

# CX1200 Color Label Press

## Frequently-Asked Questions

### Primera Technology, Inc.

(As of February 24, 2010, Version 3.9)

**1. How much does it cost?**

In the USA and Canada, CX1200 is priced at US\$18,995. In Europe, the price is 18,995-, Euro. Please contact Primera USA or Primera Asia Pacific for prices in other regions.

**2. What does the price include?**

Everything needed to start producing labels from your Windows XP/Vista/7 PC, including PTPrint 8.0 RIP software, four starter toner cartridges (CMYK), 1250' (381m) roll of matte-finish label material, unwind and rewind stations, guillotine cutter, print engine and automatic tensioning control station.

A PC and LCD monitor is not included. The LCD monitor mounting bracket is included. A typical PC that meets our recommended specifications costs approximately US\$800 to US\$1000.

The lockable storage bench is an additional US\$995 (MSRP).

**3. How do I buy one?**

CX1200 is available factory-direct in the USA and Canada. Elsewhere, it is available from:

- Primera Europe, based in Wiesbaden, Germany
- Primera Asia Pacific, with offices in Hong Kong and Melbourne, Australia
- Primera Authorized CX Distributors in Latin America and ROW

**4. Do you offer any financing or leasing programs?**

Limited-time-only 0% financing is currently available in the USA and Canada. Please contact the factory for details. Financing programs in other countries vary.

**5. How fast is CX1200?**

3.25" (83mm) per second which is equivalent to 16 feet per minute (fpm).

**6. What does the toner cost?**

The toner carts that ship with the press are starter capacity of 10,000 pages. After that, we provide only extra high yield, 15,000 page toner carts to

keep running costs as low as possible. Cost per label varies greatly depending upon percent of coverage. Generally speaking, a full-color 60% coverage label will cost about US\$0.003 per square inch, equivalent to about US\$3.00/msi.

PTPrint has a built-in label cost estimator that allows you to precisely calculate cost per label based upon actual artwork files submitted for printing. The best way to estimate the cost of your label is to send an .eps file to Primera or to an Authorized Primera Reseller or Distributor. The file can then be run on the press and a cost estimate sheet printed out.

### **7. What kinds of substrates can be used?**

It is important that only laser-qualified plain papers and polyesters (white and clear) are fed through the machine. Non-laser qualified substrates – such as most standard polypropylenes – can cause maintenance and service issues due to the high heat levels generated at the fuser. Polypropylene by its very nature is supposed to shrink when heated, which is exactly what happens when attempting to use it in CX1200!

Substrates are continually being qualified. Please contact the factory for an up-to-date listing.

Primera supplies a number of popular approved materials on continuous 1250' (381m) rolls. SKUs include:

57501 White Matte Paper, 8.5" x 1250' (216mm x 381m)

57502 White High-Gloss Paper, 8.5" x 1250' (216mm x 381m)

Another important consideration is the adhesive. It is recommended that you use only true laser-qualified acrylic adhesives. Rubber-based or hot-melt adhesives can "ooze" onto the transfer belt and fuser rollers, causing print quality issues and possibly even destroying these components.

Many qualified specialty substrates are available, including fabrics for mattress tags, care use tags, etc., PVC vinyl, cork – even magnetic materials for making refrigerator/file cabinet magnets.

### **8. Is Pantone® spot color support included?** Yes, CX1200 includes Pantone-approved color support.

Keep in mind that CMYK presses can reproduce about 35% to 50% of the Pantone Spot Color book. CX1200 accurately reproduces about 46% of Pantone Spot Colors.

If you don't already have one, owners of CX1200 should purchase a Pantone Color Bridge Book. It gives details and examples of which colors are reproducible within the CMYK color space. Go to [www.pantone.com](http://www.pantone.com) for ordering information.

#### **9. How thick of a substrate can be used?**

Substrates are not rated on thickness, but on basis weight. That's because so many variables such as stiffness are part of the equation. Here's an explanation on paper weight versus thickness from an industry-standard press reference guide:

*There is no definite relationship between paper basis weight and thickness. Nor for that matter is there any definite relationship between either of these and stiffness.*

*Clearly, all else being equal, a heavier paper will be thicker and stiffer, but if a paper is pressed harder, or calendered, or contains a lot of fibre length variation or filler material, or the fibres have been well beaten, a relatively thin sheet can have a relatively high basis weight.*

All that being said, the guidelines on the CX1200's print engine are:

Minimum: 60 g/m<sup>2</sup> grain long (16 lb.) – about .003" or 3mil

Maximum: 300 g/m<sup>2</sup> (92 lb.) – about .013" or 13 mil

Keep in mind that PET and PVC are stiffer than paper, so a 13 mil paper will usually work fine but a 13 mil synthetic surface might not. A good rule of thumb is to always test a small amount of material before ordering larger quantities.

#### **10. Is it Mac compatible?**

PTPrint 8.0 software runs only under Windows XP, Vista or 7, but can import most popular Mac file formats. The preferred import format for PTPrint is an .eps file.

#### **11. What exactly does the PTPrint software do?**

PTPrint 8.0 is a production tool that helps you streamline the running of your digital label jobs. Major features include:

- import of the label artwork
- control over color matching
- step-and-repeat
- automatic calibration of the amount of "stretch" and insertion of timing marks required for rotary die-cutting
- built-in job estimator which uses the actual digital file for optimal accuracy

**12. Can the press be hooked up via Ethernet?**

Yes; through the production PC it can be connected to a standard Ethernet 10/100/1000 office network. The data connection to the press is also through Ethernet, but directly from the production PC.

**13. Is the ink waterproof?**

Yes. It also has multi-year UV resistance without lamination. Lamination as a post-process will further increase UV resistance and give additional abrasion resistance. Primera's toner is one of the best on the market for UV resistance, far surpassing the life of other brands of laser toner.

**14. What is the print resolution?**

Two print resolutions are supported:

- 1200 x 1200 dpi
- 4800 Color Quality (2400 x 600 dpi)

**15. What is the rated duty cycle?**

Up to 150,000 feet (45,720 meters) per month – equivalent to over one million 4" x 3" full-color labels.

**16. Does it print on die-cut labels?**

No. Our research and testing strongly indicates that laser and LED print engines are not suited for printing onto pre die-cut stocks. Adhesive bleed, excess toner, label jamming and other issues can damage the ITU (Image Transfer Unit), fuser and internal components of the press. Just like virtually all high-end digital presses today, CX1200 requires the use of an off-line finishing station.

**17. How do I get the labels die cut, laminated, stripped, re-wound, etc.?**

You can use almost any of the post-finishing machines on the market that are compatible with presses such as the HP Indigo®. Manufacturers include AB Graphic, Austek, Daco Solutions, Rotoflex, Sohn and many others.

In addition, Primera will have its own digital finishing system available in March 2010. Called the **FX1200 Digital Finishing System**, it is the perfect companion to CX1200. More details along with a downloadable brochure and video can be found at [www.primeralabel.com](http://www.primeralabel.com).

**18. What imaging technology is used in CX1200 and what are the advantages of laser versus LED print engines?**

The CX1200's latest-generation laser engine provides 2400 dpi scan resolution, while LED arrays are limited to just 1200 dpi.

In an LED system, the lens must be located much closer to the photoconductor surface than in a laser system. The close proximity of the lens to the photoconductor can lead to toner contamination on the lens and streaks in the print. Maintenance is required to keep the lens clean.

In a laser system such as CX1200, photoconductor exposure is inherently uniform. Any variation in exposure across the scan is gradual. In contrast, an LED system uses multiple LED arrays to achieve full-width photoconductor exposure. The use of multiple LED arrays can lead to step changes in exposure at array boundaries, which produce print defects (knot lines). This problem may be exacerbated by temperature and aging.

This site explains how two technologies are different:

<http://mimech.com/printers/laser-printer-technology.asp>

Generally speaking, LEDs are also much more difficult to keep properly aligned. You need an LED for each addressable point on the image, and going to higher resolutions increases the number of LEDs required. Keeping them aligned is difficult.

The principal advantage to laser is print quality. Lasers are easily capable of true 1200 dpi and scan resolutions up to 2400 dpi. Dot size, shape and density are much better controlled with a laser. This helps with edge smoothing of text and lines and resolution enhancements for photos.

LED's can also suffer from something called LED streaks. If you have large areas of mid tones (like 25% grey) slight variations of power delivery to each LED can cause vertical (process direction) streaks (areas that are lighter or darker than they are supposed to be).

Simply put, excellent print quality at high speeds favors laser over LED technology.

#### **19. What is the maximum roll diameter size?**

CX1200 takes up to a 12 inch (304mm) maximum roll diameter. On a 40# facestock with a 50# liner, this is equivalent to about 1250' (381m). This is the standard roll diameter for most automated label applicators.

Some of the biggest automated label applicators take up to a 14" (355mm) roll diameter but that is too heavy for a normal person to lift up onto the CX1200's rewinds or onto an automatic label applicator. It was decided that a 12 inch (304mm) roll diameter was a more reasonable size for most people.

**20. What is the warranty?**

One year parts and labor. Extended and on-site warranties are also available at extra cost. On-site service plans are available in many major countries; please inquire with Primera or your local distributor for details.

**21. What kind of maintenance is required?**

The same as most office laser printers: scheduled replacement of transfer belt, fuser and waste toner bin, occasional vacuuming of the interior of the printer to remove paper dust and excess toner.

**22. How do I get the press set-up at my location?**

Most users prefer to install the press themselves by following the set-up and installation DVD that is included with every unit. Typical set-up takes one and a half to two hours. Primera's Technical Support Representatives are available by phone during regular business hours to help with any questions.

No-charge operator training is held on a regular basis at Primera's headquarters in Plymouth (Minneapolis), Minnesota, USA. Training in other regions include Primera Europe in Wiesbaden, Germany and at Primera Asia Pacific in Melbourne, Australia. Many of Primera's distributors will also provide installation and training.

**23. What type of operating environment is required?**

Most temperature-controlled office or shop environments are acceptable.

**24. How many labels per job are typically run on the press?**

It depends upon the size of the label. Generally speaking, runs of just a few labels to ten of thousands of labels are appropriate and cost-effective for CX1200. The input roll is 1250'. The press has been designed to print up to 1250' at one time.

**25. What level of consistency can I expect from the first label to the last label?**

The CX1200's heat control is highly sophisticated. In fact, it was one of the most critical elements during the product's software development. Depending upon the colors utilized, a very slight shift can be expected on runs of more than a few hundred feet at a time.

**26. Is unattended operation possible?**

Yes. Once a job is started, the operator can walk away and return when the job is finished. There is no real need to monitor the job while it prints.

Important functions such as color consistency are automatically performed.

**27. How much waste is there at the beginning and end of jobs?**

Almost none. When starting a job, the operator simply loads about 24" of substrate from the input roll. The press software automatically generates a blank leader of approximately 3 feet, saving toner. The leader is taped onto the output core and the job starts to print. When the job is complete, a trailer of approximately 7 feet is generated. This lets you thread your label finishing machine with blank material, again saving toner. Header and footer lengths can be adjusted from within the PTPrint Software.

**28. Are software upgrades available?**

Yes. As new features are added, low-cost or free software upgrades are available on Primera's website at [www.primeralabel.com](http://www.primeralabel.com).

**29. Where is the press assembled?**

At Primera's main factory in Plymouth, Minnesota, USA.

**30. I have more questions. How can I get them answered?**

Primera has one of the best online Knowledge Bases available in this industry. You can access it 24/7 at [www.primeralabel.com](http://www.primeralabel.com). Or, call Sales at 1-800-797-2772 (USA and Canada) or +763-475-6676. Email to [sales@primera.com](mailto:sales@primera.com) or [support@primera.com](mailto:support@primera.com).

**31. Who is Primera?**

Primera is one of the world's leading specialty printer companies. The company has been in business for more than 33 years and has developed and produced well over a million printers. The company's main websites are at [www.primera.com](http://www.primera.com) and [www.primeralabel.com](http://www.primeralabel.com).