

Epson SureColor P800

vs

Canon PRO-1000

17" Inkjet Printer Match Up

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# Epson SureColor P800 vs. Canon PRO-1000



The Epson P800 and Canon PRO-1000 are the two prosumer grade 17" wide inkjet printers available today. Prosumer means that they offer lab quality results and moderate productivity. You could run a small print business with this level inkjet printer. Both machines are designed to print photography and artwork that can be sold with the promise of fade resistance over many decades. They both offer remarkable flexibility in terms of print size, paper options, and cost effectiveness. At this point in the inkjet technology race, there is little room for improvement. With both printers, you have access to quality that could only be achieved by a professional print lab 15 years ago. Both are reliable and fairly easy to operate. Choosing one or the other is to pick from a menu of which features you value most. To us, the old Ford vs. Chevy argument comes to mind when following the debate on which superior. Our conclusion is that if you read the manual and take time to learn how to use the printer, both could satisfy the need of 90% of users. Below is a quick summary of the Canon PRO-1000 and Epson P800 where you'll see similarities and differences. Please feel free to contact us with questions. We are happy to help you decide which is best for you.

Below you will find a quick comparison chart of printer specs and capabilities. Further down we explore the features and differences in how the printers feed paper, use black inks, print black & white, and more.



# Just the Facts

	P800	PRO-1000	
Max paper width	17"	17"	
Max paper length	Up to 550" - File size dependent	26.61"	
MSRP - Rebates often available	\$1395	\$1299	
Ink	Pigment Pigment		
Ink tank capacity	80mL	80mL	
Maintenance tank?	Yes	Yes	
Colors	Cyan (T8502) Vivid Magenta (T8503) Light Cyan (T8505) Yellow (T8504) Vivid Light Magenta (T8506) Photo Black (T8501) Matte Black (T8508) Light Black (T8507) Light Light Black (T8509)	PFI-1000 Matte Black PFI-1000 Photo Black PFI-1000 Cyan PFI-1000 Magenta PFI-1000 Yellow PFI-1000 Photo Cyan PFI-1000 Photo Magenta PFI-1000 Gray PFI-1000 Gray PFI-1000 Red PFI-1000 Blue PFI-1000 Chroma Optimizer	
Print head	Piezoelectric	Thermal (user replaceable)	
Dimensions (W x H x D)	26.93" x 14.80" x 9.85"	28.5" x 11.2" x 17.0"	
Weight	43 lbs.	70.5 lbs.	
Paper feed	Top auto-load Front load single sheet	Top auto-load Rear single sheet fine art	
Roll feed?	Roll adapter optional No		
Can print on board? (25-50 mil thickness)	Yes	No	
Borderless printing	Yes	Yes	



Custom borderless printing?	Limited to certain widths, set by Epson	No	
Connectivity	<ul> <li>Hi-Speed USB 2.0</li> <li>Ethernet (10/100Base -T/TX)</li> <li>Wireless-n 2.4 GHz, Wi-Fi Direct</li> <li>Apple AirPrint and Google Cloud Print support</li> </ul>	<ul> <li>Hi-Speed USB 2.0</li> <li>Ethernet (10/100Base - T/TX)</li> <li>PictBridge (Wireless LAN)</li> <li>Wireless LAN (IEEE 802.11b/g/n)</li> </ul>	

### Paper Feed Details

### Canon PRO-1000

The PRO-1000 has two feed options:

- Rear Auto-feed Tray Suggested max paper thickness 14 mil
- Single Sheet Manual Feed Slot Paper thickness 4 mil 24 mil

The top auto-feed tray is typical Canon; a solid design that provided consistent and straight paper feed. A small door behind the auto-feed reveals the manual feed slot. It is intended for heavy and thick products like <u>Blanco Matte Canvas</u>, <u>Palo Duro Baryta Fiber</u> <u>300</u>, and <u>Aurora Art</u> papers.

### **Rear Tray**

The top tray can hold 1 to 50 sheets of paper depending on media thickness. The PRO-1000 appears to share the same feed mechanism as its 13" wide cousins, the PRO-100, PRO-10, and PRO-1.

Feed is consistent and strong. It easily fed thick papers like Palo Duro Etching and the 96lb. Pecos River Gloss.





# Single Sheet Manual Feed Slot

The rear single sheet manual feed slot is primarily for thick media. It can accept media between 4-24 mil.

To use - Start by closing the top door to the Auto Feed. Open the door to the single sheet path. Choice of this path is controlled at the software level. See the driver tours below for detail.



# Epson P800

The P800 has three paper feed options.

- Top auto-feed tray
- Front "fine art feed" and front "straight paper path"
- Optional roll adapter \$199 MSRP

For Epson 3880 and 3800 users, the removal of the rear single sheet path might come as a surprise. However, the front path has been redesigned for double duty. By opening a rear door on the printer, the path becomes the "fine art feed" for heavy and thick products like canvas and cotton fine art media. Close the rear door and the front path becomes the "straight paper path", suitable for board thickness media. Using <u>Blanco Matte Canvas</u>, <u>San Gabriel Baryta SemiGloss 2.0</u>, and <u>Aurora Art</u> papers, we found using the front path easy. It usually took less than a minute to load a sheet and get the printer ready to go. Helpful loading prompts on the printer's control panel were a nice bonus.

# Top Tray

The top tray can hold 20 to 100 sheets of paper, depending on the thickness of your media. It P800 seems to share the same feed mechanism as its 13" cousin, the P600. The mechanism is more robust than expected and easily fed <u>Aurora Art</u> and the <u>861b. Pecos River Gloss Duo</u>, both 14mil thick. If you use mostly matte or cotton art papers, clean



the feed roller after each box of paper. Help on that process is in our support center.



# **Front Single Sheet Path**

The front single sheet path is designated for fine art papers and poster board. Epson intends you to use this path for media that is 13mil or thicker. Note you can put paper up to 18mil thick through the top auto-load tray if you want. Always remember to <u>set the platen gap and</u> <u>paper thickness</u> if you are using media over 12mil. New to the P800, this path will accommodate sheets up to 17" wide. The front feed was limited to 16" width on the Stylus 3880 and 3800 models.



To activate the single sheet path, push on the gray bar above the paper output tray. This will cause the tray to lower and extend. Follow the printer's on-screen instructions to load your media.

The front path has two "modes" - poster board and fine art paper.

Fine Art Paper - In this mode you will be instructed to open the door on the back of the printer. The paper will feed into the front and arc upwards and out through that door.

Poster Board - In this mode, the back door remains closed. Media feeds through the front and straight out the back of the printer. Make sure you have plenty of clearance between the printer and anything behind it.



**WARNING** - The front feed in fine art mode is a bit unpredictable. The internet is peppered with reports of misfeeds and problems getting it to work. The root cause is a plastic lip near the back of the feed path as the paper curves up and out through the back door. Heavier, stiffer paper crashes into the lip instead of going over. Chaos ensues.

**AVOIDING THE TROUBLE** - Use the front feed in poster board mode, which is flat and avoids the plastic lip mentioned above. Print performance is the same. Media type selection remains the same. Follow the printer's on-screen instructions for loading in board mode. Set your driver so it knows you are using the board mode front feed.



# **Roll Feeding**

An optional roll adapter is available for \$199. With the adapter, the P800 can use 13" to 17" wide rolls with a 2" or 3" diameter core.

Epson states that the maximum printable length may be limited by software application, OS, available media and RIP.



9 mil to 27 mil Media thickness range Maximum roll media width 17 Inches Minimum roll media width 13 Inches Top minimum margin 1.97 Inches (50mm) 0.55 Inches (14mm) Bottom minimum margin 0.12 Inches (3mm) Left and right minimum margins Available borderless printing widths 13", 16", 16.5", 17" Borderless expansion modes Retain Size, Auto (fixed at max) Roll media length Manual Cut to Desired Length

# Canon PRO-1000 Black Inks

The PRO-1000 uses multiple black inks. The printer has an ink channel and nozzles for each primary black, matte and photo. This feature means that you only need change the driver media setting to "swap". There is no physical swap process purging and refilling the single black channel - as employed by Epson printers.



- Photo Black ink used with papers that have any reflective properties glossy, semigloss, satin, luster.
- Matte Black ink used with all non-reflective papers matte papers and most cotton fine art papers.
- Gray
- Photo Gray



# Epson P800 Black Inks and Swaps

The P800 uses Photo Black (PK) or Matte Black (MK)plus Light Black and Light-Light Black. Rules of their use:

- Photo Black ink media with any reflective properties (glossy, semigloss, satin, luster)
- Matte Black ink all non-reflective media (matte papers, most cotton fine art papers)

Since the P800 print head has one set of nozzles for the primary black ink, it swaps between Matte Black and Photo Black based on media type selection in the printer driver. The swap takes some time and uses black ink in the process:

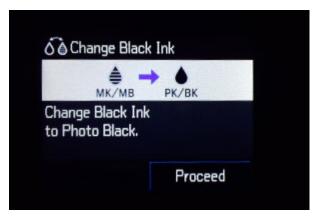
#### Black Ink Conversion Times

)
)
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### Plan Your Prints, Save Time and Money

We recommend that you print images in groups based on paper type. Gather all glossy, satin, luster, and photo metallic bound images as one batch and all matte (non-reflective) paper images into another. You will save considerable time and money following this procedure.

### Turn off "Black Ink Auto Change"



At some point you will hit the print button without double checking the media selection. If you are in PK mode and accidentally choose an MK media type, the printer will swap inks automatically by default. You don't want this. Avoid the pain and turn off the feature.

# **Print Speed Results**

The 8" x 10" image at right was printed on UltraPro Satin and the appropriate media setting. The print was made on a fast Windows computer over our wireless network.

Setting Equivalence

Canon "High" and Epson "1440x720 / Photo" setting are roughly equivalent settings. They yield similar color saturation and detail when viewing a print at standard viewing distance.

# Canon PRO-1000 Print Speed

4x6

1:51

1:08

Quality

Highest

High

Standard	0:44	1:29	3:15

8x10

3:40

2:22

Print speeds will vary by computer and how you connect to the printer.

# Epson P800 Print Speed

Quality	High Speed	Finest Quality	4x6	8x10	13x19
1440x720	Yes	Yes	1:00	1:56	4:28
2880x1440	Yes	Yes	1:49	3:23	7:55





13x19

8:00

5:13



# Canon PRO-1000 Borderless Capabilities

You can make borderless prints with the PRO-1000. Borderless sizes are preset at the factory and include:

- 4x6
- 5x7
- 8x10
- 8.5x11
- 13x19
- 17x22
- 10x12
- 14x17
- Various A and Japan sizes

NOTE - You cannot define a custom size in the driver and print it without borders.

NOTE - 11x14 is a popular photo size but **is not defined as borderless in the driver**. You can print <u>Red River's 11x14 selection</u> using our <u>Canon 11x14 Borderless Hack</u>

### Epson P800 Borderless Capabilities

You can make borderless prints with the P800. Borderless sizes are preset at the factory and include:

- 3.5" x 5"
- 4" x 6"
- 5" x 7"
- 5"x8"
- 8" x 10"
- A4 (8.3" x 11.7")
- Letter (8.5" x 11")
- 10"x12"
- 11" x 14"
- 11" x 17"
- A3 (11.7" x 16.5")
- Super B (13" x 19")
- 16" x 20"
- A2 (16.5" x 23.5")
- 17" x 22"



### Canon PRO-1000 Black & White Performance

The PRO-1000 has a "Black & White" mode that takes color or already grayscale images and, it is assumed, prints them only using three black inks - Photo or Matte Black plus Gray and Photo Gray. The system produces neutral grayscale prints as its default. Since this is a driver based system, no ICC printer profiles are required.



As mentioned above, you can choose from black & white (neutral), cool, and warm tone presets.

The image at right shows, from left to right, the driver's cool, neutal, and warm iterations of the same image. The difference is subtle to be sure. There is only a hint of cool or warmth added. We prefer this approach as toned B&W images can easily look over edited and unnatural with too much color added.

Using this system is recommended if you start with a color image and simply want to print a neutral, warm or cool black & white image.





Another option is to print a grayscale file (converted from color into grayscale in the RGB color space) and allow your application to manage colors via a paper profile. While it does not use the black ink only system, you will gain finer control over contrast and tonality. The image at right is a good example. The original file is warm and has a fair amount of contrast.

Print on left - printed using the warm tone preset via the black & white (driver managed color)

Print on right - printed using a paper profile (application managed color)

Both prints are pleasing but the application managed color version closely matches the monitor.

So, if you are printing a toned B&W image and want to replicate that tone most accurately, our recommendation is to print the file using a printer color profile instead of the driver system. Keep in mind the file must be converted to B&W in the RGB color space before printing.



### Epson P800 Black & White Performance

-		
C rr :	Advanced B&W Photo	
Print Q y :	Quality 👻	
Mode :(J)	Neutral 🗸	Advanced
	Neutral	
Paper Settings -	Cool	
	Warm	
Source :	Sepia	
Size :	Letter (8 1/2 x 11 in) 🔹	User Defined

During our review of the Epson P600, we printed a wide variety of images on every type of inkjet paper. It was not long before we confirmed that the P800 offers the same black & white performance. The following is a recap of the P600 black & white review.

The Epson P800 can print with three black inks - Photo or Matte Black plus Light Black and Light Light Black. Using the printer driver's Advanced Black & White (ABW) mode, the three blacks are used together, although not exclusively, to make a print. The ABW system can produce truly neutral grayscale prints. Since this is a driver based system, no ICC printer profiles are required.

ABW also has choices for cool, warm, and sepia toned prints. Using the ABW advanced feature allows for fine tuning of tone, brightness, contrast, and more. However, any changes to these settings cannot be soft proofed. As a result, test prints are required to perfect the output.



If you are printing a toned B&W image and want to replicate that tone with ease, print the file using a printer color profile instead of the ABW system. Keep in mind the file must be



converted to B&W in your photo software before printing. Using a profile will more accurately reproduce the desired tonality when printed.

At right is an example of the ABW system and a printer profile at work. The original image file has a warm tone. The result using ABW (print on the left) is neutral and quite stunning. Using a printer profile (print on the right) maintains the image's warmth and is more accurate to the file.

# **Brief Summary**

P800	PRO-1000
Positives	Positives
<ul> <li>Better than lab quality output on luster, gloss, photo metallic, matte, fine art, and baryta-fiber based inkjet papers</li> <li>Bold and true to life color saturation</li> <li>Minimum gloss differential and almost no bronzing</li> <li>Good ink economy and cost of operation</li> </ul>	<ul> <li>Robust and error free auto-load paper feed</li> <li>Single sheet paper feed option is easy to use</li> <li>Bold and true to life color saturation</li> <li>Good ink economy and cost of operation</li> <li>Long term fade resistance and "better than lab" quality output</li> </ul>

### Quibbles

- Fully customizable borderless printing would be nice
- At some point we'd like to see Epson printers in this line without the black ink swap and ensuing ink loss

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- Fully customizable borderless printing would be nice
- At some point we'd like to see Epson printers in this line without the black ink swap and ensuing ink loss

# **Canon Conclusion**

As the printer is almost four years old, this review is well overdue. On the upside, we have had our PRO-1000 since 2015 and have had a long time to think about it. It has been used to make hundreds of prints of all sizes and for different purposes. We have used every Red River product from <u>42lb. Pecos Gloss</u> up to <u>Blanco Matte Canvas</u> with success. It is a wonderful choice for <u>greeting card projects</u>. The top tray holds 10-30 cards and our top sellers, <u>60lb. Pecos River Gloss</u> and <u>60lb. Polar Matte</u> cards feed consistently.

We recommend the PRO-1000 for a range of customers. The small volume user who wants maximum print size will benefit from the printer's relatively low cost (around \$1000 street price) and virtually clog free operation. Larger volume users from the art fair vendor to a marketing department get consistent paper feed, improved output volumes, and lower cost of operation compared to most desktop models.



Overriding all of the above, the PRO-1000 makes printing images that will resist fade for decades surprisingly easy.

# **Epson Conclusion**

After making almost 100 prints with the SureColor P800, we find that it is a fine replacement for the venerable Stylus Pro 3880. The new printer offers more features, slightly better print quality and color gamut, most likely due to improved software. The bold combination of an auto-sheet feeder, specialty media feed, and roll capability will make the P800 an easy choice for anyone serious about making prints. We cannot say enough about the importance of a top loading auto-feed tray. This is the critical element for users who want maximum flexibility and production capability. Load it with sheets from 3.5" x 5" up to 17" x 25" and get started.

The P800's larger ink tanks are a two-fold bonus. Epson discounts the ink cost per milliliter as you are buying more at one time. This leads to a lower cost of operation - some 30% lower than a typical desktop model. Second, you can print more with fewer tank changes saving time.

### About Red River Paper

Inkjet paper from inkjet paper experts. Red River was founded in 1997 and has over 40 years experience in fine papers. We hand pick fine paper from mills around the world and bring them to our plant in Dallas, Texas. From here, we convert the paper to various sheet sizes and rolls, as well as add special features available only from Red River. We offer wholesale direct pricing, and the convenience of over 30 different inkjet papers under one roof. Red River Paper invests the time and money to understand and test the latest inkjet technology from Epson, Canon, HP, Lexmark and others so you do not have too. Our client services representatives are well versed in our products and inkjet printing, and can give our clients helpful advice on which Red River papers will suit their needs.