TECHNICAL INFORMATION BULLETIN

How To Get The Best From Your KODAK Inkjet Prints

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Does Kodak offer an inkjet paper that will work in my printer?

Kodak offers many choices of Inkjet papers; please visit our website for the paper that will help you achieve the results you are looking for. Go to: http://www.kodak.com/go/inkjet

Choosing the correct printer settings.

Kodak offers a selection of papers that will help you print out documents to photos. Once you have chosen your Kodak Inkjet paper, Kodak offers recommended printer settings to use with your printer. These settings are available on a sheet inside most paper packages. You can also visit our website to obtain these settings, http://www.kodak.com/go/inkjet

Along with manually changing your printer settings, Kodak offers a free downloadable software package called "Picture Software". This software will also allow you to download an application called "One Touch for Better Pictures." This software will allow you to pick your printer and operating system when using the **KODAK Ultima Picture Paper and the KODAK Premium Picture Paper only.** Downloading these 2 files will eliminate the manual step of having to change your printer settings for the papers mentioned above.

Kodak Inkjet Printing Recommendations.

When handling Kodak Inkjet Papers please follow the below recommendations:

- Handle Kodak Inkjet Papers like photographic papers, by the edges to avoid oil deposits and fingerprints.
- Be sure you are printing on the correct side of the paper, that is, the coated side. (some papers are coated on both sides).
- Store unused print media in a cool, dry place. Avoid exposure to direct sunlight for prolonged periods of time. All media products are best when used within 1 year of purchase date.
- Be sure to adjust your printers settings for the recommended paper.
- Remove each print from printer's output tray as it is finished to avoid ink smearing or transfer. To avoid smudging, allow inks to air dry completely before stacking. Many papers dry almost immediately, but less-than-ideal drying conditions may slow down the process. It is recommended to keep each print separated until completely dry (24 hours, recommended) before storing in an acid free folder.

Storing and Preserving Kodak Inkjet prints.

When storing Kodak Inkjet prints please follow the recommendations below:

- Visible and UV light, along with atmospheric pollution, hasten image fading. Keep prints away from bright lights - especially direct UV illumination and sunlight along with above average exposure to florescent lighting.
- Store finished prints in a cool, dry, dark place.
- Avoid hot temperatures and high humidity.
- Avoid exposure to dirt, dust, scratches and fingerprints.

- Use acid-free interleaves between printed sheets when stacking for long-term storage (after ink is thoroughly dry). when storing prints in clear viewing sleeves, use a breathable clear cover sheet to prevent inks from transferring / sticking to the sleeve. (Obtain at your local photo retailer)
- Be sure to install an acid free mat board between the frame and photo to prevent prints from sticking to the glass over time. (Obtain at your local photo retailer)
- Be sure to always save your images on a digital storage devise. Be sure to save your images to the appropriate device as technology progresses.
- **Laminating Kodak Inkjet Prints** - Due to the various makes and models of laminating machines and materials on the market today. It is extremely difficult to determine specific recommendations with Kodak Inkjet papers.
- **UV Sprays on Kodak Inkjet Papers** - Due to the various makes and models of UV Sprays on the market today. It is extremely difficult to determine specific recommendations with Kodak Inkjet Papers.
- **KODAK Ultima Picture Paper and KODAK Premium Picture Paper are designed to be fade resistant.** The use of UV sprays is not required.

The following materials should be avoided when mounting, displaying or storing your Kodak Inkjet prints.

- Materials with high acidic levels
- Plastics containing pvc or acetate materials
- Cellophane tape
- Masking tape
- Rubber cement
- Cardboard

Things not to do:

- Don’t mount your photo so that it is directly in contact with the glass in a framed display. Instead use good quality acid-free or rag mat board, and cut a window in it to provide an air space between it and the glass.
- Don’t store prints in a damp basement or hot attic.
- Handle prints by the edges to avoid skin oils and fingerprints.

Acid free materials can be obtained through your local photo retailer.

How does ultraviolet light affect my Kodak inkjet print?

Print life is determined and affected by environmental factors such as light, humidity and air quality temperature. These factors add to print dye loss. Ultraviolet light can cause a print, especially a color print, to fade. Light fading photos displayed in normal household conditions will suffer a progressive loss/color shift in the highlighted areas. To reduce these effects you can make sure prints are not displayed in direct sunlight or in windows. Dye shift may also occur even when photos are kept in dark storage (albums) but usually at a much slower rate.

Ultraviolet Absorbing Glass: Framed prints, for display can be protected with the use of ultraviolet absorbing glass or special lightweight acrylic that has UV absorbing properties.

Inkjet Definitions:

- **Absorbency**- The ability of paper to absorb and hold ink or other liquids
- **Acid Free paper**- Paper, which has had the acid, removed from the pulp so that it has a neutral 7.0 pH.

  Examples: Commonly used for fine art prints and limited edition printing, as well as permanent records where contact with paper acidity could harm the documents.

- **Archival Paper (Archival media)**- Acid free and lignin free paper that lasts longer than other papers and holds color well.

  Examples: With a quality lifetime of 100 years or longer, archival paper is often used for critical, permanent records that must be kept for many years.
- **Bleed Through**- When paper is too thin or the ink applied too heavily the color can bleed through to the other side. Using the right paper for the type of ink coverage required can eliminate bleed-through.
- **CMYK**- Short for Cyan-Magenta-Yellow-Black, and pronounced as separate letters. CMYK is a color model in which all colors are described as a mixture of these four process colors. CMYK is the standard color model used in offset printing for full-color documents. Because such printing uses inks of these four basic colors, it is often called four-color printing.

  In contrast, display devices generally use a different color model called RGB, which stands for Red-Green-Blue. One of the most difficult aspects of desktop publishing in color is color matching -- properly converting the RGB colors into CMYK colors so that what gets printed looks the same as what appears on the monitor.
- **Color Gamut**- The total range of colors that can be reproduced by a digital device.
- **Color management system (CMS)**- A system for ensuring that colors remain the same regardless of the device or medium used to display the colors. This is extremely difficult because different devices use different technologies and models to produce colors. In addition, color is highly subjective. The same colors look different to different people
- **Color matching**- the process of assuring that a color on one medium remains the same when converted to another medium. This is extremely difficult because different media use different color models. Color monitors, for example, use the RGB model, whereas process printing uses the CMYK model. As color desktop publishing matures, color matching is gaining more and more attention. The most recent WINDOWS and MACINTOSH operating systems include a color management system (CMS) to assist in color matching.
- **Crop marks (Cut Marks)**- To cut out or trim unneeded portions of an image or a page. Crossed lines placed at the corners of an image or a page to indicate where to trim it. Also called corner marks. Center marks indicate the center of a 2-page spread.
- **Dithering**- Creating the illusion of new colors and shades by varying the pattern of dots. Newspaper photographs, for example, are dithered. If you look closely, you can see that varying the patterns of black and white dots produces different shades of gray. There are no gray dots at all. the more dither patterns that a device or program supports, the more shades of gray it can represent. In printing, dithering is usually called halftoning, and shades of gray are called halftones.
- **DPT (dots per inch)**- A measure of the resolution of a printer is called DPI or dots per inch. It properly refers to the dots of ink or toner used by an imagesetter, laser printer, or other printing device to print your text and graphics. In general, the more dots the better and sharper the image. DPI is printer resolution. DPI is not image resolution although frequently used that way.
- **Duplex paper (Duplex Media)**- Paper designed to be printed on either side or both sides.
- **Matte Finish**- Coated paper with a low gloss finish without luster.
- **Opacity**- Opacity is the measure of how resistant to show-through a piece of paper is. The more fibers or fillers in a paper, the more opaque (less see-through) it will be.
- **Paper Grade**- Classification of different types of paper based on the type of pulp, treatments, and the end use of the paper. some common grades of paper include bond, book, cover, newsprint and photo.
- **Pigment Inks**- While conventional inks are commonly dye-based, pigment inks consist of tiny chunks of solid pigment suspended in a liquid medium. According to their proponents, pigment inks have fewer tendencies to run, bleed or feather.
- **Pixel**- Short for Picture Element, a pixel is a single point in a graphic image. Graphics monitors display pictures by dividing the display screen into thousands (or millions) of pixels, arranged in rows and columns. The pixels are so close together that they appear connected.

- **PPI (Pixels per inch)**- PPI is a measure of the number of pixels per inch displayed or captured in an image. A digital image is composed of samples that your screen displays in pixels. Also known as: display resolution, screen resolution.
- **Print driver**- A software routine that describes the physical characteristics of a particular printer, and converts data for printing into a form that printer can understand.
- **Resolution**- Affects to the sharpness and clarity of an image. Most often used to describe monitors, printers and cameras, it indicates the number of dots or pixels per inch. For printers, a 720-dpi (dots per inch) resolution means that there are 720 separate dots per 1-inch line of print.

  For graphics monitors (VGA, SVGA) the screen resolution means the overall number of (pixels) displayed on the entire screen. 800x600 resolution would contain 800 pixels across the screen and 600 pixels down the screen. The overall screen resolution would be 480,000 pixels. On a 15" monitor this would represent a 72-(PPI) display.
- **True Black**- Black produced by separate black ink rather than the 'process black' produced from a mixture of syan, magenta and yellow.
- **UV resistance**- The resistance to fading under direct sunlight and other UV light sources.
- **Waterfast**- The ability of a print to resist damage when exposed to water.