Freeze Frame

By Timothy L. Hale/Army Reserve Public Affairs

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Why "P" (Programmed Auto) is not the best

Dear Freeze Frame,
How come my photos don't look like the ones I see in magazines like Warrior-Citizen, Soldiers or even Sports Illustrated or National Geographic? I put the camera on "P" because the manual says "programmed auto" which makes me think the camera is capable of doing what I want it to do but my images just don't come out like I want. What am I doing wrong?

Sincerely,
Pvt. Snuffy

At the risk of offending anyone out there, I didn't actually receive an email like the one illustrated above, **BUT** I have actually had Soldiers – both enlisted and officers, some new to Public Affairs and some not so new – ask me the question above.

So, for the sake of stating the obvious, this month's article is devoted to setting your exposure – *properly*.

The **"P"** on your camera's exposure mode should not be used, unless you just absolutely cannot get your exposure correct by other methods, which I will outline for you in this article.

Most of the Nikon (and I'm sure every other camera manufacturer manual) will tell you: *"This mode is recommended for **snapshots** and other situations in which you want to leave the camera in charge of shutter speed and aperture."*

Did you see it? The word "***snapshot***."

You have one of the most powerful photographic tools readily available, but in "P" mode, the camera will decide both the aperture and shutter speed – as it sees fit. That is why your depth of field may not be what you want or your photos may not be tack sharp due to unintentional motion.

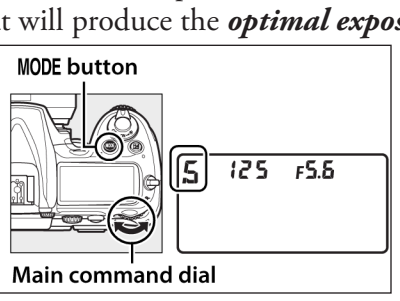
Now, let's examine the alternatives to the "P" mode.

S: Shutter-Priority Auto

In shutter-priority auto, you choose the shutter speed while the camera automatically selects the aperture that will produce the ***optimal exposure***.

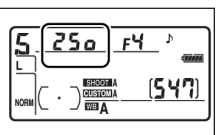
Select exposure mode S.

Press the MODE button and rotate the main command dial until S is displayed in the viewfinder and control panel.



Choose a shutter speed.

Rotate the main command dial to choose the desired shutter speed. Shutter speed can be set to "x 250" or to values between 30 s (30") and 1/8,000 s (8000). Use slow shutter speeds to suggest motion by blurring moving objects, high shutter speeds to "freeze" motion.



Did you notice that it says how to blur or freeze motion? The blurring of a subject can show tension or fluidity. While freezing motion can show drama or peak action like a mortar round being fired out of the tube, frozen at just the right moment.

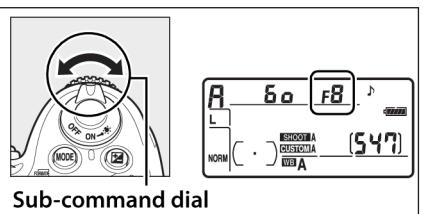
A: Aperture-Priority Auto

In aperture-priority auto, you choose the aperture while the camera automatically selects the shutter speed that will produce the optimal exposure.

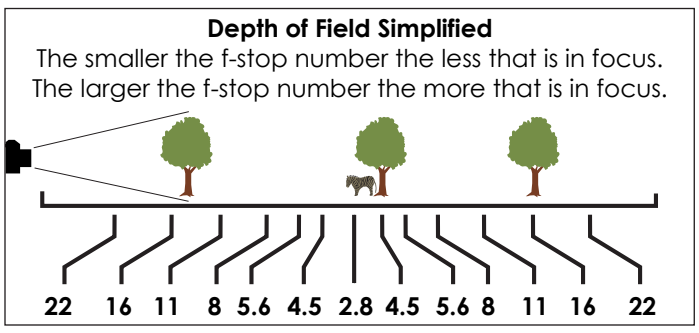
You'll use the same method to get to the "A" as you did to get to the "S" but now you will be able to control your foreground and background.

Choose an aperture.

Rotate the sub-command dial to choose the desired aperture from values between the minimum and maximum for the lens. Small apertures (high f-numbers) increase depth of field (see page 103), bringing both foreground and background into focus. Large apertures (low f-numbers) soften background details in portraits or other compositions that emphasize the main subject.



The key to remember is this: the smaller the f-stop (1.4, 1.8, 2.8) the shallower or less objects in front or behind the subject will be in focus. The opposite is true for larger numbers (8, 11, 16, 22)



M: Manual

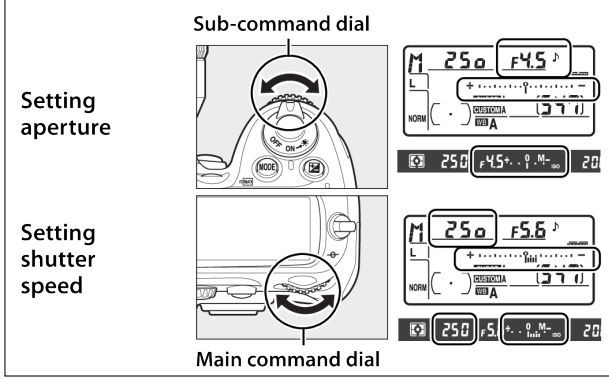
In manual exposure mode, you control both shutter speed and aperture. After learning how to shoot on a manual camera years and years ago and then transferring to cameras that think for me, I have now come full circle and shoot on "M" probably 95 percent of the time. It gives me the flexibility to be creative behind the camera.

The key to being a manual shooter is practice, practice, and then more practice!

Again, you'll use the same method to get to the "M" as you did to get to the "A" or the "S" but now you will be able to control everything – shutter speed and depth-of-field.

Choose aperture and shutter speed.

Rotate the main command dial to choose a shutter speed, and the sub-command dial to set aperture. Shutter speed can be set "x 250" or to values between 30 s and 1/8,000 s, or the shutter can be held open indefinitely for a long time-exposure (bulb, pg. 111). Aperture can be set to values between the minimum and maximum values for the lens. Check exposure in the electronic analog exposure displays (see page 111), and continue to adjust shutter speed and aperture until the desired exposure is achieved.



"A", "S" or "M"?

What I highly recommend to those of you who want to get away from the "P" mode is start with either the "A" or the "S" mode first before graduating to full-blown "M."

I have seen this progressive step-up in using different exposure settings work, with photographers actually improving their photography in as little as a week's time.

So, if you're ready to cut the cord from programmed auto and start exploring what your camera can really do for you, give the steps above a try. I'm sure that you'll like the results!

Now get out there and start making some images you'll be proud of!

(Photo by SFC Mark Burrell, KUNAR PROVINCE, Afghanistan 2011)
The image above is a great example of using exposure control to capture the mortar leaving the tube at the precise moment. "They fired seven rounds and I shot about 10 to 15 frames per round to get the shot," Burrell said.

When you do the math, that's between 70 and 105 frames to get that one image. It's probably pretty safe to say that setting the camera on "P" Programmed Auto would more than likely not produced the same result.

The camera settings to capture this image are:
Nikon D300s, 24mm lens, ISO 500, f-stop 4, Shutter Speed 1/8000 sec., Exposure: Shutter priority.

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Timothy L. Hale is an award-winning photojournalist for the Warrior-Citizen magazine at the U.S. Army Reserve Command Public Affairs Office at Fort Bragg, N.C. He is a member of Nikon Professional Services, National Press Photographers Association and National Association of Photoshop Professionals. When he isn't on assignment for the Army Reserve he owns a photojournalism and graphic design service and he also freelances for an international photo wire service. He has been shooting professionally since 1981.