

Flash photography tips: external flash techniques anyone can understand

jmeyer | 31/10/2012

Lighting can be one of the most challenging aspects of photography, and yet it is so key. An external flash unit is one of the most effective ways of ensuring a correct exposure, but setting them up and using them correctly is again a major challenge. In this post we run through some of the most effective techniques for using your external flash unit, the most useful accessories, set-ups and more. We've also provided a couple handy flash photography cheat sheets to help illustrate the techniques we're talking about.



The biggest weakness of built-in and auxiliary flashguns is that the quality of light they emit is pretty unimpressive. Because the flash is a high-intensity light source that originates from a relatively small area close to the lens, it yields flat, uneven lighting that creates deep, hard-edged shadows.

It can also eradicate fine textures and contours, bleach out skin tones and cause red-eye – all of which makes for particularly disastrous portrait, wildlife, macro and interior shots.

Larger flash heads aren't quite as bad because they spread light out over a slightly wider area, but the results are still unsatisfactorily harsh.

This type of lighting, which hits your subject straight from a flashgun, is known as direct flash photography. Although direct flash photography usually looks artificial and ugly, it can generate terrific effects when used shrewdly.

Flash photography tips: off-camera flash



The key to improving the quality and flexibility of flashgun lighting is to enlarge and soften the light source, and fire it at the subject from a more natural direction.

To accomplish the latter you need to completely separate the unit from your camera using a hotshoe adapter and sync cord. This will enable you to position your flashlight far more suitably and creatively. It will also give your subject a sense of depth and eliminate red-eye.

Nikon and Canon both make all-in-one off-camera flash cords that preserve full TTL balanced flash metering and power output. Nikon offers the one meter-long Nikon TTL Remote Cord SC-28/SC-29, while Canon has the 60cm Off-Camera Shoe Cord 2.

Some cameras require you to buy two adaptors – one for the hotshoe and one for the base of the flashgun – and a cable to connect them.

If you prefer to keep your hands free while you shoot and you don't mind looking more conspicuous, you can buy a flash bracket that connects to your camera's tripod socket and angles the flash unit permanently to one side.

Flash photography tips: bounce flash techniques



Of course, simply taking the flash off-camera doesn't stop the lighting from looking harsh and artificial – it still needs enlarging and softening.

There are several ways of doing this, and one of the most effective is to bounce the flash. This is easy if your flashgun allows you to tilt the head upwards (usually through click-stops at 45°, 60°, 75° and 90°) and swivel it around the horizontal axis.

The idea is that you bounce the flash off a reflector, wall, ceiling or even a mirror – spreading the light out over a much larger area and effectively increasing the size of the light source.

This lightens dark shadows and produces softer, smoother and more natural lighting than direct flash. For the best results, tilt the flash head up to at least 60°. The downside is that subjects can look somewhat flat and lack that 'sparkle'.

Bounce flash photography can also produce unwanted shadows underneath a subject, which in the case of a portrait accentuates eye bags and creates shadows under the nose and chin. It also significantly reduces flash power, which typically translates to a light loss of two to three stops. As long as the flash sensor's still pointed towards the subject a TTL flashgun will automatically amplify its output to compensate for this, but if it can't meet the new requirements you must increase your aperture, boost your ISO and/or move in closer to your subject.

If you're using a manual flashgun you'll need to increase your exposure accordingly.

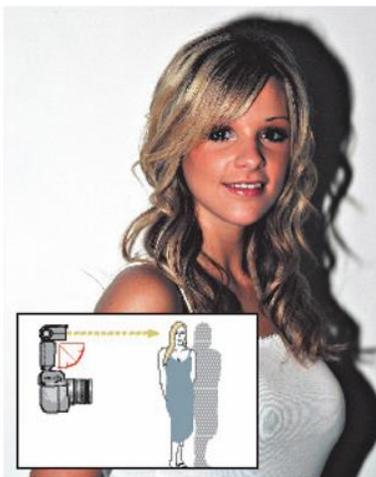
Another important consideration when bouncing flash is that the surface you bounce off must be a neutral white, otherwise your subject will end up with an unnatural color cast.

A cheat sheet for getting the best results possible from your external flash



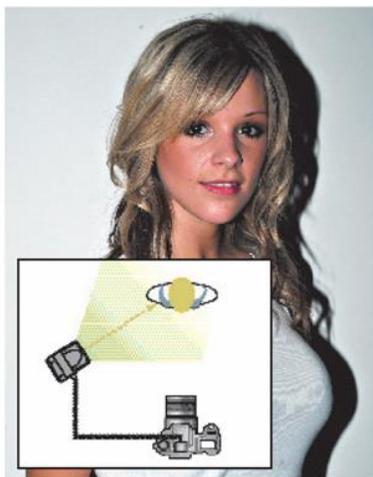
The portraits below were shot using an 80mm lens and a single Nikon SB-800. The four accessories above were introduced at various stages to illustrate their effect.

HOW TO GET BETTER RESULTS FROM AN EXTERNAL FLASHGUN



DIRECT FLASH

Direct on-camera flash provides the least attractive lighting. It creates an ugly, hard shadow, burns out highlights and flattens the subject.



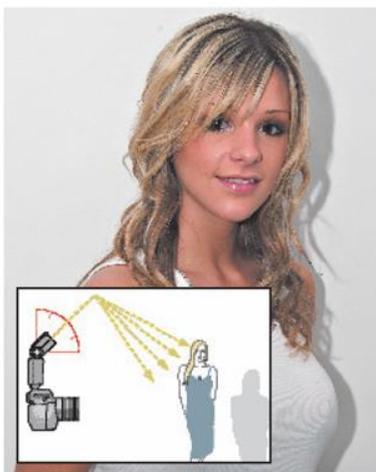
DIRECT OFF-CAMERA FLASH

Taking the flash off-camera and moving it to one side adds a little bit of depth and shrinks the shadow slightly, but the result is still unacceptably poor.



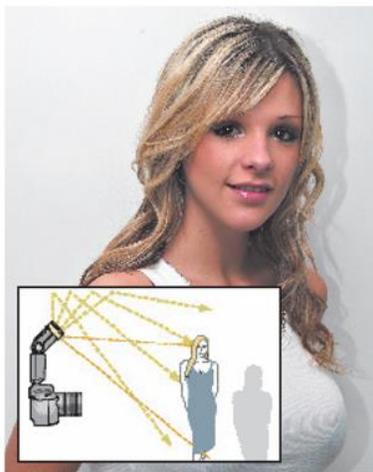
DIFFUSE OFF-CAMERA FLASH

Adding a diffuser to off-camera flash makes a big difference, visibly reducing the intensity of the shadow and creating softer, more even lighting.



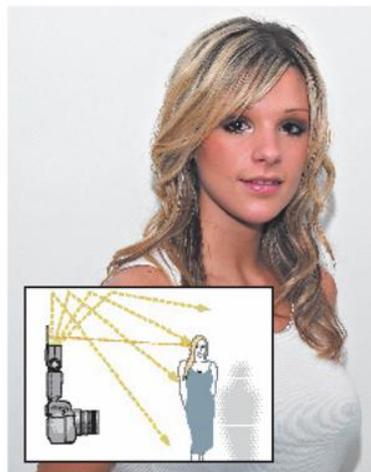
NON-DIFFUSED BOUNCE FLASH

Tilting the flash head up to 60° position and bouncing the flash off the ceiling shows an even bigger improvement than diffused off-camera flash.



DIFFUSED BOUNCE FLASH

Here the flash is bounced and diffused creating an extremely soft, diffused effect and an even dimmer shadow. However, the eyes look a bit lifeless.



DIFFUSED BOUNCE CARD FLASH

Here the flash is bounced with the wide-angle diffuser in place. The bounce card is also used to add a brighter catchlight for a more lively result.

Flash photography tips: white bounce cards



Better flashguns have a white bounce card built into the flash head to reflect some light directly onto the subject when the unit is tilted up into a bounce position.

Bounce cards are a great way to add a vibrant catchlight to a subject's eyes and to fill-in any resulting shadows – for the most effective results, tilt the flash head up to 90°.

Some advanced flashguns feature dual flashtubes instead – firing a weaker burst directly at the subject to fill in shadows and add a catchlight while the main flash is bounced upwards.



If your flashgun doesn't feature a bounce card or dual flashtube, try using a rubber band to secure a piece of white card around the back of the flash head to reflect some light forward.

Conventional bounce flash won't always be practical – you might be working outdoors. And if you're indoors the ceiling/walls might be too distant or the wrong color.

One solution is to buy a mini flash reflector that clips around the flash tube and bounces the light forwards, softening it with minimum loss of light. Try LumiQuest's Big Bounce, Pocket Bouncer or Midi Bouncer – available with different colored metallic inserts.

If your flashgun is a non-tilt model, taking it off-camera will allow you to bounce the flash in any direction. An off-camera flashgun can also be reversed, attached to a studio brolly stand and fired into a flash brolly, thereby turning it into a respectable studio light.

Flash photography tips: using flash diffusers



A flash diffuser is a good alternative to bounce flash and works in a similar way by spreading out hard, directional light into a larger, omni-directional source.

This minimizes red-eye, weakens shadows and creates softer, more flattering lighting. Taking diffused flash off-camera enables you to create even more natural results.

You can buy various types of diffusers for external flashguns. High-end flashguns often ship with a translucent diffusion dome, which looks a bit like a plastic ice-cream carton and fits snugly over the flash head.

If you don't have one, try the white, green and gold Sto-Fen Omni-Bounce diffusers, which are available for different makes and sizes of flashgun. LumiQuest makes a similar device called the Ultra Bounce and a built-in pop-up flash diffuser called the Soft Screen.

For a dirt-cheap substitute, tape some tracing paper or soft tissue over your flash window. Or you can follow our popular [DIY Photography Hacks tutorial to make a simple foam diffuser](#) for your flashgun.

To create a more powerful diffusion effect you need a miniature softbox, such as LumiQuest's Softbox or Mini Softbox. Lastolite also makes a mini Micro Apollo softbox in three different sizes that attaches to any make of flashgun with Velcro.

For the ultimate in soft, shadow-free lighting, combine off-camera bounce flash with a diffuser, adding a wide-angle adapter for even greater diffusion.

This method's great for close-ups and portrait work, but because diffusers also reduce flash output by up to two stops, you could be looking at a light loss of five stops in total.

Products like the LumiQuest UltraSoft overcome this problem by combining a mini reflector and diffuser in one completely enclosed modifier that keeps light loss to just two stops.

Flash photography tips: wireless flash



Using two or more flashguns will extend your lighting options considerably. To avoid nasty multiple flash exposure calculations and cumbersome cord connections, the simplest, most effective way to connect several flashguns is via a wireless TTL multi-flash system.

Nikon and Canon's wireless TTL flash systems allow up to nine 'slave' flashguns to be controlled and fired simultaneously via a 'master' flashgun on the camera. The remote slave units can be divided into three distinct groups.

Flash mode and flash output level compensation values can then be set separately for each group and the master unit. If you want to use all your flashguns remotely you can control them via an infrared flash trigger on the camera's hotshoe.

Being able to position several units anywhere up to ten meters from the camera has many benefits. Most importantly, you've got the freedom to create natural looking lighting that eliminates shadows and emphasizes the subject's form, texture, tones and colors.

You can also illuminate dark backgrounds, highlight secondary elements, cast colored lighting – the possibilities are practically endless.

Usually, only top-of-the-range flashguns have the ability to control multiple flashguns in a wireless TTL setup. If your flashgun isn't wireless-enabled, but features a PC cord connection, you can create a cheap and cheerful, non-TTL wireless system by attaching a PC slave flash unit to it.

This sticks to the top of the flashgun and plugs into the PC socket, allowing the flash to be triggered wirelessly, either by your camera's built-in flash or an on-camera auxiliary flashgun.

<http://www.digitalcameraworld.com/2012/10/31/flash-photography-tips-external-flash-units-anyone-can-understand/>