



color

management redefined

Kodak
ColorFlow
Software



ColorFlow Software integrates and coordinates your many color devices and their various color control elements—curves, ICC device profiles, and ICC DeviceLink profiles—in a single software solution. Now you can produce consistent color on proofers and conventional and digital presses, and throughout your workflow, with less effort and faster job turnaround.

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. In addition, these systems are often managed and implemented separately from each other, potentially leading to confusion and increased 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.

One solution for curves and profiles

ColorFlow Software unites the various color control elements—curves, ICC device profiles, and ICC DeviceLink profiles—in one software package.

Color management is broadly divided between curve and profile use. Curves are traditionally used for press and plate calibration while profiles are used for adjusting color on digital presses, proofers and monitors.

In a printing environment, color control elements are interdependent, but are managed separately—changing a press curve could affect the proofer's ICC device profile. Calibrating or recalibrating a prepress system can involve considerable time and effort, and require 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 curves, ICC device profiles, and ICC DeviceLink profiles. It manages changes in color.

ColorFlow Software stores measurements, curves, ICC device profiles, ICC DeviceLink profiles, and information about devices and their operating conditions in a database, and manages the color relationships between devices to align curves and profiles for consistent color production.

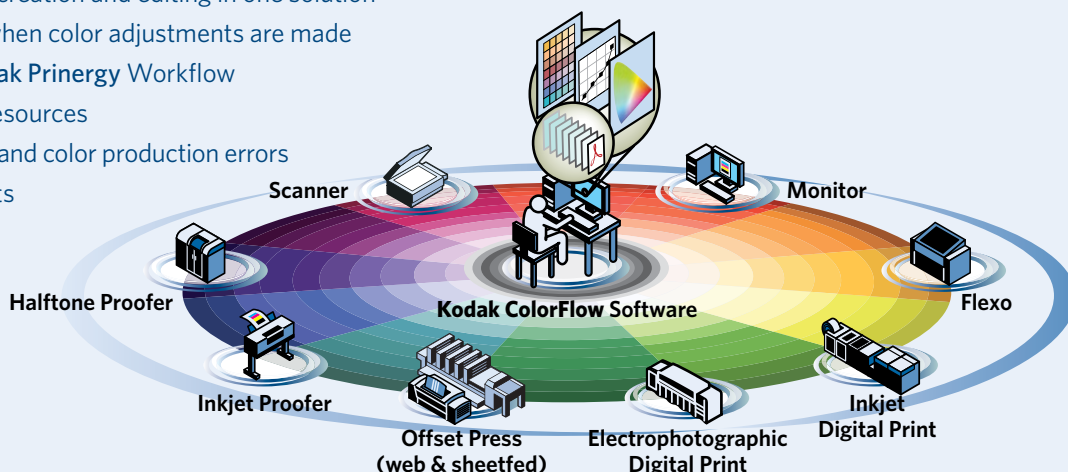
As an example, when you change a press's aim from one printing standard to another, **ColorFlow** Software can automatically update the ICC DeviceLink profile between the press and its proofer.

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. The system can intelligently reduce errors by, for example, ensuring that the correct

Kodak ColorFlow Software: Color Relationship Management

- Aligns color across devices
- Unites curve and profile creation and editing in one solution
- Updates automatically when color adjustments are made
- Integrates fully with Kodak Prinergy Workflow
- Requires less time and resources
- Minimizes training costs and color production errors
- Reduces color setup costs



print curve is used with the appropriate proofing ICC DeviceLink profile.

Ink Optimizing to reduce ink consumption and improve press stability

The optional Ink Optimizing Solution applies **ColorFlow** Software's color intelligence to control ink usage—improving press stability and reducing ink consumption on offset presses.

Ink optimization is managed throughout the **Prinergy** Workflow to ensure that proofs, CTP output, and digital presses, all produce consistent color, with savings and flexibility.

Ink Optimization is delivered through an ICC DeviceLink profile which applies Gray Component Replacement while limiting Total Ink Coverage. This minimizes the amount of ink consumed while maintaining the same overall color.

Matchprint Virtual Technology for accurate color display

With every edition of **ColorFlow** Software, you can open an image in a preview window to see the changes that occur

while you edit curves, ICC device profiles and ICC DeviceLink profiles.

Additionally, the optional **Matchprint** Virtual Technology option enables users with a **Matchprint** Virtual Technology qualified monitor to view color-accurate images in the preview window.

Powerful curve and profile editing

ColorFlow Software establishes a system's color accuracy without manual adjustment. However, in some cases, you may need to make edits to curves or profiles—for example, to accommodate customer preference.

ColorFlow Software includes tools that allow you to easily create and edit profiles and curves. You can also adjust CMY curves in synchronization to adjust gray balance without affecting tonality.

Accurate reporting tools

ColorFlow Software provides comprehensive Print Characterization and Print Comparison reports that you can use to analyze a device, compare a device to a target, or troubleshoot potential problems.

Print Characterization reports summarize your print condition and allow you to observe changes to that condition over time. Print Comparison reports allow you to analyze the differences between your print condition and another print condition, or between your print condition and an industry standard or specification.

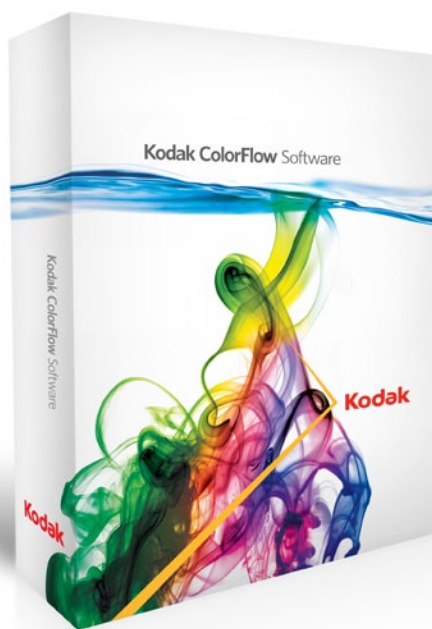
Gray-balance curves for faster, more accurate calibration

ColorFlow Software uses new, patented gray-balance algorithms to generate curves for CMY blends. Gray-balance curves provide a more comprehensive color response model than tint and ink density. This is primarily because colorimetric analysis measures the combined effect of inks as they blend on paper. Because slight tint variations can be quite evident when observed within gray blends, but are difficult to measure or perceive as pure tints, CMY neutral blends are more important to calibrate than individual color channels.

Kodak ColorFlow Software Configurations

Kodak ColorFlow Software Workflow edition (included in Kodak Prinergy and Prinergy Evo 5.1 Workflows)	Curve creation, export, and editing (gray-balance and dot gain) ICC device profile and ICC DeviceLink profile import Windows and Mac OS support Prinergy Connect , Prinergy PowerPack , and Prinergy Evo integration
Kodak ColorFlow Software Pro Workflow edition (optional upgrade for Kodak Prinergy and Prinergy Evo 5.1 Workflows)	Curve creation, export, and editing (gray-balance and dot gain) ICC device profile and ICC DeviceLink profile creation, import, export, and editing Windows and Mac OS support Prinergy Connect , Prinergy PowerPack , and Prinergy Evo integration
Kodak ColorFlow Software (standalone)	Curve creation, export, and editing (gray-balance and dot gain) ICC device profile and ICC DeviceLink profile creation, import, export, and editing Windows and Mac OS support
Kodak Ink Optimizing Solution	Optional feature*
Kodak Matchprint Virtual Technology	Optional feature*

*available for **Kodak ColorFlow** Software and **Kodak ColorFlow** Software Pro Workflow edition



To learn more about solutions from Kodak:

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Technical and environmental specifications subject to change.

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Compliant with JDF, ISO and other standards

ColorFlow Software fully supports the use of open data exchange formats such as ICC device profiles and ICC DeviceLink profiles.

Kodak also endorses the ISO printing standards and various industry specifications such as FOGRA and GRACoL. **ColorFlow** Software includes many industry specification references and data sets that can be used in print condition scenarios.

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, **ColorFlow** Software provides ink savings and flexibility with spot color replacement and ink optimization options.

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.

**Kodak**