds as the shutter speed.

There are many different light toys that create different effects. Things that have been used before include [sparklers](#), [glow sticks](#), flashlights, [maglights](#), fire/torches, [RGB strips](#), [Christmas lights](#), illuminated cell phones, iPods, [laser pens](#), and of course, any kind of LED.

Let us get into some examples:



Scribble with a [laser pen](#). In this example the laser pen was stroked up and down the models face. The model was very still. Be careful not to get the laser in your eye!

1 sec. / f 3.5 / ISO 200



These are city lights from a far away distance.
Move your camera up and down (or from left to right) while moving your focus ring at the same time. The camera records the light turning from sharp points into big blurry bokeh blotches.
sec. / f 6.3 / ISO 200 / 55mm



These lights are little [LED Finger Flashlights](#) that wrap around your fingers. I had red, blue, green, and white strapped around my fingers and waved around my hands while running around my kitchen frantically. My body remained invisible because it was not illuminated and was in constant motion. I just randomly drew lines, but you can draw faces or shapes like hearts, or words. Get creative! This was a 30 second exposure.



This is just a standard long exposure of a [firework sparkler](#) in motion.

Keep in mind that if you use a flash, the person holding the sparkler will show up in the photograph. Regular sparks from fires can also make amazing shots, especially if you go in and out of focus during the exposure. Make sure that the background is dark.

7 sec. / f22 / ISO 200.



Sure, you can use sparklers by themselves in empty dark space, but you can also trace objects with sparklers. Cars, bicycles, and sometimes even human beings make great subjects.

7 minutes long, ISO 100, F18



You can also use flashlights to give the scene an illustrious look.

Simply turn on your flashlight and start “spraying” light onto the scene to illuminate it in the dark. Remember, the entire purpose is not to just light up your subject with a stationary light, but to have a long exposure for say, 6 seconds, and move the light all around the environment to get that magical effect. If you have an extremely powerful flashlight, it is very well possible to illuminate *entire landscapes* in the dark as well!



If you have a tripod on you, and you’re in an amusement park or some kind, long exposures of rides look very good when taken in long exposure mode.

Ferris wheels are a classic example. For a light painter, going to an amusement park at night is like a kid going to a candy store



You can also create long exposure silhouettes.

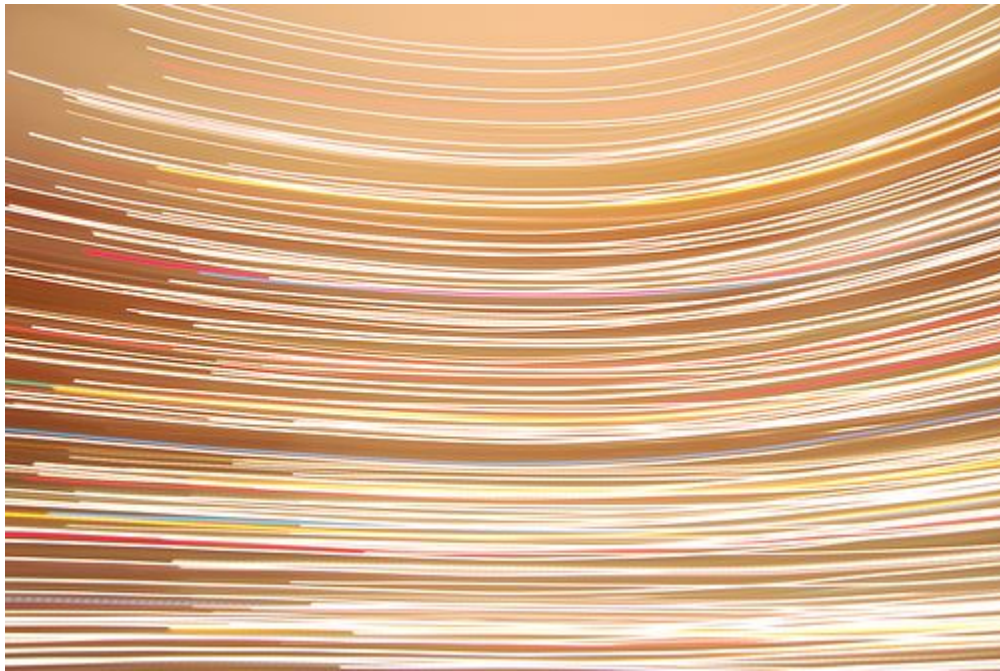
Put your camera on a tripod.

Make sure your subject is standing still.

Make sure there is no light shining on them from the front.

Take your exposure, and then start light painting light from behind them. 5-30 seconds is good.

This particular image was made using a [battery operated fiber optic light](#). It constantly changes colors to create a unique effect.



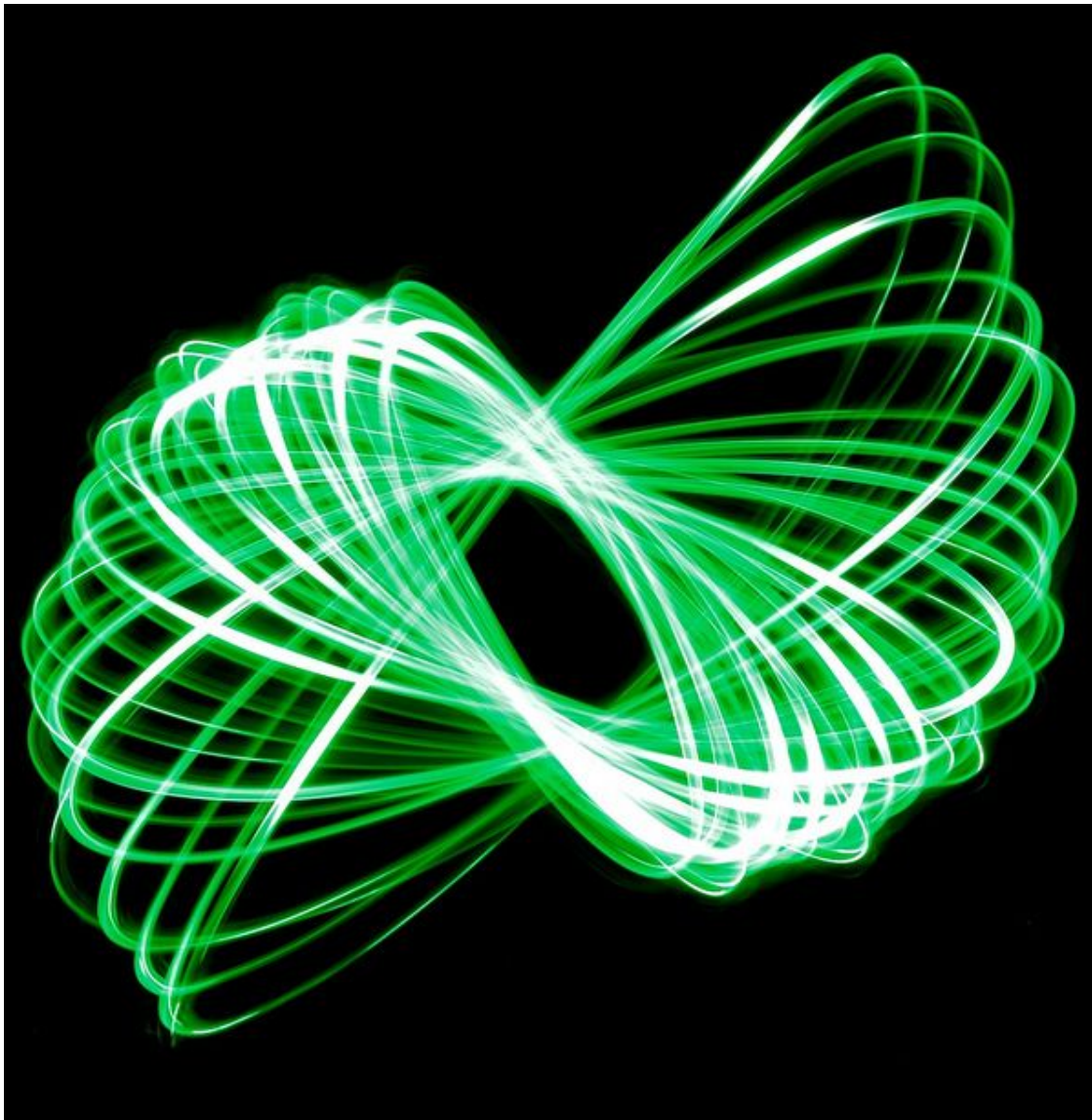
This was a long exposure of Christmas tree lights on a Christmas tree. It was a one second exposure. In order to get really smooth, straight lines, get your lens in focus then turn autofocus off so your camera won't get stuck trying to focus. Then take ~1 second (or shorter) exposure and jerk your hand in a really fast motion, you should get a result just like this



Long exposures of traffic lights have always been the classic example of long exposures. You must have a good tripod though.
30 sec / f18 / 50mm/ ISO 100

These lights are the little [LED Finger Flashlights](#) that wrap around your fingers. My body remained invisible because it was not illuminated and was in constant motion. Remember that you can draw faces or shapes like hearts or words. Get creative! These images are 30 second exposures.





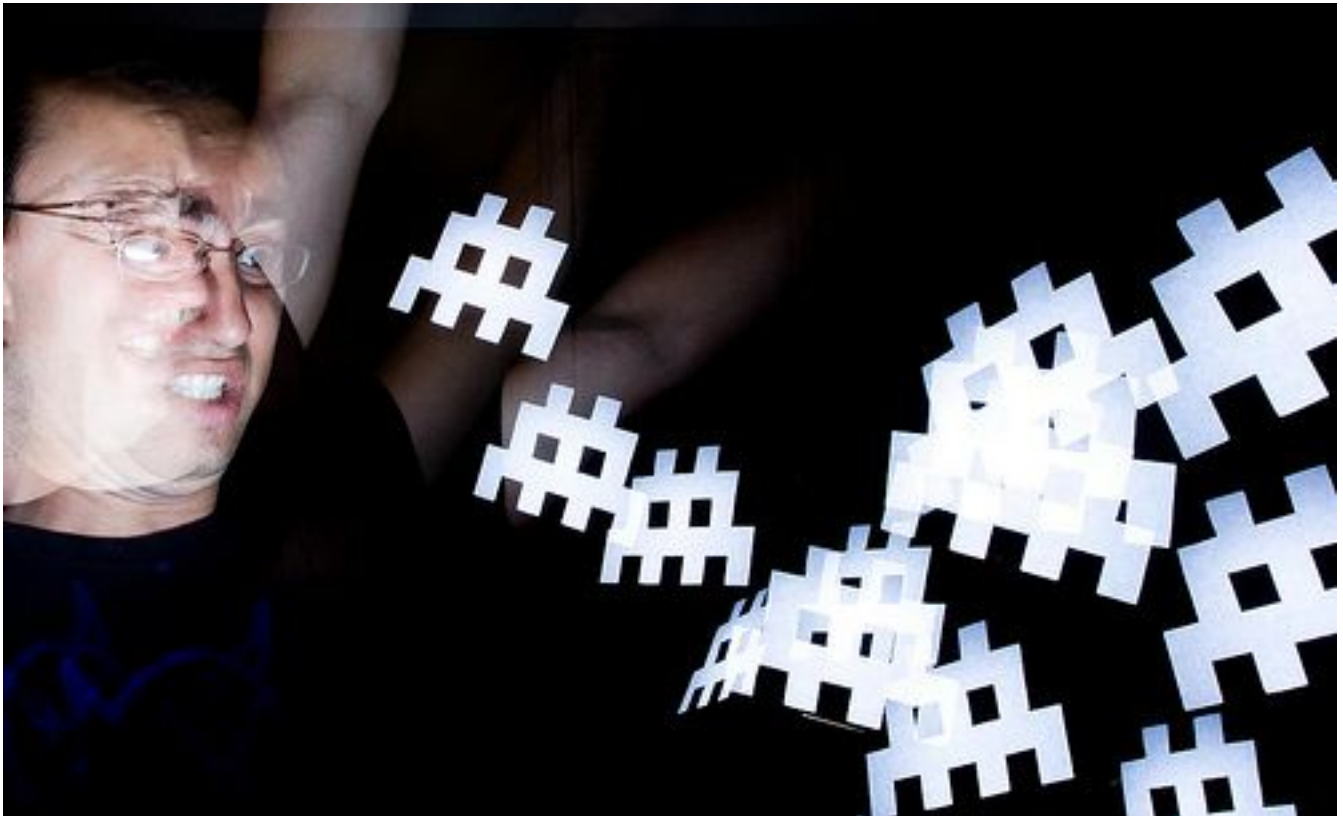
These are called physiograms. Simply tie a string to the end of the [Maglight](#), attach the other end of the string to the ceiling. About 2-4 feet is good. Maglights are pretty much MADE for physiograms (or any kind of light painting) because they are lightweight, and the cap can be taken off to enable a 'candle mode', making it the perfect light toy. Once your Maglight is dangling from the ceiling, put your camera on the floor right underneath the Maglight (on manual focus) turn the room lights off and the Maglight on, give the Maglight a little push, then take your 30 second exposure (or however long you want it. 15-30 seconds is what I use.)

More information about physiograms can be found [here](#).



Again, LEDs are just great. You can trace objects with them, just like you can with sparklers!
(Although, of course, use sparklers outside!)

I was using my green [LED Finger Flashlight](#) again on this one.



You can also make flash stencils! Just put cardboard in front of your flash with a design cut out in it, and you're ready to go. You can learn how to make flash stencils in more detail [here](#).



Another cool thing to do with flashes is to take a 30 second exposure in the darkness and fire the flash multiple times on your subject in different areas in the frame. This is similar to multiplicity photography that I will talk about in section 5.



And last but not least: Capturing lightning. This was a 7 minute exposure with the camera on a tripod. This is great because you can capture multiple strikes of lightning in one frame. However, because super long exposures introduce noise on the camera's sensor, you can help eliminate that by just taking a bunch of 30 second exposures one after the other, and then overlapping the frames in Photoshop by using the Lighten, Screen, or Linear Dodge (Add) blending modes.



The example above was photographed by Brent Pearson. Pretty extraordinary stuff. You'll notice that the light on the foreground is very diffused (soft) and natural looking. Brent Pearson explains all the lights he uses and how to set them up in his ebook: [Night Photography and Light-Painting](#).

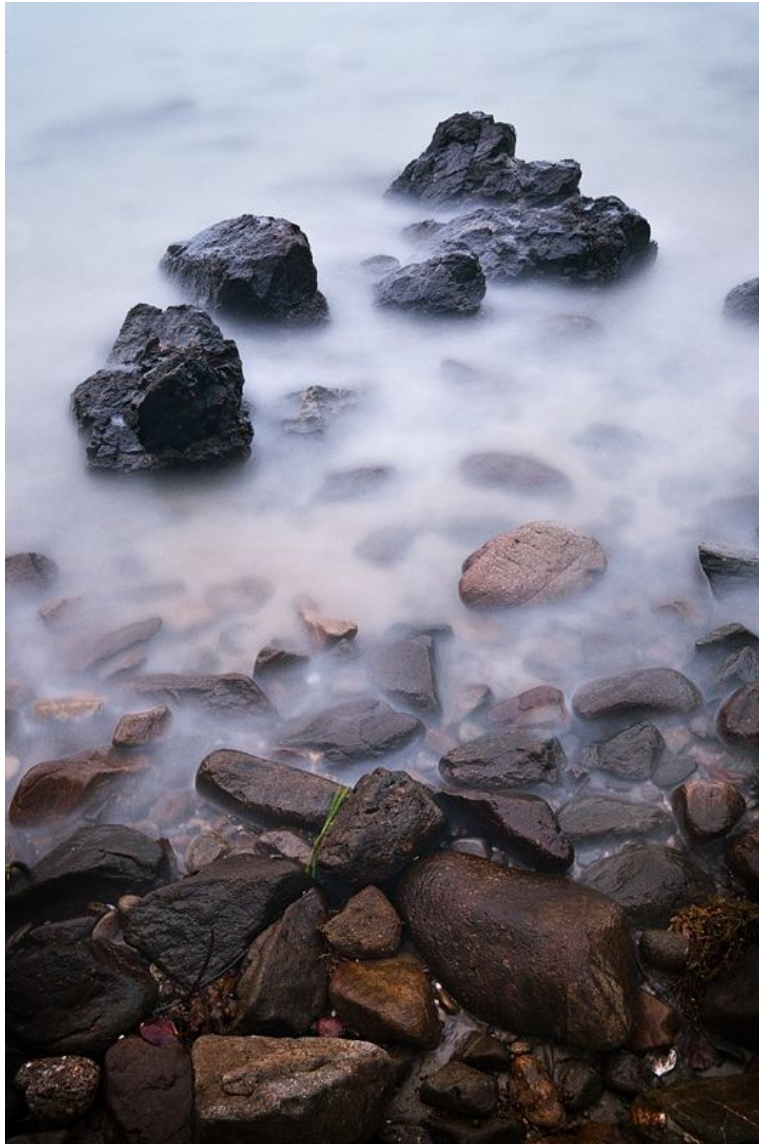
Normal flashlights such as Maglights do work, but the light might be a little bit weak or uneven. If you are annoyed with the 'un-even-ness' of the light, try putting some sort of diffusion material over the front unit of your flashlight, or just get [Brent's ebook](#) and learn the secrets about the magical lights he uses.

Perhaps one of the best options, however, is to get one of the [LED Lenser flashlights](#). Although I haven't tried them myself, the beam of light appears to be much more brighter and smooth compared to Maglight torches.

Even though this photo sort of looks like it was taken during the day, it wasn't... But that doesn't mean you can't actually do long exposures during the day. Let's talk about that in the next section!

Long Exposures During Day

You can also create long exposures of landscapes during the DAY by using an extremely dark filter that attaches to the front of your lens. The filter you can use is a [B+W filter](#), an [ND400 filter](#) (I'd recommend this one), or even an [Infrared filter](#). Taking long exposures during the day is useful for creating foggy/ghostly seascapes, blurring clouds, blurring water and waterfalls, and removing people from a scene. I'll show you examples of all of these methods below.



Long exposures are excellent for moving ocean waters splashing against rocks. The longer the exposure = the more misty the water will look.

Your camera needs to be on a tripod. Make sure to get your focus in scene before you put the filter on. After that is done, put your filter on. Switch to manual focus because your camera won't be able to focus after you have put on that extremely black filter. Switch to shutter priority mode and make the exposure as long as you can get it without overexposing your image. Then of course, take the picture... ☺

If you need more exposure time, make sure you are using the lowest ISO number you can (Like ISO 200 or lower), and the largest F Number you can (like F22, for example)



Long exposures of waterfalls create that smooth/soothing effect that is very popular. This looks blue and white because it was taken with an Infrared Filter attached to my camera lens. If you were using an ND400, the colors would be normal. We will talk about the infrared filter in detail later in this book and how you can use it to put surreal colors in your landscapes.



This is a composite of two images. Both were taken on a tripod. The sky was too bright, so one had to be set for a 5 second exposure, while the other image of the water had to be set to 20 seconds. Then the two images were put together in Photoshop to give a wider dynamic range. Again, the long exposure is made possible by the use of a ND400 filter. You can also wait until dawn or dusk when it is really dark and take your photos without the need for a filter.

Other fun long exposures



A creative use for the ND filter would be to take a picture of a watch or clock. In this 4 minute long exposure you can see each second hand as it moves around the clock.



These eyes were constantly moving while the camera took a 1.5 second exposure. No Photoshop!



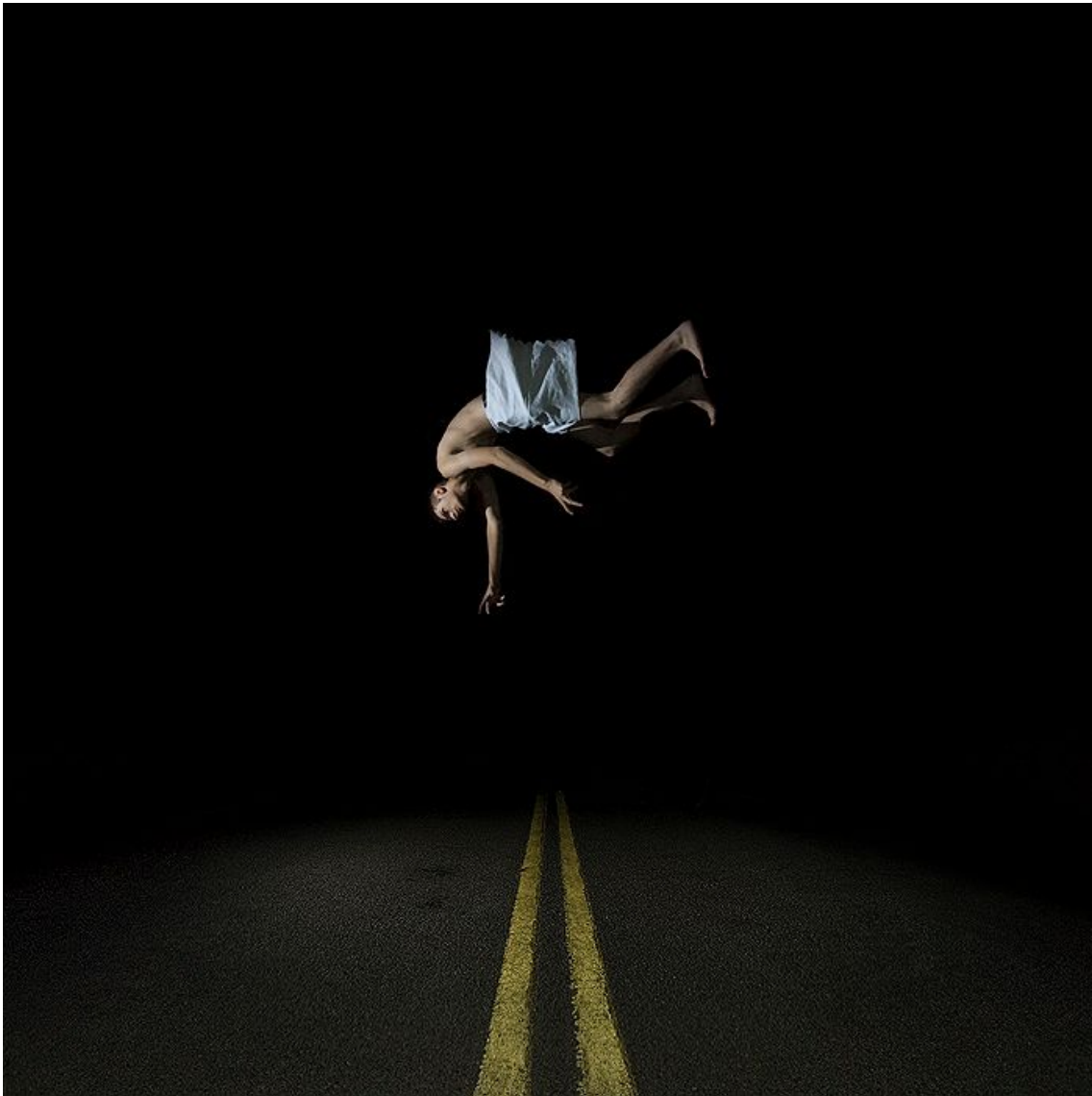
This was a one second exposure. Half of the exposure the eye was open, then after .5 seconds, the eye was shut. What you see is the eye both open and closed at the same time.



This is a long exposure at night time of snow falling! The snow was illuminated with a light, and a tree is in the background. 3 seconds.

Levitation Photography (Video tutorial [here](#))

Levitation photography is a great photography trick that has always made me smile. The best thing about levitation photography is that it looks real.



How did I get take the shot above? First, let me explain the physical setup. It was at night time, obviously. I used an external flash on a tripod that was directly to the right of my body. My Digital SLR was on a tripod, directly in the middle of the road. My tripod was as low as it could get (about 3 feet).

A stool was placed in the middle of the road, and in order to help the camera 'see' the stool in the darkness, I placed an LED light on top of it and adjusted the focus until the LED looked sharp, then turned off auto-focus because it is unnecessary to use auto-focus after you have the stool in focus. I put the self-timer on 10 seconds, ran to the stool, sat on it, pulled up my shorts, put the pillowcase over them, got into a pose, and waited for the camera to take the picture.



The trick is to get one shot of a person either standing or sitting on a stool (left image), and another shot with no person or stool in the frame.

That's a white pillow case I'm “wearing” by the way; I thought it looked more aesthetically pleasing and less contemporary than green shorts. Heh... Maybe not the coolest idea, but whatever. I actually took about 20 different shots of myself in different poses, but this was my favorite.

Now that we have the 2 essential shots we need, lets open them up into Photoshop. Put both of the images into the same document by dragging and dropping or copying and pasting them in. Have the image with the stool be the top layer, and the image with no stool be the bottom layer. Select the top layer and then erase the stool by using an eraser tool or by using a layer mask. Ta-da! The stool is gone, and it looks like you are floating in mid-air.

To flip myself upside down I selected my body using the *Rectangle Marquee Tool*, right-clicked and selected *Free Transform*. I rotated my body 180 degrees and also moved it upward a little higher from the road. This is very easy to do in a night-time situation like this one because the background is completely black. If you are in an environment that has a background that isn't a solid color, you will have to either carefully erase everything around your body and then flip it upside down, or somehow suspend yourself upside down by either hanging your feet from a rope or by leaning your legs up against something and then erasing the object.

Probably the most well known image that showcases the “upside-down levitation trick” is “[The Smothering](#)” by Miss Aniela. It's been rumored that someone was holding her by her ankles and the hands were later taken out in Photoshop. [Denis Darzacq](#) (that link leads to his levitation portfolio) also creates very interesting levitation photographs, and he does it with no Photoshop. He uses break dancers for models and captures them when they are in mid-air at just the right moment. Here is a [YouTube video](#) that shows him taking pictures in action.

I would highly recommend watching [this video](#) too! Some of Denis' work is included in the video, as well as a bunch of different photographic optical illusions that are not covered in this book.



This image on the left was created with four layers. The camera was on a tripod and was on manual mode to make sure each exposure was identical in terms of brightness, focus, and white balance. One photo was taken of only me sitting on the couch, and the other three photos were of me holding the pillow, chair, and knife. I then layered the images on top of one another and erased the arms and hands that were holding the objects. After that, I made it black and white, added a texture, and put some skulls on the couch.



Here is the same technique, just a different subject and composition. The person was laying on a stool and kicking their feet up into the air. A slow shutter speed causes the motion blur of the feet and hair to occur. If you need more support don't shy away from using multiple stools, especially if you are in really awkward poses.

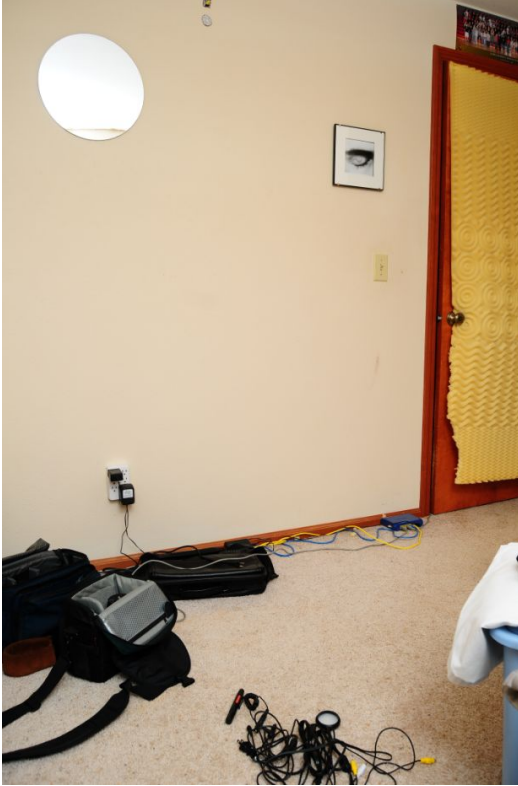


Talking about multiple stools, in this photo my hands were on two basketballs and my feet were on a little stool. This is actually harder than it looks because there is a lot of balancing weight on the basketballs. The masking between the fingers in Photoshop takes a bit longer as well.

Perfecting Shadows

If you ever photograph a levitation shot against a wall, you will most likely run into problems because the shadows of your body *and the stool* will show up on the wall. The background layer will be about twice as bright as the body layer. At first glance it might appear to be a tricky situation, but I have a solution to fix it.

Here are two example photographs:



Layer 1 (bottom layer)



Layer 0 (top layer)

As you can see, we've got some tricky situations in front of us. My arm is in front of the stool and the shadows of the stool are on layer 0 but not on layer 1. If we started to mask out the stool as we would normally, it would look unrealistic. We need to take some extra steps for this image to look realistic.

In order to remove the stool and maintain the shadows of your body, follow these steps:

1. Create a layer mask on the top layer as you normally would.
2. Select the layer (not the layer mask) in the layers pallet and then carefully make a selection of the arm and hand. You can use the Quick Select Tool (this is what I used on this image) or the Pen Tool. Use the Refine Edge tool located at the top to further adjust your selection if it isn't accurate enough. In this particular case, I am going to select everything but my hand, arm, back, and bottom. The selection will act as a "wall" when we create the layer mask.

3. After you have made your selection, select the layer mask and start painting black with a very large brush (400-1400 pixels) with the hardness set to 0. The stool is gone, but we need to bring the shadows back.



4. With your selection still active showing the marching ants, select the Burn tool then go to the top and set the brush size about to about the same size of the leg shadow (in this particular case it is roughly 700pixels) and set the brush hardness to 0%. Select Midtones for the range and lower the exposure to about 50% or so.

If you took the photograph using harsh lighting you will need to select a harder brush. Soft lighting is easier to deal with.

5. Make sure the bottom layer is selected and burn your shadows in. The stool is now removed, and artificial shadows have been added.

If you want *real* shadows, you will have to tie a rope around your ankle and then somehow hoist yourself up in mid air and then clone out the rope. This isn't worth it in most cases! Using artificial shadows is easier.



360X180 Planet Panoramas

These are complete immersive panoramic images (A complete spherical field of view... It's like a 0mm lens.) You can use software like Hugin to stitch them, and Flexify to manipulate them. If you want to learn more about what a 360x180 panorama exactly IS, head [here](#) and read the column on the left. This article is pretty long, so if you want just the big-picture basic gist of things, watch my [video](#). If you are serious and want to actually execute taking 360x180 panos, then watch the video AND read the article. This article goes into more detail than the video. If you are brand new to photography I would recommend skipping this section because it takes some effort to learn how it all works, but if you are up for the challenge, be my guest!



By taking 360x180 panoramas and stitching them in certain ways, the environments will look like little planets, inverted planets, or a number of other crazy things. It does require some patience, but it is definitely worth doing. People will be asking you "How did you do that?" every time you show them a 360 stereographic stitch. You can then respond saying "I took 65 images with my camera on a tripod to capture a complete immersive view of the entire environment around me, I then stitched the photos to make an **quirectangular projection** (left image below), and then put that equirectangular image into Flexify and remapped it into a **stereographic projection** (image below, to the right)." They'll look at you like you're nuts.



equirectangular



stereographic

You will need a digital SLR (or even a point and shoot camera), and a program called [Hugin](#). It is also recommended that you have a tripod with a panoramic tripod head, and the Flexify Plug-

in for Photoshop, but it isn't required. I will talk about all of these in this article, but first, let's look at some examples:



These are just so awesome!

Taking hand-held 360 panoramas:

First, set your camera to take SMALL JPEGs. You CAN take larger jpegs, but I wouldn't recommend it until you are successful with your first completed panorama. The resolution/image size builds up fast when you are taking 360x180 panoramas.

Take your digital SLR and use the widest angle lens you have. Mine is an 18-55mm kit lens, set on 18mm. Next, point the camera to the ground and start taking pictures around you. Shoot in vertical orientation.

Traditionally speaking, it is best to use manual mode on your camera with manual focus (and this is the method I recommend using), but I've discovered that using Aperture Priority mode (or even full Auto mode) with automatic focus works too. If you are using Automatic Mode, I would suggest your camera to be set on matrix metering.



Once you have the first row done, move your camera up and take the next row of pictures, making sure that the field of view will overlap by about 25% or more. On my camera/lens, I have to take 4 or 5 rows of pictures, with about 12 pictures in each row. This comes out to be about 65 total pictures (But that is on my specific lens and camera, it might be different for yours). If you're using a super wide angle fish eye lens, you can get the job done by only taking 5 pictures. The resolution won't be as large, but hey, it takes a heck of a lot less time. Try to rotate your body around the camera rather than rotating the camera itself; it's a good idea to keep the camera in the same spot.

Once you're done taking those pictures you need to point the camera straight up at a 90 degree angle. This is called the Zenith. Then take another picture straight down at 90 degrees (try to move your feet out of the way, if possible) this is called the Nadir. I usually mess up on the zeniths and nadirs, and that's fine, but the image won't come out looking perfect: There will be a little black spot where the zeniths and nadirs are supposed to be. You will see what I mean if you didn't take these correctly (it's not that big of a deal.)

Now we are ready to stitch them all together on the computer!

Download a program called [Hugin](#), install it, and then boot that mother up.

Using Hugin to stitch 360 panoramas:

Load all of your images into the program. Hugin will take a while to process all of your images, depending on your computer speed and what size you took the JPEGs at (this is why I recommended shooting small JPGs.)

It takes about 10 minutes to process all of the images on my computer, so be patient. I would recommend closing all other applications you aren't using. This will save memory usage, which Hugin needs. I've found that if I had too many programs running, [Hugin](#) would run out of memory and not do its job.

Once the images are done being processed, one of two things will happen. Either 1) A dialog box will appear saying that it couldn't stitch some images together, and you need to manually fix

them, or 2) a preview window will pop up, showing your panorama. If the former happens, you will need to add points on the images that are in the same spot on each photograph. Hugin will tell you what images need this. If it isn't possible to add points (this usually happens with the zenith or nadir), just delete the images, and then re-align the pano.

Now go to the top and click Preview. Here is your image. If you want it to look like a planet, select "stereographic" from the drop down box. Then, when you are looking at the preview, left-click on the spot where you were standing to take the photograph. This will morph the image into a sphere at that specific point. And there you go! You can adjust the field of view by using the sliders on the bottom and right side of the image, but be somewhat conservative with this feature, because the image will get distorted on the edges if you over-do it. You can also straighten the horizon by clicking that straighten icon at the top, but I usually don't see any difference when doing that.

Close the preview window, and then click on the Stitcher tab. Click the "optimize image size" button (this makes the image have more resolution) and then finally click Stitch. Your image will then be saved as a TIFF (or a JPEG, if you selected this option in the Stitcher tab.) It takes a long time to stitch it all together, so just go get something healthy to eat while it's doing its thing. When it is done, you can open up the directory to where you saved it, and then see its glory.

Perfecting The Stitch (optional):

Yes, you *can* take *hand-held* 360x180 panoramas, but when you do this, there will be "parallax errors", especially if you are taking pictures of things that are close to the camera (like inside an interior environment, or if you were taking your pano right next to a tree or something). The stitching software can't deal with this very well, so your pano will be less than perfect.

To fix this, you need to find the nodal point on your lens, and then rotate your camera around that point while taking panoramas. You will use a special tripod head to do that.

Finding The Nodal Point (optional):

There is a pretty good [tutorial on how to find the nodal point of your lens](#) here, it has pictures. I recommend reading that to understand what a nodal point is.

Or, you can do it my way. It's a little different, but it serves the same purpose:

To find the nodal point of your lens, go inside and find a window somewhere. Stick a piece of masking tape on the window. Get a tripod and put the handle 90 degrees straight up in the air, and then rest your lens on the tip of the handle. Go wide angle, and look through the viewfinder, have the masking tape centered in the frame. Keep in mind what is behind the masking tape on the outside of the window. Rotate your camera to the left or right until the masking tape is at the very right or left of the frame. You will then see that the object that was originally directly behind the masking tape is now a little bit towards the left or right of the masking tape!

Move your lens forward or backward (just a little) until you have found the sweet spot where this phenomena no longer happens when rotating your lens on the tripod handle. The object that is behind the masking time should STAY directly behind the masking tape, whether the masking tape in the middle, left, or very right of the frame. Once you have found this point, take a pen or

something and mark a little dot on your lens to remind you where this point is. You have found the nodal point for that specific lens and focal length. You will need to know where the nodal point is to configure your (purchased or DIY) panorama tripod head.



Panoramic Tripod Heads (optional):

If you have lots of money, you can buy a pano head anywhere from \$80-\$200. But, if you are cheap like me, you can make one yourself for a few bucks. My panohead looks like the one on the left. It is made out of wood, and can only be used with my specific lens, camera, and focal length. The tutorial I used can be found here: [How to build a panoramic tripod head](#). This is probably the most easiest, quickest design. Just make sure that when you build it, the 'Side' arm is long enough for your camera to be pointed completely up, enabling you to take proper Zenith shots. The first time I made mine, the side arm was too short, and I couldn't take a proper zenith shot. The nadir shots won't be ideal with this pano-head, but it is like that with any panoramic head.

You can't make the tripod invisible, for pete's sake.

There are other panoramic heads where you can adjust the pano-head for any lens/camera combination, but I couldn't find any useful DIY tutorials of these online; it would probably be better just to buy one. If you want to purchase a panoramic tripod head, I recommend the [Nodal Ninja](#). It allows you to take full 360x180 panoramas.

Manipulating Panoramas in Flexify (optional but recommended):

[Flexify 2](#) is an EXCELLENT Photoshop plug-in. It is specifically designed for manipulating 360x180 panoramas. In order to use Flexify properly, you need to stitch your images using Hugin first. Make sure you are stitching them in equirectangular mode (not stereographic). Once you've got that done, open your image in Photoshop and click on Filter > Flamingpear > Flexify (assuming you already downloaded/purchased the Flexify plug-in and put it in your plug-ins folder)

Next, select the input to be Equirectangular, and the output can be anything you want, there are lots of options. If you want it to look like one of those 360 planet panoramics, select Stereographic or Hyperbolic. Then, set the Latitude to -180, or 180. And if you want to adjust the field of view, mess around with the FOV slider. Keep in mind that if you slide it TOO much one way or the other, your image will look pixilated. You can always readjust it. Also, keep in mind that if you want if you want this to be a square image, you will have to resize it in Photoshop (*Image > Image Size*) before you open it up in Flexify. I did not do that in this example, however.

Using Hugin+Flexify is better than making stereographic images straight from Hugin because Flexify has more control of what you want your final output to look like. It's just really nice to use and I highly recommend it.

As you have probably noticed, there are lots of output options in Flexify. A lot of them are “cut outs” (the image isn't projected to fill an entire standard rectangular frame). Here is a list of ones that DO fill up the entire frame.

- Rectilinear
- Hyperbolic
- Stereographic
- Cylindrical
- Wetch (this is very wide)
- Square
- Swoop
- Oculus (Apparently this is like Stereographic, but the distortion is near the center instead of the edges)
- Triptych
- Tetraptych
- Shift Lens
- Mercator (you can make little lumps)
- Tetra Tile
- Hyperdouble (Two 360's side by side morphed into each other!)
- Hypertriple
- Mercator Cross
- Mercator star
- 4 Views, 12 Views, 24 Views, 60 Views, 72 Views
- Equi Tall
- Semistereo
- Squoculus
- unFish
- Lagrange Plus
- Stereo Twice (this is like two mirrored Stereographics merged together)
- Stereo Thrice
- Equal-Area Cylinder
- Equal Squarea (who comes up with these names, anyway?)
- Square Fish 1
- Square Fish 2

I've made some examples of these different types so you can see what they look like:

<http://vlue.deviantart.com/gallery/#Panoramics>





Pseudo Planets

There is still one more thing I wanted to include: Pseudo 360x180 Planets. These aren't the real deal, but they are easier and faster to create. The reason why they “aren't the real deal” is because the original image you are making the planet from is not a complete 360x180 equirectangular panorama. Usually it is only panorama made up of say, 5-10 images... sometimes only 1 image. You will see a lot of distortion around the edges and near the center of your planet when using this method, which is why I consider this to be the *alternative* way. The advantage of pseudo planets over real 360x180's is that you don't need any panoramic tripod heads, Hugin, OR Flexify. All you need is Photoshop and you are set to go! My tutorial is below, but you can also read [blog post](#) which has illustrations.



Step 1: Either take a single row 360 degree panorama, or take a single picture. It really doesn't matter. If you can a full 360, the image will wrap around seamlessly. If you take a single picture, you will have to improvise a little and either mirror the image horizontally or use the clone stamp tool to make it wrap around seamlessly. Make sure to straighten the horizon as much as possible. You can go to *Filter > Other > Offset*, and then offset the image horizontally a bit to check to see how it will look wrapped around. I suggest offsetting the image and then use the clone stamp tool with a big, soft brush, and then just ALT+Click about an inch away from the harsh line you see, then simply draw over the line to blend it out and get rid of it.

Step 2: Once you have your image loaded into Photoshop and it is straightened out, whether it be a single row 360 pano, or a single picture – change the aspect ratio to 1:1. You can do this by going to *Image > Adjustments > Image Size*. Uncheck “Constrain Proportions” and change the dimensions to a 1:1 ratio (example file: change 9000x3000 into 3000x3000 pixels).



Step 3: Turn the image upside by going to *Image > Image Rotation > 180*.

Step 4: Apply the filter: *Filter > Distort > Polar Coordinates*. Select Rectangular to Polar and click OK. There you go! Here is your pseudo planet.



Note: If you don't rotate the image 180 degrees before you apply the filter, it will be a tunnel/tube, not a planet.

Infrared Photography

These are infrared images; pictures with recorded light beyond the visible spectrum. You can take infrared photos by using an infrared filter that screws on the front of the lens, or you can convert your camera to take IR photos permanently.





Nikon D50. ISO 200, 1/2 second, f4.8.
This camera is very sensitive to IR light :)

Why Take Infrared (IR) Photos?

Infrared photography darkens clear blue skies a lot, but leaves the individual clouds very bright. Infrared photography leaves foliage (grass, plants, leaves) looking bright white. It allows you to take photos with longer shutter speeds, and gives your photos an awesome look in general.

Can my camera take IR photos?

Older Nikon cameras, like the Nikon D50, D70 and D100 work very well with the [Hoya R-72 Infrared Filter](#). However, a lot of newer cameras now have a filter located directly in front of the camera's sensor that blocks out most IR light.

In order to find out if your DSLR can take infrared photos, find a remote control that goes to your TV or something similar, then take a 1 second exposure. During that exposure, click the power button on your remote, pointing it towards the camera lens. When you look at the picture on the LCD preview screen, you should see a light coming from the front of the remote.

If the TV remote light is bright, your camera is well suited for infrared photography. If the TV remote light looks very dim, you can still do IR photography to a degree but the exposure time will have to be longer when using an IR filter and your photo will have less contrast.

Try doing this test with different lenses as well; some are better for IR photography than others. Some lenses don't work that great with IR filters and create [hotspots](#). I myself haven't had any problems with "hotspots" in any of my photos before. I'm using the Nikon 18-55mm lens that came with my D50.

If you don't see hardly *anything* coming from your remote, you won't be able to take infrared photos with your camera using an IR filter. You can, however, get the IR blocking filter removed from the front of your camera's sensor by [LifePixel](#). Conversion costs around \$70-\$500. After modification, the shutter speed times will be normal, as will focusing. Pretty cool huh? LifePixel also offers a *super* color infrared conversion that makes your photos even more spectacular than using the Hoya R72 filter alone.

If your camera passed the TV Remote Test, then you can go the cheap route and start taking infrared pictures with the [Hoya R-72 Infrared Filter](#). Mine was \$54 for a 52mm sized filter, but apparently they have come down in price.

[Here is a list of cameras and lenses that are good for IR:](#)

[Good/Bad Infrared Lenses List](#)

[Good/Bad Infrared Camera List](#)



Taking Infrared Photos Using the Hoya R72 Filter:

When you get your filter, you will notice it looks almost black. Because the filter is so dark, you will need to focus your scene before putting the filter on. Once you have your scene in focus, screw your filter on, and then switch to manual focus. You CAN use autofocus with the filter on, but you have to be in broad sunlight for this to work and it isn't always accurate....

Lenses focus differently when using an infrared filter. If you want technically sharper results, you can rotate your focus ring about 1 millimeter away from the infinite symbol (depending on your lens). Some lenses will have an infrared symbol on the lens itself, which is useful. Use that mark if it does. If it doesn't though, you'll have to play a little guess-and-check game to find the infrared focusing spot. You CAN use the camera's autofocus, it will just be slightly out of focus (I've taken many photos like this anyway.) Try a few test shots using the autofocus, you may find it acceptable. Also try using higher F numbers to increase the depth of field, which might help a little bit.



You also CAN take infrared pictures without using a tripod, but it is not recommended. You will need to use high ISO numbers, and low F numbers, and those usually are not good for landscapes. Just avoid all of that mess by using a tripod. Your photographs will look a lot more professional.

Now, if you haven't noticed by now, the Hoya R72 filter is DARK. This will substantially increase shutter-speeds. If you need shorter shutter speeds, you can raise the ISO number and lower the F number. I usually don't do much of that myself, though.

If your photos are coming out too dark, just bump up the EV until you are satisfied. The shutter speeds will be quite long when using the IR filter (depending on how sensitive your camera is to IR).

Setting The White Balance for Infrared Photography:



After taking some photographs with your filter, you may have realized that your pictures are completely RED. In order to fix this, just meter and set the White Balance with your filter on. Google "How to set white balance with [YOUR CAMERA MODEL]" for instructions, if you don't know how to do this already.

However, some cameras cannot set extreme infrared white balances in-camera and your photos will come out with weird red and purple colors no matter what. If you find that this is the case for you, set your white balance to the coolest color temperature available (2500K or lower if you can manually have a numerical white balance, or Incandescent/Tungsten if you can't set a numerical value). Then fix the color later in post processing. There are three ways to do this:

1. If you are shooting in JPEG, bring the photo into Photoshop and click *Image > Auto-Color*. The photo will then fix itself. Clicking Auto-Contrast (or Auto-Levels) also helps make the image more dynamic.
2. If you are shooting in RAW, drag and drop the photo into Photoshop. The RAW image will automatically be opened up in the Adobe Camera RAW dialog box. Drag the Temperature slider all the way to the left (2000), and the Tint slider to -100. Now open your image in Photoshop (bottom right corner of the ACR dialog box). Done.
More information/troubleshooting can be found [here](#).
3. **If you are shooting in RAW but do not have Photoshop, set the WB with a program called [UFRAW](#). This method should work with any camera. Download UFRaw, install it, open an image with it, then go into the White balance tab (it's the first one on the left) and select "Auto WB" in the drop-down box. Click the save tab (2nd to the last tab, make sure JPEG is selected, then hit the save button in the bottom right corner of the window).**

Editing IR Photos in Photoshop:

The popular look for infrared photography: have a blue sky instead of brown.

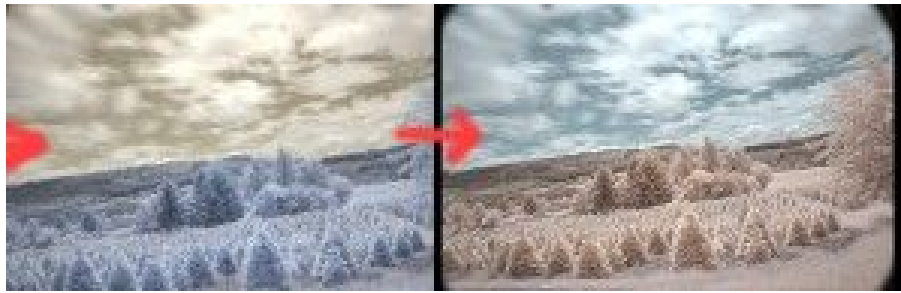
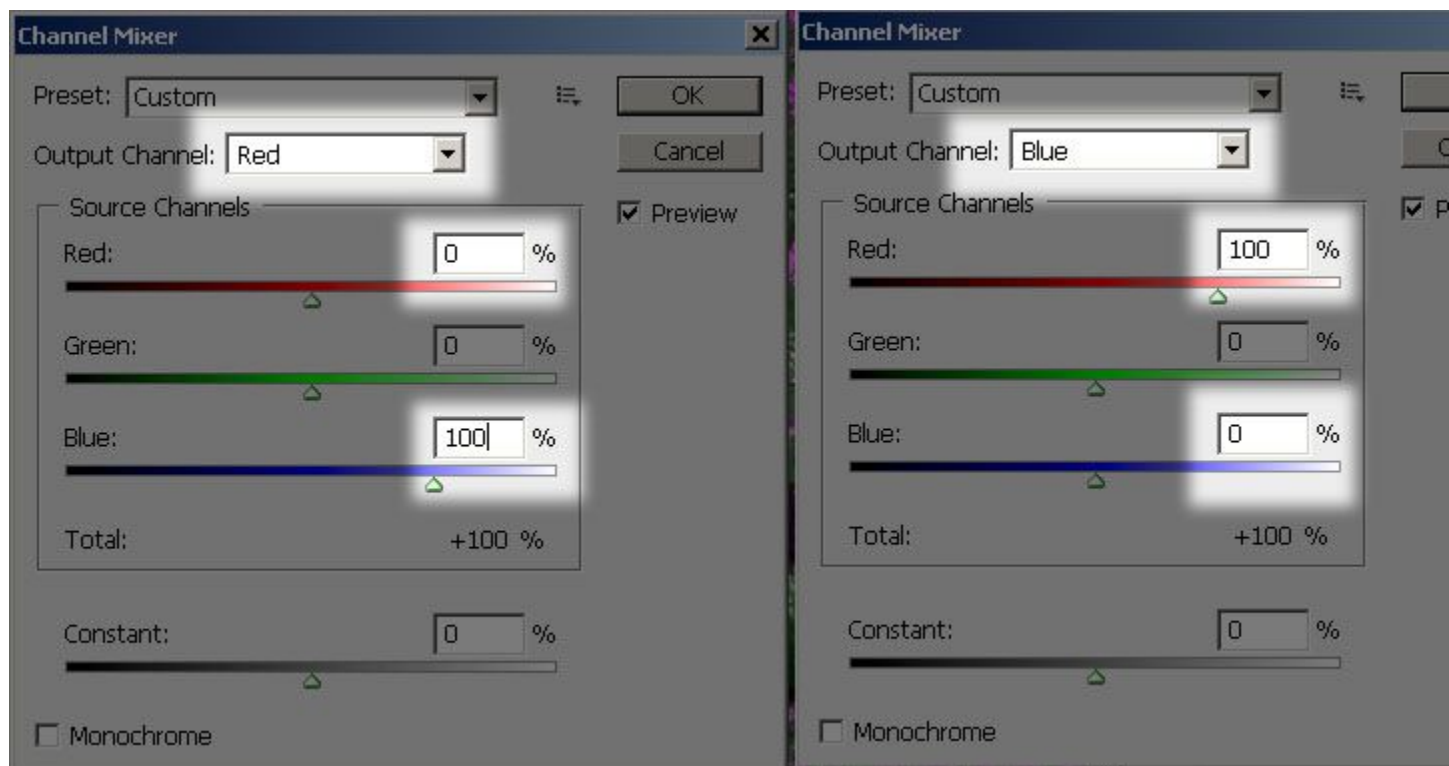


Image on the left is before the red/blue channel swap, image on the right is after it

It's quite easy to obtain this look. In Photoshop, go to *Image > Adjustments > Channel Mixer...* Make sure the "Output channel" is selected on Red inside of the dropdown box. Type in 0 for red, and 100 for blue. Next, select the Blue output channel but selecting it in the drop down box. Type in 100 for Red, and 0 for Blue. You've just swapped all the red colors for all the blue ones. Feel free to experiment with other channel swapping variations; I've seen pink and yellow foliage before :)



If your foliage in your pictures look too red-ish, and you want them pure white like snow, you can easily desaturate them using *Image > Adjustments > Hue/Saturation*. Select Red (Alt+3) and then slide the saturation slider all the way down to -100.

I would also recommend darkening the levels a little bit. The 2 examples above were not adjusted for that, and it looks a bit faded.

IR Examples Chart:



Normal color picture.

NIKON D50

F8

1/500th sec.



IR photo with AUTO WB



IR photo with adjusted
white balance, straight
from camera



IR with white RED/BLUE
Channels swapped



Red channel from IR photo
replaced with the Red
Channel in color photo

Keep in mind that this was a cloudy day. If it was a pure blue sky, the sky in the IR photos would look much darker.

Using Two Infrared Filters May Get Better Results:

I have access to two Hoya R72 filters. I stacked them on top of each other and used both of them on my lens simultaneously. The results seem to have more color and depth. People seem to debate about this. What do you think?



The images on the left was taken with two IR filters stacked on top of each other, and the image on the right was only taken with one. Red/blue channel swapped as well. Nikon D50



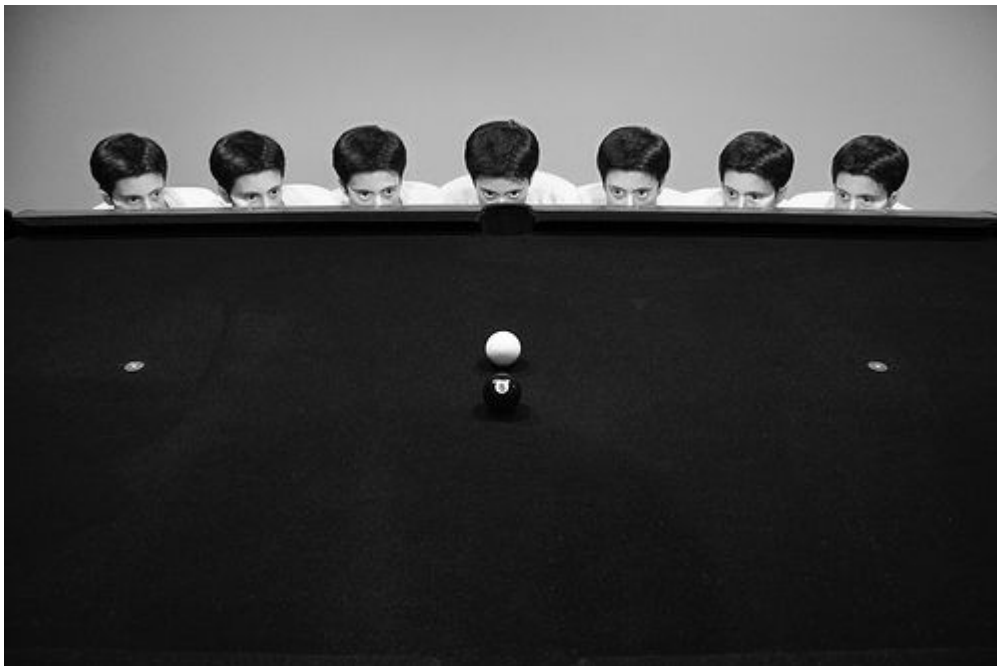


Multiplicity Photography (video [here](#))

In this article I'll explain how you can easily clone yourself with a camera and Photoshop. People call these "multiplicity photographs"



"Imagination" - I had a friend take these; every time I got into a new position I told her to take a new shot. It went by quick and easy. I replaced the sky with a more dramatic one and added birds. I also did some dodging and burning on the play structure.





So, here is how you do it: Put your camera on a tripod and tighten it so it won't move. Focus your scene and then switch to Manual focus so that your camera won't constantly be trying to re-focus the scene. You can shoot in any mode you want to, but I would advise against Shutter Priority mode and just take the photos in full Manual mode or Aperture Priority mode. This insures that each frame will have a consistent exposure and your aperture is locked in. After everything is in focus and you have your shutter speed and aperture set, take a picture of the scene with the model to the left of the frame. Then, take another picture of the model closer to the right of the frame. Keep taking pictures with the model's body in different areas of the frame.

You can get a friend to help you take each picture, use a remote, or use the self timer feature on your camera. If your friend is pushing down the shutter button on the camera, make sure they are careful on keeping the camera perfectly in place and not to accidentally bump into it.

Now once you have all your photos taken, you need to import them into Photoshop. Click **File > Scripts > Load Files into Stack....** Then just select your images and wait a minute for them to compile. (Note: if your version of Photoshop does not have the 'Load Files into Stack' option, you're going to have to manually copy and paste the pictures into the same document to stack the layers on one another)

Once it's done you should see all your pictures in the Layers window. Select the top layer and click New Layer Mask (it's located at the bottom of the layers window). Next, take a black brush and brush over the person in that frame. The person will seem to be erased, but to un-erase it, hit CTRL+I, (cmd+I if you are on a Mac). You can now see the person in the first frame, as well as the one in the second frame! Make a layer mask like that for all the frames and then you're done! You can also do this with objects and animals, and skateboarders, etc.



This image was very easy to create because none of the people were overlapping each other. This made it very easy to mask the model without tediously going into fine detail

If you would like to see some spectacular examples using this photography technique, take a look at the [20 Stunning Examples of Multiplicity Photography](#).

Thank you for reading my free ebook, I hope that it has given you some great ideas that you can implement in your photographs.

If you have questions, You can connect with me on the following sites:

PhotoExtremist.com

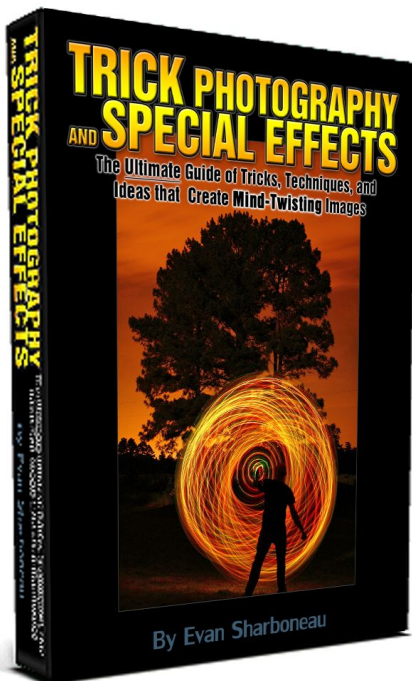
[YouTube](#)

[Twitter](#)

[Flickr](#)

[Facebook](#)

[DeviantART](#)



If you enjoyed this ebook, you may be interested in my Trick Photography and Special Effects ebook. It is basically a super version of the ebook you are reading right now. It has over 180 pages and over 400 photographs. All the information that is in this ebook has been updated and revised, plus I have added tons of more tricks. Take a look at TrickPhotographyBook.com

In addition to my Trick Photography and Special Effects ebook, I've found these to be useful as well.



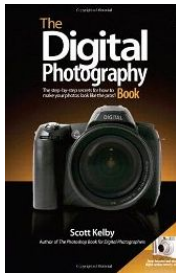
[Photographic Amusements](#) by Walter E. Woodbury

This is a free online ebook available on books.google.com. It is an old book (back in the film days, before Photoshop) but has tons of trick photography examples and is probably the best resource on trick photography. There is even an entire [Flickr group](#) dedicated to this book.



[Night Photography & Light Painting](#) by Brent Pearson

This is the one and only ebook on not only capturing night images, but also how to paint them with light.



[Digital Photography Book](#) by Scott Kelby

This three part series is great for beginners. It talks about things like getting tack-sharp images, composition, tripods and other gear, how to use lighting, off-camera flash etc.

All the best!

- Evan