

Practical HDRI

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High Dynamic Range Imaging for Photographers

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*For the one and only Corey Leigh—my wife, best friend, confidant,
and partner in all things. I stand by her and she stands by me and we walk this
world together. Without you—there'd be no this—and that's just that!*

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Preface

If you've picked up this book, there is a very good chance you've already heard of High Dynamic Range Imaging (HDRI). Maybe you've been experimenting with the technique, or maybe you recognize it as the next big thing and want to ramp up on this cool imaging technology as soon as possible. In any event, thank you!

High Dynamic Range Imaging with a digital single lens reflex (DSLR) camera is a slightly more complicated process than simple single-shot capture and processing. There are new terms to grasp, new software workflows to master, and a host of image-degrading challenges to overcome at every step of the way. Sounds scary, doesn't it?

Don't worry. Once you get comfortable with the High Dynamic Range (HDR) workflow and mindset, it'll become second nature. You'll find your HDR eye. And that's the purpose of this book. I am going to stay as far away from the boggling mathematics running in the background as is humanly possible. I'm focusing on real-world advice both in the field and in the digital darkroom. I cannot promise that I won't have to occasionally touch on some of the ultra-geeky stuff, but I promise that I'll try to keep it to a minimum. This is a specialized photography how-to book—not a college math text! ¹

Another thing that this book is not is a comprehensive introduction to DSLR photography.

There are entire rows of titles devoted to this very subject. I presuppose a basic understanding of still photography with a DSLR. I'm not saying you've got to be a grizzled pro with decades of imaging experience under your belt to make the most out of this book, but I expect most readers to have more than an inkling of how to take some creative control of their camera. Yes, I know, camera manuals aren't all that exciting, but take the time to really get to know your camera and you'll get a lot more out of your shooting experiences, both with HDRI and traditional single-shot imaging. I do cover some DSLR shooting basics in Chapter Two, particularly through the lens of High Dynamic Range Imaging—but if you are completely new to digital photography, you might want to consider a basic introduction to photography as a companion volume.

This book is DSLR-intensive. There are a handful of compact and electronic viewfinder cameras that can produce high-quality source files for High Dynamic Range Imaging, and most of the advice and tips given can be translated to this handful of non-SLR digicams with just some minor adjustments. But listen—if you are serious about your photography, invest in a DSLR. Even today's exceptionally affordable entry-level DSLRs offer great image quality and the base set of camera controls necessary to get started in top-notch High Dynamic Range Imaging.

Get ready to cover a lot of ground in this book. The first chapters cover in-the-field

¹ If you do want to do a deep-dive into the numbers, math and science behind HDRI, I highly recommend Christian Bloch's *The HDRI Handbook: High Dynamic Range Imaging for Photographers and CG Artists* also published by Rocky Nook.

shooting techniques, tips, and tricks for successful High Dynamic Range source file capture, as well as lens and gear tips, and file management. Next we'll look at the HDR merging of the source files to high-bit High Dynamic Range images and touch on image editing in 32-bit space with Adobe Photoshop CS3. And then we'll get to the exciting part: tone mapping with the most popular and interesting software available for both Macs and PCs.² This is where the High Dynamic Range image is translated back down to normal bit space for display on conventional monitors and sharing on the web—where all the magic really happens. Finally, we'll look at using Adobe Photoshop or other image editing programs to optimize your HDR images after tone mapping. We'll also lightly touch on printing issues both at home and when sending HDR photos to print shops.

There are no included software downloads on a disk, because smaller software companies update so frequently for minor bug fixes and incremental upgrades that they'd probably be on a new version before the ink dries and this book is shipped to you. But I do provide links to each programs' free trial download site, so you can try before you buy—and you'll be absolutely certain that you're installing the freshest version of each program. Also, I have always believed that the majority of photographers are most invested in their own images, so we're not including image samples in this book. Instead, I encourage you to go out and experiment with your own images—and reap the rewards with your own amazingly worked up HDR images that you're ready to share with the world!

It is my goal to get you ramped up in HDRI as quickly and as painlessly as possible. If you've already been experimenting with HDRI, the tips, tricks, techniques, and new ideas found in this book will help to improve your craft. This book focuses on pragmatic workflows, a healthy dose of tips and tricks, and real-world advice from my own trials and errors (not to mention successes!), all with the intention of helping make your impossible photos look as amazing as possible with as little diving into the insane math going on behind the scenes as I can possibly get away with.

I truly hope that you find this book informative, useful, and enlightening.

² Most of the software described in this book is available for both MacIntosh OSX and Windows. However, a few of the programs mentioned are Windows-only, but on a recent Intel-based Mac running Bootcamp or Parallels, this is much less of an issue than it was back in the PowerPC days.

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