

The Xerox[®] VersaLink[®] C8000W Color Printer

Xerox

The Printer That's Not Afraid of the Dark

The Science

xerox 6

The Secret Sauce

Get Creative

White vs. Black





The Science

If you ever tried using your typical colour laser printer to print onto dark paper, you already know that the output typically looks terrible.

Toner is actually translucent (light passes through it). On white paper the light travels through the toner, rebounds off the white paper surface, and is reflected back to your eye. However, on dark media the paper has the opposite effect, absorbing a lot of the light instead of rebounding it, resulting in dull and unusable output.



Standard CMYK print.

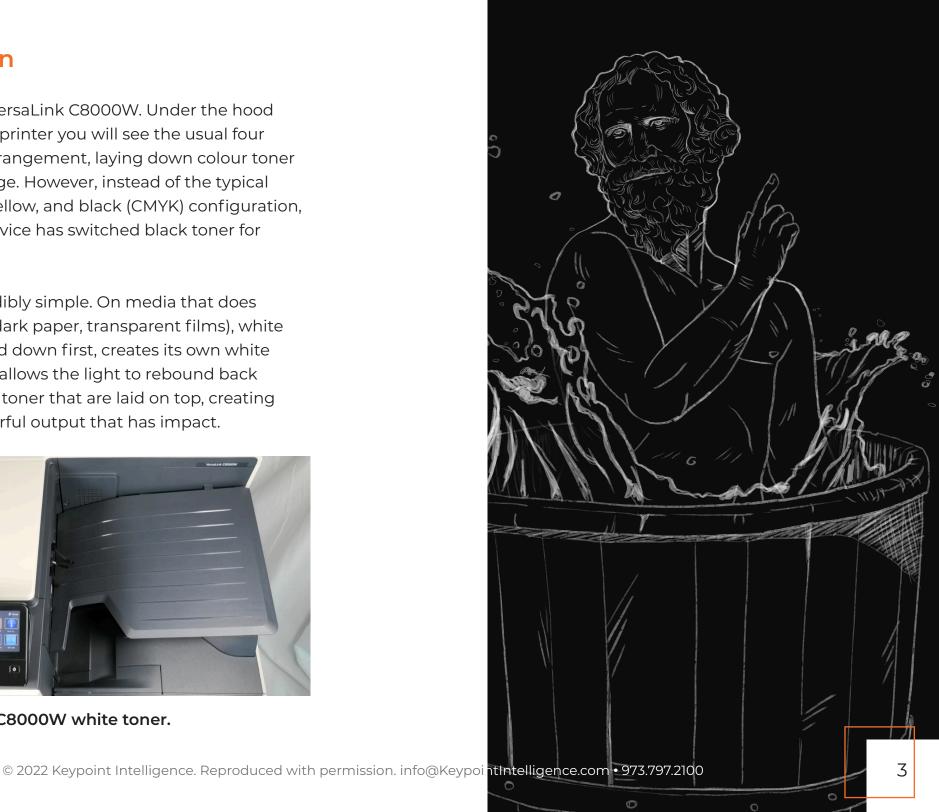
The Solution

Enter the Xerox VersaLink C8000W. Under the hood of this innovative printer you will see the usual four imaging drum arrangement, laying down colour toner to create the image. However, instead of the typical cyan, magenta, yellow, and black (CMYK) configuration, this innovative device has switched black toner for white.

The logic is incredibly simple. On media that does not reflect light (dark paper, transparent films), white toner, which is laid down first, creates its own white background that allows the light to rebound back through the CMY toner that are laid on top, creating vibrant and colourful output that has impact.



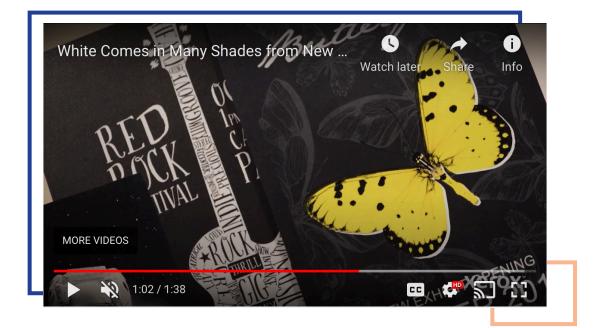
Xerox VersaLink C8000W white toner.



How Can You Do Without Black?

That question can be answered with a single word: Composite. Composite printing means that the cyan, magenta, and yellow toner are laid on top of each other, which effectively creates black. You may well have seen this on some retail inkjet printers when your black runs out and you are given the option of printing black using composite CMY. Rest assured that the black output from the Xerox VersaLink C8000W is much better than the composite black workaround offered on these inkjet devices.





Haven't I Seen This Before?

You may well have seen devices promoted as benefitting from five- or even six-colour technology, with white toner being included alongside CMYK. Many of these are production print devices with a big footprint and an even bigger price tag. Yes, there is a desktop alternative, but even that device comes with a price tag many times higher than the Xerox VersaLink C8000W, making it hard to justify to many potential buyers who may only need to occasionally print on darker substrates.

Call In the Experts

Keypoint Intelligence, the world's leading independent testing authority on digital imaging equipment, was asked by Xerox Corporation to put the Xerox VersaLink C8000W through its paces and see if this seemingly game-changing device really is as good as Xerox says it is.

The hidden beauty to this device is the simplicity.

No sophisticated pre-flight preparation

- No need to design multi-layer files in Adobe applications like Photoshop or Illustrator
- No complex RIP software to add the white mask (background)

Xerox has instead designed this to look and feel like a typical office printer, so anyone after a little training can use the device and send jobs armed with nothing more than Microsoft Office applications that they use every day.

The Secret Sauce

While the PostScript driver may, on the surface, look identical to that included with other Xerox devices, there is one key difference. On the print options tab, you will see the innocuous menu item called Toner Adjustment—welcome to the secret sauce.

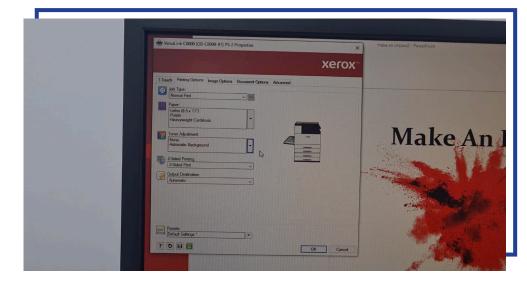
The toner adjustment option is where the print driver makes all the intelligent decisions about how to process your document and send it to the device for maximum impact. The driver has, hidden away from you, sophisticated colour tables that combine with choices you make in relation to paper colour and toner usage.

Don't worry, you don't need to know the colour science, you just need to be able to make a choice between three printing options to get the most out of the device



Option 1: Use White Toner Only

As the name suggests, the printer only uses white toner. The way it works is simple, and at the same time very cool. Xerox describes it as printing in 'negative greyscale.'



Selecting Xerox white toner.

"Xerox provides a great guide to help you through teething issues when backgrounds do not come out the right way the first time. Yes, even we get it wrong sometimes."

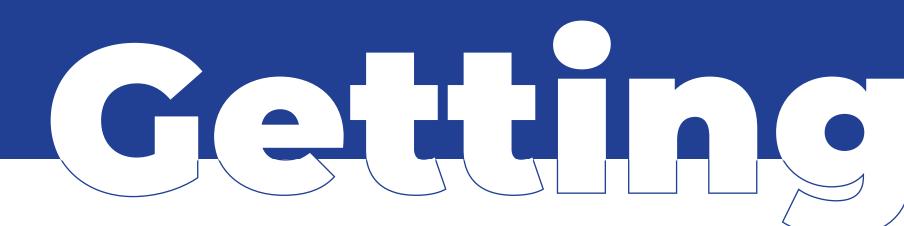


Selecting paper.

Option 2: Adjust for Paper Colour

Here is where the real magic comes into play. By choosing to adjust paper colour, the driver processes the document using the different colour tables with a combination of CMY and a base layer of white. There is an automatic background fill option (defaulted ON), which assumes that unless a background has been specifically added by you, the printer should leave the area alone and not lay down white toner. You can switch it off to get more artsy, but beware as this can cost you a lot in white toner if you get it wrong.

Xerox also lets you save toner by intelligently allowing you to take advantage of the background colour if it matches a colour in your design. You will need a bit more design knowledge to make this happen, as the colour in your design needs to match the RGB or CMYK values that Xerox associates with the paper colour.

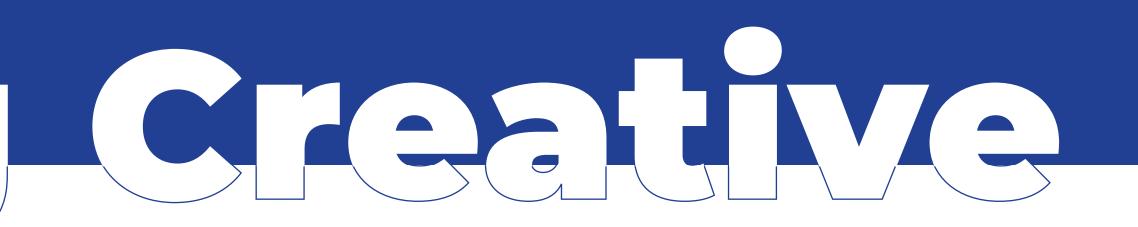


Make Your Envelope Stand Out from the Crowd



Add a Touch of Class to a Special Occasion





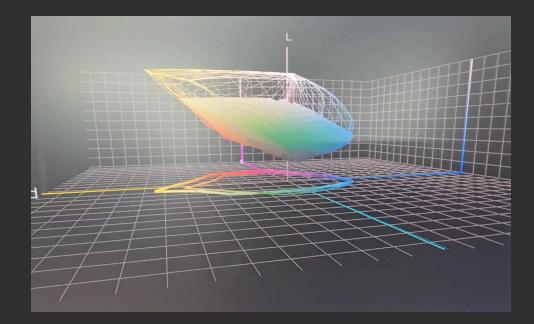
It's All About the Branding

Get Creative with White



How Much More Colourful Are We Talking Here?

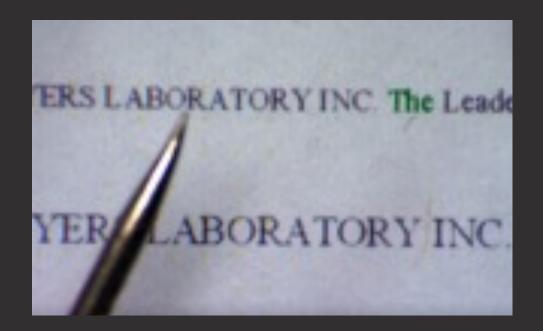
You've now seen the difference between output on darker media when printing with CMYK and CMYW technology. Keypoint Intelligence assessed the actual colour space difference—the results are dramatic. Click on the gamut video to see the colour space of the traditional CMYK device (solid) versus the extra colours available using Xerox CMYW technology when printing on dark card stock.



Composite vs. Pure Black: How Much of a Sacrifice Is It?

When we first saw the Xerox VersaLink 8000W, we were concerned about how well the device would be able to handle black, especially in how tight the registration (lining up the CMY toner dots) would be on black fine lines and small text when printing business graphics.

We were very impressed—the Xerox VersaLink 8000W handled our most challenging targets with the greatest of ease.



Where's The Catch?

The old adage "Too good to be true" had to come into play at some point. Indeed, there are three areas where we saw the limitation of missing black toner.



Memory colours (skin tones, foods, nature scenes) did not look as realistic as from a CMYK device

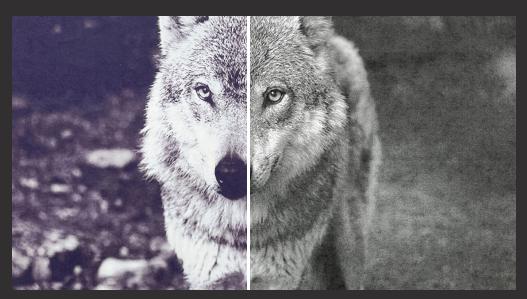


Some light and dark contrast was lost at times

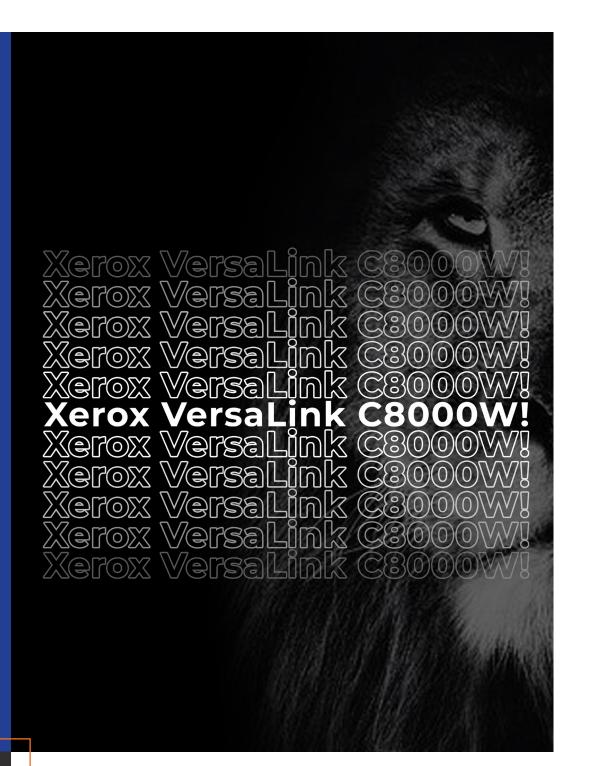


Greyscale halftone images were not as neutral, with a purplish hue

Greyscale



Xerox



IN CLOSING There is so much to like about the Xerox VersaLink C8000V!



☑ Unique Creative Opportunities
☑ Training Time Required
☑ Ease of Design
☑ Investment Cost







COLORS OF I





Xerox® and VersaLink® are trademark of Xerox Corporation in the United States and/or other countries.