

A Tutorial on Hyperfocus Technique

Contributed by Brian Webb
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Let's start with a couple of questions and the typical answers:

Question: How can you achieve the greatest depth-of-field (DOF) for a given aperture?

Typical Answer: Focus on something close in the foreground and stop all the way down.

Question: What is the fastest way to get your subject in focus?

Typical Answer: Nikon's latest AF module. No, Canon's. Nikon's! Canon's! Nikon!!!! Canon!!!! (forum flame war ensues while the rest of us step out the door and take photographs).

If your answer to the questions was similar to the typical answers given above then you are dead wrong. The correct answer to both of them is hyperfocus. Here's what hyperfocal technique is and how to take advantage of it.

What Is Hyperfocus?

Put simply, hyperfocus is the maximum possible depth of field for a given aperture. No AF system can achieve it and focusing on the closest object in your composition doesn't work, either. In fact, if you use an SLR and look through the viewfinder while your lens is hyperfocused it may appear as if nothing is in focus! No worries. It will be when the picture is taken.

Not All Lenses Are Created Equal

In order to utilize hyperfocal technique your lens must have a focus scale printed on it. If you are using a zoom lens I can all but guarantee that it doesn't. Some older zooms do, but they can be difficult to use due the variable focal length. Your best bet is with fixed focal length lenses, although some newer AF fixed lenses also lack this scale. Check your lens for markings similar to those pictured at the top of this article, including the infinity symbol (∞). Is it there? Good. Let's move on.

The Steps

1. Pick the appropriate aperture. This depends on the best balance of how close you want to be in sharp focus and what the light will allow. If you are shooting a landscape or some other "motionless" subject using a tripod will eliminate the light variable. Don't make the mistake of thinking the smaller the aperture the better. Smaller apertures (typically past f8) reduce sharpness, an effect called "diffraction". This will be especially noticeable for 35mm and digital format users. Large format users feel free to stop all the way down to f64 as unless your image is going to end up on the side of a building since sharpness isn't as great a concern.

2. Using the DOF scale on your lens, move the infinity symbol on the right so that it is placed squarely over the aperture you are using. The distance over the same aperture on the left-of-center is your minimum focus distance.

3. Push the button and take a picture. Take a few. No need to adjust your focusing.

Summary:

Advantages:

1. Fastest focusing possible because you don't have to.
2. Ability to focus from the closest possible point to the farthest possible point your lens can manage.

Disadvantages

1. Many (if not most) modern lenses lack a focusing scale. This is especially true of zooms.
2. Most effective at smaller apertures, making exposure length and diffraction potential issues.

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