Introduction to Light Painting

Tools

- **Camera** – Any digital camera capable of manual settings and (Bulb).
- **Tripod** – One of the most important tools to produce light paintings is a sturdy tripod.
- **Shutter release** – Use a cable release or remote shutter release.
- **Stop watch** – A stop watch or timer is helpful to determine exposure times.
- **Light source** – Many different types of lights can be used to do light painting. These light sources are your "brushes" and may include: flashlights, light sabers, glow sticks, and flash or strobes.
- **Color gels** – Color gels can be used over your lights to add color.

Camera Settings

- **Mode** – Manual – this mode allows you to set your shutter speed and aperture. You will be using the BULB setting.
- **Image quality** – Your image quality RAW vs jpeg. RAW allows you to capture more information but is not necessary. If you are uncomfortable with shooting RAW, use jpeg fine.
- **White Balance** – Choose either the Incandescent or Tungsten. Experiment with other white balance settings. Daylight WB is a good starting point if you want the color tones of your light sources. Auto WB is not recommended.
- **ISO** – Set to a low ISO, such as 100.
- **F-stop** – Stop down to f/8 or f/10, this allows you to get more depth of field and enables you to use longer shutter speeds.
- **Shutter speed** – Set shutter speed to Bulb, so your actual shutter speed will be determined by the amount of ambient light in the scene.
- **LCD brightness** – Lower the brightness of your LCD preview, because the normal setting is too bright at night and will make your image look bright when it is really under-exposed.
- **Histogram** – Use your histogram to help check your exposure.

- **Image Stabilization** – Set to Off. With your camera on a tripod, having image stabilization turned on can actually fool your camera or lens and cause blurring in your image.
- **Long exposure noise reduction** – Recommended setting is Off, unless you have a lot of patience.

- **Begin with ambient light**

The first step before beginning any light painting is to determine the ambient light in your scene. Determining base exposures can be time consuming when you are experimenting with exposures that could as long as three to four minutes. Here is a little trick that can help expedite this process.

1. Set your ISO to six stops higher than the ISO you plan to use. Example, if you are planning to shoot at ISO 100, set your ISO to 6400.
2. With your camera set at ISO 6400, determine out how many seconds you will need to expose the ambient light of your scene. Every second of exposure at ISO 6400 is equal to one minute at ISO 100.
3. So now set your ISO back to 100 and prepare to begin your exposure in minutes instead of seconds.
4. **Focusing**
5. Focusing your camera is an important step and in the dark can be difficult to achieve. The simplest way to get your focus is to shine a light source to a spot in your scene that you have determined must be in focus. Using autofocus determine where you want to focus, make sure your camera is focused on that point. Now to manual focus. If you move the camera you must repeat the process. In my opinion, Back-Button-Focus is a preferred great way to achieve focus for light painting.
6. **The Exposure**
7. At this point, you have determined your exposure and focused on your subject. It's time to start. Most cameras will allow you to set exposures of up to 30 seconds. Set your shutter speed to Bulb. Using your cable release or remote open the shutter. It will remain open until you press the release again. Use your stop watch or the timer on your phone to time the exposure.

Painting Techniques

- **Paint from the sides** – Don't just stand behind your camera and wave your light around over your image. Painting flat surfaces from the side will allow you to bring out the textures of the surface.

- **Use lots of different angles** – for instance, when painting the ground hold the beam low and pan the light over the ground. This will keep the ground from appearing flat and bring out all the details of the surface. Also, by adding light from many angles your resulting image will have an interesting three dimensional effect.

- **Don't stand between the camera and your light source** or you will show up as a silhouetted ghost in your image.

- **Wear dark non-reflecting clothing and keep moving.** Again, you do not want to appear as a ghost in your image!

- **Don't shine the light source back at the camera**, or else you will create a bright spot in the image.

- **Use a flash light with a red filter** when you need to check your camera to make adjustments. The red light will keep you from ruining your night vision.

- **Different surfaces are going to react to light differently.** Wood surfaces may require more light than shiny surfaces such as metal or glass

- **Keep your Light Moving.** Move your "brushes" in slow strokes to add light and faster in areas where you want less light.

- **Be Creative**

- There is so much you can do with this medium. Be creative and fearless when trying new things. Once you get the hang it, there is no limit to the images you can create.