

Introduction

Poor control of viewing conditions is the most common cause of color misalignment between hard copy proofs and virtual proofs.

The following factors should be considered when aligning colors that are displayed on a monitor with colors on a hard copy proof or press sheet:

- Light sources that affect a user's color perception are:
 - Monitor backlighting
 - Viewing booth lighting
 - Contamination from ambient light
- The monitor display is emissive while the press sheet is reflective. Color on a press sheet may look different under different lighting conditions, while color on a monitor is independent of room lighting conditions. Color on a monitor is dependent on the monitor's backlight.
- The light level in the viewing booth must produce an overall brightness reflected from the press sheet that matches the brightness of the monitor display.
- The Kodak Matchprint Virtual technology is optimized for the spectral output of lamps that are manufactured by Graphic Technology, Inc. (GTI) and JUST Normlicht, Inc. Lamps produced by any other manufacturer may produce color artifacts. The lamps must not be aged more than 2500 hours, and the brightness of the lamps must be adjustable with a dimmer control. Bulbs need to be used for 100 hours before they can be used for color-accurate viewing.

You are responsible for assessing and adjusting the viewing environment before using the Matchprint Virtual technology to compare monitor proofs to hard copy proofs or press sheets.

A Kodak Reference Proof kit is included with your purchase of onsite training (SUA). Use the kit's reference white sheet, reference proof, and profile to verify correct color and optimize your viewing conditions.

Overhead light fixtures

Ambient lighting, or overall illumination, can significantly affect the accuracy of color viewing. To reduce ambient room lighting, close curtains, install dimmers for lights, or use fewer bulbs. In rooms where Matchprint Virtual is used, install CIE D50 (5000K) fluorescent halogen lamps that meet the ISO 3664:2000 graphics viewing standard. D50 illuminants such as GTI Graphiclite color viewing lamps are designed for color-accurate viewing.

If you are not sure whether your lamps meet the ISO standard, contact your lamp manufacturer.

Measuring devices

Kodak supports the i1 Display 3 (OEM) and i1 Basic Pro3 measuring devices. To select the required measuring device, follow these steps:

1. Make sure that the device is connected to the monitor or the computer (not the keyboard).
2. At the Dock, click the Matchprint Virtual folder icon.

3. Select **MVCalibrator** and in the MV Calibrate window that appears, on the right-hand side, click .
4. In the **Measurement Device** list, select the Eye One Pro 3 or Eye One Display measuring device.
5. Click **Save**.

Note: Active USB Extension/Repeater cables are not qualified for use with the qualified measuring devices.

IMPORTANT: X-Rite support for the following models has been discontinued by XRite:

- X-Rite i1 Pro Rev D (unfiltered and UV-cut filtered instruments)
- X-Rite i1 Pro2 (unfiltered and UV-cut filtered instruments)
- X-Rite i1Basic Pro2 (unfiltered and UV-cut filtered instruments)

While you can still select these instruments in Matchprint Virtual, if there is a color quality issue, Kodak cannot support accurate color with these devices.

Important: The retail version of the i1 Display 3 will not work for this model. Only the OEM i1 Display 3 model is qualified and available for purchase from X-Rite at <https://www.xrite.com/cart.aspx?AddItem=i1D3DC%2BOEM>.

Note: Should the cart not allow for checkout, contact ordersoem@xrite.com to complete the purchase.

This device is not qualified for use with UHD (Ultra-High-Definition) monitors and is only recommended for use with 2K monitors, although some monitors can calibrate at 4K with this device.

For EAMER customers only:

To purchase the i1D3 (OEM) from X-Rite, contact:

Paul Cooper
WW OEM Business
pcooper@xrite.com
X-Rite Europe GmbH
Althardstrasse 70
CH-8105 Regensdorf Switzerland
Tel: +41 44 8422768

The part number is i1d3DC+OEM.

For Asia Pacific Region (APR) customers only: To purchase the iOneD3 from X-Rite, contact Elizabeth Eidson at ordersoem@xrite.com.

Resources

Where appropriate, this document refers you to other technical documentation for more information. The documentation is available on the Matchprint Virtual Web site at [Matchprint Virtual page on WorkflowHelp](#).