

Long Exposure Case Study #5

LIGHTS ON LIGHTS OFF

by Kent DuFault



Image 001

In this case study, I would like to talk about the long exposure concept of 'lights on and lights off.'

Let me share a photograph with you (see page 2) that I took many years ago in my commercial photography studio.



Image 002 – Photograph by Kent DuFault

This photograph was one of my earliest shots when I began to understand and explore the value of long exposure and the 'lights on – lights off' concept. I created the photo in my studio, in a completely dark environment. At the beginning of the shooting process, the shutter on my Hasselblad camera was locked open using the Bulb function. There were four light sources; each of them was an electronic flash.

Had you considered using an electronic flash or multiple electric flash units in long exposure photography?

Probably not. I say that because I didn't either, not until I began exploring the lights on – lights

off concept of lighting control in long exposure photography.

Pro Tip: If the environment in which you are going to create your long exposure photograph is entirely dark. You can lock the shutter open for as long as necessary, and then generate exposure on the frame with different light sources with the same flexibility as a painter placing paint onto a canvas. One part of your image could be lit with a candle while another lit with an electronic flash. This type of photography is very freeform. There is no limitation other than your imagination.

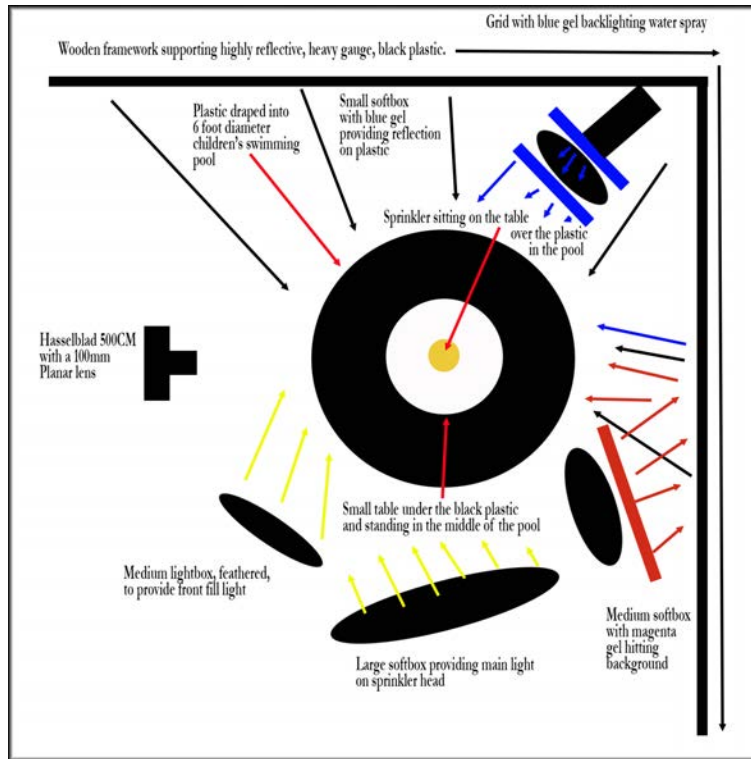


Image 003 – Illustration by Kent DuFault

The sprinkler photograph required the following steps, as illustrated in Image 003.

- 1) I secured the camera to a heavy tripod. The room was completely dark. The shutter was opened, locked, and then closed with a cable so as not to bump the camera.
- 2) The two, front, right softbox lights were flashed to illuminate the front of the sprinkler.
- 3) Then, the water was turned on, and the rear, left, light with a blue gel placed upon it flashed. The water was then turned off. (The shutter is still locked open.)
- 4) I changed the lens focus to a predetermined mark on the lens barrel. During the last exposure, this created the black halo effect that you see at the top of the sprinkler. (I created this photograph in the film days, long before the popularization of Photoshop and other editing software made special effects easy.)
- 5) The final exposure was the medium softbox on the right side of the

background, with the magenta-colored gel placed over it.

Here is how the Lights On – Lights Off concept worked for this shot.

- Room lights **OFF** – Shutter opened
- Front lights **ON** – Exposure number one
- Front lights **OFF** – The room is dark again
- Rear left light **ON** – Exposure number two
- Rear left light **OFF** – The room is dark again
- Rear right light **ON** – Exposure number three
- Rear right light **OFF** – The room is dark again
- Room lights **OFF** – Shutter closed
- Room lights **ON** – Picture exposure complete

Let's go back to Image 001.



How would a shot like this (Image 001) be created using the Lights on – Lights off concept?

- 1) The first exposure is the afterglow of the sunset. Everything else is dark: the sky, the church, the foreground. At this point in the long exposure, those areas are all recorded as black (no exposure).

Pro Tip: With advanced long exposure techniques, two things are beneficial. The first is a flat black piece of heavy (thick) cardboard. You can place this in front of the lens between light sources to **stop** any exposure while still keeping the shutter held open in the Bulb setting.

The second possibility is to either have a helper who can hold the black card in front of the lens between exposures, or alternatively, a light stand, to which you've attached the card, can help you place the card in front of the lens at will. When you're

ready to expose your next light source, you remove the card.

A black card like this is known as a 'flag'. It's flagging the light away from entering the lens.

- 2) The black card was removed when the sky turned completely dark. Now, using a gelled portable electronic flash, the church and the foreground areas were exposed using multiple pops of the electronic flash. Then, the black card is replaced in front of the lens to stop exposure.
- 3) When the Milky Way reaches the correct spot in the sky, the black card was removed, and the final exposure was made.

Here are two other examples of Lights On – Lights Off.



This image used the Lights On – Lights Off long exposure technique with three light sources. The first light source was an electronic flash that illuminated the model. The second light source was the spinning flashlight. The third light source was the moon.



This example used two light sources. The first source was the flare. The second source was the Milky Way. When were the lights off? When the flare burned out and the Milky Way hadn't yet

risen into position. Could this shot have been created in one exposure? It is possible, but not probable. Why? The flare would act as light pollution to the Milky Way exposure.

Your Challenge

Plan two photoshoots. One photoshoot should be indoors, and one photoshoot should be outdoors. For each photoshoot, do a minimum of three lights on – lights off exposures. You can use any light source available. Get creative with your light sources and how you're going to use them. It's highly recommended that you make a flat black card to block light from entering the lens between exposures, as discussed in the case study. If possible, a helper is a real advantage for this Challenge. Be careful of light pollution.

Evaluation

Were you able to successfully create the indoor and outdoor lights on – lights off shots? Did one location work better than the other for you? List out what challenges you faced and how you overcame them. What would you do differently for your next photoshoot with this technique? How did you get creative with the light sources? Could you build upon what you accomplished in the Challenge to create even more exciting shots?