

Roland's New Printer Fills Interesting Niche

The versatile PC-12 would be a great addition to any shop.

By Jeff Dorgay

It slices, it dices, it even makes fries! Well, almost. The Roland Color CAMM PC-12 is a printer that fills a very interesting niche. While Roland is very well known for their large format inkjet printers in the fine art world, they make a number of printers that have an integral cutting head as well, the PC and CAMM JET series. These machines are widely used in the sign industry for a number of different applications. The cutter head is used with the Roland ColorChoice software to cut complex shapes out of different materials once they have been printed. You can produce anything from T-shirt transfers to large vehicle graphics with perfect precision.

All of that was great if you had the space and budget for another large printer in your studio (and had the workflow to keep it running.) Now with the introduction of the PC-12 (street price \$4,995) you can have all of this capability in a footprint the size of the other guys- photo printers. So, just what is the PC-12 and what can you do with it? Answer: It's a 1200 dpi dye sub printer with an integral cutter that you can comp just about anything with.

Because the PC-12 is such a complex little machine, I strongly suggest that you give yourself a few hours of uninterrupted time to set it up and run initial tests. Read the setup directions thoroughly before starting. That being said, here are a few setup tricks that aren't in the manual that will, hopefully, save you from a brain aneurysm later.

One of the first things to do is install the cutter blade. With the power off and the front cover open, gently slide the print head carriage to the left to loosen the knob that holds the blade in place. Follow the directions implicitly on aligning the blade. Next, make sure you wind the cartridges tight like an old cassette tape so there is no slack. Failing to do this will cause a broken ribbon (trashed cartridge) on the first print.

The PC-12 will connect to your Mac or PC via a USB 1.1 connection. On the PC side you can also connect with the parallel interface. Roland has thoughtfully included high quality cables of both types for your use. (A nice touch after you drop this much money on a printer.) You can use both interfaces concurrently.

For those of you that use Windows XP, ignore the quick start instructions and do not install the PC-12 driver. The ColorChoice 4 software will recognize the printer, making this unnecessary. Another small but critical tip: make sure that the end of your media is cut squarely. Failure to do this will cause a media jam and potential ribbon tear.

While the PC-12 comes with the standard CMYK resin inkset, you can also use wax ink. This will also allow you to use up to 5 additional spot colors, including silver and gold foil. These are a must for designers trying to present comps that will have gold or silver stampings. No other proofing device on the market will allow you this flexibility. As my colleague Jason Miletsky will concur, it is usually difficult for clients to visualize anything, so this capability will help sell more than one design job.

You can run ColorChoice 4 in a Mac (8.6-9.2) or Windows environment. I use ColorChoice in both and have found it to be about twice as fast on the Windows side, all other things being equal. For those of you that already use Roland printers, this works just like the software for your Hi-Fi JET or Hi-Fi JET PRO, it just has additional functionality for cutting. For those of you that are new to the Roland world, ColorChoice 4 is a full PostScript level 3 RIP that will work with TIFF, EPS, JPEG and PDF files. You should have at least 512MB of RAM available and a dedicated hard drive, if possible, to make it really fly. For those of you in Mac world, there is an applet inside the ColorChoice folder called PE Engine. Give this as much RAM as you can spare (turn Virtual Memory on if necessary) so that you will not get PostScript errors. There is no need to increase the actual ColorChoice RAM allocation above the default.

With setup complete, run the print and cut tests just to make sure everything is happy and you are on your way to making really cool stuff!

Using ColorChoice is very straightforward. One of my favorite features of the Roland software is it allows very precise positioning of your images to print and has no minimum print size. (Maximum print length is 78.75-inches.) This will save you a lot of media over the years, because if you only need to print a 2-inch test strip it is no problem. Once open, choose your media type and color profile. While Roland has always offered very good profiles, ColorChoice 4 allows you to adjust the profiles to suit your personal tastes and save them for later use.

I printed a number of test files, including some vinyl wallwerks.com lettering for my truck and some really cool SpongeBob SquarePants stickers for my daughter. The Roland transfer material (requires the wax inkset) makes t-shirts of amazing quality. My tests were of much higher quality than the commercially available t-shirts I have purchased that are transfer-based. The brilliant color combined with the cutting

abilities makes it easy to prototype shirt and other fabric designs. Tip: make sure to print your file backwards so it is correctly oriented when applied and print about 10-20 percent darker than what you would for a paper print to increase saturation when applied to fabric.

The PC-12 consumables are very inexpensive, with the cartridges costing about \$12-\$30 each, depending on type. The media comes in 12-inch wide rolls in a few different surfaces and ranges from about 0.50 sq feet to about 1.25 sq. feet. You can use other media to print with, but using the Roland media (which matches their profiles quite well) will get you to perfect color faster.

Using a fairly standard Windows workstation (1.6GHZ processor, 1GB RAM and lots of free disk space), I was able to RIP an 8x11 image with complex cuts in about 10 seconds. Printing took about four minutes, with cutting taking about two more. Add a bit more time for more complex outlines and additional colors. By adding crop marks to your image, you can even laminate it and send it back through for cutting!

The PC-12 does everything the larger Color CAMM models do in a desktop package, so the sky is the limit for creating just about anything. The cutter is extremely accurate and will cut out anything that you can design in Adobe Illustrator or CorelDRAW. You must make an additional cut line in black (1R/1G/1B) that the cutter recognizes to cut from. I found that printing straight out of Illustrator was the easiest way to go. Keep in mind that you must cut from Roland media that has a backing. Originally, I had visions of cutting stuff out of card stock to mock up documents with windows in them, but this is about the only thing the PC-12 won't do.

Roland Color CAMM PC-12 is one of the most amazing digital design devices I have ever worked with. While it is very small and quiet, it is a very complex and powerful tool. Taking the time to familiarize yourself with all its capabilities will yield great results.

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