

Day 11: Add Your Own Light

Those starting out with flash very often get turned off by the harsh, artificial look of straight flash. As a result, they either try to learn everything and end up being frustrated, or they declare themselves to be "natural light photographers" and never touch a flash. We're going to try to avoid both of those outcomes here. The key is: Don't try to do everything at once. Take flash one step at a time and look at it as a building process.

The 5 Step Process

Here is a simple 5-step process to get you comfortable using your flash unit:

Step 1: Take the Picture without Flash

- This sets a baseline. It is how you will set the exposure level of your background.
- All the exposure controls you have been working with will still apply here.

Step 2: Add Flash

- All we are doing now is putting the flash on the camera and turning it on.
- Don't worry if your flash looks terrible. We'll start fixing that in a second.

Step 3: Dial it Back

- Use manual controls on your flash unit to throttle back on the light output.
- If you have no idea where to start, just go to 1/4 power and then adjust from there.

Step 4: Diffuse the Light

- The key is to make the light softer. To do that, you will add some sort of diffusion.
- If you are indoors, consider setting the flash to bounce off the ceiling.

Step 5: Move the Flash Off Camera

- Flash looks best when it is coming from a different direction.
- Use wireless triggers so you can set your flash off to the side.

Don't worry if each step takes a while to work through, and keep in mind that shaping and moving the flash might result in you having to adjust the power. Just keep working through it!

Additional Commentary

Many photographers are "natural light photographers." There are, however, two types of natural light photographers. The first type is a photographer for whom carrying a flash makes no sense. Many landscape and nature photographers fall into this category. For example, if you are trying to photograph a vista that stretches for miles or an animal that is far away from you, adding a flash wouldn't help.

On the other hand, there are other photographers who are natural light photographers only because they don't understand how to use the flash properly. They may have taken photos with the flash and found its effect to be harsh and unnatural. Or they jumped into using flash only to be overwhelmed and confused about how it works. They tried, failed, and gave up.

Let's avoid these outcomes for you. Even if you are not someone that uses flash very often, then this will still give you another arrow for your quiver and the occasions where you need it. What I want to do here is introduce you to using a flash and give you a simple process for using it.

Don't Have What You Need?

Before we get into how to use a flash, let's make sure you have what you need. That might sound scary, as you can spend a boatload of money on flashes and related gear.

Frankly, if you have the money and want to invest in name brand items, there is nothing wrong with that. I'm not going to dwell on that option though. That's not because it isn't a valid option. Rather, it is just that buying the best flash units from Canon, Nikon, or another name brand is just not that difficult, so you can do that without my help.

On the other hand, if you don't have what you need to get started, and want to add flash to your repertoire without spending a lot of money, I will walk you through some options. Some of these will be new to you. I talked about a setup in the videos, but here I'm going to expand upon that quite a bit. Different people have different needs, so I'm going to try to tailor this purchase to different people depending on what sort of photography they expect to engage in. In addition, I have some updated product information.

A Basic Flash Setup

First, here is everything you need to buy to get started in flash quickly and as cheaply as possible. With this equipment, you will be able to do everything in this course and then some. And it costs only \$120 for everything!

A Complete Flash Setup (Basic Version)

| Item | Model | Cost |
|-----------|------------------------------------|--------|
| Flash | Yongnuo YN560 iv (manual flash) | \$ 70 |
| Diffusion | Simple diffusion cap (any brand) | \$ 5 |
| Reflector | Cheap reflector (silver/gold) | \$ 15 |
| Remote | Yongnuo YN622N-TX wireless trigger | \$ 30 |
| Total | | \$ 120 |

Again, this is a basic setup designed to help you achieve everything in this course as cheaply as possible. That said, it might be all you ever need if you do not plan to use flash much. If you don't know whether you will end up using your flash much or not, this is a good place to start as you are not out much money if you end up not using flash very much. With that in mind, let me explain a little bit about these items:

- **Yongnuo 560 iv Speedlight:** You need a flash unit, and I recommend one that is capable of manual controls. For that purpose, you need not look further than the Yongnuo 560 iv. For several years now, Yongnuo has been making these cheap 560 series flash units. They are simple to use and work great. Many pros I know use them as well. Best of all, they cost only \$70 when a flash from Canon or Nikon would cost almost \$500.
- **Diffuser:** This is a cheap plastic cap that fits over the flash. It softens or diffuses the light blasting out of the flash unit so it isn't as harsh. You can actually do without this little cap, and many flashes (including the Yongnuo 560 iv) have a little diffuser built in. But at \$5, why not?
- **Reflector:** You can get a fold-out reflector that you hold on the non-lit side of a subject to reflect light into the subject and fill in shadows. They also do double-duty as a means to shield your subject from harsh sunlight. At \$15 or less there are many available to choose from.
- **Remote Triggers:** As you'll see shortly, you are going to want to get the flash off the camera. This isn't as hard or as expensive as you might think. While you can spend hundreds on remote flash triggers, in recent years cheaper models have come on the market and they work reasonably well. Yongnuo has a unit called the YN622N-TX that works on multiple camera systems.

Why am I pushing you toward Yongnuo? Simply because their flashes are cheap and work well. Does that mean you shouldn't consider other brands? Absolutely not. This is only meant as a

starting point. If you want inexpensive products, Yongnuo is about as cheap as they get. There are other inexpensive and mid-range brands though. Just check out B&H, Adorama, or Amazon and you'll see a lot of different options to choose from.

My Recommended Setup

While the items set forth above are the *cheapest* way to get in the game, they aren't exactly what I recommend you do if you can afford to take a relatively slight step up in price. What I will show you in this section is what I would do if you can spend between \$200 - 300 on your flash set up.

Before I get into the specific items, there is a distinction I want to make. That is the difference between the sort of photographer that will be shooting people in one place (think portraits) versus one that is moving around quite a bit (think weddings). For the most part the items are the same, but the manner of diffusing the light will be different. In one case you can set up the diffusion on a stand, and in the other case you cannot because you are on the go.

The Stationary Option

First, let's talk about a photographer that stays in one place. Again, think portraits. You might be outside, in a studio, or in your home, but the point is that your subject is staying put and you are photographing them in one place. For those situations, here is what I recommend:

Recommended Flash Setup (for Staying in One Place)

| Item | Model | Cost |
|-----------|--|--------|
| Flash | Yongnuo YN600EX-RT II | \$ 110 |
| Diffusion | Speedlight Umbrella Softbox & Stand (several brands) | \$ 51 |
| Reflector | Cheap reflector (silver/gold) | \$ 15 |
| Remote | YN622N-TX wireless trigger | \$ 30 |
| Total | | \$ 206 |

There are two changes from the baseline setup. First of all, I have changed the flash unit. The flash I recommend here is the Yongnuo YN600EX-RT II and it cost \$40 more than the YN560. But for that extra \$40 you get a flash that allows you to use TTL (think of this as a more automatic flash setting, but you can still control it) and high speed sync (also called HSS, and it allows you to use your flash with very fast shutter speeds). Of course, it also allows you to set the power manually, which is what we will be doing in this course.

The other change is that instead of a little diffusion cap to put over your flash, I recommend you get an umbrella softbox and a stand to hold it. You will put your flash into that softbox and operate it remotely using the triggers. It will diffuse your light to a much greater extent and allow

you to get some really soft light. You can spend as much or as little as you want on softboxes. I prefer as little as possible, and use a model that cost \$26 (the stand costs \$25 as well, resulting in the line item above of \$51).

One other item I should mention that isn't on the chart above. Yongnuo also makes a remote flash trigger that will work with the YN600 flashes without attaching anything to the flash itself. It is the YN-E3-RT transmitter and it costs \$75. It has an LCD display and it allows you to control your flash(es) from your camera. The problem is that, as near as I can tell, they only make it for Canon cameras at present. That might change though, so keep an eye out for that. In any case, if you choose this option you can add \$45 to the total cost.

The Mobile Option

Some photographers are always on the go. For them, having a softbox on a stand just isn't an option. If that describes you, here is a chart with adjustments made for that:

Recommended Flash Setup (for Mobility)

| Item | Model | Cost |
|--------------|-------------------------------|---------------|
| Flash | Yongnuo YN600EX-RT II | \$ 110 |
| Diffusion | Magmod Kit | \$ 100 |
| Reflector | Cheap reflector (silver/gold) | \$ 15 |
| Remote | YN622N-TX wireless trigger | \$ 30 |
| Total | | \$ 255 |

The only difference here is that I recommend you upgrade your diffusion over the basic setup, but avoid the softbox option of the stationary photographer. For that, I like the setup offered by a company called Magmod. You simply strap a rubber strap around the top of your flash, and it has very powerful magnets in it. After that, you can slap on a diffuser or a grid or any number of other options to the top of the flash to modify the light. Its strength is its simplicity. It costs \$100 for their starter kit (the grip, a diffusing sphere, and a grid), which is great if you value that simplicity, but I acknowledge that there are cheaper options out there.

If You're All About Portraits

I suspect that almost everyone reading this will be content using speedlights. A few people will want bigger lights, either because they plan to specialize in portraits or they just like the idea of the increased power. To be sure, you are seeing more and more big lights these days. Part of the reason for that is that they are getting more mobile. It is not uncommon to see professional

photographers outdoors dragging around very big lights operated by batteries. Up until recently, however, these lights were prohibitively expensive. Now, companies are making cheaper options that, for the most part, are just as good as the more expensive lights. If you are interested in that option, a good company is called Flashpoint (if you buy through Adorama) or Godox (if you buy through everybody else). In particular, check out the Xplor 600, which is a powerful, battery-operated light that sells for about \$750 including the trigger. If that seems expensive, remember that a simple speedlight from Canon or Nikon sells for almost \$500. I won't dwell on this option since, like I mentioned already, most people will be very happy using speedlights, but I did want to at least mention it. This is a pro option as good as anything on the market.

A Process for Adding Flash

How that you are geared-up, let's talk about how to actually use your flash. What we are going to do now is walk through a process for adding flash to your picture.

It is important that you treat this as a building process and don't try to jump ahead to the end. If you do that, and simply try to create the entire scene in one fell swoop, it won't work and you will get discouraged. That is a big reason why people stop using flash. They cannot get the shot all at once so they decide that using a flash is beyond them. If you follow these steps, you will see that it is simple. That's not to say you won't fail or struggle with this. Just take your time, and don't worry if you need to take multiple shots at each stage.

Step 1: Take a picture without flash

To start out, I just want you to take a picture as you would without a flash. You should be on solid footing here since we have already worked through all the exposure controls. Just start with a normal picture without flash. Don't worry if your subject is dark.

Why would you do that? Two reasons. First of all, it sets a sort of baseline for your shot. It is sort of the "before" shot that we will use to compare to the "after" shots we are going to create.

There is another reason to take a shot without flash though, and it is to set the exposure level for the background. Your flash will light up whatever is immediately in front of it, but it won't have any effect on things that are far away. The exposure of that part of your picture will still be determined by the ISO, shutter speed, and aperture settings you were introduced to earlier in the course. You will continue to use that knowledge of exposure here. It will determine the background of your picture. Keep in mind that if you don't want the background to show up, you can underexpose the base shot so that it appears dark or black.

Step 2: Add flash

Now add flash to the picture. Don't fool around with any settings yet. Just take the shot with full, unadulterated flash. You'll notice two things. First, you'll probably find that the flash is harsh

and unnatural. But, second, you'll also find that the picture already looks better than what you took without flash. You are making progress. Baby steps!

Step 3: Tone Down the Power

Now what we are going to do is tone down that harsh glare. And here is where the manual part of the flash comes in. What you will do now is dial back the power of flash.

So far, we have just used our flash at full power. In fact, it is likely that you have always used your flash at full power. But you don't have to do that. You can have your flash emit only a fraction of the power that it is capable of sending out. On most flash units, the power of the flash will be displayed as a fraction, with full power displayed as 1/1. The other possibilities are as follows:

1/128 1/64 1/32 1/16 1/8 1/4 1/2 1/1

Dial back the flash a few stops then try the shot again. You will probably like what you see a lot better. If you don't, just make an adjustment and try again. Remember this is a building process. Don't worry if you don't get it right the first time.

You might be inclined to use the exposure settings on your camera to throttle back the flash. For now, I'm going to ask that you don't do that. Just use the flash to dial it back. In addition, some of the exposure settings won't even work for this purpose, namely shutter speed. Your flash fires in less time than any shutter speed slower than 1/250th of the second, which is what you'll be using most of the time. Therefore, changing the shutter speed won't have any impact on the brightness of your flash. Since the flash is determining the brightness of your subject and the flash fires within the time of the shutter speed, then making it shorter or longer won't matter. What changing the shutter speed will do, however, is change the exposure of your background. Remember that the flash doesn't extend far enough to have much impact on your background. But you already set the background the way you wanted it in step 1. So by changing the shutter speed, you are having no impact on the flash and are ruining the background settings you set for yourself. If that seems convoluted, just remember: Don't change the shutter speed.

If you want to change the power of the flash using camera settings, use the aperture. The aperture controls how much light is allowed through the lens and onto the camera's digital sensor. There is no time element to it (as there is with shutter speed) so you can use it to change the exposure values. We will actually cover that in tomorrow's lesson if you want to learn to control that a bit. For now, resist the temptation to use it to control the power of the flash, and just use the controls on the flash itself.

As an Aside: Controlling Flash Power In-Camera

If you don't get a manual flash, then you will either be using an automatic flash or the pop-up flash in your camera. If you want to control the output of that, go to the camera's settings and find Flash Exposure Compensation. You will see a meter much as you would with exposure. You can dial it up to add more flash power or dial it back to decrease it. It is measured in stops. The camera will control the power of the flash, much as we were doing manually. For now, just dial it back a stop or two and see how you like the effect. Take test shots until you have it the way you want it.

Step 4: Diffuse the Light

At this point, your picture ought to look ok. You've added flash and dialed it back. In many cases, that is all you need to do. But there are some additional steps you can take to control the light, and that is what we'll do now.

When you go to a portrait studio or work with a professional photographer, you will see a lot of softboxes and umbrellas. Those are used to diffuse the light, and that is what we are going to do here. As mentioned in the previous section, there are different ways to do that, including softboxes and the Magmod system. Here, we are just going to use a few simple ways to get you started, but you can use those other systems after you get this down.

If you are photographing indoors, a good way to control the light further is to "bounce" it. Rather than aiming your flash unit straight at the subject, you aim it at the ceiling (or perhaps a wall). The light will bounce off the ceiling and then hit your subject. The effect will be to diffuse the light and make it look softer. When you bounced the light, what you did was spread the light onto the wall or ceiling. When it bounces from the wall or ceiling to your subject, it now acts as a really big light source and thereby makes the light hitting your subject much softer. The "big light" effect means that your subject has light coming at them from several different directions, and that reduces harsh shadows.

If you are outside, of course there won't be a ceiling to bounce the light off of. What you will do here is use a diffuser. Attach the diffuser to the end of the flash and it will soften the light quite a bit. This can be a simple cap on your flash, a sphere (like the Magmod), or a softbox.

Whether you bounce the light or diffuse the light, it will decrease the amount of light that hits your subject. Therefore, you might have to increase the power of the flash a bit. Go ahead and make an adjustment if you need to.

Another way you can shape the light is with a reflector. Place the reflector so that when the flash fires the reflector will reflect light onto a part of your subject that you want lit. Typically, you will

use these on the shaded side of a person's face. It will fill in those dark shadows and reduce the overall contrast.

You can also use a reflector to reduce contrast in another way. If you are photographing during the day, you might be faced with harsh daylight. You can use the reflector to create some shade for your subject. That will allow you to even out the exposure and avoid the harsh shadows created by the sun.

Step 5: Move the Light

There is one final step you can take with your flash, and that is moving the light off camera. You might immediately wonder why you need to do that. The fact is that light coming straight at the subject is always flat. There is just no getting around it. Flash coming straight from the camera is good for adding light, but it can be much improved. You can add shape, dimension, and mood to your shots by taking the flash off the camera. In any case, by doing so, you are avoiding that flat look. Even if you don't know what you are doing with a flash, simply moving it to one side or the other will make it look better. Trust me.

Here's another benefit: if you take the flash off the camera it lets you move around without worrying about the impact it will have on your exposure. Remember that the exposure of your subject is determined entirely by the flash, so if the flash stays in the same place, you need not make any adjustments. That lets you set the flash where you want it and then move forward and backward trying different compositions.

As you move the flash, there is one cardinal rule you need to remember: the closer the light source is to the subject, the softer the light will be. That seems counter-intuitive, but it is a fact. The closer light source makes it bigger relative to the subject. That means light is coming at the subject from different directions, which tends to reduce shadows. Try it for yourself.

Working Through It

Flash can be tricky. Sometimes there is just no getting around it. Even seasoned professionals are occasionally confounded by it. There are a lot of things working together (we'll talk more about some of those things in tomorrow's lesson). When you start adding remote triggers, it can make you want to pull out your hair. Therefore, you need to keep things as simple as possible.

If you occasionally have difficulties using your flash, just keep adjusting and plugging away. There is a lot that can go wrong, and when you have one part right another part can change on you. And then, when you have everything just right, your batteries will die (guaranteed).

What you can do is take your time and work through it step by step. You can also make sure your flash works. Then set up your triggers. After that, check out the ambient light. Get as much right



as you can before you start trying to work with a subject. Then work through the five steps I have laid out for you here.

In doing all this, you don't want to keep your subject standing all day while you fumble with your camera. On your first time, however, that is probably inevitable, so we will start out using a different sort of subject.

Day 11 Assignment

Pet Portrait

Description:

Take a portrait of the family pet (yours or someone else's). Use your flash to create it. Work through the 5-step process for using your flash. This will allow you to start using your flash without having to worry about a person (or people) getting irritated with you!

Keys to Success:

- Take multiple shots; make sure each stage is right before moving on.
- Be sure to try different ways of diffusing and bouncing the light.
- Note how your picture looks at each stage:
 - At what point does the picture start looking acceptable?
 - When does it really start looking good?
- Don't worry if things don't come naturally or you have difficulties - it happens to everyone. Don't get frustrated!

Upon Completion of this Assignment:

This assignment will put you on your way to getting comfortable with your flash unit. While you will doubtlessly have to chase your pet around a little bit, at least your pet won't complain about you fumbling with your flash.

We'll cover flash again tomorrow and hopefully you'll be ready to use it in front of people.