

# Speedlight Magic



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Everything you need to know  
from accessories, techniques to  
photo shoot

Frank Doorhof

(Translated from Dutch by Annewiek Doorhof)

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# 0 Introduction

Thank you!

Thanks for buying this book. I am sure you will find totally new ways to use your small strobes after reading this book and create some real magic in your images; that's why we called it "Speedlight Magic".

The book is divided into three parts: techniques, using speedlights, and using speedlights with some accessories. Illustrated, of course, so all the examples are easier to understand. At the end of the book, we have a cool surprise with a few tips on how some famous photographers use speedlights.

Being a photographer is the best job on earth. But during all those years, I found that my real passion is teaching, especially about light, techniques, and gear. A "like" on social media is just a moment, but when teaching you can have a lasting influence on your student's photography, and often years later we still get awesome replies about how the workshops changed their way of working, and that's so much cooler than just a like.

In this book, I will cover one of the most creative light sources out there, the speedlight. But always remember the quality of your photography and lighting depends on your creativity, and to be creative you need to understand the limits and possibilities of the gear you use. In this book, I hope to give you a good insight into both the techniques and also the creative part, but most of all (after reading the book), go out and practice! You'll find many examples in this book that will hopefully inspire you to run out and start shooting.

## **Small Flash**

You'll find out that not only in this book I'll use different names for speedlights, but also in the "real world" you will probably hear different expressions. For example, Nikon's brand name is speedlights, Canon, and Ricoh use the word speedlites. Some manufacturers call it: on-camera flash, on-camera lighting, wireless flash, external flash, small flash, camera flash, or anything similar. Basically, it's all the same. It just means a flash that could be mounted on the hot shoe of your camera (it's actually designed for that purpose, but we hardly use it on camera) and is portable. Although there are unlimited brands and possibilities now, I hope this book helps you to make the right choice for yourself and your system.

In the early days, it was easy to see the difference between speedlights and studio strobes.

We used the big heavy flashes in the studio, and on the road we used speedlights. But nowadays, you see it merging more and more. Studio-type flashes are more hybrids and getting more compact, easy to take outside with optional batteries, and often still small enough to fit in your camera bag, and although those flashes are not really meant for your hot shoe, they are great replacements for off-camera used speedlights. Another thing you see happening is that the techniques from speedlights are being introduced in the big studio strobes. For example, in the past, options like E-TTL or HSS/HS would never really be used in the larger studio strobes. But nowadays, almost every self-respecting brand has some of these options in their line-up. If you don't know the terms, don't worry, I'll explain these later in the book.

Let's first take a look at some examples of what you can buy nowadays that could be labeled "small flash."



*To the left: a Profoto-unit with a lot of power, but also designed for on-camera flash. On the Right: almost the same size but this one has to be connected to a larger battery and packs a lot of power.*



*Godox is a brand focusing on a fine line between speedlights and studio lights. The AD200 for example has two different heads, one for studio use and one for off-camera speedlight operations (as displayed here), this means you have one body with two totally different situations.*

Now before we start with all the information and techniques, I have to say the following. I often tell my students in my workshops “think outside the box”. And you must do the same with this book. Although it's aimed at speedlights, the techniques and tips discussed can also be used when you work with larger strobes.

You might not have all the options, or the strobes might not work exactly the same, but that also goes for different brands of speedlights, but always remember...

light=light.

Depending on how you use it, you can make great pictures with every kind of light; the only limit is what you make yourself believe is the limit. In other words, you are only limited by your own imagination.

### **Please note**

Annewiek translated this book from Dutch during the COVID lockdowns. Spelling and grammar were checked by our friends and Americans Alicyn Drew and Mark Astmann. The final version was edited by Gabe Stenzel and checked finally by me. All did a great job in translating the words as I would have written them. But nobody is perfect so, if you have any questions, remarks, or if parts are unclear, please let us know: [info@frankdoorhof.com](mailto:info@frankdoorhof.com)

# 1 Gear Choices

A trip to your favorite camera store is great, of course! However, when the time comes to buy a new camera, you may quickly become confused. The diversity of choices is gigantic, and every camera has its pros and cons, and there is not really one camera that fits all. So, I always advise you to search for the camera, which is best for YOU, but where do you have to pay attention to?



*With all the choices in cameras, it's like not being able to see the forest for the trees.*

When buying a camera with the intent to work with flash, it is essential to keep a few things in mind.

Believe it or not, every brand has its own flash system. For example, Canon and Nikon have great systems, and almost everything for sale is compatible with their brands. On the other hand, Sony was a little late to the party with an off-camera speedlight solution from a third party, their own system did work great but was rather limited and pretty expensive when done right. Currently (2022), Sony is a leader in many areas of the photography market, and that also means that now there are enough options to work with flash, even loads of third-party

speedlights, triggers, etc. But that was absolutely not the case when I started shooting Sony around 2013 and it really limited my use for me when working with speedlights. (Studio strobes are hardly ever a problem because they operate with “dumb” triggers, just sending over a signal, but speedlights have to be able to “talk” to the camera for all the extra functions)

By the way, did you know that although we often think that the correct title is “speedlight,” many brands have used different names for these little strobes over the years, same with HSS, TTL, and even the way Aperture/Shutter priority is labeled? In essence, it will give the end-user the “same” results, but it can be confusing.

Sony for example did have its own speedlights, but they only worked on the camera. If you wanted to use your flash off-camera, you had to buy a second flash to trigger the first one. There were no built-in radio signals for control, and no manufacturers offered compatible triggers or flash units, so it was tricky in the beginning. Luckily, nowadays, there are enough alternatives for speedlights on Sony. Fuji was another example of a brand that didn't support many flash options (and not even tethering) when they released their X series. So, this is something you should think about when buying a camera; are speedlights important for you now or in the future?

Do realize that even when they were released the Sony and Fuji cameras were great cameras to start with, but for a third party to create solutions, the camera must have a considerable market share and the techniques used must be available, via reverse engineering or via support from the manufacturer themselves. So, although a camera can be the best in class for the quality it doesn't mean you can buy all the cool gadgets available from the “bigger” brands. In fact, for most medium format cameras, which have been on the market for years, there are still fewer accessories available than for the consumer Canon/Nikon cameras. So, it's very important to find a good dealer that can give you proper advice based on what you are going to do with the camera, and what you want to connect to it.

## **1.1 Third-party solutions**

The first thing people will often look at are solutions offered by the camera brand itself, often this means you have less to choose between, and the products can be (slightly) more expensive or powerful. Of course, the big brands are not very keen on giving away all the details that make their system work, forcing the third

parties to "reverse engineer" the whole chain from camera to accessory and software to launch their own (flash-related) products. This could mean that some functions are not supported or work (slightly) differently from the manufacturer's own solutions. However, brands like Nissin, Cactus, and Phottix nowadays deliver solutions that work very close to the original (but still different) and even most of the time deliver better performance than the original line-up. It does however, become very important when choosing a third-party solution to check if your camera is in the list of compatible devices, and there is always the chance that after a firmware update something doesn't work anymore. In all honesty the last few years I personally hardly have had any problems after updates and my Nissin and Cactus solutions work just as good as you might expect from something that was designed for the camera specifically.

Personally, I think it's important to have a wide choice and thanks to the internet you can find reviews of almost everything, but do be aware that the label "works with \*\*\*\*\*" doesn't always give you the guarantee that everything works as you would expect, so make sure to at least check that HSS and zoom works. In essence, at the moment there are third-party solutions that work just as well or even better than the original but also solutions that are labeled "compatible with" and only do the basics with varying quality. So always be 100% informed when spending your hard-earned cash (it can be gone in a flash). So, let's look at some details that are important.

## **1.2 Things to think About**

First of all, you'll have to check if your camera and flash combination supports some form of ETTL and HSS (I'll explain what this means later).

It's often possible to trigger a strobe with or from your camera, but it's very possible not all features you need (or are handy) are supported, which can be a problem when you are starting to use the combination in situations where speed is important for the flow of the shoot. Always using a light meter for example gives great results, but in some situations, you must be able to trust the strobe/camera combination to "figure it out" themselves. Shooting a wedding with a less than perfect ETTL and HSS solution can literally cost you your career.

Therefore, I'm happy that the world of speedlights is changing with relatively new brands like for example Cactus. They support almost every system (Canon, Nikon, Fuji, Olympus, Panasonic, Pentax, Sigma, and Sony), and the cool thing is they even work cross-platform; in other words, you can use flashes from different

brands together, which can save a boatload of money when you work with different brands or are planning to upgrade in the future to another brand.



*The Cactus system has support for almost every brand and system. Selecting a universal flash system like this is a great way to start.*

With all the choices you have, my advice is to keep the future in mind. For example, if you want to shoot tethered (wired or wireless), the number of brands you can choose from already decreases, add to this support for iPad/Android, and even fewer choices are left.

The best advice is to stay informed about products because almost daily there are new releases, for example, I've been waiting for years for a solution to shoot wired to my iPad and a few years ago it was even labeled as "forget about it" but at the moment we have several working solutions so there is even a choice instead of none. You could for example simply create a checklist of the things you want and need in a camera/flash at present, but also add some thought about what you might need in the future. Nowadays the quality of the cameras is outstanding so that you can use them for many years. You don't want to spend time and money on an upgrade you could have prevented.

In all honesty, I think all cameras should support off-camera speedlight and tethering. Otherwise, it could be a loss of investment later. In all the years I've taught workshops I've heard countless stories from attendees that they just did a model photography workshop for fun and never thought they would love it and continue with it. This also meant their needs went up, to also be able to use off-camera flash and tethering. It would be a bad wake-up call if you at that moment find out for example that your system is not able to shoot tethered.

## **2 Being prepared to solve problems on the fly**

Every photographer knows the horror of gear not working. Somehow gear tends to stop working by choice and of course especially when the client is around, and it really counts. And trust me even professionals encounter this problem so it's not just you. Professionals are trained (I hope) to improvise or work around these problems. However, hardware and software are known for their bugs and errors. So always be prepared! The first thing we already discussed, making the correct choices, but even when you did you can still encounter loads of issues during a shoot.

Of course, you can read this book and probably solve many problems beforehand, but I strongly advise that you read the manual as well. I have to be honest in this regard, I rarely read user manuals. Somehow, I feel that a product should be designed and that its operation is logical, but when I test new speedlights, I always do read the manual. These small strobes have many options with many settings/modes/options in a relatively small form factor, therefore I always tell my students to read the manual carefully and fully understand where all the buttons are and what they do. In the following chapters, I will give you some tips based on issues that I received via email, social media, or during my workshops.

### **2.1 EVF**

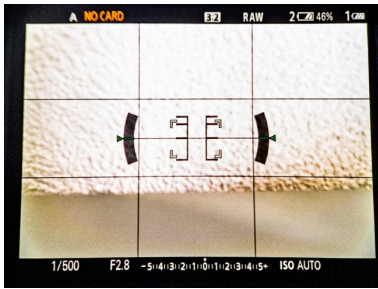
I love the EVF (Electronic Viewfinder) option you find in many cameras today. I think it's one of the greatest inventions for modern photographers. The weird thing is that for example in film, it has been used for years, including all the benefits like focus peaking and over/underexposing a scene. Still, somehow photographers really needed to get used to it (and believe it or not some still don't like the EVF).

You might say that when you buy a mirrorless camera, you'll end up with an EVF. So, what is that magical EVF, and how does it work, or help with setting up flash?

An EVF is the replacement of the optical viewfinder. It shows the scene, not like the optical viewfinder, but it shows you the image the way it would look the moment you press the shutter (what you see is what you get). This is very handy in situations where the light is not perfect and the metering inside the camera is easily fooled, think for example about heavily backlit subjects, but also night shots or even something simple as a snow landscape. But it also helps with



setting up more elaborate flash setups where it's for example vital the background is darker than the model.



*Besides an accurate preview, the SONY EVF also has the option to display the settings of your camera. You can program the EVF to your liking in many ways, so you only see the info you want as a photographer.*

The EVF is life-changing but also has one big disadvantage. As mentioned, before it's a “what you see is what you get solution (WYSIWYG)” so in a dark studio with the settings for strobe use (for example 1/125 ISO100 f16) the viewfinder will be pitch black and only open up when focusing.

But don't worry, there is a solution. In most cameras, there are two options. One will show the image through the viewfinder as it would be when you press the shutter; this is ideal for walking around or working with continuous light sources. There is no more guesswork with difficult lighting situations: just dial it in as you like and press the shutter.

The other setting mimics what we were used to from the older viewfinders, the optical viewfinders, where the light just reaches the eyes without considering the settings of the camera.

One might wonder why one would ever use the second option, seeing that it doesn't show you the final result, and this is where the trick comes in.

When you are shooting with continuous lighting for example, in most situations it's best to use the WYSIWYG option; it's just super handy.

However, when shooting with strobes, there is a huge change. Now we don't use the camera to capture the available light, but we “anticipate” much more light coming from the strobe. This means that our settings like ISO, Aperture and Shutter speed are set up in a range where we don't see anything from the available light (as an example, the available light is f2.8 but the strobe is set for f16) this would mean that in the WYSIWYG mode you only see a black screen, which makes it impossible to shoot the scene. Therefore, for studio work, you can

disable this function and just let the EVF “level out” the incoming light and give you something you can see in the display. This is not accurate of course compared to the photo but at least you see where you aim the camera 😊. One might say it’s an emulation of the old optical viewfinder, but it’s so much more. For example, in a very dark scene, the “optical mode” of the EVF shows you the scene like you have super sight! It’s clear and almost looks like daylight (with some added noise sometimes), so although you don’t get to see the end result, it’s still a lot better than the older optical viewfinder, but there is more....

Let’s use the EVF to set up a strobe shot really fast.

We all know those amazing “day to night” shots where the background is a lot darker than the subject and although it’s shot during daytime the image looks like it was shot in the evening or even nighttime, let’s take a look at how to use the EVF there.

In the past, I would use a light meter in the spot metering position, aim at a really bright or really dark area where I wanted to keep detail, and just “guess/calculate” the setting I needed to dial in for the strobes, then switch to incident metering and meter the subject with that setting in mind. The first step is the most difficult and even with years of experience it’s most of the time a “ballpark setting”.

Now let’s look at what the EVF changed in this situation.

When you’re using strobes outside or inside and mixing them with continuous light, it’s very handy to put the camera in the “WYSIWYG” setting. Now, look through the viewfinder and dial in everything the way you want it to appear on the final image, you can even zoom in on most cameras to really check all the fine details, just ignore the subject you are going to light with the strobe(s), just focus your attention 100% on the scene.

Let’s say the available light meters f2.8 but you just love the moody look when shot on f8, simply put the camera on f8, and now the only thing you have to do is take out the light meter and just setup the strobe(s) to f8. This way, your subject will be correctly lit at f8, and the rest of the scene will be like you saw in the viewfinder. The use of WYSIWYG saves you a lot of work with a spot meter and “guessing.” The moment I started using the EVF this way setting up difficult mixed light situations became incredibly easy, meaning you can focus your attention way more on the creative process instead of figuring out if something works. It’s a life-changer.