color
management redefined

Kodak
ColorFlow
Software
For print service providers, the challenges of color are ever-evolving. The range of printing devices continues to expand—there are offset and flexo presses, inkjet and laser digital printers, and proofing options that include halftone and inkjet systems and calibrated monitors.

Each of these devices brings with it a set of color tools procedures and processes for calibrating color. The learning curve—and training costs—to set up and manage these systems is significant. Worse, these systems are often managed and implemented separately from the others which can lead to confusion, and increase the risk of error.

**Kodak ColorFlow Software** is an intelligent solution for integrating all the color elements and devices in a print production environment. It provides a unique opportunity to integrate and manage color devices and tools into one platform, and to improve color consistency across devices, while simplifying color setup and maintenance.

**ColorFlow** Software integrates and coordinates your many color devices—and their various profiles, curves and recipes—in a single software solution. Now you can produce consistent color on digital and offset presses, and throughout your workflow, with less effort and faster job turnaround.

**One solution for color curves, profiles and recipes**

ColorFlow Software unites the various color calibration technologies—curves, profiles and color recipes—in one software package.

Color calibration is broadly divided between “color curve” and “color profile” adjustments. In general, tint curves are used for press and plate calibration, while profiles are used for adjusting presses, scanners, proofers and monitors. Color recipes are a special category, for simulating spot colors with process color blends.

In a printing environment, each of these calibrations should affect the others: changing a press curve should affect the proofer’s ICC profile. But the two systems are separate. Calibrating, or recalibrating a prepress system can involve considerable time and effort, and multiple press runs. ColorFlow Software coordinates multiple color systems, and their inter-relationships, through Color Relationship Management.

**Simplified Color Relationship Management**

Color Relationship Management goes beyond unifying color curves, profiles, and spot recipes: it manages changes in color. ColorFlow Software makes it easy to monitor and adjust the presses response, so it quickly gets back to where it was before the inks were changed.

Color Relationship Management stores the color tonal curves, DeviceLink profiles, ICC profiles and spot color recipes, and applies its knowledge of the color relationships between them to align curves and profiles for consistent color production.

**Integrated with Prinergy Workflows for automated color accuracy**

Within a **Kodak Prinergy Workflow**, **ColorFlow** Software can automatically make color adjustments—reducing setup time and accelerating work turnaround. Spot color technology and ink optimization are managed throughout the **Prinergy** Workflow, to ensure that proofs, CTP output and digital presses all produce consistent color with savings and flexibility.
**Ink Optimizing reduces ink consumption and improves press stability**

The optional Ink Optimizing Solution applies ColorFlow Software’s color intelligence to control ink usage, which improves press stability and reduces ink consumption on offset presses.

The Ink Optimizing Solution applies sophisticated color-conversion intelligence to convert color blends and reduce the amount of CMY ink without affecting the appearance of color images or the sharpness of text or line art. Actual ink savings vary depending on the amount of color, and the color blends in a job, but ink savings of up to 30% are common.

**Powerful, accurate profile/curve editing**

Generally, ColorFlow Software will maintain a system’s color accuracy without manual adjustment. ColorFlow Software allows you to adjust CMY curves in synchronization, to affect an balance without creating or affecting color casts.

**Reporting tools**

As a tool that supports the business of printing, ColorFlow Software includes comprehensive reporting tools to help you plot and compare the color gamut of various devices. Tools are available to help you monitor press and proofer performance over time, to maintain print quality, track any drift, and predict your maintenance and calibration requirements.

**Gray-balance adjustments for faster, more accurate calibration**

ColorFlow Software uses new, patented gray-balance algorithms to measure and adjust CMY blends. Gray-balance adjustment provides a more comprehensive color response model than tint and ink density. This is primarily because gray scales measure the combined effect of inks as they blend on paper. Tint variations as slight as +/- 1% can be quite evident when measured within gray blends, but are difficult to measure or perceive as pure tints. Adjusting and balancing colors using gray scales can tune a device to a more precise specification, more quickly, than is possible by measuring ink tints.

**Compliant with JDF, ISO and other standards**

ColorFlow Software uses open standards and formats, and Kodak fully endorses the rigorous ISO 12647 and ISO 10128 standardization recommendations—which means that printers can employ ColorFlow Software while maintaining their ISO certification. In addition, the software supports PDF/X data exchange formats (and associated ICC standards), and JDF job control specifications.

ColorFlow Software delivers a high value solution to the complex challenges of color management. Graphics arts professionals benefit with a level of consistency across devices, and through the changing combinations of inks, print stocks, and international standards. Moreover, it provides ink savings and flexibility with spot color replacement and ink optimization options.
## Kodak ColorFlow Software Configurations

| **Kodak ColorFlow Software for Kodak Prinergy Workflow** | Curve creation and editing (gray-balance and TVI)  
Import ICC device profiles and ICC Device Link profiles.  
*Windows* and *MacOS* versions |
|---|---|
| **Kodak ColorFlow Software Pro for Kodak Prinergy Workflow** | Optional upgrade for *Prinergy Workflow* System 5.1  
Create ICC device profiles and ICC DeviceLink profiles.  
Edit ICC DeviceLink profiles  
*Windows* and *MacOS* versions  
ColorMatching on output for *Prinergy* Workflows |
| **Kodak Ink Optimizing Solution** | Optional with *ColorFlow* Software |

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### Part of a Kodak Unified Workflow Solution

A **Kodak** Unified Workflow Solution is a comprehensive, integrated solution for graphic communications. Its modular architecture brings together business, production, color, and data management in a combined conventional and digital printing environment. Intelligent automation helps provide efficiency and profitable growth. **Prinergy** Solutions support conventional and digital print workflows, making them integral parts of **Kodak** Unified Workflow Solutions.