



THE ULTIMATE
HOW-TO
GUIDE

a  book
by Gina Milicia

FAST FLASH

FOR PORTRAIT PERFECTION



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Fast Flash for Portrait Perfection

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“In ordinary life, we hardly realize that we receive a great deal more than we give, and that it is only with gratitude that life becomes rich.” – Dietrich Bonhoeffer

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Thanks also to my family, my “M” girls and Pietro Ferrero. You make my life beautiful.

This book is dedicated to the memory of Graziano Isgro



About the Author

Gina Milicia is one of Australia's leading photographers, specializing in fashion, lifestyle, celebrity portraits, corporate portraits and editorial.

During her 25-year career, Gina has mentored successful photographers in the art of portrait photography and innovative post-production techniques. She also coaches photographers at all levels in how to grow a lucrative business.

Known for her professionalism, creativity and unique ability to get the most out of the people she is photographing, her portfolio boasts the 'Who's who' in the fashion, entertainment and corporate world.

Gina has written five books about photographic techniques and is co-host of the top-rating podcast "So you want to be a photographer". Find out more about her coaching programs at www.GinaMilicia.com.

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The beginning

“We all know that light travels faster than sound. That’s why certain people appear bright until you hear them speak.”

– Albert Einstein

There has never been a better time to take amazing photos. Cameras are cheaper and easier to use than ever before. What was once a pursuit reserved for tech heads is being taken up by anyone who loves to take photos. Photography has become the fastest growing hobby ever.

Cameras have also become really clever. Just point and shoot. Your camera will add flash if the image needs it, work out the best shutter speed focus, and even process the shot in whatever style you like.

This is great, right?

Well, yes—if you want your shots to look just like everyone else’s. Job done! You can stop reading now.

If, on the other hand, you want your images to stand out, and you really want to become a better photographer, then you’ve come to the right place.



Great lighting will make your photos stand out from the crowd.

I used to hate photography.

Until the age of 18, I thought cameras were a tool of torture. A camera was something my mom and dad busted out on a Sunday before forcing my brother and me—scrubbed within an inch of our lives and wearing our “good” clothes and shoes—to stand awkwardly next to each other in front of the lemon tree. Sicilians love lemon trees as photo backgrounds. My mother would coax us into position using her infamous Sicilian death stare. No words were necessary.

It wasn’t until I got my own 110 Instamatic that I began to feel differently about photography.

I loved taking snapshots, and it was easy. The camera did it all for me! When I had the opportunity to study photography as part of my teaching degree, I jumped at the chance, thinking it would be a great way to improve my travel snaps.

The reality couldn't have been further from the truth.

The language and techniques used to teach photography made me instantly regret my decision to study it.

I found *F Stops*, *ISO*, the *exposure triangle*, and all the other techie mumbo jumbo impossible to comprehend. I just wanted to make good art. I hadn't signed up for a science degree. In fact, science has never been one of my strong points; my 9th grade science teacher, Mrs. Kearney, will back me up on that.

I wanted to drop out, but my love of the craft (and the fact that failing the class meant failing the year) forced me to push through. I gritted my teeth and bumbled my way through the course, scraping through with a "pass." I managed to learn a few cool things, but it wasn't until I started shooting for myself that this knowledge really kicked in.

I learn by doing. I'm also very visual. I don't really need to know *why* something works a certain way. I just want to know *how* to do it.

NAME.....Gina Milicia.....Year...9C.....		
SUBJECT.....Science.....DATE...30th June.....	ATTENDANCE	ABSENCE
	19	9
Gina is a very capable student, unfortunately she is easily distracted... often by nothing but herself or shiny things. If Gina put the same amount of effort into her homework as she does with her hair she could be a C+ or B student. Her final paper on "The History of Days of Our Lives" was well researched, unfortunately television is not part of the current YR 9 Science curriculum	ACHIEVEMENT	
	A B C D E+ F	
CLASS TEACHER'S SIGNATURE <i>Kearney Stephen</i>		

If my high school science teacher had included "The History of Days of Our Lives" in the curriculum, I totally would have nailed a B average.

If you're anything like me, you don't want all the techie mumbo jumbo—you just want to make great art. This book is for you. You shouldn't need a science degree to take amazing photos. Photography can be explained simply, and I want to make it accessible to everyone.

This book will explain how to use flash in your photography, no mumbo jumbo. I've dedicated an entire chapter to

all the different kinds of light, with plenty of examples. If you are looking for more in-depth explanations of lighting and how it works, I suggest you read my earlier book, [Portraits: Lighting the Shot](#).

At the end, I hope you feel confident about how to use flash to achieve the art in your mind's eye.

The rules

If it ain't broke, don't fix it

“That’ll do, pig. That’ll do.” Babe

The question I always ask myself before adding artificial light to a shot is, “Will more light improve this image?”

I like to ask in Dirty Harry’s voice, “Do you need more light, punk? Well, do ya?”

Adding artificial light would have totally killed the vibe in these images.

When you have a new toy, it’s easy to get overexcited and overuse it. Like when I discovered Nutella and decided it should be added to every meal. It was a great idea . . . until I couldn’t zip my jeans up anymore.

The same thing happened when I discovered fill flash. I thought using flash made me a “real photographer,” and I got flash happy.

Overlighting was a bad habit I needed to break, just like overeating Nutella. (I’m still working on the Nutella habit. Don’t judge me.)



Surfer sunburst sunrise, Manly Beach, Australia



Soft window light, Rachael Lever



Sunset soccer at Seminyak, Bali

Beautiful lighting looks natural

The secret to great lighting is making it look natural. Portraits that are well lit blend with the environment they were photographed in.

Overlit images, with harsh shadows and no shape to the light, can look fake. The trick is to balance artificial light with available light, making sure the styles of light match.

Harley Bonner/Fremantle Media.



Lights should be quick and easy to use

If you need a science degree and a membership to Mensa International to use a light, then you'll be reluctant to use it. I used to have a small softbox I bought online. It was really cheap and put out a decent light, but it was a complete nightmare to set up. I would forget which part went where and end up so frustrated, I'd give up and shoot with natural light.

Test before you invest.

When it comes to buying accessories, look for brands that are simple and quick to pack up and dismantle. That [cheap flash modifier](#) gets really expensive if you never actually use it.



Josh Hueston @Platform me

Lighting should be light

Unless you have several donkeys or a packhorse to lug your gear around, think very carefully about the size and weight of the lights you invest in.

Select the lightest equipment you can afford. Trust me: after a few hours, every extra pound makes you crankier. If you buy big and bulky items, there will be tears. I know; I've been there.

I'll give you a full rundown of all my best choices for lighting gear in the section called [The Gear](#), and you won't need quads of steel to carry it around.



Lugging lots of gear around isn't fun, and donkeys take ages to get across town.

Pick your moments

There are times when light from a flash might add something special to your image, but using it could cost you the shot. Sometimes time isn't your friend.

Understand that sometimes a *good* shot is better than *no* shot.

In this image of Enzo, I only had seconds to get the shot. He was grumpy, and I'd already stretched the friendship by asking him to pose for me. If I had taken up even a few more minutes of his time getting my flash right, he might have walked.

This expression is priceless. Enzo 1, Gina 0.



Go ahead, make my day. Enzo, Ragusa Ibla, Sicily, for sicilianfoodtours.com

Light travels in a straight line

Sunlight, flash, LCD—it all behaves in the same way. Light reflects off solid surfaces much the same way a ping pong ball bounces when you hit it against a wall. Light, like the ping pong ball, will reflect off a solid surface at the same angle it hits the surface.

The amount of light reflected off a surface is affected by the glossiness and color of the surface. A glossy surface (like a mirror) reflects more light than a dull surface (like carpet), and dark colors absorb light while light colors reflect light.



Hard light

Soft light



Small light source = Caca lighting. Big light source = Beautiful, soft lighting.

Big is beautiful

In this context, caca means terrible so we're talking about harsh or unflattering lighting.

If there is one rule that will be the game changer in your portrait photography, it's this one:

The larger the light source, the softer the light.

The smaller the light source, the harder the light.

The most flattering natural light for portraits is early morning—just before sunrise—and as the sun is setting.

When the sun is directly overhead it makes a bigger light source (producing softer light). The opposite of this is hard lighting, created when the light source is really small. This is why midday portraits, when the sun is farthest from the earth and smallest in the sky, are the least flattering.

You can see the same pattern with artificial light. The smallest flash in existence is the flash from a smartphone, followed by pop-up flashes on a DSLR,

then speedlights and studio flashes. **These flashes are tiny compared with the size of the people being photographed.**

This is why the best photographers add modifiers onto their flash heads: to create larger light sources. I will run through all the best modifiers to create soft, flattering, realistic light in the [section on gear](#).

The basics of using flash

The quality of light is influenced by the size of the light and how close the light is to your subject.

Put simply;

- **The closer the light source, the softer the light.**
- **The bigger the light source, the softer the light.**

If you want to create soft, evenly lit portraits with minimal shadows, use as big a light source as possible and keep it as close to the subject as possible.

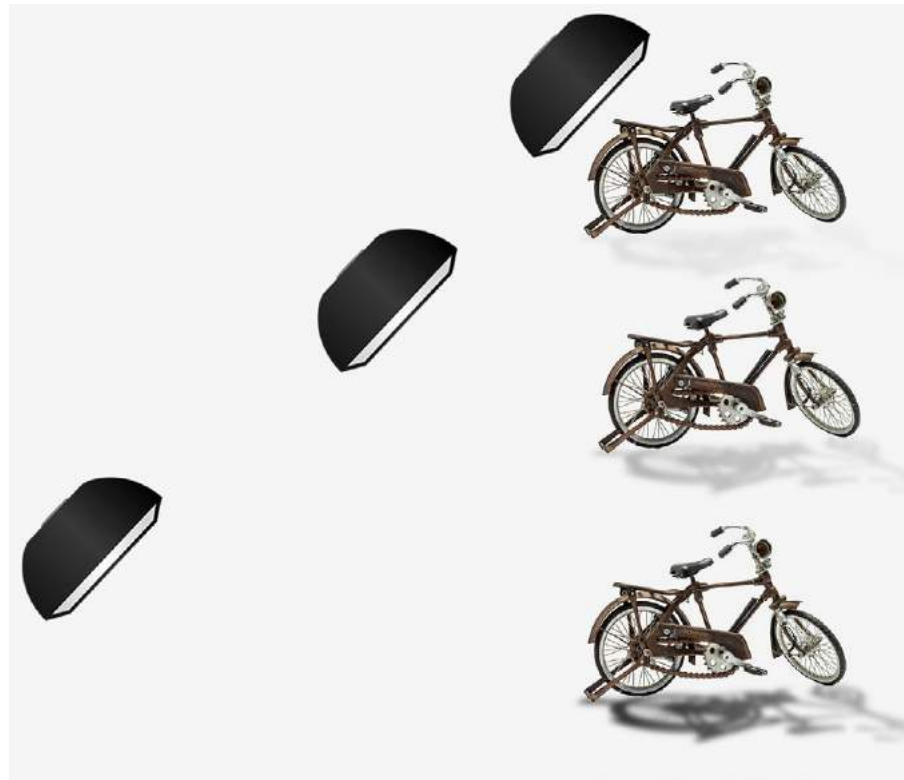
If you want to create more contrast in your lighting style, use a smaller light source and move it away from your subject.

Soft lighting is the secret to beautiful portraits.

Soft light is flattering and easier to control, which is why I think it's the best style of lighting to start out with. Then, when you begin to feel more confident with your lighting style, I suggest you start playing around with a few harder lighting styles. Fashion photographers love working with hard light, and one of my idols, Herb Ritts, was a master.



In the image above, you can see that the smaller light source creates harder light, with more contrast and well-defined shadows. When the light source and the subject are similar in size, the shadows and the light source are softer. Using a light source that is much larger than the subject gives a beautiful, soft, shadowless light.



In this image, we can see that the farther away the light source is from the subject, the harder the light becomes.

The Three Amigos

In my book [Portraits Making the Shot](#), I introduced the Three Amigos: Shutter Speed, Aperture, and ISO. Each has special superpowers, and they work together to make your photos look awesome. When their superpowers are used for evil (cue evil laugh), you will end up with a photo that looks not so super.

Shutter speed controls ambient light in a scene.

The camera shutter is just like a set of curtains or blinds for your camera's sensor. The sensor is the small chip that sits just behind the lens; it's what the camera records the images onto. When you press the shutter release on a camera, one curtain opens to start the exposure and another closes to finish the exposure. The longer these curtains remain open, **the greater the amount of light** that hits the sensor and the brighter your image is.

When you are shooting with flash and want to create a lighter background, use a slower shutter speed. If you want to create a darker, moodier background, select a faster shutter speed.



When using flash, you can count on the Three Amigos. **Shutter Speed** controls ambient light, **Aperture** controls your flash power, and **ISO** controls the overall scene.



A dark streetscape can be transformed into Vegas, baby, just by slowing down the shutter speed.



A bright street scene can be transformed into a moody image by increasing the shutter speed (cue spooky music.)

Shutter speed controls ambient light.

In the above image, my aperture is set at F5.6 and my ISO is 100.

I can control how bright or dark my background is by changing shutter speed. Notice that the exposure of my flash is not affected by shutter speed.



Shutter speed controls movement.

If you are photographing something that is moving and you want to freeze the action, use a fast shutter speed. If you want to create motion blur in your image, select a slow shutter speed.

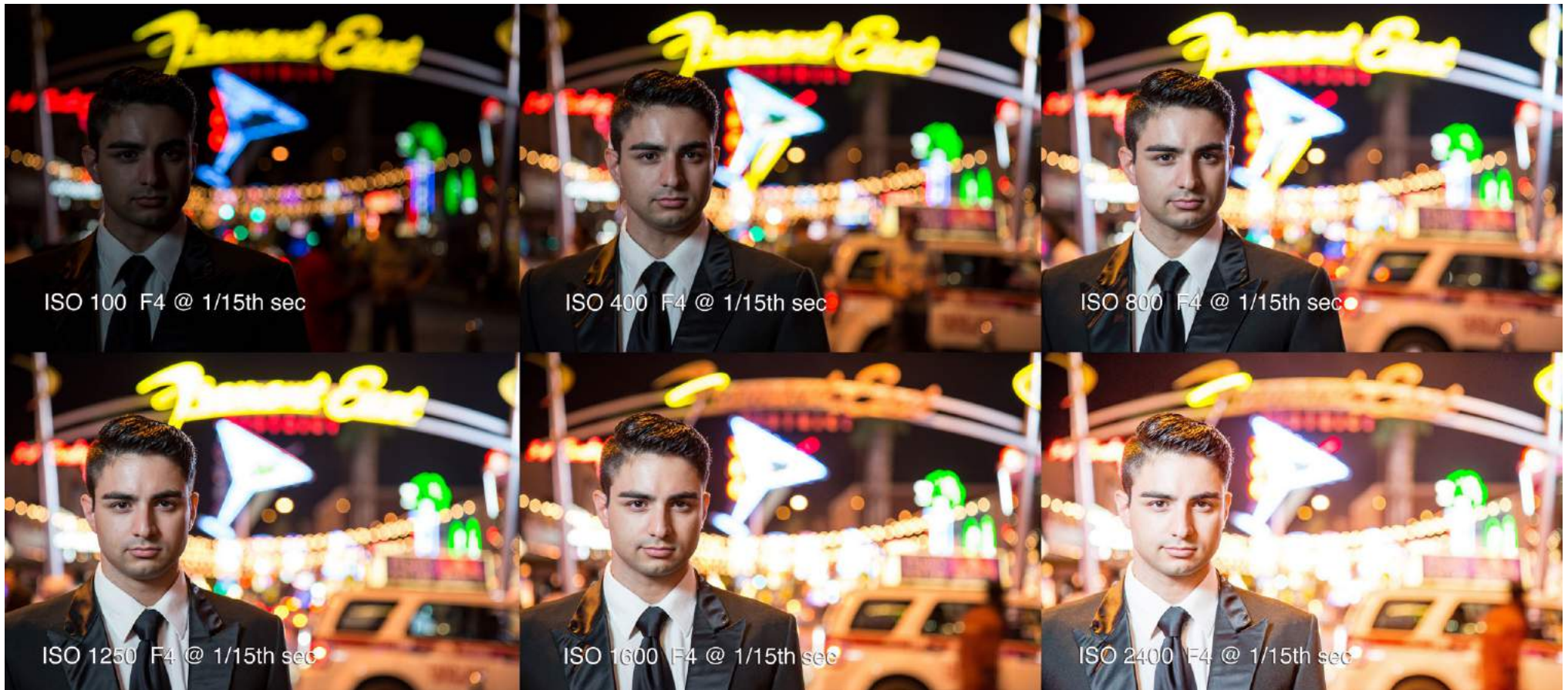
Aperture controls flash power.

In this series of images, I keep my shutter speed at 1/15th second and adjust my aperture. My background remains the same and the power of my flash increases each time I open up my aperture.

Aperture controls the depth of field.

Below, the image on the left is shot with a smaller aperture of F16, which means my image has a greater depth of field (more parts of the image are in focus). The image on the right has a larger aperture, which means it has a shallower depth of field (fewer parts of the image are in focus).





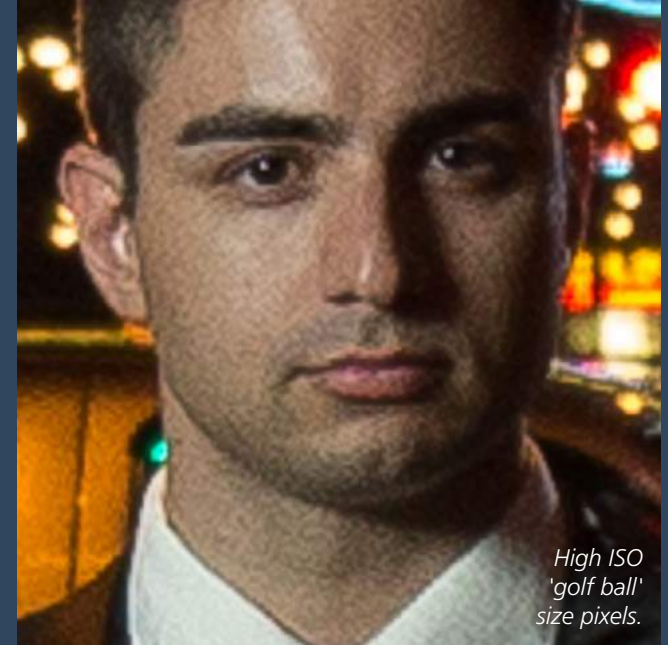
ISO controls the overall scene.

In this series of images, I keep the aperture and shutter speed the same and increase the ISO. As the ISO increases, so does the overall brightness of both flash exposure and ambient light.

Increasing ISO will increase the camera's sensitivity to light overall, but be cautious, because when you increase ISO, you also increase noise in the image. Pixels the size of golf balls are not that sexy!



A cheat sheet of rules



Shutter speed

- If you want a **darker background**, use a faster shutter speed.
- If you want a **brighter background**, use a slower shutter speed.
- If you want to **show movement**, use a slow shutter speed of 1/30 of a second or lower.
- If you want to **freeze movement**, use a shutter speed of 1/60 of a second or higher.

Aperture

- If you want to **increase flash power**, open up (increase) your aperture.
- If you want to **decrease flash power**, stop down (decrease) your aperture.
- A larger aperture will **decrease the depth of field**, making the background blurrier.
- A smaller aperture will **increase the depth of field**, making the background sharper.

ISO

- Increasing ISO will **increase the brightness** of the overall scene.
- If you are shooting in daylight bright conditions, select an ISO of 100–400.
- If you are shooting in low light conditions such as indoors, early morning, twilight, or overcast days, select an ISO of 400–1200.
- If you are shooting in very low light or at night, select an ISO of 400–2400. You can go further, but I'm not a huge fan of portraits shot at very high ISO. Golf balls belong on a golf course.

The gear

Gearaholics Anonymous



How much gear do you really need?

There is a room in my house where all my impulse purchases are stored. These are items I convinced myself I *needed* but no longer use, like the bread machine (made me fat), the ice cream machine (see “bread machine”), and the Ab Cruncher Pro (purchased to undo all the damage caused by the bread and ice cream machines).

Along with the everyday stuff, there are dozens of cheap photographic accessories, bought on impulse only to be regretted later. Like the silver umbrella I bought for \$10. It fell apart the second time I used it; now, when opened, it covers everyone within a 5-mile radius in silver glitter. Or the three cheap remote triggers I bought, because every girl needs three remote triggers that don’t work.

Then there are the five softboxes, the ring light, a beauty dish, and five broken light stands that “might come in handy one day.”

My name is Gina Milicia, and I’m a Gearaholic.

It started with a small purchase I made one night with friends. There was no harm done, but then I started to buy gear alone...

What would Bruce Lee do?

“I fear not the man who has practiced 10,000 kicks once, but I fear the man who has practiced one kick 10,000 times.”
– Bruce Lee



We all want to skip to the black belt, but doing this before we're ready usually ends with tears.

I think the reason many photographers become frustrated with fill flash is because they are working with lighting styles and modifiers that are too complicated and involve too many variables. Most of us are impatient. We want to get to the “good stuff” right away, but the danger is that you never really understand the subtle differences between each lighting style and modifier.

When it comes to selecting the right gear, I like to implement what I call “The Bruce Lee Protocol.”

Bruce Lee was a master in martial arts. Martial arts training requires participants to master each level, or belt, before they move on to the next.

It took me many years to realize that owning every single light modifier and photography gadget was not going to make me a better photographer. The one thing that would improve my photography was *deciding on one lighting style and modifier and working with it until I felt I'd mastered it.*

I use one light with the same modifier for 80% of my fill flash photography. I can vary the look of my shots by the way I expose my images and where I position the light.

If you're just starting out, I recommend that you buy only one modifier (I'll give you my suggestions at the end of this chapter) and one light, and then work with this setup until you're confident and happy with your style.

I'll cover the best way to approach each style in the next chapter.

The Ab Cruncher Pro Protocol

What gear should you invest in? When is it ok to buy knock-off versions?

Certain photography items are worth paying a bit extra for, like one-off purchases or items that need to be able to withstand a bit of rough and tumble.

Investing in cheap gear can end up costing you more in the long run. I've had flimsy, lightweight, el-cheapo light stands blow over and smash my expensive lights several times over the years (yes, I'm a slow learner). I've missed important shots because my remote triggers weren't reliable, and I've damaged my back with poorly designed, overloaded camera bags.

I got so sick of my gear not being 100% reliable, or breaking, or just being downright difficult and cumbersome that I implemented the Ab Cruncher Pro (ACP) protocol when buying any new equipment. My ACP protocol states that any machinery or equipment I buy must be:



- Easy and quick to assemble and dismantle without needing a membership to Mensa International.
- Sturdy enough that it won't fall apart at the first gust of wind (or if an old lady coughs on it).

- Portable, without my needing to be a weightlifting champion to carry it.

But how much should you spend on gear? And what should you consider so you don't end up with a room full of useless junk?

Pro-level gear vs. enthusiast-level gear

Before investing in photography gear, ask yourself these questions:

- *What* will I be using it for?
- *Where* will I be using it?
- How *often* will I be using it?

POP QUIZ: WHICH OF THESE SITUATIONS DESCRIBES YOUR PHOTOGRAPHY BEST?

1. I only take my gear to book club on Sundays.
2. I'm going to document my trek to the Amazon Basin, the running of the bulls, and my next IRONMAN challenge.
3. I photograph 50 weddings a year.
4. I'm still learning, but I love to take photographs every opportunity I get.

If your answer is #2, or something similar, you may want to consider **heavy-duty professional gear** that's designed to take rough handling and extreme weather conditions; cheaper lightweight gear may not withstand the wear and tear or hold up to the elements.

The shutters on cheap cameras usually roll over and die after 100,000 frames or so, and cheap lights can overheat and stop working if overused. If you plan on taking



thousands of frames daily or weekly (#3), it may be more cost effective to invest in a **mid-range camera and lights** that are built to shoot more frames.

That said, even upscale equipment will eventually fail. I upgrade my cameras every 3–5 years because I simply wear them out.

If you answered #1 or #4, then you probably don't need to invest as much. Consider taking a stepped approach, starting with entry-level budget brands or secondhand equipment.

Tripods. Buy once, buy well

A great tripod is not necessary to creating a great shot. You don't really need a tripod for most portrait shoots. I just know that working off a tripod really suits my personal shooting style.

I like to focus 100% of my attention on my model's pose and expression. I find that working off a tripod means I don't have to worry about my camera, making it much easier for me to give my model my attention.

I've had some of my tripods for 20+ years. A great tripod is like a classic car. It has few moving parts, and a tune-up every five years means it will last for decades.

Cheap tripods are flimsy. They can cause camera shake and, even worse, can be easily knocked over, damaging your precious camera.

I have four tripods:

- **Manfrotto 190XPROB** – a small, lightweight tripod that I use when I travel
- **Manfrotto 475B Pro** – a great sturdy tripod for location shoots
- **Manfrotto 058B** – a heavy-duty tripod for studio use
- **Manfrotto 679B Monopod** – for film, TV stills, and theater

There are many great tripods on the market today. They vary in price from \$10 to \$10,000 USD.

Look for tripods that are a **comfortable weight** to carry around all day. I use my Manfrotto 190XPROB on lifestyle and location shoots because it's half the weight of my Manfrotto 475B Pro.

Other factors to consider when buying a tripod:

- **How high it will extend.** *The ideal height for portraits is 5 feet, or about 1.5 meters.*
- **The tilt angle of the tripod head.** *More expensive brands have gears that allow for really precise movement.* I once bought a cheap tripod because I needed something light and small for an overseas shoot, and I didn't want to use up my baggage allowance on my usual tripod (which was just under 7 pounds). Big mistake. I cursed this tripod from the moment I first used it. In fact, I nearly hurled it over a cliff in frustration! It was ridiculously awkward, and I couldn't adjust it with the precision that I wanted to, which meant I never got the image I had in mind.
- **How easy it is to raise and lower the tripod head.** There is nothing more frustrating or dangerous than a tripod that is difficult to raise and lower. Raising and lowering your tripod head should be a smooth operation



that can be done without interrupting the flow of the shoot. If raising or lowering your tripod head involves turning bright red from the brute force needed, I'd reconsider your purchase.

- **Load capacity, or how much weight it can hold.**

A cheaper tripod will have a load capacity of only 2-5 pounds (1-2kgs), which is much lighter than most DSLR and zoom lens combinations.

A few other tripods you might want to consider:

- **Vanguard Alta Pro 263AT Aluminum Alloy Tripod Legs**
This is a mid-level tripod, costing about \$200 (USD). It's very lightweight and easy to use.
- **05 Benro Travel Angel 2 A1682TB0**
This is a light, compact travel option for around \$200 (USD).
- **Gitzo Range GK3532-80QD**
If you want to go for a top-of-the-line tripod, you should definitely check this one out. It sells for about \$1300 USD.

Some other great tripod brands include Silk, Benro, Manfrotto, and Velbon.

Light stands. Invest well and save



I prefer my models to be lit from above and slightly to the side, so I place my portable lights on the following setups:

Getting someone to hold my lights is the best way to get the light exactly where I want it. The people who work with me are amazing and always manage to tilt the light to exactly the right spot. This is my preferred technique for lighting setups

on the go, like lifestyle shoots, location fashion shoots, and weddings.

Many brands of extendable poles are available. I use a Lastolite LL LS2400 24cm-48cm Ezybox Hotshoe Extension Handle.

If you can't afford to hire an assistant, make a deal with a photography friend, offering to play assistant for each other.

The problem with cheap light stands and tripods is that they are unstable and break easily. I know, because I have about five cheap light stands piled on top of my Ab Cruncher Pro. They have all fallen apart.

Cheap, poorly made light stands are difficult and frustrating to use and can be downright dangerous. Why would you place a light worth hundreds or even thousands of dollars on a ten-dollar light stand?

The questions to consider before buying a light stand are similar to the tripod questions:

- How high will it extend?
- How easy is it to set up?
- How heavy is it?
- How stable is it?



Extendable pole on a voice-activated stand.

Single light on a stand

I have a variety of light stands in various weights and sizes. The majority are Manfrotto brand; these stands start at around \$80–\$100 (USD).

The LumoPro LP605, which I've owned for a couple of years, is perfect for speedlights. It also folds down to be very compact, making it easy to transport.

There are plenty of stands for under \$15, but buyer beware. You get what you pay for!

C-stand or boom stand

If I'm working on my own or want the light to remain static, I use a C-stand setup, also called a boom setup.

The C-stand is a piece of equipment that was first used on film sets. The term was coined because the stands were used mainly to hold up 100-inch-wide sun reflectors referred to as "centuries." The stands became known as "century stands" or "C-stands."

A C-stand, or boom, allows me to position the light above my model without the stand getting in the way of the shot.

C-stands are a really good investment. They are also very heavy and solidly built, however, so they are far from ideal for



This gig was a promotional shoot for Italian racecar driver Glauco Junior Sollerì.

location shoots. I mostly use C-stands and booms on single location shoots where I know I won't be moving around too much.

I use an Avenger A2033FCBKIT Steel 40-inch Century Stand Grip Kit, which sells for around \$200 (USD).

The MacGyver boom

There have been some occasions when I've really needed a boom but didn't have one. So I MacGyvered my own by joining two light stands together using a Super Clamp. It's not the prettiest-looking light stand, but it does the trick in a pinch.

Start small and trade up.

Start out with a secondhand light stand and trade your way up as you become more experienced.

I used secondhand cameras, lenses, and lights for the first 10 years of my career. This gave me the opportunity to work with mid-level and pro gear for the same prices I would pay for new entry-level gear.

I have several top-quality light stands that I bought secondhand for a fraction of the cost of buying new.

Buy trusted name brand memory cards

When it comes to storing your precious files, this is no time to skimp on price. Having a great camera and lens is pointless if you use a crappy card that fails on you.

Go for a trusted brand. I prefer Lexar or SanDisk.

If you need to save money, buy a trusted brand with a slower read/write speed.

A super-fast read/write speed will give you the ability to shoot on burst mode for sports photography and action shots. It will also give you much faster transfer times when downloading the cards to a computer.



Batteries

Batteries are responsible for powering remote triggers and speedlights. Cheap batteries are unreliable, can corrode your equipment, and pretty much suck all around.

If you are constantly using speedlights, then you might consider investing in rechargeable batteries. They are expensive to buy—almost four times the cost of a set of AA alkaline batteries—but they pay for themselves in no time at all.

I use Eneloop brand rechargeable batteries. They recharge in about four hours and hold their charge for months, so you can head to your shoot feeling confident your batteries won't let you down. A set of four batteries costs about \$25 (USD).

Bags to store your gear in

A good bag is well worth the investment.

When you need to move around quickly, having decent bags for your camera and accessories becomes really important.

I generally work with three bags: one for cameras and lenses, one for light modifiers and accessories, and one for tripods and light stands.

I prefer to use a roller-style camera bag if I'm working in locations with paved roads. If I'm working in more rugged locations, in the country, or at the beach, I prefer a backpack that keeps my gear off the ground.

When looking at roller-style bags, I look for a lightweight bag with great wheels and lots of pockets and sections to store my gear and accessories. I have a large Lowepro roller bag that fits two cameras and all my lenses and accessories, and I use this bag on most of my shoots. I have a smaller version that I can take as carry-on luggage on planes. I'm not a fan of lugging gear around, so having wheels is a huge bonus for me.

I have one small backpack to carry my tripod and a couple of stands, leaving my hands free—one to hold the roller bag and one to hold my coffee!

For my lifestyle and travel location shoots, I have a Lowepro SlingShot. This bag is fantastic if you need to move around a lot and keep both hands free. I really like the

design; it allows me to store everything I need for a shoot and quickly access more lenses or cards as needed.

If I had to buy a bag today, I would check out the range of backpacks from Think Tank, which many of my photographer friends rave about. There are also many places that will customize camera bags to suit individual needs.



Weight bags. Or, the insurance policy

Sandbags are worth their weight in gold. Seriously. I've had a few lights fall over and smash, costing me thousands of dollars, so a small investment of \$30 is well worth it.

If you don't want to lug around the extra weight, there are great weight bags you fill with water. Alternatively, you can carry empty 2-liter bottles and fill them with water or sand when you get to your location.

You can also MacGyver your own sandbags by cutting the legs off an old pair of jeans, filling them with clean sand from the hardware store, and sewing up the ends. I had a set of these for years.



Light meters

I think using a light meter makes me a better photographer, because I don't waste valuable time guessing what my exposure should be.

Many photographers don't bother with light meters because they believe you can get an accurate exposure by checking the back of the camera and adjusting the images accordingly. This action of repeatedly looking at the back of the screen is known as *chimping*, because photographers looking at the screen and reacting with "ooh" and "ah" tend to sound like monkeys.

Light meters aren't cheap, costing between \$600 and \$1600 (USD), but they are invaluable tools that will save you lots of time on a shoot, give you far better exposures, and stop you sounding like a chimp.

A light meter is another item I recommend buying secondhand.

The market is flooded with them, and you can pick up a good one for about \$100 (USD).

I use a Minolta IV (not available anymore). I've had this light meter for over 25 years now, and it's still one of my most reliable pieces of equipment. As a basic meter, it's excellent, reading ambient light or flash, and it's perfect for most lighting conditions. In the past, I've advised my students to look for secondhand versions of this light meter, but I'm really pleased to learn that this exact model is being made again and sold as the Kenko KFM-1100 Auto Digi Meter.

Other options:

- Polaris Flash Meter (\$300 USD)
- Sekonic L-478DR LiteMaster Pro (around \$600 USD)



Portable lighting options

A few factors to consider when shopping for portable lights:

What is your shooting style, and how much can you bench press?

Several really good options are available in portable portrait lighting. The type of lighting you ultimately decide on comes down to personal preference, budget, and lighting style. This isn't something you need to decide on right away.

I suggest you test out a few different types of lighting kits and modifiers and see which you like working with best.

The Shite Lite 300*

My first portable lighting system was a cheap, no-name brand battery and light setup. It was clunky, only worked 70% of the time, and I had to wait 5–10 seconds for the flash to recycle between frames. Can you imagine what that was like to use? It was a complete nightmare.

I had to come up with conversation topics between frames to keep my subjects entertained. It was so awkward.

** Not the real name.*

The advantage of this cheap light is that it gave me entry into the whole world of portable lighting at a price I could afford. And it worked 70% of the time, which is still better than no light at all.

Several years later, I was talked into buying what was, at the time, the “Mercedes Benz” of portable lighting. This kit lived up to the hype. Gorgeous light quality. Heavy duty build, very fast flash sync—but I had several issues with the kit.



First off, it weighed a ton (okay, more like 33 pounds). It had a really slow recycle speed, and the batteries had to be charged constantly or they would lose power. On paper, this was an ideal kit for me, but the reality was that it was too heavy. The fact that I had to constantly charge the batteries was frustrating, and the slow recycle time did not suit my shooting style.

The way you like to shoot and how much weight you are prepared to lug around are very important factors to consider before buying portable lighting gear.

I've now settled on something that's in between the Shite Lite and the Mercedes Benz. It's the perfect weight, it has a fast recycle time, and the batteries hold their charge. Having a kit with these qualities makes shooting effortless, and I can focus all my attention on my model rather than fussing over gear.

A few other important factors are worth considering when buying portable lights:

The power you need

When I'm trying to photograph large groups or need extra power, I prefer working with my Quadra lights, because they are four times as powerful as speedlights.

The quality of light

I think the quality and look of light from my Elinchrom Quadra is far superior to that of speedlights. Each unit will vary in color and look, depending on build and components used.

Having said this, there are times when I'm in a remote location and don't, or can't, have my Quadra kit, like when I'm trekking to a remote village. It's on these occasions that I'm really grateful for my speedlights. Having a speedlight lighting my shot is still 10 times better than no light at all.

Two heads are better than one.

I only need one flash head on the majority of my portrait shoots, but if I want to add an extra light, my Elinchrom Ranger gives me that option.

If you are buying a battery kit and head option, invest in a pack that gives you the option of adding an extra light.



One of my Elinchrom Ranger Quadra lights is worth five speed lights.

Charging time

Most portable battery packs take about 2–6 hours to fully charge a battery. Save yourself the stress and invest in a second battery.

Recycle time between flashes

What is the recycle time between flashes? Three to five seconds doesn't sound like very long until you've got a group of CEOs tapping their feet in front of you while you wait for your flash to recycle.

Don't believe the literature. Test the flash and count how long it takes to recycle between frames. My ideal recycle time is 1–3 seconds.

Number of flashes per charge

The number of flashes at full power will vary from unit to unit. Test this out and thoroughly research before you commit to any one unit.

Accessories

All lighting systems have unique ways to attach modifiers and accessories. You should know how compatible your flash unit is with your current accessories and how easy is it to add modifiers to the light.

I now use the same brand for my portable lighting and my studio lighting so I can mix and match all my lighting accessories.

Safety

Most portable flash kits are not water-resistant. Make sure to keep them well protected in extreme weather and around water.



Speedlights

I use a speedlight off-camera for about 10–20% of my photo shoots. Like any piece of gear, speedlights have their pros and cons, but they can light you out of some tight spots (quite literally). I use [Canon 580EXii speedlights](#) as my preferred lighting when I am traveling or need to work quickly or in tight locations.

These speedlights are not cheap at roughly \$500–600 USD each. But there is a really great name-brand alternative called the Yongnuo (YONG-NEW-OH) YN-560II Speedlight for around \$100 USD.

These speedlights don't have the same robust build and quality as the Canon or Nikon speedlights, and they have fewer features, but the Yongnuo YN-560II is a great entry-level light. The other mid-range option you may want to consider is the Sigma EF610 DG Super Flash for Canon and Nikon DSLR cameras.

My portable lighting of choice is the Elinchrom Ranger Quadra. It's a mid-priced system that suits my needs perfectly.

The term *speedlight* is actually the Nikon brand name for on-camera portable flashes, but it has become a generic name, much like Chapstick, Frisbee, and Jeep. Canon calls its on-camera flashes "Speedlites." When I use the term speedlight, I'm referring to any brand of on-camera flash system that is hotshoe-mounted.

Light modifiers

The right tools for the job

Many years ago, I decided to invest in a new coffee table. My previous coffee table had collapsed after someone stood on it during a party (don't ask).

I knew exactly what kind of table I wanted. I wanted a big, rustic table made from recycled timber. A table that looked like it had already hosted 1,000 parties and wouldn't buckle under the weight of someone standing on it.

I started visiting furniture stores and websites but couldn't find the table I wanted. Everything I saw looked exactly the same. I wanted something unique, and I finally realized the only way to achieve that was to have it custom made.

That's when I met Matteo, the carpenter. Matteo's work was incredible and exactly what I was looking for. He built me the most beautiful and robust coffee table I'd ever seen. That coffee table is still a prized possession.

Matteo had been making tables for 15 years. He worked out of a converted warehouse that housed every modern woodworking tool and machine imaginable, but having every tool under the sun isn't what made this such an amazing table. Matteo used certain tools in a particular way, bringing the timber to life and reflecting his unique sense of style. Without that point of difference, my coffee table would have looked like any other coffee table.

Having all the right tools is important for any artist, but knowing exactly which tools to use and how to use them is key to creating great art that is also unique.

Light modifiers are a selection of tools you can use to shape and control light. Matteo used chisels and a wooden mallet to shape the timber. A different carpenter may have opted for a handheld plane or electric router. I would have ended up with table either way, but each tool requires a different level of skill, and each craftsman will choose and use those tools in a unique way.



It's not just having the right tools for the job; it's how to use those tools.

Shaping and controlling light

Same, but different

All light shapers achieve pretty much the same thing. They control and diffuse light from your flash. Some modifiers do it in a very basic way, without much finesse (like the umbrella), and require very little skill to master. Other modifiers (I'm looking at you, beauty dish) are very complicated, but when used correctly, they create dream lighting. When used incorrectly, the dream lighting becomes a complete nightmare.

The shape, quality, and quantity of light created is influenced by the shape, size, and style of modifier.

Modifiers can be broken down into two groups:

1. Soft light modifiers

Umbrellas, softboxes, umbrella boxes, octaboxes, and scrims will all give a very soft light.

Soft light bounces all around the subject and fills any shadow areas. It's by far the most flattering light source and is very similar to soft window light or the light outdoors on an overcast day.

Soft light can be used as a main light, or as a fill light in conjunction with a hard light modifier.

2. Hard light modifiers

Bare bulb, gridspot, snoot, fresnel, and beauty dish will all give a very hard light.

Hard light creates hard, dark shadows. The smaller the light source, the harder the light relative to the subject. Classic hard light is midday sun on a clear day when the sun is very high in the sky.

Here is a list of the main players.

The umbrella (Miss Congeniality)

PROS

Umbrella light is a great fill light. It closely resembles daylight, making it perfect for lighting large areas.

Because the light is very soft light and spreads everywhere, this is the easiest light shaper to work with. It's an ideal light shaper to start out on.

CONS

The spread of umbrella light makes it very difficult to control the lighting and create moody shots.

Umbrellas are also a complete nightmare to work with outside, because the slightest breeze turns them into a kite, taking your precious light with them.

Softbox (Mr. Reliable)

PROS

Softboxes create a soft light that is more contained than the light from an umbrella. This makes it a better choice of light modifier if you want to light only certain areas of an image.

Softboxes are completely enclosed and a much better light modifier to use outside, as they are less likely to blow around in windy conditions.

CONS

Because the light is more contained in a softbox, it difficult to light large areas.

Softboxes are often fussy and time-consuming to set up and take down. If you need to shoot really quickly, you need to factor this into your timing.

Softboxes are also more expensive than umbrellas.



Umbrella box (Miss Convenient)

PROS

The Umbrella box is the most convenient light modifier, because it combines the simplicity of the umbrella with the control of a softbox. The box design eliminates the complications of using this modifier outdoors.

Umbrella boxes are also cheaper than softboxes, so they're a great choice for your first light modifier.

CONS

Umbrella boxes are often poor quality and made from cheap materials, so they break very easily.

The beauty dish (Heaven and Hell)

PROS

The beauty dish creates a very hard, controlled light. On the right skin tone, this kind of light looks incredible, because it creates rapid falloff from highlight to shadow, which really emphasizes bone structure. This is why the beauty dish is a favorite light modifier of celebrity, fashion, and portrait photographers.

The beauty dish is a relatively heavy and solid light modifier, so it's perfect to use outdoors, like on a windy beach.

CONS

This light modifier creates a very hard light and emphasizes every lump, bump, and imperfection in the skin's tone. I find it works best on young models with great skin, or on older models to create character.

This is a very difficult light modifier to master and could easily be renamed "the ugly dish."

The deep octabox (best of both worlds)

PROS

The deep octabox is a combination softbox and beauty dish, so the light is still soft and controlled, but with more contrast than a traditional softbox.

This is my location light modifier of choice. It creates beautiful, soft-yet-crisp light and really nice round catchlights in the eyes.

CONS

The deep octabox is one of the most expensive modifiers. It's also tricky to use, with very little room for error.

Before selecting a light shaper, it's important to consider the following:

- **Your skill level as a photographer**
- **Hard light vs. soft light**
- **The size of area you are trying to light**
- **Your model**





A side-by-side comparison of several of the most popular light shapers that are compatible with portable lighting

From a distance, the differences in these shots are subtle, but on closer inspection, you can see the different qualities each modifier brings to the shots below it.

Going back to the Bruce Lee Protocol I mentioned earlier, the easiest light modifiers to use are umbrellas, followed by softboxes. Hard light modifiers like beauty dishes, grids, and deep octaboxes are more difficult to master.

Style of light

Softboxes, octaboxes, and umbrellas all produce a very similar soft, or diffused, style of light. The main differences are the catchlight produced by each modifier and how much the light is spread, which is influenced by the size of each modifier.

Remember, **soft light** bounces all around the subject and fills any shadow areas. It's by far the most flattering light source and is very similar to soft window light or the light outdoors on an overcast day.

Soft light can be used as a main light, or as a fill light in conjunction with a hard light modifier.

Hard light creates hard, dark shadows. The smaller the light source, the harder the light relative to the subject.

Hard light can be used for dramatic effect or when shooting outside in full sun.

Size of the area you are lighting

If you are trying to light large groups of people or a large area, it's best to work with large softboxes or umbrellas.

If you are trying to light very small areas, such as a single person in a moody shot, it's best to work with smaller, more contained light modifiers like beauty dishes, grid spots, or softboxes with grids.

Light modifiers and skin tone

Hard light will emphasize imperfections, so as a general rule, I prefer to use hard light modifiers on younger skin tones and for character portraits.

Soft light modifiers give the most flattering light and are the best choice for most portraits.

Hard light modifiers like beauty dishes can be used in conjunction with a softbox to soften the harshness of the light for a really nice result.

Light modifier accessories

Grids

A grid spot is a honeycomb accessory that can be placed over the front of a light modifier to further control the spill or angle of coverage from a light.

Reflectors/deflectors

Bright, reflective surfaces will reflect the light that hits them. And because light travels in a straight line, using reflectors or fill boards is a great way to soften and control your light.

Gold, silver, and white reflectors can be used to bounce light back into your portrait and fill or lessen hard shadows.



Deflector

Dark colors and matte surfaces will absorb light, so a matte black piece of material or card can be used to deflect or reduce light, creating more drama in a portrait.

Remote triggers

When I bought my first set of remote triggers, I bought cheap infrared ones. Every time a forklift or an emergency vehicle with flashing lights went by, it

would set off my flashes. They were also really inconsistent, and I missed many shots due to misfires. This was frustrating but not impossible to work around; I just learned to have more patience on these shoots.

Remote triggers can cost anywhere between \$30 and \$300 per trigger. I'm currently using PocketWizards, which are heavy duty and 100% reliable.

Still learning? Here are my recommendations about remote triggers:

1. Buy the cheaper brands. Yongnuo RF-603N Flash Triggers cost around \$40.
2. An even cheaper option is to use a sync cord. This is the cheapest way to use a remote flash trigger, but you'll have the sync cord to contend with as an extra tripping hazard, which could injure someone or knock over a light.
3. Rent them. Renting is one of the most cost-effective ways to access equipment you don't use very often, or can't afford just yet.

Warming gels

A warming gel is a piece of plastic that you can use to change the temperature of the light, adding light without overpowering the shot. It can add some gentle, late afternoon light at any time of the day!

You can buy warming gel from photography shops, but you can also use colored cellophane or even candy wrappers, so start eating those sweets!

Gels are available in almost any color, and they can make a boring background come to life.

Portable stool

I bought my stool at a thrift shop for \$3. I love it because it folds down flat and is really handy for headshot shoots in locations where there is nowhere for my model to sit.

Step ladder

I always keep a portable step ladder in the car. It comes in handy when I'm photographing large groups of people and need to be slightly higher than the group, or when I want my assistant to hold a light higher than a very tall model.



Wayne – an important member of my crew.

Going it alone with Scott, Neville, and Wayne

Q: How many assistants does it take to change a light bulb?

A: Three. One to do it and two to tell you how they did it on the last job.

I love working with assistants. Having them on set makes me a better photographer. I believe they are worth every penny, and I now use them on about 90% of my photo shoots. This was not always the case. There were many, many years where I was just working with Scott and Neville.

Who are Scott and Neville?

Working “Scotty Neville” is Australian slang for working alone. Alone as in, *You’ve got no mates and never will.* I love this phrase!

So how do you light a portrait when it’s just you, Scott, and Neville? Introducing... “Wayne.”

Colleagues like Wayne are among the most important members of any portrait photographer’s crew.

Wayne and I have been together for decades. I love him like a son. He’s worked on some really big shoots and has been an integral part of the lighting for many big names, yet he remains humble and respectful.

Wayne comes in handy when I’m working out a new lighting concept.

I bought Wayne from a mannequin supply shop. But perhaps you would open your heart to consider adoption. There are also many rescue shelters you can adopt mannequins from. Thousands of mannequins end up in the landfill every year, so it’s worth considering a rescue dummy. Because a dummy is not just for Christmas, it’s for life.

Lighting kits for all budgets

“Do what you can, with what you have, where you are.” – Theodore Roosevelt

Before you invest big bucks on a lighting kit, I highly recommend that you test several of them out first. You might find that you really love the simplicity, affordability, and portability of speedlights; but when you test battery-powered strobes, you might discover that the extra power really makes a big difference to your shooting style and experience.

There is no right or wrong kit.

A more expensive kit will not guarantee you better photos. I've seen just as many poorly lit photos taken with expensive lighting kits as I've seen awesome images taken with inexpensive kits.

Do what you can with what you have, and make it work.

These are all brands that I really like. You can mix and match and look for secondhand options. These kits will all work with the lighting recipes I'll show you in the following chapters.

The ultimate portable lighting kit: Shoestring budget (\$200)

**All prices are given in United States Dollars (USD).*

- 1 x [Yongnuo YN-560II Speedlight](#) \$70
- 1 x [Yongnuo RF-603N Flash Triggers](#) \$30

These are very cheaply made lights, not designed for heavy duty use but perfect for beginners.

- 1 x [CowboyStudio Pro 30-inch Octagon Umbrella Speedlite Softbox Brolly Reflector with Grid](#) \$38
- 1 x [CowboyStudio Umbrella Mount Bracket with Swivel Tilt Bracket](#) \$15
- 1 x [LumoPro LP605 Compact 7.5-foot Stand with Ground Spikes](#) \$40
- 1 x [Sandbag](#) \$7

The ultimate portable lighting kit: Two-shoe budget (\$400)

**All prices are given in United States Dollars (USD).*

- 2 x [Yongnuo YN-560II Speedlight](#) \$140
- 2 x [Yongnuo RF-603N Flash Triggers](#) \$60

These are very cheaply made lights, not designed for heavy-duty use but perfect for beginners.

- 2 x [CowboyStudio Pro 30-inch Octagon Umbrella Speedlite Softbox Brolly Reflector with Grid](#) \$76
- 2 x [CowboyStudio Umbrella Mount Bracket with Swivel Tilt Bracket](#) \$30
- 2 x [LumoPro LP605 Compact 7.5-foot Stand with Ground Spikes](#) \$80
- 2 x [Sandbag](#) \$14

The ultimate portable lighting kit: Entry-level (\$1500)

**All prices are given in United States Dollars (USD).*

- 1 x [Einstein™ E640 Flash Unit](#) \$500
- 1 x [Vagabond™ Lithium Extreme](#) \$400
- 1 x [VLX™ Spare Battery](#) \$150
- 1 x [Manfrotto 1004BAC Master Stand](#) \$100
- 1 x [LumoPro LP605 Compact 7.5-foot Stand with Ground Spikes](#) \$40
- 2 x [Manfrotto 026 Swivel Lite-Tite Umbrella Adapter](#) \$60
- 1 x [Yongnuo YN-560II Speedlight](#) \$70
- 2 x [Yongnuo RF-603N Flash Triggers](#) \$60
- 1 x [Westcott 301 Photo Basics 40-inch 5-in-1 Reflector](#) \$40

The ultimate portable lighting kit: Mid-range (\$3000)

**All prices are given in United States Dollars (USD).*

- 1 x [Elinchrom Ranger Quadra Hybrid Li-Ion PRO Set A Battery Set with 2 Heads](#) \$2100
- 1 x [Elinchrom EL 26185 Rotalux 39-inch Deep Throat Octagonal Softbox with 2 Diffusers](#) \$375
- 1 x [Manfrotto 026 Swivel Lite-Tite Umbrella Adapter](#) \$30
- 1 x [Avenger A2033LKIT Steel 40-inch Sliding Leg C-Stand with Grip Kit](#) \$200
- 1 x [Manfrotto 1004BAC Master Stand](#) \$100
- 1 x [LumoPro LP605 Compact 7.5-foot Stand with Ground Spikes](#) \$40
- 2 x [PocketWizard Plus III Transceiver](#) \$250
- 1 x [Elinchrom Reflector and Honeycomb Grid Set](#) \$250
- 1 x [Westcott 301 Photo Basics 40-inch 5-in-1 Reflector](#) \$40

The ultimate portable lighting kit: High-end (\$7000)

**All prices are given in United States Dollars (USD).*

- 1 x [Profoto B1 500 AirTTL Location Kit \(2 heads with inbuilt battery\)](#) \$4000
- 2 x [PocketWizard Plus III Transceiver](#) \$250
- 1 x [Manfrotto Alu Master Air Cushioned Light Stand Quick Stack 3-Pack](#) \$330
- 1 x [Profoto 505-705 3-Foot Octagon Softbox](#) \$550
- 1 x [Westcott 301 Photo Basics 40-inch 5-in-1 Reflector](#) \$40

The need for speed:
Natural-looking
flash on-camera

The Princess and the Big Mac



It was 3:43 p.m. and the Emirates Marquee at the Melbourne Cup Carnival was deserted except for a few waiters and some lingering guests. My feet were killing me. I don't know what I'd been thinking when I decided that breaking in a new pair of heels on Melbourne Cup Day was a good idea.

I was exhausted, in pain, and starving: the event photographer's trifecta.

I was daydreaming of a foot massage and a Big Mac when a really familiar-looking couple wandered into the marquee. For a split second, I thought they were friends of mine or work colleagues. Then I realized who they were.

The pain, sleep deprivation, and hunger were replaced with a surge of adrenalin, and I sprang into action. "Good afternoon and welcome to the Emirates Marquee. May I take your photo, please?"

The couple graciously agreed, thanked me, and moved on, disappearing before I even had a chance to wonder if I was breaking any protocol.



Flash on-camera is the fast food of photography. It gets the job done and fills the spot, but I always wish I could have had a better setup.

Royal couples moving around free of bodyguards and minders are a rare sight these days. Photographing them is a bit like photographing a pair of beautiful gazelles in the wilderness of Africa. I didn't want to startle them and scare them away, but it was important to react quickly.

The year was 2003, and the couple was Princess Mary and Prince Frederik of Denmark. Their story is a big deal in Australia, because Mary was just a common Aussie girl who met her Prince Charming in a bar in Sydney. They fell in love and got married, and she became Princess Mary of Denmark.

My client was delighted. The image made it into newspapers around the world. I headed home to soak my feet and eat a Big Mac.

Many factors combined to make that image possible:

1. I was in the right place at the right time.
2. My camera was loaded and ready.
3. I was shooting using flash on-camera.

There are times when I can't always light a portrait the way I would like to, just as there are times I can't always eat the meal I would like to.

Sometimes time restrictions mean I have to let go of *great* and settle for *good*.

When I'm on a long road trip and starving, I have to let go of my need to have an organic home-cooked meal and settle for fast food; otherwise, I'll starve.

If I'm working at a crowded event like the races, an A-list party, a wedding, or a corporate event and I just need to get the shot, I can't jeopardize the shot by wasting time setting up flash off-camera. It's just not practical.

The problem with flash on-camera is that it flattens the light, giving portraits a fake cardboard cut-out sort of look. Flash on-camera is a very hard, unflattering light, and the color of the flash is often very different from the ambient light, particularly when shooting indoors at night or outdoors at sunset. Fortunately, there are several ways to make this style of lighting look much better so you can have your Big Mac and eat it, too.

Here are seven things I do when it comes to shooting flash on-camera.

When I'm thinking about shooting flash on-camera, I first consider this question:

1. Will adding flash to this image improve or detract from the subject?

This is the most important question to ask yourself. I've ruined many beautiful images by adding flash where it wasn't necessary. Now that I know better, I only use flash on-camera in the following situations:

- Night shoots
- Shoots in dark interiors with no natural light or very low light
- Shoots in mixed light, particularly fluorescent light (or, as I like to call it, "ugly lighting")

BONUS TIP: Never choose a venue with fluorescent lighting for a first date.

- Shoots at dusk or dawn



Hans from the camera factory



2. I shoot in manual mode.

Your camera and flash have been programmed by Hans at the camera factory, and the output is based on generic settings that are often too heavy-handed. **The best way to control the look of flash on-camera is to switch over to manual mode.**

If you're unsure how to do this, I suggest you read my first book, [Portraits: Making the Shot](#).

As a general guide, my camera settings are as follows:

- Mode: Manual
- Aperture: As wide open as possible, i.e., F2.8-F4. Always focus on the eyes. If I am photographing a large group, I will increase my aperture to F5.6 or higher to give me a greater depth of field so that everyone in the group is sharp.*



I think event photography looks much better when the background is slightly out of focus. A sharp background can look too cluttered and take attention away from the subject of the portrait.

- Shutter speed: Between 1/30 of a second and 1/200 of a second, depending on how much ambient light there is in my image
- Flash mode: TTL or through-the-lens (A)
- Flash output: -1/3 to -1/2 (B)

** I recommend you test your lenses at various F-stops and check how sharp they are. I know my 24-105 lens will be sharp all the way through at a focal length of 24mm and aperture of F4, but at the same settings, my 24-70 lens creates an image that is soft (out of focus) at the sides. It was only through trial and error and a few tears that I worked this out.*

3. I increase the size of the flash using a modifier.

The bigger the flash, the softer the light relative to the object you are photographing. A pop-up flash or speedlight is tiny compared to a person (unless you are photographing teeny-weeny people, which is really rare), so the best thing to do is use a modifier to make your flash on-camera as large as possible.



How different speedlight modifiers change the look of flash

I like to use a 10 inch x 14 inch softbox, which does a really good job of softening the light.

These modifiers also work:

- FlashBender brand
- Pop-up flash
- Gary Fong brand

Each of these modifiers works in a similar way, and that is to **soften the light**. Which one you choose comes down to personal preference.

Some photographers like to use the ceiling or walls to bounce the flash into. This technique is great if you're shooting in a place with low white ceilings or white walls. You simply point the flash toward the ceiling, and because light travels in a straight line, it will be diffused and bounce back into your model's face. **I'm not a fan of this technique**, as it tends to cast shadows under the eyes. It's also inconsistent. Many places I've worked in have 20-foot ceilings that are too high to bounce light off, or red walls, which will reflect a red cast on your model.

4. I balance flash with ambient light.

The secret to great flash on-camera is to **use the flash sparingly.**

I do this by taking a reading for my background *first* and adjusting my shutter speed to control the ambient lighting. If I want a darker background, I increase the shutter speed. If I want to create a lighter background, I decrease the shutter speed. I then add an extra ½ stop of fill flash to match the ambient settings.



As a general rule, I will start with the following settings:

Daytime indoors

- ISO: 400-800
- Aperture: F2.8-F4 (higher for group portraits)
- Shutter speed: 1/30 second

When working in TTL, I find the flash output is too bright, so I manually lower the settings by 1/3 to 1/2 stop to get a more natural-looking light.

5. I increase the ISO.

One of my biggest frustrations about shooting with flash on-camera is the recycle time between flashes. Seconds can feel like minutes when you have people posed and waiting. I think the formula is similar to dog years. One second of waiting for flash to recycle actually feels like one minute... or something like that.

The best way to increase the speed of shooting is to increase the ISO, which will increase the overall brightness of the scene. This means the camera flash doesn't need to output as strong a flash to light the scene and the flash will recycle much faster. I learned that trick from some Fleet Street photographers while photographing Formula One legend Lewis Hamilton after he won the 2007 Melbourne Grand Prix.

6. I change the color of the flash to match the ambient lighting by using gels.

If I'm working in a room that is lit by warm continuous lighting, like the lights you see in a hotel ballroom or conference room, I like to add a warming gel (CTO) to my flash so that the color temperature of my flash lighting is similar to that of my ambient light.



7. I look for open spaces and avoid walls and reflective surfaces.

The best way to avoid harsh background shadows when using flash on-camera is to **avoid backgrounds altogether**. Look for open areas, preferably with bright light (natural or artificial), to add interest to the background.



Lighting styles explained

You never forget your first time

He was the best-looking guy I'd ever seen in my life. At 6' 2", he towered over me; I'm 5' 7" (5' 8" with my hair done).

When he locked his piercing blue eyes onto mine, I actually gasped. Seriously.

So there we were, alone together. It was my first time, and I was so nervous. My heart was beating at a million miles an hour. My mouth was dry. My palms were sweaty.

"Pull yourself together, woman," my inner tough chick scolded.

I was only 22. It was my first time, and I was worried I'd do something wrong. I thought I knew where everything went, but it's not until you're actually in the thick of it that you know for sure... I stumbled and bumbled my way along, and then I finally let myself go. It was rough, it was raw, and it certainly wasn't pretty, but it was my first time, and I was so proud of my achievement.

I'd just completed my very first professional portrait shoot.

"Know the rules well, so you can break them effectively."
– Dalai Lama XIV

I can still remember every single second of that shoot like it was yesterday. I'd been an assistant for a year; I felt so intimidated by the skill and confidence of the photographer I worked for that I hadn't picked up a camera all year.

Then a model agent I knew asked me if I'd like to test with some of her new models. "Testing" is when model agents who are developing new talent send the models out to work with as many different photographers as possible to build their portfolios and develop their modeling skills. This type of thing is mutually beneficial to both the emerging photographer and the new model.

I was lucky, because I had an amazing mentor who taught me some really helpful tips on lighting, posing, and how to define and enhance facial features and make skin glow.

This was a huge advantage, but the minute I started shooting, I forgot most of the stuff he had told me. All I could remember was "Focus on the eyes and expose for the something, something..." I was so preoccupied with trying to get my shot in focus, trying to get the exposure correct, and thinking about how incredibly good-looking this model was that I completely forgot all of the lighting rules.

Just in case you happen to find yourself in a similar situation, following is a list of all the lighting styles, when to use them, and how to create them.

Being able to use more than one lighting style means that you can create many different and unique looks in your portrait photography.

As with all good rules, learn them, test them out, and then experiment to create your own unique way of doing things.

One size does not fit all

I spent the first half of my career oblivious to the subtle differences in lighting styles and how they could radically improve my portraits.

To the untrained eye, these styles all look similar. It's like when I first started drinking red wine. I couldn't tell a Merlot from a Shiraz or a Cabernet Sauvignon, but gradually, I began to notice subtle differences.

Portrait lighting styles are an acquired taste. Some are obvious, like the difference between white and red wine; others are more subtle, like the difference between a Merlot and a Shiraz.

All lighting styles are defined in terms of lighting position of the main light in relation to the model.

There is always one main light that is responsible for producing the majority of the light and giving the light its shape and style. Any other lights are "fill" lights, and their sole purpose is to reduce the amount of shadow. I'll tell you more about fill light in the chapter called, The essentials.



I like to think of a lighting setup as being similar to a lead vocalist, like Prince, and the fill light as his backup singers. They support Prince but never overpower him. Prince is a killer badass singer in his own right, but adding backup singers gives his songs more depth.

Every one of these lighting styles I'm about to describe can be achieved with just one light and a basic modifier.



Classic beauty lighting has main light directly above the model.

Classic beauty lighting

Classic beauty lighting is also referred to by several other names:

- **Hollywood lighting** or **Paramount lighting**: Paramount Pictures used this style of lighting to photograph its Hollywood stars.
- **Clamshell lighting**, because it is often achieved with two lights arranged like an open clamshell, one above the other.
- **Butterfly lighting**, because the position of the top light creates a shadow under the nose in the shape of a butterfly.

This style of lighting can be created with both hard and soft light.

Classic beauty lighting is a really popular style of lighting among fashion and celebrity photographers who prefer to use beauty dishes as their modifier of choice.

“Wow, I love the way this beauty lighting has accentuated every flaw on my face and made me look heavier than I really am. Thanks so much!!”
– said no model ever.

This lighting style accentuates bone structure and is ideal for thin models with beautiful skin and great bone structure. I don't recommend this style be used on fuller models with older or imperfect skin, as it tends to emphasize every imperfection and make people look older and fuller than they really are.

I often use this style of lighting for my celebrity portraits, but I have modified it to be much softer and more flattering by adding extra fill lights on either side of the top and bottom light.



In loop lighting, the light is placed above the model at a 45-degree angle camera right or left.

Loop lighting

At first glance, loop lighting can look a lot like beauty lighting. The setup is very similar.

The main light is placed above the model, as with beauty lighting, but moved 45 degrees camera right or left to add shadow where there is falloff from the light. I think this is a far more flattering lighting style, because having the face in partial shadow gives the optical illusion that the face is slimmer.

“Camera right” and “camera left” refer to right or left from the perspective of the camera holder. It’s the easiest way to avoid any confusion, and using this kind of lingo can make you sound pretty cool.

This lighting style gets the name “loop lighting” because of the loop-shaped shadow the nose casts on the side of the model’s face. How prominent the shadow is depends on how much fill light is used.

I use this style of lighting for 80% of my studio shoots and location shoots because I think it is one of the most natural-looking lighting styles.



Split lighting is created when the light is placed at a 90-degree angle to the model.

Split lighting

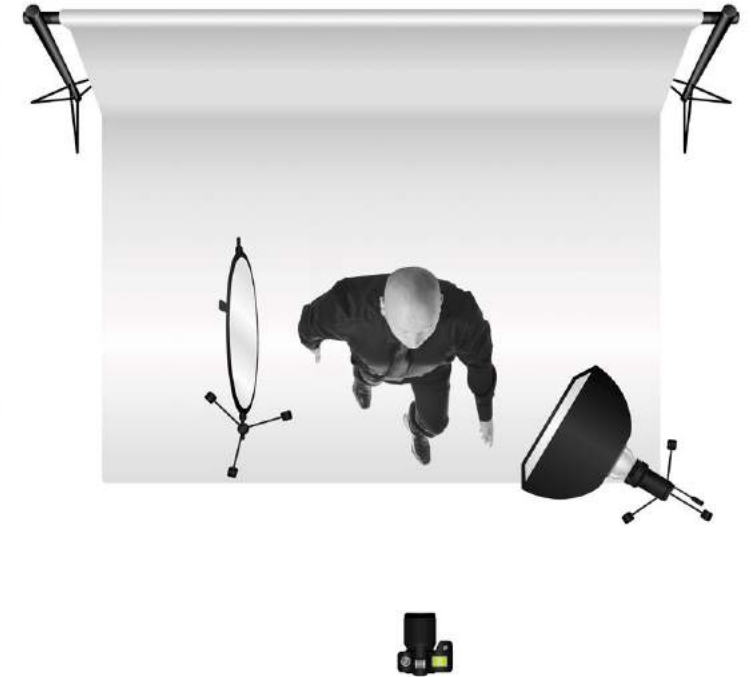
When I was a kid, my mom used to make me chocolate-dipped almond cookies. They were so good. I think that's how my chocolate addiction began. Whenever I see a split lighting setup, I'm reminded of those cookies.

Split light is where the model is half in light and half in shadow. It's a very moody-looking lighting—perfect for creating character portraits or if you want to add drama to an image.

The amount of contrast can be varied by the amount of fill light used and the style of light.

Hard light will give darker shadows with less detail, while soft light will give less contrast and more detail in the shadows.

I use this style of lighting when I'm shooting dramatic cover shots or to add character to a headshot. This style of lighting tends to suit male models better than female models, but I have seen it work really well on certain female models. Rules are meant to be broken, right?



Rembrandt lighting is created by placing a light at a 45-degree angle to the model.

Rembrandt lighting

Rembrandt lighting is a style named after 15th-century Dutch painter Rembrandt Harmenszoon Van Rijn. What a mouthful! Now you can win the next trivia championship or a million dollars, because hardly anyone knows his full name.

So basically, Rembrandt was an amazing painter from the 1600s. He used to paint portraits using a single window light to the side of his model. He would position the model at a certain angle to create a triangle of light under the eye on the shadow side of the face. This was his signature style. He was like the original “Where’s Waldo,” but with a way cooler name.

This is probably the most flattering of all the classic lighting styles, because it adds a three-dimensionality to the model’s face.

The only difference between split lighting and Rembrandt lighting is the slight shift in position of the light in Rembrandt lighting, which creates slightly more detail in the shadows and, of course, the triangle.

Like split lighting, the contrast between the shadow side of the face and the highlight can be increased or decreased using fill light or reflectors.



Rim lighting basically has lights set up behind the model and creates a glow, or a "rim" of light, around the model. It's also called "backlighting" or "hair lighting."

Rim lighting

Rim lighting looks great as a dramatic effect, as a single light portrait against a dark background, or in conjunction with any of the lighting styles I've mentioned above.

I often use rim lighting on outdoor locations in conjunction with daylight, as it can add a bit of bling or sparkle to my shots in very flat lighting conditions, like an overcast day. I also like to use this style of lighting when I need to separate my model from the background, particularly if I'm working with a dark-haired model against a dark background.



Is this my good side?

Short and broad lighting

Two really important factors to consider when lighting your models are

1. Which side of the face to place the shadow on; and
2. Whether to photograph into the shadow side of the face, the highlight side of the face, or square on.

Photographing someone from the shadow side is called **short lighting**. Photographing from the highlight side is called **broad lighting**.

Short lighting gives the optical illusion that a face is narrower than it appears. This lighting style is really flattering for most faces and is my go-to technique for most situations.

Broad lighting tends to make people's faces appear wider than they really are. Many inexperienced photographers shoot into the highlight side of the face unintentionally.

The effects are quite subtle to the untrained eye, but once you see the difference in practice, it's like night and day.

The essentials

Fill light



An image can be changed dramatically by the amount of fill light used.

“Say hello to my little friend!” – Scarface

Fill light can be created by adding another light source. This can be another flash, daylight, or using a reflector to bounce my light back into the shot.

Fill light, just like a good backup singer, supports but never overpowers the main light.

How much or how little fill you decide to use depends on the model you are working with and the mood you are trying to create.

- Adding fill decreases contrast and flattens the look of the lighting.
- Subtracting fill increases contrast and increases the moodiness of a shot.

I generally like to have somewhere between 1/2 stop and 1 stop of fill light in my portraits. This looks the most natural in the environments and style I shoot in.

Reflectors as fill lighting

Reflectors are the cheapest and most common tool used to fill shadows. You can buy one for about twenty bucks. I actually keep two in my kit at all times. I recommend the 5-in-1 version, because it's the most versatile. These versions come with a translucent center panel and a removable cover that has white, silver, gold, and black sides. Which side you use depends on the final look you're going for.

The **translucent** disc is most commonly used to diffuse harsh sunlight, like midday sun, or to counter the "panda eyes" look caused when the sun is directly above your model. The translucent disc makes a perfect diffuser for speedlights or to diffuse hard sunlight on a location shoot. I've also used the translucent disc in conjunction with an octabox to create a softer light source.

The **white** disc gives the softest fill light and is my go-to choice 80% of the time. It's perfect to use with flash, because it gives a very neutral and clean fill light.

The **silver** disc gives light with a hard contrast. It's perfect for daylight portraits in really low light conditions, like overcast days, but I think it's too hard when used as fill with flash.



When I started lighting my portraits with flash, I only owned one flash. I used a reflector attached to a light stand as my fill light. I photographed my first cover and many, many editorial and advertising shoots using this technique before I could afford to buy more lights.

The **gold** disc gives light with a warm contrast, which can be too warm for most portraits. I used this side a lot in the late 80s when I had big blonde hair and wore jackets with shoulder pads. Enough said.

The **black** disc is not a reflector, technically speaking, because black deflects rather than reflects light. I use the black deflector when I need to **reduce the amount of fill light** in my portraits.

An example of this is when I'm shooting portraits in a small, brightly lit space with lots of daylight bouncing around or white walls that reflect my flash around. This sort of scenario is perfect if I want to create soft, even, beauty lighting, but not so great if I want to create mood or add shadow to my portrait. This is where the black deflector comes in really handy. Using the black deflector absorbs the light and helps create a darker skin tone.



Lighting headshots and profile pictures

“I’m pretty sure there’s a lot more to life than being really, really, ridiculously good-looking. And I plan on finding out what that is.” – Zoolander

The “X” Factor

When I heard my studio door buzzer at 3 p.m. (on the dot) I rushed to answer. I was extremely excited about working with this particular model. Her photos looked incredible, and I couldn’t wait to meet her.

I flung open the door with the same excitement I feel on opening a fresh jar of Nutella. For a split second, I was thrown, but I quickly regained my composure and greeted the model warmly. What threw me? Even after all these years, I am still surprised when the most beautiful models in the world look nothing like their photos.

This session was a cover shoot for a book. The makeup was minimal, because the client wanted a fresh girl-next-door look. The makeup artist added mascara and lip gloss and gently tousled the model’s hair. When she stepped under the lights, I noticed her flawless skin and incredible bone structure. When I looked through my camera I *really* noticed her. “Oh my God,” I gasped, “you’re so beautiful.”

Was my makeup artist a genius? Did a little lip gloss and some mascara really transform my model that much? Well, no. Even though my makeup artist *is* a genius, it wasn’t the makeup. The transformation was a combination of lighting, lens, and the “X” Factor.

The “X” Factor is a combination of many elements, including bone structure, size and shape of the eyes, distance of the lips from the nose, and the mysterious “X” that makes some people ridiculously photogenic and others, not so much. The camera does lie (or at least embellish the truth), and I’m still blown away by how different some people can look in photos.

Getting a headshot or a profile picture was once the exclusive domain of lawyers, accountants, actors, and smarmy real estate agents. Today, everyone from the local corner convenience store owner to the Queen of Sheba has a social media account or website and needs a great headshot.

The world is getting smaller each day, and the need for better headshot photographers is increasing. Photographing headshots is how I broke into the photography industry, and it’s the perfect way to hone your people skills.

A great headshot should reflect the personality of the person you are photographing.

Sadly, not everyone has that “X” factor, but I do believe everyone can look amazing in their headshots.

How amazing they look is determined by three main factors:

- 1. Pose and attitude**
- 2. Lens**
- 3. Light**

Pose and attitude

Even ridiculously good-looking people will look worse-than-average if they aren’t posed well and have a poor expression. I cover posing and rapport in great detail in my book, [Portraits: Striking the Pose](#).



Jan, who works at the passport office, loves to shoot with a 50mm lens.

Lens

Your choice of lens makes a huge difference in how subjects will look in their portraits.

Longer focal lengths of 85mm and higher compress facial features and are more flattering. A focal length of 50mm is the most accurate representation of a face, and under 50mm tends to distort facial features, making these focal lengths ideal for character shots.

I love working with a focal length between 85mm and 200mm for most of my headshots, because I think it's the most flattering.

Light

The one thing that can make or break a portrait is... light. You can have a great pose, an amazing connection with your model, and a superb location, but if the light isn't right, your portrait will suck.



I prefer using moodier lighting for male portraits and a flatter, softer style of lighting for female headshots.

There are no hard and fast rules for lighting headshots. Some photographers love to use a very moody or arty style of lighting, and others prefer a very evenly lit, bright, commercial style of lighting. I find myself shooting somewhere in the middle.

Headshots: The way

A great headshot can be lit with one, two, three, even up to six lights. One light will give the portrait its shape, and the other lights add fill. I generally use more lights when I'm shooting a magazine cover or publicity campaign where the client insists on very even lighting and a bright white background.

Regardless of how many extra fill lights are involved, the setup remains the same.

This style of lighting works for business or corporate headshots, actors' headshots, magazine covers, musicians, and even the Queen of Sheba's new Instagram profile picture. The lighting can quickly be modified from moody/arty to flat commercial just by repositioning the light.

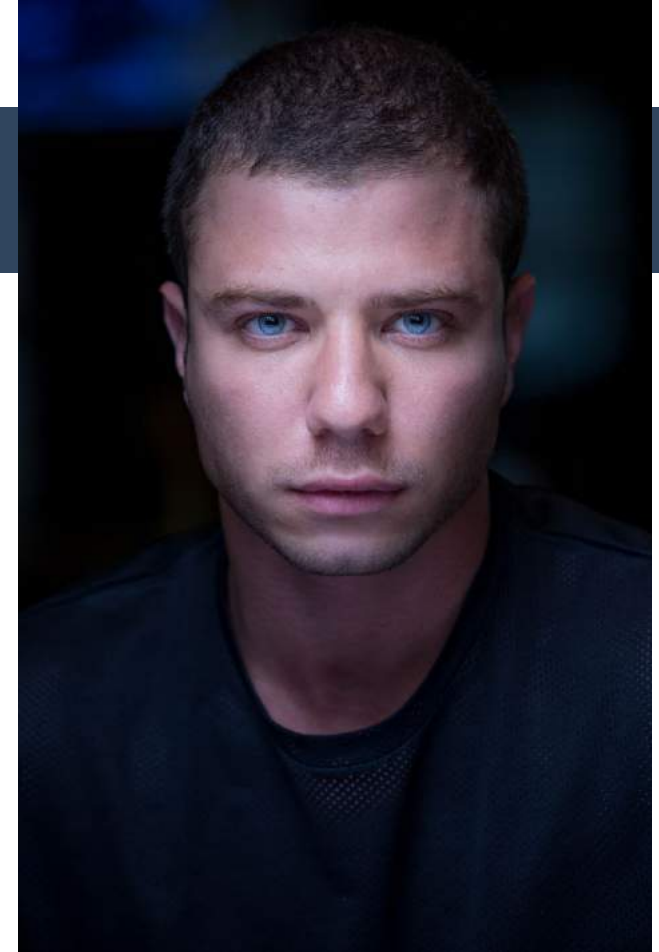
The one thing all these shots have in common is the use of soft lighting rather than hard lighting. The reason I use soft lighting for headshots is that it's far more flattering and far more forgiving if I make a mistake.

Headshots, particularly corporate-style headshots of ridiculously important and busy people, often need to be photographed in minutes. Having a setup that is quick and easy to position, portable, and flexible is the key to headshot photography success.



This is a typical headshot setup for an office scenario. The background could be a plain wall or a portable background.

1. Main light
2. Fill light (reflector or light)
3. Rim light
4. Plain wall or portable background, view, or interesting background



From shoebox to the great outdoors

Over the years, I've photographed thousands of headshots in locations that range from Presidential Suites in the world's finest hotels to back alleyways complete with dumpsters to pokey offices with low ceilings and banks of fluorescent lighting to contend with. No matter what location I find myself working in, I am always able to create the same consistent lighting style using this portable setup.



The color used in the background of a headshot can make a huge impact on how the model looks. As a general rule, stick with neutrals like white or grey and leave the beige, green, and teal back in the 80s (where they belong).



This is a typical setup for an outdoor headshot. Look for interesting backgrounds that don't detract from the star of the show.

1. Main light
2. Fill light (reflector or light)
3. Rim light or the sun
4. Plain wall or interesting background





A great headshot makes the person you are photographing the main focus of the shot. Try to avoid backgrounds that are too busy and distracting. This example shows a headshot that has too many distractions in the background; there also appears to be something growing out of the back of the model's head.

I prefer backgrounds that are bright and interesting rather than flat, plain backgrounds. I think they give the headshot more life.

Here are a few suggestions for interesting headshot backgrounds:

- Trees or gardens that are backlit
- Anywhere with bright lights
- Windows (these make great backgrounds)
- Back streets, long corridors, or any background with depth



Here is the same setup using a longer lens with a tighter crop. The background is now completely blurred out, making the model the star of the photo.

One-light headshot options



The moody look of this headshot can be varied by the angle of the light and the amount of fill light reflected back in.

I photographed Australian actor, Gill Tucker using a larger softbox and placing it flat on towards him (left) creating a softer, more even and flattering light. The aim is to fill in any creases or imperfections with soft light.

I then placed the softbox at a more extreme angle will enhance lines and imperfections, which can be used to bring out the character of a model.

Note: I've yet to meet a woman who has asked me to enhance any imperfections and lines on her face, so I generally save the moody look for male models.

Two-light headshot: Moody



The two-light headshot is the ideal way to control the fill light more accurately. If I'm shooting a number of headshots, I generally work with two lights and increase or decrease my fill light based on my model's needs. The second light can also be a rim light used along with my basic headlight setup.

Three-light headshot



Three-light headshots can be configured in several different ways:

SET UP #1

- 1 x main light
- 1x rim light (this look can be achieved with flash indoors or sunlight outdoors)
- 1x background



SET UP #2

- 1 x main light
- 1x Fill light
- 1x rim light (this look can be achieved with flash indoors or sunlight outdoors)



SET UP #3

- 2x rim light
- 1x main light

SET UP #4

- 2x main
- 1x rim (this look can be achieved with flash indoors or sunlight outdoors)

Variations of the three-light headshot using moody and flat lighting.

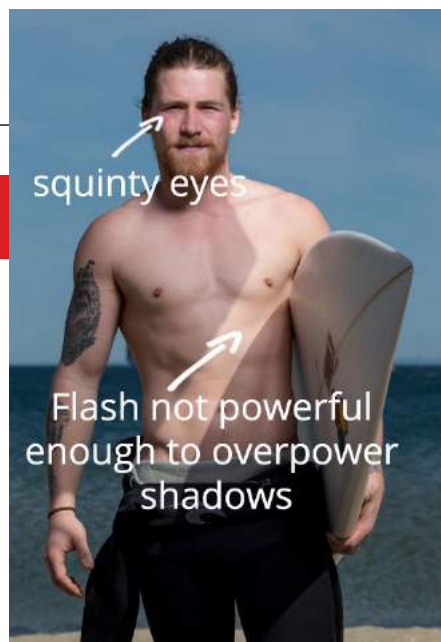
The caca zone

How to take great photos in the worst lighting conditions

High noon



The harsh midday sun causes raccoon eyes, squinty eyes, and harsh caca light.

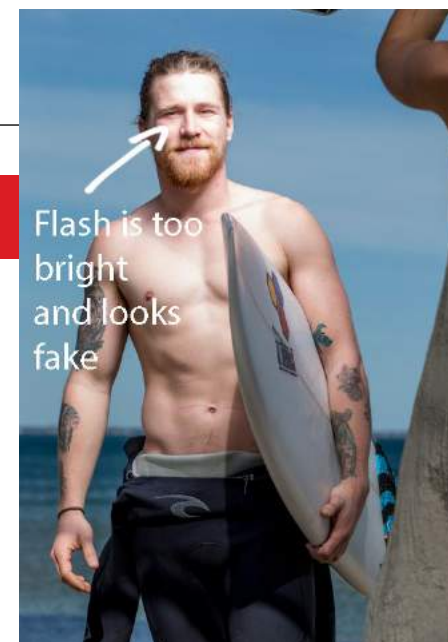


Flash on-camera can do a reasonable job if the shots are just social pictures, but the flash often isn't powerful enough to fill in all the shadows.

There are a few rules in life that we know are right, like brushing your teeth, eating your greens, and looking both ways before you cross the street. I'd like to add one more to the list.

Never shoot portraits in midday sun.

Shooting at high noon (midday), with the sun directly overhead, is a nightmare. First of all, the angle of the sun creates harsh, ugly shadows. Second, bright sunlight causes most people to squint, so you end up with squinty raccoon eyes.



Using flash off-camera helps to fill in the harsh shadows, but if you use too much flash, the image starts to look fake.

If you ignore my advice and find yourself shooting in the midday sun, there are a few ways you can improve your portraits.

- 1. Pray a cloud will show up to block the sun.** Clouds can be a great help if they stay in position long enough for you to get your shot. Unfortunately, this is a very rare event, so this approach is not particularly reliable.
- 2. Use flash to fill in the harsh shadows the sun creates.**

The downside of this technique is the amount of flash power needed to override the midday sun.

This lighting setup highlights one of the few downsides of using speedlights.

In order to produce enough flash power to override the sun's mighty rays, speedlights need to be set to *full power*. But when speedlights are set to full power, the recycle time between flashes slows down considerably, and you end up with long, awkward pauses while you wait for the flash.

The workaround is to use two speedlights at $\frac{1}{2}$ or $\frac{3}{4}$ power. There are many adaptors that allow you to convert light modifiers to hold between one and six speedlights. Or you can use a larger battery-operated flash to give you more power (and fewer awkward silences).

3. The final (and best) way to improve portraits taken at midday is to soften the sun.

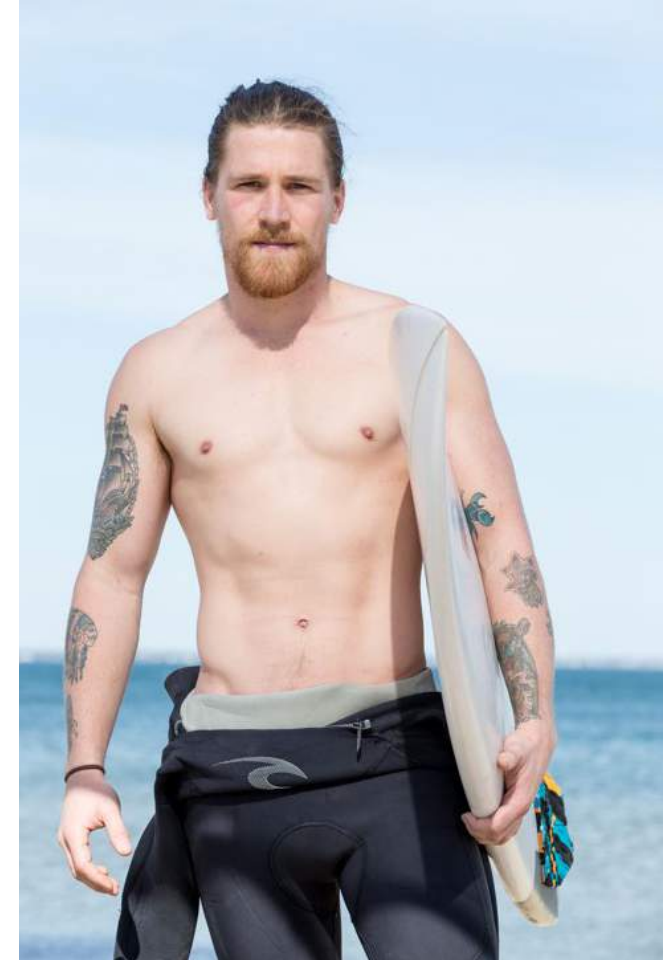
Adding a diffuser is the best way to soften the harsh midday sun. I use a portable diffuser that is approximately 5 ft. x 2 ft. I attach it to two light stands, secured by sandbags so they don't blow over.



Creating shade and then adding fill flash is the best way to shoot in harsh midday sun.



Filling old shopping bags with sand is a great alternative to lugging heavy shot bags to the beach.



Surfer Luke photographed under the diffuser.

The diffuser softens the harsh light and decreases the contrast, creating nice, even lighting. Some photographers find that adding a diffuser is enough to create good lighting.

I agree, but sometimes the image looks a little flat. Adding an extra light to this setup can really make your portrait pop.

If you'd like to see exactly how I created this shot, head to the [Surfer Boy at Noon recipe](#).

Backlighting



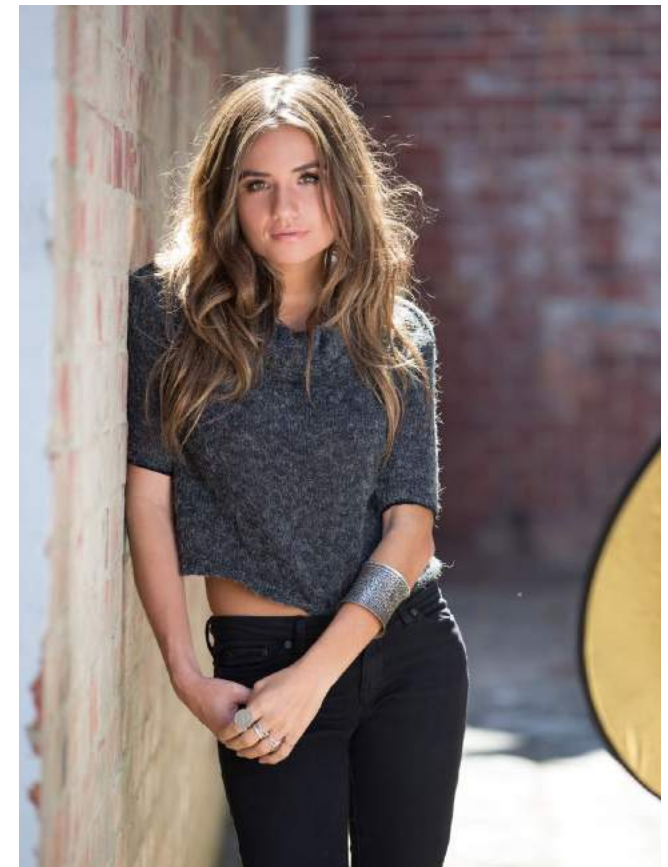
Backlighting can be challenging for photographers. The backlight wreaks havoc with the camera's light meter, and images are often underexposed.



There are two workarounds in this situation.

- 1. The best way to correctly meter skin tones in a backlit setting is to use a light meter.** I might sound like a nag about this, but light meters really do make a big difference.
- 2. If you don't have a light meter, move in close to your subjects and fill the frame before you take a meter reading from the skin tone.** This technique will give a much more accurate skin tone and a nice effect, but the background is now overexposed. (A)

Skin tones in backlit portraits can look a little muddy (B), which is not very flattering. Shooting with flash to overpower the backlight can make a big difference in the skin tone and the overall look of the shot. (C)



The backlit shot has a distinctive look about it, and sun flare can also add a dreamy romantic look overall.

Using flash in dark rooms



This overlit shot looks fake and completely devoid of any mood.



The lights and mood are retained by altering settings.

The biggest challenge with using flash in dimly lit rooms is that your image can end up looking fake or overlit, killing any mood light that may have been present. Even the smallest amount of flash will bounce off a ceiling, and using a light modifier will have a similarly negative effect.

The best workaround for this situation is to increase the ISO as high as possible*, use a slow shutter speed, and use as wide an aperture as possible. This will pick up more ambient light in the room, and the flash becomes a subtle fill light rather than a mood-sucking spotlight.

** Each camera will have different high ISO variables.*

Rookie lighting blunders and how to fix them

The blob

“Make sure you can see the logo in the background when the CEO hands the check over,” said Richard, head of the PR agency I had just started shooting for.

The CEO of a well-known power tool company would be presenting a check for \$250,000 to the head of a children’s charity. It was part of a public relations exercise, and my job was to photograph the hand-over, making sure that the company logo was prominent in the shot.

It *should* have been a fairly straightforward shoot.

The “handshake shot” for check presentations always uses either daylight or flash on-camera, because it’s all over in a matter of seconds and there isn’t enough time to set up lights.

When I arrived at the convention center, I noticed the PR company had set up a beautiful display of glossy signage and logos.

I set my camera to manual mode and did a quick test off to the side to make sure everything was working. Then I positioned myself and got ready for the action to begin.



The handshake looked a little awkward, but I managed to coax genuine smiles out of the CEO and the charity head, all the while ensuring that the company logo was clearly visible in the left of the shot. I took about 10 frames, and I was confident everything in the shot looked good.

Boy, was I wrong! When I saw the images the next day, I wanted to cry.

Instead of seeing a beautiful logo in the left of each frame, I saw a massive white blob of light caused by the reflection of the flash bouncing off the glossy background.

I was a rookie with the flash back then, and this was Classic Rookie Blunder #1: I hadn't watched out for reflections and shiny surfaces. The image had to be retouched, at a considerable cost to the agency (this was well before Adobe® Photoshop® software). Now that I know better, I check the background very carefully before adding flash.

This wasn't the only rookie mistake I've made; there are plenty! In hopes of saving you some time and heartache, here is my list of classic lighting mistakes and how to avoid them.

1. Light reflections in shiny background surfaces

As you just read, having the lights reflected in shiny surfaces (like glass) used to drive me crazy on indoor shoots.

The easiest way to avoid this is to **change the angle of the lights slightly, or move them** so they reflect into a part of the frame that is not visible.

Sometimes, I've found myself in situations where I can't move the lights. In these cases, my only option is to take a frame of the background (on a tripod so the scene matched exactly) with the lights turned off. The background could then be added back in during the post-production phase.

But this requires extra work and time in Adobe Photoshop or similar software, and it can be really tricky when there are people involved. It's always better to spend the extra few minutes getting it right in-camera.



In this example, the light on-camera left was moved to the left slightly and the light on-camera right was raised higher.

2. Light reflected in glasses

A model wearing reflective glasses can be a nightmare scenario when you're shooting with flash. The light will be reflected in the glasses, often obscuring the eyes altogether.

Moving the lights can dramatically alter the lighting, so in this case it's not the best option. The easiest fix is to remove the glasses, but **always make sure this is okay with your model**. Often glasses are an important part of people's look, like hairstyle or clothing.

The next option—the one I use the most—is to ask your model to tilt their head down slightly to remove the reflection. Always keep an eye on their glasses as you shoot, because it only takes a minute shift in the angle of your model's head for the reflection to reappear.

3. Raccoon eyes

Having the light positioned directly above your model's head will create raccoon eyes (dark shadows under the eyes). *This only looks good on raccoons.*

Adjust the angle of your lights to ensure that your model's eye sockets get enough light. Some people have deeper eye sockets than others, so getting this right is a matter of trial and error.



4. Harsh shadows

This is a classic example of a photographer's first attempt at off-camera flash. It's easy to see why many people become frustrated with the results and give up.

These harsh shadows can be caused by a number of rookie missteps: positioning lighting incorrectly, using a light source that is too hard, using a modifier that is too small, or placing the modifier too far from the model. Each of these scenarios will create the same result.

The best way to overcome harsh shadows is to work with large soft modifiers and bring the light in as close as possible to the model.

If you are not able to use a large soft modifier, always position the light above the model's head or only slightly camera right or left to minimize shadows.

5. Horror lighting (mwahahaha!)

When the light is positioned below your model's face, the result is (*mwahahaha!*) "horror lighting." This style of lighting is great when you want to create scary-looking portraits, because it creates really deep shadows and makes everyone you photograph look like a monster.

If you aren't trying to create horror lighting, always position your lights slightly above eye level or higher.



6. Too moody

This is more of a personal preference than a blooper. It's great to create mood with portrait lighting, but if the lighting is too moody and there are no details in the blacks, the portrait can end up looking like a split head with underlit and muddy skin tone.

I think there should always be some detail visible in the shadows. A gradual shift from highlight to shadow looks more natural.

This can be achieved by using some fill light on the shadow side or by slightly changing the angle of the main light.



7. Overlighting

The 90s called, and they want their headshot back!

This is how I used to light model headshots in the 90s. I would overlight so the skin tone was completely blown out (and had no detail). All that was left was eyes, hair, and lips.

As a general rule, it's best to see some tone and texture in the skin. That's why I recommend overexposing skin tone by 1- 1 ½ stops.



8. Hot heads

Rim lighting can make or break a shot. I've broken a few shots by not paying close attention to how my rim lighting is affecting the shot.

The most common scenario is using a rim light that is too powerful and blowing out highlights (so there is no detail) in your model's hair or skin tone. This is very easy to do, particularly if you are not using a light meter and are judging the shot from the screen on the back of a camera.

As a general rule, I don't use a rim light on anyone who is bald or has a receding hairline. I also very carefully check to make sure there is detail in the highlights, paying extra attention to fair-haired people, because fair hair is much easier to blow out.



These recipes were designed for photographers on the go. The first few were all created with one speedlight and an entry-level budget modifier, in less than 30 minutes.

The recipes progress to cover the next level of lighting and modifier use until we bring the whole band together at the end.

Recipes

The Office: Studio lighting on a budget

Photographing corporate headshots in office locations can be tricky. There are so many variables to contend with. Time is limited, offices are cramped, Jan from accounts keeps walking through the back of frame, and background choices are often limited to blank walls or ugly filing cabinets.

The traditional way to shoot headshots is to bring in a gray backdrop and several lights, but this looks really dated and lacks personality.

Here is a quick, cheap, and easy way to shoot headshots that have a more “lifestyle” look to them (and don’t scream “1985”).



Scott Harvey. I photographed Scott in his busy city office. Space was limited, so the speedlight and small softbox on a stand were perfect for the setup.

The gear

- Canon 5D MKIII
- Canon 70-200mm L-series lens
- 1 speedlight
- 1 small softbox
- 1 light stand
- 1 reflector
- 2 remote triggers

The settings

- ISO: 400
- Aperture: F3 ½ @ 1/200 of a second
- Focal length: 200mm

This was a typical office location, with banks of fluorescent lighting (the ugliest light in the world) and lots of dark gray furniture.

When setting up, I always look for a spot that gives me maximum depth behind my model. This makes it easier to throw the background out of focus.

I also like to try to incorporate the windows in the background and any other lights. A mix of light and dark areas gives the background depth, tone, and life and looks far more interesting than a flat background.



The humble office doesn't look like much when it's photographed with all the details in focus.



Here is my setup.

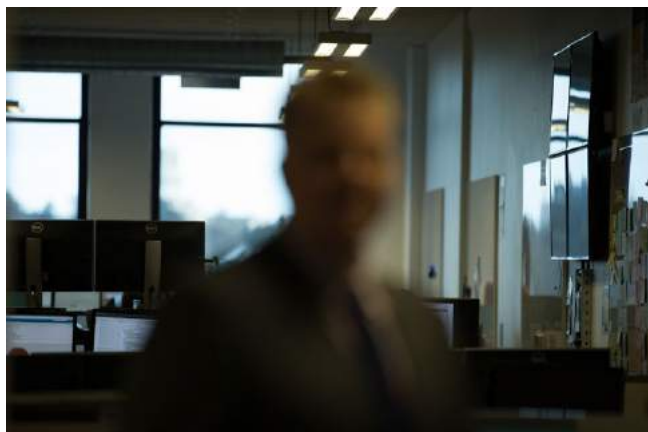
I used a single speedlight and small softbox, shooting on my 200mm lens at a focal length of 200mm. I actually set up in a corridor that joined two offices so I would have enough depth.

If space is limited, this type of shot would work just as well at a focal length of 85mm–200mm.

- My light was set to Manual (M), and the power was set to 1/8 power.
- My meter reading was F4 @ 1/200 of a second.
- My camera was set to F3.5 @ 1/200 of a second. *This meant I was adding an extra half stop of light into the image.*
- The softbox was positioned to the right of my model at a 45-degree angle.

Once I had my model in position, I took an initial exposure for the background.

My meter reading was F3.5 @ 1/200 of a second. If I'd wanted a brighter background, I would simply have reduced the shutter speed to create more fill light.



Test exposure on background

I selected an F stop of 3.5 because I wanted my background to be out of focus.

Whenever I'm shooting at the maximum focal length of my lens and it's a very quick shoot (like this headshot), I won't risk shooting wide open. Most lenses are not



Here is the shot using just one light. I noticed that the shadow on Scott's face might have been a little too dark for a corporate headshot, so I added some fill light using a reflector.

as sharp at the extreme apertures, which is wide open (F2.8, in this case) or fully closed down (F22 on most lenses).

I didn't want to risk missing the focus, so I deliberately selected a higher F stop for safety.



Using a white reflector looks more subtle than silver, yet still makes a big difference.



No flash.



Using a silver reflector as fill brings extra detail into the shadow area of Scott's face.



Using a black cutter reduces the amount of light on the shadow side of Scott's face, which makes the image look moodier. I tend to use the black cutter if I'm working outside and my shot looks too flat.



I also photographed Scott in the alleyway behind his office. The setup was identical to the office setup, so once I had my light on the stand, I could quickly and easily move around to different locations.



Here is the final shot using a black cutter to add mood. The settings for this image were:

- ISO: 100
- Aperture: F3.5 @ 1/60 of a second
- Focal length: 15mm



Either decreasing or increasing shutter speed can change the look of the background.

Look Ma, No Modifier!: How to add light in a hurry

The entire setup can be created for less than \$150 and takes up the same space in your camera bag as a large jar of Nutella. That makes it perfect for traveling, event photography, weddings, or any occasion where time and the ability to carry lots of gear are limited.

A quick shoot is a good shoot!

I've photographed so many amazing characters over the years. In an ideal world, I could travel with a crew of five assistants, hair and makeup, a lighting truck, a coffee machine (essential), and all the paraphernalia needed to create amazing high-end shots.

Unfortunately, this is mostly limited to high-end advertising shoots and Hollywood productions. I usually settle for daylight and a reflector. This simple approach can still look amazing, but what if I were to tell you there is a really simple way to create great lighting without the Hollywood price tag?

This image of a Havana woman known by locals as La China was photographed with a very basic setup.

I bumped into La China on my way back from another shoot. I had not planned on photographing her. I was due to be at another location and had very little time, but I could not pass up the opportunity to photograph this gorgeous woman.

The gear

- Canon 5D MK III
- Canon 24-105mmL series lens
- 1 speedlight
- 1 diffuser dome
- 1 light stand or light pole
- 1 reflector
- 2 remote triggers

The settings

- ISO: 100
- Aperture: F4 @ 1/200 of a second
- Focal length: 105mm

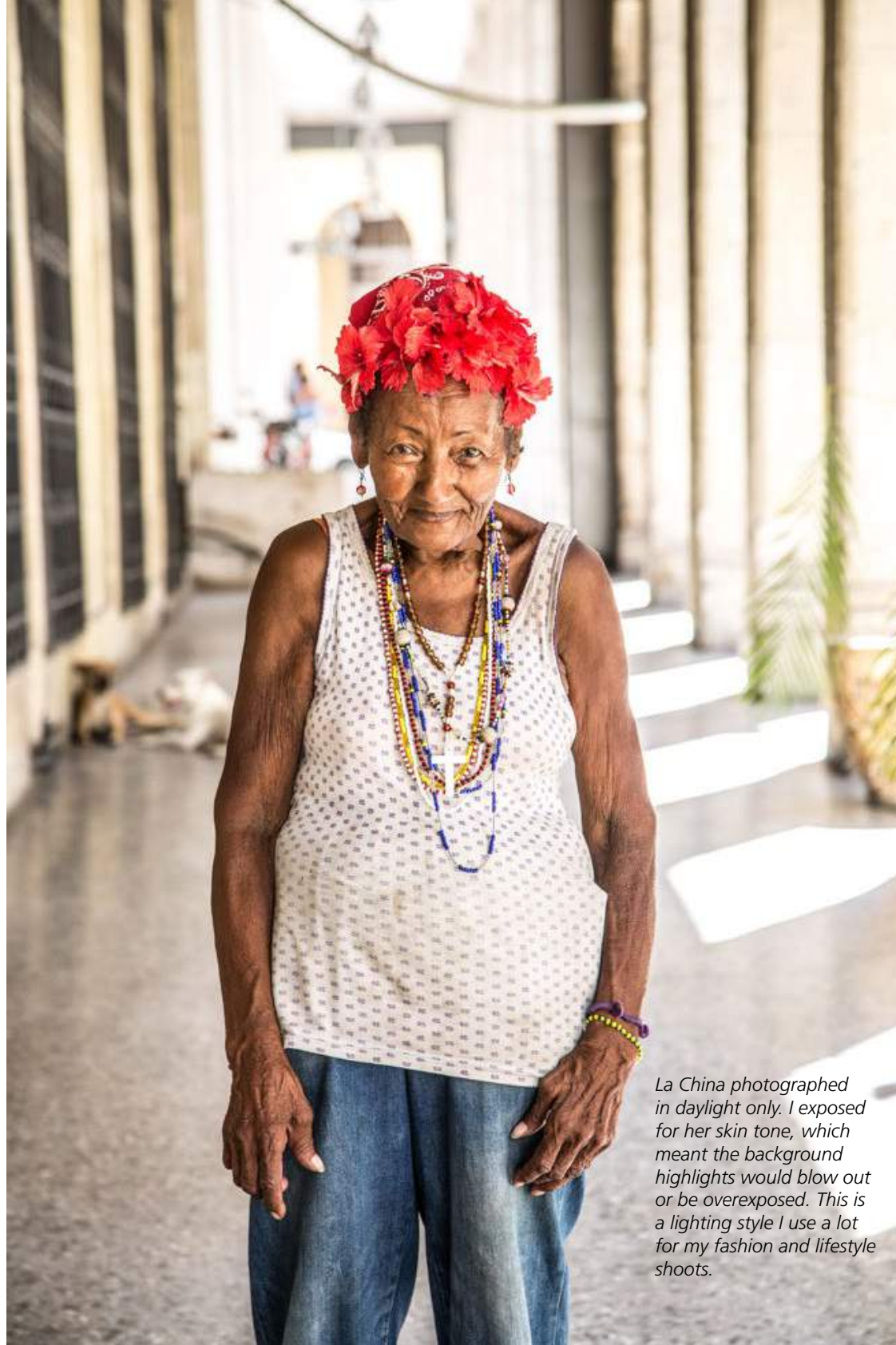


La China, Havana, Cuba.

The easiest way to photograph La China was to use natural light. It was a bright, hot, and sunny Cuban day, and we were standing in open shade, under an overhang. All I needed to do was expose for La China's skin tone and blow out the background. I could have left it at this point, but I really wanted to create a more high-end look for La China and add some mood to the image.



The background was in open shade, and the shadows from the columns made an interesting pattern.



La China photographed in daylight only. I exposed for her skin tone, which meant the background highlights would blow out or be overexposed. This is a lighting style I use a lot for my fashion and lifestyle shoots.

Here is the step-by-step process.

The first thing I do is decide how I want my background to look.

In this case, I wanted to create a darker, moodier, more saturated background than the one I'd captured using natural light.

I also wanted La China to be the hero of this shot. To do this, I needed the background to be out of focus. I created a narrower frame by shooting wide open using the widest aperture on my lens (F4) and a focal length of 105mm.

Then, I adjusted my shutter speed, starting at 1/15 of a second until I achieved the desired result. In this case, it was F4 @ 1/200 of a second.



Changing the camera angle is the easiest way to remove random strangers from the background. The lower camera angle also makes the model appear more dignified.

Whenever I'm shooting in a crowded location, I always use a longer lens. It creates a narrower frame of view, making it easier to avoid random people in the background.

I also had several people who decided to sit right behind La China and watch me photographing her. It's difficult to keep asking people to move out of the shot. The easiest workaround was to hide them behind La China. In this case, I lowered my camera angle to hide everyone.

Once I was happy with how my background looked, I simply needed to add enough fill flash to brighten La China's skin tone by ½ a stop.

My initial shot was metered at F4 @ 1/200 of a second. My flash reading was F4.5 @ 1/200 of a second. My camera settings remained at F4 @ 1/200 of a second.

The speedlight was set to M for manual, and the power setting was at 1/8 power. I positioned the light above La China's face and slightly camera right. I used a light pole held by an assistant, but a light stand would also have worked.

I also added a reflector camera left, held by a passerby who had kindly offered to help. The reflector added some extra fill light to the shadows under La China's chin and on the right side of her face.



*Speedlight @ 1/8 power
with diffuser on light pole.*





The background was in open shade, and the shadows from the columns made an interesting pattern.

Smokin': How to convert bright morning light to dusk



The LumiQuest ProMax is the most versatile, light, and travel-friendly of all my light modifiers. I use it as my modifier of choice for flash on-camera event shoots and as a flash off-camera modifier for times I need something quick, easy, light, and compact.

The advantage of this small softbox over the light dome is that it creates a much softer, more diffused light, whereas the dome has less diffusion and spreads light around more.

I call this kind of character portrait a “burger with the lot” because it has so many added extras. My model, Armando, caught my eye with his

incredible face. The cigar and newspaper scream “Cuba,” and the classic car that happened to pass as we were shooting was the icing on the cake (or the sesame seeds on my burger bun).

I wish I could take credit for the styling of this shot, but I have to admit it was a complete fluke. I was in the right place at the right time!

I had just finished a prearranged shoot with another Cuban man when Armando wandered past me. I didn’t hesitate for even a second. I had my Cuban assistant ask if he would pose for me, and Armando was delighted to oblige.

It was early in the morning, approximately 8 a.m. The light was flat, and the sky was overcast. This is a perfect scenario for the LumiQuest ProMax modifier. The minute Armando wandered into my frame, I knew exactly how I wanted my shot to look: dark, moody, and gritty. I wanted to recreate dusk, and here is how I did it.

Top left: Armando, a Cuban gentleman, photographed on the streets of Havana, Cuba.

The gear

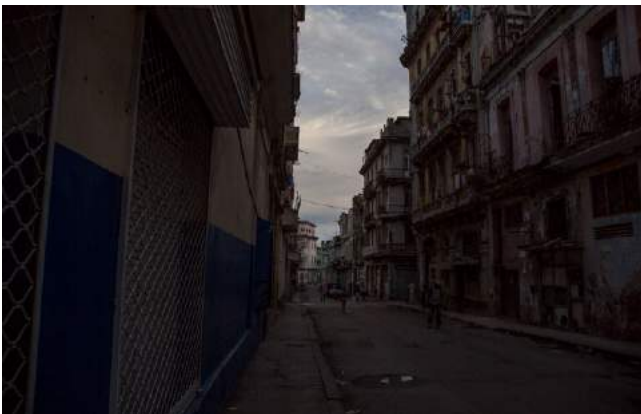
- Canon 5D MK III
- Canon 24-105mmL series lens
- 1 speedlight (1/8 power)
- 1 LumiQuest ProMax modifier
- 1 light stand or light pole
- 1 reflector
- 2 remote triggers

The settings

- ISO: 100
- Aperture: F 5.6 @ 1/200 of a second
- Focal length: 24mm



In this test shot of the background, I exposed for the shadows. The result is a bright shot with lots of detail, which looks kind of dull. The sky is also blown out. My meter reading was F4 @ 1/160 of a second.



In this test shot, I've metered off the sky, and the result is far more dramatic and moody. My final reading was F5.6 @ 1/200 of a second.



Here is the first test shot, without flash, showing Armando in position.

- ISO: 100
- Aperture: F5.6 @ 1/200 of a second
- Focal length: 24mm

Next, I set my flash to 1/8 power and took another test shot. My desired reading was F5.6½, which is half a stop over my background reading.



Test shot at F5.6 @ 1/200 of a second. Flash is set to ¼ power, giving a reading of F5.6½.



The mood of the shot can be completely changed by increasing the ambient light. Here is an example of how the shot looks with a shutter speed of 1/30 of a second. All the other settings remained the same.

I positioned the light slightly above and to Armando's left, which is classic loop lighting.

One of the problems with this style of lighting is that it is very difficult to get light into the eyes, particularly when the eyes are deep set. I added a reflector and had it positioned under Armando's torso to fill light back into his face and ensure he had great catchlights... because a portrait without catchlights gives shark eyes and can look a bit creepy.



Adding fill to the shot to avoid shark eyes.



Adding the fill light also opens up the shadow on Armando's right side (camera left). This image is without fill.



Here is the same image with fill light.



Here is the final image from a slightly different angle.

Soft speedlight shuffle: Recreating soft morning light using a speedlight and an umbrella box



This image was created in a derelict theater in Havana, Cuba. The theater was bathed in soft morning light, and I wanted to recreate this light on the ballerina.

I also wanted to maintain the detail in the distressed walls and pockets of sunlight that streamed through the windows.

In order to replicate soft morning light, I needed to use a modifier that created a more diffused style of lighting. The umbrella box is perfect for this, because the light from the flash is bounced into an umbrella and then diffused back onto my model through another diffuser. The umbrella creates a light source that is most like daylight because it spreads evenly over a large area.

A large softbox would create a similar style of lighting but is not as portable or as easy to use as the umbrella box. A single speedlight doesn't have enough power to work well with a large softbox. The workaround for this is to use two or three speedlights combined.

The gear

- Canon 5DMKIII
- Canon 24-105mm L-series
- 1 speedlight
- 1 umbrella box
- 1 light stand or light pole held by an assistant
- 2 flash triggers
- 1 tripod

The settings

- ISO: 100
- Aperture: F4 @ 1/30 of a second
- Focal length: 45mm

My model is Patricia, a ballerina with the National Cuban Ballet. She looks very cool and composed in this image, but it was actually sweltering hot in the theater. I felt like I was working in a sauna.



The first images I took were of the background, while my ballerina was getting changed. I exposed for the highlights—the pockets of sunlight coming in through the windows. If I had exposed for the shadows, the highlights would have been totally blown out.



At a slower shutter speed (1/15 of a second), there is much more detail in the shadows, but the highlights are blown out, making this shot too bright.



Next, I positioned my model and experimented with my shutter speed to determine just how much ambient light I wanted in the background. In this image, the shutter speed is at 1/200 of a second, which I thought was a bit too moody.



I was really happy with how my background looked at a shutter speed of 1/125 of a second. I settled on that as my main exposure.

Now to bring in the light!

My camera was set up on a tripod, and my settings were:

- ISO: 100
- Aperture: F4 @ 1/125 of a second
- Focal length: 28mm



I set my speedlight to ¼ power and took a meter reading.

My light reading was F4.5 @ 1/125 of a second, which is half a stop over the background setting.

On closer inspection, I thought this light looked a little too bright. I wanted the light to look natural, not like it had been lit with flash, so I turned down my light and opted to match my original settings.



My second test shot, with the flash power lowered.

I set my speedlight to 1/8 power and took a meter reading.

My light reading was F4 @1/125 of a second, which was now the same as my background and blended in nicely. Patricia no longer looked like a ballerina in the spotlight... more like a ballerina in soft morning light.

The rest of the shoot involved tweaking the focal length. I took several shots at 24mm and then changed it up a bit and zoomed in for some full-frame options.



Image with flash only.





Image using a white reflector on the floor.



When I took the tighter shots, I noticed the shadow side of Patricia's face (camera left) was a bit heavy, so I added a white reflector as fill to open up the shadows.



Left: The lighting style I've replicated for this shot is classic Rembrandt, complete with triangle of light. It's a soft light source placed above my model and slightly to one side.



Right Shot with no flash.

Cranking it up a few notches in Vegas, Baby!: How to bring light to the darkness

*“Bright light city
gonna set my soul.
Gonna set my soul on fire.”*

– Elvis Presley, “Viva Las Vegas”



Douglas Lewis/Vive photographed in Las Vegas, Nevada.

A couple of years ago, I photographed a celebrity wedding in country Victoria for a national magazine. It was a gorgeous ceremony on an old homestead, literally in the middle of nowhere.

The place looked amazing with beautiful little tea lights. This is fabulous for a romantic mood, but try getting a decent shot of the bridal waltz in complete darkness!

I didn't dare risk trying anything fancy that night. I used my fastest and sharpest lens with flash on-camera. It wasn't all that flash (see what I did there?), but I got the shot.

In this image taken in old Vegas, Nevada, I wanted to create an old-school 1960s retro vibe for my shot. I also had time to light this image using off-camera flash.

The aim of the shot was to balance the neon lights in the background and give the impression that my model was lit only by street lamp.

The gear

- Canon 5DMK III
- Canon 24-105mm L-series lens
- 1 speedlight
- 1 medium softbox
- 1 light stand or light pole
- 2 remote triggers
- 1 tripod

The settings

- ISO: 1600
- Aperture: F4.5 @ 1/200 of a second
- Focal length: 30mm

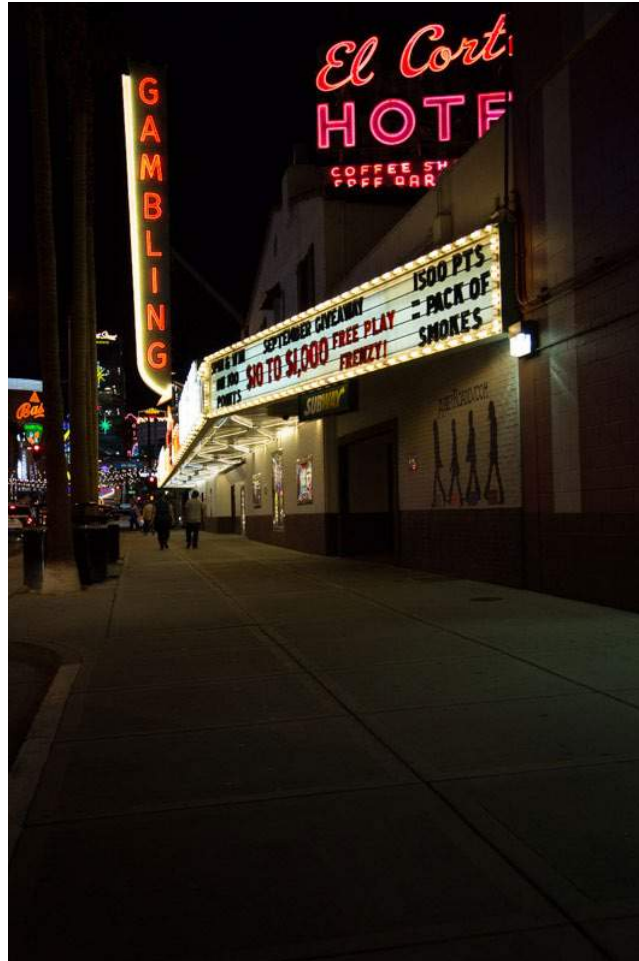
This kind of low light scenario was fairly tricky for the following reasons:

1. It was a dark scene with very little ambient light.
2. The model was walking toward the camera.

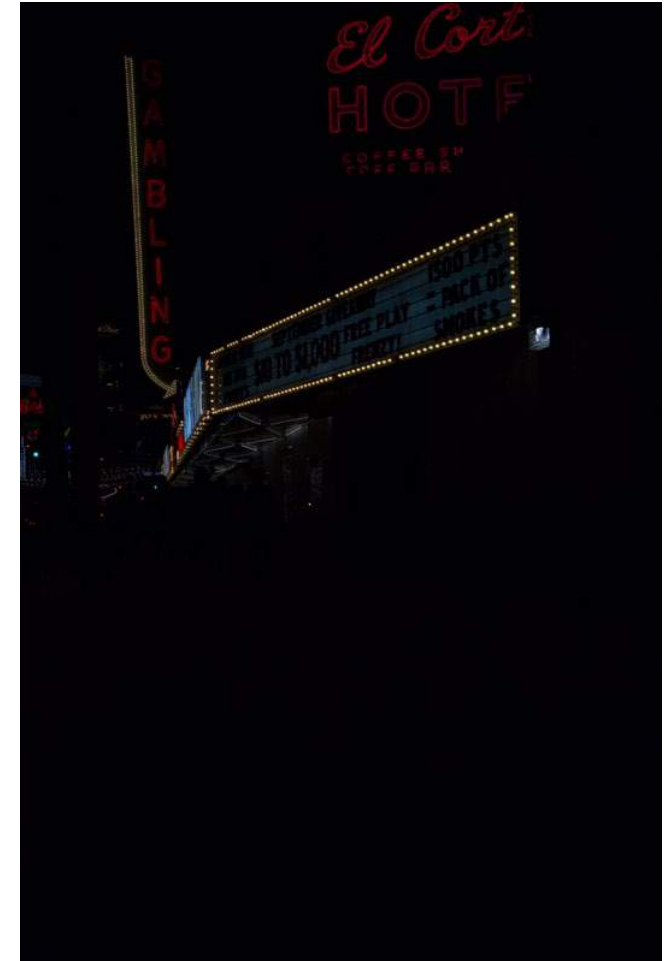
My initial light reading at 100 ISO was F4 @ 1/15 of a second. This would have worked if my model were standing still, but he was walking toward the camera, so I needed a faster shutter speed of 1/200 of a second if I wanted to freeze the motion.

Flash does freeze some motion, but if the shutter speed is too slow, there will be ghosting of your model.

The dilemma in this case was that once shutter speed was increased, the neon signs in the background were no longer visible.



Test shot at ISO 100, F4 @ 1/15 of a second.



Increasing my shutter speed to 1/200 of a second eliminates all the ambient light, and the neon signs are no longer visible.

The workaround in this case was to increase ISO. The ISO controls how sensitive to light the image is.

The best exposure for the background was ISO 100 @ 1/15 of a second.

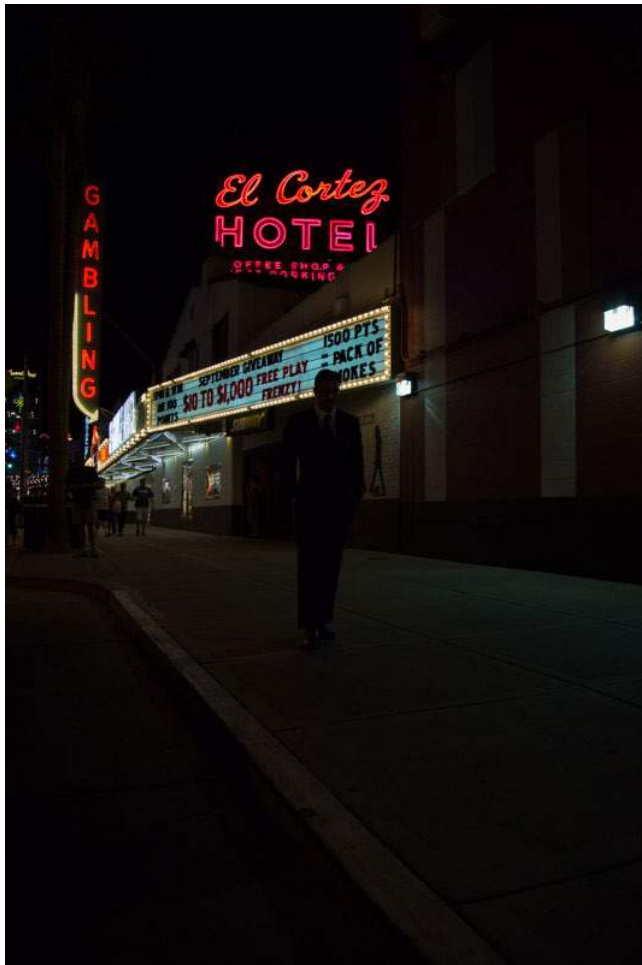
Increasing my ISO to 1600 and shooting at 1/200 of a second gave me the same look as shooting at ISO 100 @ 1/15 of a second.

The only downside to this is that increasing ISO also adds noise to the image. In this case, the trade-off was worth it, because slightly more noise is better than a soft image.



Increasing the ISO to 1600 allows me to maintain a high shutter speed and retain enough detail in the neon lights.

Once I was happy with how the background looked, I took a test shot of my model.



Test shot of my model without flash at ISO 1600, F4 @ 1/200 of a second.

This type of shot requires very little flash. This is where speedlights really shine.

They can be powered down to as low as 1/128 power, which was all I needed when shooting at a high ISO of 1600.



My first test shot with flash was with my speedlight set to 1/164 power, and my aperture was F4½.

If I were shooting in daylight, this would have worked really well, but because my background was so dark, the extra half stop of light was too much, and the image looked overlit.



Once the speedlight was powered down to 1/128 of a second, the lighting looked far more natural.



This diagram shows the light position for this shot. My assistant was standing just outside the edge of the frame. The light was positioned farther away from my model than I normally shoot because I wanted to create a slightly harder light, with a shadow to help make the shot look believable.

Surfer Boy: How to outshine the midday sun



The gear

- Canon 1DX
- Canon 70-200mm ISL series @ 200mm focal length
- Elinchrom Quadra portable light kit
- Rotolux Deep Octa converted to beauty dish

The settings

- ISO: 100
- Aperture: F16 @ 1/200 of a second

You can read more about why shooting at midday is so tough in [The Caca Zone](#).

Luke Deslandes was photographed at midday, which is the number one caca zone for portrait photographers.

Here are the steps I used to create my final Surfer Luke portrait.

1. Set up diffuser and position it so Luke is covered by the shade of the diffuser.
2. Take a meter reading of the background exposure. In this case, my background reading was F16 @ 1/200 of a second.

The background is about half a stop darker than the correct exposure, but I prefer the background to be slightly darker and moodier.

3. Set my flash power to a reading of F16½ @ 1/200 of a second.

Sunlight is a hard light, so the best and most natural fill lighting in this scenario would result from using a hard light diffuser.

For this, I'm shooting with a Rotolux Deep Octa octabox that has been converted to a beauty dish. This shot would work with a shoot-through umbrella, beauty dish, or octabox.

The lighting style I'm using is loop lighting. I had an assistant holding my light, but I could have used a C-stand or boom instead.



Luke in the shade of the diffuser.



Final image.



Rotolux Deep Octa octabox.

Leap of Faith: How to freeze motion

Always have a Plan B *“The best-laid plans of mice and men often go awry.” – Robert Burns*

This entire shoot with Australian dancer Brodie Chesher seemed to be a string of mistakes and miscommunications.

I was in the wrong place at the wrong time, but somehow I ended up with exactly the right shot.

The shoot was supposed to take place an hour earlier, but we were given the wrong location. After circling the wrong inner city carpark for 30 minutes, becoming more and more anxious as the sun began its descent, I seriously considered pulling the plug on the shoot altogether. But then, at the 11th hour, we managed to locate what we thought was the correct rooftop, and we got to work.



*Brodie Chesher, Ministry Of Entertainment,
Melbourne, Australia.*

The gear

- Canon 1DX
- Canon 24-105mm L series
- Elinchrom Quadra portable light kit*
- Elinchrom 22" beauty dish**

* Two speedlights can be substituted

** An octobox, umbrella, or small softbox can be substituted

The settings

- ISO: 100
- Aperture: F16 @ 1/200 of a second
- Focal length: 24mm



My beautiful Melbourne in the caca hour, somewhere between sunset and twilight



A dark background combined with a model lit with fill flash looks fake or "deer in the headlights".

The image I had planned and the image I ended up taking are worlds apart. I wanted Melbourne's city skyline as a backdrop, but by the time we arrived at the location, the sun was too low and the skyline looked terrible (no offense, Melbourne, I love you dearly).

I had three choices.

1. Go home.
2. Suck it up and make the best of a bad situation.
3. Go to Plan B.

I carefully considered all three options and decided to try and make it work. Unfortunately, even Brodie's incredible air acrobatics couldn't add life into the shot.

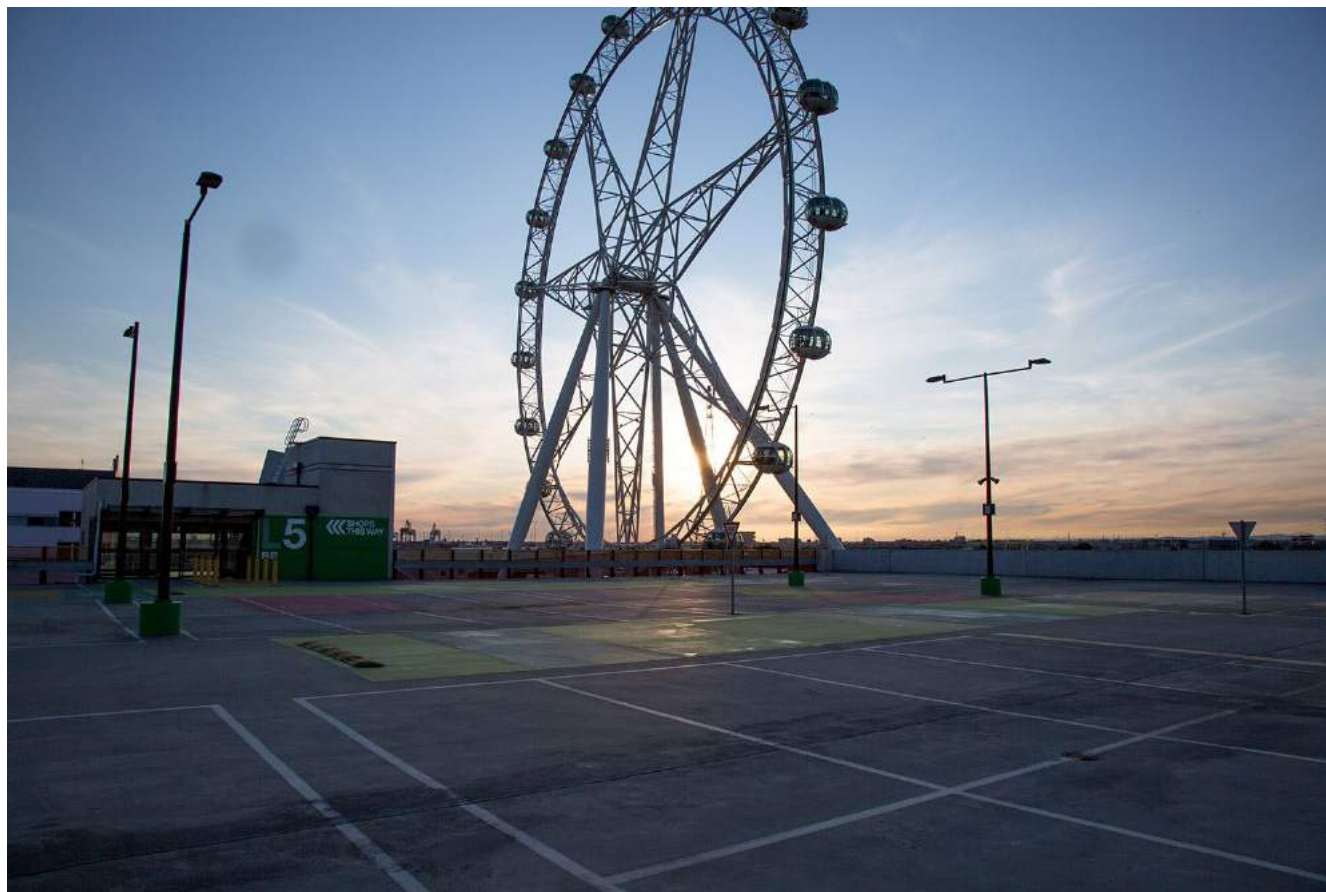
I didn't continue with this shot because:

1. The background is too dark and dull, making the image appear flat and lifeless.

2. The contrast between the light on my model and the background is too great, making this image look fake or digitally edited.

Luckily, I had a Plan B!

When I turned in the opposite direction, I saw this spectacular sight.



Here is the first image of the background, exposed for overall detail using:

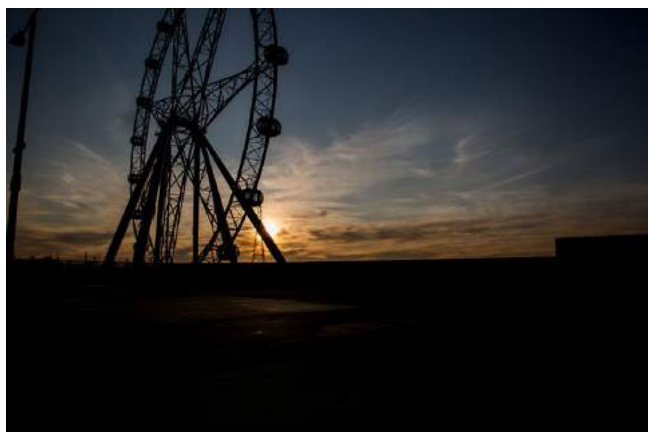
- ISO: 100
- Aperture: F11.5 @ 1/200 of a second

It doesn't look like much in this image, but I knew if I underexposed the sky, it would look amazing.

Here is the first image of the background.

- ISO: 100
- Aperture: F16 @ 1/200 of a second

Decreasing the exposure by 1½ stops really brought out the color in the sky and the detail in the clouds.



The best way to capture the rich colors of a sunset is to under-expose the sky by between 1 and 2 stops. Use your camera's light meter and take a reading off the sky.

The next step was a quick test shot to check my focus and to ensure that my dancer, Brodie, was leaping into the right part of the frame.

I was extremely impressed by the way Brodie could get so much height from a standing start. Respect!

In this case, I was shooting wide at 24mm at an aperture of F16, so I knew my images would be very sharp from background to foreground.

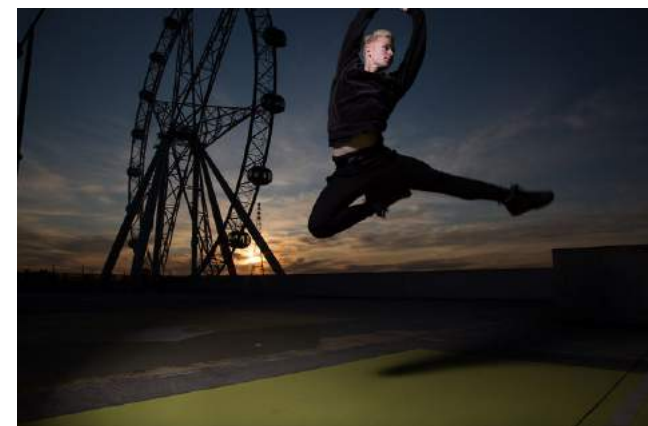


A test shot to position my dancer in the frame.

The best way to light this shot is to use a long extension pole held by an assistant. A boom arm would not have been long enough.

What would MacGyver do?

The best DIY hack for this type of lighting setup is to use a painter's extension pole with an adaptor to hold the light in place



It took me a few shots to get Brodie in the right position.



The final image.

Whiteout: Bringing the whole band together



I use whiteout style for about 80% of my commercial advertising, television, editorial, and advertising shoots.

With this style, the background is completely eliminated. I can recreate it anywhere that has an electric hookup and enough space for a backdrop. The light created is very soft and forgiving and suitable for all skin tones and ages.

You can use anywhere from three to ten lights (I think the most I've used on one set is seven). The overall portability of this style means you can achieve a high-end commercial look anywhere, anytime.

The gear

- 1 heavy duty background stand and light stand combo 9 ft. x 12 ft.
- 2 remote flash triggers
- 3 flash heads (min 400Ws)
- 3 light stands
- 2 black cards to use as cutters
- 1 medium softbox, octabox, large umbrella, or umbrella box
- 1 reflector
- White seamless roll paper (for background)
- Perspex (or acrylic sheeting)

The four light setup

- 2 1200Ws Elinchrom compact flash units with Chimera softboxes to light my model
- 2 600Ws Elinchrom compact flash units with wide reflectors to light my background

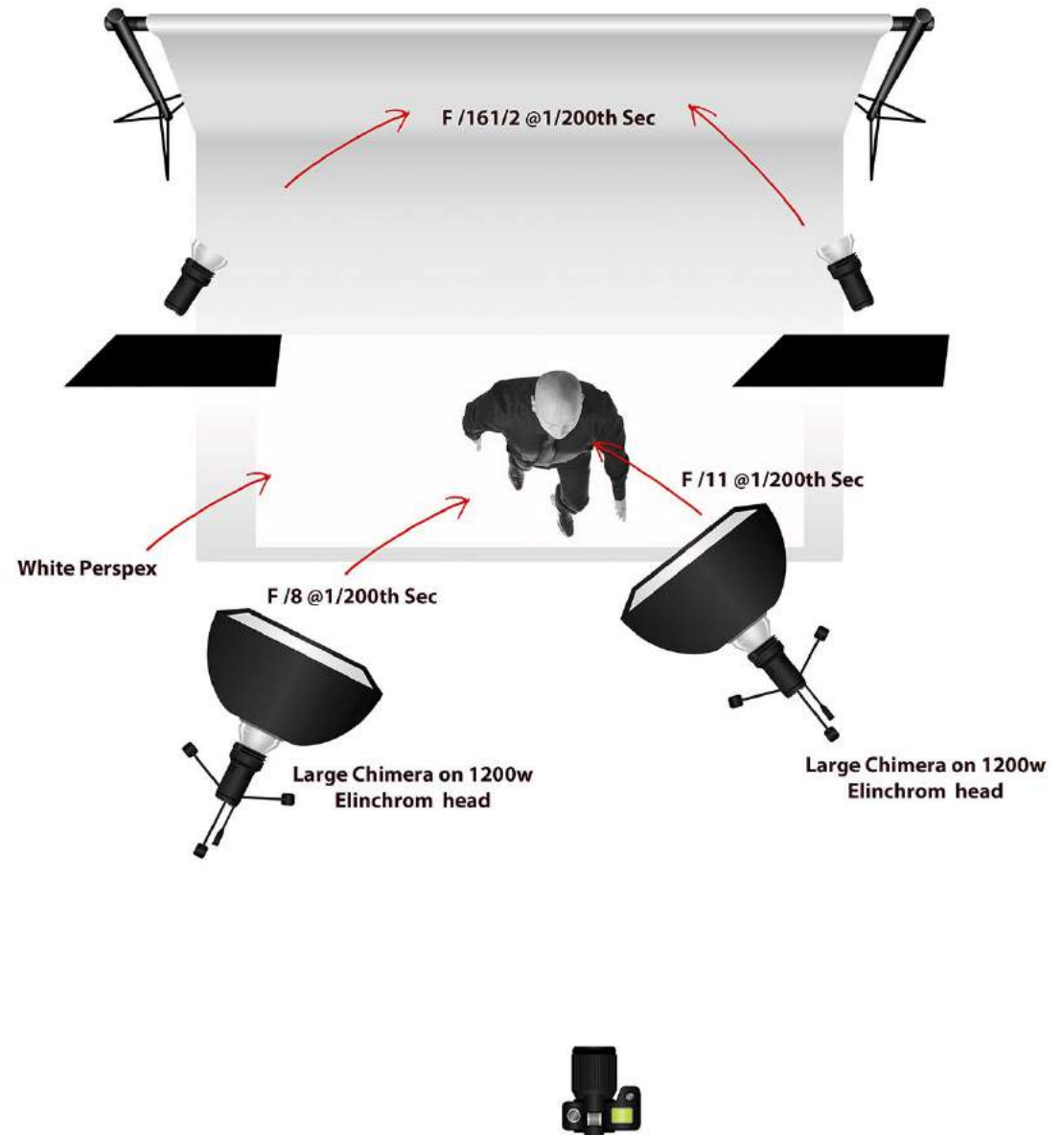
Due to time restrictions on actors, many of my television cover shoots are created on set. These are usually industrial locations where we are forced to compromise on spaces to shoot in. Some of the locations I've worked in include garages, kitchens, and tiny green rooms.

I recently shot a major publicity campaign for a top-rated TV show in a loading dock. I did another shoot in an abandoned warehouse, using a bin as a desk for my laptop. Glamorous, right?

The cool thing is that nobody can tell if these images were photographed in a high-end city studio or a derelict building next to the dumpsters.



The Footy Show cast. Image courtesy of Nine Network Australia.





Turning off the backlights will give you a grey background like this. Image of NBL Basketball player Matthew Delladova, shot for the November Foxtel cover.



The set up.

I use black cutters to eliminate flare, which is caused by light bouncing off the white roll paper and onto the lens.

Cutters are square or rectangular frames with mounting pins attached. They are the opposite of reflectors. They're used to protect the camera lens from flares, control spill light from other sources, or keep light from reaching an area on the set.

I position my main light (camera right) as close to my model as possible. My main softbox is positioned as the lead singer. Each additional light is part of the backup vocals, supplying fill light only. If only my main light fired, I would still have a good shot; it would just look slightly moodier.

Sometimes, I place a piece of white Perspex acrylic sheeting on the floor section of the backdrop roll paper. This protects my roll paper from marks and creates a really slick-looking reflection on the floor.

When metering for this type of lighting style, I meter each light individually (using a light meter) so I know exactly how each light will affect my model.

I always start with my main light and build my shot one light at a time.

As a general guide, I mostly shoot at F11, so my main light has a meter reading of F11.

I always position my main light camera right, at a 45-degree angle to the model, as this creates really nice shadows across the face.

If I want a brighter image, I'll add a reflector or another light. The meter reading camera left is F8.5 (or F8 if I want to create a moodier shot).

The background is +1.5 stops brighter than the model. This gives a bright white background.

Look Ma, No Stands!: Post production



Look ma, no pesky light stands in the shot. Shot on location in Havana, Cuba.

I love shooting environmental character portraits with wide backgrounds and lots of details. This is really easy when I use only natural light, but it becomes problematic if I ever want to light my model.

I like my lighting to be really soft. Having to position lights just out of frame means that it's a lot more difficult to control the lighting. The farther away from the model the light is, the harder the light is to control.

The obvious solution is to crop in to avoid lights, but I have an even better solution, one that lets everyone have their Nutella and eat it!

The gear

- A tripod is essential for this shot.
- Adobe Photoshop software or any post-production software that enables editing in layers and erasing

The setup

- This type of shot needs to be planned ahead of time. I now have a protocol I like to incorporate into all my environmental location shoots.

Step 1.

Once I've set up my shot, I bring lighting and reflectors in as close as they need to be, without obscuring the model's body. The tripod is locked in position, and my focal length and focus points are also locked (by "locked," I mean I don't move or knock anything).



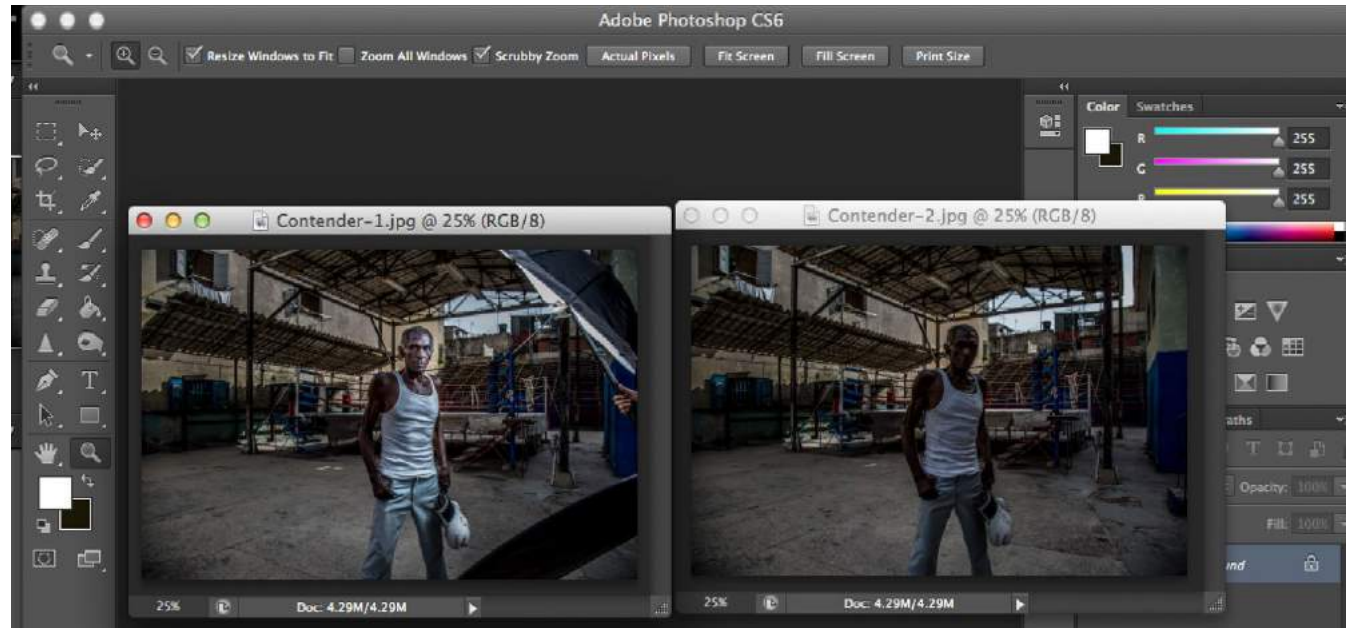
Step 2.

Next, I take a shot without lights or reflectors, being careful not to knock or move the camera. This will now become the background template. The main shot is the "hero shot."



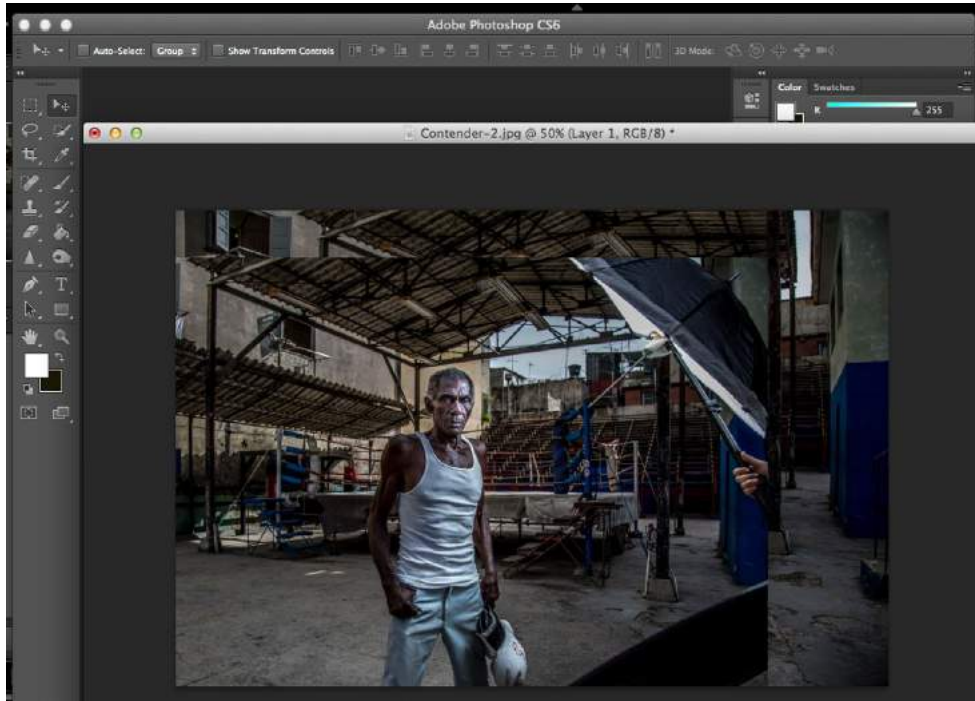
Step 3.

To process both final image and background template, I open them both in Adobe Photoshop software.



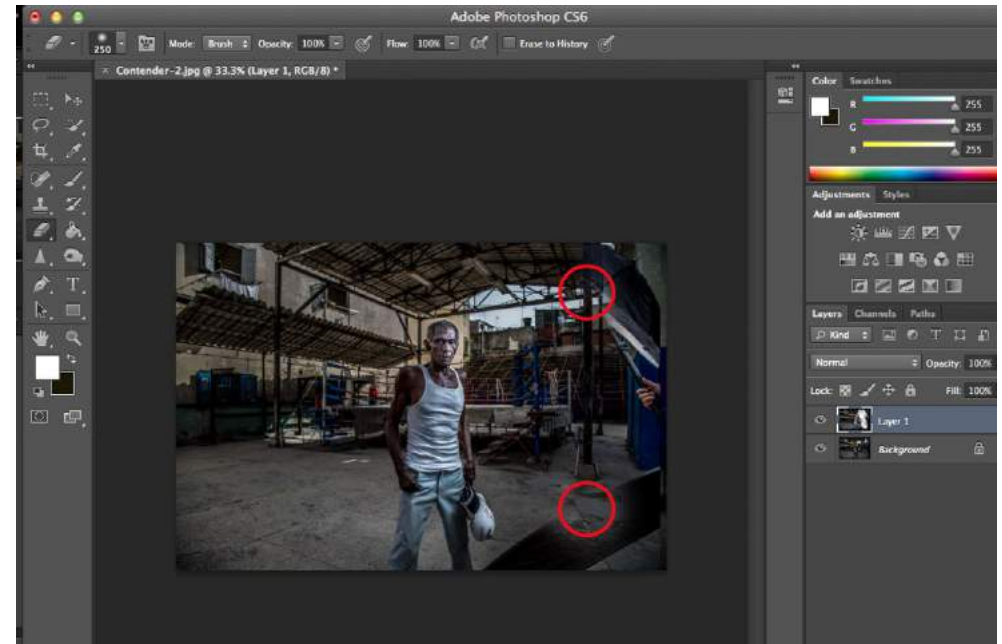
Step 4.

I drag the hero shot onto the background template and ensure they are both lined up *precisely*.



Step 5.

I select the eraser tool with a soft brush. I select the top layer and simply brush away the light and reflector from the shot. Just like magic!



The end

I was in Havana recently, working on some shots for this book. I employed a local Cuban photographer to be my assistant. One day, while we were lugging gear from one location to another in the hot sun, she asked, "Why do you light with flash? It's so much trouble to go to when daylight is so much better."

To be honest, I've often asked myself the same question. Especially when I've just lugged bags of gear up seven flights of stairs to get a particular shot.

Here's the truth: when it's good, there is no substitute for natural light. The problem is that natural light is not consistent. It's fickle, coming and going whenever it pleases. There is never any guarantee it will show up and light the exact spot you want it to light.

With natural light, you can only show up and hope for the best.

Carrying flash is like having an insurance policy for all those times natural light calls in sick. It's like having the sun in your pocket and being able to use it anywhere, anytime, at any strength.

When you can control light like this, anything is possible.

It's my hope that after reading this book you will have all the tools and skills needed to fill your pockets with sunshine, and the confidence to use them in a way that is meaningful to you.

May you always be inspired and find beautiful light and amazing images everywhere you go.



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