# TAVCO

# Canon PRO Series Information Guide

Take your wide-format graphics printing to new levels with the new, innovative Canon PRO Series printers.

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# Canon Resets the Bar with a New Graphics Poster Printer

It has been interesting to watch wide-format printing trends over the past few years. Surprisingly, the highest area of growth has been in the graphics and photography segment. This is partially due to companies of all types stepping up their marketing efforts with more display graphic materials. Canon has responded to this new demand by investing their R&D resources on the next wide-format platform, the new PRO Series. This includes both the **24-inch PRO 2000** and the **44-inch PRO 4000**. Both promise to be the new graphics and poster printer standard. Here are the highlights of the new improvements.

## More Rolls is More Better

The new PRO Series is available in two versions—either a single-roll printer or as a Multifunction Roll System (MFR). The advantage of having the second roll is that is can either be used as a second media source or it can be configured as a bi-directional take-up unit. This is really handy when printing long prints or a continuous nested set. The take-up roll will receive the prints and keep them from hitting the floor.
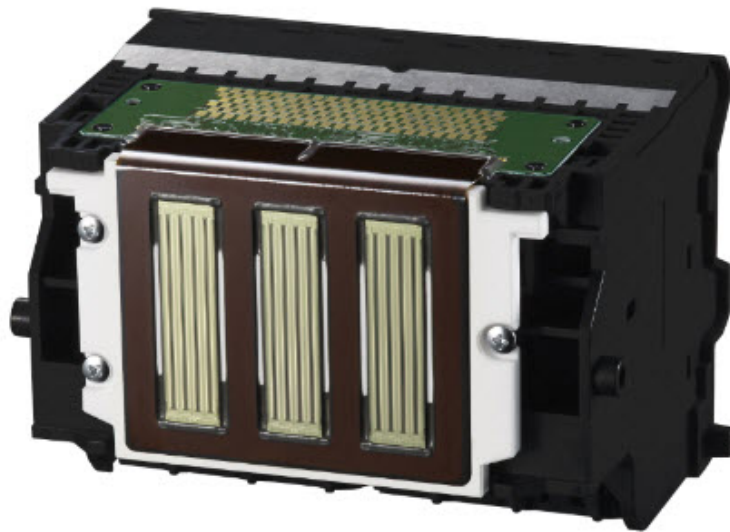
One word of caution—the MFR is not a field-upgradable option. If this is a feature that you will eventually need, you need to get the two-roll model.

## WiFi Connected

Finally, WiFi connectivity is standard with the new PRO Series. Users have asked for this for years. And now, you can easily install it on your wireless network. Hint: Look for this to be the standard for other new Canon units in the future.

Newly Developed PF-10 Print Head



This is not a subtle change. There is a lot going on here with the new print head design. First of all, there is only one print head. In contrast, all previous Canon graphics printers have used a two print head format. That was because each of the older print heads could only handle six ink channels each. Now with the new PF-10, one single print head will control all twelve ink channels. This change, in conjunction with a 1.28-inch swath path results in much higher print speed and a lower overall cost of operation.

Improved anti-clogging technology means that ink output is consistent and precisely checked. If a clog is detected, another nozzle automatically provides a backup. Along with preventing wasted prints due to ink clogging, this also helps reduce the frequency of nozzle cleaning required.

Also, all PRO Series printers include a built-in multi-sensor to help ensure color consistency, not only from one print to the next, but from one PRO Series device to another. This is a huge benefit for installations that are running multiple machines.

## Chroma Optimizer

Previous Canon Graphic and Fine Art printers utilized a 12-color LUCIA EX ink set. What has changed with the PRO Series is that the Green Ink has been removed and replaced with the Chroma Optimizer. Essentially, this is "clear coat" that provides improved gloss uniformity for superb image quality.

One thing you will notice about the Chroma Optimizer is that is applied to the "white" areas of the image. This may not sound like much, but it is huge. If you have tried to print a photo or a poster with some white areas in the background, the white space was simply the color of the unprinted paper. At times, this did not contrast well with the printed image. Sometimes the final print would appear unfinished.

When the Chroma Optimizer is applied to the white spaces, the results are amazing! In addition to adding overall uniformity, it also protects against bronzing.

## New LUCIA PRO ink



As mentioned earlier, the new ink set is minus the Green ink. This is because green is the easiest color to reproduce. So, the new ink format is 11-colors, plus the Chroma Optimizer. The new LUCIA PRO ink system uses microencapsulated pigment ink to produce an incredibly wide color gamut. Also, the Blue and Magenta inks have been reformulated to render brilliant colors, while the Black inks have been improved to capture the finest details in the dark areas your print.

## USB Direct Print

Now you can plus a USB flash drive directly into the printer and send PDF or JPEG files right from the interface. Simply plug the thumb drive into the internal port, preview the image on the operation panel, and print. It doesn't get any easier than that.

Print Studio PRO Software



This included software offers features that help streamline your printing process. It is completely compatible with **Canon Digital Photo Professional**, **Adobe® Photoshop**, and **Adobe Lightroom**. Here are some of the key features:

- 16-bit printing workflow
- Large preview screen
- Import multiple images and make batch edits that apply to all
- Print history
- Soft proofing
- Contrast reproduction
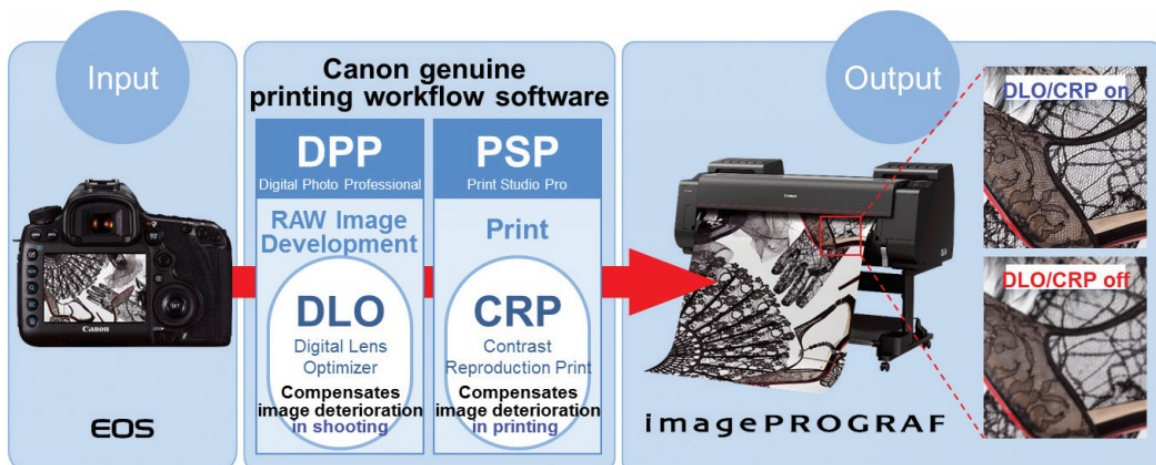- Ability to print multiple-up pages
- And more!

All-in-all the new Canon PRO Series is a complete platform upgrade from their previous line of graphics and poster printer models. The new enhancements such will no doubt set new standards for the industry.

# Canon PRO 4000 & 2000 Photo Printers Exceed Expectations

Leave it to Canon to raise the bar when it comes to producing new ultra-high quality wide-format printers. And the new breed doesn't disappoint. In fact, the new PRO Series is turning heads with a multitude of new technologies that are completely different from anything else in the competitive field. Although designed for professional photography and other digital artwork, there are plenty of situations where one of these photo printers would fit nicely. See why the Canon PRO 4000 and PRO 2000 printers will exceed your expectations.

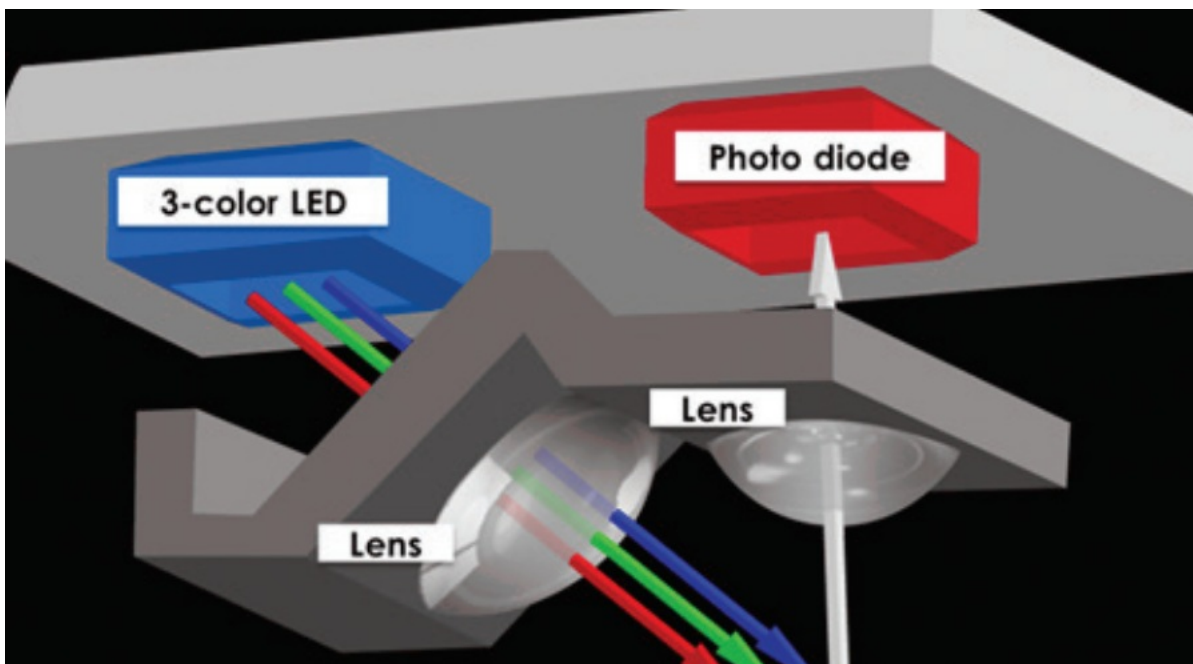**The PRO Series Links Directly to a CANON EOS Camera**
Photographers and digital professionals of all types are rejoicing over the fact that you can know directly link a digital camera directly to both the PRO 2000 and PRO 4000 printers. This new process is called **Crystal-Fidelity** and it ensures that the original structure, clarity, and texture of the original photos are maintained and printed with the highest level of accuracy and efficiency. At this time, Canon is the only company offering this functionality. Neither Epson nor HP have the ability to link directly with a digital camera.

## Built-in Color Density Sensor and Color Calibration System

Color output is optimized by Canon's built-in **Color Density Sensor** and calibration system. This capability is extremely important to professional photographers and graphic artists because it means that these printers can reproduce colors reliably and consistently, over time.

Canon's Color-Calibration System is simpler and easier to use than competing systems. With Canon's Color Density Sensor, a calibration for one media type is used to make adjustments on the other Canon supported media—unlike Epson and HP, who require the need for a spectrophotometer, and repeat calibrations for each type of media or print mode. Plus, color calibration on the Canon is fast---it can be done in just 10 minutes.



## Innovative and Dynamic Media Handling

Canon's refined media loading system enables a roll of media to be loaded into the printer with directly touching the media with your hands. This is extremely useful for glossy papers that are prone to show fingerprints and smudges. Simply set the media in the roll holder and lightly rotate the flange to initiate the leading edge of the media to be automatically fed into the assembly.
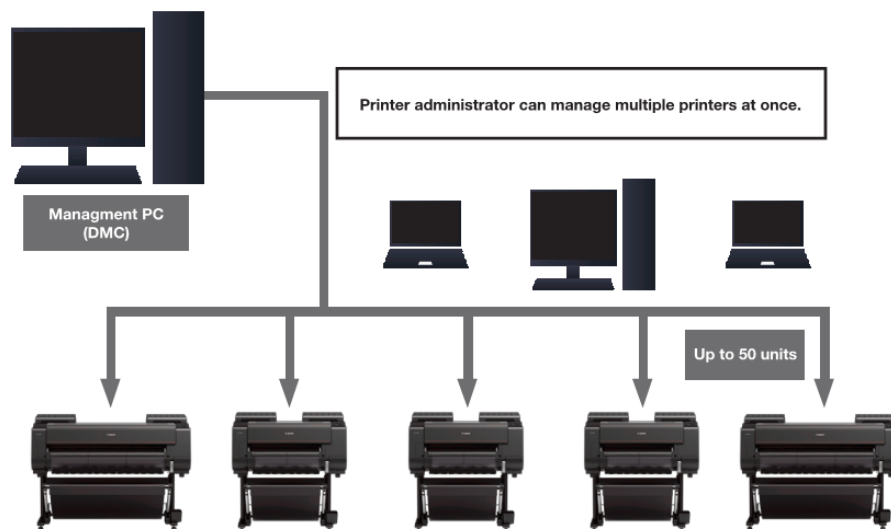
Additionally, the optional **Multi-Function Roll (MFR)** System can also be used as either a second media rolls or it can be configured as a bi-directional take-up unit.

Fleet-Wide Printer Management

Canon offers the ability to control color calibration and printer management for an entire fleet of imagePROGRAF printers in an Enterprise environment.

**Device Management Console** (DMC) enables users to monitor, control, and calibrate printers from one location.

Average color difference between printers has a delta of less than 2.0 ($\Delta E00 \leq 2.0$)



Software and Workflow Solutions Included

Every Canon PRO Series printer ships with software and workflow solutions that further enhance productivity and the range of print applications that can be produced.

**Print Studio PRO**: Offers features that streamline your printing workflow

**Media Configuration Tool**: Helps manage print settings and media information

**Quick Utility Tool Box**: Provides quick access to printer management tools

**Print Plug-in for Microsoft Office**: Print in large **format** from Microsoft® Office Applications

**PosterArtist Lite**: Easily create posters from an archive of templates and clip art

**Accounting Manager**: Tracks ink and media usage and costs

## Sub-Ink Tank System – Exclusively on Canon iPF Printers

The Sub-Ink Tank System acts as an internal reservoir for the printer, functioning to remove all of the ink from the replaceable ink tanks for before changing them. This helps eliminate any wasted ink and decreasing your cost per print. The empty ink tanks can then be replaced on the fly, without stopping the printing and ruining the print. This sub-ink technology is only found on Canon iPF printers including the new PRO 2000 and PRO 4000.

## Takeaways

Ultimately, there is a lot to love with the new Canon PRO Series printers. Plenty of innovation and new technologies have been packed into the PRO Series, including direct links to digital cameras, reformulated LUCIA PRO inks and a new print head design. Plus, built-in color calibration makes profiling a breeze. Also, the unique Multi-Function Roll Unit and included software solutions help the PRO Series stand out in a competitive field. Ultimately, all of these new advancements lead the way for the PRO Series to completely exceed your expectations.

# Use Canon Printers & Drones for Stunning Aerials and Maps

Drones, also known as UAVs (Unmanned Aerial Vehicles), have become a staple fixture in our society. You can easily spot consumer models at big-box retailers and companies like Amazon are experimenting with drone-based deliveries. But, the most promising aspect of these UAVs lies in the enhanced capabilities of drones with cameras for commercial use.

They provide companies of all sizes the ability to gather 3D data and capture incredible images. Then, users can send the images to a wide-format printer to make maps or aerial photos. Having the power to print and share drone images is giving companies who invest in this technology a massive advantage over their peers.

## Drone Business is Booming

There are many compelling reasons to consider investing in a UAV. They are compact, simple to use, and easy to fly. In fact, any company can easily train multiple pilots on staff, enhancing the ability to deploy them on short notice. Drones are also reliable and have low operational and maintenance costs, so they are affordable to use on a regular basis.

## Segments Expected to Strongly Utilize Drone Technology

**Energy** – There is an explicit need to quickly and efficiently gather survey information for power towers and lines, solar panels, sub stations, oil and gas pipelines, and wind farms.

**Government** – Gaining a top-down perspective is essential for state and federal organizations to conduct scientific research, GIS mapping, surveillance, and wildlife monitoring.

**Public Safety** – Because drones are highly transportable and easy to deploy, they are becoming a vital tool for search and rescue teams, crowd control, security surveillance, fire monitoring, and disaster relief.

**Precision Agriculture** – Although farming seems to be an unlikely benefactor of remote aerial devices, there are huge impacts for the industry. Growers are finding uses for drones in crop and irrigation monitoring, weed identification, soil fertility, and livestock location and monitoring.

**Film and Video Production** – Obviously, aerial photos have always been important to the film industry, but historically, that type of viewpoint has required the user of traditional aircraft at a massive expense. A drone with camera now provides that functionality in a powerful and relatively inexpensive aerial tool for independent film studios, photographers, and sporting events.

## Pairing Wide-Format Printers with Drones

There is certainly a link between remotely piloted aircraft and wide-format printers.Think about it; many surveying and construction companies invest in this technology to capture aerial images and surveys of job sites. Often, is used in conjunction with another software application such as Pix4D or Drone Deploy to process and manipulate the point cloud data. These applications then allow the user to create various 3D models, elevation charts, surveys, and maps.

Although most of this type of work happens on a computer screen, there is still a massive value to printing out physical maps and charts. Printing images on a large-format sheet provides a visual impact that is just not possible on a screen. Some other benefits of hard copies include better communication when collaborating on a project, stunning visuals for presentations, and quick reference materials for field crews.



**Use the Best Plotter Printer Technology for the Job**
Since most AEC companies already have a plotter, common sense dictates that they would want to utilize that device for printing their UAV images. But, not so fast. Many legacy plotters simply lack the processing power needed to handle such large files. Also, a general-purpose CAD plotter typically uses a 4-color CMYK color profile. Mixing four colors has limitations, and thus, just cannot produce a wide enough color space to represent the full color gamut needed for presentation quality images, like for aerial photos.

In this case, a large-format *graphics* printer makes more sense. A commercial-grade printer like the new Canon PRO Series will produce better image quality and will have the onboard processing power needed to print large, complex files. Plus, graphics printers use more resilient ink than traditional CAD plotters. The average CAD printer uses an aqueous DYE ink that can smear when wet and it will also fade over time. Conversely, a true graphics printer will print much more durable and longer-lasting documents.

**A Unified Platform**

UAV Drones are awesome. They continue to change the way some companies survey and gather data. Better software applications make them easier to use than ever and give users the ability to dive deep into the capabilities available. Likewise, new and improved printer technologies give people the means to quickly and accurately print out images, maps, and 3D models of the data collected. Having both technologies on hand should give companies of any size a distinctive competitive advantage over the status quo.

If a drone is in your future, you should certainly look into a professional printer to meet your high-performance demands.

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# Print Like a PRO!

Take the next step towards a new Canon PRO Series.

Reach out to one of our specialist for further information, print samples, or a price quote.

Contact a TAVCO Representative