

A portable wireless flash s

Gary Friedman, author of the popular downloadable e-book all about using Dynax 7D and 5D, explains how he uses Konica Minolta 5600 HS (D) flash units to create professional portraits

I'm a big fan of anything portable. I'm also a big fan of Konica Minolta's wireless flash system, which is indeed portable yet more powerful than most people realize.

Since I hate lugging lots of heavy studio lights, light banks, and cords when doing field work, I have devised a rather portable studio setup which, while not a replacement for more traditional equipment, is still ideal for small gigs, is relatively inexpensive, and produces outstanding results.

In this article I will share the secrets to setting up a studio and making exceptional portraits using these little gems, and in the process I'll also alert you to common pitfalls. The Konica Minolta 5600HS (D) flash is ideal for this kind of work because it is quite powerful, has a swivel head and a manual flash mode, and is amazingly energy efficient.

For example, I have shot weddings using only eight AA batteries in my 5600 – no burdensome or bulky Q-flash, or battery pack, or cords!

My portable studio setup pushes these versatile flashes to the edge of their capabilities in terms of light output and recycling time. But again, it is easy to transport, sets up in 10 minutes, and is cheaper than a low-end studio flash setup.

For those of you who are not familiar with Konica Minolta's wireless flash, it is quite an ingenious invention – it uses rapid flash bursts of varying duration (kind of like a "Morse Code" using low-intensity bursts) to communicate to any flash in the vicinity.

Although the systems work somewhat differently for film vs. digital cameras, the basic idea is that the camera's pop-up flash can communicate with all off-camera flashes and control how much light is output and when to fire. Although it uses light bursts to communicate, you'd be surprised to learn that direct line-of-sight between the camera and flash is not always required to have it work properly. When used indoors, the "control" signal from the camera will often bounce off of the subject, walls, and ceiling and still be received by the off-camera flashes, making the use of wireless pretty foolproof for automatic exposures.

The basic setup requires only three flashes: One main light



bounced into an umbrella reflector, and the other two which illuminate the background. Because the white background will almost guarantee underexposure when using automatic (TTL) exposure, all three flashes must be put into **Manual** flash mode and checked with a flash meter or by viewing a digital test exposure and histogram to get the desired results.

Older flash units such as the 5400 HS – not TTL or wireless compatible with 5D/7D – can be used with suitable film bodies for this set-up, but need cable connections for the 5D/7D and work at full power only.

Two heads and a sheet

For the examples, I used a large white backdrop and illuminated it using two unmodified flashes set to 24mm zoom: one pointing to the top half of the backdrop; the other to the bottom half. See photo, left, and above it examples of shots taken with this set-up. Even if the coverage seems blotchy when shot as a wide angle of the 'set', when zoomed in the results can look quite consistent and professional.

When setting up the flashes to illuminate the background, I used the 5600's swivel head feature to allow



the flash head to point at the back-drop while the control signal's sensor points at the camera – not always necessary but in theory it's the best way.

A third flash is mounted on a lightstand with a softening umbrella, near the camera position. For flash/umbrella brackets with standard flash shoes, an OS-1100 adaptor can be used to fit the 5600's proprietary hot shoe. If the stand has a tripod head, the supplied flash stand foot is threaded to fit this and no adaptor is needed. Again, to maximize the sensitivity to the control signals, the flash swivel head is turned 180 degrees, so that the flash tube faces into the umbrella, but the wireless flash sensor is facing the subject.

As mentioned earlier, the guns have to be set to manual because of the white backgrounds. To set the 5600 (or 5400, etc) to manual, hit the "MODE" button on the back of the flash until the displays shows a large "M" on the left-hand side. Then use the + and – buttons to adjust the amount of output desired – all the way from "1/1" (full power) to 1/32nd of full power.

Using a conventional handheld flash meter to measure a wireless triggered flash's output will yield inaccurate results. The control signals from your camera pop-up flash confuse the flash meter. To make it work, you have to put an 'infrared filter' – an exposed and developed strip of color negative film works nicely, see below – on the pop-up flash, reducing the control signal power so that the flashmeter picks up only the real flash



If the background light power is bright enough, a very clean result can be obtained. Gary turned from facing his subjects (above) to photograph his 5600 flash with bounce umbrella, standing just behind him, to the right, a little above shoulder height. You can see the quality of light and shadow produced by this in the shot above. Because the 'filtered' pop-up control flash is aiming at the subject, and the main flash is behind the camera, the flash body is turned so its IR receptor faces the set.



burst. If you don't own a flashmeter (or don't want to bother making an IR filter) you can always shoot test shots with your digital camera and check the shot using the playback histogram to make sure the amount of light being output is registering as white but not being completely blown out.

When setting your studio up, check the output of the background flashes first. Hold your flashmeter in front of the centre of the backdrop and fire a test shot with the camera (remember to have an IR filter over the pop-up flash). The two background flashes will fire simultaneously and your flashmeter will measure the total amount of light on that spot. Since you're measuring the incident light that's falling onto the backdrop, you don't have to compensate by +1.5 to get it to look white. My settings are typically ISO 200, f11, and ¼ flash power.

Next, measure the output of the main flash on the subject. Turn off the rear flashes, place the flashmeter in front of your subject, and fire the camera again to trigger the main flash. Using the previous settings of ISO 200 and f11, the diffusing nature of the umbrella usually warrants either 1/2 or 1/1 (full) power for the main flash. Since such high power can easily cause long recycling times, I invested in a Minolta EP-1 external battery pack which houses six C batteries and plugs into the 5600's power socket. The EP-1 reduces recycling time to something close to 1/2 second. The EP-2, which uses six AA batteries instead of six C batteries, is the successor to the EP-1, and is more commonly available.

Once your flashes are set correctly, turn the rear ones back on, set your camera to manual exposure mode (safe setting, 1/60th of a second and whatever f-stop you measured) and shoot away! I am probably the only person in the world to ever try to use these accessory flashes in this way.

A little simpler

Does all this sound like too much work? You can greatly simplify the studio setup and get very nice results by using only ONE flash (the main light with umbrella bounce) and NOT light up the background at all.

This results in darker (but not black) backgrounds as shown in the male portrait above.

For this shot I used TTL (automatic) flash metering instead of manual which simplified the setup even further, and is possible when you don't have a white background.



Make it fun!

Truth be told, nobody cares about how simple your lighting setup is or how sharp or natural your skin tones are. Only other pros care about these things. People only react when a photo catches a person's true spirit.

For this reason, all photo sessions much be designed to be FUN to put people at ease and relax in front of the camera. You can help by posing people so they touch and interact with each other. Digital can help by letting your subjects see intermediate results (like on a TV screen!) which tends to warm them up even faster.

Away with standard boring poses! Let digital and a new paradigm herald in the age of portraits that capture spirit!



Drawbacks

My three-flash system does have its drawbacks. For starters, it is limited to one- to three-person portraits (group shots require more light). For finishers, flash recycling times can be slow, even when the pop-up flash is only being used to trigger the other flashes.

The 7D and the 5D, for example, will only allow one shot every two seconds using the built-in flash as the trigger or wireless master. This can sometimes make it difficult to capture the truly natural expressions which almost always occur just after the first, posed picture is taken.

This problem didn't occur with film cameras, where – when used with the EP-1 for fast recycle times – mounting an accessory flash to the camera and setting it to “control” mode provided no practical restriction to how often I could take a picture.

Those lazy eyes

There are a small percentage of people in the world with remarkably fast reflexes. They are the ones who always seem to be blinking when the flash goes off. This happened in the days of film, too! Now with the advent of digital cameras and a pre-flash

feature that you can't disable, people with slightly slower reaction times are starting to display this problem.

Everyone will blink at one point or another; all you have to do is find the right interval between the pre-flash and the blink.

What can be done? Bear in mind that this is NOT a digital camera problem; it is a people problem. Everyone's different. If you find that you get a subject who consistently displays droopy-eye syndrome, then switch to either film (where the pre-flash is non-existent) or a Dimage A1 or A2 (where the pre-flash is significantly longer) and the problem will go away.

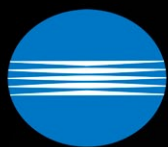
Conclusion

We Minolta photographers have always been ahead of the curve. We employed our Maxxum 9000s when the pros were dismissing autofocus; we enjoyed wireless flash long before any competitor thought it was worth copying.

Now with the advent of more powerful flashes and a phenomenally good digital sensor with the best skin tones around, great off-camera, bounced and controlled shots are within everyone's reach. The 3600/5600 HS (D) kit can be your stepping stone to real studio skills.



Gary Friedman is a larger-than-life character with a great rapport, an adventurous tourist, occasionally serious traveller, expert teacher and an exceptional photographer. Visit his website (www.friedmanarchives.com) and you'll spend hours reading his illustrated diaries – David Kilpatrick.



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