

# Light Painting as an Art Form – An Introductory Guide

**Lori Saunders**

Light painting is not only photography, but also creating art with light as your paintbrush. This document provides a beginning guide for photographers who are inspired to try it out. It covers how to start, different light painting styles, and tools you can use or easily make.

## My Story

The first time I saw the results of someone painting with light, the images seemed magical and completely unlike anything I had seen before. Every light painting image is unique because of the infinite ways light interacts with your tools, movements, surroundings, and camera settings.

This technique can take many different forms, but all include “moving a light source while taking a long exposure photograph, either to illuminate a subject or space, or to shine light at the camera to 'draw', or by moving the camera itself during exposure”. The first technique I learned was how to move a light source over a subject in a painting motion to illuminate it. In this image, I used a filtered flashlight to paint over hanging silks and spools. This technique is often what photographers are most familiar with.



*15 sec F5.6 ISO 200 / flashlight*

I began creating images with only light as part of my interest in abstract photography. By sharing my initial images online, I connected with other light painters and was inspired by their creativity to try new techniques with new tools. I learned that anyone can become a light painter; you can start with tools you may already have—light-up toys or holiday light strings—and move on to making or buying tools specifically for light painting. Because I'm often asked questions about light painting, I created this guide to help newcomers get started.



*35 sec F8 ISO 100*

*DIY Light Flute with LPB Universal Connector, Pink and Blue Fiber Optics with colored filters*

## What You Need (or is Helpful to Have)

To begin light painting, you likely already have everything you need:

- **Camera\***: DSLR, Mirrorless, or Smartphone (with long exposure app)
- **Stabilization for Long Exposure**: Tripod, or anywhere to set your camera for a long exposure
- **Dark Environment**: Indoors or outside
- **Light Source**: Anything from a basic flashlight, a kid's light-up toy or holiday lights, to lights specifically designed for light painting
- **Dark Clothing**: So that *\*you\** do not show in your light painting
- **Lenses**: Wide Angle lenses for tight spaces or large light paintings, but no requirements
- **Extra Batteries**: Long exposures drain batteries quickly -- especially in the cold
- **Remote shutter release/trigger for your camera**: Preferably wireless, to trigger from a distance. Otherwise, you can set a specific long exposure time.
- **Props**: Lensball, vase, bottles, mirror, straws, wheels, hula hoop -- or just about anything!

*\* Note: If you have an Olympus or some other newer mirrorless camera models, you can use Live Composite Mode for light painting to see the image develop in real time.*

### About Bulb Mode

Bulb mode (see also **Light Painting Resources**) is a shutter speed option that allows any length you choose; your camera's shutter stays open for as long as you hold down the shutter release button. Most DSLRs and mirrorless cameras have a Bulb mode option; to find it, turn your camera to Manual, and shift your shutter speed as long as it can go. Usually, after the 30 second mark, your camera will show the letter "B" as your shutter speed. This is your bulb mode! Since pressing and holding the shutter button can shake your camera, it is best to use a remote shutter release. Bulb mode is particularly useful for Light Painting so that you can have exposures longer than 30 seconds or have the shutter open for the exact length of your painting, which can vary substantially from image to image.

If you prefer not to use Bulb mode, or your equipment does not support it, you can estimate your exposure time and set it from a few seconds to the maximum for your camera (usually 30 seconds but may be longer on newer cameras).

## Getting Started

To get started, be familiar with how to use Manual mode on your camera, how to focus manually, and how to use Bulb mode or a long exposure setting. You can begin with the following **camera settings**, and adjust as needed for the situation and your specific camera:

- Save images as RAW files (*if possible*)
- **Mode**: Manual
- **ISO**: Low (100 to 200), to reduce noise
- **Exposure time**: Bulb mode, if available, or set from around 5 to 30 seconds
- **Aperture**: Around F8, and adjust depending on varying factors (see below)
- Turn OFF Vibration Reduction or Image Stabilization (*always the case on a tripod*)
- In Camera Noise Reduction = Off
- Use **Live View** to assist in focusing and framing, if available

Next, set up your camera and tripod in a dark location; it does **not** need to be completely dark and it **can** be in a small space, such as a basement room or patio. If you can, choose a dark background outside or create one indoors with dark fabric or walls. It will be helpful to have a light easily accessible for in between exposures to check your camera or setup the next shot. If you are in an area with ambient light

that you cannot turn off, it is helpful to use brighter lights for painting so that they will stand out against that light.

Then, it is time to **focus your camera**, but **not** in the dark!

- Set camera and/or lens to **manual focus**
- Put a marker (e.g., a stone for outdoors or small item for indoors) at the spot you plan to do your light painting; this can be anywhere from a few to 100 feet away
- With the lights **on** or by shining a light, focus your camera on that marker (*easier for indoors or with a helper*)  
OR
- Set a light on that marker, and then focus on that light from your camera (*best if you are outdoors and need to focus from a farther distance*)

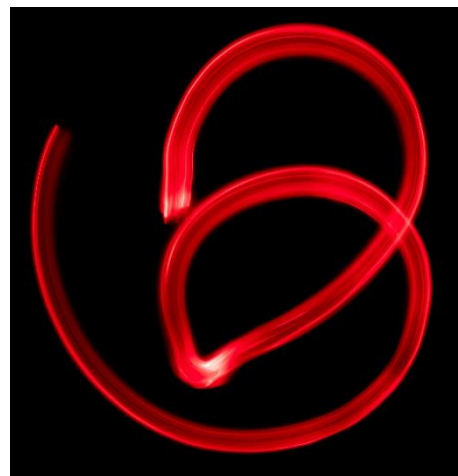


Finally, you are ready to create your first light painting – try a flashlight with added color or use your phone with a bright image showing on the screen:

- Set camera to F8, ISO 100, and Bulb Mode (or 10 seconds if not using Bulb mode)
- Select your light painting 'tool' (e.g., flashlight covered with colored cellophane)
- Turn **off** the lights!
- Move to your marker and start exposure using your remote OR Start exposure and then move to your marker (*if not using remote*)
- Move your light in an even pattern; try a figure 8 or similar abstract pattern
  - Go at a steady pace
  - Do not go over the same spot too many times
  - Do not point the light directly at the camera
- Stop the exposure with your remote, or let exposure complete if using set exposure time
- **Check your image!** Review focus as well as the histogram to see if the image is too dark or if any parts of the image are blown out



Flashlight with red cellophane attached with rubber bands



12 sec F8 ISO 100

To use your phone, ***the tool everyone has:***

- Pick or find an image
- Adjust so it is full on the phone screen
- Wave it around!

***Bright colors work great!***



*iPhone 11 as tool with bright colored image on screen with lensball on black plexiglass*



## Adjusting your Settings, Tools, or Light

If it looks too bright or too dark you can adjust your settings and try again.

- If it is too bright, adjust to a smaller aperture (larger F-stop number) and/or lower ISO
- If it is too dark, try a larger aperture (smaller F-stop number) and/or higher ISO

There are several factors with the light painting itself you can adjust that will affect exposure:

- **Brightness or Type of Light Source**
  - Switch to a brighter or dimmer light
- **Distance from Light Source to camera or from Light Source to subject**
  - Move *closer* for more light or *farther* away for less light
- **Direction or angle of light to subject**
  - A sharper angle reveals more textures, but gives less light
- **Color of Light**
  - White, yellow or orange light are brighter; red, purple, or blue light are dimmer
- **Speed of Light Movement**
  - Move your light *slower* to make it brighter; move it *faster*, to make it dimmer
- **Type of tool**
  - Switch to a tool that emits more (e.g., plexiglass blade) or less light (e.g., light flute)

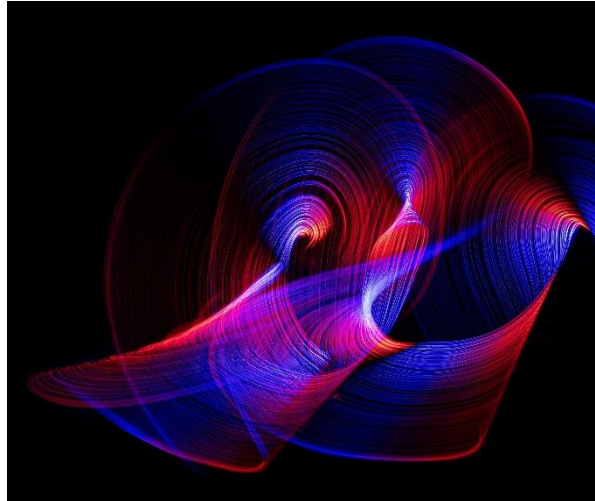


174 sec F8 ISO 100  
LPB Round Plexiglass, Pink Fiber Optic Brush, and color filters

## Tips and Tricks

### *Single Tool*

Start out simple using a single tool and experiment with creating different shapes; this image uses a color changing flashlight with an acrylic 'bubble' rod and Light Painting Brushes (LPB) Universal Connector.



*16 sec F8 ISO 100  
Acrylic Bubble Rod with LPB Universal Connector*

### *Erase your Feet*

You may want to create a shape where you need to stand in one place for 30 seconds or longer. In that instance, your legs and feet may show up in the photo. To deal with that, you can 'erase' your feet by painting light on the ground afterwards during the same exposure.

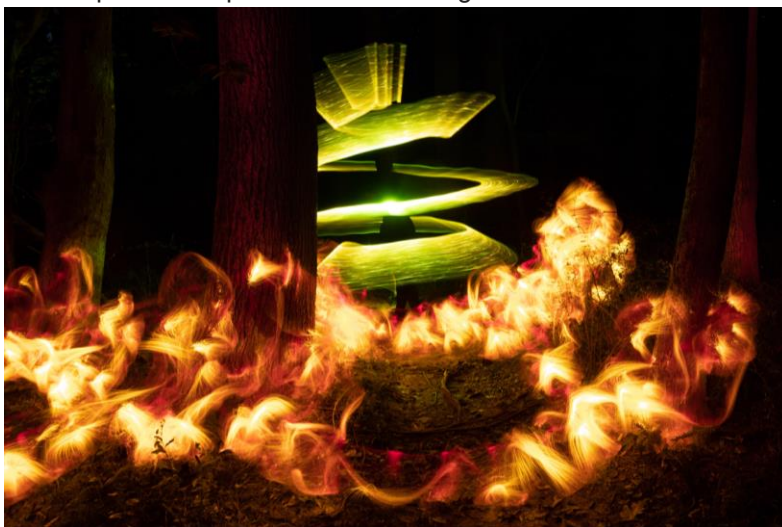
The below image shows an orb made with a round plexiglass tool and purple filter from Light Painting Brushes (LPB); I erased the feet after creating the orb by painting a green filtered light across the ground where I had been standing.



*87 sec F8 ISO 125  
LPB Round Plexiglass and color filters  
Flashlight with green filter*

## Multiple Tools

As you progress, you can use more than one tool in a single exposure; make sure you know where your tools are located so that you can easily find them in the dark. The below includes the LPB gold/green glitter stick for the swirl and pink fiber optic brush with orange filter for the 'fire'.



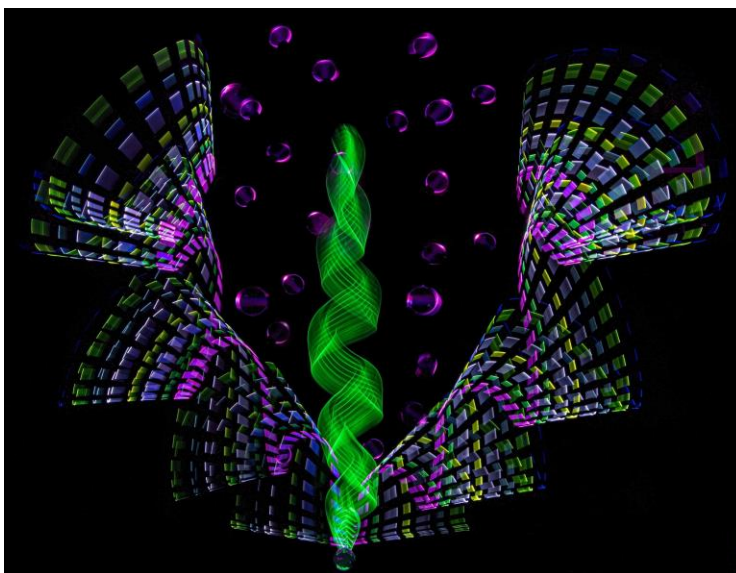
228 sec F8 ISO 100

*LPB Glitter Stick and Pink Fiber Optic Brush with orange filter*

## Capping the Lens

You can use a technique of “capping the lens” on your camera to make it easier to use multiple tools in the dark. To do this: 1) Start exposure and use one tool, 2) put the lens cap on your camera, 3) turn on the lights and get your next tool ready, 4) turn off the lights, 5) use your next tool. Continue these steps for the entire exposure. You could also “cap your lens” and move your camera to have two different backgrounds in a single exposure; for example, woods and then a stream reflection.

This image below used multiple tools – a DIY light flute for the swirls, LPB Leaf Plexiglass for the green ‘stem’, and small round plexiglass for the ‘bubbles’. I created the bubbles by clicking the light on and off briefly while holding the light still.



149 sec F11 ISO 400 / DIY light flute with LPB Universal connector, Leaf, and Small Round Plexiglass



## Working with Props and Models

Another progression in light painting is to work with props or models. Props can be any object or surface; one advantage is that they have endless patience and don't move. Even if your goal is to work with models, practice first with props.

### *Props*

Props are great for storytelling images. Here, I used the black fiber optic brush with white light behind a plexiglass with characters affixed to it, followed by a light pen with yellow filter, and finally, a filtered flashlight over the still life objects.



65 sec F14 ISO 200

*LPB Fiber Optic brush, light pen, and filtered flashlight*

You can use props on a reflective surface. The left image used a vase filled with water on black plexiglass with a DIY light flute, LPB Universal Connector, and color changing flashlight. The right image used a Lensball on black plexiglass with LPB black fiber optic and color filter and EL Wire.



29 sec F6.3 ISO 100 / DIY light flute with LPB Universal  
Connector and color changing light



25 sec F8 ISO 100  
*Lensball on mirror surface, with LPB Black Fiber Optic  
Brush with color filters, and EL Wire*



## ***Model Silhouettes***

When you are ready to work with models, the easiest technique to start with is a silhouette. Have the model stand in front of the light tool while you 'paint' behind them. Long light tubes or swords work well for this. I took the below at a workshop by moving the LPB light sword behind each model in a circle; then, the models briefly lit their swords in a crossing pattern.



*28 sec F8 ISO 100 / LPB Light Sword with transparent adhesive colors*

For more challenges, you can try attaching a sparkler to the end of your light tube or sword.

This is more difficult because you need to light the sparkler before starting the exposure, so it is helpful if you have an assistant to start and stop the exposure.



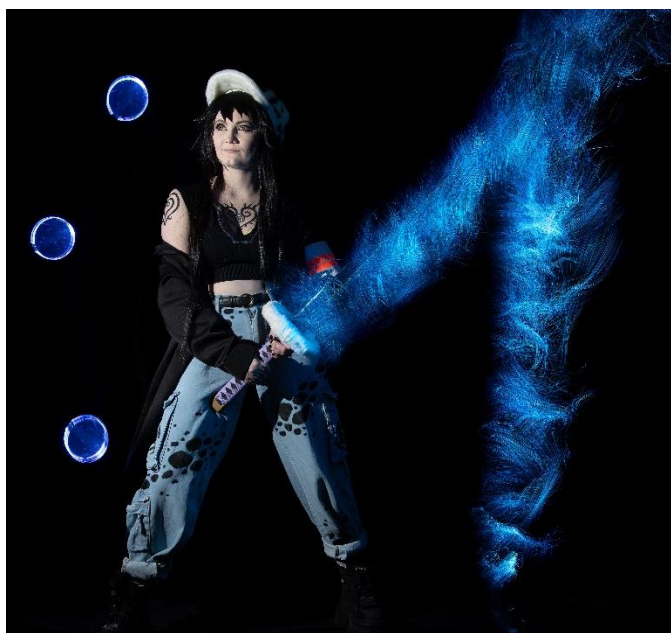
*14 sec F8 ISO 100 / DIY Light Tube and Sparkler  
Model: @katherinelcalvert*

## ***Illuminating your Model***

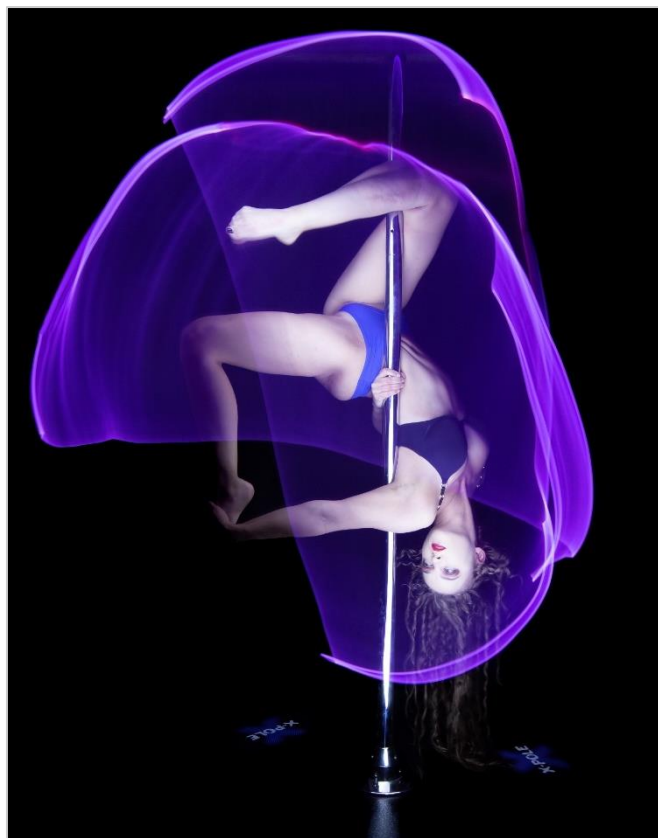
You can also light your model separately so that they are illuminated rather than silhouetted. For this look, complete your light painting tool work *first* in the back and to the sides of the model and *then* light the front of the model. The LPB Model Light works well for this, or you can use any type of diffused light (alternately, you can use an off-camera flash/Speedlight). Let your model know when you are about to light them so they can stay as still as possible! Sweep the light up **one time** in a smooth movement at a constant distance from bottom to top, only taking a few seconds. Using the model light or flash ***last*** will mostly erase earlier light on the model and minimize seeing their movement in the image. *This is all done in a single exposure.* In post processing, use noise reduction software to smooth skin tones.



*37 sec F8 ISO 200 / DIY Light Tube with strobe light  
Model: @yguti*



*36 sec F8 ISO 100 /  
Fiber Optic and circle plexiglass with blue filter  
Model @peachblossomjumpcosplay*



*29 sec F6.3 ISO 400 / LPB Whip  
Model @thegoddess\_skylar\_bombshell*

## Types of Light Sources and Tools

There are many types of light sources that can be used, from ones you find around your house, to those you can make, to those you can purchase specifically for light painting (see Light Painting Resources).

### Lights

- Flashlights
  - Low to High-powered (100 to 1000+ Lumens)
  - Color or color changing
  - Strobe (one-touch option)
- Battery powered light strings (e.g., fairy lights)
- Electroluminescent (EL) Wire
- LED strips (battery or USB connection)
- Kid or “Rave” Light Toys
- Tea lights
- Fire (e.g., spinning steel wool on fire)
- Sparklers
- Your Phone! The one tool everyone has!



*Flashlights from Coast, Nitecore, Ryu's Lightworks, Ants on a Melon RGB Critter (39 colors, programmable) and Light Excursion (Color Changing light)*

### Supplies for making or modifying light painting tools

- PVC Pipe, plastic bottles, clear or translucent colored tubes
- Fluorescent (T-8) tube guards (clear or color tinted)
- Acrylic rods
- Holographic or transparent self-adhesive vinyl
- Liquid chalk colors
- Flash Gels
- Cellophane wrap (colored or iridescent)
- Bicycle wheels, turntables (attach LED strips, battery powered light strings, or EL Wire)
- Gaffer tape, zip ties, rubber bands, or plumbing parts to pull it all together

### Tools specifically for light painting

- Light Tubes (with or without sparklers)
- Light Flutes (solid tube or pipe with holes cut for light)
- Plastic Bottle (attached to light with LPB Universal Connector)
- Light-up swords (e.g., Star Wars light sabers)
- Light Whips or ropes
- Fiber Optic Brushes
- Blades in different shapes, made from Plexiglass

See Light Painting Tools .

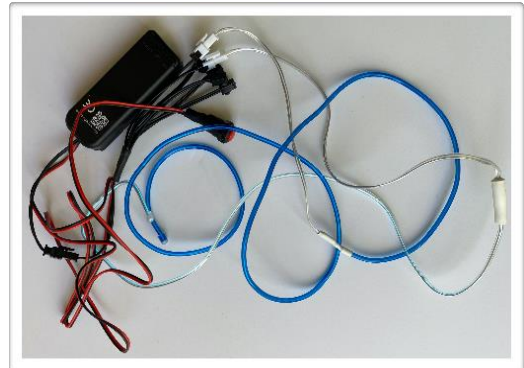


## Light Painting Tools

The following are examples of a few light painting tools, images made by them, and how to find or make (see for Light Painting Resources):

### ***Electroluminescent (EL) Wire***

EL Wire is a thin copper wire coated in a phosphor that produces light through electroluminescence used for decorating, costumes, and many other applications; it can be found at craft or online stores. It comes in different colors and degrees of stiffness. EL Wire sets made specifically for light painters with an on/off connector for multiple strings are available from EL Wire Craft: <https://elwirecraft.co.uk>.



*EL Wire and on/off switch connector*

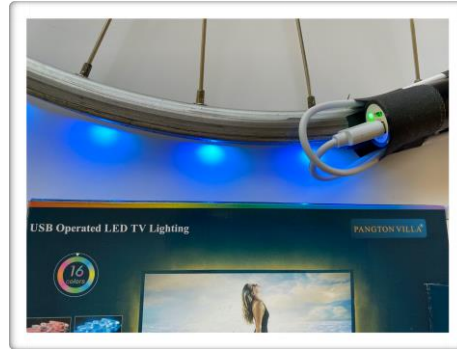
This image was made with a string of orange EL Wire wrapped around a bicycle wheel and spun on the floor, followed by gently moving a string of blue EL Wire in the center area to create a steam or smoke look effect (in a single exposure).



*43 sec F8 ISO 200  
Blue and Orange EL Wires*

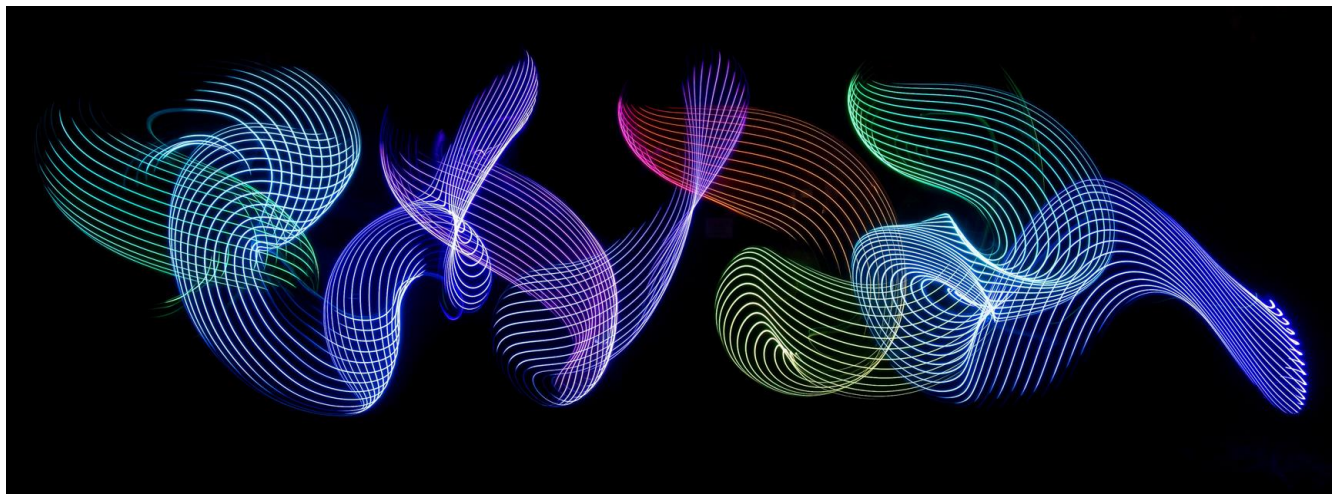
## LED Strip Lights

LED strip lights (also known as LED tape or ribbon light) are flexible circuit boards with mounted light-emitting diodes (LEDs). You can cut them to different lengths and attach to an object to light paint with, such as a bicycle wheel (see below), hula hoop, or long stick. These can be purchased from any electronics or online store. Be sure to choose the kind that can be powered via a USB connection; you can attach a portable charger with an on/off switch, such as you would use for your cell phone. Most come with a remote that includes several colors and pattern changing settings.



*LED Light Strip on bicycle wheel with USB power pack*

This image was made with an LED strip attached to the outside rim of a bicycle wheel, using a fading color changing pattern.



*28 sec F8 ISO 100 / LED Light Strip on bicycle wheel*

## Light Tubes

You can purchase tubes specifically made for light painting, but it's also easy to just make them yourself. Light painter Eric Pare (<https://ericpare.com/>) has a tutorial video showing how to make your own using fluorescent tube guards with holographic self-adhesive vinyl inside ([How to make your own rainbow light-painting tube - Tube Stories 139](#)).

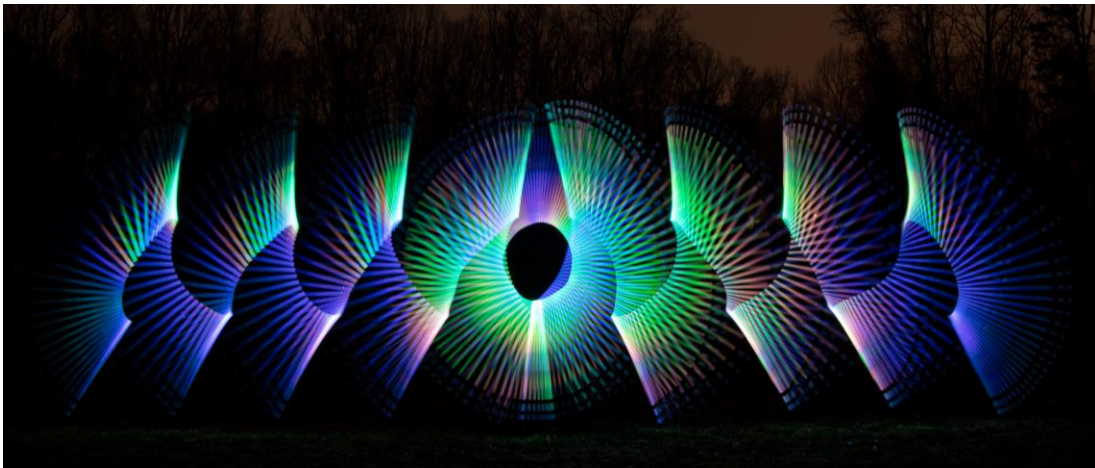




I have made tubes in different colors and lengths. It works best to use a flashlight with an on/off button and clip at the base that can be inserted into the open end at the bottom of the tube.



*35 sec F8 ISO 100 / DIY Multi-color Tube with flashlight on strobe setting, LPB Pink Fiber Optic*



*60 sec F8 ISO 100 / DIY Light Tube with flashlight on strobe setting*

Another option is to attach a sparkler to the end with rubber bands or tape.



*40 sec F8 ISO 100 / DIY Light Tube with flashlight on steady and strobe setting and sparkler*



## ***Light Painting Brushes (LPB) Universal Connector Options***

With the LPB Universal Connector (<https://lightpaintingbrushes.com/collections/universal-connector>), you can attach most flashlights to anything with a 1" diameter opening. For example, this works with most plastic bottles, 1" clear tubes or acrylic rods, or a 1" PVC pipe connector. For any of these, using a flashlight with an on/off button at the base works best.

### **Plastic Bottles**

You can experiment with colored bottles or cover them in colored translucent paper or liquid chalks; the below image was created with a bottle covered in iridescent wrapping paper.



*53 sec F8 ISO 100*

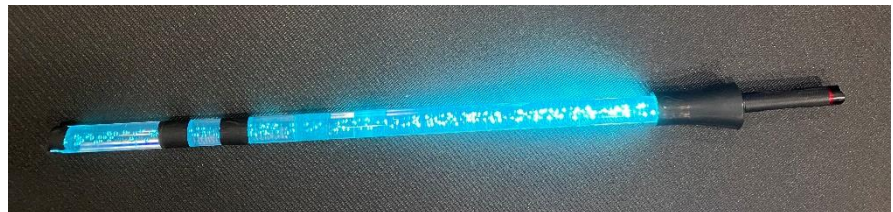
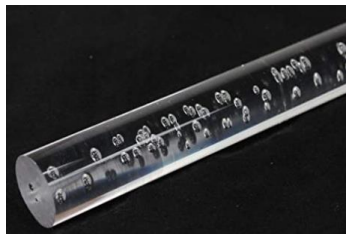
*Plastic bottle with iridescent paper*



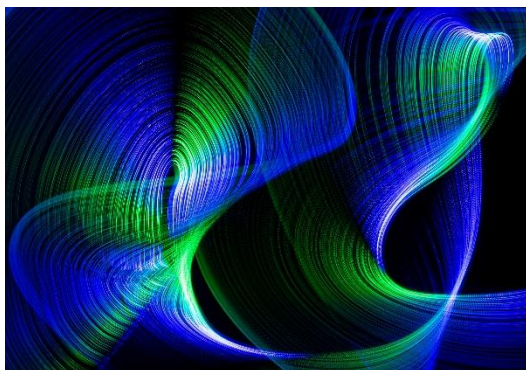
*Plastic bottles with LPB Universal Connector and flashlight*

### **Acrylic Round Lucite Rod (colored or with bubbles)**

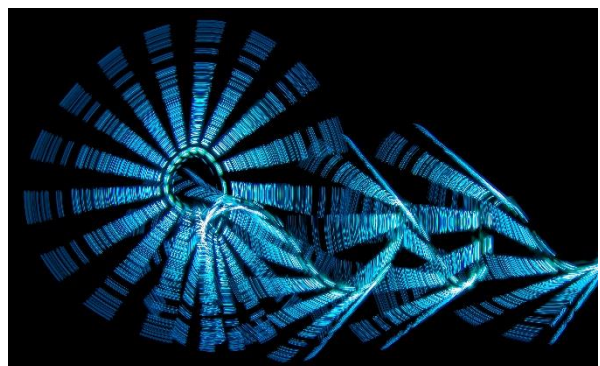
These are often used for crafts or decorating, but are great for light painting! Ones with bubbles inside create a textured pattern. If they are 1" diameter, you can insert them into the Universal connector.



*Acrylic Bubble Rod with Universal Connector, blue gel, and flashlight*



*18 sec F8 ISO 100, Color changing light*



*17 sec F8 ISO 100, Strobe light*

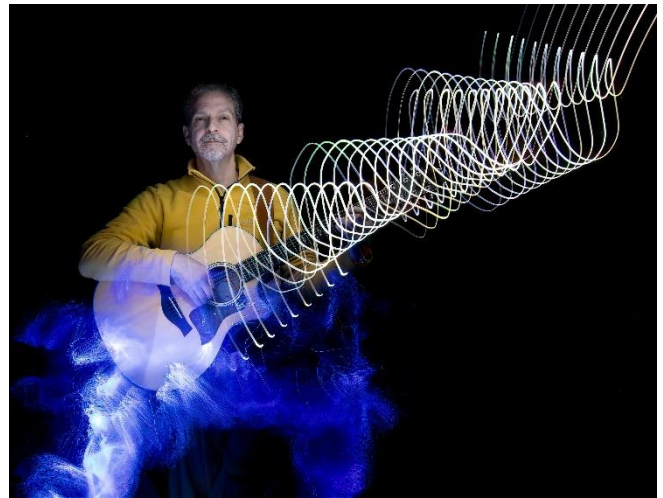
## Light Flute

You can make a Light Flute by drilling holes in a 1" PVC pipe tube; connect it to your flashlight with a 1" PVC pipe connector and the LPB Universal Connector. Create different patterns with alternating sizes and patterns of holes for each light flute.

Alternatively, experiment with cutting holes in something as simple as a paper towel cardboard tube with a flashlight inserted into the base.

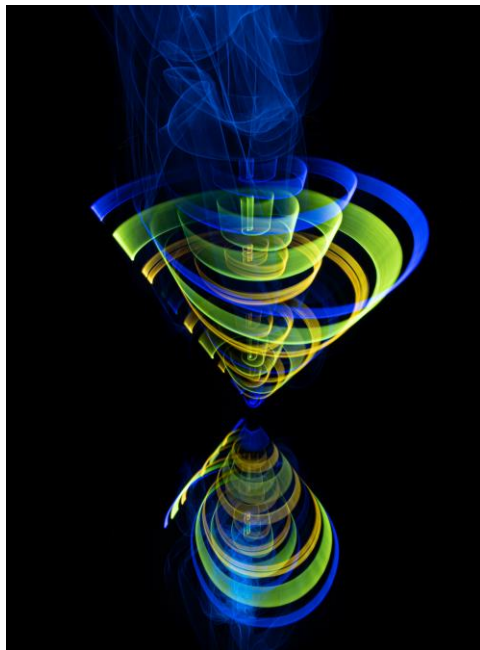


*Light Flutes from PVC Pipe  
Attached to LPB Universal Connector and flashlight*

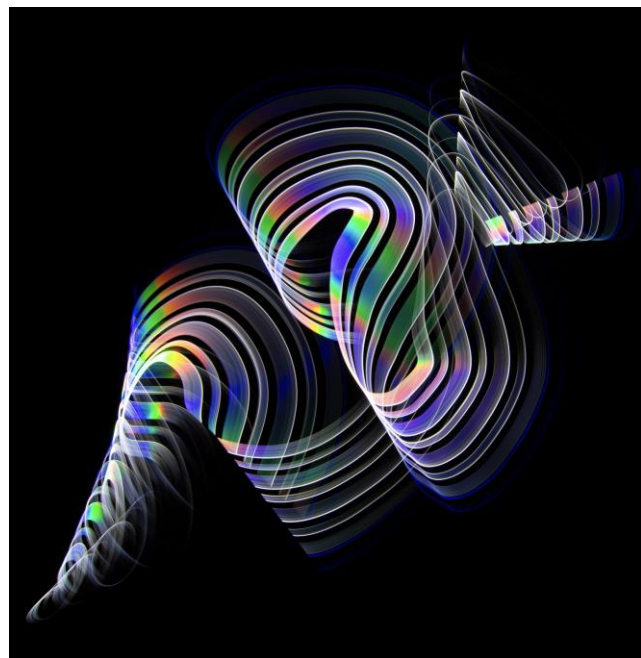


*47 sec F8 ISO 100  
Light Flute with small holes  
LPB Blue Fiber Optic with Blue Filter, LPB Model Light*

These images below were created with a light flute with wider holes; one with strips of colored gels covering each hole, and the other with a strip of holographic paper slotted inside.



*38 sec F8 ISO 100  
Light Flute with Gels on mirror, and EL Wire*



*25 sec F8 ISO 100  
Light flute with Holographic paper inside*



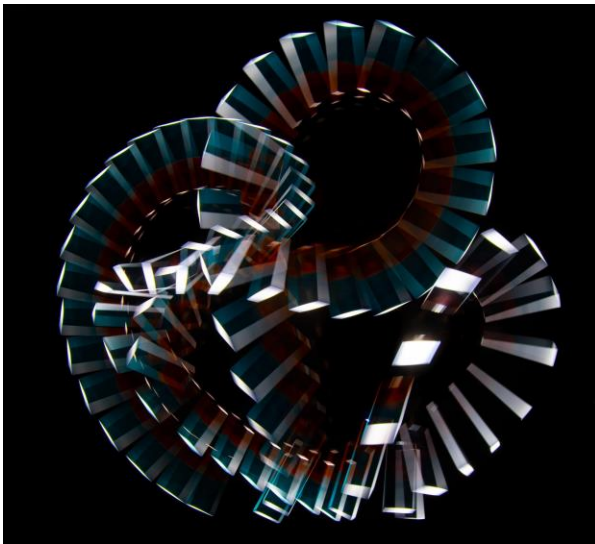
## *Plexiglass Tools*

Plexiglass tools can be made or purchased from a variety of places; I use ones from Light Painting Brushes that connect to your flashlight with the Universal connector (<https://lightpaintingbrushes.com/collections/plexiglasss-light-painting-brushes>). You can modify them by adding colors with liquid chalk or translucent adhesive vinyl colors to change the look.

Possibilities are endless by varying the shape of the plexiglass, colors, and light pattern. You can use a strobe flashlight to see repeating shapes in a pattern, such as here:



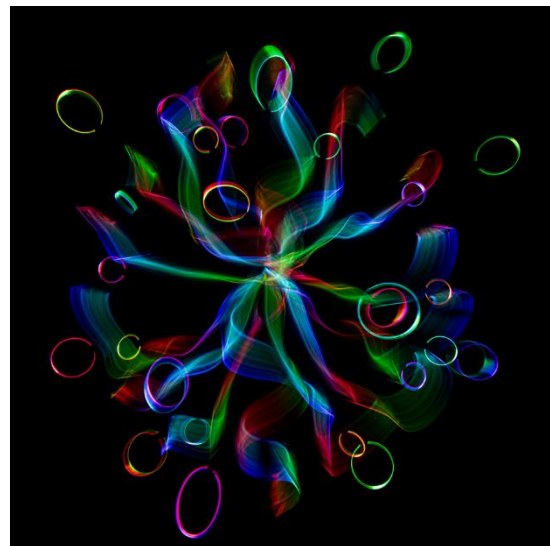
*LPB Rectangle Plexiglass with adhesive colors  
LPB Round Plexiglass*



*14 sec F8 ISO 100*

*LPB Rectangle Plexiglass with added adhesive colors and strobe flashlight*

A steady light and movement will create a ribbon like effect; slowly blinking the light on and off while holding the light still will create shapes hanging in space.



*126 sec F8 ISO 100*

*LPB Round Plexiglass with color changing flashlight*



## *Fiber Optic Brushes*

Fiber optic brushes are extremely versatile. You can use battery powered fiber optic lamps or toys, make your own, or purchase brushes specifically for light painting. I use ones from Light Painting Brushes in black, white, and other colors (<https://lightpaintingbrushes.com/collections/fiber-optic-light-painting-brushes>).

You can use them with models to create water or fire effects. Using a black brush with a color filter creates fine light streaks, while combining a pink brush with orange filter can look like fire or a blue brush with a blue filter like water.



*LPB Universal Connector, Black Fiber Optic  
And blue colored screw on filter attached to  
flashlight*



*73 sec F8 ISO 100  
LPB Pink Fiber Optic with Orange Filter  
Blue EL Wire  
LPB Model Light*



*91 sec F8 ISO 200  
LPB Black Fiber Optic with color changing light,  
LPB Model Light  
Model: @yguti*



*47 sec F11 ISO 400  
LPB Black Fiber Optic with blue filter  
Flashlight on book  
Model: @carlvsanders*

## Post Processing

You may want to crop, add contrast, or adjust brightness, but most of your light painting photos should not require a lot of editing work. The most common adjustments that I make are:

- Cropping
- Adjusting exposure
- Darkening background selectively so that it is completely black
- Cloning out unwanted elements
- Denoise, especially for skin tones

Here is a very basic example of a before and after:

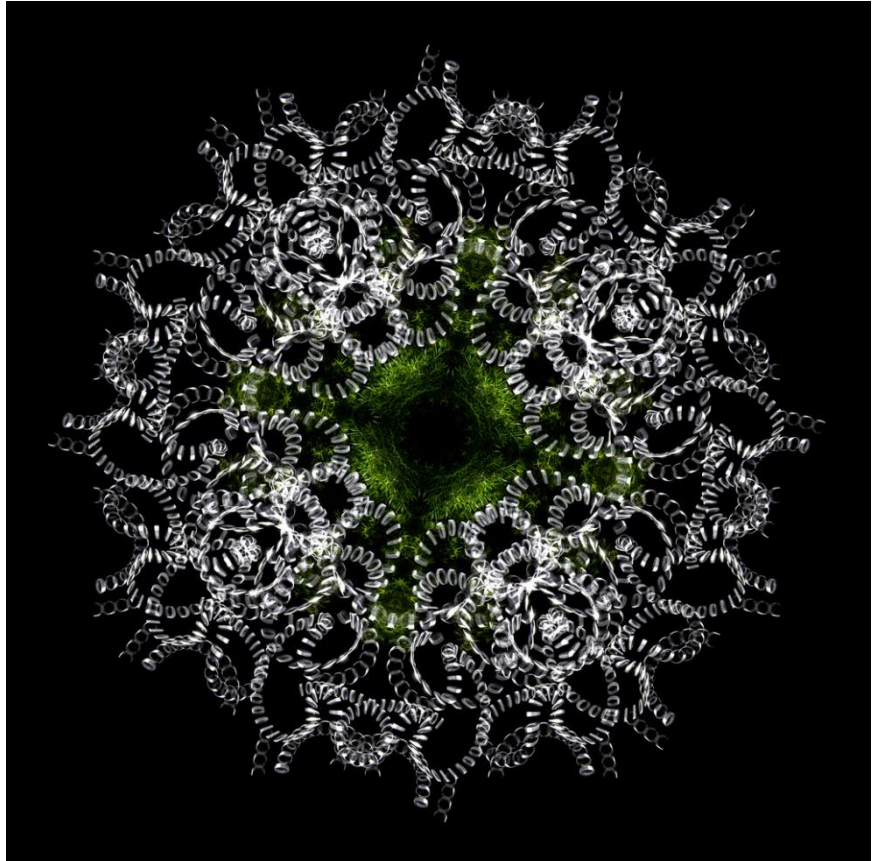
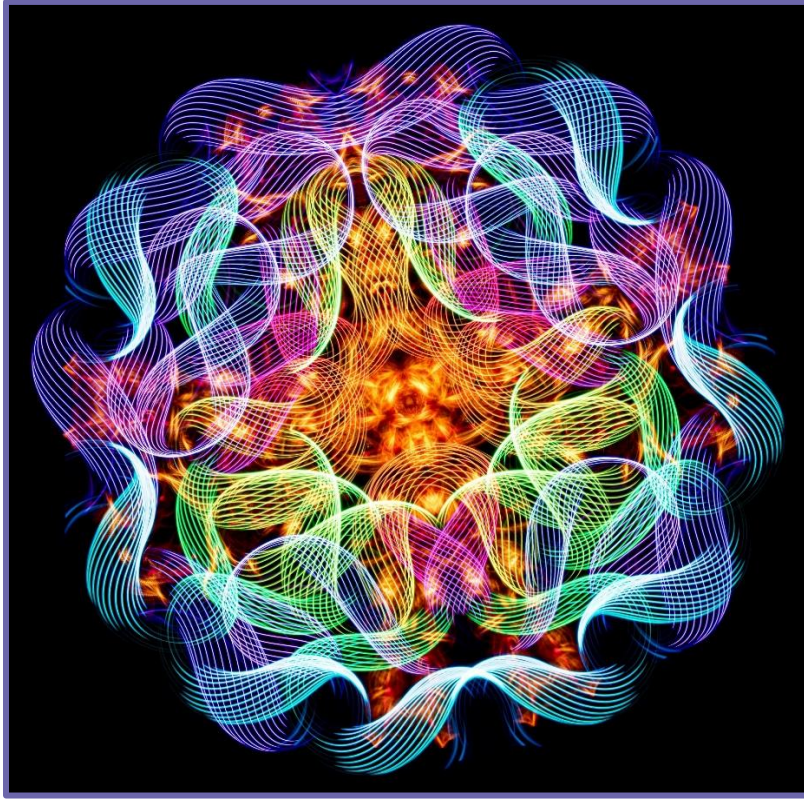
*Straight out of Camera*



*Cropping, darkening background*



It is also fun to go crazy and edit images that you did not like initially into completely new creations.





## Go for It!

I encourage you try out light painting – it is all about having fun, experimenting, and sharing your work! It does take practice, so do not give up if your first results aren't what you had hoped; every effort will get closer to what you envision!

For more of my light painting images, see [lorisimages.smugmug.com](https://lorisimages.smugmug.com) and follow me on Instagram @Lo8iS. Seek out more information at the resources listed below.

### ***Light Painting Resources***

<https://lightpaintingphotography.com/>

<http://lightpaintingblog.com/>

**Light Painting: A Complete Guide:** <https://petapixel.com/light-painting/>

**Light Painting Tutorial videos:** <https://www.youtube.com/user/LightPaintingPhoto>

- Rotation photography: <https://www.youtube.com/watch?v=G0ZFD9hj5fs&t>
- The Sheet Technique: <https://www.youtube.com/watch?v=EvgMjSOeK2o&t>

**Flashlight buying guide:**

- <https://www.stephenknightphotography.com/post/best-flashlights-for-light-painting-photography-2023>

**How to with EL Wire:** <https://www.diyphotography.net/light-painting-and-el-wire-secrets-revealed/>

**Light painter Eric Pare tube making tutorial video:** (<https://ericpare.com/>)  
([How to make your own rainbow light-painting tube - Tube Stories 139](#))

**Bulb Mode:** <https://photographylife.com/bulb-mode>

**Facebook group with Light Painting Brushes:**  
<https://www.facebook.com/groups/LightPaintingBrushes/>

### ***Tools and Lights***

**Light Painting Brushes tools:** <https://lightpaintingbrushes.com/>

**Ants On a Melon Light Painting tools:** <https://antsonamelon.com/collections/light-painting>

**Ants On a Melon RGB Critter 2.0 light:** <https://antsonamelon.com/products/rgb-critter-flashlight>

**Light Painting Paradise tools:** <https://lightpaintingparadise.com/en/>

**Light Excursion custom made color changing lights:**

- Contact on Instagram @lightexcursion or <http://photoexcursion.com/>

**EL (Electroluminescent) Wire for light painters:** <https://elwirecraft.co.uk/>  
(Light Painting kits with on/off triggers)

**NiteCore (high-powered) flashlights with strobe:** <https://www.nitecorestore.com/>