

Pantone makes six-color printing easy with a plug-in to preview, compare and create Hexachrome separations

Pantone HexWrench 1.0.2

BY SHANE STEINMAN

THIS BEING AN ISSUE WITH A FOCUS ON COLOR, AND CONSIDERING that the cover has been done in Hexachrome, it seems appropriate to talk about *HexWrench*, the *Photoshop* plug-in used to create six-color separations.

PLUG-IN FOR ADOBE PHOTOSHOP

Pantone *HexWrench* by Studion Soft allows users to preview, compare and create six-color Pantone Hexachrome separations. Hexachrome is an ultra high fidelity process printing technology that renders more colors (over 90% of the solid Pantone Matching System Colors) and better saturation than is possible with traditional four-color CMYK printing. Its color set consists of Pantone Hexachrome CMYK, plus Hexachrome Orange and Hexachrome Green; or CMYKOG. *HexWrench* requires you to install and use a ColorSync 2.0 color-matching method called SAME (Studion Appearance Management Environment) that provides smooth gamut mapping between chromatic and achromatic

Previewing. HexWrench allows you to pan and zoom on the preview window, providing an thumbnail locator alongside for navigation.



names. For prepress production, separate final artwork into six-channel files, import the separated images into *Photoshop* to apply plate corrections, and then re-export for placement using the DCS 2.0 file-format module.

HexWrench includes the HexWrench/PS plug-in, with which you do most of your work, plus a HexWrench/DCS plug-in for reading and writing multi-channel DCS 2.0 file sets from *HexWrench*. It also requires the SAME ColorSync Color Management Module and SAME Profiles for various scanners and printing process color on glossy, matte, and proofing stocks. Extra options include round-dot screening at 175 and 200 lpi, or Agfa *CristalRaster* stochastic screening at 14 and 21 micron dots. To fine-tune profiles, you use *HexWrench* Tuner, which outputs test charts that can then be checked with a spectrophotometer.

SOFT PROOFING

HexWrench's commendable on-screen preview lets you control the six-color separation process, stacking the deck in your favour in the high-end color reproduction game. Just open your RGB image in *Photoshop* and re-jig its components right on your calibrated monitor. *HexWrench* provides split-screen capability for before and after comparisons or to compare image reproduction in Hexachrome versus CMYK. By trying out the different configurations, you can get a sense of which works best for the image fairly quickly, or what needs to be done to make it print well. The Hexachrome color gamut encompasses or exceeds the gamut of



image regions, as well as between colorant-specific sub gamuts — all of which is to say you should end up with clean grays and less moiré, along with more accurate and enhanced color.

HexWrench reads and writes DCS 2.0 files from *Photoshop*, letting you manipulate individual color channels and channel combinations with *Photoshop's* channel processing functions. Your DCS files can be placed directly into *QuarkXPress* or Adobe *PageMaker* — then spot tints can be added using the tint formulas in the Pantone Hexachrome Color Selector. Conveniently, *HexWrench* automatically names channels to correspond with Hexachrome Color ink

an RGB monitor, so you can increase saturation or simulate out-of-gamut colors, with a better correlation between what you see on the monitor and what you are able to achieve on press.

EASY-TO-UNDERSTAND CONTROLS

The interface provides sensible menu options in an attractive setting. The preview pane itself can be split into rectangular or triangular regions and any region can be set to display in one of four modes: RGB shows the original; PRF (proof) shows an approximation of the printed colors; SEP (separation) shows a grey scale image of a resulting plate;

HexWrench interface.

Easy-to-understand controls enable you to specify the functional separation parameters.



and PRG (progressive) shows one or more enabled colorant channels.

With the manipulation tools below the preview pane you can pan and zoom on the preview window, examining the effects of the separation configuration in detail. A thumbnail locator to the right of the pane facilitates navigation. And you can use channel selection tools, also to the right, to look at individual separation plates or even simulate the effect of progressive overprints.

Each set of the configuration settings — Input, Display and Output — provide pop-up menus with filters (input media, process, stock, screen), selectors (scanner profiles, ColorSync Profile monitor, *Photoshop* Preferences monitor) and modifiers (matching style, black model). The process filter provides Hexachrome and CMYK profiles, while the screen filter has profiles for normal halftone and stochastic screening. The Matching Style modifier indicates what to do for input colors that will not fit output: Images preserves brightness at the expense of saturation, for smooth photographic rendering; Graphic preserves saturation for bright bold graphics; Spot Colors preserves color for applications like logos. The Black Model modifier determines the way that darkness is represented for SAME printer profiles: One-color represents darkness with black ink only, limiting maximum density in shadow areas; Three-color creates black with a mixture of CMY leaving the black separation available for a spot color; Four-color achieves a higher black density by adding CMY to shadow regions; -2/-1/0/+1/+2 determine the density of the coat of darkness.

That said, Pantone should also build more control over the nature of the black generation when choosing your separation qualities — more than simply indicating whether your press condition will be using higher or lower Black ink densities. I would like to see an expert control panel for people who are used to having a firm hold on the process variables — especially black generation.

The fact that *HexWrench* provides a stochastic compensation option was surprising at first glance — but when I thought of screening angles, it started to make sense. After all, there are a limited amount of good angles in this world. Seems, these days, that Bill's got most of the angles covered — which only leaves three and a third good angles for the rest of us. I say three and a third because there are three

good angles in every ninety degrees. After that, they all repeat anyway. But, the typical yellow angle of 90 degrees does not conflict with all other ink angles. It meshes perfectly with 45 degrees, but wipes out on the two remaining angles — hence, one third good.

I often didn't see the difference between many of the selectable options when previewing those changes on screen — I wonder if all of them are set up to alter the displayed preview.

To help you keep track of what you've been up to, each change to the configuration in a pane triggers a light by the menu item that has been changed, and a colored path to the Proof button indicates what changes have been made. Unfortunately, the preview updates only when you hit the Proof button — the process should be dynamic — maybe a Preview On and Off toggle.

HexWrench uses standard *Photoshop* command keys. And it supports Clipping Paths.

When you're ready to apply the separation settings of the currently selected region, you actually have two options. You can immediately perform the separation, writing the six-channel image as a DCS file set. Or you can defer the separation by writing out an RGB TIFF file with an embedded profile set corresponding to the current separation mode. It can then be transferred to a service bureau that has licensed *HexWrench*, to do the separation at the time the file is output.

IT'S A LAYDOWN

Just for the record: K, C, G, M, Y, O is the standard Hex laydown order. For this issue's cover we added the Gold last in the process, though this choice will vary depending on subject matter and intended effect.

As I said, *HexWrench* is easy to use. In some ways, it may be too easy.

But for special print jobs like annual reports and high end catalogues, there's no question that Hexachrome will add a lot of sizzle to your final output.



PANTONE HEXWRENCH

Recommended system requirements
Power Macintosh, OS 7.5 or later, minimum of 16 MB RAM, 8MB of free disk space, Adobe Photoshop

List price \$499 (US),
Estimated street price \$350 (US)

Online information
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