



OFF-CAMERA FLASH

CREATIVE TECHNIQUES FOR
DIGITAL PHOTOGRAPHERS



ROD AND ROBIN DEUTSCHMANN

Amherst Media®
PUBLISHER OF PHOTOGRAPHY BOOKS

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Check out Amherst Media's blogs at: <http://portrait-photographer.blogspot.com/>
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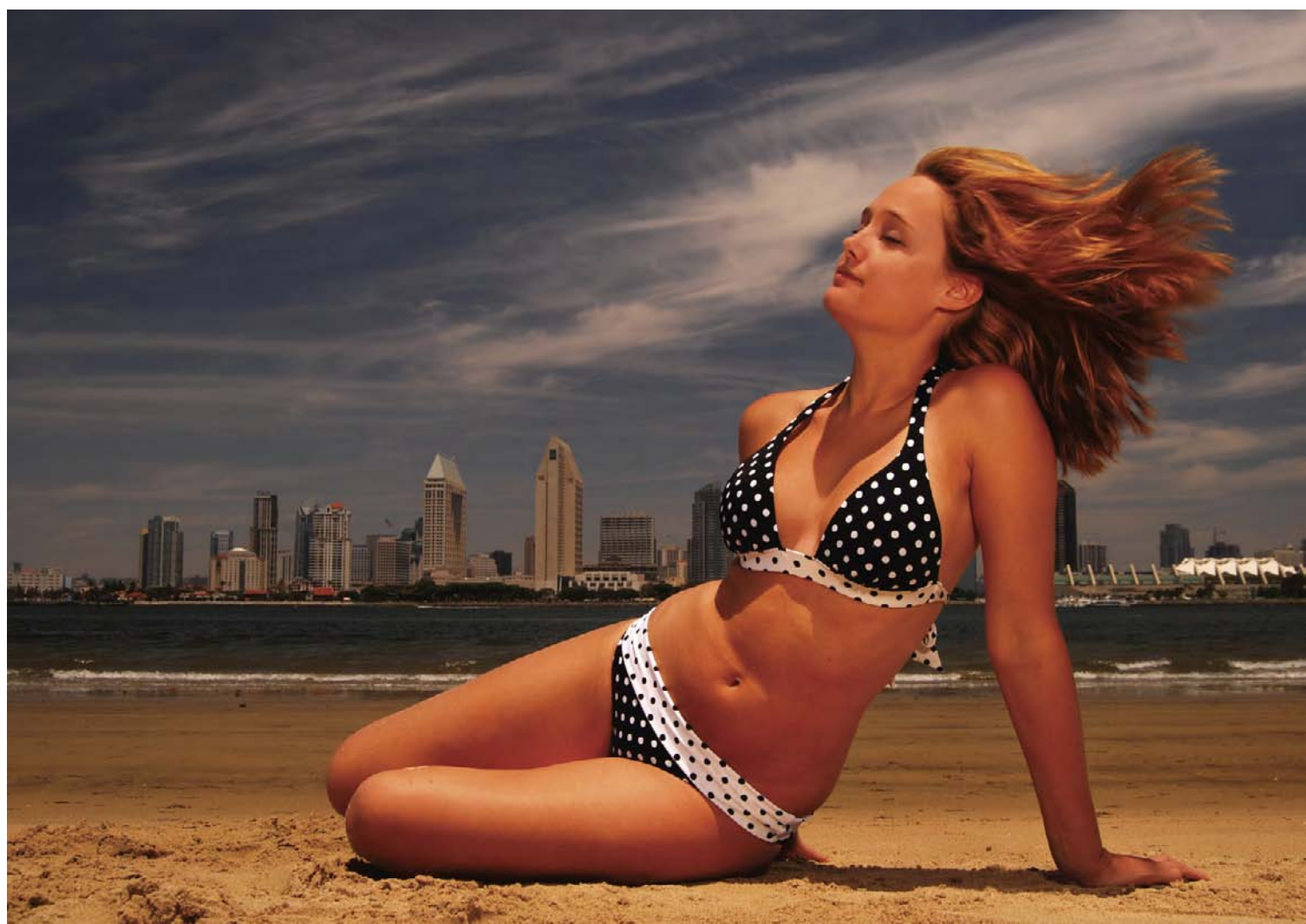
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PHOTOGRAPH BY ED COATS.



About the Authors

For years, Rod and Robin Deutschmann have been teaching people to be artists with their cameras. Taking a practical approach to modern photography, the duo strips the nonsense from the facts and the hype from the truth. They believe that creativity lies in the artist’s soul and not his camera bag. Touting the advantages of manual control, they offer a fresh view of photography that rebels against the norm. Their innovative approach and down-to-earth style have garnered them a loyal following of Southern Cali-

fornia photographers—and in this book they bring their unique vision and perspective to everyone for the first time.

Rod and Robin are award-winning fine-art photographers and winners of the 2007 Thomas Jefferson Award in communication. Visit their web site at www.IFLCSanDiego.com.

1. ADDING LIGHT WITH OFF-CAMERA FLASH

Adding light with off-camera flash is the heart and blood of creative expressionism. A photographer can finally set his vision free—no matter how outrageous, subdued or impulsive it might be.

EXPRESSIONISM REBORN

Creativity is flourishing in digital photography. New ideas are being touted, advanced techniques have emerged, and a youthful, ultramodern approach to message-building is being recognized. Photography as we know it is changing and nowhere is this revolution more pronounced than in the world of flash photography—particularly off-camera flash photography.

Thanks to the digital camera's LCD monitor and the instant access to our own mistakes, techniques once reserved for masters are being conquered

Unshackled by the confines of a studio, off-camera flash photographers can find opportunity and amazing images anywhere. The world is their studio, with every mountain, every building, and every street sign offering fresh alternatives.



Every artist needs tools, and the options for off-camera flash photographers are boundless. Whether you use extending handles (as seen in this image), multiple flashes, modifiers, light stands, or even old-fashioned light meters, you must learn to use them well. Take the time to practice and get comfortable with your equipment.



in record time. Tools once considered vital, such as hand-held light meters and, for some, even the in-camera light meter, are now archaic. Full manual control is chic, homemade or modified gear the norm, and the use of multiple flashes a trend.

Real expressionism is coming to the world of visual communication.

This, as well as radical new approaches to design and composition, have turned the photography world upside down—as has its new crop of masters. They are literally redefining what photography means and how images are being created. As a result, a strange and wonderful mix of traditional values and new approaches has emerged. Photography is no longer about simply capturing a reflection of what’s in front of you, rather it’s about sharing with the world how something makes you feel.

The artists making this vision have melded their own version of flash photography with some of the most outrageous in-camera choices, tools, and accessories ever seen. Real expressionism is coming to the world of visual communication and, thanks to the pioneering spirit of these gifted photographers, it’s hitting the globe like a thunderstorm.

A BUOY OF STYLE

At the forefront of this squall, pushing harder than anyone, stand the photographers who use off-camera flash. Proud, undaunted, and defiant, they



tout the value of visualization above all else. Brazenly adjusting reality to meet their needs, they push the envelope of creative control by adding mood and manipulating color whenever it strikes them. With a simple swipe of light they can forever change and alter a viewer's perception—hiding important details in the shadows or expanding on one solid thought with a simple, yet highly effective beam of light.

Each of these new masters shows us, on a daily basis, how important it is to see the world in a way other than it appears. Gallery exhibits, art shows, and photography contests are all being dominated by the flash photographer. New web sites and blogs dedicated to the off-camera flash user, and to true expressionism, continue to pop up. Creativity and individual style are beginning to emerge as the new hallmark of professional photography and it's all happening at a record pace.

Online safe-houses, such as Strobist.com and others, have been stout supporters, highlighting each and every new advance when it's made. Its members, safely shielded from the biased remarks of the uneducated, share their vision of the future as quickly as it comes into focus. They have truly blazed a unique path and ignited a passion for visual communication the world has rarely seen. These visionaries, these explorers of light, all recognize the value of seeing the world other than as it appears and are doing whatever it takes to keep this fledgling form of expressionism alive and safe.

The images produced are different, the techniques used are unique, and their process of message-building totally scoffs at what many believe the nat-



New and exciting tools are being used. Fresh ideas are starting to emerge and an expressionist approach, rather than "just taking pictures," is gaining ground. Thanks to the challenges and rewards of using off-camera flash, the world of photography and of image creation itself is changing—and it couldn't have come at a better time.

Leaving Adobe Photoshop Behind

Since the majority of "corrections" are already being made by the flash or flashes, the need for post-processing corrections or adjustments diminishes. Imagine that: creative in-camera photography without the need for extensive after-the-fact editing! Where do I sign up?

This image illustrates the use of a homemade light funnel. The funnel (made from a potato chip canister) directs a small beam of light toward a subject.

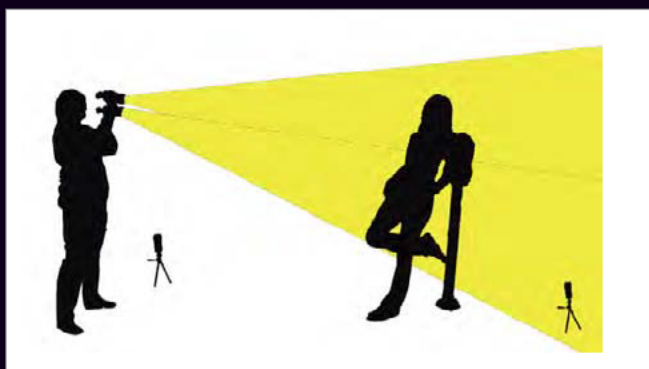


Here, the new Lastolite Extending Handle is shown. In this photo, three external flashes have been attached. The flashes are connected via PC wires and are being triggered through the use of an inexpensive Cactus brand radio transmitter.

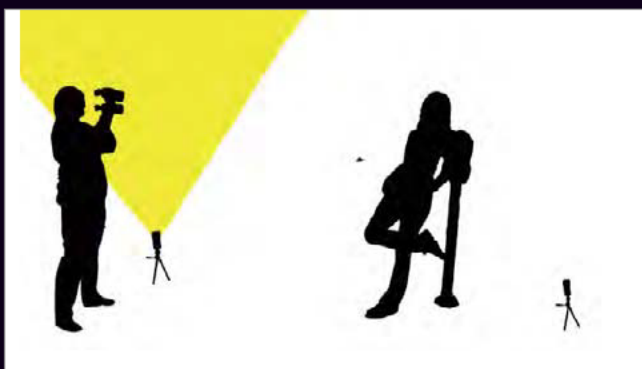




Five unmodified off-camera flashes were used in the creation of this image. The power of each flash was adjusted according to taste. Two were hand-held, two were set on small tripods, and one was placed on the ground.



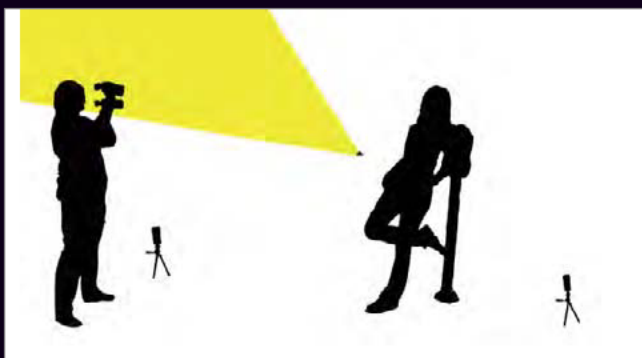
Two flashes set to full power acted as the main light.



Another flash, set to half power, illuminated the wall and tree.



A light was added to the right side of our model to add dimension to her leg and the parking meter.



One last light was needed to give more interest to the wooden door in the background.

Even with the “right” number of flashes being used, the photographer still needs to maintain control of his image. The top photo was shot in full manual with all the flashes firing; the bottom image was shot in full auto-matic with all flashes firing.



ural “flow” of photography should be. Off-camera flash is fun, it’s exciting, and it’s where you need to be.

Be warned: there is a learning curve. For those who have never conquered manual control of their equipment, there will be problems. A camera or flash set to “auto” is designed to do one thing: to give you an average or “normal” representation of what lies before you. There is nothing average about expressionism and there is nothing normal about an artist’s images. Average isn’t anything to aspire to.

If you're new to off-camera flash photography, work hard and remember your real goal isn't to just take pretty pictures; it's to become an artist who can create them any time you want.

IN RECOGNITION

This book is a salute to you, the artist who pushes the boundaries of light with off-camera flash. It's for those who make a real difference in photography and for those who want to. This book will push, this book will guide—and, hopefully, this book will inspire. Push yourself and your ingenuity to the breaking point. Get to know your camera and the choices it offers—and if you want the best possible results, if you truly want your voice to come through in your images, learn to shoot in full manual mode and take responsibility for the light you capture and produce. Choose your own type of light, make your own aperture and color decisions. Switch that lens from autofocus to manual and learn to zero-in on an idea instead of just focusing on subjects.

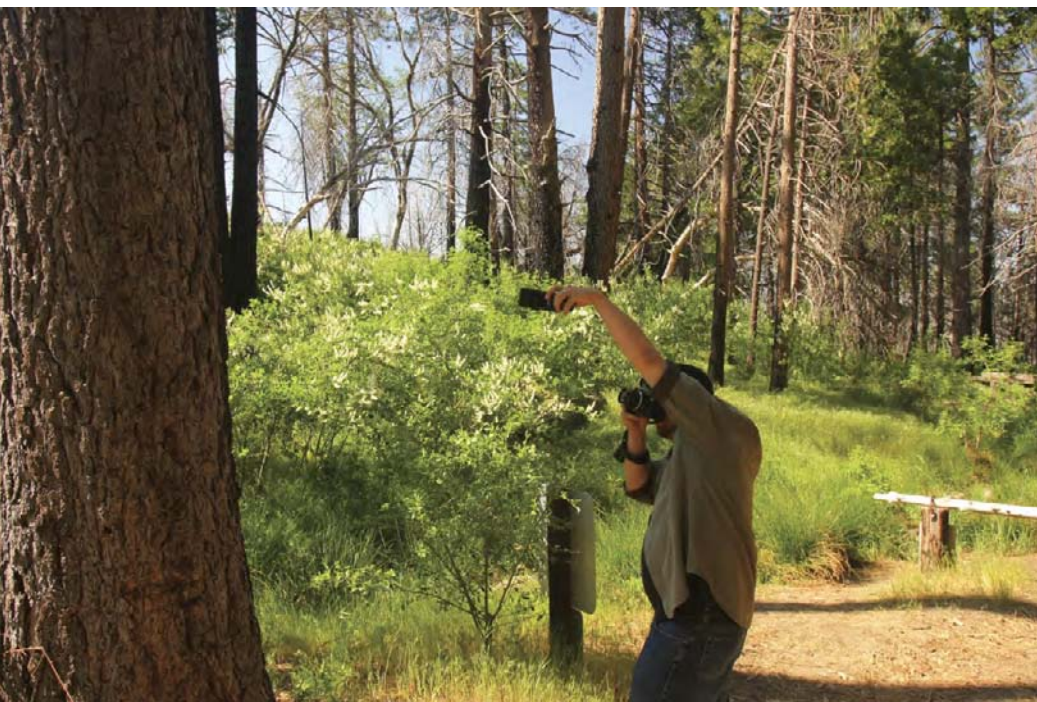
Pride in workmanship and skill aren't camera modes and you can't add them in later with postprocessing. Creativity is not a filter or contrast adjustment. True artistic expression comes from inside the artist; it has very little to do with which camera, lens, flash, or computer program he's using.

WE CAN HELP

For those who haven't made the leap to manual control or aren't interested in doing so, the lessons, theories, and placement ideas in this book will help. Our desire as photography instructors is that you, the person who is interested in off-camera flash photography, will pick up the mantle of expressionism and stand strong for individuality and creative style—that you'll go

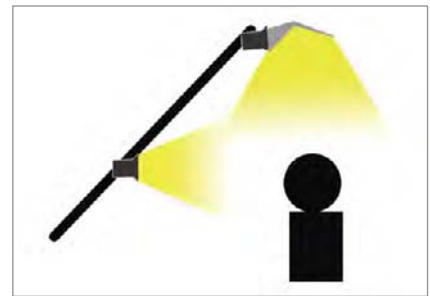
Expressing Yourself

Off-camera flash photography and an expressive heart offer the photographer the options he was always looking for. It gives him a chance to be himself, to capture or create a message that only he can see and that only he can create. It makes him different, it makes him unique. It gives him a voice.



Creativity and style with off-camera flash relies on your ability to push your vision, expectations, and gear to the limit.

Two flashes were used in the creation of this image. A bounce modifier was applied to the top flash, giving a broader top-light base. The second flash was shot at half power and pointed directly at our model's head and shoulders. The white balance was adjusted to add more red.



beyond simply lighting one subject “correctly” and show the world who you are and how you feel. Remember, art has no rules. There is no right or wrong way to do things.

Take what we say for what it is: simple advice from people who have done this before. Then, push the ideas even further. Use this book to examine our methods, try new ideas, and develop your own creative style and approach to off-camera flash photography.

The world is full of photographers taking pretty pictures of things, but there are very few artists out there who are making their camera say something worthwhile. You, as an off-camera flash photographer, can change that. It's in you and in your voice that the future of visual communication rests. When you bring your own dreams and passions to the mix, this storm of change—this squall of expressionism—grows ever stronger.

Authors' Note

Throughout this book you'll see a variety of tools, toys, and gizmos in use. Beginning on page 124, we've included an illustrated guide to this equipment—along with an associated web site where you can find more information.

Each year, manufacturers offer more and more options for flash support and light modification, so keep your eyes peeled.

2. KNOWING WHAT GEAR TO PURCHASE

Knowing what gear to purchase and what can be expected from it are major concerns for any off-camera flash photographer. Understanding the basics will get you far.

TWO PATHS

There are two paths an artist interested in using off-camera flash must explore, and both should be traversed simultaneously. The first path is an inward journey of meaning and emotion; the second path is one laden with mechanics, gadgets, and gizmos. We'll begin by exploring all the fun, cool gear now, then jump into the philosophy a bit later.

WHAT DO YOU NEED?

As an off-camera flash enthusiast, it's pretty obvious you're going to need some type of flash unit, a way to trigger it, something to hold it in place, and a tool to modify its light. Your choices are vast and can be a bit confusing. Depending on who you ask, you might expect to pay thousands of dollars or just a few hundred. Some may even tell you that you already have everything you need and shouldn't spend any money at all.

The problem is, they are all right. Depending on what you want to accomplish, you may already have all the gear you need. If your tastes run a bit more complex, you may end up spending a few hundred dollars. If you're

It's pretty obvious you're
going to need some type
of flash unit . . .

Tools and accessories for the off-camera flash photographer abound. Budget, ingenuity, desire, and a solid understanding of the mechanics should guide your path. Know what you want your image to look like then buy the tool that makes it happen. There isn't just one piece of gear that will guarantee success—it's your understanding of the gear you own that will.



With just one wired flash, the world of street photography changes. No longer are you arrested by natural light. You are unshackled—free to explore composition and design.



Should I Buy the Name-Brand Flash?

The rule of thumb on this is easy: if you're an automatic shooter and depend on your flash and camera "talking" to each other, then make sure they both speak the same language. However, if you're a manual shooter, you have no need for your flash and camera to communicate. The sky, then, is the limit. You can purchase just about any flash you want. You can even mix and match brand names, ages, and types. Nikon, Canon, and Pentax flashes working together in perfect harmony? What's the world coming to?!

going to jump into this like gangbusters, then expect to pay the big bucks. Understanding the basics will take you a long way and can very quickly save you a lot of money.

Let's start with the basics.

THE FLASH

The type, brand, and age of the flash unit you choose to work with is important. If you're an automatic shooter you'll need to do your homework. Since the camera and flash will need to communicate with each other, it's best if they were made to do so. The transfer of exposure and distance data is very important to the auto-shooter; without it his images will fall apart. You'll want to begin by exploring the options your camera manufacturer offers and recommends, then look for advice from friends, family, and professionals. Your local camera store is a great place to start.

If you're a manual shooter, on the other hand, things are very different. Since there is no need for the flash and camera to share exposure data, there are no communication problems to worry about. Pretty much any flash that you can trigger off-camera will do. Brand name, model type, and age won't matter. (*Important note:* If you plan on connecting an older off-camera flash unit to your camera's hot shoe, make sure that there aren't any voltage conflicts. Older flash units produce more electricity than their newer cousins. Mismatched voltages can really ruin your day. Your camera's electronics are fragile. Treat them with care.)



Of course, there are advantages (even for the manual shooter) to having newer, brand-name flashes with all the bells and whistles—but for the most part this is all window dressing. Remember: it's not the gear that creates art; it's the artist.

Flash Features You Can't Be Without. No matter your ultimate goals, there are a few flash features that are must-haves for the off-camera flash shooter. Manual control of the unit is paramount. An adjustable flash head is useful as it allows the user to choose a narrow or wider beam of light. Lastly, make sure that the flash head can rotate. Since a lot of off-camera flash work is accomplished with the aid of light stands, tripods, and booms, it's important that your flashes can be adjusted. A flash head that tilts, moves, swivels, and bends makes this very easy.

Controlling the output of the flash is a major concern for every off-camera flash photographer. Being able to quickly adjust these settings and to anticipate their effect is of major importance. If you can't do this, take the time to learn how.



Never tied down by shadows, glare, or slow shutter speeds, the off-camera flash photographer creates his own possibilities. In the photo to the left, we see the photographer using a wired (TTL sync cord) connection. This affords him the opportunity to both bypass his camera's flash-sync speed limitation of $\frac{1}{200}$ second (see page 42 for information on flash-sync speed) and to be more "in touch" with the action going on around him. A wired approach to off-camera flash photography is one of our favorite ways of connecting with the moment.

Reliability is a Key Factor

The best part of using a wire to trigger your off-camera flash is in the reliability of the connection. When using a wire, the photographer can rest assured that when he presses the shutter button, his flash will fire. This, of course, proves invaluable when shooting things that move, jump, run, or only give you one chance at that shot of a lifetime.

TRIGGERING THE OFF-CAMERA FLASH

You can trigger an off-camera flash either with a wire or without. The wired option is a joy for the photographer who loves to be part of the action, while the wireless route gives him the chance to use a variety of lights placed at different locations.

A Wired Connection. The wired route keeps the photographer up-close-and-personal with his subject and forces him to adapt quickly to chang-



The angle at which you hold the flash in relation to your subject is of the utmost importance. The slightest variation in direction changes the image and your options. Shadows will fall differently, glare can increase, apparent power output may shift, and more. Here, notice that the light coming from the flash has been modified through the use of a softbox. This tool not only diffuses the light but also enlarges it. Both are important ingredients in the total elimination of shadows on the wall directly behind the subject.





The type of modification, support and communication you'll employ during your adventures will depend on your experience level and personal preference. Where you're going and how familiar you are with the location should also play a role. If your destination takes you near the water, outfit yourself accordingly.

A Smart Buy

If you're new to off-camera flash photography the purchase of a softbox or two (they come in different sizes) for each of your flashes would be a very wise investment.

With a TTL sync cord you can shoot from the hip and know the flash will fire. Plus, most TTL cords are built sturdy and come in a wide range of lengths. It's a valuable tool for any off-camera flash photographer.

ing light and fast-moving subjects. You have to move and anticipate when connected with a wire. You have to develop a feel for the correct flash-to-subject distance and know by instinct which shutter speed will give what effect.

There are several types of wires/cords you can use—and all are fairly inexpensive. It may prove a little tricky, however, to find the perfect wired setup for your own gear, since not all cameras and flashes have the same connections. With a little research, though, you should have no problem.

Many photographers find the best wired option to be the dedicated TTL sync cord. It's a little more expensive, but it's a brilliant choice—especially if you're an automatic shooter. The sync cord directly connects your flash to the hot shoe of your camera, sending exposure and distance information back and forth. For the auto-shooter, this is a blessing; all of the aperture, shutter, and flash power output decisions are passed off to the machine. An auto-shooter using a TTL sync cord can be confident that the light his flash produces will give him a very “normal” image with average lighting—each and every time he shoots.

The TTL sync cord also permits manual control of the flash, giving the artist-with-a-camera full creative control, as well. More advanced shooters will also enjoy the fact that they can shoot at any shutter speed, unhindered by their camera's built-in flash-sync limitation—provided, of course, that their camera and flash will allow this type of action.

Once wired with a TTL sync cord, you're ready for anything. You can even purchase more adapters, plugs, and accessories that allow for wired work from great distances—or for your flashes to “piggyback” one another when the power of one just isn't enough.

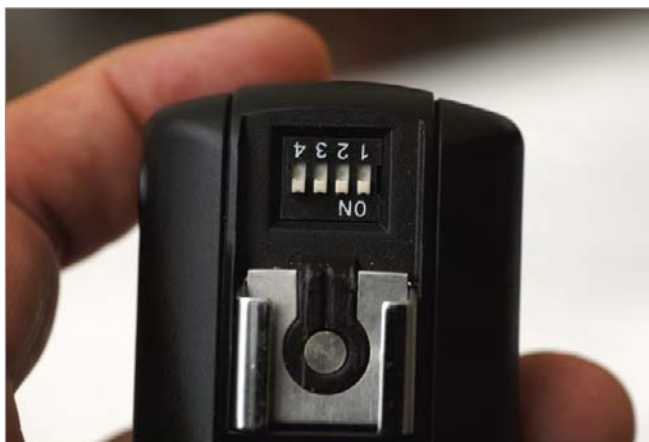


A Wireless Connection. The other option to trigger your flash off-camera is a wireless one. Through the use of optical or radio signals, a photographer can fire his flashes from great distances without being physically connected. This is a wonderful alternative that allows for unhindered, creative flash work. You can explore the world of message-creation as never before, setting up multiple lights in the field and adjusting each one accordingly. It is one of the most powerful options we, as graphic artists with cameras, have today.

Again, your choices when it comes to gear type are vast—sometimes confusing—and can definitely get expensive. For those shooters who rely on automated systems, expect to pay quite a bit more. Transmitters and receivers that share distance and exposure data with the camera can sometimes



The Cactus brand wireless transmitters (left) and receivers (right) are some of the most inexpensive and reliable radio triggering devices on the market today. Manual shooters will find them wonderful to work with. Shooters relying on automatic camera modes may have problems; Cactus units do not transmit TTL information from the camera to the flash.



There are four small switches at the bottom of the transmitter and the top of the receiver. Sixteen channels can be tuned according to different combinations of the switches.

RIGHT TOP AND BOTTOM—Whether your adventures find you near the ocean or in the mountains, there will always be an opportunity to add your own light. With a bit of ingenuity and determination any vision can be illuminated properly. In the top photo, the photographer has equipped his extending handle with a shoot-through umbrella and small softbox. In the bottom photo, he adds a touch of light to the blowing weeds in front of him, setting his flash off with the help of an inexpensive Cactus wireless transmitter and receiver.



ABOVE—An extending handle, two flashes, two softboxes, and two water-tight plastic bags allow for the creation of never-before-dared images. Here, flash photography is taken to new heights as both the photographer and the model brave the splash and uncertainty of off-camera flash photography in the water.



run into the hundreds of dollars per unit. Those that don't offer average \$20 to \$35 each. That's a big difference—especially when you want to shoot with six or seven flashes.

Cactus brand transmitters and receivers, though fragile, perform extremely well for the manual shooter and allow for very inexpensive, yet complex and extravagant lighting setups.

Another option is using optical slave units to trigger the flash. An optical slave is a small electronic device that sits on the foot of your flash. When it "sees" another unit fired, it sends a small burst of electricity to the flash it's attached to, setting it off. For the budget-minded, off-camera flash shooter,



Three flashes were used to illuminate separate portions of our model. This would never have been possible without the help of some of the most important accessories a photographer can have: his family and friends.



there is no better option. This system, however, does have one major drawback: to work, each flash must be within line-of-sight of the others.

ADVANCED LIGHTING SYSTEMS

Before purchasing your first off-camera triggering system, you may want to research the camera and flashes you currently own. Many of the later-generation SLR cameras already feature advanced lighting systems for off-camera flash photography—they are built right into the camera and the flash. Each of these systems requires a master unit and at least one slaved flash.

Buy What You Need, When You Need It

As your experience increases so will the number of flashes and extra gear you'll employ. Let it happen naturally. Try not to purchase any gear or equipment until you know why you need it. Then, and only then, should you begin investing extra money. Off-camera flash photography can be an expensive hobby, but it doesn't have to be. Concentrate on the tools you need to make your message clear. When you find your gear lacking, it's time to buy some new toys.

From the master, you can identify each flash, put them into groups, and adjust the power output. This is incredibly handy when multiple flashes are being used across great distances.

These systems also offer channel selection. If there is more than one off-camera flash photographer using the same advanced system, each can choose a separate channel from which to work. In this way, they can be certain their master units won't set off the other photographer's slaved flashes.

SUPPORT ISSUES

There are a plethora of choices when it comes to flash support—everything from simple hand-holding techniques to using light stands, tripods, monopods, extension rods, extender arms, and even adhering them to tree limbs or telephone poles. Search the market and you'll be shocked at what you'll find. There are hundreds of choices and each affords its own advantages and disadvantages. If there is something you want to do with your lights and you can't find the right tool to do it with, then just make it. This is where your ingenuity will come into play. Don't let a creative vision slip away just because someone else hasn't made the right tool yet.

Having thousands of dollars in peripherals doesn't make any sense if you aren't going to use them. Think hard about what you really want to do while in the field and what you are really willing to carry with you. We find that a simple extending handle with two flashes attached answers many problems that arise.





Durable and lightweight light stands are a must for any off-camera flash photographer looking for a sturdy base of support. There are a variety of stands, booms, and “arms” available. From our experience, air-cushioned stands perform the best and prove quite reliable while in the field.



There are many inexpensive alternatives to the light stand available, including small and large camera tripods, beanbags, flash “feet,” and more. And don’t forget the sand bags—probably the most important accessory you could ever buy for your stands.

Never underestimate the power of two flashes pointed directly at your subject. While modification, support, and connectivity should always remain a high priority, you should never lose sight of why you are adding light in the first place.



MODIFICATION OPTIONS

You will also have to deal with actual “quality of light” issues—whether your flashes are producing harsh, soft, diffused, scattered, or funneled light. You’ll find there are just as many options available for modification as there are for support and connectivity.

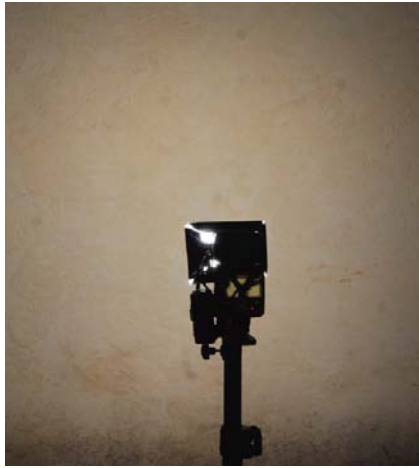
Modification tools come in a variety of sizes and shapes, each having its own specific purpose. There are a number of manufacturers, but our personal favorite is Lumiquest. With their forward-thinking and customer-responsive design staff, they are constantly leading the way in both performance and innovation.



For the creative off-camera flash photographer, the option of changing the color of the light their flash produces is one that can’t be missed. Lumiquest makes a compact gel holder (FXtra) that actually attaches to the flash. It comes with eight gels including Fire Red, Plus Green, and Sky Blue.



A sturdy bounce is a must-have for any good off-camera flash enthusiast. Our personal favorite is the Lumiquest Quik Bounce (as shown in these images). Its unique design has doors that can be opened to quickly allow light to shine through so that the photographer can either bounce or cut the power of the flash.



Lumiquest also offers a variety of small and large softboxes and bouncers. Pictured above is the Mini Softbox (left image), the Classic Softbox (middle image) and the Large Softbox II (right image).



No matter which modifier you use, make sure to do plenty of tests with each at home so that you will know what to expect when in the field.

FINAL THOUGHTS

Your budget will play a huge role in what gear you choose. Remember: there is no right choice or bad decision when it comes to equipment; there are only options. Be honest about where your skill level lies and what your goals truly are. If you need the help and are using automatic settings, look to the more expensive setups. If you're a manual shooter and love to explore and learn from your own mistakes, keep things cheap or just make it yourself.

No matter the system you choose, learn it well. Give yourself plenty of time to experience everything it offers. Discover its weaknesses and explore its strengths. Try to see the world as if you could add light to each and every “graphic tier” of information—and then just do it.

3. MESSAGE-BUILDING

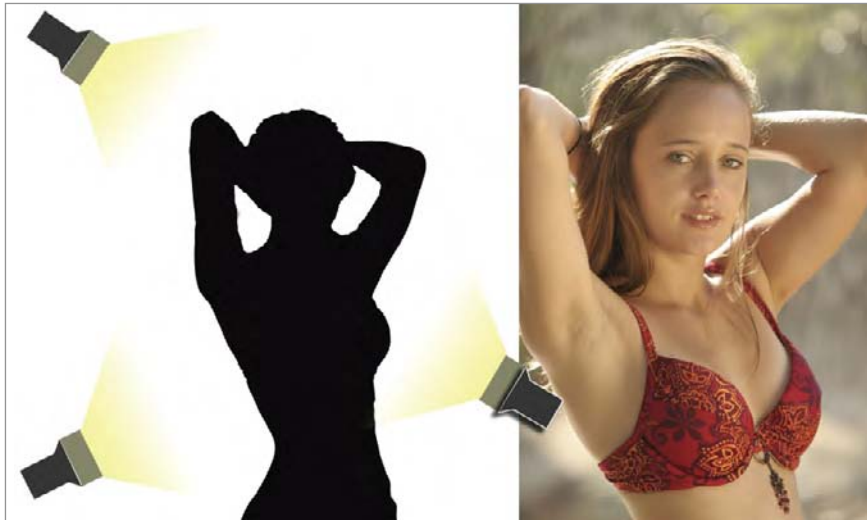
Message-building for the off-camera flash photographer begins with a thought—an idea or an emotion. Gear is secondary.

LIGHTING A VISION

Photography is, as it always has been, a communication device allowing us to share thoughts, ideas, and emotions with others. It's not just a tool of rec-

What many new off-camera flash photographers fail to realize is that, besides the relatively simple task of adding light to their model, they are still responsible for lighting their background as well. It took three flashes to bring our model into the light here—but four other flashes were needed to bring detail and texture to the background. For the creative off-camera flash photographer it's not just about lighting a subject, it's about illuminating an idea.





With enough practice, simple three-light setups such as this will prove easy. What's challenging, though, is dealing with and controlling the lighting on all the other tiers of graphic information.

ollection, it's a means of expression. For the off-camera flash photographer, this rings true from his first image to his last. He knows he is not just taking pictures of things; he's literally changing the way the world appears—visualizing what it could look like and making it happen. This type of courage, this type of expressionism, is rare today.

An off-camera flash photographer is original and each of his photos are unique. Instead of lighting subjects he illuminates ideas. He sees “tiers of graphic information” and lights each the way he wants. This is vision, this is art—this is real message building.

MAKING IT HAPPEN

To create an effective image using off-camera flash, you have to think as an artist does—there is no getting around this. You will have to know what it is you are trying to say with your camera and flash, you'll need to visualize it, and you're going to have to have the courage, equipment, and tenacity to follow through.

In the past, gaining the experience and confidence to pull this off took years. Varied exposure levels, distance equations, modification choices, and support issues reigned supreme. It was a daunting task and one that only the most talented photographers dared approach. However, with the advent of the digital camera, all of that is changing. Sure, the problems of lighting, support, and modification still exist, but learning how to fix them has gotten easier. Today, we can all become the artist with an off-camera flash that we know we can be. We're just going to have to buckle down and learn something new.

In the past, gaining the
experience and confidence
to pull this off took years.

A New Approach

Artists with cameras are learning things so quickly today that it's actually making some time-tested tools of the trade obsolete. Our students have actually abandoned their camera's meter and are relying on their own recollection to get the exposures needed. Advanced flash students have even shunned the hand-held meter and all automatic modes—including those of the flash.



Thanks to the digital camera's monitor, photographers can shoot, analyze, and correct their images in the field—learning each step of the way.

MESSAGE-BUILDING 101

Being creative means more than just buying the latest tools, gadgets, and gizmos; it means being aware of your surroundings and knowing that you have the power to alter its appearance.

The first realization for any off-camera flash photographer is that the world isn't made up of just subjects. Since he has a tool that can add light to anything and from anywhere, he needs to begin seeing more than just what's in front of him. Each piece of the background becomes a possible target for his flash. He needs to think. He needs to question. He needs to act. What would happen if he were to light his background instead of his subject? What if he were to modify that light, enlarging or narrowing the beam?

As his questions are answered, his skill level grows. He then pushes forward and takes apart the foreground as well, breaking it into pieces and changing how each piece appears, asking the same questions and finding new answers. As his experience builds, the number of flashes he employs grows. Soon, it's not just about one light and one subject, it's about just how many lights can he shove into one scene. His images begin looking like visions instead of pictures. As he uses and illuminates everything in frame, his subjects start taking on smaller and smaller roles until finally they aren't as essential as they once were. The artist now uses everything—each piece being just as important as another. He creates stories about what's in front of him. He illuminates emotions and not just things. A true creative off-



camera flash photographer sees the world differently and uses his gear to share that vision with rest of us. It's truly an amazing thing.

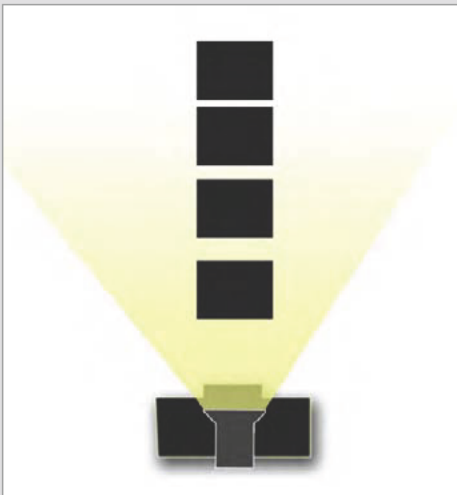
TO BEGIN

Budding artists must see the world as “tiers of graphic information” and not just a steady stream of subjects. In each image there are lines, shapes, patterns, colors and tones. These are the five basic graphic elements. They unite to form “tiers of graphic information.” Your subject is a tier, as is the tree behind him and the car in the foreground. As an off-camera flash photographer, you can light each tier independently, completely changing the meaning of any image and how it’s “read” by a viewer. You can modify each light, changing its size, its angle, its range, and its power output. This, then, alters how each tier looks and how it relates to the others within the frame. You should be purposeful in how these tiers work together in an image, adding and taking away data until the overall vision is exactly what you want.

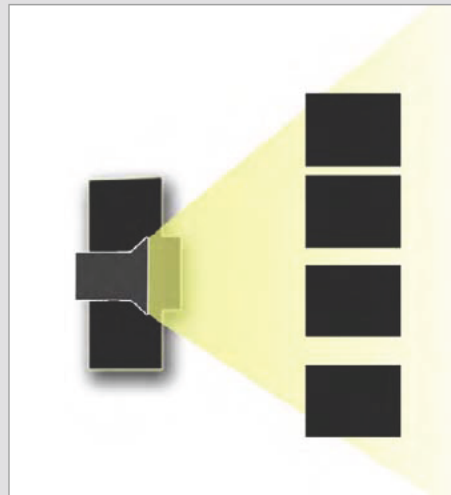
HOW IT'S DONE

The actual process of building a message with an off-camera flash is pretty simple. Start with an idea. Know firmly what you want to say before you try

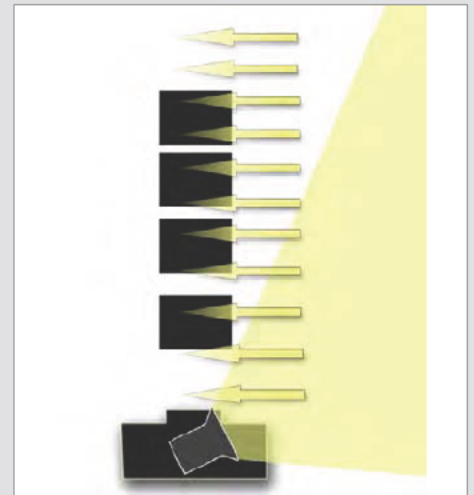
In each image there are
lines, shapes, patterns,
colors and tones.



The flash is positioned on top of the camera—not always the best option.



Adjusting your shooting angle offers very little creative control.



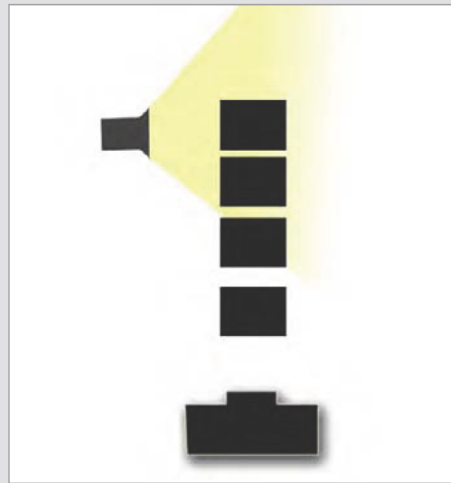
Bouncing your flash increases the overall size of the flash but is still quite limiting.

The Problems with On-Camera Flash

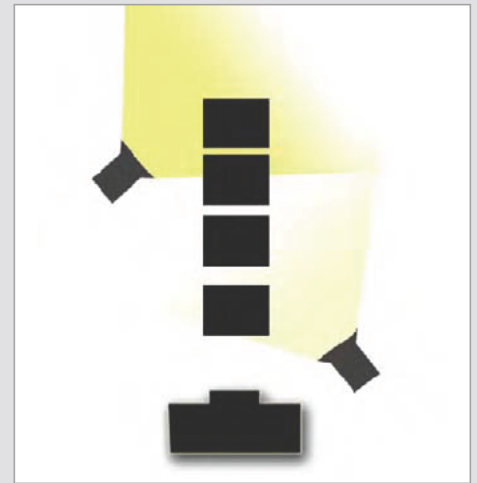
When a flash is positioned on top of a camera (left), the light being produced will always illuminate the first “graphic tier of information” more than those that follow. This is not always the best option. The photographer can, of course, adjust his shooting angle, placing himself parallel with these “tiers.” However, this offers very little creative control (center). The on-camera flash photographer could bounce his light off a much larger reflective surface; this increases the overall size of the flash but is still quite limiting (right).

Freedom

When a flash is allowed freedom, it can light any tier of graphic information the artist wants. He can skip the front tiers completely and light only the rear if he likes (left). With more lights the artist has even more options. He can also vary the power of each flash, giving one tier even more power than the others (right).



A flash can light any tier of graphic information the artist wants.



With more lights, you have more options.

The process of building a message with an off-camera flash is pretty simple.

to say it. Pick your spot based on perspective, choose your lens based on crop factor and depth of field needs . . . then, move straight to the background and decide how you want to make it appear. If your background is out of your physical reach, then dial in the appropriate aperture and shutter speed to make it look the way you want, mentally adjusting for extraneous mechanical or physical obstacles that may show up later.

Once the background is taken care of, move to the next tier of graphic information and light it (with a flash/reflector) the way it needs to be lit. Then, slowly move forward one tier of graphic information at a time until you reach your lens. Then, shoot.

The trick, of course, will be in identifying the tiers that need illuminating and leaving alone the ones that don't. You'll also have to choose the power output of the flash, its zoom position, what type of modification the light needs (if any), how you'll be triggering the flash, and what's going to support it. The speed at which these decisions are made will rest as much on the amount and type of gear you have as on the amount and type of practice you've had using it.

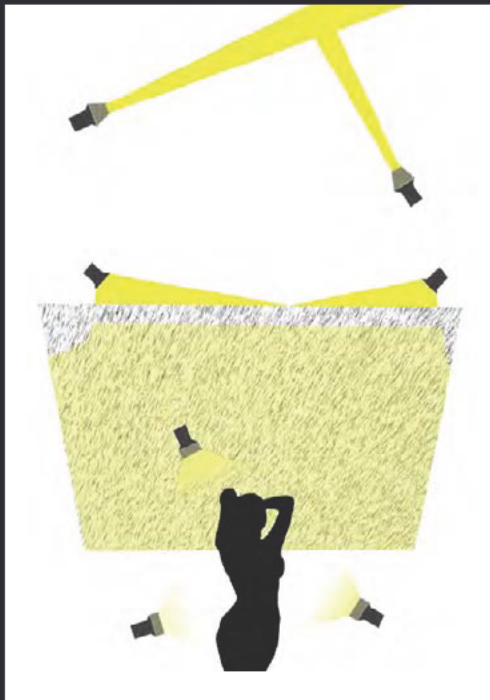
This process is, admittedly, difficult for the beginner; it may seem impossible, but it's not. As anyone who has been shooting with multiple off-camera flashes for a while will tell you, it just takes practice, perseverance, and a willingness to make mistakes and learn from them.

Multiple tiers of graphic information were illuminated in the series of images that appears on the next two pages. Three softboxed flashes, two snooted flashes, and two straight flashes were needed to produce the images.

The rain was created with the help of two assistants with water hoses. The two straight flashes were aimed at the falling water from each side, well behind the model. The background flowers and leaves were lit with two crossed, snooted flashes. The rear, background flashes were set to full power and the flashes lighting the rain were set to half power. The shallow depth of field was accomplished through the use a large aperture ($f/1.4$). A



Three softboxed lights were used to light up our model. One was placed to the top left, providing the back-lighting. Another was placed to the right and another to the left. The power was adjusted according to taste.



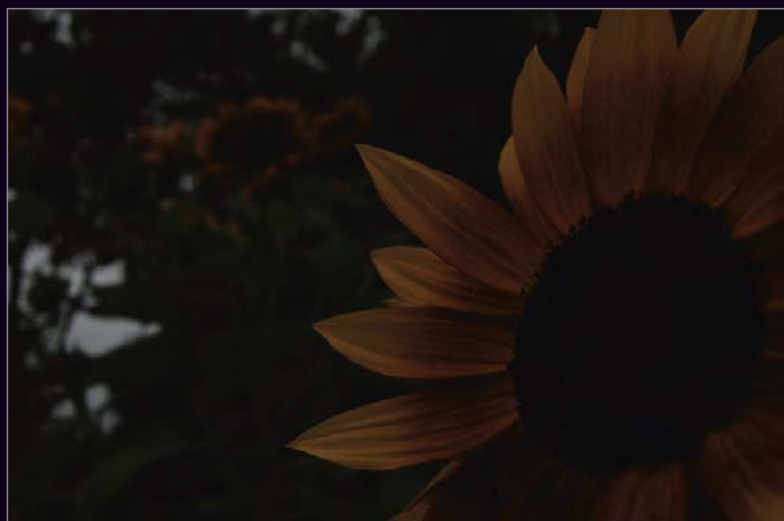
As an artist with a camera, you have to be aware of your background options. If you don't like the way something is lit, change it—make it work for you. Here, many flashes with different types of modification were required not just for our model but for the background, as well.



redder-than-usual white-balance setting was applied and the contrast/saturation settings in camera were bumped up a bit higher than normal.



Seven flashes were needed to create this image. Each flash was modified in a different way; each power setting, placement location, and support option was unique. The camera's settings were adjusted manually before the session and all the flashes were set off using an inexpensive radio triggering system.



Two modified flashes were used in the creation of the top image. The foreground flash was set to $\frac{1}{16}$ power and the rear flash was set to $\frac{1}{4}$ power. Each light was enlarged with the help of a bounce attachment. A small aperture ($f/16$) was chosen to give the depth of field needed and a fast shutter speed was used to darken the image. In the first image (top), both lights have been triggered. In the second image (above left), only the foreground flash was triggered. The third image (above right) shows what happens when no flashes are used.





In the first photo (above) we see the result of lighting multiple tiers of graphic information. Four flashes were used. The second image (left) shows the same subject shot without any flashes using the camera's automated features. It's easy to see the incredible difference the off-camera flashes make in the representation of this scene.

The top photo on the facing page looks nothing like “real life.” It’s a unique representation created using multiple of off-camera flashes—four to be precise. The positions of these flashes can be seen in the photos to the right. What can’t be seen is the artist’s original vision; you have to know what you want *before* you start placing lights.



ADDING LIGHT OFF-CAMERA: A BEGINNER'S ODYSSEY

If you're new to all of this, take some time with your gear. Practice with it. Get to know the shadows your off-camera flash produces, the glare you can expect, and so on. Start with just one flash. Use a wired option to trigger it; this will produce the most reliable results. Switch your camera to autofocus, pick a subject, stretch your arm far from your body, aim your flash, and begin shooting. It doesn't matter what you're shooting—just shoot.

Then, change the angle of the flash—put it above your subject, below, and to the side. Shoot and examine again. What you'll quickly discover is the reliability of the off-camera flash. Spend time doing this. Become a master at wired, off-camera flash, then add another light and try to go wireless.

What you'll quickly discover
is the reliability of
the off-camera flash.

USING MULTIPLE FLASHES

Each flash added to the mix brings with it the same options, questions, and challenges of the first. You'll still need to trigger, support, and modify them to match your vision. When photographing people, keep in mind that not everyone has the same amount of time to get the image perfect as you might—so practice beforehand. Set the lights up when your subject isn't there. Do a few test shots to make sure all the kinks are worked out. And don't be afraid to veer from your original vision if something more exciting comes around.

Be flexible and don't take life—or your pursuit of the perfect message—too seriously. Remember why you got into photography in the first place: it's a fun and exciting art form. (And smile when you shoot—your pictures will always come out better if you do!)

4. NUTS AND BOLTS

Being creative with your flashes has nothing to do with the amount or type of gear you have, rather it's in how you use that equipment to **solve specific problems**.

GETTING STARTED

It all starts with a vision, a clear understanding of what you want before you click the shutter. Simply setting up a bunch of flashes and shooting on auto does not, and never will, guarantee success. Off-camera flash photography

TOP—When building a message with off-camera flashes, it's best to have an idea of what you want to say *before* you begin saying it. Besides the obvious addition of three flashes, light stands, and modifiers, the photographer was also dealing with depth of field issues, perspective problems, mood creation, contrast and saturation issues, white balance and hue choices, and more. **BOTTOM**—A large aperture (f/1.4), medium focal-length lens (50 mm), and a close position to the subject helped achieve the blurry background. Usually, when this size aperture is used, a very fast shutter speed (such as $\frac{1}{2000}$ second) is needed to maintain proper exposure during the day. However, with the addition of off-camera flashes and the camera's limited flash-sync speed, other options had to be explored. Here, a creative cross-polarizing technique (see page 53) was employed to strip excess light, allowing the artist's original vision to remain intact.



requires forethought and planning. There has to be a goal, a reason for all the lights in the first place—and despite the fact that many will try to tell you that there is a certain roadmap to follow when using off-camera flash, there isn't. Just because one person has luck with one way of doing things doesn't make it right and doesn't make it the only way. There are a wealth of off-camera flash techniques yet to be discovered and it's going to take the combined strength, energy, and vision of all of us to figure them out.

A good off-camera flash photographer has a goal. Going in, he knows what he wants his image to look like. This makes the type, placement, and modification of his lights an easy-to-work process. Options simply have to be weighed, strategies thought out, and (most importantly) decisions have to be made. It's a scary process the first time, but with practice it gets easier. Experience allows for that. Still, some misguided photography "experts" today tout the use of automatic modes when using off-camera flash, comparing it to driving a car, riding a bike, or taking the train. "Why," they ask, "would you want your trip to be more difficult?"

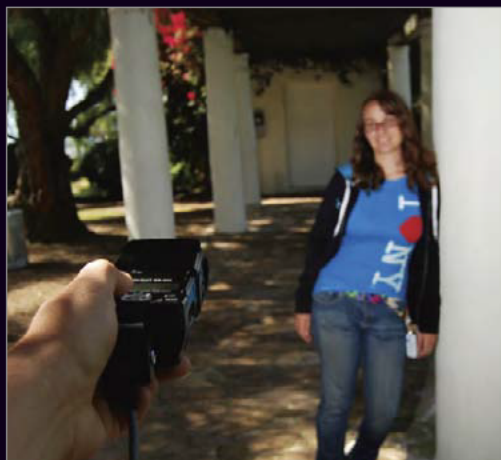
This is foolishness. Why hide from that experience? It doesn't cost you anything to learn with today's digital cameras; that's what the delete button

It's a scary process
the first time, but with
practice it gets easier.



For the off-camera flash artist, it's not about capturing the world the way it looks, it's about exploring how it makes him feel, then sharing that emotion with others. The flashes and modifiers—even the camera and lenses—are just tools that let it happen. It really isn't about the gear, it's about how you use that gear to build your message.

Light from a flash can be pretty harsh. But what happens when we change the angle of that light? In the image to the right, we see the effects of an off-camera flash pointed directly at our subject; it's not very flattering. The light is harsh, unpleasant, and creates a ton of glare. By moving your flash away from the subject (as seen in the three small images below), a softer, more pleasing light is generated. The subject is now being illuminated by the scattered "corners" of the flash. We call this technique "feathering" and it's quite an effective means of modifying your external light source. The final image appears at the bottom of the page.



is for. Photography is an art form, not transportation. Those “little things” like exposure, depth of field, perspective, color, and even focus are important to the artist-with-a-camera. It’s the paint to his paintbrush; it’s the clay to his sculpture. These “little things” are what makes photography so spectacular to begin with. It’s the heart and soul of creative expression. How can someone just give those away? Where is the pride in letting a machine make those decisions for you? Are you really so busy that you can’t take the time to learn your craft?

With enough experience, *anyone* can visualize and be creative—and do it quickly. As photography instructors, we advise our students to be in full manual control of both their camera and flashes at all times, so that they can learn from their own mistakes. We teach hundreds of photographers each year to do away with their automatic settings and become the artists they know they can be. And yes, it does take a while. Yes, they do make a lot of mistakes along the way. But, these mistakes are important; they afford us experience, and without experience, pride is nonexistent.

Where is the pride in
letting a machine make
those decisions for you?

FLASH-SYNC SPEED

As every photographer knows, the shutter speed chosen dictates the amount of light allowed into the camera. A faster shutter speed cuts the amount of light, making the image appear darker. A slower shutter speed allows more light to flow through the aperture, making the image brighter. What many new off-camera flash photographers are unaware of, though, is that their shutter speed options may be limited when using their flash—whether on-camera or off.

The majority of cameras have what is called a “flash-sync speed”—a shutter speed that can’t be surpassed if the photographer intends to use a flash. This limitation is a direct consequence of the type of shutter the camera possesses. Most SLRs use what is known as a focal plane shutter, consisting of two metal blades that run across the film/sensor plane. When the shutter button is depressed, the first blade (often called the front curtain) begins moving across the film plane. The second blade (often called the rear curtain) then follows. The amount of time between the movement of the blades depends on the shutter speed chosen. When a slow shutter speed is picked, the gap between the blades is large, often allowing the entire sensor to be hit with light at one time. As the shutter speeds grow faster, the gap between the blades diminishes, causing the camera’s sensor to be illuminated by only

a small slit between the blades. This slit then travels across the sensor—similar to how a table-top scanner “reads” your pictures, with the scanning mechanism slowly moving from one side to the other.

The fastest shutter speed at which full coverage is afforded (before the slit emerges) is called your camera’s flash-sync speed. If you were to use your flash with a faster shutter speed than this, then the light from the flash would not touch the portion of the scene that was being covered by the rear blade. This would make certain portions of the scene darker than everything else. Typically, this appears as a dark band running through your images.

Flash-Sync Speed Limitations

These images show you what to expect if you exceed your camera’s flash-sync speed limitation.



The shutter speed is set to the camera’s fastest possible flash-sync speed ($1/200$ second). An aperture of $f/5.6$ was chosen. Full coverage is afforded.



As the shutter speed increases ($1/320$ second), less light from the flash is captured. Notice, too, the dark strip (banding) at the top of the image.



As the shutter speed increases again ($1/800$ second), the dark strip expands to encompass half of the image.



At an even faster shutter speed ($1/1250$ second), very little light from the flash has been recorded. The dark band now extends through most of the image.

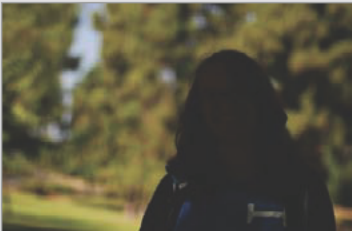
ORIGINAL VISION



An Original Vision

Let's say the photographer wants a blurry, darker-than-usual background behind his subject (as illustrated in the top photo). Since his subject is in a shadow (as illustrated in the second image [middle left]), the addition of light is mandatory. Adding light naturally, by slowing the shutter, increases the light everywhere (as seen in the third image [middle right]), making his background now unacceptable. A flash is required.

Because of the limited shutter speed options when using a flash (the flash-sync speed), most photographers choose to compromise their original vision with a smaller aperture. This produces a background that is far more in-focus (as seen in the bottom image) than was their original intent (top image). As an off-camera flash artist, *you should never* compromise your original vision. There are ways of eliminating light without touching your aperture setting. Search them out; it's part of being creative.



TYPICAL COMPROMISE



For special effects work (especially in-camera multiple exposures and collage-building) this dark band is an extremely useful tool. In basic message-building though, it's problematic at best and needs to be addressed and conquered immediately.

Most cameras, when in an automatic mode, will not let you choose a shutter speed that is faster than the camera's flash-sync speed. However, a shooter working in the manual mode—using many of the off-camera flash

accessories and techniques listed in this book—can easily (and unknowingly) circumvent this safeguard.

Finding your camera's top flash-sync speed is easy. While in manual, adjust your shutter speed to its highest possible setting (such as $\frac{1}{4000}$ or $\frac{1}{8000}$ second), then engage your pop-up flash and examine the given shutter speed. You will notice a change; the shutter speed now reflects your camera's top flash-sync speed. (*Note:* If your flash-sync speed reads $\frac{1}{500}$ second, your camera may possess an electronic shutter.)

FLASH-SYNC SOLUTIONS

Some manufacturers
offer high-speed flash
synchronization options. . .

A camera's flash-sync speed can pose a threat to any creative photographer who has a specific goal in mind. If larger apertures are needed, the limitation of the flash-sync speed (and its reciprocal consequences) may make using that large aperture impossible. And if fast shutters are required to freeze moving subjects, then the slower flash-sync speed is also unacceptable.

There are several options for beating the flash-sync problem:

1. Employ a camera/flash system that offers a high-speed flash-sync (FP) option.
2. Use a camera with an electronic shutter and manually fire the flash (using inexpensive triggering devices).
3. Use a handful of neutral density filters to cut the light (or a variable neutral density filter).
4. Simply cross two linear polarizers. (This is great news for the manual shooter but bad news for those who shoot in auto. Linear polarizers often conflict with choices the camera makes, such as exposure, white balance, and focus.)

Whichever approach you take, as long as it eliminates the unwanted light, is the right one. Remember it's not about the equipment; it's about using the equipment to achieve a desired result.

Option 1: High-Speed Sync. Some manufacturers offer high-speed flash synchronization options (sometimes called "FP," referring to the camera's focal plane shutter) with their cameras. To use this feature, you'll need to purchase a corresponding flash unit. These specialized flashes produce a series of smaller continuous flashes that, in essence, fill in the missing gaps on the sensor caused by the moving shutter blades.



TOP LEFT—Nikon's high-speed sync option is found in their latest camera and flash models (look for the "FP" terminology). When a flash with this capability is attached, simply activate the option in-camera and any shutter speed can be dialed in. Please refer to your flash and camera manual for more information. **ABOVE**—The high-speed sync option for Canon is found on the flash itself. Depress the (H) button and when a Canon camera that allows for this type of operation is attached, you can shoot with any desired shutter speed. Please refer to your flash and camera manual for more specific model information. **LEFT**—Using an advanced high-speed sync option will enable you to capture breathtaking flash pictures at any shutter speed. This seemingly impossible digital magic is accomplished by having the flash fire a series of smaller bursts so quickly that each part of the hidden focal plane becomes illuminated. High-speed sync requires a special combination of flash and camera. Rest assured you'll be paying a higher price for it as well.

The high-speed sync option allows you to use any aperture setting you wish. This is quite helpful when trying to blur backgrounds and isolate subjects. Here, an aperture of f/2.8 was chosen to blur the background. A consequence of this choice was the need to shoot the image at $\frac{1}{1000}$ second to maintain proper exposure for the background. However, since an off-camera flash was required to fill in undesired shadows, the camera's flash sync speed of $\frac{1}{200}$ second proved debilitating. Instead of compromising the integrity of the image (using a smaller aperture to compensate for the longer shutter speed) the high-speed sync option was called into play. The light was then funneled (page 98) toward the model's head.



Using this option will present its own set of problems. The recycle time between normal flashes increases dramatically and the actual flash output (reach and power) will be diminished. Also, the system itself is quite proprietary. If you own a Nikon/Canon camera that allows for this type of action, then you'll need a corresponding Nikon/Canon flash that accepts it. This can get pretty pricey—although it's worth every penny.

Creative off-camera flash photographers also need to know that this special high-speed sync option only works

when the camera and flash can communicate easily with each other in an unrestricted way. Certain triggering devices we use, such as inexpensive optical and radio transmitters/receivers, as well as straight PC sync cords and wires, will not transmit the needed data. This means that if you don't play by the manufacturers' rules you won't be able to use this feature very often. However, there are some very resourceful manual shooters out there who have overcome this issue, engineering their own solutions or developing other techniques to compensate.



The choice of shooting with a fast shutter to capture motion (such as in the above two photos) or to simply pick a large aperture to blur a background (left photo) shouldn't be compromised. If your camera and flash offer a high-speed option, explore its potential. You'll never regret it.



Option 2: Electronic Shutter. Not all digital SLR cameras employ a straight focal plane shutter. Several models use a hybrid mechanical and electronic system that allows for faster-than-normal flash sync speeds—usually around $\frac{1}{500}$ second. This, in and of itself, is blazing fast and should make any off-camera flash enthusiast drool. However, the electronic shutter does come with drawbacks. Because of its design, the sensor is slightly less sensitive to light. Plus, there is usually a noticeable increase in the amount of noise present in the images. Other degradations to image quality have been reported as well. Despite this current “perceived” loss of quality, however, off-camera flash enthusiasts look at this new technology as a huge leap forward. Now, through the use of electronic shutters and some very traditional (non-TTL) cords, PC wires and inexpensive (\$20–\$30) radio transmitters and receivers, a photographer can shoot unfettered by shutter-speed limitations. His imagination now lies unshackled at the foot of his equipment. Anything he can visualize, every outlandish flash setup and outrageous image construct is possible and can be created. That’s a pretty cool thing.

The Point-and-Shoot Alternative. As a creative off-camera flash photographer, there is an answer to the flash-sync problem you really need to be aware of: using your smaller point-and-shoot digital camera with your off-camera flashes. Admittedly, this seems a bit odd—but it’s actually becoming quite the “pop”-culture trend. Using a pop-up flash to trigger other external flashes, revolutionary artists are pushing the technology—and their creative spirits—to the limit. This is truly on the cutting edge of off-camera flash artistry, and it’s just plain fun.

Good in Theory

In theory, an electronic shutter should allow a flash photographer to be unhindered by any type of flash-sync limitation. However, the technology just isn’t “there” yet. Manufacturers still impose a top flash-sync speed (albeit a much higher setting) on their cameras that use an electronic shutter. This aids in the overall stability and acceptability of the image.



One slightly modified off-camera flash, triggered through the use of our point-and-shoot’s integrated pop-up flash, created this simple, yet effective image. The electronic shutter’s flash-sync speed ($\frac{1}{500}$ second) allowed for the deep, rich colors and brooding tones.



You can use your camera's pop-up flash to trigger other larger flashes. It's a simple process but does require a "slaved" flash unit. While you can purchase inexpensive slave receivers for your own flash or flashes, we prefer to use a Digi-Slave Deluxe 3000. We've found it to be one of the most reliable and powerful slaved flashes on the market today.



Using a point-and-shoot with your off-camera flash offers a few distinct advantages over shooting with a digital SLR. First and foremost is a gain in flash-sync speed from the electronic shutter—going from the typical $\frac{1}{200}$ second to a blazing-fast $\frac{1}{500}$ or even $\frac{1}{1000}$ second. Plus, due to the design of the point-and-shoot, it's now possible to create spectacular close-up images using off-camera flash—without the need of special tubes, filters, or macro lenses. And you get all of this in a very small package. An entire off-camera flash kit (including camera, flash, tripod for the flash, and a small light modifier) could easily fit inside a small camera bag or even a purse. It's no wonder that our students—and many others across the country—are taking advantage of this seemingly odd approach.

Point-and-shoot off-camera flash photographers usually use an optical-slave approach to wireless communication, usually employing various slaved flashes and setting them off with their camera's built-in pop-up flash. This, of course, calls for the use of optical slave units (see page 20) or even full-fledged slaved flashes. Our personal favorite is the Digi-Slave Deluxe 3000.

Set up your lights, modify them however you like. Attach an optical slave to the bottom of each flash. Aim that optical receiver toward your point-and-shoot and use your small camera's pop-up flash as the triggering device. Voilà—an instant outdoor studio for your point-and-shoot. (*Note:* Manual shooters will have the most luck since they'll understand how to modify not only the light their camera is capturing but how to physically change the output coming from their flash. Automatic shooters will find the whole process frustrating.)

One of our favorite ways of triggering our off-camera flashes (when using a point-and-shoot without a hot shoe [see page 20]) is to attach an inexpensive radio transmitter to an inexpensive optical slave device. Both are then attached to the camera with Velcro. As long as the optical slave can see the flash from the point-and-shoot, it will trigger the radio transmitter, which then triggers any off-camera flash that has a receiver attached. We've actually found this to be the most reliable way of setting off external flashes with a point-and-shoot. Plus the images are downright spectacular! You really have to try this to believe it.

If you're lucky enough to own a point-and-shoot that has a built-in hot shoe (and are a manual shooter) you're in for an even greater surprise. With



Whether your creative approach uses handheld, off-camera flash options and accessories (as in the above photos) or if you like the more controlled, one-modified-flash-on-a-light-stand approach (as seen on the previous page), point-and-shoot cameras offer a wealth of options that digital SLRs simply can't. Blazing-fast flash-sync speeds, a lightweight and compact camera, and a manual control system that's too easy to be believed are only a few of the advantages you get when using your point-and-shoot. Of course, there are some serious drawbacks as well—but if you don't mind the increased noise, loss of lens choice, and the obvious stares you'll get from passersby, this is a great option.



ABOVE—When triggering our flashes with a point-and-shoot camera, we use a special homemade combination optical/radio system. By simply attaching a radio transmitter (Cactus is our favorite brand) to an optical sensor (we like to use the Wein brand) and then placing the sensor near the flash (attached with Velcro to the camera) we can achieve 100 percent effectiveness. Of course, each external flash unit must have a Cactus brand receiver attached as well.

RIGHT—This image was shot with a \$150 point-and-shoot camera. The leaves in the foreground were illuminated with a wireless, optically triggered, hand-held flash unit. A polarizer helped produce the deep, rich blues in the sky.



an inexpensive radio transmitter, simple sync cord, or PC wire, you will be able to shoot at any shutter speed you wish. Simply attach it to your camera's hot shoe, switch your camera to manual and get ready to play. You're now ready for the off-camera flash adventure of your life. (*Note:* Unfortunately, we've had mixed results with various small point-and-shoots when attempting this bypass. Sometimes we're able to achieve maximum shutter speed, and sometimes not. At a minimum though, you'll still be able to use the camera's blazing $\frac{1}{500}$ second sync speed.)

There are some obvious drawbacks to this method of dealing with flash-sync speeds, of course. Besides it only working in manual and making you



Stacking neutral density filters will most definitely strip light from your image. You may suffer however from several repercussions: image quality may wain, vignetting may occur—and, depending on the number of lenses you have, you may end up with a camera bag full of nothing but neutral density filters.

look like you don't know what you're doing (even when you really do), you'll also be faced with the fact that none of your expensive lenses can be played with anymore. You're stuck to that one lens on your point-and-shoot and the focal lengths it offers. Plus, if you're using an optical triggering method, you'll be forced to deal with all of the issues associated with that as well: limited triggering range, glare from the pop-up flash, triggering interference from the pre-flash, and so on.

Option 3: Neutral Density Filters. Compromising your artistic vision should never happen. If you want to shoot with a larger aperture and none of the high-speed shutter options work for you, don't give up. You have other options.

Another effective means of stripping light from an image is through the use of neutral density filters. While these screw-on filters will not allow you to bypass your flash-sync speed, they will strip excess light from your image without the need for you to shrink your aperture—meaning, you get to shoot at $f/1.4$ as much as you like with your flashes, no matter how bright



it is outside. Plus, they are a fraction of the cost of what it would take to purchase the other high-speed sync options discussed earlier.

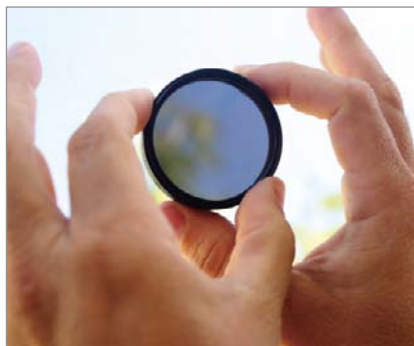
Neutral density filters come in a variety of densities and in sizes to fit every lens. Our advice is to buy a lot of them, for each lens you own—and get them dark. (*Note:* These filters have become harder and harder to find in local camera stores, but an online search will reveal a shocking number of choices.)

There is also a variable neutral density filter available. This rather advanced tool allows you to spin-in the desired amount of darkness going from one density to another. It's a great piece of equipment but, in our opinion, no piece of glass should cost more than \$300—especially if there is another, much cheaper, alternative.

Option 4: Cross-Polarization. Our favorite way of stripping light is by far the easiest—and a lot more exciting than just stacking one neutral density filter upon another. By simply crossing two linear polarizers (a filter designed to strip glare from your image) you can effectively spin your way into as dark an image as you want—just as if you were to use that expensive variable neutral density filter.

Simply attach both filters to your lens, then spin the bottom polarizer to eliminate any unwanted glare and spin the top polarizer to slowly take away light. This is a technique we've been employing for years with all of our equipment, both film and digital. As always though, you'll find people who disagree with this approach. They argue that this causes some degradation to the image. Throughout our combined forty years of experience we've never, *never*, found this to be the case. Our images are clean, sharp, and

If you already own two linear polarizers, simply screw them together, one atop the other (left). Rotate the bottom polarizer to eliminate any unwanted glare from the scene and rotate the top polarizer to take away light (below). It doesn't get any easier than this.

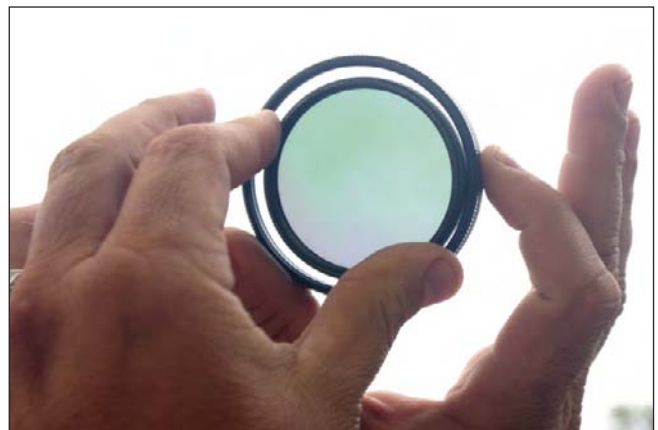




For the ease of use and simple cost effectiveness, we use a Cokin linear polarizer and filter holder when employing this method. This enables us to use the same setup for all of our lenses.



You'll need to purchase the correct adapter ring for each lens. Attach the ring to an already-mounted linear polarizer. Slide the Cokin filter holder (with polarizer inserted) onto the adapter ring, then spin the linear Cokin polarizer—instant darkness!



Crossing two circular polarizers will have a different effect than crossing two linear polarizers. Instead of taking away light, a beautiful color shift occurs. This effect can be quite useful when trying to be creative with color, though it doesn't help a bit if you want to strip light.

never lack any type of “punch”—whether shot with a digital SLR, a traditional film camera, or even a point-and-shoot.

This trick tends to work best with two *linear* polarizers. Usually, the only thing you'll get if you cross two *circular* polarizers is a shift in hue or sometimes a colorful rainbow canvas on which to work. This, again, presents a problem for the automatic shooter as he will undoubtedly be using circular polarizers. If you're a manual shooter however you can effectively employ linear polarizers in all of your creative endeavors (no matter what the “experts” or even your camera manual says).

THE POLARIZER: DON'T LEAVE HOME WITHOUT IT

Glare from a flash can be horrendous, quickly aging someone twenty years as wrinkles and skin blemishes are made obvious. As one of the major culprits of bad off-camera flash images, glare needs to be dealt with. To do this, you need a polarizer—a simple glass filter that screws onto your lens to eliminate glare from the sun and your flashes as well.

The polarizer, as you may or may not know, is the single greatest accessory you could ever purchase for your camera. Often, we will shoot with just one hand-held, off-camera flash pointed directly at our subject—unmodified and at full power. The photos are staggeringly beautiful, of course, but only because we used a polarizer. Without it, the image would be a glared mess and completely unusable.

Misconceptions. There is a lot of confusion in the photography community today about the use of polarizers—and for no real reason. A polarizer



When using just one unmodified light aimed directly at a subject, you can achieve startling results when a polarizer is used. In this image, the flash was hand-held by an assistant just a few feet to the right of the bride's veil. Since the flash and the sun both produced glare from a similar angle, a properly turned polarizer stripped it all away.



The top two images show the results of shooting with a single softboxed flash placed to the left of the subject (top left photo) and the right of the subject (top right photo). You can see the glare produced by this “softened” light. The corresponding pair of images (in the bottom row) show the effect of adding a polarizer.

simply eliminates glare. It needs to be rotated to work and you have to be at the correct angle to make it happen. Get any of that wrong and it’s not going to do a thing.

Some new photographers mistakenly believe that by enlarging their light source they are eliminating glare. They’re wrong. Glare will occur whether a light modifier is in place or not. You can reduce the amount of glare by repositioning the light or simply by turning a polarizer.

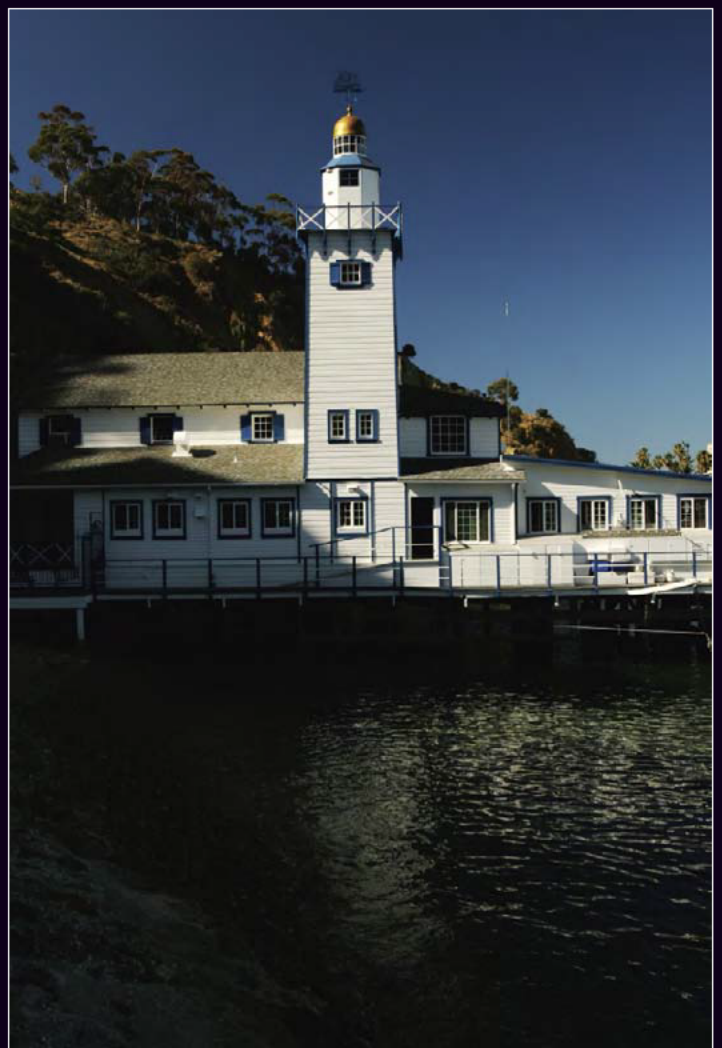
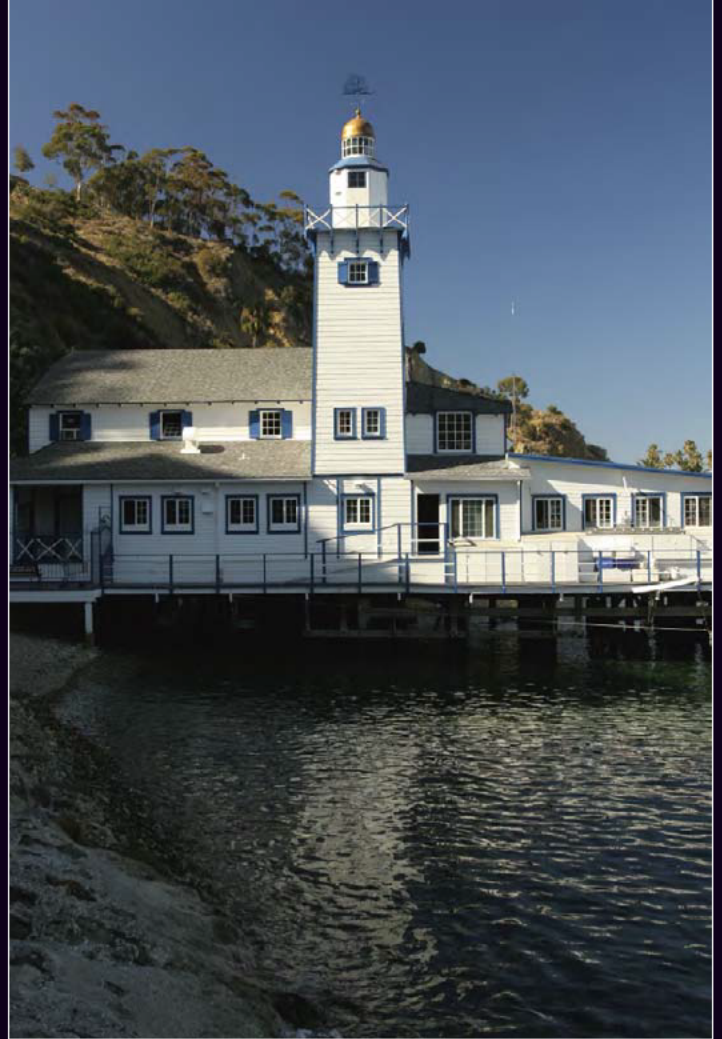
Many people mistakenly believe that a polarizer is only used to darken skies. They’re wrong. Glare can be found on *everything*—especially if you’re a photographer adding light with off-camera flash. You have to step up and accept some responsibility here. Since you’re the one adding light, you’re also responsible to strip the glare it produces . . . and a flash produces a *lot* of glare.



The Need for Visualization. The problem is, we're used to seeing the world with glare. So when our images mirror what we see, we're pretty happy. But as a creative off-camera flash photographer, you need to be aware that there are other options. If you take the time to strip the glare you're creating, you'll achieve images unlike anything you've ever shot before—images that are clean and magnificent. Keep in mind: this is nothing that Adobe Photoshop (or any other editing program) can do. You can't eliminate glare once you've captured it. All you can hope to do is mask it. And what's easier? Simply turning your polarizer and watching the glare magically be stripped from your image, or working for hours in front of your computer trying to fix something that really wasn't there to begin with?

A Polarizer Tip. Learn to visualize the way something *could* look, instead of just the way it *actually* appears. Then, simply work with your polarizer and off-camera flash to bring out the depth, color, and beauty of the world you envision—not necessarily the one you see.

ABOVE—These images show the one-flash approach. Notice that the flash (seen in the upper corner of the right image) is unmodified and pointed directly at our subjects. With the aid of the polarizer, however, no glare falls into the camera. **FACING PAGE**—Even though it was the middle of the day, we knew that with the right attitude, right angle, and right equipment we could make something spectacular happen. The above series of photos show how—with a little imagination, a polarizer, and a faster-than-usual shutter speed—you can turn an ordinary landscape into a beautiful image. (The faster-than-usual shutter speed simply refers to the fact that we chose a shutter speed most people wouldn't, since our final image does not resemble what we saw.)







A great off-camera flash artist knows that he's not just trying to capture what's in front of him, he's trying to make what's in front of him shine. To do this, he visualizes a darker-than-usual background. The above images show what we created while the images to the right show how the scene and subject actually looked. In the image directly above you can see our first attempt. The light from the flash was not powerful enough. In the above right image we adjusted the power setting in the flash itself from $\frac{1}{30}$ power to full power. We thought it was the perfect amount.

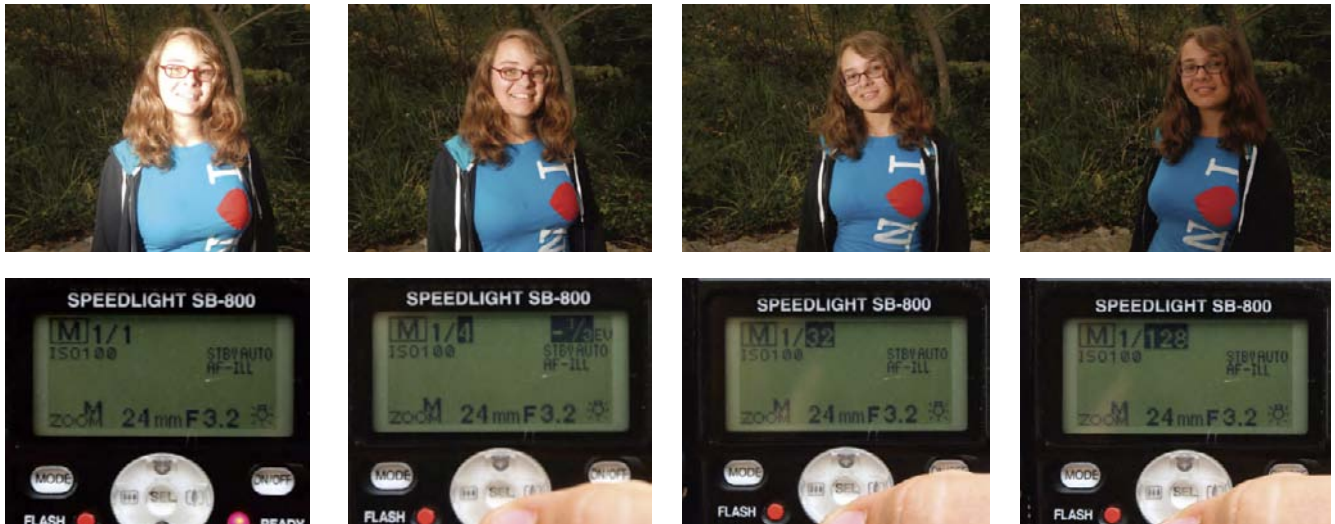


ADJUSTING THE FLASH'S POWER

One of the most sensible ways of controlling the power from your flash is to simply adjust the power on the flash unit itself. As discussed in the previous chapter, many flashes offer you the chance to increase and decrease the power output. This is a fairly obvious procedure. Power is typically adjusted via fractions of output. A $\frac{1}{1}$ setting offers full power, while a $\frac{1}{4}$ settings offers a quarter of the output actually available from that flash. If you're a manual shooter, this is pretty important. Automatic shooters will probably never play with this option; their camera and flash will take care of these settings for them, making sure they attain that desired "average" image.

On many flashes, you have the option of changing the flash's zoom position. Again if you're on automatic, the camera and flash will typically take

FACING PAGE—This image was taken at 3PM on a Saturday with the sun blazing. With a simple understanding of light and how to use a polarizer with an off-camera flash, anything is possible at any time. We realize that many photographers believe that the bright light of midday is a bad time to shoot, but they are wrong. There is no such thing a bad time to shoot—there are only bad photographers who can't (or, worse yet, *won't*) visualize all their options.



By adjusting the power setting of the flash you can dramatically alter its overall impact.

care of this setting for you, matching the flash’s angle of coverage with that of the lens’s angle of view. Manual shooters, however, often use this option to adjust the apparent output of their flash, as well. A wider zoom position offers less light; a more tightened flash focus produces more apparent light.

OTHER OPTIONS

You can also soften and enlarge your flashes through the use of modifiers. Each type of modifier produces different effects. You can use snoots to direct light to one portion of the scene, while larger softboxes spread the wealth. Throughout this book, you’ll see us using these tools—but the type and size

A Little Truth Never Hurt

Here’s a common myth: You should always try to balance your “fill” flash with the background light. The truth is, this is only one option—and quite honestly, it’s one that’s been overplayed. Take a look through this book and you’ll see example after example where the background is much, much darker than the foreground information (or vice versa).

Trying for “normal” is not being creative . . . it’s just normal. This is why we abandoned our automatic settings long ago. Pushing beyond average is something every artist-with-a-camera should be doing. Exploring their vision—and society’s, as well.

We, as the artists, need to make a stand. The world does not have to look the way it appears—and our photos don’t have to match some quirky and unneeded societal bias toward “even” lighting. We have to stop being drones and start creating meaningful message—and that means doing away with some rather bad habits.

An off-camera flash photographer should be willing to go out on a limb and change the way the world looks. Sure, he runs the risk of people not liking his photos, but the whole point of adding light is to take charge of your images. Why not push things? Why not explore that creative side without limits?

The only thing you should ever have to balance when it comes to off-camera flash photography is your check book.



By adjusting the flash's "zoom" feature (if in manual mode), a similar effect can be achieved.



Here we see the comparison between what it actually looked like and how it appeared when the flashes fired. The photographer's position was chosen based on angle of polarization. A large modified light source on the right (a JTL Mobile light) provided our main light. A small flash attached to a mini-boom pointed down at our model added dimension. Another small flash aimed directly at the back of her head provided the desired rim lighting.

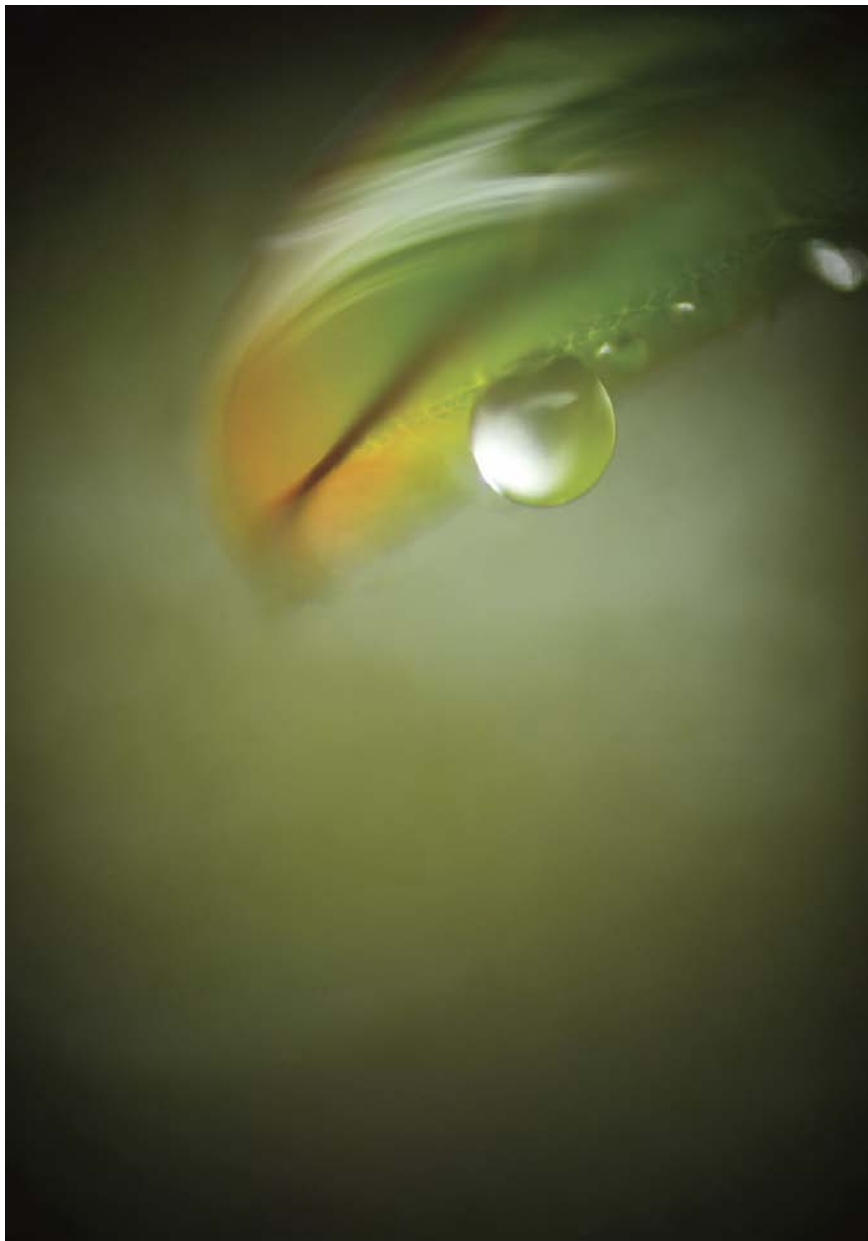
will vary, of course, based on our original intent. Don't think, however, that classic in-studio options such as umbrellas (either shooting through or reflecting against), larger softboxes, or even large reflectors are archaic. We still use these—along with portable studio lights, heavy-duty light stands, and more—while in the field. Remember, it's all about capturing your vision. Gear doesn't matter; as long as it works, use it.

5. CLOSE-UP PHOTOGRAPHY

Close-up photography with off-camera flash gives the photographer a multitude of options for creating unique and inspired pieces of art. He's just going to have to change the way he looks at the world is all.

AN OVERVIEW

Creativity is born in the soul and springs from the the tools we use. An off-camera flash photographer working in close proximity to his subjects will be faced with this reality quicker than most. The effects of his choices, good or



With the help of a snoot, the wired, off-camera flash photographer is able to concentrate the full power of his flash on one particular part of the image—in this case, his background. When working in the close-up world, the background takes on a whole new flavor. It must be given the same respect and concentration due the best of subjects.



For our students, not relying on their equipment for exposure settings and contrast, saturation, or white balance choices has made their trip through message-building and pure expressionism in the close-up world an enjoyable and thought-provoking experience.

bad, are multiplied ten fold due to the confined space he's working in. The most insignificant slip or misaligned light can ruin a message completely.

As an off-camera flash photographer, you have to be on top of your game when shooting things close up. Your choices and equipment are now center stage. You need to be meticulous and caring. You need to be well aware of what you want to say, how you're adding light, and why you might want to change or modify it.

Your close-up subjects need your experience, vision, and creativity—not just more light.

THE BASICS OF CLOSE-UP WORK

When it comes to macro photography, the flash is regarded as a must-have piece of equipment—and for good reason. Inherent close-up problems, such

as miniscule depth of field and slower shutter speeds, can be wiped away in the blink of an eye. An off-camera flash gives the close-up photographer even more options and solutions; creativity becomes second nature and his tiny world expands like never before.

THE PROBLEMS WITH MACRO

Being so close to things and firing a flash has its drawbacks. Even on the weakest power setting you're going to be producing a lot of light. Modifiers



A creative spirit and an off-camera flash can illuminate the simple things in life and create dramatic backgrounds as well. In this image, a well-placed t-shirt was illuminated. The blown-out white provides stark contrast between the subject and the background.

An adventuresome spirit will embrace lighting scenarios that few others choose to play with. By lighting tiers of graphic information (other than your subject) you can set the stage for brilliant close-up images that have to be seen and photographed to be believed.



such as snoots, light funnels, and softboxes are a must when shooting things this close up.

CLOSE-UP TOOLS

When it comes to macro photography and using the flash, precision is the name of the game. Your tools and understanding of each will take you far. If your current crop of lenses won't get you as close as you like, purchase something new. There are a plethora of accessories and lenses that can get you up-close and personal with the macro world. Just make sure that these pieces will work with your chosen means of camera-to-flash communication. Auto shooters will need to ensure their close-up gear is made specifically for the brand of camera they use—keeping that communication alive. Manual shooters, on the other hand, will reap the rewards of their years of experi-

There are a plethora of ways to get you up-close and personal with nature. Some will cost you, others won't. Which close-up alternative you choose will depend on your experience level and your pocketbook.



ence, being able to use even the most inexpensive of options. Close-up filters, extension tubes, reversing rings, and couplers are amazing alternatives to high-end, name-brand macro lenses.

PRACTICE MAKES PERFECT

No matter what decision you've made when it comes to gear, you've still got to practice. As usual, it's best to keep things simple at first. Start with a wired, hand-held option and work your way up from there.

Movement (both from you and your subject) will be a major concern. The flash will help solve this by allowing for a much faster shutter speed. The addition of light also gives you the choice smaller apertures. Your vision and desire will guide you here. Keep in mind though, that when shooting in macro, your depth of field will be severely lacking. Small apertures such as $f/57$ or $f/62$ may only give you an inch or so of depth. If you want more depth, you may have to back away a bit or change lenses.

LIGHT MODIFICATION

Once the mechanical and physical issues of your situation have been solved, you'll want to work on light modification. Things get interesting the minute you put a large flash in front of something small. Being able to modify the light is critical.

Experience, Passion, Vision

A tool is only as good as its owner. Getting close is the easy part; creativity with light comes from the experience, passion, and vision a photographer embraces.

When it comes to taking breathtaking close-up images, you'll have no better tool than an off-camera flash. It gives you options no other tool can. Not only will it light a subject from any angle or position, but it can also illuminate a background, foreground, or even create glare when needed.





For our students, the precision and flexibility of the off-camera flash and homemade “flash stick” have allowed for some amazing close-up images.



A wonderfully
simple solution is the
homemade flash stick.

Snoots and softboxes, as noted, are a must—but they’ll fall short. Manufactured choices are quite limited when it comes to modification gear for the macro world. Your ingenuity will be called on more than ever. You’re going to have to get creative with how you modify your light.

A wonderfully simple solution is the homemade flash stick (see “Making Your Own Flash ‘Stick’” [next page] for an example). It’s a piece of white cardboard or manilla office folder attached to a flash with a rubber band. We use it quit bit when taking photographs of insects. When placed correctly, it softens the quality of the light, making macro work even easier. (*Note:* You’ll need to shoot on full power when using the flash stick as the majority of light is lost.)

Making Your Own Flash “Stick”

Cut a rectangle from a manila folder roughly the width of your flash. Then attach the “stick” to your flash with a rubber band. This flash stick makes a remarkably controllable bounce for closeup flash work.

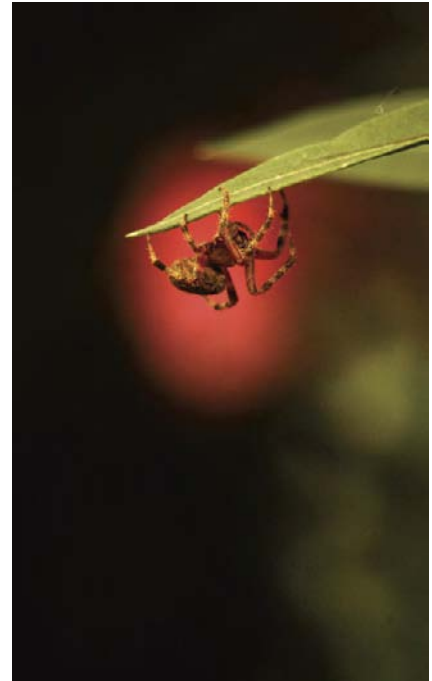
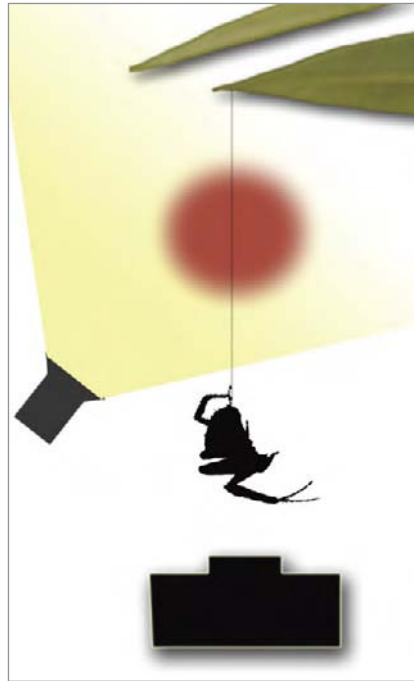
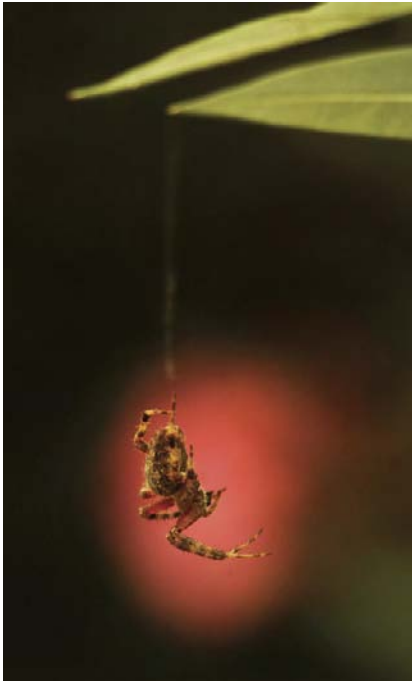


“PUNCHING” A CLOSE-UP MESSAGE

Being able to see graphic tiers of information offers the close-up, off-camera flash photographer an chance to do something amazing. Since those tiers will usually be blurred in the macro world, you can light them any way you want. That means that, if you can see and light the rear tier with your off camera flash, you can have a spotlight of color behind just about any subject. This rear tier could be anything—flowers, trees, cars, people, or even trash. The “thing” itself doesn’t count—just the shape it makes when blurred.

We call this technique of placing your subject in front of a pretty background “punching” an image. It’s the opposite of how most photographers approach message-building. Instead of worrying so much about a subject, we look for graphic tiers that work together. Through the use of perspective,

It’s the opposite of how
most photographers
approach message-building.



Sometimes it's best to concentrate your efforts on lighting a rear tier of graphic information instead of just a subject. Look closely at the options within your frame. Don't just take a pretty picture of a thing, make your message meaningful by including the background in your construction process, as well. A well-placed beam of light, directed at seemingly unimportant blurry flower, allowed for this rather dramatic representation of the "punch" technique.



Two flashes, one modified with a snoot and the other unmodified, were used. The rear flash was pointed directly at the background, which was made up of other plants. The front snooted flash was set to $\frac{1}{16}$ power and aimed directly at the tip of the flower.

depth of field, and lighting, we literally create a pretty background and punch a hole in it with our subject.

The best part of this design process is that it forces the photographer to see and look for more than just one thing. He quickly stops being subject

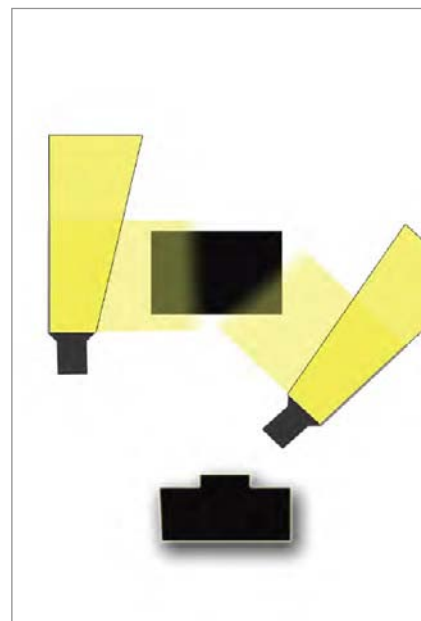
oriented and begins building messages—starting from the back and working forward. We find this speeds up the process of becoming an artist with an off-camera flash immensely.

Being creative with your flash means more than just modifying your flashes or freezing your subjects. It means you've made decisions about every piece of the graphic puzzle you've included in your frame. Being creative

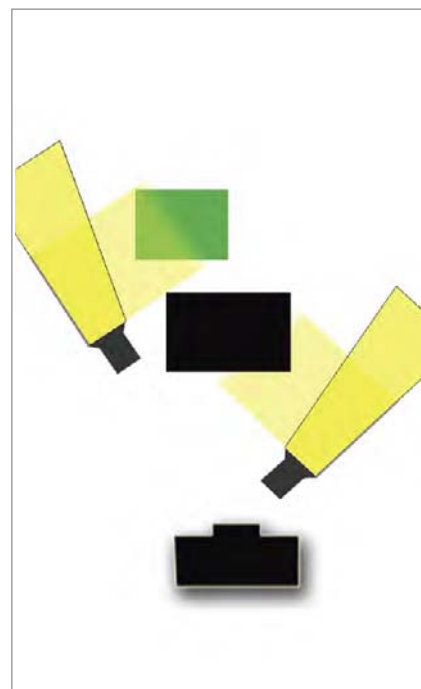
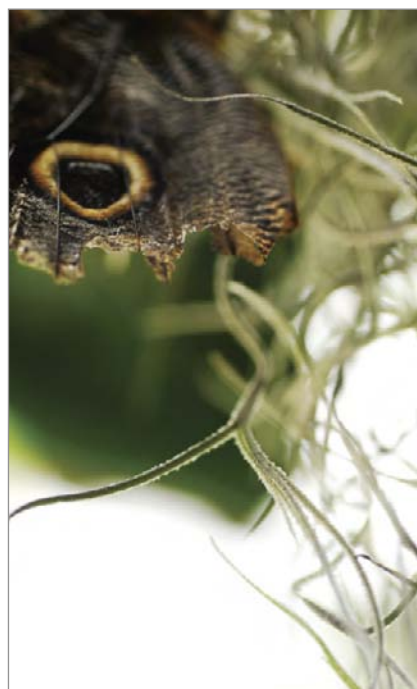


It pays to know your insects when getting this up-close-and-personal. Paper Kites (*Idea leuconoe*) are among a few species of butterfly that do not mind the extreme intrusion a close-up lens and external flashes produce. Two off-camera wireless flashes were required to create this rather stunning portrait. One flash was used to light the insect itself, while another snooted flash was used to light the blurred weed directly behind her head.

Two “sticked” flashes were used to create this image. One directed light toward the left side of the flower and insect. The other sent light through the butterfly’s wings.



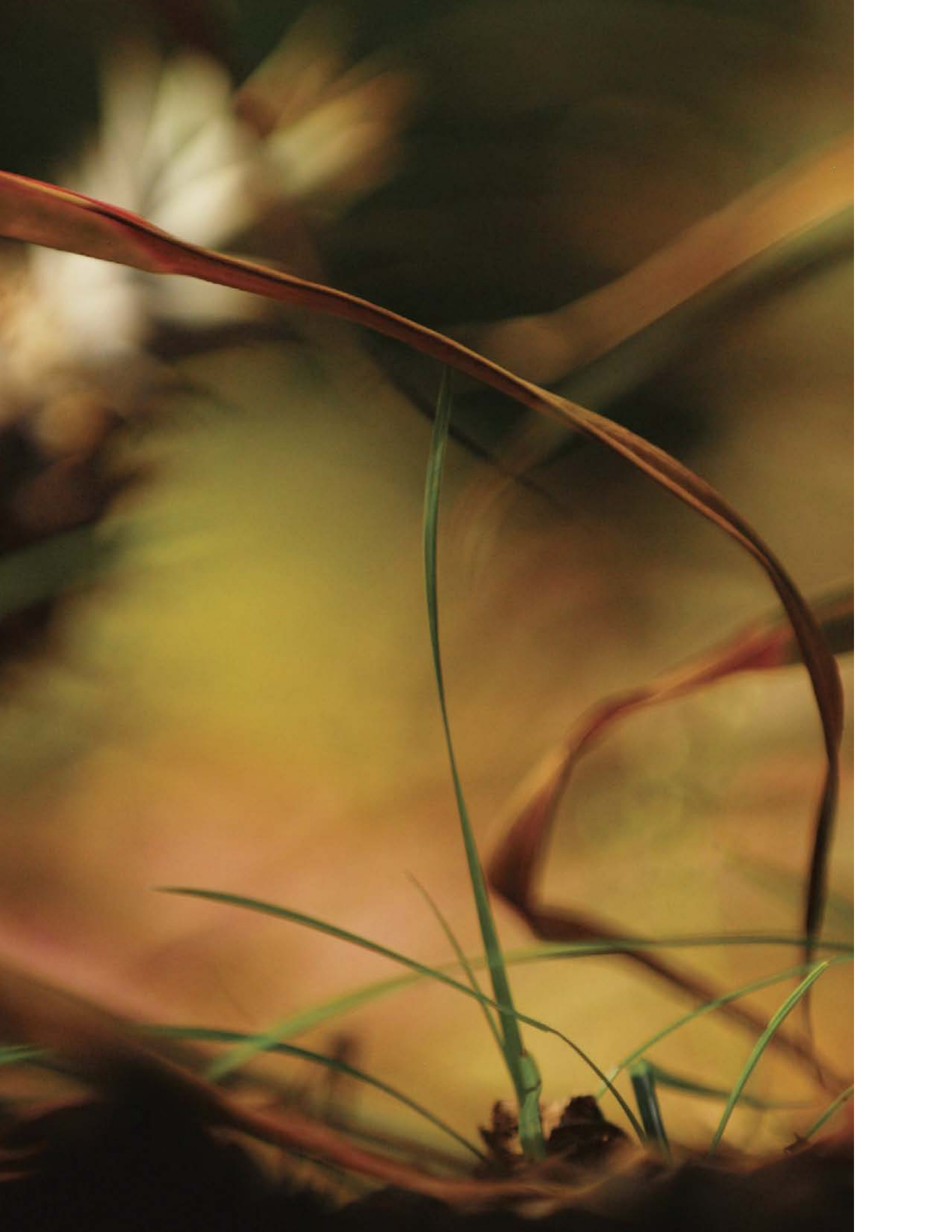
Two “sticked” flashes were used here. One was pointed at the leaf behind the butterfly. The other was directed at an upward angle toward the insect and the plant itself.



means you care about what you’re shooting—each and every time you pick up the camera.

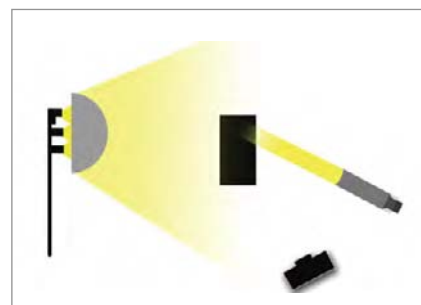
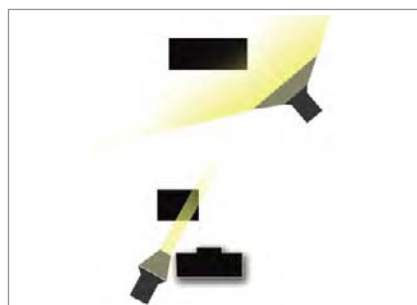
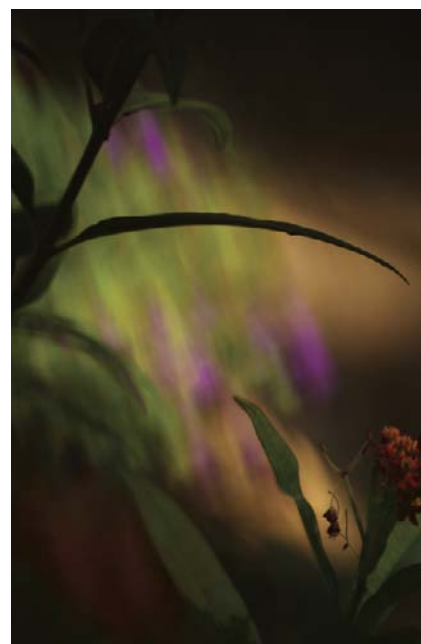
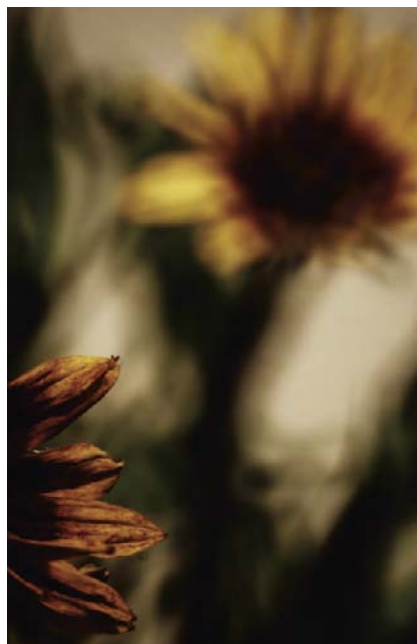
EXPLORATION AND CREATIVITY

Close-up, off-camera flash photography will push your imagination and ingenuity to the limit. Each situation will present its own set of problems, challenges, and rewards. But, if you’re persistent—if you work from the fur-



LEFT (TOP AND BOTTOM)—Two modified flashes were used in this image. The first was snooted and aimed at just a corner of the front-most flower. The second was modified with a large softbox and aimed at the top of the blurred sunflower in the rear.

RIGHT (TOP AND BOTTOM)—Two snooted flashes were used at full power to light the background. No flashes were added to the foreground tiers of information. The “stroked” background blur was achieved using the finger-painting technique explained in chapter 9.



these tiers forward, fixing every problem as it appears—you’ll grow as an artist and your images will be proof of it.

Think before you shoot. Imagine what would happen if you lit the background or foreground instead of just the subject. What if you intentionally placed your subject behind a bright background? What if you lined up the edges of the front tiers and blurred background tiers to create a brand new shape made up of only color and tone?

Push your camera, as well. Adjust your white balance, contrast, saturation, and hue—and make sure you examine the effects in the field. Use multiple lights, widen and narrow their beams, hit only one tier—or light seven.

You can even incorporate off-camera flash into multiple exposures. Imagine what might happen if you took a multiple-exposure image in which the first exposure was as crisp as possible, then, on the second exposure, you blurred it into an unrecognizable mess—and then hit that blur with a burst of light? We think you’ll be shocked at the possible results.

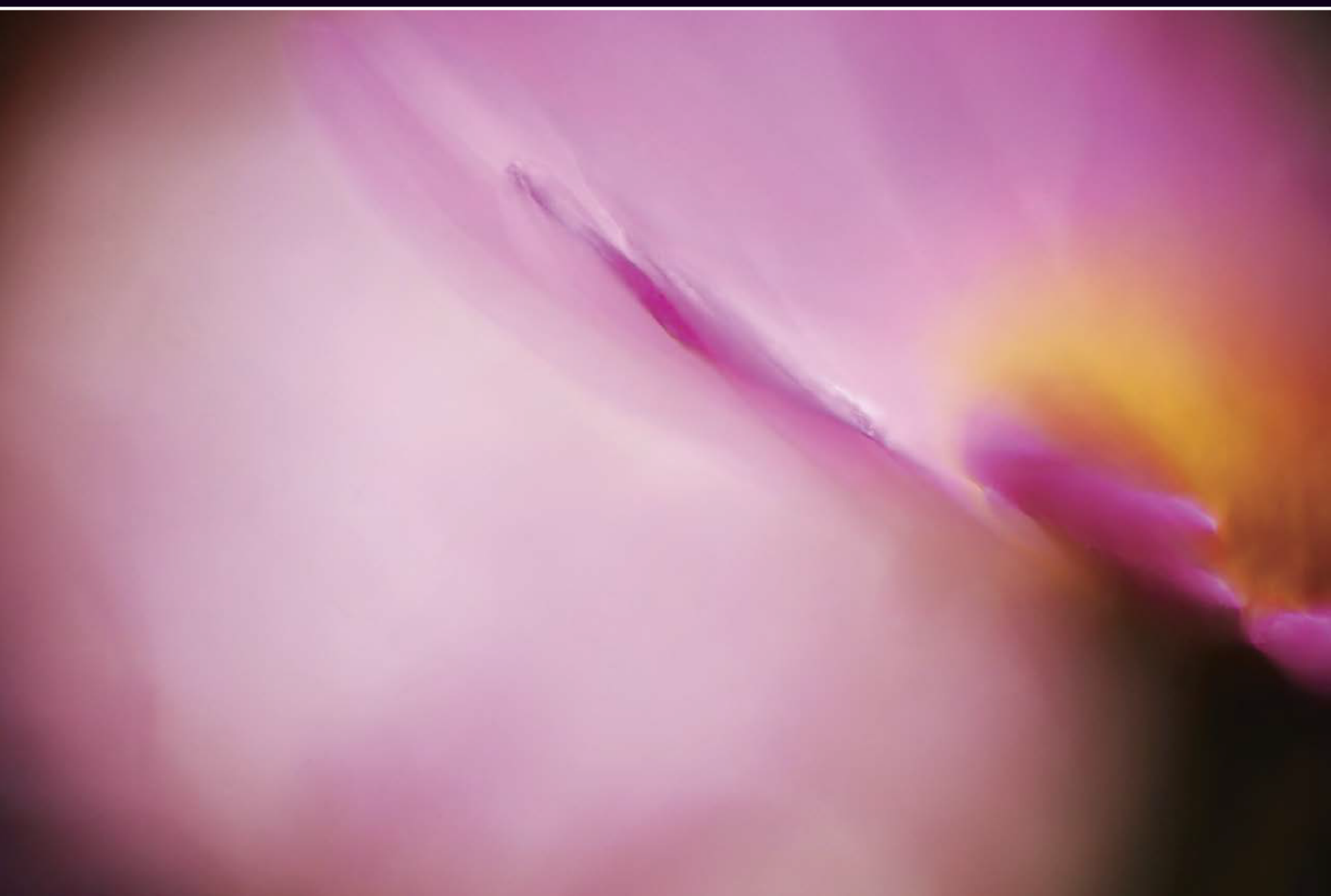
FACING PAGE—As most of the color was there, the background proved vital to this shot. Two wireless flashes were used to brighten that color. One snooted flash was placed on a small light stand above and to the left of the pineapple and another softboxed flash was put on the ground to the right of the background. The light falling on the lone blade of grass in the foreground was natural.



When an off-camera flash photographer employs more than one flash, a multitude of possibilities open up. And if he's got a creative spirit and a water hose, even more opportunities will present themselves. In this series of images, you see the construction of a dramatic (and quite wet) close-up image. A macro lens was employed, as were two flashes. One flash was modified through the use of a Lumiquest Pocket Bouncer, the other remained unmodified. Both flashes were set off wirelessly with the help of a Cactus transmitter and two receivers.

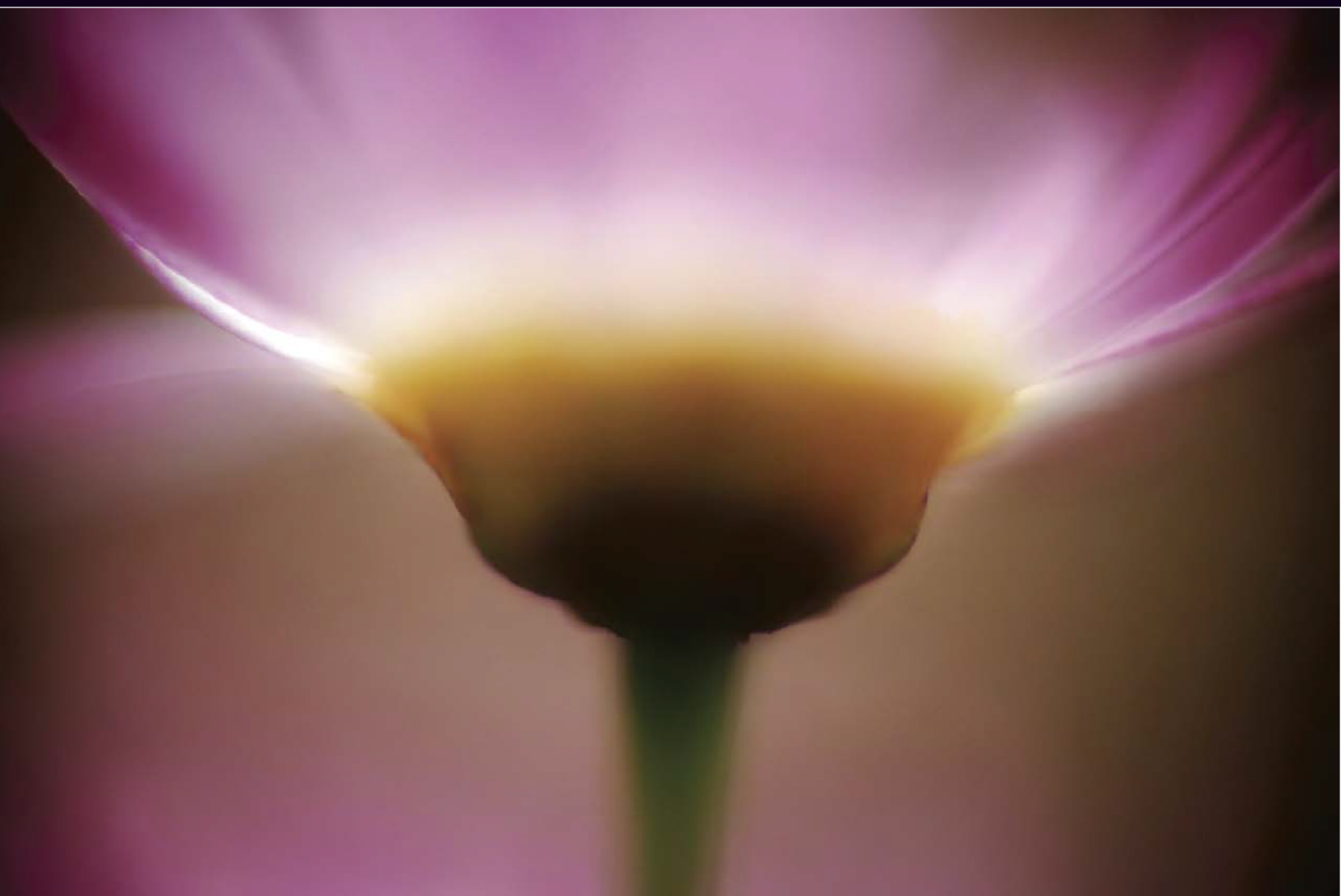
RIGHT—In-camera multiple exposures take on new meaning when you can introduce a variable amount of light during just one of them. The effects of your imagination have yet to be felt. Push your equipment and your vision to the breaking point. You'll be shocked at how far you can go.

BELOW—Even in a rather complex, abstract close-up, the need for an off-camera flash still presents itself. The background in this photo would appear nothing like it does if extra light had not been added to it.





No matter what your final design will look like, having the option to add light is valuable. Slight additions of light brought each of these images out of the shadows and illuminated the artist's true intent. Remember: it's not about how something looks; it's about what's possible when you add light.



6. ON-LOCATION PORTRAITURE

Off-camera flash photography and **on-location portraiture** go together like peanut butter and jelly. The options and rewards of creating light while in the field are as limitless as your imagination.

PORTRAIT PHOTOGRAPHY IS CHANGING

The leash has been cut. The use of off-camera flash brings with it the freedom to take our message-building skills outside—away from the stale props and overused reflectors of yesterday. Finally, our creative voice can shine unhindered as the world becomes our well-lit backdrop and our vision grows as the scenery changes.

Off-camera flash photography has brought the studio outdoors—and with it all of the options, advantages, and challenges of unrestrained light. You can now seize upon nature's gifts or capitalize on man-made alternatives. With the aid of family and friends, even the most problematic of shoots are quickly reined in. When shooting in the city, it's wise to stay away from the use of tripods or anything else that can impede traffic. Not only is it dangerous, but chances are that the city will require permits. Avoid the hassle and enlist some help.





A NEW TRUTH

As portrait photographers using off-camera flash, each new outdoor location brings with it amazing possibilities and a chance to test our skill, knowledge, and competence. Gear choice will be a testament to our adventurous side. Do we take one light connected with a cord or several and use wireless options? Do we ask friends or family to hold the gear or do we employ light stands, hand-held booms, or beanbags? Will we visit an exotic locale for the ambiance, or do we tackle the hustle and bustle of downtown? Are we up for a trip to the mountains, hauling sandbags to keep light stands from blowing away? Or do we head to the beach, wrapping each flash in its own plastic bag to protect the gear from sea spray? Creativity, as you might have guessed, may just lie in our answers to these questions.

WHAT TO EXPECT

If you're new to the idea of using off-camera flash for your on-location portraits then be prepared for something very special: the lights change everything. Every rule that you thought you knew now doesn't apply. Every weather condition—rain, sunshine, muggy, cloudy, even a tropical storm—brings new opportunities and new “looks” for your message. There is no need to ever worry about having the “right” light; you're going to be bringing it with you. With enough flashes and modification devices, you can easily replace the sun as your main light source when it's just not cooperating, creating sunsets and mood anywhere, at any time you want. Plus, you'll still maintain complete control over your lighting, depth of field and



One large softboxed flash was used to illuminate our model's face. It was held by an assistant slightly off camera. The background, with its beautiful shapes, lines, and color, needed to be in crisp focus, so a very small aperture (f/16) was chosen. A redder-than-normal white balance was incorporated to add drama and draw attention to the model more quickly.

Looking to the Future

After you've seasoned a bit, search out more challenging and difficult situations. Drive away from the familiar and task each shoot as never before. This adventuresome spirit—not the overabundance of unused equipment or ideas—is what builds great photographers. Stay fresh and keep exploring your heart and vision for more possibilities. This is the true path toward creative freedom.



Challenge yourself and your equipment whenever you shoot outdoors. If you're comfortable using one off-camera flash, then push yourself to use two. If you use indoor studio lights, create a set for outdoors. Don't settle for the ordinary.

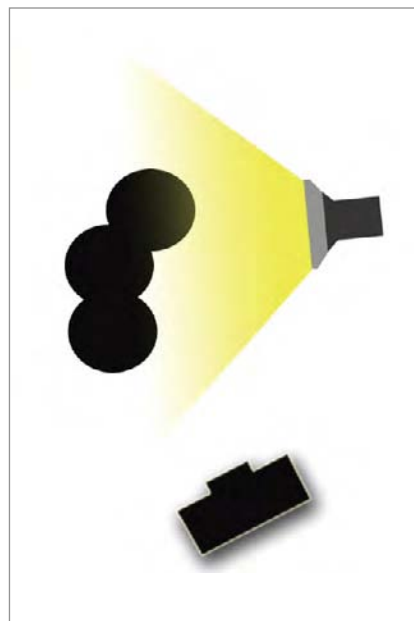


perspective—something that's nearly impossible if you're only using one on-camera flash.

A FRESH APPROACH

Keep things extraordinarily simple at first. Master the use of one light. Learn what it takes to support it, to modify it, and how to trigger it. Use the flash both indoors and out. Demand as much from it as you do from your camera and subjects. Practice shooting with the flash set at full power, then modify it. Don't accept a poor image. Review each shot as it is taken—and if you

One softboxed flash was chosen as the main light source for this image. The flash was placed on a beanbag on a nightstand and aimed straight at the family. A little hot breath on the lens gave the blur, and a polarizer stripped any excess glare.



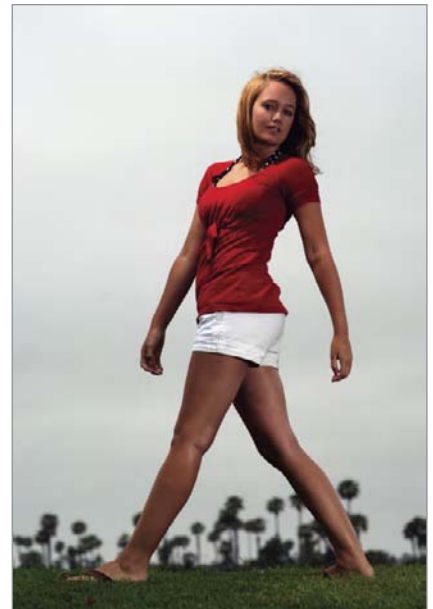
don't like it, fix it right then. Each bad photo now affords you experience, so get as much of it as you can. Learn from your mistakes and make them work for you.

DOUBLE YOUR FUN

Two lights will always offer more options. The placement, height, angle, and power output can be adjusted independently—and you can add separate filters, gels, and modifiers. Once you've moved on to two flashes you will need to think about using some kind of light stand. Keep in mind that, when it comes to support, you get what you pay for. Choose a cheap stand or an inexpensive tripod and you can expect trouble. It's best to go with a quality product rather than an inexpensive one that will break or, worse yet, fall over.

Softening the Light

Direct flash, even when off-camera, can still be quite harsh. You may want to consider purchasing a variety of softboxes. These enlarge and diffuse your light source making them a must for any off-camera-flash portrait photographer.



Two lights with no modification were placed at opposite sides of our model for this series of images. In the first image the lights were turned off. In the second image, the left light was turned on. In the last image both lights were fired. The differences are obvious—and very important.

Light stands, sync-cords, extending handles, softboxes, snoots, reflectors, and more await. Get creative with your tools—but, more importantly, get to know them before you go out and shoot.



If a support tool that you
need can't be purchased,
then make one.

TAKING IT TO THE NEXT LEVEL

Creativity in portrait photography really kicks in when you start adding several off-camera lights. You'll eventually search out tools and accessories to make the job of holding them even easier. Get creative with your support systems. Call in favors from family and friends, ask your kids, your wife, or your husband for help. Use tools you already have, such as tripods, monopods, and beanbags. Combine your modification tools; use a snoot on one flash and a softbox on another. Change the ways you introduce light to the scene. Drag out some of that old studio equipment and modify it to suit your new outdoor needs.

Don't be afraid to challenge the norm. If a support tool or modification contraption that you need can't be purchased, then make one. You would be surprised at how far a few strips of Velcro, a pair of scissors, and some black foam will get you.

DEALING WITH GLARE: A "POLARIZED" REMINDER

If you're unaware of how powerful a polarizer is when using flash photography, then you haven't been using one correctly. For the best results, place

your lights 90 degrees from your lens to remove any glare they produce. If you mistakenly add light from the wrong direction, you will create more of a problem than any polarizer can handle. Remember, you'll still need to turn the polarizer (no matter the type) to make it work. If you don't, then your off-camera flash photography will always be lacking the punch that other photographers' images have. (*Note:* If you're shooting in any automatic mode, you'll need to purchase a circular polarizer. If you're a manual shooter who uses manual focus, either a circular or linear polarizer will work just fine.)



Polarizers

Want the most from your polarizer? Then learn to shoot in manual. Unfortunately, polarizers can't work at 100 percent if the camera is in any automatic setting. The camera, in its attempt to capture average images, will actually fight the desirable effects the polarizer produces.

The top image was created with one unmodified off-camera flash placed to the right of the model. A polarizer was attached to the lens but was rotated incorrectly. In the bottom image, the exact same camera settings were used, and the same flash was fired, but the polarizer was now rotated correctly for maximum effect.



Don't let anything stop you from getting the image you want. Off-camera flash offers the freedom to take the shot anywhere—even if the location is a bit wet. Here, one softboxed flash was connected to the camera via a sturdy TTL sync-cord. This allowed the off-camera operation of the flash and offered the option of high-speed syncing, a vital part of the production of this image. An angle of view was chosen that allowed the polarizer to eliminate the majority of glare from the sky. The flash was also pushed as far from camera to the right and left as possible. While this is not the perfect location for glare removal—it's the best that can be done while hand-holding a flash over the water.

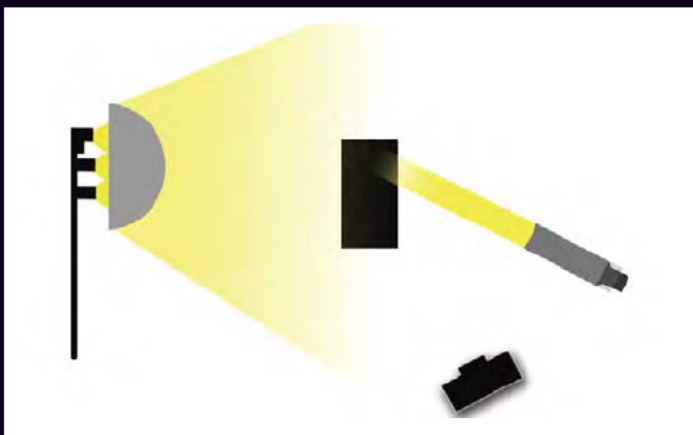




Shooting downtown poses its own unique set of problems. Not only do you have the typical lighting issues any outdoor setting offers but you have the hustle and bustle of a vibrant city to work with, as well. We suggest a few scouting runs prior to the shoot itself. Traffic, both pedestrian and vehicular, can prove a nightmare for city shots such as this. Get to know when certain locations are “clean” and free of people and cars. Hunt for locations that offer a certain “feeling” and make sure your models and lighting match.

Three modified flashes were used in the creation of these images. One softbox, a snoot, and a light funnel (see page 98) were employed. Two flashes were held in place by an assistant using a modified extending handle and one was handheld. A very large aperture (f/1.2) was chosen for the blur and a higher-than-usual contrast setting was picked in-camera. The cross-polarizing technique (see page 53) was employed to combat our limited flash-sync speed.





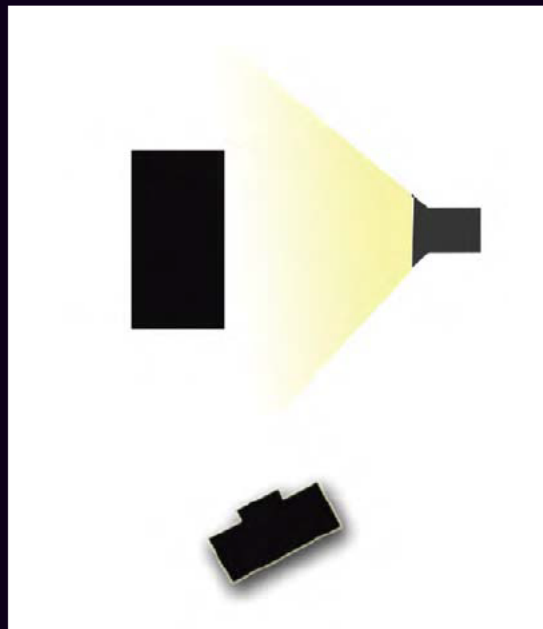
Sometimes two off-camera flashes just aren't enough. When it comes to creating mood, very few off-camera flash options can beat an umbrella holding three lights. In this image, there was a need to slightly overpower the afternoon sun. Three flashes were loaded under a studio umbrella pointed at our subject. Another light was funneled directly at the model's head and shoulders. The shallow depth of field was accomplished with the aid of a super-large aperture ($f/1.2$) and a stack of neutral-density filters. A redder-than-usual white-balance setting was chosen to mimic a sunset, and a higher-than-usual contrast setting was used for mood. A very fast shutter speed was chosen to darken the background. The composition and design are courtesy of every Mark Twain novel read as a kid.



One single softboxed flash placed directly to the right of the model provided plenty of light to illuminate our subject.



Two simple softboxed flashes were used in the creation of this image. One was held by an assistant to the left at a 90 degree angle (to allow for the polarizer to cut glare). The other flash was held by the photographer and positioned slightly to the right.

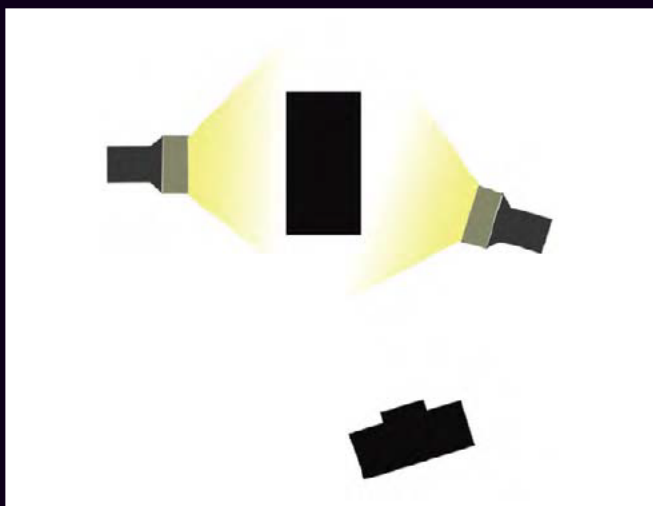


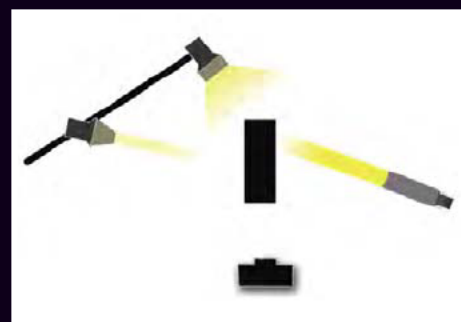
One unmodified flash was chosen as the main light for this image. Both the model and flash were positioned to take full advantage of the polarizer. The filter was turned, the shutter speed chosen, and higher-than normal contrast and saturation settings were dialed in.



Two softboxed flashes, set on two light stands, were positioned at right angles from the camera. The model was caught in between. The power on the flash to the left was increased slightly. A polarizer was turned, a lower contrast setting and higher saturation setting were dialed in. A redder-than-usual white-balance setting was chosen.

A very large softbox covering one flash was set behind the camera and to the left of the photographer. The soft, cascading light easily engulfed the model. Lower-than-usual contrast and saturation settings were employed.

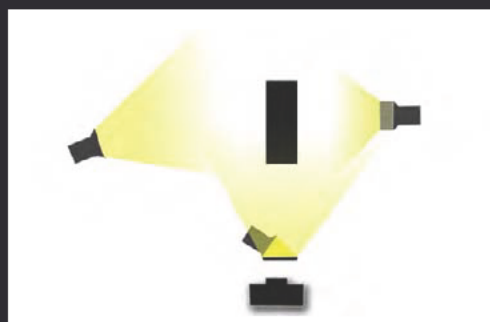
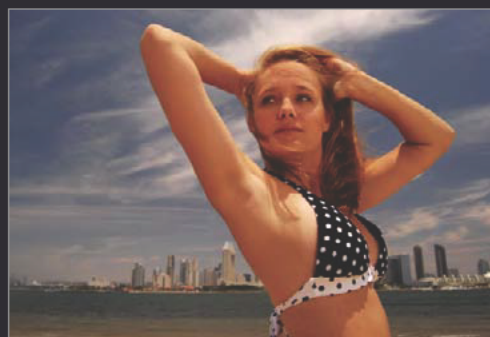




A flight of fancy is sometimes just a “boom” and a light funnel away. In these images, a slightly modified extending handle added the needed light from above and to the left of our model. On it, a softboxed flash sat, producing the top lighting, while a snooted flash provided a more pronounced, pinpointed light for our model’s face. An assistant using a homemade snoot (light funnel) aimed his flash at the opposite side of our model’s face. The blurry background was accomplished through the use of a very large (f/1.2) aperture. Excess light was reduced by a stack of neutral density filters. A bluer-than-usual white-balance setting was chosen to ride with the nautical theme, as was a lower saturation setting. Contrast was raised a bit in-camera, as well. The entire shoot lasted ten minutes. We drove up to the location, got out, and shot—then headed to our next location. It really does pay to scout your locations in advance.



Not much beats an afternoon with a model on a secluded beach—especially if you’ve got three flashes and a softbox. Here, a classic setup was used. Two modified and one straight flash were used. The forward-facing flash was reflected off a small piece of plastic, enlarging the light and ensuring the elimination of any unwanted shadows. A very small aperture (f/8) was chosen to help with the required depth of field. The distance between photographer and model proved the most important “setting,” as it’s what dictated the beautiful perspective. A very red white-balance setting was chosen, a polarizer employed, and a slight in-camera hue shift was introduced to bring out the classic pin-up feel. Higher-than-usual contrast and saturation settings were also chosen. By changing these in-camera settings, the photographer can more easily express how something makes him feel.



7. BLACK & WHITE PHOTOGRAPHY

Off-camera flash **for the black & white photographer** means more than just adding light—it's yet another way to use color to adjust tones.

BLACK & WHITE: A NEW BEGINNING

Thanks to the digital age, in-camera black & white photography is seeing a resurgence. Built-in color filters, contrast choices, and white-balance options have given the photographer the in-camera control he has always wanted—in essence, eliminating the need for postprocessing corrections and modifications. Add to that the power and flexibility of the off-camera flash and the world of black & white photography is forever changed. A new way of shooting has been born and a new approach to this classic art form is taking hold.

In-camera black & white options can easily rival, if not surpass, those offered by after-the-fact editing programs.



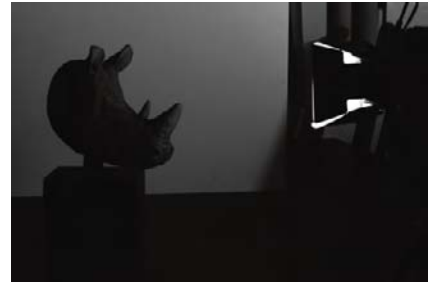
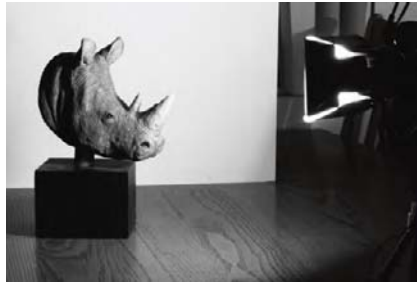
The world of black & white photography has certainly changed since the introduction of the digital camera. With in-camera options now giving the photographer all the classic color-filter options, along with the surprising twists that colored gels over our flashes offer, in-camera black & white photography is seeing a resurgence—and the images that are being produced are amazing.



In this illustration, we see the use of three off-camera flashes—all modified and aimed at different parts of our model. When creating image with more than one flash, think small. Light as many different graphic tiers as possible and make each decision (as to what to light) a meaningful one.



Here, we see the startling effects of shooting in black & white and using the green and then the red filter option in-camera. Learning to see in black & white is a skill that takes time to build. Immerse yourself in this art form; it's a very classic way of seeing the world.



The left image shows the addition of a red gel filter in front of the flash. The center image shows what happens when the photographer switches to black & white in-camera and dials in a red filter (while still employing the red filter on the flash). The right image shows what happens when the photographer dials in a green filter. Notice the striking difference between the last two images. When a red filter is applied to the flash and a red filter is dialed-in to the camera settings, you can easily increase or decrease the apparent power output of your flash. Similar effects occur when the other black & white in-camera filters (yellow and orange) are applied.

THE SECRET IS OUT

As most of us know, great black & white photography requires the artist to see the world in shades of black, gray, and white—not just color. By lighting individual tiers of graphic information with a flash, the skilled photographer can pull information from the shadows, using colors that were once hidden to change the very tones present in his image. Colored filters and gels can also be added to the flash or flashes, further altering the tones a black & white artist can play with. This is truly a new way of shooting in black & white—a new way of thinking, a new way of visualizing. The pictures created are more a testament to the artist's vision than what was in front of him.

Colored filters and gels can also be added to the flash, further altering the tones . . .

A GOOD PLACE TO BEGIN

If you've never shot in-camera black & white before, first take the time to learn it inside and out *without* the addition of man-made light. Search out a mentor, buy a few good books—do whatever it takes to fully comprehend the true options of going black & white. Practice, fail, and practice again. Work hard at learning the art and push yourself. Then, when you've gone as far as you can, add your first off-camera flash to the mix.

A Little Truth Goes a Long Way

Effectively using flash in black & white photography requires a firm understanding of the above-mentioned concepts and a wealth of experience to boot. The off-camera flash photographer really has to understand how this type of imaging works if he wants to succeed. In-camera black & white with an off-camera flash is not something for just anyone; this is visualization taken to the highest level and it needs to be respected more than just toyed with.

Colored Gels

Here's a trick that every in-camera black & white photographer should know: by adding red light and choosing the correct in-camera filter (red), you can increase the apparent output of your flash five-fold!

As most in-camera digital black & white photographers know, when a red in-camera filter is applied, anything that is red becomes much brighter. If you simply carry that thought process on just a little further, then it makes perfect sense that if the light itself that was illuminating your subject were red, then the light it would produce would be much, much brighter.

This proves amazingly helpful when trying to separate a subject from a background with a tonal variance (such as making the background slightly darker). Simply adjust the lighting to provide for that dark background, then slap your subject silly with as much red light as your flash can muster. Keep in mind, of course, that you also have to use the red filter in your camera. If you were to choose to use green, then it would be as if your flash were set on its lowest possible setting—even though you might have the flash's power turned up as high as it can be.



LumiQuest offers an amazingly easy-to-use gel filter system. A holder sits atop your flash and you simply slide in the gel of your choice. Here, we see a photographer using a red gel for off-camera flash black & white work.



ABOVE LEFT—Here we see the effects of a red gel filter placed in front of the flash and a red filter chosen inside the camera. **ABOVE RIGHT**—The in-camera filter was switched to green. **LEFT**—Here we see a perfect example of how to use this technique. Since this red-on-flash/red-in-camera filter combination produces an apparent excess of light, the photographer can easily darken his background—no matter what the natural light may be. By simply overpowering his now “super” flash (with either a fast shutter, neutral density filters, or the cross-polarizing technique) he can quickly create a darker, moodier, and more blurry background than would have been possible in the color world. In this photo, a fast shutter speed (FP) ($1/2000$ second) was dialed in and an aperture of $f/1.2$ was used. The red-filtered flash was hand-held and aimed at our model's face, giving it more apparent light than was possible any other way.

BE AGGRESSIVE

Unlike the gentle approach that is often required when learning to add light to portraits or close-ups, when working in black & white, you can give it all she's got. Slam your subjects with as much light as is possible. Turn that power up, open up the aperture and get close to your subjects. Sure, you'll make mistakes—and, yes, you'll end up blowing out a few things at first—

What a difference the addition of light can make in a black & white image. In the bottom image on this page, light from a flash was included at full force without modification from just a few feet away. In the top left image, the flash wasn't fired.





One “funneled” flash was used to highlight only a portion of this scene. Funnels are an effective way of controlling light from a flash.

but it’s important to learn just how far you can push things in black & white. You may be shocked at how far you can go.

BE PRECISE

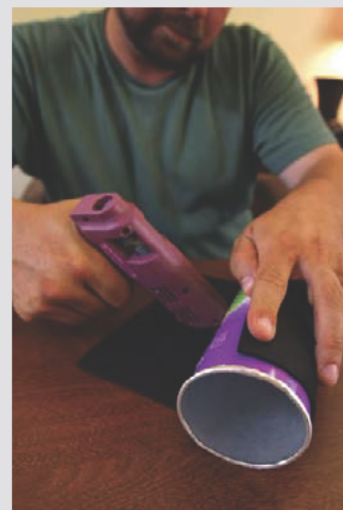
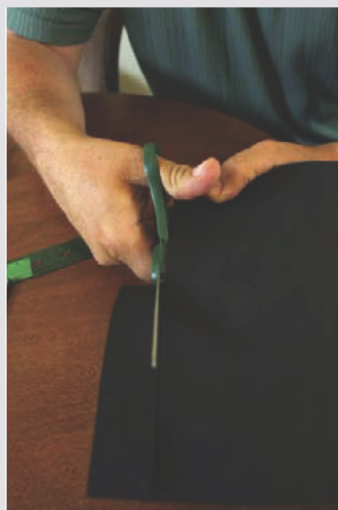
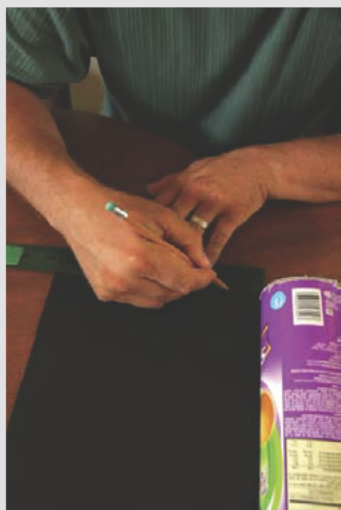
When shooting in black & white, direct the light and be precise with your placement. Instead of enlarging it, narrow the beam. Use a snoot to pinpoint the exact spot where you want to add light.



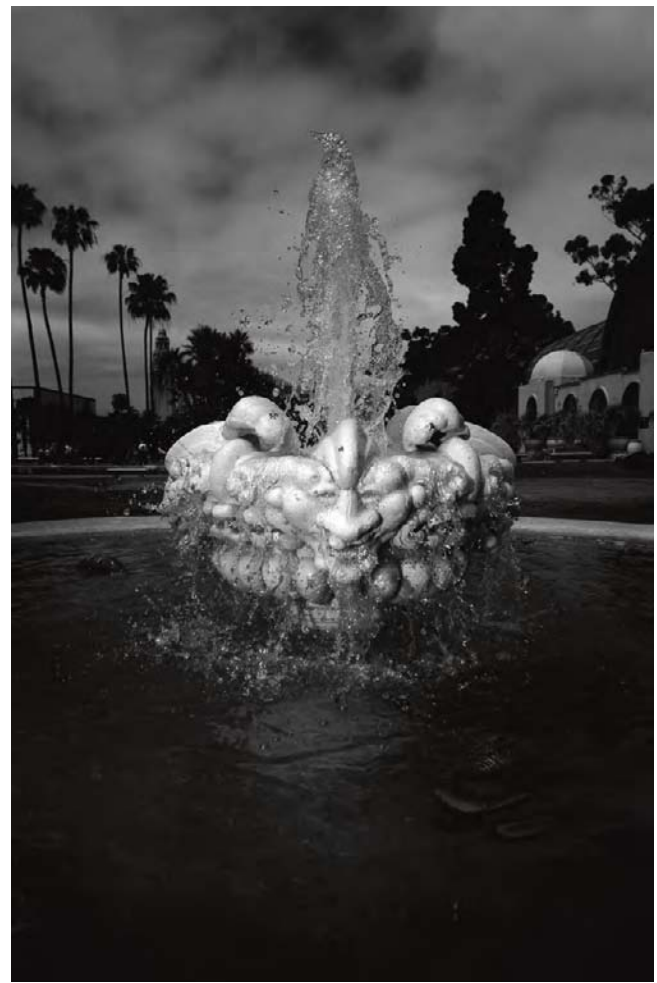
As usual, start your message-building process with your background, working your way forward. When you get to a tier that needs some light, be very specific with the beam. Narrow it and slice into your image like a razor. Point that light where it needs to be, visualize the contrast you’d like to see between it and the rest of the scene, then make it happen. If your snoot doesn’t narrow the beam enough, use a light funnel. While a normal snoot affords a direct beam from your flash to your target, a light funnel sharpens that beam even more. The funnel is a bit longer than a normal snoot and gives you a more ergonomic way of controlling the beam. Think of a light

Making Your Own Light Funnel

Snoots are amazing modifiers—but none provide the directional light that a good light funnel will. We use a normal-sized potato-chip canister, cover it with black foam (for aesthetic reasons only) and we're ready to shoot. The canister can easily fit over most flashes—just slide it in place and go.



Direction and power is of the utmost importance for the off-camera flash photographer. A light funnel enables the photographer to be extremely precise with his light additions (as seen in the image on the left)—though, admittedly, the tool will take time to master.



LEFT—In this image, a hand-held flash was “funneled” directly at our model’s face. The flash was covered with a red gel and an in-camera red filter was employed to boost the apparent output of the flash. A large aperture was chosen to blur the background and a high-speed flash-sync option (page 45) was called into play to eliminate excess light. The entire process took less than thirty seconds. The aperture used was $f/1.2$ and the shutter speed was $1/4000$ second. And this image was shot at noon—in bright daylight! It pays to know what you’re doing. **RIGHT**—Here, one funneled, red-filtered flash, a small aperture ($f/11$), and a fast shutter speed ($1/200$ second) created a very brooding image in the middle of the day.

funnel as a rather muscular snoot, pushing light quite aggressively in only one direction. This simple, homemade light modifier is one of the most effective ways of adding pinpoint precision to your addition of light.

The overall goal of the funnel remains the same as the snoot: it adds a lot of light to one small spot. The funnel can be used in color photography as well, but its output usually needs to be curtailed with the help of some sort of modifier. (*Note:* A light funnel wreaks havoc with automatic settings. If you’re planning on using a light funnel, manual control will be best.)



In the beginning, expect to miss your mark quite often when using the light funnel. Your inexperience will show when photographing small animals, moving subjects, or multiple exposures (as the flash just may not touch anything!). Over the course of time, however, you'll get better with your aim and may even begin incorporating the funnel in your special-effects shooting, portrait work, and even your macro projects.



Here, a simple photograph of a small farm animal takes on an almost religious quality with the introduction of man-made mood; lighting and contrast overwhelm our senses. Two snooted flashes were used to illuminate the animal. Pairing these with the correct choice of in-camera filters, the contrast and mood of the background sprang forth.



We love the classics—not just in our photographic approach to creating art but in our movies, as well (*Casablanca* and the *Maltese Falcon* are two of our favorites). Creating this type of film noir image is something we love to do and our approach is as classic as the films themselves.

In those films, it's all about mood and this had to be addressed at the very beginning of our image-making process. Therefore, we started with the background (as always). Since we were shooting in-camera black & white, we began by dialing in a red filter in the camera. This helped drop the bright blue sky to darkness. We also positioned ourselves to take advantage of our polarizer (page 55). These two simple things should easily blacken out most skies—no matter how bright it really is.

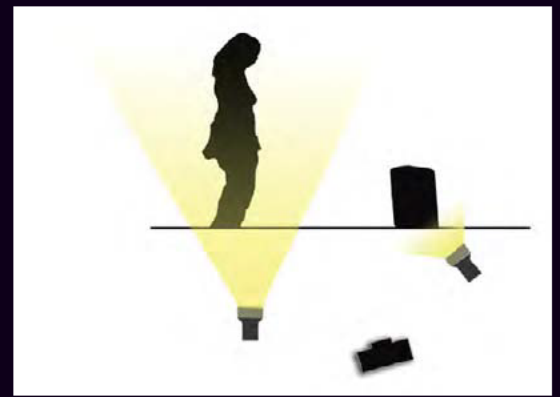
Next we chose an aperture that ensured the required depth of field (since *Citizen Kane*, it's an easy truth that great black & white films kept everything in focus). An aperture of f/11 was decided upon. After aperture choice, a decision about the shutter speed followed. In this case, a shutter speed of $\frac{1}{80}$ second proved adequate, as it lit the background exactly how we wanted it: dark and brooding.

Next came the lighting. To mimic those classic films, we knew that two lights would be required: one directed at the top of our model and another to light just the face and shoulders. Each of these lights would need to be modified slightly. Because it would give a far-reaching stretch of coverage, we chose a LumiQuest Quick Bounce for our top light. For our lower light, a small LumiQuest soft-box was chosen to give more of a spotlight feel.

We attached both lights to an extending handle and were ready to shoot. The extending handle was hand-held slightly above and to the right of our model. A quick test of the flash power settings led us to the perfect combination.

In less than four minutes, a series of images was created in-camera—images that in no way resembled the way the scene and subject looked in front of us.





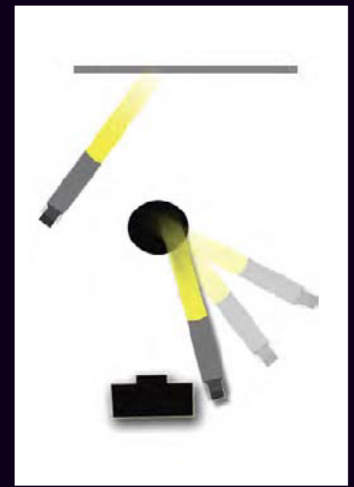
Two softboxed flashes were needed to enhance the mood of this scene. An in-camera red filter was chosen to help darken the sky and a polarizer helped crystallize the statement. Two modified flashes were used, each equipped with a small LumiQuest softbox. One flash was hand-held and pointed directly at our model while the other was placed on a beanbag lying on the ground. The flash was then aimed directly at the tombstone.

This fun image shows what's possible when all of your choices are explored. Keep in mind that this is how this image was shot; no after-the-fact editing was required.

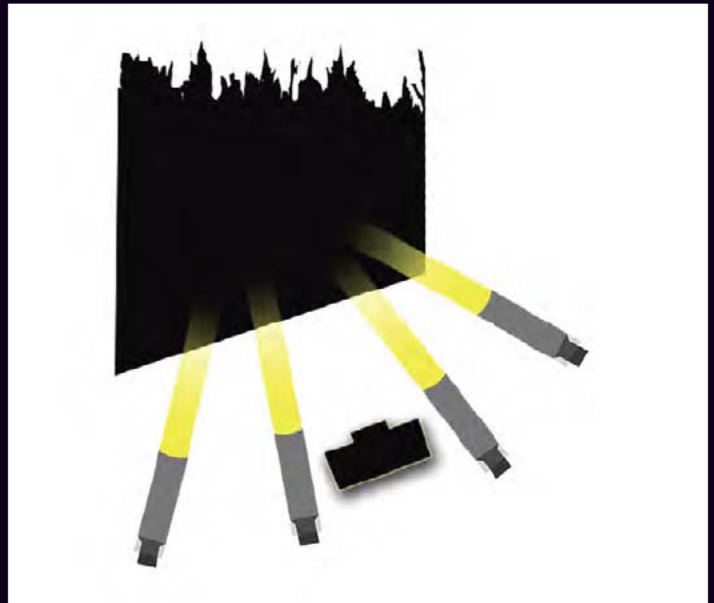
We begin with an exploration of this image's background, which must include the very specific darker borders you see running diagonally around our model. This "trick" is accomplished in-camera by holding two graduated neutral density filters in front of your lens. Each is positioned to where their clear fields run directly across your model and the darker outside edges "hide" the corners. In essence, you are producing a clean strip of bright light.

Next we select an in-camera red filter to drop the blue sky to black. Here, this is even more pronounced because of the white clouds. A shutter speed of $\frac{1}{200}$ second was chosen—the fastest possible choice with our given equipment (due to its flash-sync speed; see page 42). An aperture of f/8 was then chosen to both bring the clouds into slight focus and help darken the background. Our polarizer was also spun to solidify that very moody background.

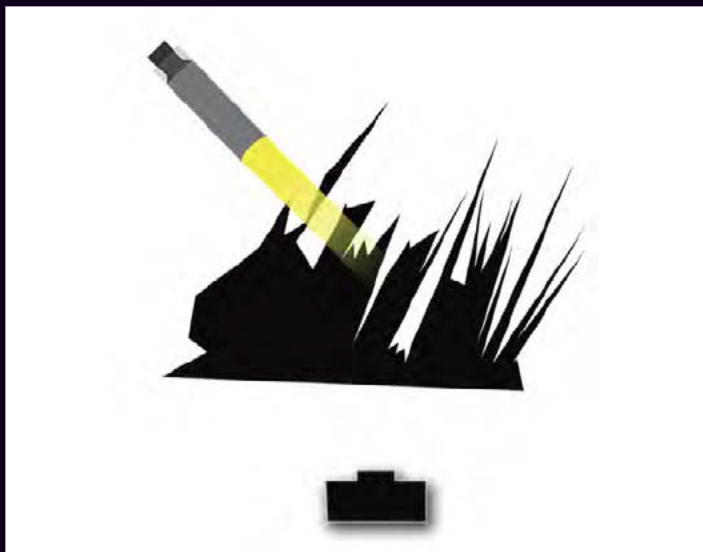
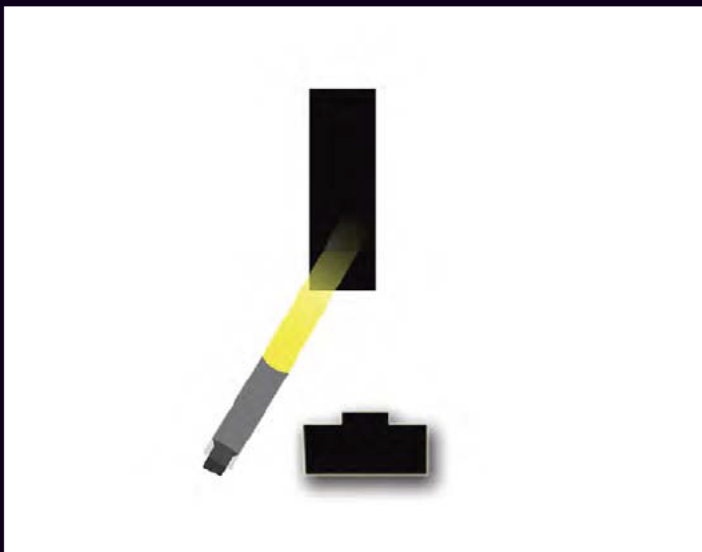
An assistant then directed an off-camera funneled flash down toward our model, mimicking the natural light of the sun. The flash was triggered through the use of a Cactus brand radio transmitter and receiver. The entire process took less than thirty seconds.



Two funneled flashes were used in all of these images. One flash, on a light stand, was directed at the wall opposite our model. The power output was adjusted to allow for only a small glow behind our subject. A very high contrast setting was chosen in-camera, as was a red filter. The choice of the red in-camera filter was specific in design: our model was wearing a green dress, so the red filter helped keep the dress in the dark (conversely, we could have chosen an in-camera green filter to make the dress appear much brighter). The power setting on the front flash was then adjusted to reach about three feet. A shallow depth of field was needed, so an aperture of $f/1.2$ was chosen. Since natural light was not part of the equation a $\frac{1}{200}$ second shutter speed (our camera's flash-sync speed) was chosen. Various angles of flash were then explored.



Four funneled flashes placed on the ground and aimed at the bottom of the field provided the lighting. A graduated neutral density filter ensured the mood of the sky. A small aperture ($f/11$) was chosen to guarantee the required depth of field and a shutter speed of $\frac{1}{80}$ second gave just the right amount of light to our background.



One funneled flash was used and handheld. An orange filter and lower contrast setting were chosen in the camera to allow some the sky to shine through.

One hand-held funneled flash was pointed directly at a small group of twigs on the ground. Then, the in-camera contrast was set a bit lower than usual to allow for more detail. A green in-camera filter was also employed to bring out even more information. A small aperture (f/11) was chosen, since great depth of field was required. A shutter speed of $\frac{1}{160}$ second proved sufficient for our background.

8. CAPTURING MOTION

Capturing motion with your off-camera flash opens a world that is seldom seen. Being creative means pushing your vision and your equipment further than ever before.

VARIATIONS ON A THEME

As an artist with an off-camera flash, you have more options than most when it comes to dealing with movement. A quick splash of light from any angle or height will freeze things when nothing else will. It will also clear up a poorly executed pan or fill in the shadows on quickly moving subjects. You can, as always, highlight any tier of graphic information. Plus, if you use a



With the use of an off-camera flash, a new dynamic is added to motion photography—a way of incorporating both the emotion of movement with the stopping power of the flash. With the aid of one simple corded flash, the photographer gains a multitude of options.



fast enough shutter speed, you can darken even the brightest sky, ensuring that you can keep your true intent illuminated above everything else.

STARTING WITH ONE FLASH

As always, if you're new to all this, begin with one flash connected to your camera via a wire and try to freeze some action. It doesn't matter what—just freeze *something*. Even at slower shutter speeds, the flash will help freeze movement. Keep adjusting the power output on the flash. Change the aperture in the camera. Move closer and further away. Review your images. Notice how even the slightest changes can weaken or strengthen the flash. Now, modify the light. Use a softbox to enlarge it or a snoot to direct it. Get to know the magic that one flash offers before you move onto more.

ADDING MORE LIGHT

When your skill allows it, move onto two flashes and trigger them wirelessly. Once you've mastered this, move onto three flashes—and then even more. Be creative with your lighting setups, triggering methods, and modification rituals. Don't keep doing the same thing each time you shoot. Explore the possibilities of motion frozen with flash while paying attention to how things change in the rest of the image. You will use all of this experience later.



Two unmodified flashes gave this image the needed boost of light it deserved. The flashes were set off with the help of two optical slave devices called "peanuts." These extremely small optical receivers are connected to a PC wire that runs directly to each flash. When these "peanuts" sense a bright contrast, they set off the flash unit they are connected to. In this case, the camera's pop-up flash provided the needed contrast. When the pop-up flash fired, so did the other flashes. The pop-up flash did not illuminate any portion of the scene; it was only used as a triggering device for the much more powerful off-camera flashes.

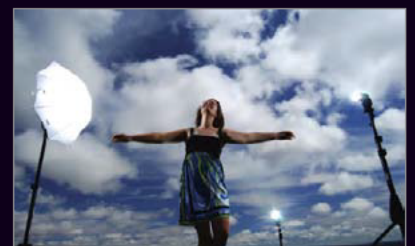


You have three choices when dealing with motion and using an off-camera flash: freeze it, let it blur, or do both at the same time. Here, one hand-held flash brings our message into the light.





It's amazing what your images can look like when you employ as many lights as you possibly can. Remember: the more power you have, the more options you gain.



Seven unmodified lights set to full power were employed to freeze the twirling model. Four were used behind an umbrella, two were set on light-stands, and one was hand held by an assistant (and sometimes the photographer). High contrast and saturation settings were used along with a bluer-than-normal white balance.



Two unmodified lights perfectly illuminated the right and front side of our model. A very wide-angle lens (18mm) was used.

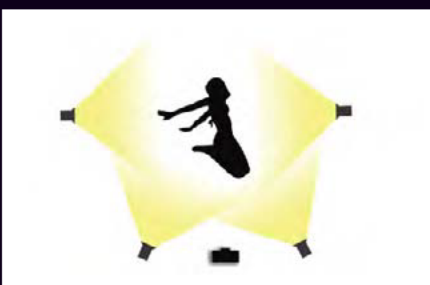


One off-camera, unmodified flash can still be quite effective in freezing detail. The shallow depth of field seen here was accomplished with a very fast 85mm lens (f/1.4). The longer focal length also allowed the photographer to move backward, dramatically changing the offered perspective.





Three unmodified flashes set to full power are attached to an extending handle in the above images. The beauty of hand-held “booms” is that there is no need for an assistant. They are lightweight and easy to move on your own.



Four unmodified flashes set to full power were needed to light each corner of our model during this rather dramatic jump over the San Diego skyline. A very light red filter was added to each flash to complement the redder-than-usual white balance setting. In-camera contrast, saturation, and hue choices were adjusted to taste. A smaller aperture (f/11) and shorter focal length lens (18mm) were used to help with the required depth of field.

Now, increase the power of your flashes by combining them. Create as much light as possible and see what happens. Overpower the sun itself if you can. Know what gear it takes to have complete control over every aspect of the scene. And don't limit your vision when it comes to subjects, either; there are more things to shoot than just people, so try it on moving animals, as well. Understand the maximum amount of light you can produce with all your gear, then figure out how you can use it with all moving subjects—at any time of the day or night. .

SNOOTING MOVEMENT

Try isolating just one part of the action with a snooted hand-held flash or light funnel (see page 98). You'll probably need an assistant for this. Let

When you stop trying to capture the world as it appears, magic can happen. Long before cameras could sync a flash with the front and rear curtain, photographers would trigger their flash in the middle of a long exposure. The idea was to freeze a portion of the scene while allowing the rest to blur. This type of “mid-syncing” has long been forgotten by most—but for those up for the challenge, the rewards are amazing. In this image, an assistant held the flash and triggered it manually, firing at the frozen beverage sign while the photographer took the image. After the flash fired and while the exposure was still “cooking” the photographer began zooming to create the blurs you see. (*Warning:* This technique will open up a new world of possibilities. Be ready!)





The off-camera flash offers amazing options. When shooting fast-moving subjects, you may find that your flash-sync speed doesn't offer the needed stopping power. As discussed in chapter 2, by employing a TTL cord and connecting your off-camera flash directly to your camera, you can (as long as your equipment permits it) use high-speed flash sync to shoot at faster shutter speeds.

everything other than the subject drop into shadow, clarifying one small element with your flash. Aim it at a face, at a skateboard, or parts of a bicycle. Concentrate on tiers of graphic information that most photographers overlook. Keep the size of the flash very small. With enough practice you and your assistant will be able to track even the fastest-moving subject.

SLOW-SHUTTER CREATIVE TECHNIQUE

As you know, your off-camera flash has the power to freeze whatever it touches. As a photographer you're also fully aware that with a slower shutter



Without flash.



With flash.



Not only can you move with your subjects to create amazing panned images but you can also move against your subjects' movements. You can spin the camera, zoom in and out with your lens, move your body forward and back—the options are as vast as your imagination.



ABOVE—A quick burst of light at the beginning of an extremely long exposure brought in the detail required on the flower. Then, the camera was slowly moved from one side to the other, creating the dramatic trail of colored light you see. This is a very difficult technique, but it is one that every good off-camera flash photographer should learn. **RIGHT**—When movement (blur) and your flashes' ability to freeze movement collide, the effects can be quite startling. Many of today's off-camera flash artists use this combination to create images that have never before been attempted. In-camera art is coming to the forefront of creative expressionism today, and the off-camera flash photographer is leading the way. Here, a very slow shutter speed allowed for the dramatic movement captured while the flash (fired at the end of the exposure) froze the bird's head.



speed comes the ability to blur motion. But did you know that you can put these two effects together? Combined, a slow shutter speed and off-camera flash offer a chance at expressionism that only the bold and adventurous play with today.

Panning. This technique is all about blur and your ability to control it. Start with simple panning exercises—cars, bicyclists, and skateboarders make perfect targets. Shoot at $\frac{1}{15}$ second or slower, making sure to keep up with your moving subject throughout the exposure. Once you've mastered that,



Here, we chose an aperture of $f/10$. This allowed for the use of a slow shutter speed ($1/10$ second). While this combination proved effective for our background, our foreground subject stayed in the dark.



Next, a wired off-camera flash was employed to illuminate our subject. No other settings were changed. The camera was still held very still.



In this image, the camera and flash settings remained constant (as in the previous image), however the photographer didn't. Instead of holding the camera still, he spun the camera in a clockwise direction during the exposure. Even though the camera movement caused a very blurry background as seen here, our illuminated subject remains crisply in-focus.

try zooming on your moving target while panning. Yes, I know it sounds odd, but this is a book about creative techniques, right? Once you can zoom and pan at the same time, try adding your off-camera flash. Use a wired, handheld option to trigger the flash, set your camera to rear sync (see next page), and shoot. The effects will be quite interesting to say the least. You'll not only capture the motion of the pan and zoom but whatever the flash touches will be frozen as well. It's really spectacular.

Keep in mind that your subject doesn't have to be moving for this to happen; as long as there is blur, you can freeze whatever the flash touches. Whether you spin the camera, zoom, or just jiggle it, blur happens. Use that to isolate an intent. This technique will change your mind about ever putting a camera on a tripod again.

Spin and Zoom. We've been teaching people how to be artists with their camera for years, and one of the most popular techniques we offer is that of the slow shutter, off-camera flash, spin and zoom trick. It's a simple and very traditional idea that combines a slow shutter, extreme camera movement, and the use of an off-camera flash.

For an off-camera-flashed spin or zoom to be effective, you've got to use a slower shutter speed. We recommend $1/15$ second or slower for beginners. To get this, simply begin by dialing in a smaller aperture. Keep in mind, though, that if you use too small a hole you will be cutting the apparent output of your flash—causing you to use an excessive power setting, which may irritate your models. Try not to exceed $f/10$ or $f/11$.

Take a moment to make sure your lighting is correct. Next, grab a model and get your off-camera flash to illuminate your subject. You may want to use a light stand. Once you've got your power settings and a great picture, begin playing. Start by slowly rotating the camera while taking the picture. It's best if you begin moving the camera and then press the shutter. You'll see the movement of your spin and the jaw-dropping stopping action of your flash working in combination.



ABOVE (LEFT AND RIGHT)—In these images, the photographer zoomed his lens instead of spinning the camera. The first photo shows how it looks without the flash. The second illustrates the extreme stopping power of a flash. **RIGHT**—In this image, you see the combined effects of a slow shutter-speed zoom and spin. Notice how the off-camera flash still kept our model completely frozen during the turmoil.

Now, take it up a notch. Instead of spinning the camera, simply zoom in toward or away from your subject. We think you'll love the images you can create.

IMAGINE

Let's step things up a bit and think way outside of the box. What if you combined this slow-shutter, flash option with that of multiple exposures? What if you were to light a moving subject with a color-filtered flash, yet changed your white balance to favor another—and what if you did all of this while twirling the camera? What if you were to combine old-fashioned, in-the-front-of-the-lens, special-effects filters with movement, lighting, and tiering? What if you set your camera to fire the flash at the rear of the exposure and zoomed while you exposed the sensor? What if you just played with your camera and flash? What do you think would happen?



Front and Rear Syncing

Depending on your camera, you may be able to synchronize your flash with either the front or rear curtain of your camera's shutter (see page 42). Both options offer very unique effects. If you haven't played with them, do! You'll be shocked at what a difference it can make. (*Note:* The images here were all shot with the camera on rear [or second curtain] sync.)

9. EXPRESSIONISM

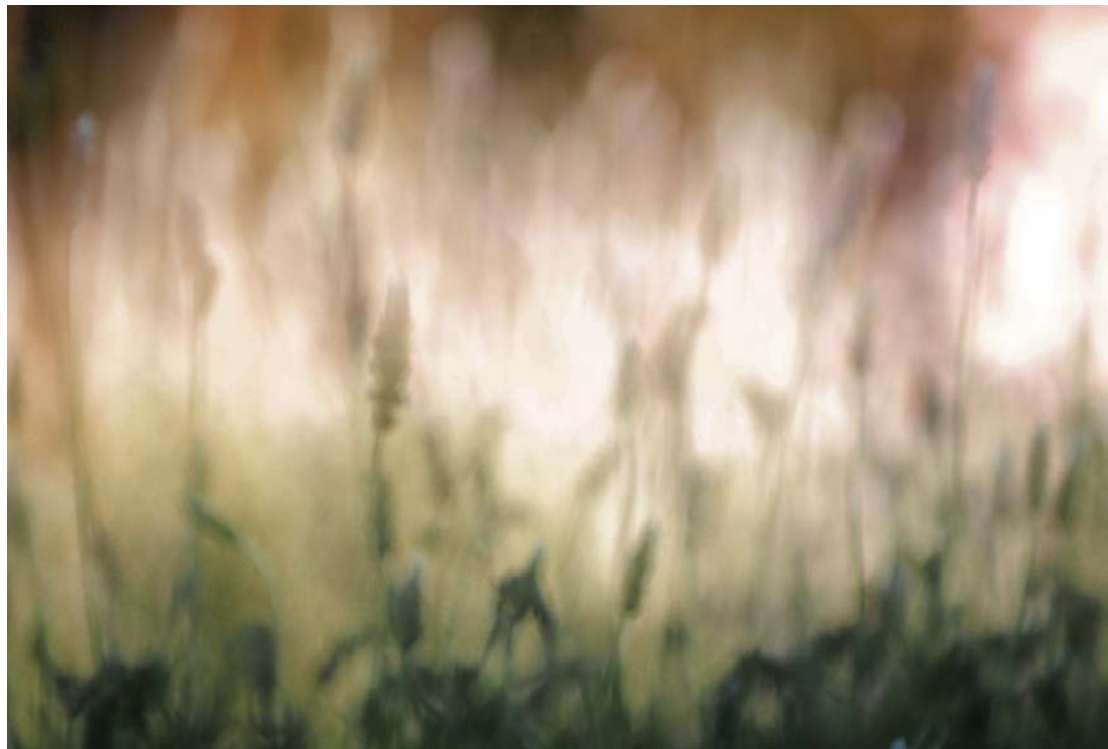
Expressionism is about sharing with others how something makes you feel. For the off-camera flash photographer, there is no limit to what he can create once he gives up what he sees.

LEFT—Here, a very slow shutter speed (the camera was actually set to bulb [B]) was needed to produce the painted effect. The exposure time was approximately one minute. The brush-stroked color and tones appear because the camera was moved during the exposure. An off-camera flash helped lock in the details at both the beginning of the exposure and the end. To do this, the flash was fired manually. As an added bonus (just to keep things fun) the focal length of the lens was also changed during the exposure. **RIGHT**—For an expressionist who uses a camera, the off-camera flash is a powerful tool that allows him to brighten up select portions of his art while leaving others in total darkness.

A NEW KIND OF PHOTOGRAPHY

We call it “painting with a lens,” others label it creative photography or toss the word “abstract” about. Whatever you call it, expressionism is a way of communicating how you feel. A photographer who digs deep into his heart and shares how he feels isn’t just a photographer; he’s an artist with a camera. His images rarely resemble life as we know it. Instead, they portray something visible only to his eyes—a kaleidoscope of color and ideas, of shapes and feelings, of lines and emotion, of tones and passion. They are as unique as the photographer himself. His images are not manipulated in the computer; they are created in the heart. His camera is but a simple tool that collects this information; his flash becomes an extension of his imagination.

For the off-camera flash photographer who’s gained a wealth of experience, expressionism becomes second nature. His flashes offer him an unending set of possibilities. His skill pushes him forward and his desire to explore a world unknown makes him special.



Collage-Building

Multiple-exposure options and the off-camera flash is a marriage made in heaven. Think for a moment. If you were to choose the multiple-exposure option in your camera (if you have it) and if you were to flash one exposure but not another, what would it look like? What if you would shake your camera during one exposure then hold the next one still and use your flash to light just one tier, then two? I don't think things get more creative than that, do you?



Too often, well-meaning budding photographers get lost in all the gear and technical issues. They begin looking for road maps and diagrams that show how to be expressive. While those can certainly help in the beginning, when you move beyond the basics you have to (and will most likely want to) do it on your own.

Art and true expressionism are never paint-by-number. Sure, you can see what others have done and use that as inspiration and guidance, but the real work has to be done on your own. Only you know, or can know, what you want to say—what you want to express. Only you can know what tools will be required to bring your vision to life. The best part is, once you've mastered the majority of the techniques shown in this book, you'll be ready to take your message-building skills to the next level. You'll be able to incorporate all the support, modification, and power options available. You'll be able to freeze moving targets or allow them to blur. You'll be able to shoot things close up or use your lights to illuminate tiers of graphic information from yards away. You'll be a master at creating images of people. You won't be afraid of getting wet and there will never be such a thing as a "poor" lighting situation.

The power of using flash off-camera is unlimited. An artist who uses it can set his vision as far off as he wishes—and with enough practice, he can make it happen. Art is not technical; it comes from the heart, not a tool. Sure, the pieces may seem complicated at first, but with time their use becomes easy.

Only you can know what tools will be required to bring your vision to life.

We begin anticipating what will happen and expect certain results. If our gear doesn't fulfill those dreams, we get creative and make it obey us. We'll change, modify, or even create brand new tools and techniques.

An artist isn't happy with the status quo; he pushes society to places it's never been. He uses his camera to introduce ideas and feelings that are unique to him and his vision. He isn't afraid of someone saying they don't like it. Human biases will always be there, but the off-camera flash photographer has already beaten the toughest one there is: he knows the world doesn't have to appear the way it appears—and he's already changed it.

OF ADVANCED TECHNIQUES AND THE SPIRIT TO USE THEM

The bottom line is this: if you don't have anything worthwhile to say, then no tool or technique is going to improve it. We've been teaching expressionism with a camera for years. We've created hundreds of techniques that allow the artist to soar. What we've found though is that if the original message isn't worthwhile, no trick, technique, or after-the-fact alteration will help. While the picture may improve, the artist's vision doesn't.



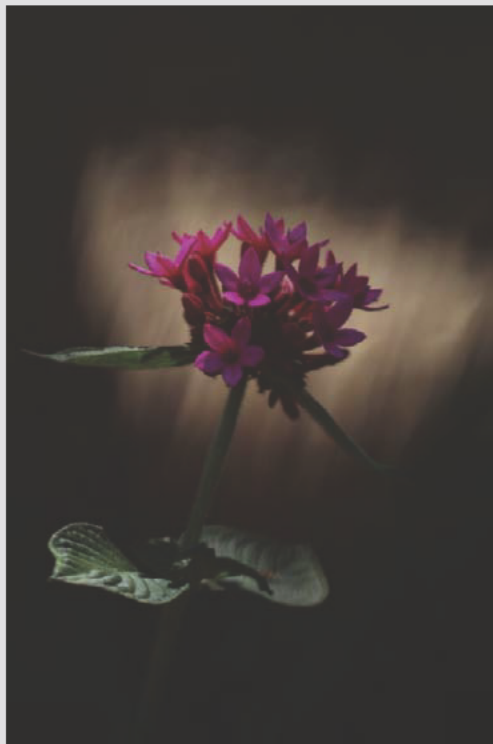
The heart of an artist soars on beams of light. With an off-camera flash or two, he can fly higher than anyone ever imagined.



Finger-Painting with a Flash

Some of the most intriguing techniques require little more than a snooted flash and your fingers.

The technique illustrated here is called finger-painting. It's a controlled blur trick that's done by literally putting your fingers in front of your lens. You'll need to blur them with an exceedingly shallow depth of field. Simply focus on the middle tier



of graphic information, light the back tier (or even your subject) with a snooted off-camera flash, put your fingers in front of the lens (opened slightly), and voilà—a finger-painted photograph.

We ask our students to think outside of the box and do away with the ordinary. From the start, we ask them to abandon their automatic settings, as most of these will make their goal of becoming a true artist with their camera more difficult. Creativity shines when there is skill to back it up. Being confident with your equipment and knowing what you want to say is paramount for your growth as an artist. Relying on a camera's automatic features stops that from happening. All the images you've seen in this book (except for those marked otherwise) were shot on manual with each flash being set to manual control as well. Yes, it takes a while to build up to that level of confidence, but it will happen if you let it.

Reevaluate your goals. If you're happy with what you're shooting, that's wonderful. Purchase a flash, work hard with it off-camera, and your images will look great. If you want something more—if you're looking for a bit more punch—it's probably not your gear that's lacking; it's your vision.

While off-camera flash offers a world of amazing opportunities, if you're not in full control of your equipment and of your vision, you won't make it

Creativity shines

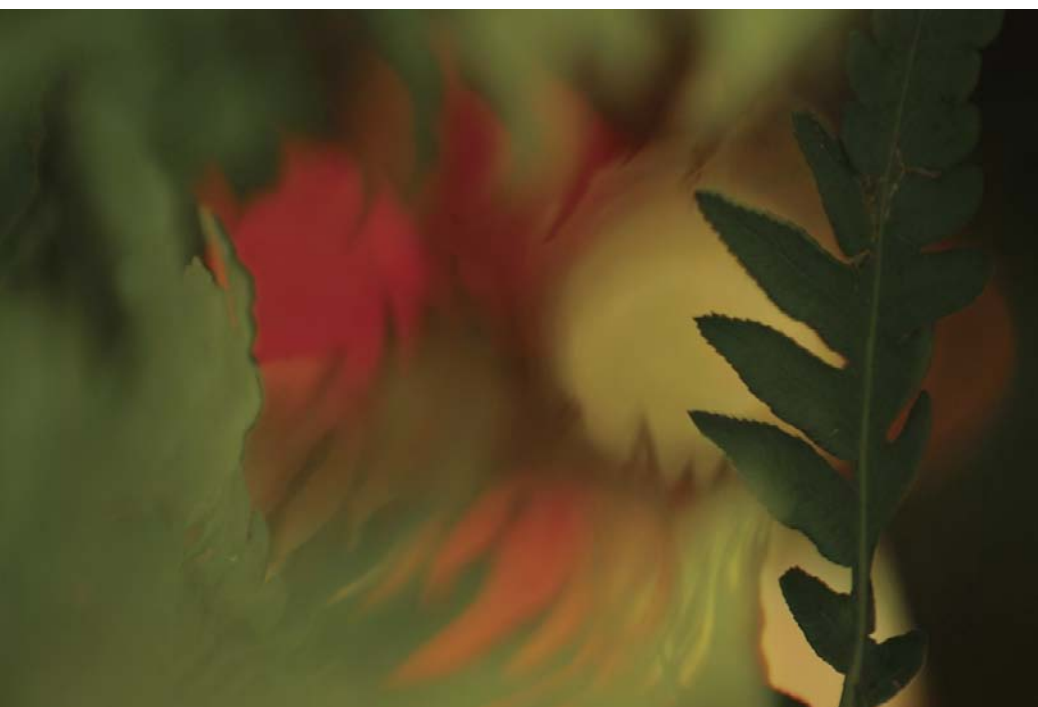
when there is skill to

back it up.



TOP LEFT—While many photographers use after-the-fact editing programs to create drama, a free-thinking artist with an off-camera flash can do it all in-camera. The painted strokes in the background were accomplished by simply introducing a very structured foreground blur (fingers) into an already well-designed image. A snooted, off-camera flash was used to highlight just the top portion of the cactus. We call this artistic technique finger-painting—for obvious reasons. **TOP RIGHT**—The success of your finger-painted images rests in achieving an extremely shallow depth of field. Everything needs to be done to create maximum blur—this is where your mastery of the basics comes in handy. Once blurred, you'll be using the gaps between your fingers to create painted "strokes" like those seen in this image. You can, of course, allow for certain graphic elements—such as the butterfly here—to remain untouched by the effect; simply spread your fingers. The off-camera flash in this case helped light the background; it was originally much darker than the foreground subject. **RIGHT**—Here, the finger-painting technique was employed with an extremely close subject illuminated by an off-camera flash. Notice that a softer-than-usual contrast setting was employed and the in-camera saturation was turned down. The soft feeling the image creates demanded it.





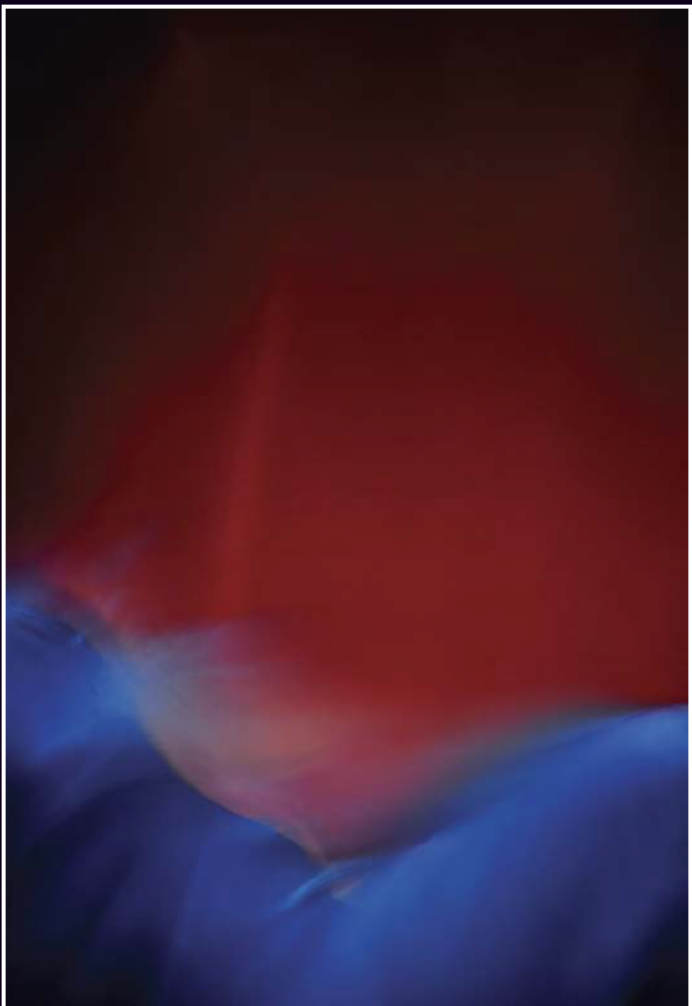
as far as you want. Have faith in what you see, in what you envision, and in the gear you use. Practice as much as you can.

If you think before you shoot, if you push hard each time you practice, and if you smile and have fun when you're doing it, life itself will be an amazing adventure and your pictures will prove it.

TOP—When blurred, background glare is a powerful tool for the expressionist. A photographer using an off-camera flash can create glare by simply pointing his flash at anything metallic in the background and firing away. Being creative with your flash sometimes means not pointing it at what you think needs to be lit. Think out-of-the box and far away from your “subject.” Create glare and use it—instead of running from it.

BOTTOM—Chromatic and spatial aberrations can be a pain for the “normal” photographer, but when used by an artist with an off-camera flash, they can transform even the most mundane of subjects into a work of art. When your normal images fail, when you just can't get what you want into focus, rethink your strategy. Why not roll with the blur problem and try to introduce a bit of light? Remember: you do not always have to light your *subjects* with your flash (there is so much more to your images than that!), you can choose to light your background and foreground tiers. Add a little bit of color if you wish—do whatever it takes to jazz up that boring photo. Use the blur to your advantage and light it creatively. You'll love what happens.

FACING PAGE—Blur itself is a beautiful thing—and when combined with the power of the flash and seen through the eyes of an artist, anything is possible. Believe in yourself, practice as much as you can, and control that flash. A new world is waiting—and it's going to take you and your off-camera flash to find it. Good luck and good shooting.



GEAR INVENTORY

Every photographer has his favorite **tools and accessories**. As off-camera flash photographers these are our favorites. The images in this book wouldn't have been possible without their help.

Softbox (LQ-107)

Enlarges and diffuses the light with the flash in the direct flash position. The light is softened as it passes through a center-weighted frosted diffuser. (www.lumiquest.com)



Softbox III (LQ-119)

The LumiQuest SoftBox III is roughly twice the size of their original SoftBox, thereby producing softer shadows. It fits conventional flashes (Nikon, Canon, Sunpak, Vivitar, etc.). (www.lumiquest.com)



Pocket Bouncer (LQ-101)

Enlarges and redirects light at a 90 degree angle from the flash to soften the quality of light and distribute it over a wider area. No exposure compensation is necessary with automatic flashes, but operating distances are reduced. (www.lumiquest.com)



Quik Bounce (LQ-122)

The unique design has doors that can be opened to allow 80 percent ceiling bounce while allowing 20 percent of the light to bounce off the remaining surface area to provide fill light and more even illumination. When the doors remain closed, 100



percent of the light bounces off this surface area. (www.lumiquest.com)

ProMax System (LQ-105)

Allows 80 percent of the light to bounce off the ceiling while 20 percent is redirected forward as fill light. Includes white, gold, and silver inserts as well as a removable frosted diffusion screen. (www.lumiquest.com)



Snoot (LQ-114)

The LumiQuest Snoot isolates the light to a very specific area. Automatic operation may be affected, as the illuminated area is limited. (www.lumiquest.com)



Soft Screen (LQ-015)

The LumiQuest Soft Screen is a diffuser that is designed for the built-in pop-up flash of many digital cameras. It can be used to trigger optical slave flash units. (www.lumiquest.com)



Cinch Strap (LQ-117)

Enables the attachment of LumiQuest accessories without installing a self-adhesive loop on the flash. Wrap-around Velcro attaches LumiQuest accessories for a more secure attachment. (www.lumiquest.com)



3x4-Foot Uplite 4:1

Cooltone (LL LR3498)

Ideal for photographers who work alone and need to support a reflector at an angle to bounce light up into the subject. It is particularly useful for shadow fill under the chin and eyes when shooting portraits. (www.lastolite.com)



TriFlash Three Pocketflash Shoe with Umbrella Tilt Head (LL LA2412)

Allows you to attach up to three flashes to one stand. Also features an umbrella socket so the gun(s) can be used with or without a shoot-through or reflective umbrella. (www.lastolite.com)



Ezybox Hotshoe Extending Handle Long (LL LS2413)

Allows for the addition of flashes both at the top of the handle and along its neck. Lastolite offers a variety of softboxes that attach, as well. (www.lastolite.com)



Spring Clamp with Flash Shoe (175F)

Supplied with a miniature ball head with a flash shoe attachment to allow it to clip and position a flash unit wherever it is needed. (www.lastolite.com)



Wireless Flash Trigger Set V4

With this system, you can place multiple flashes at various angles and distances from your subject. Each receiver works with one flash. You can use as many receivers as you wish, all receiving their signal from one transmitter. (www.harvest-one.com/cactusfront.html)



Sync Cords

These cords, which connect the flash and camera, allow the camera to “talk” to the flash for firing. They are available online and at most camera stores.



Dedicated (TTL) Flash Cords

Connects the off-camera flash to the hot shoe of the camera, allowing data to transfer. The flash fires as the shutter is pressed.



Optical Slaves

Allows off-camera flash to fire, triggered by the “flash” of the main flash as shutter is pressed. Optical slaves must be in line-of-sight of other flashes to work dependably.



Digi-Slave Deluxe 3000 Slave Flash

This device is especially designed to fire on the correct flash sensed by its built-in optical sensor and circuitry. It features a switch on the back, allowing users to select between two different triggering modes used by different digital camera models, making it compatible with most camera brands. (www.srelectronics.com)



Connectors and Adapters

These devices connect various sync cords between flashes for multiple flash work. They are available online and at most camera stores.



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