

# Positive proof for laser color in the workflow

## Color Printers Xerox Phaser 790

by Dan Brill

Along came desktop page layout, and with it came the need for fast, inexpensive content proofing.

The laser printer quickly filled that void in the design workflow, providing cheap, fast output technology which could at least show your fonts the way they should be printed, and with luck, give you some clues as to how well your images and line art would survive. It also provided a harbinger of PostScript errors to come when it failed to print at all.

I remember ten years ago when I was proofing pages on a 600 dpi black-and-

white tabloid size laser printer made in England. It was big, slow and unreliable—and re-tailed for over \$20,000. Skip ahead a decade, and today single page laser printers are ubiquitous, and even high resolution tabloid black-and-white models cost less than \$5,000.

But color? That's always been a problem area for laser technology. Laser color output has traditionally been inaccurate, unpredictable and out of gamut—or to put it in layman's terms, not WYSIWYG, as changeable as the weather (literally), and more often than not unprintable by offset printing process standards.

That also means it's generally not been worth the extra investment in color over grayscale, especially since "real" color proofs are inevitably a necessary evil. And digitally speaking, in this dawn of CTP, that probably means buying digital inkjet proofs—unless you are one of those budget-unchallenged types who springs for a Kodak Approval or other digital dot proof.

But even at \$20 a page for inkjet, proofing costs can add up over the course of a year (though far from the \$300 film laminates of the "good ol' days").

Yet before you spend \$200 a page on proofing—or even \$20—the first question you have to ask is, how many pages need to match color perfectly? After all, "good enough color", "pleasing color", "run of press color"—that's what makes up the majority of commercial offset work that goes on press.

What's most important about the proof is that it is indeed "proof" of the digital integrity of the file from which it was printed. The proof must be an "exact" predictor of how plates or film will print. It represents the handoff from digital to analog.

Dye sub printers have almost disappeared—they were always too slow and expensive anyway. Inkjet proofers are relatively inexpensive and deliver good enough quality color output, but they're not fast enough to print in numbers, and consumable costs can mount up in a hur-

ry. So where's the proofer that's good enough, fast enough, reliable enough, and cost-effective enough for any workgroup of creative graphics professionals?

### XEROX AND TEKTRONIX BRING LASER COLOR INTO THE WORKFLOW

The Xerox Phaser 790 is a heavy duty proofer that has been engineered to include everything a graphic design studio needs to produce print-ready jobs. And, believe me, I know exactly how heavy duty it is. When the delivery truck showed up with only one driver, I wound up carrying one end of this beast up the stairs to our second floor studio space. At over 160 lbs., I can tell you this machine is all printer.

Setup was easy—at least, according to my son, Ben (he's thirteen). Took him less than an hour to unpack and install the cartridges, set up the trays, connect it to the network—and *then*, of course, read the manual, just to check on the software installation.

The Phaser 790 falls into the network printer category: for under \$10 thousand it swallows PostScript files and spits them out—at six full color pages a minute. The difference is, the marriage of Tektronix and Xerox color technologies has produced a machine with highly respectable color, "good enough" to take to press with confidence if you so choose.

One of the Phaser 790's key features is its built-in temperature and humidity control that moderate the toner output. The color variability which has historically plagued laser devices has finally been solved. You can also tweak the color to get the calibration settings you need using on-board color adjustment controls.

It's fully Adobe PostScript 3 compliant and comes with 64MB RAM installed (which can be bumped up as high as 512MB) plus a healthy 6GB internal hard drive. All of that simply means that you can throw any file at it you want—as big and complex as you like—and the 790 can handle it (and I did exactly that).

It also takes a full range of media and paper sizes, from 20 lb. bond to 100 lb.



### XEROX PHASER 790

#### Specifications

Dimensions: 28.7"W x 19.3"H x 24.2"D

Weight: 161 lb.

RAM: 64MB expandable to 512MB

Hard disk: 6GB

First page out: 26 seconds color/11 seconds b/w

Print speed: 6ppm color/26ppm b/w

Maximum image size: 12.6 x 17.2"

Maximum resolution: 600 x 600 dpi

Networking: 10/100BaseT, bi-directional parallel

Drivers: Mac OS 8.x/9.x, Windows 95/98/NT

4.0/5.0/2000

#### Pricing

Suggested list \$9649

Xerox Office Printing

Telephone 800-ASK-XEROX

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card stock and from oversize envelopes to transparencies, in sizes from 3.5 x 5.5" up to a full 13 x 18" sheet (i.e. double page spread plus bleed, maximum image area 12.6 x 17.2"). It has two lower drawer paper trays plus a side feed, and can hold up to 1400 sheets at a time. And paper jams, though infrequent, were a breeze to fix. The 790 has intelligent controls that point you right to the location of the errant feed. In fact, the LED display on the machine will provide you with an ample number of messages, including a warning when your cartridges are running low on toner.

**HOW FAST IS IT? HOW GOOD IS IT?**

Xerox specs say that the 790's 266 MHz RIP can process a color page in as little as 26 seconds. Realistically, I found that it took a minute or two for an "average" page (whatever that is), and about five to fifteen minutes for a more complex job (like running a 56-page magazine). But it never choked, and that's one thing I can't say about every laser printer I've met.

But what about the color?

I didn't do a lot of tweaking (although this unit can be set up for a ColorSync workflow—or even ICM), mainly relying on straight out-of-the-box color. Yet when I took the Phaser 790 output with me to press (along with my inkjet proofs) to compare its color quality to my final press color, I was amazed at how close it came. Or, to put it in simple terms, for me this color was "good enough" for most of my pages.

And print detail? I printed 2-point type that was readable; I printed multicolor blends that were smooth; I printed hairline rules that were unbroken; I printed continuous tone images that rendered a close match to the final press sheets.

**A TRUE WORKHORSE**

The bottom line on the Xerox Phaser 790 is that this is a true workhorse 600 dpi color output device that can serve any group of designers—big or small—quickly and dependably. Plug it into a network and it's ready to play.



The PHASER 790 is also the core of Xerox's 2006 printer/copier unit, which lists in Canada for about \$22,000.

The Phaser 790 retails in Canada for \$9649; the 790DP auto-duplexing model costs about \$1500 more. Xerox is also using the 790 as the heart of its 2006 printer/copier unit, which sells for approximately \$22,000. A replacement set of cartridges isn't cheap—at about \$1500—but they're also jumbo-size (Xerox says they should be good for 6000 pages).

Check [www.xerox.ca](http://www.xerox.ca) for complete details on the Xerox family of printers. 🌐

POSTMODERNS

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