



colour

management redefined

Kodak
ColorFlow
Software



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

For print service providers, the challenges of colour 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 colour tools procedures and processes for calibrating colour. 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 colour elements and devices in a print production environment. It provides a unique opportunity to integrate and manage colour devices and tools into one platform, and to improve colour consistency across devices, while simplifying colour setup and maintenance.

One solution for colour curves, profiles and recipes

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

Colour calibration is broadly divided between “colour curve” and “colour profile” adjustments. In general, tint curves are used for press and plate calibration, while profiles are used for adjusting presses, scanners, proofers and monitors. Colour recipes are a special category, for simulating spot colours with process colour 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 colour systems, and their inter-relationships, through Colour Relationship Management.

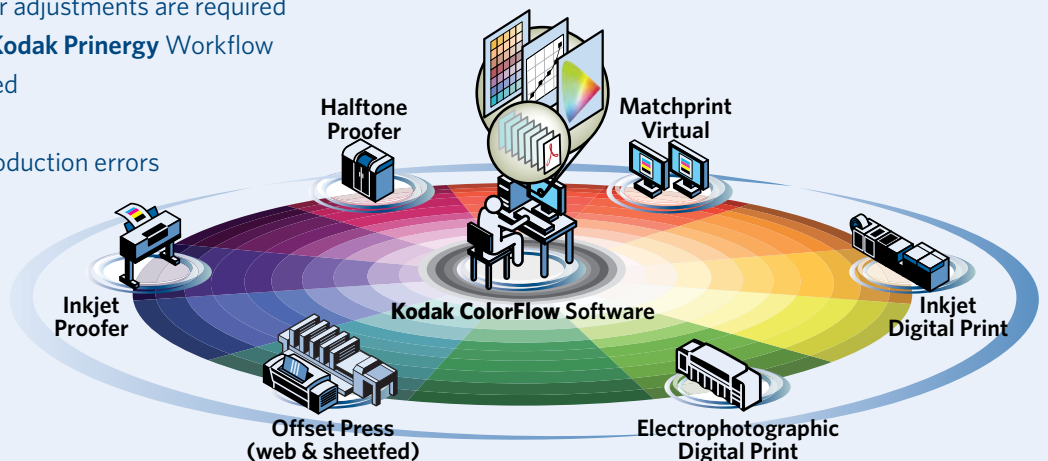
Simplified Colour Relationship Management

Colour Relationship Management goes beyond unifying colour curves, profiles, and spot recipes: it manages changes in colour. **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.

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

Kodak ColorFlow Software: Colour Relationship Management

- **Kodak ColorFlow** Software aligns colour across devices
- Unites curve and profile creation and editing in one solution
- Automatic updates when colour adjustments are required
- Integrated colour control with **Kodak Prinergy** Workflow
- Less time and resources required
- Reduced colour setup costs
- Reduced training and colour production errors



Integrated with Prinergy Workflows for automated colour accuracy

Within a **Kodak Prinergy** Workflow, **ColorFlow** Software can automatically make colour adjustments—reducing setup time and accelerating work turnaround. Spot colour technology and ink optimisation are managed throughout the **Prinergy** Workflow, to ensure that proofs, CTP output and digital presses all produce consistent colour with savings and flexibility.

Ink Optimizing reduces ink consumption and improves press stability

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

The Ink Optimizing Solution applies sophisticated colour-conversion intelligence to convert colour blends and reduce the amount of CMY ink without affecting the appearance of colour images or the sharpness of text or line art. Actual ink savings vary depending on the amount of colour, and the colour 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 colour accuracy without manual adjustment. **ColorFlow** Software allows you to adjust CMY curves in synchronisation, to affect a balance without creating or affecting colour 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 colour 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 colour 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 colours using gray scales can tune a device to a more precise specification, more quickly, than is possible by measuring ink tints.

Kodak ColorFlow Software Configurations

Kodak ColorFlow Software for **Kodak Prinergy** Workflow
Included in **Kodak Prinergy** and **Prinergy Evo** 5.1 Workflows

Curve creation and editing (gray-balance and TVI)
Import ICC device profiles and ICC DeviceLink 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
Colour matching on output for **Prinergy** Workflows

Kodak ColorFlow Software Standalone

For **Windows** and **MacOS** systems
Same features as **ColorFlow** Software for **Kodak Prinergy** Workflow
Curves and profiles can be exported

Kodak Ink Optimizing Solution

Optional with **ColorFlow** Software

Compliant with JDF, ISO and other standards

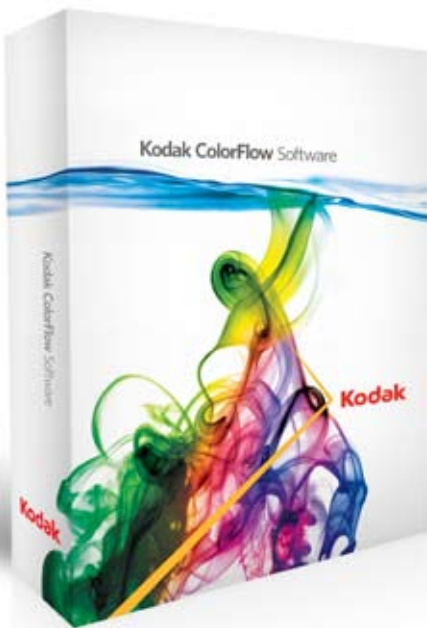
ColorFlow Software uses open standards and formats, and Kodak fully endorses the rigorous ISO 12647 and ISO 10128 standardisation recommendations — which means that printers can employ **ColorFlow** Software while maintaining their ISO certification. In addition, the software supports PDF/X data exchange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

ColorFlow Software delivers a high value solution to the complex challenges of colour 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 colour replacement and ink optimisation 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, colour, 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.



To learn more about solutions from Kodak,
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