

# Fine Art Printing for Photographers

**Exhibition Quality Prints with Inkjet Printers**

2<sup>nd</sup> Revised Edition



**Uwe Steinmueller • Juergen Gulbins**

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# Contents



## Preface

Foreword by Mac Holbert (Nash Editions)

**xi**

xiv

## Printing Techniques

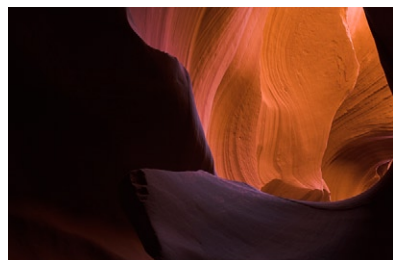
**1**

1.1	Basic Printing Techniques	2
	How Many Pixels or Dots Per Inch Do You Really Need?	6
1.2	Offset Printing	8
1.3	Laser Printers	9
1.4	Dye-Sublimation Printers	11
1.5	LightJet® Printing (Digital Photo Print)	12
1.6	Inkjet Printing	15
	Inkjet Technology	15
	Droplet Size	17
	Printer Resolution	17
	Number of Inks	18
	Types of Inks	18
1.7	Other Printing Techniques	19
1.8	How to Pick Your Fine Art Printer	19

## 2 Inks, Papers, and Print Permanence

**27**

2.1	Print Permanence	28
	Light as a Factor of Print Permanence	31
	Temperature Influencing “Dark Fading”	31
	Humidity	32
	Gases and Their Influence on Print Permanence	32
	Paper Additives	32
	How to Improve the Permanence of Your Prints	33
2.2	Inks	34
	Dye-Based Inks	34
	Pigmented Inks	35
2.3	Papers	36
	Paper Characteristics	37
	Paper Ingredients	38
	Whiteness and Brightness	39
	Paper Coating	41
	Paper Surface – Paper Finish	43



	Paper Size	44
	Matching Inkjet Technology, Subject, Paper, and Ink	44
	Some More Characteristics	45
	Other Materials	46
	Paper Handling	47
<b>3</b>	<b>Color Management for Printing</b>	<b>51</b>
<b>3.1</b>	<b>Understanding Different Color Models</b>	<b>52</b>
	RGB Color Model	53
	Lab Color Model	53
	CMYK Color Model	53
	Grayscale Mode	54
	HSB/HSL Color Model	54
	Color Spaces	54
<b>3.2</b>	<b>Understanding Color Management</b>	<b>55</b>
	Why You Need to Understand Color Management	55
	ICC Profiles	56
	What is a Color Management System?	56
	Color Working Spaces	57
<b>3.3</b>	<b>Visualization of Color Spaces</b>	<b>59</b>
<b>3.4</b>	<b>Color Space Mapping</b>	<b>62</b>
<b>3.5</b>	<b>Creating Device Profiles</b>	<b>63</b>
	Camera Profiles	64
	Printer Profiles	64
<b>3.6</b>	<b>Profiling Your Monitor</b>	<b>65</b>
	Calibration by Eye	65
	Hardware-Based Calibration	65
	Calibration Settings	65
	Calibrating and Profiling Using Eye-One Display 2	66
<b>3.7</b>	<b>Photoshop Color-Management Settings</b>	<b>69</b>
<b>3.8</b>	<b>Profiles for Your Printer</b>	<b>72</b>
	Profiling Your Printer	73
	Printer Profiling Using Eye-One Photo (i1 Photo Pro)	74
<b>3.9</b>	<b>Installing and Uninstalling Profiles</b>	<b>78</b>
<b>3.10</b>	<b>Finding a Printer's Black Point and White Point</b>	<b>79</b>
<b>3.11</b>	<b>Sanity-Check</b>	<b>80</b>
<b>3.12</b>	<b>Soft-Proofing and Gamut Warning</b>	<b>84</b>
<b>3.13</b>	<b>Metamerism and Bronzing</b>	<b>87</b>



<b>4</b>	<b>Fine Art Printing Workflow</b>	<b>89</b>
4.1	Basic Printing Workflow	90
4.2	Tuning Tonality	90
	Global Tonality Tuning	94
	Local Tonality Tuning	100
	Corrections Related to Certain Tonality Ranges (Shadows, Midtones, and Highlights)	104
	Painting Techniques (Mainly Dodge and Burn)	107
	Dodge and Burn Using Layers	109
4.3	Tuning Colors	111
	Selective Saturation Improvements	111
	More Saturation and Contrast Tricks	113
	Variation with "Soft Light"	116
	Removing Blue Shadow Casts	117
4.4	"Ring Around" and Variations	119
	Ring Around	120
	Using Variations	122
4.5	Local Contrast Enhancement	125
4.6	Further Preparations for Printing	129
4.7	Resizing	130
4.8	Sharpening	131



<b>5</b>	<b>Fine Art Printers in Practical Use</b>	<b>135</b>
5.1	Printer Installation	136
5.2	Printer Adjustments	138
5.3	General Driver Tasks and Settings	139
	Settings that Influence Print Quality	139
	More Settings	141
5.4	The Actual Print Workflow	143
5.5	Printing Your Image	147
	Basic Print Settings	147
	Photoshop CS5 Print Dialog	150
	Printing Under Windows with the Epson R3880	153
	Color Printing with the Canon iPF6100 under Mac OS X	156
	Black-and-White Printing	160
5.6	Printing from Adobe Photoshop Lightroom	161
5.7	Printing Using a Printer Plug-in	164
5.8	Test Prints	167
5.9	Print Quality Related Issues	168
5.10	Some More Recommendations for Printing	169
5.11	Printed Frames	171



<b>6</b>	<b>Printing Packages and RIPs</b>	<b>173</b>
6.1	What is a RIP?	174
	Why Use a RIP?	174
6.2	Printing Using a Printing Package	175
	Qimage	175
6.3	Printing Using a RIP	179
	QuadToneRIP	179
	ImagePrint by Colorbyte Software	182
	EFI Designer Edition	185
<b>7</b>	<b>Black-and-White Prints</b>	<b>189</b>
7.1	Workflow for Black-and-White Prints	190
7.2	From Color to Black-and-White	192
	Black-and-White Conversion Using the Channel Mixer	193
	Using the Photoshop "Black & White" Adjustment Function	194
7.3	Printers with Black-and-White-Enabled Drivers	195
	Black-and-White Prints with Epson's Fine Art Printers	197
	Making Black-and-White Prints using the HP Designjet Z3200	199
7.4	Specialized "Raster Image Processing" (RIP) Software for Black-and-White Printing	200
	Colorbyte's ImagePrint	200
	QuadToneRIP	202
	Other Solutions	202
7.5	Soft-Proofing for Black-and-White Prints	202
7.6	Papers for Black-and-White Prints	205
<b>8</b>	<b>Image Evaluation and Presenting Fine Art Prints</b>	<b>207</b>
8.1	Critical Image Inspection	208
8.2	Presentation Options	210
8.3	Portfolio Binders	211
8.4	Matting	212
	True Matting	212
	Faux Matting	218
8.5	Framing a Print	219
8.6	Coating a Print	222
8.7	Displaying a Print in True Light	223
8.8	Storing Prints	225



<b>A</b>	<b>Some Fine Art Printers</b>	<b>227</b>
A.1	General Points on Fine Art Printers	228
	Inks for Black-and-White Prints	228
	Photo Black and Matte Black Simultaneously On-line	228
	Ink Cartridge Volume	229
	Print Plug-ins	229
	Printer Linearization and Calibration	229
	How to Prevent Nozzle Clogging	230
	Printer Life Cycles	231
A.2	Epson Fine Art Printers	233
	Epson Stylus Photo R800 / R1800	234
	Epson Stylus Photo R1900	234
	Epson Stylus Photo R2400 / Pro 4800 / Pro 7800 / Pro 9800	238
	Epson Stylus Pro 3800 / Pro 3880	239
	Epson Stylus R2880 / Pro 4880 / 7880 / 9880	240
	Epson Stylus Pro 11880	241
	Epson Stylus Pro 4900 / 7900 / 9900	242
A.3	Canon's Fine Art Printers	243
	Canon PIXMA Pro9500 / Pro9500 Mk II	244
	Canon imagePROGRAF iPF5100 / 6100 / 6300	245
	Canon imagePROGRAF iPF8100 / iPF8300 / iPF9100	252
A.4	HP's Fine Art Printers	253
	HP Photosmart Pro B9180	254
	HP Designjet Z3200 Photo	261
<b>B</b>	<b>Papers for Fine Art Printing</b>	<b>273</b>
B.1	Digital Fine Art Papers	274
	Some Notes on OBAs	275
B.2	Some Examples of Fine Art Papers	278
	Matte Papers	278
	Satin/Glossy Coated Rag Papers	279
	High-Gloss Papers	280
B.3	A New Generation of Fiber-based and Baryt Papers	281
B.4	Specialty Papers and Canvas	283
B.5	Fine Art Papers Well Suited for Black-and-White Prints	283
	A Note on Paper Grammage and Paper Thickness	285
<b>C</b>	<b>Glossary and Acronyms</b>	<b>287</b>
<b>D</b>	<b>Resources</b>	<b>295</b>
D.1	Recommended Books	295
D.2	Organizations and Institutes	295
D.3	Useful Resources on the Internet	296
	<b>Index</b>	<b>303</b>





Camera: Nikon D2X

# Preface

## ***A brief history***

*Inkjet printers have been around for more than 20 years, yet digital inkjet printing technology has only come of age in the past few years. The earliest consumer models lacked the technology and sophistication to print photographs similar in quality to common silver-halogenid prints (stereotypical photos printed on photographic paper), developed from film negatives or slides. Worse, inkjet prints lacked the lightfastness of silver-halogenid prints. For most users, the digital inkjet printers that delivered the desired image quality, e.g. Iris prints, were, unfortunately, rarely affordable. This economic obstacle has changed dramatically in the last few years, with the rise of digital photography. Thus, there is now a sizeable market for a new breed of inkjet printers from seasoned manufacturers like Epson, HP, Canon, Lexmark and Dell, among other newer brands.*

*Among the first Super B printers, suitable for both fine art printing and the budget of a broad range of buyers, were the Epson P2000 and P2200 (P2100 in Europe). The breakthrough of this line was based on quality, affordable price, and an Ultrachrome ink set.*

## ***Size matters***

*Many photographs impress viewers only when presented at an optimum viewing size; for example, the typical pocket-size 4 x 6 format is clearly unsuitable as a pleasing means of displaying a beautiful print. For most good shots, even the larger Letter, Legal and A4 sizes often leave viewers wanting more. Enter the A3+/Super B prints, which measure an impressive 13 x 19 inches. In 2005, there was an explosion in the use of these medium- and large-format prints, an impressive statistic that further in 2006 and 2007 (and beyond) increased when a number of new fine art printers were introduced by HP, Canon, and Epson.*

For some photographs, it is advisable to produce even larger prints. Printer manufacturers like Epson, HP and Canon market printers that promise high-quality prints up to 64 inches wide. There are many other large-format printer manufacturers out there, like Encad, Océ, Mutoh, and Roland, yet they are not designed for true, fine art printing. For this reason, we chose to focus on the moderately sized prints and printers, typically from Letter/A4 to C/A2. Most of the lessons of fine art printing, however, can be applied to both smaller and larger prints and printers.

### **Fine Art Printing is a Sensuous Endeavor**

The highly technical nature of fine art printing should not overshadow its ability to awaken the senses. As the term “fine art printing” expresses, it is the printing of art in a highly artistic fashion. It allows you to project onto paper an image created with a simple digital or film camera, after enhancing the image with image-manipulation software to more accurately represent the original. Today’s fine art printing, using a good digital inkjet printer, allows you to produce a quality of equal or higher value than that of traditional silver-halogenid prints, and clearly surpasses the quality of offset or rotogravure printing. When performed optimally, your printing can achieve a richer color gamut and finer tonal gradations than with traditional book- and magazine-printing techniques.

### **Experiment ... and Discover!**

As with other genres of art, without proper knowledge and practical experience, the resulting print may not be as accurate as the image on your computer monitor, so you may have to try several different techniques, papers, paper sizes, borders, and matte styles. With careful practice, you will hopefully be on your way to producing museum-quality work with less effort than you had previously dreamed.

Though most prints are either displayed in frames behind glass or Plexiglas, often to reduce glare, this has the effect of reducing the visual appeal of the print and the fine art paper on which it is printed. Therefore, it is important to experiment with different types of fine art paper to achieve the desired result. Paper with a certain texture and tactile essence can be very sensuous indeed, so take your time to find the paper that best suits your taste and needs and to achieve the result you like.

A printing paper’s color, surface, texture, and gloss will determine the kind of print you will produce, and must be carefully chosen to match the feeling you wish to project. An architectural shot may require a different printing paper than a photograph of nature or a landscape. A black-and-white print calls for a certain type of paper that would be unsuitable to a full-color shot. A certain print displayed without glass or Plexiglas will appear entirely different than one framed behind these types of transparent coverings.



Kamera: Nikon D2X

Both authors use digital cameras – Uwe Steinmueller as a professional and Juergen Gulbins as a serious amateur. They were both led to fine art printing by the desire to control their workflow from start to finish, from the shooting of photos to the finished print. Printing with a fine art printer for them, is not a simple, tiresome task, but the final step, and a very important one – toward producing a pleasing image.

Planning for printing and printing itself takes time, but, in most cases, only a perfect, finished print gives full value to a good shot. Normally, only a few of all the photos you take will make it into a perfect, fine art print, but in many cases, this print will be the crowning glory of your photographic shooting. With the techniques shown in this book (together with others books we have published), you should be in complete control from start to finish.

We hope that the control of this process and the creative tasks along the way give you the same satisfaction and relaxation we found while doing it. Producing a satisfying print from your work has similarities to Christmas: the work is finished, and the present is unwrapped. You must still find a place to keep or present it, a place where it can be enjoyed for years to come.

Matting, framing, and hanging of prints is its own subject, and we go into it only briefly. We do, however, give some advice on how to keep and store your prints.

### Acknowledgements

Thanks to our many influencers and friends like Bill Atkinson, Jim Collum, Charles Cramer, Brad Hinkel, Mac Holbert, and Ben Willmore.

Uwe Steinmueller, San José (California)  
Juergen Gulbins, Keltern (Germany)

Januray 2011

### Foreword by Mac Holbert (Nash Editions)

Read our brief introduction to Nash Editions in our Printing Insights #22: "Digital Printmaking & Printmakers" at [www.outbackphoto.com/printinginsights/pio22/essay.html](http://www.outbackphoto.com/printinginsights/pio22/essay.html)

[www.nasheditions.com](http://www.nasheditions.com)

In 1989 my partner, Graham Nash, and I embarked on a search for a way to save a large body of his photographic work. The original negatives had been lost while being shipped from Los Angeles to Graham's home in San Francisco. All that was left was a box of "jumbo" contact sheets. Graham had been offered a show at the Parco Galleries in Tokyo and without his negatives he was unable to put together an exhibit. In solving the "problem" we ended up creating a method and a studio that has been recognized by many as the first fine art digital photography studio in the world. With the help of our friends, David Coons and Charles Wehrenberg, Jack Duganne and I experimented with hardware and software and by 1991 had developed a product that we felt was ready for the world. As it turned out we still had much to learn.

The only source of information in those days was from the few individuals that were involved in the technology. When I opened the door to Nash Editions in July of 1991, I had basic working knowledge of word processing and database management but I didn't have a clue what the difference was between a pixel and a raster. I asked a lot of questions, nurtured a lot of friendships and slowly I began to develop an overview of image processing and image output. By the mid 1990's the Internet had become an excellent source of information exchange and I began to frequent the online forums that focused on imaging and printing. I can't remember specifically when I first saw the name Uwe Steinmueller but I believe it was either 2000 or 2001. Suddenly I noticed his name appearing everywhere. Not only was he in quest of information but he was, more importantly, sharing it with anyone and everyone who would listen.

I finally got to meet Uwe in 2003 when he and his wife Bettina visited my studio. Their enthusiasm for the digital photography revolution was obvious. I have seen many "experts" come and go over the past 16 years. Uwe's expertise and his openness have gained him a high level of respect and admiration in the evolving world of digital photography.

I am very impressed with the book you are about to read. It's information like this that has helped to raise the quality of digital output and reduce the traditional art world's resistance to the use of digital tools in art. It is a book written by someone who KNOWS fine art digital printmaking. Uwe's style is concise and to the point. This comprehensive and complete guide to fine art digital printmaking should be included in the library of anyone who is serious about making fine art digital prints.

I only wish that all this excellent information had been available to me back in 1989 when I embarked on my digital journey. The hours I wasted ... The ink and paper I wasted ... The late nights ... The cold suppers ...

Mac Holbert

April 2006

## What's New in the Second Edition?

This is the second edition of this book. Since the first edition in 2006 quite a few new printers suitable for fine art prints were introduced by HP, Epson and Canon, some of them outdating printers that we mentioned in the first edition. We try to cover these new printers in this book. Quite a few new fine art papers have hit the market, and we will cover these too in the current edition. We have also found some effective good ways to determine the amount of brighteners that are used in specific papers, so we will give you some hints on this subject as well.

New printers and papers will continue to come up. To facilitate the update in these, we slightly changed the scheme of the book. The actual practical printing that is described in chapter 5 now merely serves as an example. We off-loaded details on specific printers to appendix A, where you will find a section for each specific printer or printer line. Additionally, you will find updates on these printers on Uwe's Internet site as soon as we are able to lay hands on new printer models and we have had the opportunity to test new papers. So, for updates, have a glance at that site from time to time at: [www.outbackprint.com](http://www.outbackprint.com)

New functions have appeared in applications described in our first edition; also new applications and filters have come to the market, which are described in this second edition. Some of the dialogs of Photoshop were updated when Photoshop CS3 was introduced. As the minor changes of the interface were not relevant for our task here, we did not update all screenshots – please accept our apologies for this.

As we both work on Mac OS X as well as Windows, you will find screenshots from both platforms. As the interface and the handling of Photoshop and most other applications are almost identical on both platforms, this should not confuse you. When using keyboard shortcuts, in most cases we will specify both versions – where not, simply substitute the Windows **Ctrl** key by the Mac **⌘** key and the Windows **Alt** key by the **⌥** key when working with Mac OS X (and vice versa). **⇧** stands for the Shift key. **⇧-Ctrl-A** implies, that you have to press all these keys simultaneously.

This revised reprint of the 2<sup>nd</sup> edition includes all the latest changes in Photoshop CS4 and CS5, and also covers printer models introduced in 2009 and 2010. Once again, we haven't renewed all of the screenshots to reflect the slightly changed Photoshop GUI, as the relevant settings and menu entries remain the same.



light (continued)  
 sunlight 223  
 tungsten light 223  
 UV 31  
 LightJet 14  
   printing 12  
 lignen 39  
 lines per inch 2, 4  
 local contrast enhancement 125  
 lossless compression 290  
 lpi (LPI) 2, 4, 290  
 LUCIA EX 231, 252  
 luminance 65, 290  
 luminosity 114  
 LUV 61  
 lux 291  
 lx (lux) 291  
 LZW (Lempel-Zip-Welsch compression) 291

## M

mapping  
   color space 62  
 master image 90  
 mat cutting 214  
 matting 212, 218  
   faux matting 218  
   process 212  
   true matting 212  
 maximum density 45  
 medium 154  
 metadata 291  
 metamerism 87, 210, 291  
 microcontrast  
   enhancement 127  
 microporous 41  
   coating 41  
 midtones 91, 92  
 mil 291  
 ml (milliliter) 229  
 Monaco Systems 299  
 monitor profile 65

## N

nozzle clogging 230

## O

OBA (optical brightening agents) 275, 291  
 offset printing 8  
 opacity 46  
 optical brighteners 40, 291  
 optical brightening agents 40  
 optical brightening agents (OBA) 275  
 OSD (online screen display) 67  
 overcoats 42

## P

painting techniques 107  
 paper 36, 300  
   additives 32  
   alpha cellulose paper 39  
   base weight 37  
   brightness 39  
   buffered paper 39, 45  
   caliper 40  
   characteristics 37  
   coating 41, 42  
   color 39  
     simulate paper color 85  
   handling in printer driver 156  
   ingredients 38  
   opacity 46  
   preparation 145  
   rag paper 38  
   RC paper 42  
   size 41, 44  
   sizes 49  
   sizing 43  
   sulphite paper 39  
   swellable paper 41  
   thickness 40, 285  
   weight 40, 290  
   whiteness 39  
 P.A.T. (photographic activity test) 291  
 PCS (profile connection space) 64, 291  
 perceptual 62, 163, 291  
   intent 291  
 perceptual rendering intent 70, 152  
 permanence  
   print permanence 28  
 photographic activity test (P.A.T.) 291  
 photo print 12  
 photo printers 4  
 photo printing 12  
 PhotoREt 3  
 Photoshop  
   color and monitor profile settings 69  
   conversion options 70  
 pH-value 45  
 Pictorico 280  
 Piezo 15  
 pigment-based inks 34  
 pixels per inch 2  
 PixelTrust 42  
 plug-ins  
   print plug-ins 229  
 point (printed point)  
   2  
 portfolio binder 211  
 PostScript RIP 25  
 ppc 2  
 ppi (PPI) 2, 291  
 precoating 42  
 preparations for printing 129  
 prepare  
   image for printing 143  
   printer 145  
 presentation  
   options 210  
 press-proofing 174  
 primary colors 2, 4, 52, 291  
 print  
   archiving 147  
   color management settings 162  
   framing 147  
   heads 25  
   hexachrome printing 8  
   paper type 139  
   permanence 20, 28  
   planning 143  
   plug-ins 229  
   quality 165, 168  
   quality setting 139  
   resolution 161  
   workflow 143  
   your own image 147  
 printed point 2  
 printer  
   adjustments 138  
   color calibration 138  
   connection 136  
   costs 22  
   dye-sublimation 11  
   head alignment 138  
   head cleaning 138  
   inkjet printer 15  
   installation 136  
   interface 24  
   linearization and calibration 229  
   maintenance utilities 158  
   native resolution 161  
   preparation 145  
   profile 64, 72, 137  
   profiling 73  
   settings 157  
   thermo-sublimation 11  
   unpacking 136  
 PrintFIX 74  
 printing 135  
   black-and-white 20, 189  
   digital photo print 12  
   offset printing 8  
   preparations for printing 129  
   screen printing 19  
   silk-screen printing 19  
   techniques 2  
   using a printing package 175  
   workflow 90



prints  
   coating 222  
   displaying 223  
   framing 219  
   laminating 222  
   matting 212  
   protecting from light 224  
   storing 225

Pro 4800 240

profile 291

  camera profile 64  
   canned profile 56, 72, 229  
   custom profile 56, 73  
   monitor profile 65  
   printer profile 64  
   printer profiles 137  
   profiling 291

profile connection space (PCS) 291

proof

  CMYK proofs 174  
   contract press-proofs 174

ProPhoto RGB 58, 59, 61

ProRes 3

PS (Photoshop) 291

## Q

Qimage 130, 175

QuadTone RIP 160

QuadToneRIP 179, 191, 196, 202

Quick Mask mode 103

## R

rag 38

raster cell 3

raster image processor (RIP) 173, 292

rasterization 3

RAW 291

RC (resin coated paper) 41, 42, 48, 291

reception layer 38

reflection 39

relative colorimetric 62, 163, 291

relative colorimetric rendering intent 70  
   152

rendering intent 57, 140, 152, 163, 291

  perceptual 163

  saturation 163

resin coated paper (RC) 41, 42, 291

resizing 130

resolution 292

  print resolution 161

RGB 292

  Adobe RGB (1998) 58, 293

  color model 53

  ECI-RGB 58, 293

  ProPhoto RGB 58, 59

RH (relative humidity) 29, 292

Ring Around 120

RIP (raster image processor) 25, 45, 87, 173,  
   174, 210, 292

  for black-and-white printing 200

  ImagePrint 87

  PostScript 25

roller marks 168

rotogravure printing 2

## S

sanity-check 80

saturation 291

  intent 63

screening 175

screen printing 19

S-curves 99

shadow recovery 101

shadows 91, 92

sharpening 131

  creative sharpening 131

  output-specific 131

silk-screen printing 19

simulate black ink 85

simulate paper color 85

sizing 42, 43

Smart Sharpen 133

Soft Light (blending mode) 116

soft-proofing 63, 202, 203, 292

  black-and-white prints 202

spectrophotometer 25, 65, 73, 74, 210, 230,  
   253, 261, 262, 263, 265, 269, 292

split toning 201

spraying/coating 33

sRGB 13, 58, 61, 292

stochastic dithering 4

stochastic pattern 4

substrate 37

subtractive color model 53

sulphite 39

sulphite paper 39

sunlight 223

swellable 41

swellable paper 41, 292

## T

tagged images 292

test prints 167

thermal degradation 31

thermal inkjets 15

thermo-sublimation printer 11

thickness 285

T-hinge 215

TIFF 292

tonality

  highlights 91

  midtones 91

regions 91

shadows 91

tuning 90

  locally 100

tonal range

  reproducing 144

toning

  split toning 201

topcoats 42

tungsten light 223

tuning 90

  colors 111

  tonality 90

## U

UltraChrome 233

  HDR 233

UltraChrome HDR 233

unsharp mask filter (USM) 132

upsizing 130, 144

up-sizing (DOP Up-sizing) 130

USB 292

USM (unsharp mask filter) 132, 292

UV 31

## V

variations 119, 122

vignetting 292

## W

water spots 169

WB (white balance) 293

white balance (WB) 293

whiteness 39

white point 65, 79, 80, 293

  adaption 293

wide gamut 292

WiFi 24

Wilhelm Imaging Research (WIR) 28, 30

WinColor 71, 78

WIR (Wilhelm Imaging Research) 28, 29,  
   30, 33, 293

workflow

  for black-and-white prints 190

  print workflow 143

working

  (color) space 69

working space 293

## X

XMP (extensible metadata platform) 293

X-Rite 73

## Z

Z3100/Z3200 199, 253, 261, 262

ZIP 293