

# AMERICAN PHOTO

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## EDITOR'S CHOICE

TECH  
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VISION



## HP DESIGNJET Z3100

WITH A BUILT-IN SPECTROPHOTOMETER, THIS IMPRESSIVE WIDE-FORMAT INKJET PRINTER OFFERS ONE-CLICK PROFILING OF ANY PAPER YOU CHOOSE. BY MICHAEL REICHMANN

**D**uring the past couple of years serious photographers have made clear their preference for pigment-based inks in photo-quality inkjet printers. Pigment prints are more archival than dye-based prints, of course, but there's no longer a tradeoff in image quality. When used with appropriate fine art papers, pigment-based inks now provide an equal or superior color gamut.

Epson has been the leader in pigment-based inkjet technology, with its most recent pro printers using UltraChrome K3 inks. But Canon and HP have both challenged Epson's hegemony with the rollout of new wide-format printers and pigment-based inksets. HP's flagship model in this effort is the **HP Designjet Z3100**, a 12-ink printer that comes (a little confusingly) in two sizes, for output up to 24 or 44 inches wide.

When HP decided to take on Epson in the pigment printer arena, it knew it had to come up with more than me-too products. Its Z-series printers, which use HP's Vivera inks, are anything but. The Z3100 models in particular are a printer's dream, offering features such as 12 inks (including red, blue, green, and four separate blacks); a built-in Gretag Macbeth i1-based spectrophotometer (for automatic creation of paper profiles); a built-in 40GB hard drive (for spooling files and storing profiles); and even a Web server, also built in.

Like all large-format, floor-standing printers, the Designjet Z3100 does not have a paper cassette. Paper is loaded from rolls and in single sheets. Ink cartridges are a decent 130-milliliter in size, and all twelve load simultaneously so there is no need for costly ink swapping when switching between glossy and matte papers. One cartridge

contains a "gloss enhancer" that effectively eliminates gloss differential and bronzing with glossy papers.

The Z3100 models also feature six user-replaceable heads. These are regarded as consumables, with each costing less than an ink cartridge, and shouldn't present any financial burden. The printers' automatic calibration also means that any change to the individual heads over time, due to use and wear, is constantly compensated for, to ensure consistent results.

Once you experience the Z3100's automatic paper profiling, achieved with a built-in, professional-grade spectrophotometer, you'll see it as a must-have feature in any future printer. Simply load a sheet or roll of the desired paper, select Profile, and then answer a couple of on-screen questions. In less than half an hour the Z3100 creates a custom profile and loads it into the correct directory on your computer. In this respect HP is among the first printer companies to openly recognize that photographers use papers other than their own brand. There's no need to guess what type of paper in the profile menu is most like the one you want to use.

The Z3100's four black inks—photo (glossy), matte, light gray, and medium gray—deliver monochrome prints that are as outstanding as the printer's color output. When matte paper is used, all four blacks are put to work, and the results exceed those produced with silver halide papers, both in maximum density and tonal range. In fact, weeks of printing with the Designjet Z3100 have proven to me that the quality of its output is as good as, if not better than, anything else I've seen in the inkjet world. This printer is a clear shot across Epson's bow. ■