




# ChromaBlast C120 Print Times

The following tables indicate the approximate print times when using the ChromaBlast C120 software with a number of different printer settings. Please note that actual print times will vary depending on the computer system and options selected in the printer driver.

The test results are based on the ChromaBlast recommended computer specifications (Windows XP, Pentium 4, 3.0 GHz, 2GB Ram and using a USB 2.0 cable). The ChromaBlast settings were Letter paper size, photographic color management and ColorSure off. Corel Draw 12 was the Graphic Design software. All other software applications were turned off during the test procedure. The print time is calculated from when the Print button is clicked to the time the printer ejects the printed sheet.

		Print Time (in Min & Sec)	Print Time (in Min & Sec)	Print Time (in Min & Sec)
Sample Image #1	Image Info.	ChromaBlast 4880	ChromaBlast R1800	ChromaBlast C120
	<b>High Speed</b> 7 x 10.25 image size	1:30	:26	1:43
	<b>High Quality</b> 7 x 10.25 image size	1:51	1:13	2:43

		Print Time (in Min & Sec)	Print Time (in Min & Sec)	Print Time (in Min & Sec)
Sample Image #2	Image Info.	ChromaBlast 4880	ChromaBlast R1800	ChromaBlast C120
	<b>High Speed</b> 8" x 8.8" image size	1:20	:26	1:23
	<b>High Quality</b> 8" x 8.8" image size	1:39	:53	2:10

		Print Time (in Min & Sec)	Print Time (in Min & Sec)	Print Time (in Min & Sec)
Sample Image #3	Image Info.	ChromaBlast 4880	ChromaBlast R1800	ChromaBlast C120
	<b>High Speed</b> 8" x 8" image size	1:19	:29	1:17
	<b>High Quality</b> 8" x 8" image size	1:37	1:10	1:58

Actual results will depend on specific artwork, hardware, firmware, RIP and color management settings. Numbers are based on the specific images displayed using the specifications above. Inconsistencies in print times can be explained by a variety of factors including, but not limited to: imaging time, paper feed time, print head speed, ChromaBlast settings, Computer RAM and Processor speed, printer anomalies and actual print size of the image. Contact your sales representative with any questions @ 843-884-1575

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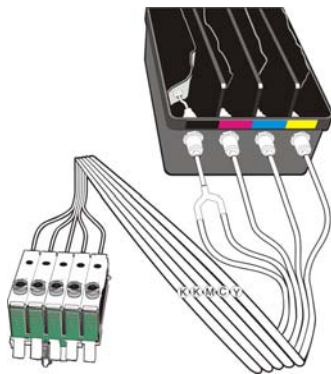
## ChromaBlast Solution for the Epson C120

### **ChromaBlast C120 System Features**

- **ChromaBlast inks (CMYK)**
  - Utilizes the proven reliability of ChromaBlast inks
  - Consistently accurate colors
  - Less dense formulation for enhanced performance and fewer head cloggings
- **ChromaBlast C120 driver provides easy-to-use color management tools for spot-on color.**
  - High quality and reproducible cotton decoration transfers.
  - New ChromaBlast C120 color management tools produce superior color output.
- **Epson C120 replaces previous Epson C88 for introductory level, color decoration printer.**
  - C120 color profiles provide superior color output similar to the C88
  - Head to head, the C120 produces superior quality images at faster or equal speeds to the C88 on the high quality settings. High speed settings produce improved images at slower speeds.
- **Two Ink Delivery system options**
  - Quick Connect bulk ink system uses 55 ml bulk ink bags\* that lower the cost per print.
  - Ink cartridges are available in a 'two-pack'. Combined yield of the two-packs is roughly comparable to the yield for the single C88 cartridges.

#### **Ink System Configuration – NEW!**

- 4 colors (CMYKK)
- The C120 printer features a 5 cartridge carriage. Sawgrass has designed an ink configuration that includes three colors (CMY) and two, interchangeable black color cartridges (KK).
- The QuickConnect bulk ink delivery system features a damper system with five ink compartments. The first two compartments are designed for black ink and the remaining three are designated for the three colors (CMY).
- Four bags of ink are used in the QuickConnect bulk ink system, with tubing for the black ink splitting and feeding both of the black dampers.



Bulk Ink System configuration



Individual Ink Cartridge configuration

- *Bulk-ink bags require the purchase of the ChromaBlast bulk ink delivery system.*

- **Printing Speed**
  - On the High Quality setting, speed is equal or improved for the C120 over the C88.
  - On the High Speed setting, the C120 driver sacrifices some speed compared to the C88 for the sake of enhanced image output quality. The C120 printer system has eliminated several image quality issues, such as banding and 'spitting' that some C88 users experienced.
- **Your Travel Companion**
  - This system easily fits into any office, shop or home. Portable and lightweight, it is perfect for cotton decorators on the go. Take it to festivals, shows, events, races – anywhere someone may desire customized cotton apparel.
- **Sawgrass Total Support**
  - Sawgrass offers unparalleled support for ChromaBlast users that includes full product warranty and expert-level technical support via telephone, email and fax. This comprehensive support delivers value and peace of mind to all of our customers.

## ***Epson C120 Product Features***

### **Printing Technology**

4 Color *Drop-on-Demand* Micro-Piezo ink jet technology.

### **Printing Speed**

7 x 10 Inch Photograph:	1:43	High Speed
7 x 10 Inch Photograph:	2:43	High Quality
8 x 8 Inch Vector Art:	1:17	High Speed
8 x 8 inch Vector Art:	1:58	High Quality

*Print speeds vary based on the computer system configuration (processor speed, RAM), image size and how many computer processes are running concurrently.*

### **Printing Cost per Image**

Approximately \$1.54 (ink & paper) for a heavy-coverage 8x10 image using 55 ml bulk ink bags.

Approximately \$3.80 (ink & paper) for a heavy-coverage 8x10 image using standard size cartridges

### **Maximum Printable Area**

8 ½" (W) x 11" (H)

### **Dimensions & Weight**

17.1" (W) x 9.4" x 6.3", 10.4 lb.

### **Minimum Recommended System Requirements\*\***

- Pentium ≥3, 800 MHz, ≥512 MB RAM
- Windows 2000/XP/Vista

### **Recommended System Setup**

- Pentium 4, 3.0 GHz, ≥1 GB RAM (2 G RAM is highly recommended when using graphic design programs such as Corel Draw and Photoshop.\*\*)
- Windows XP/Vista compatible

**\*\* Minimum System Requirements**

As you know, Sawgrass currently provides the minimum system requirements needed to run each of its desktop systems. As technology continues to advance for printer platforms, computers, and graphic software, these requirements are more critical than ever for your customers' optimum performance. We are asking you to play a more proactive role in consulting with your customer and assessing whether they have an adequate computer system to effectively run not only the printer, but the graphic software programs as well. With that request in mind, we wanted to update you on these minimum system requirements for current systems and systems to be launched in the very near future to ensure your customers' success when using a Sawgrass system.

Through our product development process and testing, we have found the following:

- Newer printers require more RAM and processor speed to work properly and at maximum efficiency and speed.
- Epson's new printers, such as the 4880 and C120 perform well on Windows XP and Vista operating systems, and may not perform as efficiently on older Windows platforms such as Windows 2000, Windows 98 or Windows ME.
- Newer graphic design software/programs require more RAM and processor speed for maximum efficiency and speed.
- Newer graphic design software/programs perform well on Windows XP and Vista operating systems, and may not perform as efficiently on older Windows platforms such as Windows 2000, Windows 98 or Windows ME. The processor speed and RAM requirements of these programs may exceed those needed just to operate the printer.
- Presently, PowerDriver software (for SubliJet users) is designed to work exclusively on Microsoft operating systems and not on Macintosh OS systems.
- PowerDriver software is designed to handle graphic files (Bitmaps and Vector) images. Additional RAM memory and/or processor speeds greater than the minimum recommended values may be required to print large graphic files.

**Sawgrass Technologies minimum and recommended system specifications for whole product solutions:**

- Each new product has both a well-stated minimum and recommended system specification that take into account the printer and graphic design programs that can/should be used with the system.
- Sawgrass reserves the right to limit support to customers that use less than the minimum stated requirements for each system.
- Sawgrass Technologies recommends resellers verify their customers' system specifications before recommending or selling a particular printer solution.

**Effects of using computer systems and graphics programs that are *below* the minimum recommended system requirements:**

- Print speeds may be longer and therefore less economical to run.
- Larger graphic files may not print properly or at all.
- The computer may get 'hung up' or 'time out' during the processing of the print command.
- Graphic design programs are much slower to use.
- Print spooling may not work properly because of lack of computer or printer memory capacity.
- Graphics may not print correctly. Images may be cut off.
- Longer print times lead to more room for error - i.e. nozzle drops or banding.

**Bottom line:**

The minimum and recommended system specifications for new printer platform/PowerDriver solutions have increased dramatically. The more applications that are open and running at one time on a computer will greatly affect the efficiency and ability to run/print from graphics programs. **Printing performance is maximized by using the latest hardware and software systems available.**

**System Specifications for Printer Using Corel 10 or Photoshop CS**

Printer	Minimum RAM	Recommended RAM	Minimum Processor Speed	Hard Drive Free space
<b>Epson 4880</b>	1 GB	≥2 GB	≥Pentium 4 3 GHz	≥30 GB
<b>Epson 1800</b>	256 MB	≥1 GB	≥Pentium 3 500 MHz	≥300 MB
<b>Epson 1400</b>	512 MB	≥1 GB	≥Pentium 3 800 MHz	≥1 GB
<b>Epson C120</b>	512 MB	≥1 GB	≥Pentium 3 500 MHz	≥500 MB

**System Specifications for Printer Using Corel 12 or Photoshop CS2**

Printer	Minimum RAM	Recommended RAM	Minimum Processor Speed	Hard Drive Free space
<b>Epson 4880</b>	1 GB	≥2 GB	≥Pentium 4 3 GHz	≥30 GB
<b>Epson 1800</b>	512 MB	≥1 GB	≥Pentium 3 500 MHz	≥300 MB
<b>Epson 1400</b>	512 MB	≥1 GB	≥Pentium 3 800 MHz	≥1 GB
<b>Epson C120</b>	512 GB	≥1 GB	≥Pentium 3 500 MHz	≥500 MB

**System Specifications for Printer Using Corel X3 or Photoshop CS3**

Printer	Minimum RAM	Recommended RAM	Minimum Processor Speed	Hard Drive Free space
<b>Epson 4880</b>	1 GB	≥2 GB	≥Pentium 4 3 GHz	≥30 GB
<b>Epson 1800</b>	1 GB	≥2 GB	≥Pentium 4 3 GHz	≥1 GB
<b>Epson 1400</b>	1 GB	≥2 GB	≥Pentium 4 3 GHz	≥1 GB
<b>Epson C120</b>	1 GB	≥2 GB	≥Pentium 4 3 GHz	≥1 GB

## ChromaBlast Solution for the Epson C120 printer

As a replacement for the Epson C88 printer, the Epson C120 printer is designed for customers who are looking for a fast, cost-effective, entry-level printer for producing cotton transfers. The Epson C120 allows the end-user to print up to letter size documents.

**Q. How is the ChromaBlast C120 driver different from the ChromaBlast C88 driver?**

A. Sawgrass Technologies has developed a new ChromaBlast color management profile for the Epson C120 that provides color output that exceeds that of the previous generation of Epson entry level printers, such as the Epson C88.

**Q. What type of ink delivery options will be available?**

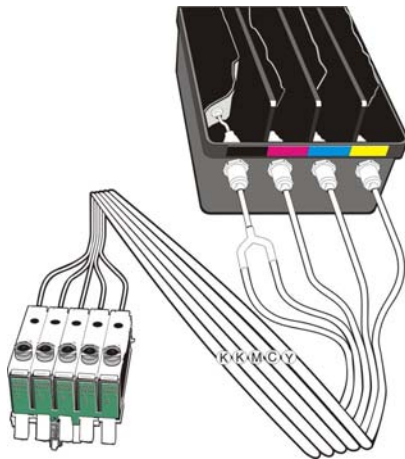
A. Two ink delivery systems are available. A QuickConnect bulk ink system that uses 55 ml ink bags and individual carts. The ink carts will be sold as 'two-packs' with two ink cartridges per box.

**Q. What is the ink configuration of the ChromaBlast C120 system?**

A. The ink configuration is KMCY (Black, Magenta, Cyan and Yellow). The OEM printer utilizes five ink cartridges (two black). The Sawgrass bulk ink system uses a set of five ink dampers (cartridges) and four ink bulk ink bags. The black ink bag supplies two of the dampers with black ink.

*Ink Configuration- New!*

- o C120 printer features a 5 cartridge carriage. Sawgrass has designed an ink configuration that includes three colors (CMY) and two interchangeable black color cartridges (KK).
- o The QuickConnect bulk ink delivery system features a damper system with five ink compartments. The first two compartments are designed for black ink and the remaining three are designated for the three colors (CMY).
- o Four bags of ink are used in the bulk ink system, with tubing for the black ink splitting and feeding both of the black dampers.



Bulk Ink System configuration



Individual Ink Cartridge configuration

**Q. Will I be able to use ChromaBlast C88 ink cartridges in the Epson C120 printer?**

A. Yes. The C120 and C88 bulk ink systems utilize the same ink formulations and ink bags.

**Q. What type of computer system will I need to get the optimum output?**

A. A Pentium 4, 3.0 GHz or higher processor is highly recommended. 512 MB RAM is the minimum recommended memory. However, 1 GB RAM or more is highly recommended to process larger documents with high quality settings. 1 GB RAM of free hard drive space is required for proper software and file management.

**Q. What is the major advantage of the ChromaBlast C120 digital cotton decoration system?**

A. The ChromaBlast C120 digital cotton decoration system is a reliable, fast and inexpensive printer solution that offers the cost effectiveness of a bulk ink system and a reliable maintenance-free printer solution.

**Q. What paper sizes does the Epson C120 support?**

A. The Epson C120 can print up to letter size (8.5 x 11 inch).

**Q. Who should use the ChromaBlast solution for the Epson C120?**

A. The Epson C120 ChromaBlast cotton decoration system should be sold to customers who currently are using a C88 printer and wish to make an easy and smooth transition to a newer printer or to new customers looking to introduce sublimation to their product mix.

The C120 printer solution is lightweight and easily portable, making it a perfect printer for custom product designers who take their business directly to the customer, operate mobile Kiosks or businesses that have limited space.

**Q. How does the print speed compare to the C88 printer?**

A. On the High Quality settings (which Sawgrass recommends), the C120 driver produces enhanced image output at slightly faster print speeds than the C88 system. The High Speed setting for the C120 driver sacrifices some speed for the sake of enhanced image output quality.

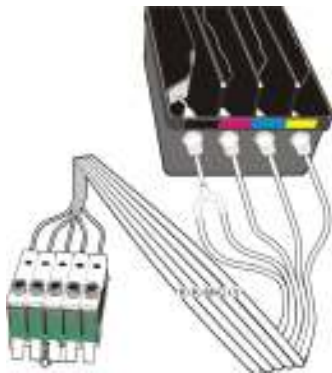
Overall, the ChromaBlast C120 driver has eliminated several image quality issues, such as banding and 'spitting' that some C88 users experienced.

## ChromaBlast C120 System Features

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## Epson C120 Product Features

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**System Specifications for Printer Using Corel 12 or Photoshop CS2**

Printer	Minimum RAM	Recommended RAM	Minimum Processor Speed	Hard Drive Free space
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**System Specifications for Printer Using Corel X3 or Photoshop CS3**

Printer	Minimum RAM	Recommended RAM	Minimum Processor Speed	Hard Drive Free space
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<b>Epson 1800</b>	1 GB	≥2 GB	≥Pentium 4 3 GHz	≥1 GB
<b>Epson 1400</b>	1 GB	≥2 GB	≥Pentium 4 3 GHz	≥1 GB
<b>Epson C120</b>	1 GB	≥2 GB	≥Pentium 4 3 GHz	≥1 GB

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