



## SWOP® Off-Press Proof Application Data Sheet

# MATCHPRINT Virtual Proofing System – LCD with EIZO ColorEdge CG210 Display

The SWOP Review Committee has approved the use of off-press proofs as input material to publications. SWOP specifications recommend that: “The appearance of an off-press proof used in this application must closely simulate a SWOP Certified Press Proof.” See other explanations and recommendations as outlined on pages 21 and 47 of the 2001 edition of the SWOP specifications.

### I. Manufacturer

Kodak Polychrome Graphics  
401 Merritt 7, 3<sup>rd</sup> Floor  
Norwalk, CT 06851

### II. Product

*MATCHPRINT Virtual Proofing System – LCD with EIZO ColorEdge CG210 Display*



### III. Introduction

MATCHPRINT Virtual Proofing System – LCD provides for color-accurate viewing of CMYK files on RGB electronic monitors. Users may select custom or standard color rendition targets, including a standard / supplied color profile based on data contained in ANSI CGATS TR001 as suggested by SWOP. This MATCHPRINT Virtual Proofing System color profile is freely available to all users. Visual match is apparent by selecting this profile when viewing a digital file on the monitor screen and simultaneously viewing an actual SWOP Certified Press Sheet. MATCHPRINT Virtual Proofing System – LCD includes a software tool to automatically confirm compliance with color measurement data in this SWOP Off-Press Proof Application Data Sheet.

### IV. Control Guide

SWOP Specifications recommend the use of the SWOP Digital Color Bar or other suitable guides which meet these requirements. Each MATCHPRINT Virtual Proofing System incorporates an automatic process to calibrate the system and its monitor on a daily basis. Users can confirm color rendition according to SWOP standards by selecting the “information” button (see *MATCHPRINT Virtual Proofing System – LCD Operator Reference*) when viewing an image file.

### V. System Components

#### Hardware:

1. One Liquid Crystal Display (LCD) Color Monitor (EIZO CG 210 Display), and cables.
2. KPG Monitor Calibrator, a specially calibrated and certified colorimeter supplied by KPG for use with the MATCHPRINT Virtual Proofing System – LCD.
3. One APPLE PowerPC G5 computer with keyboard and mouse.

#### Software:

1. MACINTOSH OS/X Version 10.3.3, or greater, Operating System software.
2. MATCHPRINT Virtual Proofing Monitor v3.2, or greater, - a supplied component of the MATCHPRINT Virtual Proofing System – LCD.

### Environment and Viewing:

Subdued ambient light is recommended for optimum color viewing. While LCD displays offer a number of advantages compared to conventional CRT displays, viewing angle for critical color judgment is more restrictive. KPG recommends viewing the LCD display from a position directly in front and perpendicular to the center of the LCD screen.

When viewing hard copy proofs, KPG recommends using a GTI Softview 1ex viewing booth with KPG recommended lot number lamps (5,000 K).

### Setup and Protocol:

Follow these steps to ensure the MATCHPRINT Virtual Proofing System viewing is in conformance with SWOP requirements while using the Automatic measurement method:

1. Switch on all system components and allow one hour warm-up. The MATCHPRINT Virtual Proofing System – LCD system automatically enforces this one-hour warm-up from a cold start.
2. After warm-up, MATCHPRINT Virtual Proofing Calibrator software is automatically launched. Follow the on-screen prompts to complete the automatic calibration process.
3. Launch the MVP Color Check application from either the MATCHPRINT Virtual folder in the Dock area or in Macintosh HD | Applications | MATCHPRINT Virtual.
4. When the calibration dialog box appears, confirm the KPG Monitor Calibrator is placed flat on an opaque surface and click Continue. When the colorimeter dark calibration is complete (approximately 10 seconds), click on the LCD display screen to select it for SWOP color confirmation.
5. Position the KPG Monitor Calibrator flat against the display within the on-screen outline and press any key.
6. In the Measurement dialog box, click on the Color Check button. A Choose File dialog box appears.
7. Select the file “ECG210\_AutoSWOPADS.txt” in the name and click Open. Click Continue in the Color Check dialog box. Re-confirm placement of the KPG Monitor Calibrator and press any key.
8. A series of color patches automatically appears successively on-screen, corresponding to the colors in this SWOP Application Data Sheet.
9. When the automatic color measurement is complete, a data table is presented on screen. Within this table are actual color measurement values and Delta E comparisons with values for each color in this SWOP ADS. The table can be printed using File | Print.
10. To independently confirm the MATCHPRINT Virtual Proofing System viewing is in compliance with SWOP standards, open a proof view (see *MATCHPRINT Virtual Proofing System – LCD Operator Reference* for instructions) and click on the “information tool” (“i” shaped icon). The resulting window should indicate:

#### Color Profile

CMYK Printing Process	Standards
Proofing Condition	US Web SWOP

If this is not the case, close the information window, close the image window and return to the window showing the image thumbnail. Select “Properties” in the column to the right of the thumbnail image. In the resulting window, utilize the selection boxes to ensure the above noted two settings are selected. Click on “Process Again” and close the window.

See the *MATCHPRINT Virtual Proofing System – LCD Operator Reference* and *Administrator Reference* for explanations of these and other tools.

## V. Finishing Procedures

No finishing procedures are necessary with the MATCHPRINT Virtual Proofing System - LCD.

## VI. Finished Proof Characteristics

A properly made proof using the MATCHPRINT Virtual Proofing System – LCD with EIZO ColorEdge CG210 Display should have the following color characteristics:

Color	L*	C*	h(ab)*	a*	b*
Cyan 100%	56.52	44.89	237.91	-23.84	-38.03
Cyan 75%	63.66	38.39	233.27	-22.96	-30.77
Cyan 50%	70.89	26.42	234.27	-15.42	-21.44
Magenta 100%	43.98	72.11	358.34	72.08	-2.09
Magenta 75%	53.22	54.95	355.42	54.77	-4.39
Magenta 50%	63.63	35.22	354.34	35.04	-3.47
Yellow 100%	87.19	81.52	96.64	-9.42	80.97
Yellow 75%	85.33	72.88	99.05	-11.46	71.97
Yellow 50%	86.39	49.87	99.92	-8.59	49.12
Black 100%	18.99	0.15	--	0.03	-0.04
Black 75%	37.81	0.38	--	0.17	0.29
Black 50%	55.30	1.15	--	-0.49	1.02
Red 100%	43.75	80.07	37.02	63.93	48.22
Green 100%	52.13	65.52	149.75	-56.59	33.01
Blue 100%	22.84	51.94	301.34	27.02	-44.35
Gray 75%	37.29	3.11	--	-2.35	2.02
Gray 50%	52.33	2.04	--	-0.32	2.01
Gray 25%	70.57	2.15	--	-1.19	1.79
Paper	89.14	3.91	--	0.15	3.91

\*Three color grays made up of Cyan, Magenta, Yellow: 75, 64, 64; 50, 40, 40; and 25, 17, 17 values.

All measurements are made with the supplied KPG Monitor Calibrator and the MVP Color Check software application.

Aggregate measured color of any patch should be within 2.5  $\Delta E$  of the following values.

## VII. Sample Proofs

Sample MATCHPRINT Virtual Proofing System proofs conforming to this Application Data Sheet have been demonstrated to the SWOP Technical Committee for their inspection and verification.

CALL TOLL-FREE 1-877-574-7274 FOR ADDITIONAL INFORMATION  
OR VISIT US ON THE WEB AT [www.kpgraphics.com](http://www.kpgraphics.com)

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