

KODAK Premium Photographic Papers

KODAK Premium Photographic Glossy Paper / 270 g

KODAK Premium Photographic Glossy Paper / 180 g

KODAK Premium Photographic Satin Paper / 180 g

KODAK Premium Photographic Matte Paper / 180 g

GENERAL DESCRIPTION

For stunning, photo-realistic displays and exhibition prints of the highest quality. Ideal for photo reproduction.

- Multiple surfaces available (glossy, satin, and matte) for all photo reproduction needs.
- Industry-leading light stability for indoor display
- 8-mil and 10-mil, resin-coated, photographically stable bases for high quality photographic output
- Enhanced lamination capabilities with many inexpensive thermal materials

COMPATIBILITY

When used with the following printers and inks, KODAK Premium Photographic Papers are recommended for all applications. Recommendations will provide optimal output when using printing paths commonly associated with each printer. These settings are intended as starting points—other combinations of settings may also provide good results. See "Printing Notes" for more information. "Yes" in the Laminate Recommendation column indicates that this media is likely to have good adhesion with laminates in that class.

For compatibility information for all KODAK Wide-Format Inkjet Media, refer to the Inkjet Media Compatibility Chart at www.encad.com.

Manufacturer	Model	Ink Compatibility		Laminate Recommendation (See Finishing Section)			
		Ink	Print Driver Media Setting	Heat Activated Thermal 210-240°F (99-116°C)	Heat Activated Low Temperature 185-195°F (85-91°C)	Heat Assisted 185-195°F (85-91°C)	Pressure Sensitive Ambient to 120°F (49°C)
KODAK PROFESSIONAL	4042/4060/ 4742/4760	Lightfast Plus Dye	See Printing Notes	Yes	Yes	No	Yes
KODAK PROFESSIONAL	4860	Lightfast Plus Dye	See Printing Notes	Yes	Yes	No	Yes
HEWLETT-PACKARD DesignJet	800/1050C/ 1055CM	Dye	High-Gloss Photo*	No	No	No	Yes
HEWLETT-PACKARD DesignJet	2000/2500/ 2800/3000/ 3500/3800 CP	Dye	Semi-Gloss Photo Paper	Yes	Yes	Yes	Yes
HEWLETT-PACKARD DesignJet	5000 Series	Dye	Photo Imaging Gloss	Yes [†]	Yes	Yes	Yes
ENCAD NovaJet	PRO 36/50	GX	See Printing Notes	Yes	Yes	Yes [†]	Yes
ENCAD NovaJet	PROe	GX	See Printing Notes	Yes	Yes	Yes [†]	Yes
ENCAD NovaJet	500	GX	See Printing Notes	Yes	Yes	Yes [†]	Yes
ENCAD NovaJet	600/700 Series	GS+	See Printing Notes	Yes [†]	Yes	Yes (matte paper only)	Yes (matte paper only)
ENCAD NovaJet	600/700 Series	GX	See Printing Notes	Yes	Yes	Yes [†]	Yes

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Manufacturer	Model	Ink Compatibility		Laminate Recommendation (See Finishing Section)			
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ENCAD NovaJet	850	GS+	See Printing Notes	Yes [†]	Yes	Yes (matte paper only)	Yes (matte paper only)
ENCAD NovaJet	850	GX	See Printing Notes	Yes	Yes	Yes [‡]	Yes
ENCAD NovaJet	1000i	Qi Dye	See Printing Notes; Printer Heater Setting: 4 (except Satin: 6)	Yes	Yes	Yes	Yes
COLORSPAN DisplayMaker	Hi-Res 8	EC	Glossy Photobase	Yes	Yes	Yes	Yes
COLORSPAN DisplayMaker	Esprit/Series XII	EC	See Printing Notes	Yes	Yes	Yes	Yes
EPSON Stylus Pro	7600/9600/ 10000/10600	Photographic Dye	See Printing Notes	Yes (matte paper only)	Yes (matte paper only)	Yes	Yes

* This media selection was chosen to eliminate the pigmented black ink. If you choose a different media setting, select one that does not use the pigmented black ink.

[†] Hot shoe type thermal laminates only.

[‡] Lower ink coverages needed and/or use only for rigid display.

[§] Laminates with vinyl film type work best.

PRINTING NOTES

The Print driver media settings recommended in the Compatibility section are intended to provide usable results with available media profiles found in the printer manufacturer's provided drivers and RIPs. These recommendations will provide proper ink laydowns with no pooling or bleeding, and color which will be acceptable for many applications. It is suggested that tests be run using these recommendations and color corrections be made to meet user expectations.

In cases where no recommendation is made, choose the media setting closest to the KODAK Wide-Format Inkjet Media you are using. For example, if you are printing on KODAK Premium Photographic Glossy Paper / 180g, choose a setting in your driver or RIP which is intended for another glossy photo paper. This should give you a print which requires little or no adjustment to get usable results.

RIPs and Profiles for Encad and Other Printers

For more exacting color, several third party RIPs (Raster Image Processors) are available with profiles supporting Kodak media for Encad, Kodak and other printers. For more

information visit Encad's website at <http://www.encad.com/Support/RIP-Support/index.asp>

Following is a list of software companies that provide RIPs for the Encad product line. To obtain profiles that are not available for download directly from Encad, as well as complete product descriptions and support, please visit the RIP company's website.

Encad	www.encad.com/Support/RIP-Support/index.asp
Colorgate Photo RIP	www.colorgate.com/home_e/products_e.html
Best GmbH	www.bestcolor.com/bcint/index.htm
Scanvec Amiable	www.scanvecamiable.com
Onyx Graphics	www.onyxgfx.com
AIT International	www.applied-image.com/Shiraz-RIP.htm
Image Technologies	www.imagetechdev.com
Global Graphics	www.globalgraphics.com
Colorburst Systems	www.compatsys.com
Wasatch Computer Technology, Inc.	www.wasatchinc.com
CADlink Technology	www.cadlink.com
JET RIP	www.jangeun.co.kr

Custom Profiles

While the above printing recommendations and available profiles from Encad will provide adequate results for many wide-format inkjet applications, there are applications, such as inkjet proofing, which demand more exacting color requirements. It is suggested that for these applications, custom profiles be built for given ink/media/printer combinations. Many color management and profile building software applications are available which allow the user to manage color to meet their needs. Also, many RIPs will provide color profiling options which allow the user to control the color of their output. Please contact your dealer or Encad technical support for help determining the best solution for your application.

Hewlett-Packard Printers

Note: These settings were determined using the respective HP DesignJet printer drivers with Adobe PhotoShop on a Windows NT 4.0 platform, and are intended to produce images of high quality with little user adjustment. These settings may vary using different applications and systems, but will still provide a good starting point. Leave other settings at the default state of the printer driver. You may want to experiment with other settings to customize results for needs and applications.

Other features, such as Postscript Options and Page Size setup, are user definable and will have no impact on final image quality, but should be examined and adjusted by the user.

Hewlett-Packard DesignJet 5000 Series

Press the "media load/unload" button so the control panel will guide you through each step. Position the roll tightly against the fixed flange on the supply reel, making sure the media has no "telescoping." This may require a little more force than media on different cores. Feed the media through the printer, aligning it with the blue guideline, and pull enough media through to ensure the edges are square to the supply roll. Complete the remaining instructions as directed on the control panel.

As with other HP printers, be sure to allow print head alignment when switching media types for optimum image quality. If this is not automated, select it through **Setup**. Choose **Menu -> Utilities -> Calibrations -> Printhead Alignment**. When prompted for **Media Type**, select **Photo Imaging Gloss**.

On the printer:

- Select **Printer Setup**
- Select **Internal RIP Settings**
- Select **Black Replacement**
- Select **Off**

The default setting for Black Replacement varies depending on which version of firmware your printer has.

Leaving the Black Replacement on will result in prints with a green cast.

There is also an Ink Emulation selection available in the Internal RIP Settings. The choices here will affect overall color balance and saturation. Experiment to find the selection that gives you the best results for your application.

When printing with the HP DesignJet 5000PS3 printer driver, make the following selections:

Print

Setup

—Select **Properties**

—Under the **Device Options** tab, select the desired **Print Quality** mode. **Max Quality** produces excellent images on this media.

—Click **OK** again to exit **Properties** and return to **Setup**

When Printing with the HP DesignJet 5000 printer driver, make the following selections:

Print

Setup

—Select **Properties**

—Under the **Basic Setup** tab, select the desired **Print Quality** mode. **Max Quality** produces excellent images on this media.

—Click **OK** again to exit **Properties** and return to **Setup**

Hewlett-Packard DesignJet 3500 CP

Press the "media load/unload" button so the control panel will guide you through each step. Position the roll tightly against the fixed flange on the supply reel, making sure the media has no "telescoping." This may require a little more force than media on different cores. Feed the media through the printer, aligning it with the blue guideline, and pull enough media through to ensure the edges are square to the supply roll. Complete the remaining instructions as directed on the control panel.

As with other HP printers, be sure to allow print head alignment when switching media types for optimum image quality. If this is not automated, select it through **Image Quality -> Printhead Service -> Align Now**. When prompted for **Media Type**, select **Semi-Gloss Photo Paper**.

When Printing with the HP DesignJet 3500CP PS3 printer driver, make the following selections:

Print

Setup

—Select **Properties**

—Under the **Advanced** tab, select the desired **Print Mode**. **Photographic Quality** produces excellent images on this media. For **Color Management**, select **EuroScale**. For **Rendering Intent**, select **Colormetric**.

—Click **OK** again to exit **Properties** and return to **Setup**

When printing with the HP DesignJet 3500CP printer driver, make the following selections:

Print

Setup

—Select **Properties**

- Under the **Options** tab:
- Select **Semi-Gloss Photo** for paper type
- Select the desired **Quality** mode. **Photo** produces excellent images on this media. **Color** should be left at **Automatic**.
- Click **OK** again to exit **Properties** and return to **Setup**

Hewlett-Packard DesignJet 1050CM

- Select **Print**
- Choose **Properties**
- Go to the **Options** tab
- Choose **High-Gloss Photo** for paper type
- Click **OK**

Epson 9000 with Fiery RIP Station 5100

When printing with the Epson 9000 using the Fiery RIP Station 5100, use the following settings for best results:

- Print Mode: **PQ Semi Gloss Paper**
- Rendering Style: **Photographic**
- CMYK Simulation: **DIC**
- RGB Source: **Off**
- Screen Method: **Error Diffusion**

The Fiery RIP Station 5100 provides many selections which allow the user to customize results for a variety of applications and media. The above results were selected to provide optimum image quality for general imaging applications using KODAK Premium Photographic Media. Image quality can be affected by choosing different resolutions, by selecting uni- or bi-directional printing, or by selecting different Screen Methods. Color quality can be affected by changing such things as CMYK simulation, RGB source, brightness and others. These choices should be tested by the customer and chosen for specific applications and preferences.

Epson Stylus Pro 7000/9000

Make the following selections with the supplied Epson printer driver:

Print Setup

- For **Media Type**, choose **Photo Quality Inkjet Paper**
- Select **Properties**. Under the **Main** tab select **Custom** and then **Advanced**.
- In **Color Management**, choose **Color Adjustment** and mode **PhotoRealistic**.
- Choose Print Quality of **Fine 720 dpi** or **Super Fine 1440 dpi** (there is little difference on this media).
- Click **OK**
- Click **OK** again to exit **Properties** and return to **Setup**
- Now select **Transfer**
- Select **Override Printer's Default Functions**
- Deselect **All Same**
- Select **Black**
- Enter **90** in the **100%** field

These settings will produce excellent results in terms of color reproduction and image quality, with drying fast enough to use a take-up spool in most conditions (use caution when humidity is high). Using this path, you will

only be able to print in uni-directional mode. To decrease print time and print in bi-directional mode, labeled high-speed in the Epson dialogue box, the media type needs to be Photo Paper, and all other settings the same as described above. While allowing faster printing, color saturation will be lower. Test for your applications.

Epson 7600/9600/10000 Printers

Avoid using the take-up reel when printing at greater than 50% RH.

Epson 7600/9600/10000 Series Photographic Dye Printers

For best color, use Media Selection: **Photo Quality Inkjet Paper**.

- Print at 720 or 1440 dpi for best results.
- Select **Page Setup**, then select **Transfer**.
- Select **Override Printer's Default Functions**
- Deselect **All Same**
- Select **Black**
- Enter **90** in the **100%** field
- Use caution when using the take up reel at high humidity. Prints must be laminated for optimum performance.

Colorspan Printers

Because of the way media is transported through Colorspan printers, you should advance the media several inches before printing to ensure that the media lays flat on the print platen. This is particularly important with Premium Photographic Glossy Paper / 270 g, due to its heavier weight and stiffness.

HANDLING

All inkjet media must be handled with care before and after printing to prevent damage to the ink receiving layer and printed images. Use the following guidelines, your experience, and common sense for the proper care of your media.

- Store unused media in its original packaging, using the core-plugs and plastic sleeves.
- Allow media to acclimate to your environmental conditions for at least 24 hours before use.
- Kodak Inkjet media is rolled printable side out. Avoid touching the printable side by handling by the edges of the roll.
- Wear cotton gloves when handling media to avoid scratches, abrasions and fingerprints from moisture and oils on your hands.
- Do not allow the media to come into contact with moisture. Moisture will damage many types of inkjet medias before and after printing.
- Avoid handling, trimming, laminating or other finishing until prints are completely dry. Dry times will vary based on media type, ink type and environmental conditions.

- Do not fold, bend or crease media or damage may occur to the ink receiving layer.
- Do not allow the surface of the media to come into contact with itself or another inkjet media.
- Use media only in recommended operating conditions—see "Physical Characteristics" section.

Curl

Most types of roll-based inkjet media will exhibit some amount of curl, either toward the base side or toward the print side. This will vary based on media type and environmental conditions. Some media will curl more in low humidity environments and others in high humidity environments. Also, media may curl more towards the core or end of the roll due to "roll memory."

Although curl is mainly an issue when printing, it can also have an impact on laminating and other finishing procedures. Follow these guidelines, and use your experience and common sense to avoid issues caused by curl.

When printing:

- Advance media several inches past the print platen before starting a print job.
- Add weights or clips to the leading edge of the media.
- Attach media to the printer's take-up spool before starting printing.
- Adjust vacuum settings accordingly on printers equipped with variable media vacuum settings.
- Adjust heater and dryer settings on equipped printers to obtain optimum conditions to ensure flat media. See printer owners' manual for their recommendations.

During finishing:

- Reverse wind media, when completely dry, to counteract roll memory.
- Do not allow media to remain rolled for extended periods of time.
- Rough cut prints and lay them flat before laminating.

FINISHING

Detailed information and tips can be found in Kodak publication E-2600, *Laminating, Mounting, and Finishing KODAK Wide-Format Inkjet Media*.

Lamination

Please refer to lamination chart in compatibility sections above for specific printer/ink/laminate recommendations.

Lamination Definitions

Heat Activated Thermal, 210-240°F (99-116°C)*	Laminates with a '0.5/2.5' mil polyester/adhesive ratio for hot roll laminators at 210 - 240°F, and '1/2' mil inkjet compatible hot shoe laminator films.
Heat Activated Low Temperature, 185-195°F (85-91°C)*	Several '1/2' mil polyester/adhesive ratio for hot roll laminators at 185 - 195°F.
Heat Assisted, 185-195°F (85-91°C)	Laminates with pressure sensitive adhesives, specially formulated for inkjet prints to be applied on hot roll laminators at 185 - 195°F. They can use either vinyl or polyester films.
Pressure Sensitive, Ambient to 120°F (49°C)	Cold applied liquid laminate adhesives on either vinyl or polyester films.

* For both Heat Activated Thermal and Low Temperature, we recommend the 3 mil laminates mentioned. Thicker laminates may be applied to the back of the print for increased total thickness.

It is important that your print be dry before laminating. For best results, use inkjet-specific laminate products, and wait 4 to 6 hours to laminate after printing.

For increased durability, choose a laminate with UV protection and encapsulate with a 1/4-1/2" (6.5-13 mm) seal around the edges of a print to prevent moisture and other airborne pollutants from reaching the image. Heavier weight papers may require a wider edge seal.

Mounting

Prints can be mounted, laminated or not, to a variety of materials, including poster board, foam board, Sintra, Lexan and more. Use inkjet-specific adhesive materials and follow the manufacturer's instructions.

PERFORMANCE GUARANTEE

Encad will guarantee prints from compatible systems against noticeable fading, cracking, yellowing, and bleeding when the print is viewed from its intended viewing distance.

The Indoor Performance Guarantee durations will vary based on the media/printer/ink system. The stated durations assume the media is displayed indoors under fluorescent light (average intensity 450-lux, 12 hours/day), and/or with indirect sunlight exposure (at least 6 feet from a window, with no direct sunlight). The guarantee covers both laminated or unlaminated prints as noted in the table below. The unlaminated guarantee assumes the media will be displayed in a typical office environment and will not be exposed to a high level of pollutants (above a typical ozone level for an office environment).

Terms, conditions and additional information about the Performance Guarantee can be found at www.encad.com.

Manufacturer	Model	Ink	Durability Glossy and Satin	Durability Matte
HEWLETT-PACKARD DesignJet	5000 Series	6 Color Dye	9 years 15 years laminated	7 years 10 years laminated
HEWLETT-PACKARD DesignJet	2xxx/3xxx	4 Color Dye	9 years 15 years laminated	7 years 10 years laminated
ENCAD NovaJet	800, 700, 600, 500 Series	4/8 Color GS+	3 years	3 years
		4/8 Color GX	25 years 35 years laminated	20 years
	1000i	Qi Dye	20 years	20 years
EPSON Stylus Pro	7600/9600/10000/10600	6 Color Photographic Dye	15 years 10 years laminated	12 years 8 years laminated

Additional Durability Information

The following table can be used as a guide for printers and inks not included in the Performance Guarantee.

Durability Guidelines for Printers Not Included in Performance Guarantee

If Using	Expect Durability Similar To:
KODAK Lightfast Plus Dye	Encad GX
Colorspan EC Dye	Encad GX

ORDERING INFORMATION

KODAK Premium Photographic Glossy Paper / 270 g

Roll Length	Roll Width / Order No.				
	24 in. (61 cm)	36 in. (91.4 cm)	42 in. (106.7 cm)	50 in. (127 cm)	60 in. (152.4 cm)
100 ft (30.5 m)	NA	871 7423	136 3076	169 4447	188 9062
16.4 ft (5 m) (sample)	NA	879 5379	NA	NA	NA

KODAK Premium Photographic Glossy Paper / 180 g

Roll Length	Roll Width / Order No.				
	24 in. (61 cm)	36 in. (91.4 cm)	42 in. (106.7 cm)	50 in. (127 cm)	60 in. (152.4 cm)
100 ft (30.5 m)	117 7781	179 0203	139 3768	858 2967	866 9475
16.4 ft (5 m) (sample)	NA	824 6217	NA	NA	NA

KODAK Premium Photographic Satin Paper / 180 g

Roll Length	Roll Width / Order No.				
	24 in. (61 cm)	36 in. (91.4 cm)	42 in. (106.7 cm)	50 in. (127 cm)	60 in. (152.4 cm)
100 ft (30.5 m)	143 9942	854 2003	859 9185	163 8436	883 3782
16.4 ft (5 m) (sample)	NA	815 4304	NA	NA	NA

KODAK Premium Photographic Matte Paper / 180 g

Roll Length	Roll Width / Order No.				
	24 in. (61 cm)	36 in. (91.4 cm)	42 in. (106.7 cm)	50 in. (127 cm)	60 in. (152.4 cm)
100 ft (30.5 m)	117 1099	887 6310	809 4807	855 8926	132 3245
16.4 ft (5 m) (sample)	NA	168 7011	NA	NA	NA

NA = Not available

KODAK Premium Photographic Papers

PHYSICAL CHARACTERISTICS

Physical Characteristics	Glossy / 270 g	Glossy / 180 g	Satin / 180 g	Matte / 180 g	Test Method Reference
Caliper	10 mil (254 μ m)	8 mil (203 μ m)	8 mil (203 μ m)	8 mil (203 μ m)	ISO 534
Opacity	>95	>95	>95	>95	Tappi T 524
CIE Whiteness	125	125	125	125	Tappi T 524
Weight	270 g/sm	180 g/sm	180 g/sm	180 g/sm	ISO 536
Brightness	104	104	104	102	Tappi T 524
60-degree Gloss	>80	>80	25	<10	ISO 7668
L*(D65/10 uvi/BBW)	95	95	95	95	Tappi T 524
Flame Spread Classification	Class A	Class A	Class A	Class A	ASTM E84
Operating Conditions	59-86°F (15-30°C), 30-70% RH (non-condensing)				
Recommended Storage Conditions	68°F (20°C), 50% RH				

If you have questions or need assistance, visit Encad's website at www.encad.com or, in the U.S., contact Encad Technical Support at 1-877-362-2387.

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