

A word about digital imaging standards:

Richard Anderson is the principle author of the **Universal Photographic Digital Imaging Guidelines (UPDIG)**. The 15 Guidelines - along with accompanying Best Practices documents - aim to clarify issues affecting accurate reproduction and management of digital image files. Although they were created from a photographer's perspective, Richard and the other members of the UPDIG group have worked hard to incorporate the concerns of everyone involved in the process of reproducing digital images. Anyone working with digital images should find them useful.

The Guidelines are available at <http://www.UPDIG.org>

Digital offers unparalleled freedom in photography...when it's properly managed Richard Anderson Photography manages the process every step the way

Digital photography has all but replaced film. It makes each photo shoot more efficient and gives more consistent results, and it offers extraordinary image enhancement capabilities every step of the way. Digital truly represents a quantum leap forward in what photography can be and accomplish.

Digital's flexibility and efficiency-including cost efficiency-have revolutionized the photographic and color management process. Our digital photography services strive to get the most of each file, and every final product. We help clients improve results by understanding-and managing-each image. In our studio, on the art director's screen, and in the final printed result, our digital services ensure that every image we shoot always looks its very best.

Procedures:

Why we shoot RAW: We shoot RAW files whenever possible because, among image file formats, RAW captures the most color. If you imagine digital photography using film, think of the RAW file format as a negative. Compared to JPEGs or TIFFs, RAW files offer the greatest potential for image adjustment, especially in the areas of white balance and exposure. Whenever possible, and always when critical color accuracy is required, we include a MacBeth colorchecker or a neutral grey card in a reference image. This reference frame in conjunction with the RAW file processor allows us to pinpoint the precise grey balance for the rest of the images with those lighting conditions. In addition, we use the color checker to create a camera calibration for each digital camera we use- enhancing color accuracy for every shot.

How we save time and improve consistency in the studio: For studio and set up shoots, we usually connect the digital camera to a video monitor or a laptop

so that our client or art director can review shots in real time. On location, we regularly download results to a laptop, which makes previewing easy for clients and art directors. Immediate feedback builds confidence and speeds the project, something our clients have come to appreciate.

Intelligent file management simplifies organization: When we are finished shooting, whether on location or in the studio, we immediately back up all image files to a separate hard drive. Next, we edit down the number of "keepers," which are then renumbered and renamed. We add other information-captions, keywords, and other metadata that can streamline file retrieval. By collaborating with clients on these naming and information protocols, we make sure our pictures fit into their archiving systems.

Maintaining image and color integrity throughout the proofing and batching processes: Following the edit and numbering/naming of files, we prepare html proofs for client review. The first step is to edit RAW files in terms of color balance and exposure. These color corrected and exposure optimized files are run through special Photoshop batch process procedures tailored specifically to each client's needs.

For example, on an advertising shoot where we are culling hundreds of shots to get a handful of "heroes" to be used in an ad campaign, we run a batch that creates small "proofing" JPEGs. These JPEGs have been color corrected and contrast and sharpening have been added. In the case of an institutional location shoot-on a college campus for example-the batch typically includes html proofs and a picture library of full size JPEG files at 300 ppi, color corrected, contrast enhanced, and sharpened. Clients with a sophisticated understanding of color management sometimes request that we deliver in such color spaces as Adobe 1998 or Pro Photo. We also recommend that clients use our services for CMYK conversion (see below). If they have color management in place and prefer to make their own conversions, we can provide RGB TIFF files in place of JPEGs.

The importance of careful RGB-CMYK conversion: For the best-printed results, we offer complete RGB-CMYK conversion services before the file goes to the printer. We know how the picture should look. When we make the conversion, we can ensure that picture retains its color, contrast, sharpness, and overall look. When working with graphic designer or advertising art directors, we request a full-size PDF document so that we can provide properly sized CMYK TIFF files. We then deliver the finished CMYK files along with a set of cross rendered "guide" prints-done on our profiled in-house printer-to the designer, who then can place them in the Quark or InDesign document that ultimately goes to the printer. We prefer to use the printer's proofing CMYK profile if available. If the printer is not using a custom profile, we determine the paper and press type, and use SWOPv2 coated or uncoated. We have the new GraCOL profiles available

for sheetfed presses using that system.

The art at the heart of image enhancement: In many cases, we shoot a project, edit it, proof it, and provide clients with several choices.

For example, during a portrait session, we may shoot 20 to 50 RAW files, which we edit down to 15-20 keepers. The client reviews the html proofs we upload to our web site and from those selects three pictures to keep on file. We can then open those three RAW files, color correct them and retouch as needed. We then typically e-mail a small JPEG of the retouched images for client approval. After making any requested changes, we then save an RGB masterfile, a copy of which we deliver to the client in whatever form they need along with ink jet guide prints for reference.

Balancing color and light can prove challenging in architectural photography, especially indoors. But digital actually makes it much easier to achieve much better results than with film. Our architectural photography clients can review and select several views from the proofs we provide. Examining the RAW files, we can then choose the best exposures to blend together to achieve the wide dynamic range that makes a stunning architectural image.

Pricing:

The Shoot: Our approach lends itself to modular pricing. Our creative fee pays for our expertise in understanding how to get the best resulting from every assignment. One consideration in determining this fee is the client's usage requirement; limited usage costs less than unlimited usage. Additional fees cover the cost of assistants, travel, and other necessary production expenses. Scouting may also be required to assess a location, and we charge for this. We estimate creative fees on a project-by-project basis.

Digital capture fees: We charge a digital capture fee of \$1.00 per proofed file. This means that if a client's html proofs include 540 images, the digital capture bill is \$540.00, roughly the same as with 35 mm film. If, however, the film were 120 mm, shooting digitally more than doubles savings. Digital capture fees includes shooting to memory cards, downloading the memory cards to computer, backing up files, editing, renaming/numbering, entering IPTC data, batching RAW files to JPEGs, and creating html proofs. Html proofs can be posted to a web site for review for \$25.00 per folder or delivered on a CD for \$25.00 per CD plus delivery charge.

Image enhancement fees: After proofing, the next step is to prepare requested files as **RGB masterfiles**. We charge \$125.00 per hour for this service. Time per file varies greatly depending on the need-from just a few minutes for files

destined for the web or PowerPoint, to several hours for a complex composite such as a stitched panorama or group portrait derived from individual shots-and this why we charge hourly.

RGB masterfile: We always begin image enhancement and RGB-CMYK conversion processes with the creation of an RGB masterfile. This masterfile is archived with each project, and we return to it each time we receive new requests for an image. Fundamental to smart digital asset management, the creation and archiving of RGB masterfiles can represent significant investments in Photoshop time. An RGB masterfile is also often the version that has been approved by the client, making it doubly important to preserve. The fact that we archive RGB masterfiles for our prepress color management clients means they have the freedom to repurpose images indefinitely with no deterioration in image quality; RGB masterfiles have more than 16 million available colors and no limiting file characteristics. On the other hand, as a first step in their prepress work, most printers begin by converting RGB files to CMYK (with just 4,500 colors), and eliminating forever the RGB version. They then do color correction and retouching.

RGB-CMYK: After image enhancement to masterfile, files may require further preparation for offset printing. We charge \$20.00 - \$60.00 per file for the conversion, depending on the final file size, total number of files and whether or not the client would like us to provide a reference [guide] print. This fee includes research to determine the proper CMYK profile for a specific printer, cropping and sizing, sharpening, and optionally providing accompanying guide prints done on our calibrated and profiled inkjet printer. In the absence of film, guide prints serve as a reference to maintain strict control over image accuracy through the entire print reproduction process.

File Delivery: We can deliver files a variety of ways. On CD or DVD media, by FTP, or for smaller files by e-mail. Electronic delivery of course means that there won't be the option of a guide print. We tag all files with the correct color profile, and include a **readme** document that describes what the files are in terms of color profile, file format, and sharpening information. If we are requested to deliver files that will be resized, we often do output sharpening on a layer, so the final sharpening effect can be viewed and recreated if the file is resized by more than 20%.

Archiving: Some clients do not have robust archiving systems in place. For them, we offer archival services. Our system is to write client files to CD or DVD and make a second backup to external hard drives. A third backup is stored offsite. Clients can be assured that we can respond quickly to requests for additional copies of their archived files, including the html proof files. When a client is ready to establish an in-house archive, we can deliver their files on

portable hard drives and transfer them directly to the archive system, a fast and reliable process.

Color management services: We offer a range of consulting services for clients seeking to enhance their color management systems. A good first step is a complete evaluation of client workspace, computer(s), and printer(s). We explain proper Photoshop set up, calibrate monitor(s), and provide several resources for obtaining profiles for ink jet printer. Our fee for this consultation is \$175.00 per hour, including drive time. Clients seeking color management self-sufficiency can also receive hardware and software recommendations, as well as training in their use. We can also provide profile verification kits for clients who wish to evaluate and maintain the accuracy of their monitor and printer profiles over time. Alternatively, we can make periodic site visits to verify and/or reset monitor and printer profiles.

Contact us for an initial consultation: Digital photography represents a new kind of freedom in the graphic arts...and a new set of responsibilities. Let us show you how you can make the most of it. Contact us at Richard@rnaphoto.com with your questions, or concerns, or to schedule an initial consultation.