

Beginners Easy Guide to Digital Photography



Beginners Easy Guide to Digital Photography

I'm really glad you made it this far and you're reading my eBook. As you know by now, my name is Dee and I'm an award winning professional photography business based in Crowborough, East Sussex.

I've always been curious about people, emotions, expressions and relationships. So photography was the natural hobby for me to fall into as a young adult. In my spare time (if I can ever bare to put my camera down!) you will find me walking my beloved dog, Bertie, watching sporting events, going to live performances (I LOVE going to live music gigs!) and I always sneak in a camera!

I'm a real geek when it comes to things like this. When I get hold of something that I'm passionate about, I always want to share it with others. If I could knit, I would teach others how to knit. If I could play the guitar, I would teach others how to play the guitar. I'm passionate about photography and the memories it captures, the way you can control and freeze moments in time, so yes.....I want to help others to do so as well.

When I attended my first beginners course after taking photos for years and years, it changed my life. I'd taken so many photos by this time, but looking back, I really didn't know what I was doing. I was a 'point and shoot' photographer. I always hoped for the best. And when I took a great shot, it was the most exciting thing. But for the most part, my photos weren't that good. When I say that, I mean I just didn't have the knowledge or understanding enough to get good shots every time. I really didn't know that I was wasting my time on 'auto'.....and don't get me started on the built in flash. To be honest, I'm not quite sure why they still exist on cameras.

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As a beginner in digital photography, this little gem is designed for you to learn the basic essentials in order to take control of your camera, and take great photos every time.

You don't have to turn it into a business or a chore, but if this is your hobby, by the end of this book you'll do it well. And when you do it well, you'll enjoy it even more! So what are the basic essentials

- Aperture
- Shutter Speed
- ISO

It's like music.....

Have you heard the saying "*when you know the note to sing, you can sing almost anything*"? It's the same for photography..... "*when you know the settings to set, you can shoot almost anything*"!

Trust me, it really is that easy.

Now.....if you don't want to read (although I think you should), you can skip to the tasks and get on with shooting. You will find tasks in white text against a blue panel background just like this one.

Where it all began.....

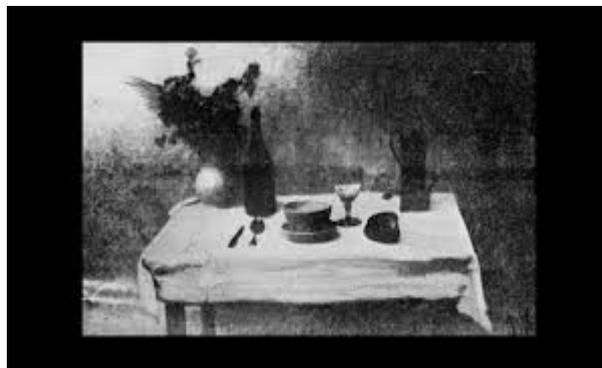
Again, if you're anything like me, you might be wanting to get straight to it and take photos. So I won't be offended if you don't want to read some sections, I get that you want to dive right in and just shoot, and it's quite alright.

But I'll include this section for you anyway, because it's often good to have an idea of the history of your hobby, how it was done in years gone by, and how it's developed.....

So who 'invented' Photography?



Joseph Nicéphore Niépce (1765–1833), a French inventor is said to have taken the first known photograph around 1827. Whilst we can process in the click of a few buttons, his processing was an arduous eight hours of exposure to light, and the picture was definitely not as sharp as we expect photos to be these days. Nevertheless, back in the 19th century this was absolute magic!



A little fuzzy, but can you imagine, this was magic back in 1827

Skills and Technology back then...

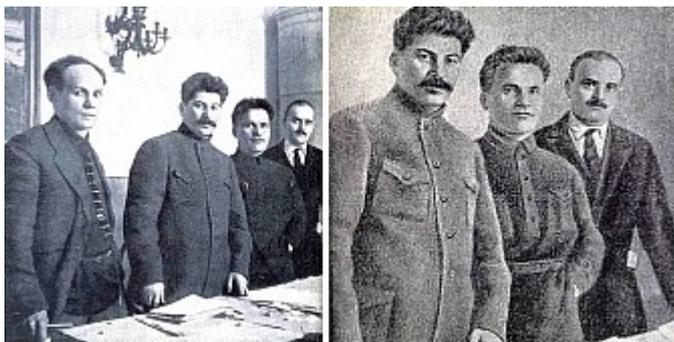
Not only was photography invented an absolute age ago, so was the ability to 'photoshop'. Yes 'photoshop', although that's not what it was called back then. And it wasn't for perfection that we use today, but to falsify photographic fact.

People were (apparently) literally erased from photos back in the Stalin era. Imagine, if we didn't have the knowledge, intelligence and technology today. History could have a shaped very different landscape. Imagine!



The image adjacent shows one of the officials being removed and the photo re-touched with the water behind him.

The image below shows cropping, sufficient enough for the official on the left hand side to be removed. If you really are interested, have a read of "The Commissar Vanishes", which is said to be a disturbing glimpse into the manipulation of photographs for political advancement by Joseph Stalin.



What is Photography?



I promised not to bore you with theory because I know you want to get on with it..... and shoot! But you have to know what photography is in order to do it correctly. You have to know what it's about in order to know how it works. Because when you know the settings to set, you can shoot almost anything..... Simply, photography is the art of creating images by recording light. Yes. It's all about light, because without light you have nothing. So always remember, it's about creating images by recording light.

As a photographer, you will always be in search of light. Good light! (Understanding 'good light' is something which comes with time and experience).

Bear with me, I have to tell you all of this (and I'll do it as quickly as possible) because once you understand how your camera works with light, you'll be able to do everything with ease. *Trust me, relying on your auto button to get good photos is actually hard work.*

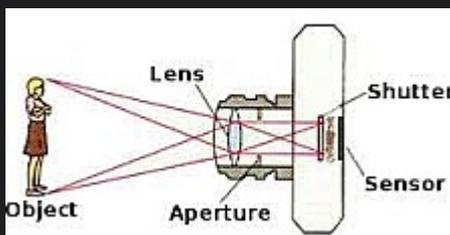
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Always know this. When your camera is set on 'auto' mode, your camera decides, or guesses, what it is that you are focusing on. This is why you only sometimes manage to get a great shot, and then find you can't repeat it. Your camera has no idea what you're actually trying to achieve or what you're looking at. So the camera adjusts the lighting, focuses in and guesses how the photo should come out.

All photographers have been there, when that great shot comes out and you just want more. And you just can't achieve it. Like I said, when you know the settings to set, you can shoot almost anything!

So here it is, plain and simply. This is what a camera is and what it does. The shutter opens up to a determined size (**aperture**) and speed (**shutter**), captures light (with your subject/object in the frame), and it closes. This is simple science.....and now I'm going to show you how to control it....



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Ok we're here! This is where you'll be practising.
Now I'm going to tell you about the 3 essential settings
on your camera that you need to know in order to take
great shots

APERTURE

In simple terms, this is the hole or window or eye of your camera lens, and it opens to whatever size you set it to.

Your aperture is measured in F.Stops. (I promise not to start speaking in tech jargon!).

Have a look at your camera now for the 'aperture' setting. You'll see what I mean for example (depending on your lens) you'll see the settings are F1.4, F2.8, F5.6, and so on.

So, how easy is it to set your aperture? All you need to decide is how wide you want the lens to open – or not. The wider it opens, the more light you let in. The narrower it opens, the less light comes in.

In terms of the aperture setting, the higher the F.Stop number (e.g. F11), the narrower the aperture and therefore less light. The lower the F.Stop number (e.g. F2.8), the wider the aperture and therefore more light.

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What happens inside your lens when the aperture changes?



Hopefully the image above explains what I mean.....the lower F.Stop the wider; the higher the F.Stop the narrower.

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TASK

Let's have a go on your camera and see how this works.

A) Indoors (in generally good light during the day without having to switch on lights)

1. Find a stationary object
2. Set aperture to a high F.Stop number (e.g. F7.1)
(find and set ISO to 1600; shutter to 250 - we'll talk about these later)
3. Take a shot
4. Now set aperture to a low F.Stop number (e.g. F2.8)
5. Take a shot

Compare the two images and you see how much darker the first shot (with the narrow aperture) is to the second shot (with the wide aperture)

B) Outdoors (in generally good daylight)

- (find and set ISO 200 and shutter to 250 - we'll talk about these later)*
1. Repeat the steps 1. to 5. above

From the two tasks A) and B) what have you noticed and learned? Even though I'm stating the obvious, it's all too easy to neglect the importance of light, and when to control the amount going into the lens. Overall can you now see that a wider aperture is better indoors and a narrower aperture is better outdoors. All because light.

Excellent! You've completed your first task! Keep practising, it'll soon be a breeze.

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SHUTTER SPEED

Now you've learned about aperture (how wide the lens is to let light into the camera), the next thing to set is how long we expose the lens to the light. In other words, we need to set the shutter speed to open and close quickly (short exposure) or not so quickly (long exposure). The shutter speed setting has an enormous effect on how light is managed when it comes through.

Still promising not to give you tech jargon..... the shutter speed is measured in fractions of a second. For example, $1/10$ is one tenth of a second; $1/200$ is one two hundredth of a second, and so on. So, you can see what this means right? The higher the number, the faster the shutter speed; and the lower the number the slower the shutter speed. Again, whilst it's stating the obvious, it can be all too easy to forget to consider these when you're a beginner. And you probably think "how will I remember all that?"

It's like driving a manual car, in time it becomes second nature to change your settings for your environment as you would change gears. I promise you will remember to adjust your aperture and shutter as easy as changing those gears.

Stay with me now, I know you're getting this..... A slow shutter speed (e.g. $1/10$) is a long exposure; and a fast shutter speed (e.g. $1/500$) is a short exposure.

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Take your imagination to this scenario.....

You have your shutter speed set for a long exposure (e.g. 1/10). This means that the lens is open for a long time, and will capture any movement that may occur. Capturing movement would mean there will be motion blur right?

Therefore, a shorter exposure (e.g. 1/350+) means the sensor in the camera isn't open very long and you will therefore capture a freeze in time. This would eliminate motion blur and the image would be sharper. Yes? Yes!

Also, if the shutter speed is set for a long exposure (e.g. 1/10) and the aperture is wide open (e.g. F2.8), an enormous amount of light will come into the shot, as well as the potential for movement and blur. Likewise, if the shutter is set for a short exposure (e.g. 1/350+) and the aperture is not open wide (e.g. F7.1) the amount of light into the camera is restricted.....you might even have an image which is too dark. **Don't even think about that built in flash!**

I hope you're not freaking out right now.

Grab a coffee and read this section again if you want to, because we have another task coming up..... ***Keep thinking about aperture and shutter speed together.*** The aperture setting will determine how wide you want the lens to open to take the shot The shutter speed setting will determine how long you want the sensor to be exposed to light coming in.

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TASK

Remember if you shoot this task indoors you'd benefit from a wider aperture (low F.Stop number) than if you are outdoors.

You'll need someone to photograph for this task - outdoors in daylight.

1. Set your shutter speed low, to 1/10

(find ISO and set to 100 - we'll talk about ISO later. Set aperture to F7.1)

2. Photograph your person as they are walking past you, marching their arms

3. Now set your shutter speed high, to 1/400

(Set aperture to F2.8)

4. Photograph your person as they are walking past you, marching their arms

Now compare your two photos.

You should see that the first photo has some motion blur; and the second photo has very little if any. This is because of the long exposure in the first photo and the short exposure in the second photo.

Excellent! You've completed another task!

Now keep practising what you've learned with aperture and shutter speed.

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RECAP ON APERTURE AND SHUTTER SPEED

The aperture is the opening to the lens; and this can be opened wide (letting in lots of light) or narrow (restricting the amount of light).

The aperture is measured in F.Stops.

The shutter speed is the length of time (exposure time) the sensor inside the camera is exposed to light. The longer it's open, the more light allowed into the camera (long exposure); and the shorter time it's open (short exposure) the less light allowed into the camera.

The shutter speed is measured in fractions of a second.

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ISO

This is a setting that you will use to increase or decrease the camera sensitivity to light.

This is your little helper in environments where there may not be enough light to take good photos. The higher you increase your ISO the brighter the photo. This setting is great to support your aperture and shutter settings. *Bye bye built in flash!*

Generally, in most cameras, ISO starts from 100 and can go up to 25000 and more.

A point to note, ISO is not there for you to depend on for all lighting situations, it is there to support your aperture and shutter speed settings. Because if ISO is set to high, the resultant images may be 'noisy', i.e. grainy.

So. When you need more light indoors - LEAVE THE BUILT IN FLASH ALONE! Adjust your ISO setting.

I use the following settings, and adjust around these if I need to:

- Indoors : ISO 1600
- Outdoors (generally good light): ISO 100
- Outdoors (dull, cloudy day) : ISO 500

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TASK

Environment: You're going to take this shot indoors during the day, and find a still object/person to photograph. Don't switch on any lights and be away from windows.

1. Set your aperture to F2.8 (or as close as possible)
2. Set shutter speed to 1/250
3. Set ISO to 100
4. Take your shot
5. Now set ISO to 400
6. Take another shot
7. Now set ISO to 800
8. Take another shot
9. Now set ISO to 1600
10. Take another shot

Compare these photos. Can you see how the images progressively brighten? Keep practising these adjustments, and get familiar with your camera with these different ISO settings. THIS IS HOW WE GET LIGHT - NO BUILT IN FLASH!

Excellent! You've completed another task!

YOU'VE DONE IT!!

Well done you've completed the tasks, and you're on your way to taking better photos.

Now you should have a basic understanding of how to set your Aperture and the effect it will have on your images, in conjunction with your Shutter Speed. You should also be able to adjust the light sensitivity by adjusting the ISO setting to suit your environment.

Keep practising. You will make mistakes, but try not to be tempted to switch back to 'auto mode' or use the built in flash if you need more light indoors.

I hope you enjoyed this eBook. I'll be issuing plenty more like this so it would be great to stay in touch with you.....and I promise not to spam you with junk!

Feel free to get in touch, all feedback will be much appreciated.

Happy shooting!