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Oh my gawd, Becky... look at her butt. It's so big!

Nikon 105mm f/2D AF-DC Nikkor



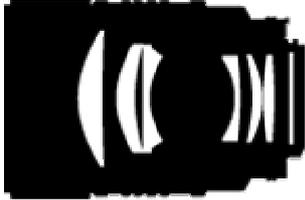
I don't really know how to describe this lens, other than it wipes the floor with most if not all other 105mm lenses. The picture above is about 2/3 of the frame, taken in daylight, on a digital, at f/5.6 (you can see a larger version [here](#)).

The body of the lens is metal, are the premium Nikkor lenses. The focusing ring is rubber and the aperture ring is plastic (yes, Virginia, it does have one of those - and is thus usable on any Nikon body). The lens weighs about a pound and a half and takes 72mm filters (good excuse to buy the [28mm f/1.4](#) too!). The lens is about the same size as the 135mm f/2D AF-DC, with which it shares a barrel. The lens elements are deeply recessed, and if you use a filter on the front, you should pull out the built-in metal hood.

The lens has 6 elements in 6 groups and a somewhat novel plane-glass rear dust element (which presumably keeps grit out of the lens). It features rear focus. The rear focus is pretty much a necessity, because the wimpy motors in modern Nikons would not be able to pull the entire weight of the optical system around. The older 105/1.8 AI-s had a very heavy optical unit and for autofocus, it is clear that the whole focusing regime needed rethinking. Autofocus disengages via a A-M switch on the barrel.

You will want to avoid using a J, K, or other screen with focusing aid with this lens; those aids are not generally accurate enough to focus a lens with this little depth of

field consistently. I would recommend using either the electronic rangefinder in the camera or an E screen - one that is conducive to focusing on or off the center of the frame. I tend to regard the E as better than the C because the grid helps train your eye on the screen to focus. The best screen for manually-focused portraits with this lens (that I have found so far) is the D. You will have to retrofit this screen into an F4 frame to fit an F4, but it is readily available for the F, F2 and F3.



No aspherics. Sorry. You don't need them with telephotos.

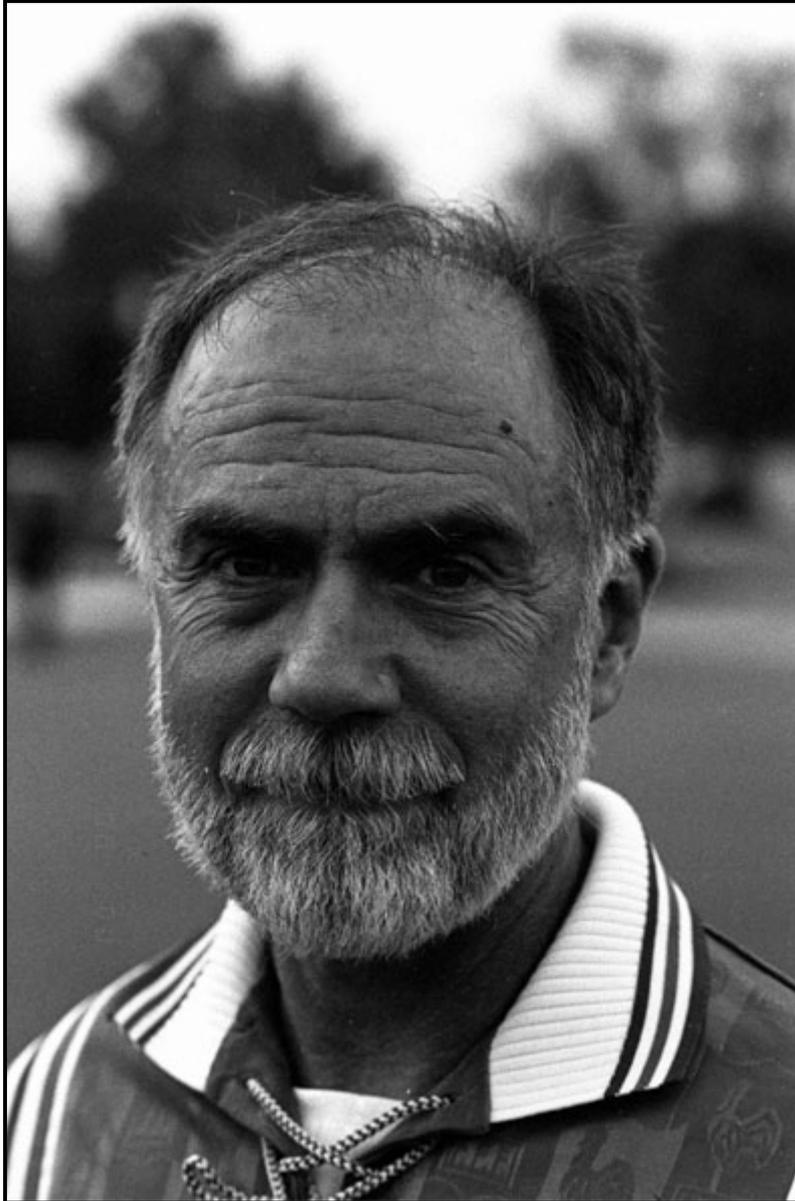
The 105/2 is definitely a step up from the 105/1.8 Ai-s lens it replaces. Although it lacks the heavy-but-silky focusing feel (not bad), it is sharper wide-open, feels lighter, and has the almighty autofocus. It is a little bit better in the sharpness department than the vaunted 105/2.5 Ai. The rear focus, for all the theoretical complaints about chromatic aberration, is more than good enough to wipe the floor with all previous 105 Nikkors. In my testing with an F4s and Kodak 14n (optimization: auto), it delivered excellent pictures with no complaints. It does a good job preserving highlight separation on color film. It is very flare resistant; the shot above was into a bright overcast sky, pretty much a no-no with any big-aperture lens. In blowup tests, you are good to 8x10 wide-open (easily); f/5.6 is the optimum aperture, and you can pretty much keep enlarging until you run out of information or run into grain. You can see the rivets on a bridge a half mile away.



f/5.6, DC at 5.6R 12 feet from subject, distant background

Ok, so you want to know: what's defocus control (DC)? Think of it as the opposite of Close Range Correction. With DC, you move a group of lens elements in the front (as far as I can tell, the second group from the front) to create aberrations rather than to correct them. The DC ring has settings from 5.6R to 0 to 5.6F. If you set the

ring to the same aperture as the lens in the F direction, it blurs objects in front of the subject. Likewise, if you turn the ring to match the aperture in the R direction, it blurs the background. If the DC ring setting exceeds the aperture (e.g. lens set to f/2, ring set to f/5.6), the picture will be soft all over. Setting DC requires the lens to be refocused (because it changes the focal length of the lens a tiny bit). DC setting does not show up in the viewfinder.



f/5.6, DC at 5.6R, 3.5 feet from subject, near background

I will not profess to be an expert at DC - generally, I either leave it set at zero, or when taking a head shot set the lens to f/5.6 and the DC ring to 5.6R. What I have observed is that the defocus control has less to do with generating bokeh (it already has good bokeh) than it does with how quickly the plane of focus fades into defocus. With a conventional lens, it is a gradual transition. The DC tends to make the falloff much more pronounced. I think it's a great add on, but the main value of this lens is its awesome optical performance when used as a regular lens.

Not to scare you off or to kill your high, but I'll give you a few tips about shopping and shooting 105mm lenses:

– The major determinant of how your background looks is the distance from camera to subject. The smaller the distance from camera to subject compared to subject to background, the less the chance that anything in the background will be in focus. So your current telephoto lens may be fine.

– If you are looking for a cheaper general lens with decent performance and good bokeh, get a first-generation Nikkor 105/2.5 P.C. Nikkor (\$60; the first non-Ai version - assuming you have an F, F2, F3 or F4 that can mount non-Ai lenses).

– If your entire purpose for buying this lens is to take a lot of soft focus shots only, don't pass go; buy a 105/2.5 Ai or AIs lens (\$150-200) and a \$10 52mm softening filter. This and a chip from Rolland Elliott are a cheaper solution for most Nikon cameras.

– You can mimic the look of the 105/2 AF-DC at about half the price by using a 180mm f/2.8 ED AIs Nikkor and a +1 diopter closeup lens. This will create the equivalent of a 150mm f/2.8 lens for head shots.

Of course, few solutions are as elegant as just biting down and buying the 105/2 AF-DC. This, too, is an expensive lens that is definitely worth it.

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