

DIGITAL FINE ART PAPERS

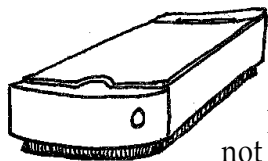
In addition to our wide selection of fine art papers, Opus carries a selection of high quality papers compatible with inkjet printers. Many of these inkjet papers can be used to create limited editions, original digital art, photographic quality images or any print where a quality look and feel are required. Many of these papers are acid free and are designed with the discerning user in mind. Opus also carries papers which are labeled as photocopier and laser printer compatible, and a number of smooth, lightweight fine art papers which are printer friendly.*

**Please see "Archival Concerns."*

INKJET PAPERS

There are a variety of papers available for inkjet printers, now that these printers have become less expensive and more accessible to consumers. Digital papers are produced in different surfaces and weights, providing artists with many choices of paper to use for their individual projects.

Most digital papers are specially coated for use with inkjet printers. This special coating is generally applied to one side only, making the coated side the optimum side for printing. In addition, due to the nature of this coating, it is best if the paper is stored properly and not handled too much as the oils from your hands can break down the special surface. The surface treatment on these papers is designed to increase colour gamut and maximize ink jet loads allowing for excellent colour and tonal reproduction.

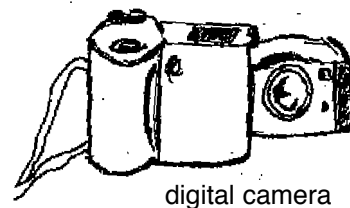


scanner

There are also many traditional fine art papers that can be used with inkjet printers. These include, but are not limited to, Arches Cover, Arches Watercolour, Waterford, Opus Student Watercolour and Somerset Velvet.

When testing and experimenting with fine art papers in your inkjet printer it is important to consider the weight and surface of the paper in combination with the weight of paper your printer can feed. This will help to minimize any jamming or other potential problems with your printer. Most printers have a paper thickness adjustment, though each printer will have a different range of weights which the printer can accept. It is best to check your printer manual for its individual specifications.

Artists often use digital technology in conjunction with other more traditional methods such as printmaking and photography. This combination of processes offers greater possibilities for art making and provides the artist with excellent tools for experimenting.



digital camera

Recently, there has been a wider acceptance of the use of digital media to create works of art, and with the advent of faster computers, more storage space, affordable inkjet printers and the creation of digital art papers, artists have even more tools to create and output their work.

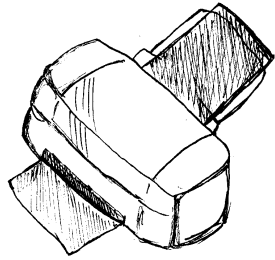
The choice of paper you use often depends on the project, the subject matter and the desired outcome. As all papers will interact with inks and images in different ways, some testing should be done previous to printing the final image(s). Some papers produce more subdued colours, while others make colours more saturated. Bright whites often enhance intense colours while cream coloured or off-white papers will dull the more intense colours in your image. The latter of these papers work well with black & white, sepia toned or images with a subtle tonal range. The surface of the paper whether it be glossy, matte, satin, rough, smooth or textured also has an impact on the image.

As with most art materials, all artists have their favourite paper. Depending on your aesthetic and style, and the desired outcome, you too will develop your own preferences.

DIGITAL FINE ART PAPERS

TESTING

There are a few key things to keep in mind when testing papers for printing with an inkjet printer. Ideally, the ink should be absorbed on the first layer without beading and then dry immediately leaving a smooth finish on the paper. The paper should not have a tacky feeling to the touch, nor should there be a build up of ink in the darker areas of the print. An even coating throughout the whole image is ideal. The ink should not smudge or bubble on the surface. Smudging, bleeding or bubbles on the surface can be a result of the DPI setting you are using to print your image.



inkjet printer

If you are using a lower DPI such as 360, try another print only this time set the DPI to 720 or 1440. Some paper and image combinations allow for beautiful prints at a lower DPI and other paper and image combinations require that you use a higher DPI setting. Always remember to double check your printer settings to ensure that it is set for the correct paper and type of image you are printing! It is also a good idea to get in the habit of keeping a log so you can remember what works and what doesn't!

Most inkjet manufacturers will recommend the use of both their brand of paper and ink with the printer you choose. This recommendation implies that only their products will produce the best results. By no means should this prevent you from experimenting with and combining other papers and inks, however, should you decide to use a different ink set than the one recommended by the manufacturer it is important to note that you will most likely void your warranty if any problems arise as a direct result of this action. Take care and do a little research before attempting to use different ink sets in your printer (please see the end of this handout for a list of websites that will offer further information on choosing this option).

When choosing alternative papers, there is less concern when it comes to the warranty on your printer. It is simply necessary that the paper setting on your computer and printer is properly set and that

you make sure that your printer can handle the weight of the paper you would like to print on. There is always the possibility of a paper jam, however, with inkjet printers this is usually quite easy to solve.

ARCHIVAL CONCERNS

At Opus, we are frequently asked questions regarding the archival nature of our papers, matboard and many other products. This concern is also true for digital fine art papers and inks. In the past there was not as great a concern about archival inks as printers were originally used in the office and not too many employees were concerned if their annual report was going to last 50 or 100 years! With the increasing demand for better art papers has come the demand for better inks.

The Wilhelm Research Institute has conducted longevity tests for a number of years and is respected for their work in this area. What has become certain is that it is no longer just the ink or paper that needs to be considered, but rather it is both the ink and paper in combination. Similar to many other works of art, after the choice of an archival ink and paper has been selected, the storage conditions must also be carefully considered, as humidity will greatly increase the fading of many prints. Thus, it is important to also consider the use of archival framing materials such as glass, matboard, tape and backing.

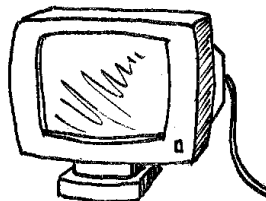
COLOUR MANAGEMENT

Achieving good results depends on more than just a good printer, and the proper inks and paper. Colour management is important too, and is the act of moving colour from one device to another in a controlled and predictable manner. The devices over which you can apply colour management can be your monitor, scanner or printer. Having control over your equipment will help to ensure that the colours you see on screen will be the same colours which will print on paper.

The most basic and least complex form of colour management is to ensure that your monitor is correctly calibrated. This can go a long way to avoiding some of

DIGITAL FINE ART PAPERS

the frustrations that can occur when the colours on your screen do not match the colours being printed. By holding your printed image up to the screen under proper lighting you can make notes about any inconsistencies. Take this information and refer to your printer and monitor manuals for tips on colour correction. Another good idea is to make a number of small prints on one sheet of paper using different settings and making notes as you go along. This can help you with future prints to figure out which settings you want to use.



Learning how to properly scan images, and understanding basic file saving concepts, such as the difference between TIFF, GIF and JPEG/JPG file formats, will also help you achieve good results. In addition, a basic understanding of the imaging software you are using to save and possibly alter the scanned image is useful. There are numerous websites, classes and books available that can help you get started with scanning, manipulating and printing images.

GLOSSARY

Archival Inks: Inks that have been produced for permanence and lightfastness.

Bitmap: An image made up of pixels. Often you will hear people say that an image is "bitmapped". This often means that the pixels are distinguishable once it is printed.

Calibration: Adjusting the colour of one device relative to another, such as a monitor to a printer.

CMYK (Cyan, Magenta, Yellow, Black): The encoding system used by printers for combining primary colours to produce a full colour image.

Contrast: The measurement of the change in brightness. High contrast implies a large difference between dark and light; medium contrast implies an even amount of difference; low contrast indicates very little difference between light and dark.

Digital Art Papers: Specially coated artist grade papers designed for use with inkjet printers. These papers tend to reproduce a much sharper resolution than most other artist grade papers used in printers.

Dot per Inch (DPI): This is a measurement which is based on dot density. Most consumer inkjet printers vary from 360 dpi to 1440 dpi.

Graphics Tablet: A pressure sensitive pen and tablet used in place of or in conjunction with a mouse. The pen and tablet allow you to draw with more freedom, as it is similar to using a pen and paper.

EPS (Encapsulated Post Script): This file format allows the exchange of PostScript graphic files between image applications.

GIF File Format (Graphic Interchange Format): This format is a raster oriented graphic file format which allows the exchange of image files across platforms.

Image Resolution: The number of pixels that make up an image. Image resolution is often referred to as pixels per inch (PPI) or pixels wide.

Import: The process of bringing data into a computer from another computer, file format or device such as a scanner or digital camera.

Raster Graphic: A set of horizontal lines composed of individual pixels, used to form an image.

RGB: Red, Green and Blue. These are the primary colours used to simulate natural colour on computer monitors.

Saturation: The degree to which colour is undiluted by light. If a colour is 100% saturated it contains no white, if a colour has no saturation it is a shade of grey.

Scanner: A device which converts images into digital form so that they can be saved and manipulated on computers.

TIFF (Tagged Image File Format): This is the standard file format for high resolution bitmapped graphics. TIFF files have cross-platform capabilities.

DIGITAL FINE ART PAPERS

Website Addresses:

www.inkjetmall.com - Excellent information on colour management, inks, printers and lots of other useful things.

www.mediastreet.com - Information on printer inks and includes a great links page.

www.scantips.com - An excellent introduction to scanning.

<http://welcome.to/computerdarkroom> - Digital printing information.

<http://myCMYK.com> - Information on digital print longevity.

<http://come.to/digitaldarkroom> - Reviews on printers, software and other digital imaging accessories.

www.wilhelm-research.com - Information on testing of inks and papers for archival stability.

www.reink.com - Re-inking supplies.

NOTES:



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Art Supplies

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OPUS Victoria
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