Fine art printing for photographers and other artists
Since 1975
Giclée printing since the late 1900s

Archival pigment inkjet (giclée) printing

Film scanning
Photography of original artwork
Lightjet photographic prints from digital files
Showcase gallery for our clients

Rev. 01/12
The LightRoom has served photographers and artists since 1975, first specializing in fine art printing on Cibachrome, later called Ilfochrome Classic, from slides and transparencies. Our first ventures into the world of digital imaging began in 1985 when the technology was young and the results were crude. Here in the Bay Area we were one of the first studios to add high quality digital printing to our services in the mid 1990s. It wasn’t until the end of that decade that the technology matured enough to be truly considered fine art quality, the level we have always strived for in all of our endeavors.

Our specialty is archival pigment inkjet printing, often referred to as giclée printing. I believe this form of printing—for photographers or other artists—represents the highest quality and most versatile of processes currently in use. Whether we start by scanning film or working from a digital file from camera or computer, the results speak for themselves. We stock a wide choice of papers and surfaces, not to mention specialty materials such as fabrics and other suitable printing media. We can work with you from the beginning or simply print the digital files you provide. Artists needing reproductions of their originals can bring them to us for the highest quality digital files need for printing or any other use.

For photographers needing film scanned we can provide you with raw scans from our Hassleblad/Imacon 848 scanner. We can also produce Master Files for you from our high resolution scans, adjusted to your specifications. For those wishing their prints on true photographic paper, we offer LightJet prints on Fuji Crystal Archive matte, glossy or super glossy surfaces. The latter has a mirror-like finish on a polyester base, similar to our old Cibachrome process.

Our newest service is working with you to produce a folio of images, a die-cut paper enclosure of up to 12 8.5”x11” prints on any of our papers, plus a smaller print for the enclosure window. A simple page of text, called a text signature, to be inserted with the images, is also included. Captions or other text can be added to the individual prints, as well. Additional options include multi-page text signatures as well as custom design of embossing/debossing dies that can be applied to the folio cover as an elegant addition. We have many sample folios in the studio to inspire you in the creation of your own. The LightRoom will also offer folios from selected artists and photographers at reasonable prices for anyone interested in adding to their own collection of art.

I am always happy to answer questions and work with you on your projects, from a single 5x7 print on up. Please don't hesitate to call or email me at any time. We also showcase client’s work in our gallery, both in the studio and on the web site. You can also join the mailing list or become fans of The LightRoom on Facebook for our email newsletters offering specials on our services and news of events and gallery shows at The LightRoom.

Rob Reiter
Table of contents

- Pigment inkjet printing
- File preparation
- Film scanning
- Workshops
- Folio production
- Art photography
**WHAT** is a giclée print (and how do you pronounce the word?) It’s pronounced zhee-CLAY, a French word meaning to spray and it refers to the inkjets that spray ink onto the paper. The term giclée was coined to differentiate fine art quality inkjet printing from the proof printers used in the offset printing industry, where the printing needed to be high quality but did not need to last long. A more descriptive name for this is *pigment printing* or *archival pigment prints*.

Modern inkjet prints use more fade resistant ink and when printed on good acid free papers or canvas will last as long or longer than the best photographic color prints. Typical accelerated testing figures predict the life of these types of prints to be 80-100 years or more, when behind glass and not exposed to direct sunlight for long periods (never a good idea with ANY type of printing.) Although viewing conditions vary too much for testing figures to be taken absolutely, they can be useful for comparison purposes. Fuji Crystal Archive photographic paper has been rated at 40 years and Ilfochrome Classic has a 29 year rating.

For photographers used to the printing choices of glossy or matte papers, giclée printing brings a wider world of paper choices and opens a new window on our art. The paper itself is a component of the emotional impact of a printed image. For artists reproducing originals such as pastels, watercolors or oil paintings, this process allows for high quality reproductions that can have much the same feel as the originals when similar papers or canvas are used. As a base for mixed media work, giclée printing is limited only by the artist's imagination.

Besides the technological differences introduced by the materials, digital imaging represents a revolutionary change in the control the digital artist has over the preparation of the image itself through the use of a program like Adobe Photoshop®. When film is printed in a darkroom, the techniques of masking or dodging and burning are used to lighten and darken certain areas of the prints. Dodging tools, the use of hands or sheets of paper with holes cut in them to limit light exposure, even contrast masking, all seem crude in comparison to the exquisite level of control available in Photoshop. Precise masking to affect carefully chosen parts of the image, exposure and color correction tools far more extensive than those in the darkroom, the ability to repair dust and scratches-permanently!-all this and more combines to create prints with a greater degree of fidelity to the original, or to a photographer's vision that only starts with the frame of film. When the work is finished and saved to disk, the high degree of consistency in digital printing assures that prints done at a future date will match earlier versions much closer than darkroom prints ever can, where much of the delicate dodging and burning cannot be accurately recorded and must be recreated from scratch each time the image is printed.

There has been rapid development in recent years in the field of high end inkjet printing. Originally, most fine art inkjet printing was done on printers using dye based inks. These inks have a good range of printable colors, but the inks run if gotten wet and they are more prone to fading than pigment based inks. Epson made significant strides with pigment inks with the introduction of their UltraChrome line in 2002. Canon and HP came out with printers of comparable quality about around 2007.

The LightRoom was one of the first studios in the Bay Area to offer giclée printing in the late 90’s with our ColorSpan Giclée Printmaker, using Endurachrome dye based inks, the best available printer at that time. With the introduction of the Epson UltraChrome ink technology, we phased out the ColorSpan. With their higher color saturation, sharpness, moisture resistance, expanded paper choices and longer print life, pigments are the ink of choice for fine art inkjet printing. Currently, we use the new Canon 8300. As we are always experimenting with new papers, do not count on this brochure always to be up to date!

The papers we use have varying degrees of surface texture and range from bright white to slightly cream colored, as well as canvas, of special interests to artists. We're happy to provide you with samples. We've also done special order
printing on Japanese rice papers and fabrics such as silk and cotton/polyester blends. Many artists add to the final print with additional drawing and painting or collage with everything from other papers to pieces of glass. We encourage experimentation and would love to work with you on your ideas.

**Pigment printing** is about choice: ink and paper choices and the deep level of control we have in preparing the image for print. It expands our ability to put down on paper the vision of the artist or photographer. Whether it is to reproduce the original artwork or film as closely as possible or to use that as a springboard for more interpretive work, giclée printing is an exciting addition to fine art printing.

We can do all the digital work ourselves—film scanning and image preparation—or you can send us your own digital files. Information on the following pages will help you get started.

Please feel free to call or drop by with any questions.

**One of the most confusing things about giclée printing is the paper size options.** Unlike photographic printing with its sizes of 8x10, 11x14, etc., giclée papers have evolved from a different standard. In an attempt to simplify a confusing array of papers of slightly differing sizes, we are standardizing on a basic sheet size of 35”x44” for all papers, whether they are actually sheets or from roll paper. We offer some standard sizes of full sheet, half sheet and quarter sheet as well as tabloid and letter sizes. The actual sizes are in the pricing table that follows. These are known as page sizes and within a given page will be your image and its borders. So, we talk of page size, image size and border. Of course, sizing is completely flexible and you do not need to keep to these sizes. If your requirements are different, call for a quote. Prices are always based on total page size, including borders. All our papers are on rolls and allow more flexibility in odd print sizes and we will price accordingly, i.e., a print that needs to be just slightly larger than one of our standard page prices will not require pricing at the next largest page price. These page sizes are efficient paper sizes for pricing, but if you need something, say, 10% larger, the price will be no more than 10% higher. Most rolls are 44” wide and we can print any length needed.

While the wide choice of papers is one of the exciting things about giclée printing, newcomers often find the task of choosing difficult. We’ll be happy to suggest a paper after talking to you, but one thing to keep in mind is that most of the differences between papers are not noticeable once the final print is framed behind glass and hung on a wall to be viewed from more than arm’s length. The subtle joys of surface textures and paper tints is something to appreciate when held in one’s hands and viewed close up. You won’t go wrong in choosing any of these. Some of the papers we currently stock are described below:

*Hahnemühle Photo Rag (308 gsm)*

Photo Rag is a beautiful smooth paper incorporating optical brighteners in its coating to produce a bright white surface. It has an good color gamut and excellent blacks. It’s a favorite of many photographers for all kinds of work and excellent for black and white prints.

*Hahnemühle Museum Etching (350 gsm)*

Museum Etching is our heaviest stock, a natural white 100% cotton rag paper with a moderate texture.

*Hahnemühle Photo Rag Satin (310 gsm)*

Photo Rag Satin has a unique look, with a slightly lustrous finish. It falls somewhere between a true matte paper and a glossy one. The result is a more subtle luster that lends itself to certain images and has the barest hint of coloration in black and white printing reminiscent of a lightly selenium toned darkroom print.
Hahnemühle William Turner (310 gsm)
A lovely paper with a pronounced watercolor style texture, more noticeable than the texture of Hanemühle Photo Rag, Breathing Color Elegance Velvet or Canson Edition Etching.

Hahnemühle Sugar Cane (300 gsm)
Made from sustainably harvested sugar cane, this is a textured paper free of optical brighteners and a good choice for artists or photographers looking for a different paper that is also eco-friendly.

Breathing Color Elegance Velvet (310 gsm)
This bright white, slightly textured paper is perfect for photographers wanting an all around printing solution with rich colors and a pleasing surface texture. One of our most popular choices.

Breathing Color Optica One (300 gsm)
A new paper for those looking for the brightest smooth surfaced paper with the deepest blacks. It’s a good choice for black and white images and any color work that requires maximum intensity and gamut.

Breathing Color Chromata White Canvas
This cotton/poly blend canvas has an especially white surface without the use of traditional fluorescing agents (optical brighteners.) The pleasing but not obtrusive weave of the canvas coupled with the bright white surface results in a very nice finished piece, whether the original art was on canvas or paper, or a photograph. The surface is water resistant, but for any print not protected by glass, a coating will provide extra protection. We provide coating services for a slight additional cost. New! We now also offer canvas stretching on 1.75” frames for direct display with no additional framing needed. Call for details and pricing.

Arches Aquarelle Rag (310 gsm)
Painters have long enjoyed the lovely texture of Arches Cold Press water color paper and we did a lot of printing on it in the late 90s with our dye based Colorspan printer. Modern pigment inks require a coated paper and this is essentially the cold press paper coated for today’s printing. Photographers and painters alike will enjoy this lovely new warm toned cotton rag OBA-free paper.

Canson Edition Etching (310 gsm)
A lightly textured paper with no optical brightening and a soft surface typical of this paper style.

Canson Rag Photographique (310 gsm)
A 100% cotton rag paper with a very smooth surface and one of the brightest of the papers with no additional optical brightening. It’s slightly warmer than Hahnemühle Photo Rag and has the deepest black of all our matte papers. Like Aquarelle Rag, the Canson line of digital papers is from the famous Arches mills, one of the world’s great paper manufacturers.

Innova Cold Pressed (315 gsm)
A very nice natural white, acid and lignin free paper with a water color style texture. A really striking paper for images that need a heavier texture.

Harman Matte FB MP Warm Tone
A natural white matte paper with a high clay content to its surface. Very clean black and white prints with deep blacks and the smoothest surface of any paper currently made.
**Moab Entrada Natural White (300 gsm) and Bright White**

Similar to Hahnemühle Photo Rag in surface smoothness, but natural white with no optical brightening for highest archival ratings. A lovely choice for just about any kind of printing. The bright white version is one of the brightest paper we have.

**Harman Gloss FB AL and Warm Tone**

These two papers have a wonderful semi-glossy surface reminiscent of fiber based black and white darkroom papers. They are good for color work and among the best available for black and white.

**Museo Silver Rag (300 gsm)**

One of the first inkjet papers to achieve a look similar to darkroom papers, Silver Rag is still one of the best. It’s OBA-free warm tone base is particularly pleasing for portraits and landscapes and its light luster finish shines with a subdued sparkle and excellent color saturation.

**Metallic (270 gsm)**

Call it metallic, pearlescent, shiny—it's all of these. Depending on how light hits it, whites take on a silvery look that is eye catching. Words don’t quite capture this material, but it’s unlike other glossy papers and great for black and white pictures as well as work with highly saturated colors. This one you do have to see to appreciate.

<table>
<thead>
<tr>
<th>Giclée Print Prices</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Size</strong></td>
<td><strong>Price</strong></td>
</tr>
<tr>
<td>Full sheet (34x44 inches)</td>
<td>$150</td>
</tr>
<tr>
<td>Half sheet (22x34)</td>
<td>$90</td>
</tr>
<tr>
<td>Quarter sheet (17x22)</td>
<td>$60</td>
</tr>
<tr>
<td>Tabloid (11x17)</td>
<td>$40</td>
</tr>
<tr>
<td>Letter (8.5x11)</td>
<td>$25</td>
</tr>
</tbody>
</table>

All prints quarter page and larger include a 5x7 proof. Additional 5x7 proofs are $15 each, $25 for 8.5x11.

Multiples of the same print are 30% off for 2-6 and 50% off for prints 7 and up. Ask about our Server Storage plan for additional long-term savings.

*The sizes and prices here are just starting points.* All our papers are on 44” wide rolls and we can accommodate any custom print size and price accordingly.

**File Specifications**

You can provide files on CDs or DVDs or flash drives. They can be in any Adobe Photoshop compatible format, 8 or 16 bit RGB or grayscale, in TIFF, PSD, JPEG, PDF, EPS, RAW or DNG format. Size them to your desired image size at up to 300 dpi. Be sure to indicate desired borders or include them in the canvas size of your image. If borders are included, add a one pixel stroke for trimming. *Any number of smaller images may be included on a larger page for increased price savings over single print prices.* Include trim lines if you wish us to cut them out. Individual images may be submitted un-sized and we can size them and add borders, but they will be charged as individual prints. If files need further image adjustments, there may be an additional charge.

Leave embedded working space profiles. We will convert to paper profiles when printing. Files with no embedded profiles are also acceptable, but color balance may vary more from your expectations.

If you would like to upload picture files online via our FTP site, please call for instructions or visit our web page at www.lightroom.com.
File Preparation

For the highest quality digital printing from the LightJet and for all our giclée printing, we offer the Master File. This is produced from a high resolution scan of your film or from your digital file. We usually spend up to an hour spotting and adjusting exposure, color, etc., to make the best print we can. This will be saved for future LightJet or inkjet prints that can be ordered by phone or email. It is this labor intensive aspect of digital imaging that results in such stunning prints. The one-time charge for the Master Image file is typically $65-$75, including film scanning (subtract $25 if you provide us with the digital file.) We will keep a copy of the file for future printing and you may have a copy for any other needs you may have, such as web pictures, post cards, etc.

Of course, all of our printing can be done from your own digital files. You can prepare them yourself from film scans or a digital camera and there will be no additional set up fee. We will be happy to advise you on the best way to set up the files for printing.

Our Custom print is meant to be comparable to or better than what we used to do in the darkroom, but is done from a medium resolution scan, suitable for prints up to 16x20 and sometimes larger. We won’t spend as much time on it as on a Master Image, and we don’t archive it (although the resulting scans can be purchased at the same price as our medium resolution raw scans, $15), but there is no additional charge above the print cost. Many customers find the Custom print to be all they need except for those time when only the very best will do, or when prints larger than 16x20 need to be at their sharpest, at which point the Master Print is suggested. Digital camera files typically need little in the way of further adjustment.

Scanning

Film scanning is done on our Hasselblad/Imacon 848 scanner. We can do the scanning and the file prep for either a Master or Custom print, or we can provide you with the raw scans to adjust and tweak on your own.

If you’d like us to do the digital work (the Master Image) we will work with you to get the results you want. We can try to match your film as best as possible, or we can help you interpret the image by careful manipulation in Photoshop. By working on small areas at a time, we can tune each part of the image play up certain elements or de-emphasize others, to adjust color, remove scratches or dirt and make the image the way you want it to look.

Film Scanning Services

<table>
<thead>
<tr>
<th>Medium Resolution</th>
<th>High Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>$15</td>
<td>$25*</td>
</tr>
<tr>
<td>35mm= 3150 ppi</td>
<td>6300 ppi</td>
</tr>
<tr>
<td>120 film= 1600 ppi</td>
<td>3200 ppi</td>
</tr>
<tr>
<td>6x4.5 cm= 2000 ppi</td>
<td>*6x17 cm hi res $50</td>
</tr>
<tr>
<td>4x5= 1020 ppi</td>
<td>2000 ppi</td>
</tr>
<tr>
<td></td>
<td>2040 ppi</td>
</tr>
</tbody>
</table>

All scans are 16 bit
Workshops

Digital imaging tools and techniques can produce prints of a quality only dreamed of in decades past, and while many artists and photographers have taken to programs like Adobe Photoshop® in the same way the darkroom attracted us not that long ago, there is still a learning curve involved that can be daunting at first. The premier imaging program on the planet is, of course, Photoshop. Vast in its capabilities, it can be intimidating for all its power. Since 1993 I have offered one-on-one tutorials for those interested in honing their skills at preparation of digital files for fine art printing. The advantage of this approach over more typical classes is the ability to focus specifically on your needs, working with your own images. I suggest a basic familiarity with the program beforehand.

My approach will be to help you with the basics of making accurate selections, working with adjustment layers and layer masks and, essentially, taking your film or digital file to the point where it can be printed the way you envision it—creating the Master File.

If you need, film scanning is included. If you shoot with a digital camera, it is strongly suggest you save pictures in your camera's RAW format, if it can. JPEG pictures, while usable, have nowhere near the flexibility of a RAW file for image adjustment.

We will use Curves, Levels, Hue/Saturation and other Photoshop tools to adjust every aspect of you picture—lightening shadows without blowing out highlights, correcting color casts, emphasizing areas of the image through the digital equivalent of dodging and burning. While the program is capable of all kinds of whiz-bang special effects, these basic skills are the foundation of all you may wish to do later.

The cost is $195 and the tutorials are conducted in two sessions, each an hour and a half, scheduled at our mutual convenience.
There are many ways photographers and artists have tried to make their work available to others. Traditionally, other than the selling of original, one of a kind artwork, this has involved making a reproduction—a photographic print or more likely today, a pigment inkjet print, of large size, matted, framed—and in today’s economy—expensive. As an alternative, flexible in concept and elegant in presentation, the folio, a collection of smaller prints in a heavy art paper enclosure, perhaps with additional text pages (called a text signature) can be a great way to promote your work, create a memento of a special occasion or a unique gift.

The LightRoom now offers this service for up to 12 prints of 8.5”x11” on any of our fine inkjet papers, plus a cover print for the folio front and a simple text signature, all for the initial price of $200, including folio (available in 6 colors) and the design setup of your existing, printer ready artwork. We will work with you in designing the individual prints, which may include text, such as captions or other ornaments, and the text signature, which can include information about the folio, the collection as a whole or the individual images. Once the initial folio is printed, single reprints can be done anytime for $120 and if you order three or more, they will be $100 each.

Other options available are embossing of text or other art on the folio enclosure, creation of more extensive text signatures and our usual image preparation services if your pictures are not yet printer ready.

There are several different folio designs available at our studio and I encourage anyone interested to drop in and take a look at this versatile fine art printing option.
To achieve a print of the highest quality, when reproducing existing artwork, requires a digital file of the highest quality. In the past, this meant photographing the artwork, preferably on 4x5 inch transparency film, then scanning that and adjusting the resulting file to best match the original. These days the old film standby has been replaced by a high resolution digital camera, which we have found to have much more accurate color than film. And while 4x5 film was quite capable of fine resolution of image detail, the digital camera option opens the door to even higher resolution through the technique of photographing the original print in segments and using Photoshop to seamlessly stitch together these frames, multiplying many times the inherently high resolution of a single frame. Thus, even larger than life size prints will retain the sharpness and color of the original. By choosing from our large stock of papers we can help you produce prints of a higher quality than any previous technology has allowed.

A pigment inkjet print need not be the end of the process. Because of the flexibility of the medium, many artists are seeing our prints as a step along the way in mixed media work by continuing to paint or draw on the print, producing individual, unique interpretations of existing art. Some will even bring in unfinished pieces, sketches, for example, to finish by adding color to after the prints are made.

While we are happy to work with your existing digital files, or provide film scanning services for pre-existing photos, I think you will find our digital capture of your original artwork to be affordable and exciting in it's possibilities. Our Master File preparation fee of $65-75 includes this photography.
Hours: 9-6 weekdays  
Saturdays by appointment

The LightRoom  
2263 Fifth St.  
Berkeley, CA 94710

510•649-8111  
888•649-8111 toll-free

rob@lightroom.com  
http://www.lightroom.com