

Canon

 **ImagePROGRAF®**

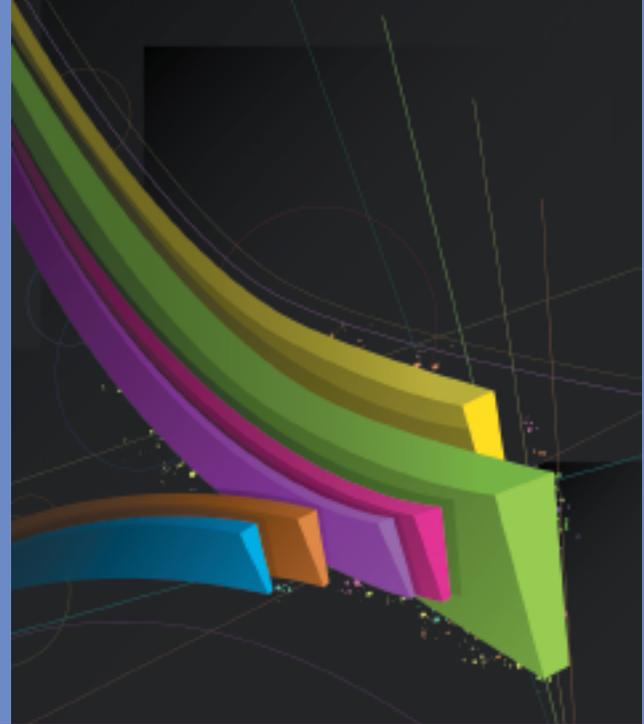
image**PROGRAF**

LARGE-FORMAT PRINTING
CANON INNOVATION IN EVERY SOLUTION



Canon Technologies

Innovation: At the core of every
Canon solution



What makes one large-format printer a better fit for your needs than another? At Canon, we believe innovation makes the difference. We put our most advanced technology into every imagePROGRAF system — so that you can get the highest quality out — with printers that not only deliver brilliant color and exceptional detail, but also help you to be more efficient, productive and profitable.

A WORLD-WIDE INNOVATION LEADER FOR OVER 70 YEARS, CANON HAS A LEGACY OF CULTIVATING BREAKTHROUGH TECHNOLOGIES.

Our scientific, engineering and manufacturing expertise has produced many of the world's leading imaging solutions. From digital photography to graphic arts, print-for-pay, proofing, and the fine arts to corporate, engineering and CAD — Canon is at the forefront of the most demanding markets and graphic applications imaginable.

How does Canon stay ahead of the technology curve? By investing a significant portion of our annual revenue back into research and development. We develop the technologies and control the entire manufacturing process, right down to the inks our systems use.

The result? Not only is Canon proud to be one of the top three U.S. patent holders of the decade, the real accomplishment is that our customers benefit from extremely high quality printing solutions that perform reliably and efficiently.

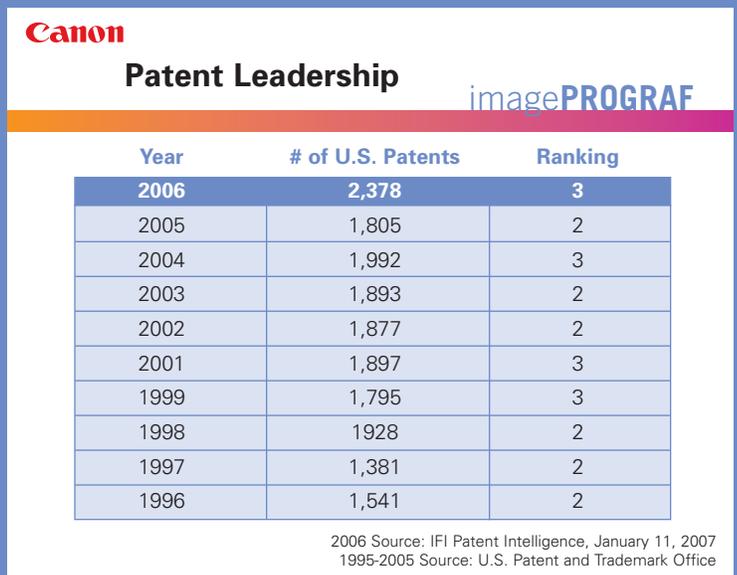
Each printing system in the imagePROGRAF family has been engineered to meet specific customer requirements. Behind each of these solutions are proprietary Canon technologies configured to meet the unique needs of our customers. In this guide, we highlight some of these technologies and explain how each provides meaningful benefits and advantages that you won't find in any other large-format printer.

Canon's imagePROGRAF large-format printing systems — it's about innovation, technology and so much more.

Canon Core Technologies: Key Advantages

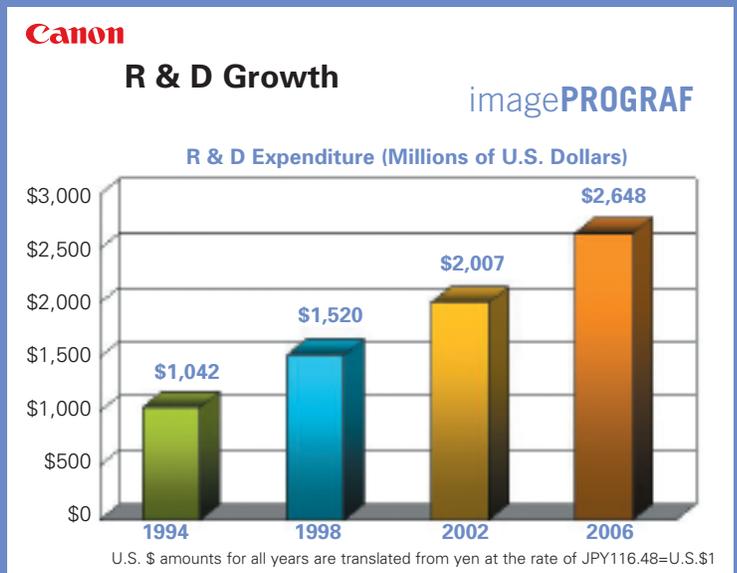
Hardware, Ink, Software & Workflow Technologies — Targeted solutions that deliver:

- Print quality:**
 high-resolution, sharp lines, crisp text, brilliant images, fine detail, and smooth gradations
- High-speed processing:**
 fast output of ultra-high-quality images; enhanced user productivity
- Advanced inks:**
 unparalleled color gamut; durable, fade resistant inks
- Integrated software solutions:**
 expands capabilities; simplifies use; saves time and improves productivity



Canon is proud to be one of the top three U.S. patent holders of the decade —

the result of investing a significant portion of our annual revenue back into research and development.



Canon Hardware

FINE Technology: The difference is in the details



The same technology that goes into the design of semi-conductors goes into Canon print head technology. Working at near microscopic levels, the imagePROGRAF printer's 1.07

inch print heads are manufactured with Canon's proprietary FINE (Full-photolithography Ink-jet Nozzle Engineering) technology. This unique process enables Canon to manufacture high density print-heads ideal for precision printing with fine details, smooth gradations and reduced graininess.

Each imagePROGRAF printer's print head has 15,360 nozzles. This remarkably high number of nozzles enables imagePROGRAF printers to eject ink faster and more accurately. Not only does this technology result in faster printing, it also reduces wear on the print head, which improves reliability, longevity and cost efficiency.

So how does FINE technology benefit you? The answer is in the details. Imagine producing images with incredible

resolution — up to 2400 x 1200 dpi — with finer detail and smoother gradations. The ink droplets are so fine (four picoliter) you can produce delicate color gradations without graininess and the high-definition expression necessary to capture subtle details, small fonts and thin lines.

L-COA Processor: Uncommonly fast and accurate

At the heart of every imagePROGRAF printer is Canon's innovative L-COA (Large-format printer Common Architecture) processor delivering incomparable speed and accuracy. The L-COA processor intelligently processes print data and directs the high-precision, high-density print heads to deposit ink, ensuring image clarity and color accuracy — even for complex graphics and color-rich photographic images. When you think about the enormous amounts of data involved in large-format printing, the speed with which the data is processed, and the precision and efficiency with which the processor coordinates all of the system variables, you can really appreciate the power of L-COA processing.



High-Capacity Ink Tanks

330 to 700 ml capacity tanks supply ink to the print head via tubes

Platen (Document Table)

Multiple holes on the surface facilitate a suction system to ensure that paper is held firmly in place during printing

Carriage

Transports the print head horizontally. Incorporates not only the print head, but also a sensor to read print results, and a cutter

Print Head

Ejects ink to form an image. The imagePROGRAF iPF9000 is equipped with two 1-inch-wide print heads, printing with a total of 30,720 nozzles

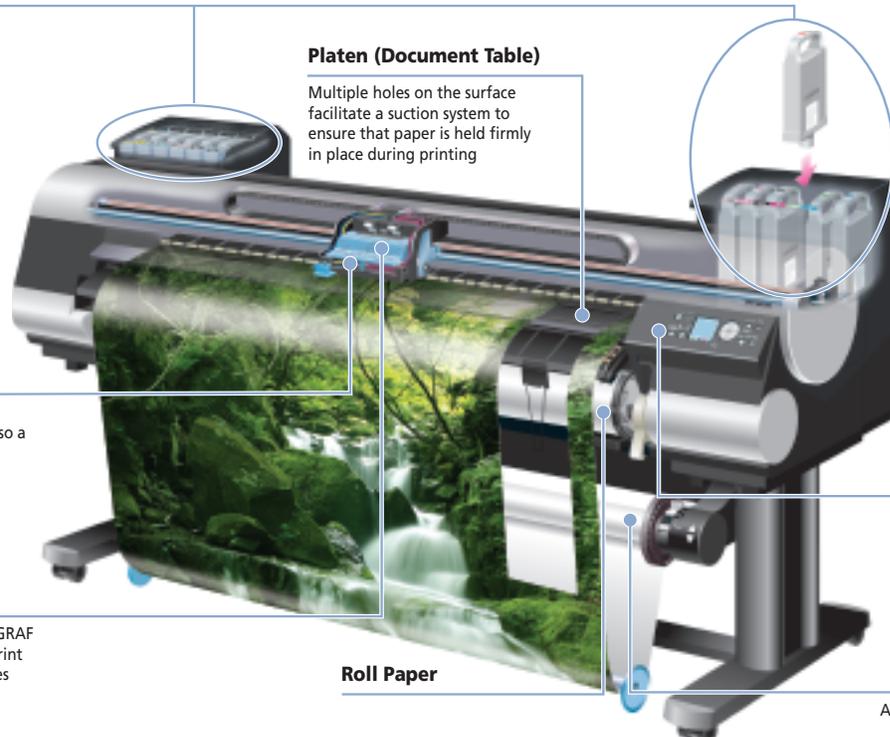
Roll Paper

Operation Panel

A large LCD panel graphically indicates printer status and provides operational guidance

Take-Up Unit

Automatically winds print output



imagePROGRAF iPF9000 shown

Calibration: For when consistency is critical

The newest imagePROGRAF Graphic Arts printers are uniquely equipped to overcome the effects of time and environment with the built-in ability to calibrate back to the original, optimal factory settings and then apply any necessary adjustments across all of the printer's media types in just minutes! This creates a more stable, predictable printing platform on which superior results can be consistently achieved.

Perhaps the best way to describe the impact this technology can have on your business — is to give you a scenario for consideration. Think of a photographer who has produced a large format portrait for a customer, a designer working for a corporate client, or an artist producing and oversized museum quality piece. Each has worked hard on their piece giving careful attention to every detail, the color and resolution are just right — and the print is perfect. Then a few months go by and their customer wants to order additional copies — perhaps for

family members or a collector. This may sound easy enough, however, time and environmental conditions can effect any printer's performance and color reproduction. When this happens it could be difficult to reproduce a print that is a perfect match to the original made only a few months earlier. If you work in a busy multi-printer environment, the problem can be even more complex. This is when Canon's unique calibration function can make all the difference.

To help ensure the best results, Canon has created a solution that simplifies sophisticated color science with a highly accurate sensor that scans and reads a calibration chart, makes calculations for color density, light and media and then automatically applies any necessary adjustments across all of the printer's media profiles. The profiles applied have been specifically optimized by Canon to address the unique requirements of printing large format images. The result is better overall quality and more reliable color reproduction across all of the printer's media types, from print to print, day after day.



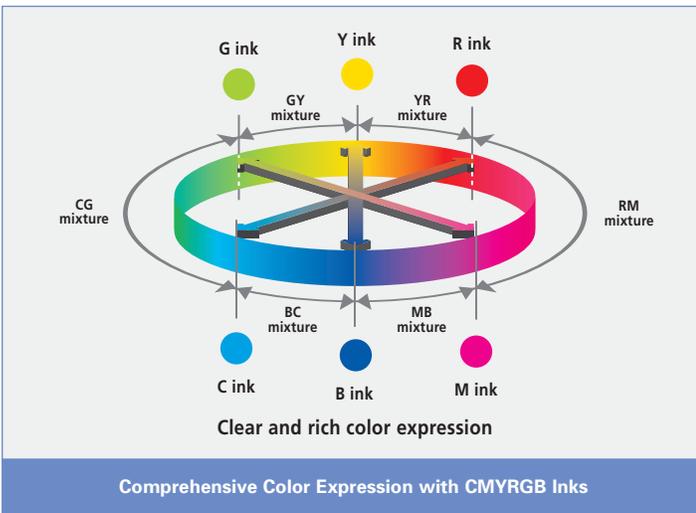
Reliable Color Reproduction From Print to Print, Day After Day.

HARDWARE

Canon Ink Technology

The technology that goes into the ink you use makes a big difference in the results you get. Through advanced chemical engineering Canon specifically formulates all of the inks used in Canon large-format systems for optimum print performance. Why? Because having control over the production of our inks gives us greater control over the results.

Canon LUCIA™ Inks: Engineered to improve print quality

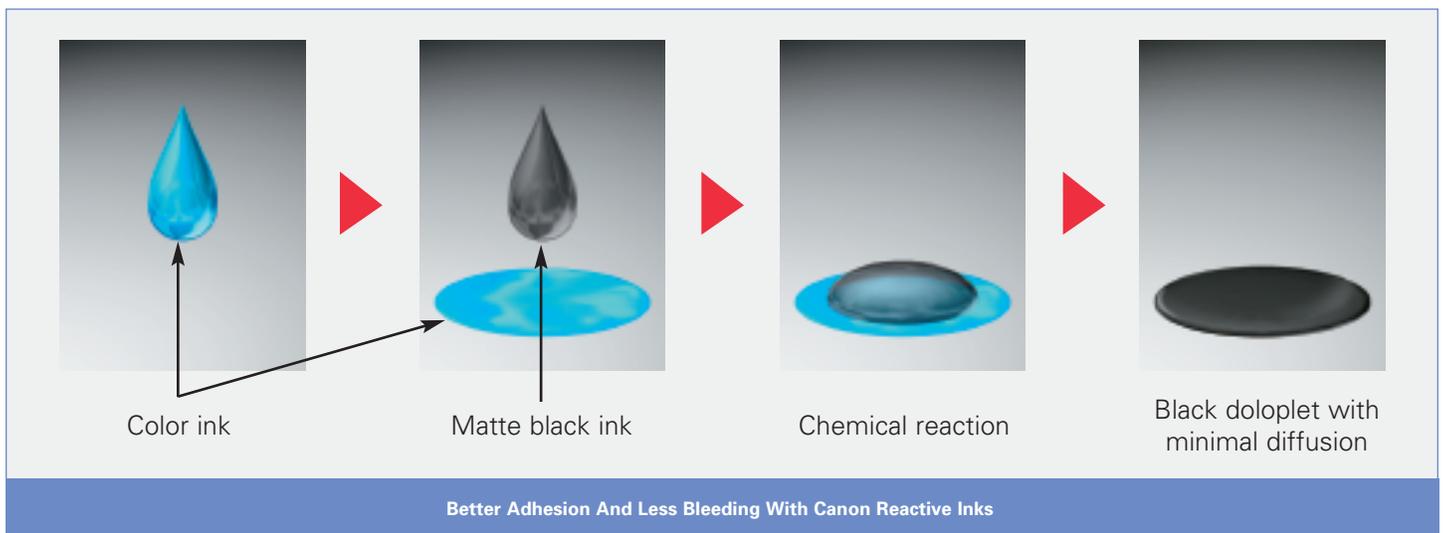


Canon Graphic Arts systems featuring LUCIA inks deliver a wider color gamut for exceptional print quality. If you're in

the photography, proofing or fine art fields, you'll appreciate the smoother gradations, sharper details and finer overall image quality produced by these inks. LUCIA inks are formulated to minimize graininess, improve scratch-resistance and prevent "bronzing" (that unwanted sheen that occurs when viewing output from different angles and/or under light), while enhancing color-fastness and fade resistance.

Canon Reactive Ink Technology: When precision is paramount

When precision is critical, Canon's breakthrough 5-color dye/pigment Reactive Ink technology makes all the difference. Canon imagePROGRAF Corporate and CAD series printers feature an ink technology developed specifically for printing detailed business documents and engineering applications (CAD/GIS) with fine lines, small text, detailed graphs and tables. This unique formulation improves the ink's adhesion to the media and minimizes color "bleeding". The secret is in the chemistry of the ink. When the black ink intersects with a colored area (for example words printed on a colored background) the black and cyan inks cause a chemical reaction that prevents the black from bleeding into the colors. As a result, you get clearer text, smoother curves and sharp fine lines, even on uncoated technical papers. What's more Canon Reactive Inks also improve scratch and marker resistance so prints are more durable than when printed with conventional dye inks.



Auto-switching technology: Always the right black ink for the media

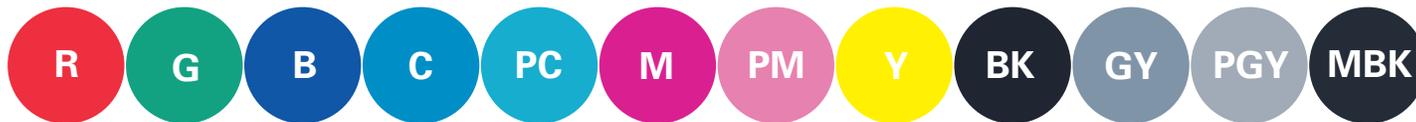
All imagePROGRAF printers include multiple types of black ink. By using different types of black ink, better results can be achieved on a wider variety of media types. A pigment matte black ink may print better on matte papers, while a dye black may print better on glossy media. So how do you know which is the right black ink to use? You don't need to, because imagePROGRAF printers are able to recognize the type of media being used and will automatically select the right black ink! What's more, because all ink types are online at all times, there is no wasted time or ink when switching. The system automatically picks the correct black ink so you always get the best quality printing possible on each type of media.



Corporate and CAD Series



Graphic Arts Series



S-Series



INK TECHNOLOGY

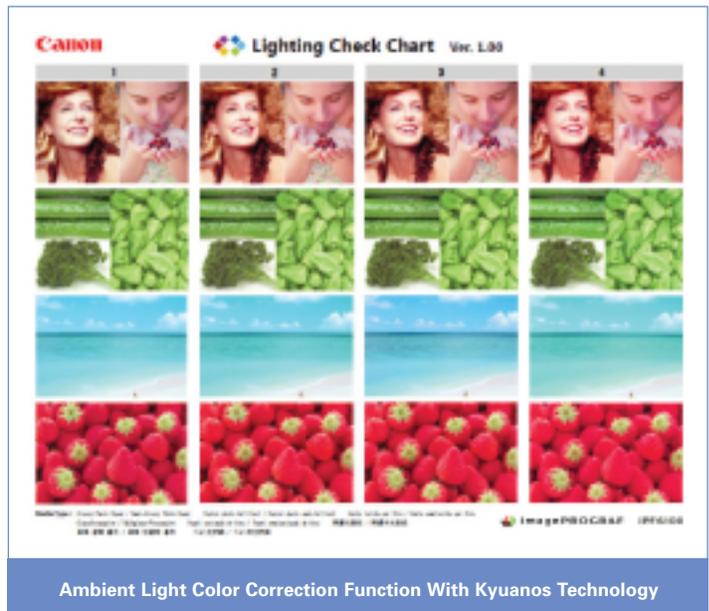
Workflow Solutions

Canon Printer Driver*

Canon Printer Driver for Windows® and Macintosh® optimizes printing of high-quality, large-format prints by incorporating simple page setup options, one-click borderless printing, color settings and more. The Easy Settings mode is just that — easy. Operators simply choose from a variety of application targets such as photo enlargement, poster making or maps to rapidly print standard jobs at the optimal value for the media and type of image being printed. If you need more control over print settings or for multiple jobs that require different output options, the Advanced Settings mode enables user-friendly manual operation.

When it comes to workflow Canon's goal is simple — to give you easy and effective ways to produce beautiful prints while improving productivity. The Canon Printer Driver makes the following functions available with the ease of one-click operation:

- **Borderless printing:** Print large-format photographs, posters and spreadsheets — edge to edge.
- **Free-layout function:** This feature allows nesting of multiple documents, of different formats onto one page for printing. Users can choose desired pages from documents created with various office applications including Powerpoint, Excel, Word, and graphics applications, then layout, edit and print them together as a single job. (PC only – Macintosh includes Autolayout).
- **Integration with Canon imageRUNNER device:** Seamlessly connects an imagePROGRAF printer with an imageRUNNER device with Universal Send to create enlargements of existing hardcopy documents at the touch of a button.



Canon Kyuanos Technology

Kyuanos Technology is Canon's proprietary high-precision color matching engine for advanced graphic arts applications. It manages color by compensating for the differences in color performance which is common when you're working with various input and output devices such as digital still cameras, scanners, monitors, and printers. The result: uniform color reproduction. Kyuanos is included in Vista, the latest generation of Microsoft's Windows operating system.



HDI Driver for AutoCAD**

Included with imagePROGRAF Corporate and CAD printers, the HDI Driver converts line drawing data directly from AutoCAD for accurate renderings and faster processing speed.

* Operating Systems: Windows 98SE/Me/2000/XP/2003 Server, Vista, Macintosh OS 9.1/X/10.2/10.3/10.4 (Power PC or Intel).

** For AutoCAD or AutoCAD LT 2000, 2000i, 2002, 2003, 2004, 2005, 2006, 2007.

WORKFLOW

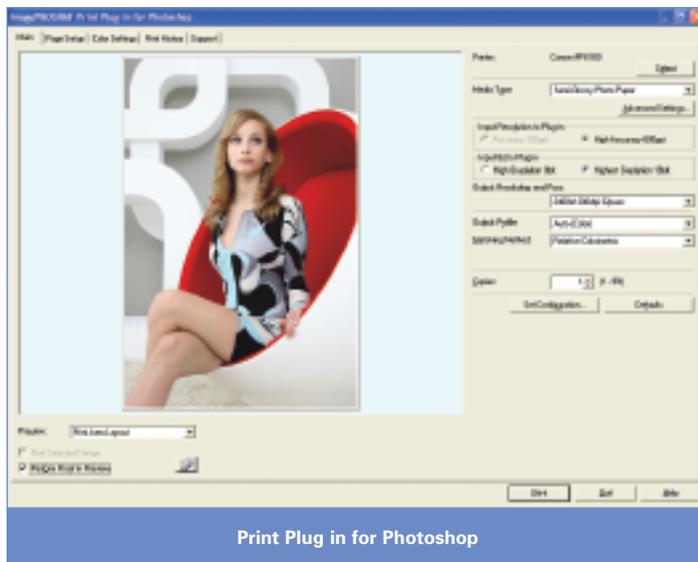
Canon Software Technology

Software Solutions: Advanced technology that makes work simple

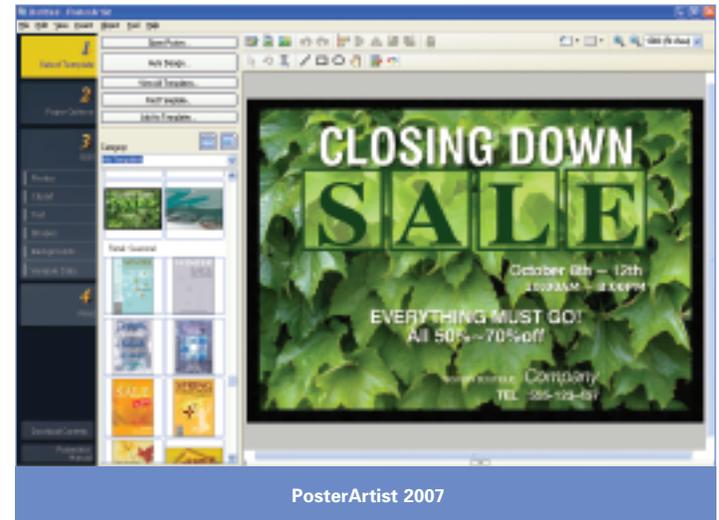
As sophisticated as the technology is, Canon software is all about simplicity. Canon's intelligently designed systems feature a number of integrated tools and automatic settings that streamline workflow, improve efficiency and expand the user's capabilities. In other words, Canon software technology helps you do more, in less time — easily.

Canon's software solutions integrate seamlessly with imagePROGRAF large-format printer systems. See individual printer specifications for the software included with each model.

Print Plug-in for Adobe Photoshop*. Included with imagePROGRAF Graphic Arts printers, this plug-in provides greater control over image processing by enabling you to print directly from Adobe® Photoshop®. Now you can quickly and easily edit/manipulate photographs or fine art for output, boosting productivity like never before. What's more, this print plug-in enables 16-bit processing of images to reduce jagged edges for improved gradations and better image quality.



Print Plug-in for Digital Photo Professional**. This plug-in software optimizes printing from digital cameras. It lets you transfer RAW data images from EOS digital cameras to an imagePROGRAF Graphic Arts large-format printer. This plug-in expands the color control options, supports custom ICC profiles and enables advanced gray adjustment to improve monochrome output. To help you



save valuable time, Digital Photo Professional also creates and stores a print history log making it easy to reapply print settings for future printing.

PosterArtist 2007** is an optional, easy-to-use poster creation tool for PCs that provides over 180 professionally designed templates that can be quickly customized and output to a variety of media. Now you can easily customize and print posters, banners, signs, and eye-catching displays with full-width imagery. PosterArtist includes over 1 GB of clip art and print-ready, royalty-free images. You can also easily import your own images such as company logos and digital camera photos.

Digital Photo Front-Access is a utility that displays file images and provides a direct link to other software applications making it faster and easier to select, edit and retouch your digital photo files. Available with the newest imagePROGRAF printers, Digital Photo Front-Access coordinates operation with PosterArtist, Photoshop and configuration of print settings via the printer driver.

* For Adobe Photoshop 6,7,CS,CS2 running on Windows 2000/XP or Macintosh OS 9.1 or OS X 10.2/10.3/10.4

** Windows 2000/XP

SOFTWARE

Markets, Products & Technologies

Canon Technology Solutions: Engineered to meet your needs

Canon technologies make it possible for you to produce the highest-quality prints of any large-format system anywhere. But as you've learned, that's not all our technology can do for you. By seamlessly integrating our core technologies Canon brings to market comprehensive large-format printing solutions designed to help you increase efficiency and boost productivity.

CANON TECHNOLOGY SOLUTIONS: MEETING YOUR NEEDS



Canon Innovation In Every Solution

GRAPHIC ARTS

Photography
Proofing
Fine Art Reproduction
Print for Pay

imagePROGRAF TECHNOLOGIES*

Print Plug-in for Adobe PhotoShop: enables processing and direct printing of large, complex images with smooth gradations and high image quality.

Plug-in for Digital Photo Professional: streamlines the transfer of images from the camera to the printer while providing additional color control and image management functions.

L-COA Processor: for faster output of large, complex images.

FINE Technology: reproduces museum-quality images in detail with superior accuracy and clarity.

LUCIA Inks: wide color gamut enables colors to be reproduced more accurately; produces superior image resolution, with exceptional color quality and clarity; durable inks resist scratches and fading.

Calibration: ensures consistent image quality and color accuracy for flawless representation of the original; multiple production printers can be used interchangeably without a shift in color or performance.

CORPORATE & GENERAL USE

Posters
Signs
Presentations

PosterArtist 2007: this optional software package provides a versatile graphics toolset and an integrated stock image library that lets users create professional-looking large format graphics quickly, easily and without expensive outside design charges.

FINE Technology: gives you high-resolution, smoother gradations and beautifully rendered graphics, with crisp text and accurate colors for professional quality presentations.

L-COA Processor: faster print speeds for producing signs/posters.

Reactive Ink Technology: provides durability, improved scratch, fade and marker resistance so posters can be placed in high-traffic indoor locations.

Digital Photo Front-Access: makes it faster and easier to select, edit and retouch your digital photo files.

TECHNICAL DOCUMENTS

CAD and Architectural,
Engineering and
Construction

FINE Technology: enhances resolution, creates smooth gradations and reduces graininess.

Reactive Ink Technology: prevents dot gain and ink spread to ensure clear text, smooth curves and sharp fine lines on any media, even on non-gloss technical papers.

HDI Driver: converts line drawing data directly from AutoCAD for accurate renderings and faster processing speed.

Want to learn more or have a big idea for using
Canon imagePROGRAF large-format printers?

Go to www.usa.canon.com/imageprograf



1-800-OK-CANON
www.usa.canon.com

Canon U.S.A., Inc.
One Canon Plaza
Lake Success, NY 11042

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