

Enlightened Images

In the late 1980s, while working in the prepress business in San Francisco, I encountered the commercial photographic work of Aaron Jones. Jones developed a unique, artistic still life lighting technique that he eventually incorporated into his product, the HoseMaster.

The HoseMaster utilized a high-capacity light source that was then directed through a fiber optic hose. Different attachments connected to the light-producing end of the hose to create varying light sources. With the studio darkened and the camera lens open, Jones would build up an image by “painting” with this highly controlled light source. The results were stunning in that the image appeared painted, evoking a dramatic Rembrandt-like mood.

Jones’ technique stuck with me through the years, and when digital photography matured, I experimented with light-painting techniques. The piece of technology that made it possible for me was a high-intensity tactical flashlight made by SureFire (surefire.com) for law enforcement and military communities.



A tripod and a reliable dark space are required.

A nice feature of the SureFire flashlights is that they have a quick on/off button on the rear of the flashlight, allowing them to be instantly turned on and off. After a bit of testing, I came up with a workable—if not experimental—low-cost, light-painting technique. With a bit of black construction paper and a dryer softening sheet, I built a diffused light source with instant on/off capability.

The experimental aspect of light painting involves finding the right application of light to the subject. In my early experiments, I found that each exposure required refinement like a sort of dance—I would choreograph my movement while lighting the subject at various key locations. After viewing the result on the camera’s LCD display, I would slightly modify my dance for the next exposure. I would eventually get a keeper, sometimes after

dozens of exposures.

A 30-second exposure at ISO100 gets the job done for me. The trick is experimenting with how long you hold the flashlight in place and how you adjust the density of the diffusing material. Once I begin getting the exposure I like, I’ll double-check my focus—there is nothing worse than doing a series of these exposures only to discover the focus was off!

Obviously, the room needs to be as dark as possible. After I open the shutter, I can use short pulses of light to see where I’m going to position myself without affecting the final exposure. I tend to shoot the light at raking angles to emphasize surfaces. I also move to both sides of the still life to get lighting from multiple angles. Sometimes I will put the flashlight behind the object (when feasible) to get a bit of backlighting. The biggest no-no is getting the lit end of the light in the scene, although it is often at the edge of the frame and easily removed in Photoshop.



SureFire Z2 CombatLight

The “Aha!” Moment

My “aha!” moment came while working on an image in Photoshop. I realized I could build up an image by stacking several exposures and setting the blend mode for each to Lighten. Only the light-painted portions of each exposure are added to the underlying image. Because I had photographed all the exposures with a tripod, all of the resulting images were always in registration with one another. Turning the various layers on and off in the Layers palette is like turning various lights on and off in



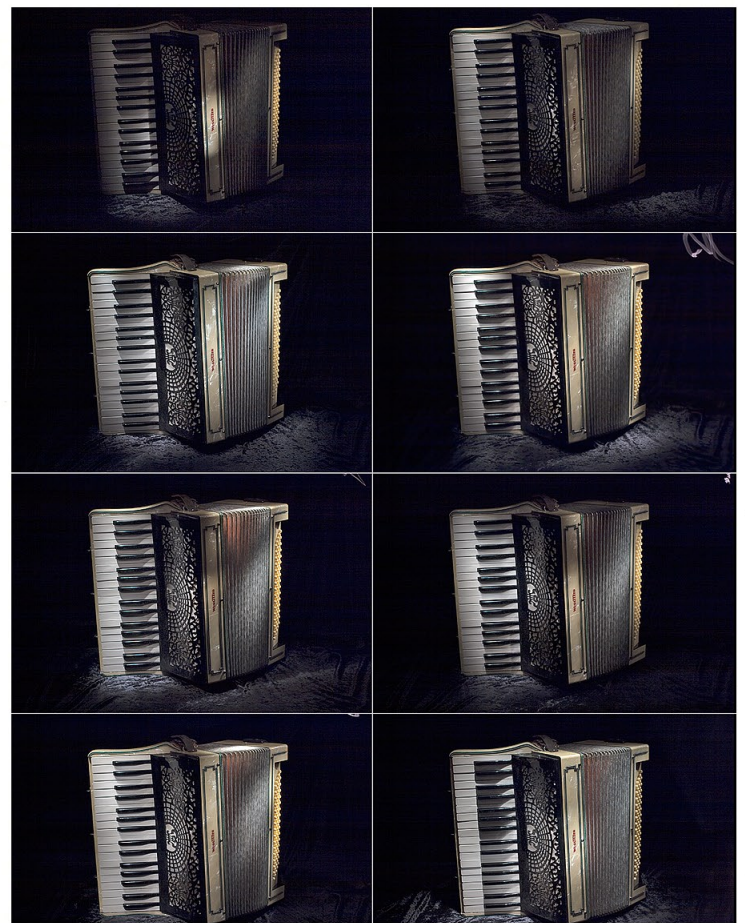
Dryer softening sheet used as a light diffuser.



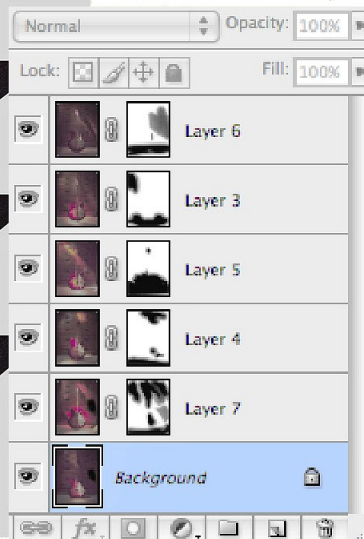
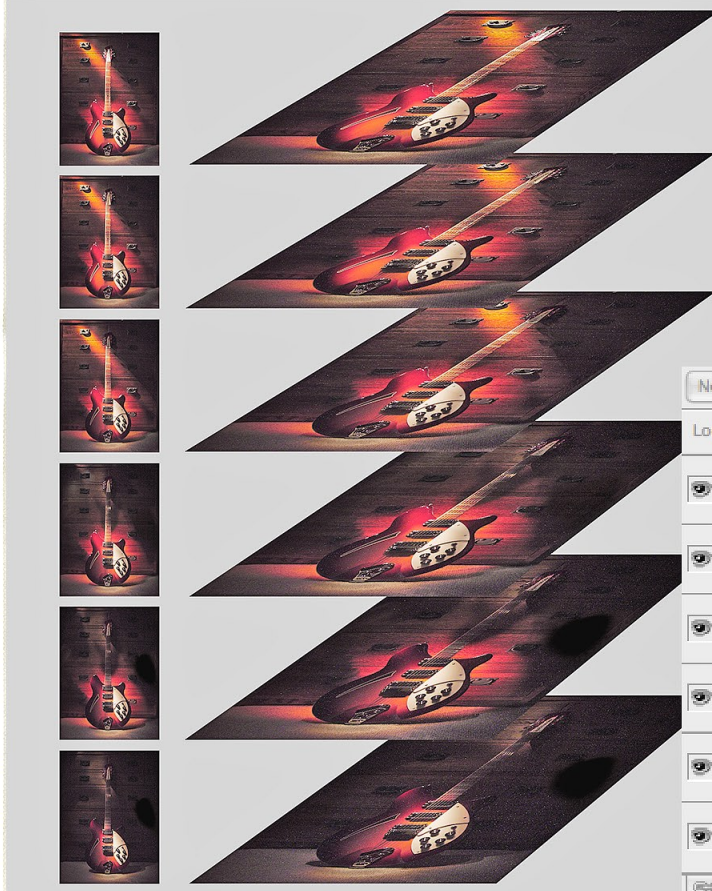
Black construction paper is used to make a narrow aperture light source.



The black cone keeps the light source directed.



The experimental nature of the lighting results in multiple variations in lighting.




The image is built up via a stack of exposures using the Lighten blend mode. Layer masks are used to edit the visible lighting in each layer.

the image. The additional use of layer masks further enables editing the lighting as desired.

The use of stacked layers set to the Lighten blend mode eliminates the need for highly choreographed light painting. A series of exposures with specific lighting applied to each can be easily blended together and edited in Photoshop.

The benefit of this technique is that your imagery often is lit in a manner not possible with a single-exposure approach. This results in a painterly-styled image that does not necessarily conform to our preconceptions of how light illuminates and models objects. Still-life subjects can really benefit

from this lighting technique, so enlighten your images! 

John Derry is a pioneer of digital painting and one of the original authors of Corel® Painter™. Since 1985, he has leveraged his background in drawing and painting to advance the look and experience of traditional art-making tools on the computer. John is the co-author of two digital painting-related U.S. patents. He has a Master of Fine Art degree in painting from Cranbrook Academy of Art, and is a practicing artist and photographer. John teaches Corel Painter workshops internationally and is currently serving as Corel's Painter Ambassador-at-Large. John's website is at www.pixlart.com.