

LightPlay: Reality

Basic gist here is I had an idea for a cool abstract photo, to be taken in a famous art gallery. However when actually trying it the practicalities like loads of people being about and lighting, meant it would be tricky to do. Not impossible, but it got me thinking and lead to two ideas...

What if this idea was transposed from the real world to a virtual environment using similar construction and photographic style techniques?

What else could be used to make shapes so artists and photographers can play with light? Mostly without spending too much money, in fact most of the stuff used here came from pound-stores :)



With the first idea, a basic 3d model of an art gallery wall and some simple shapes (all in poser prop format) has been created, sample image below. This is the first version and the idea is to improve on this with the help of other poser artists. To download the 3D files and to learn more about the 3d version, visit...

<http://www.poserdirect.com/concepts.html>

For the second idea there's this document which explores a variety of stuff like the creation of a few assorted bits, how to take shots etc. Again I'm hoping that other photographers will have ideas, techniques and suggestions they can contribute to make this idea a lot more fun.

BTW – Credit where due. Not all the ideas here are mine, some are light painting staples, some are adaptations of other peoples work, others are friend's ideas and some where pure luck.

Version 1.1 By MrSparky – June 2014

Let there be light

The original idea was going to use special coloured lighting cable called EL-Wire, available as wire, panels or tape often as a "Light Painting" kit. Costing around 20 quid, a typical kit will contain 4 or 5 bits of different coloured Wire (each roughly a meter long) and a small battery box called a "Driver", used to power things.

Another option is a kid's toy - the "Fuze Light Striper" - meant for bicycles. While a bit thicker and more expensive, the build quality is much better. Plus it comes with a handy waterproof-"ish" mounting bracket.

Though whatever you use, for example used "loose" like dangling it in front of your camera and an object can give you a nice surreal effect. Like the alien invader to the right.

Even as head-ware for your cat!



Shapes & Supports

Though the real fun comes when you decide to make some shapes, and despite EL being thin and flexible, it doesn't hold its shape at all. For that humble garden wire is pretty good.

My preference is for the plain silver/galvanised type over the plastic coated stuff with a plastic coating, as the former is easier to shape. Though either way getting very small radiuses can be fiddly, so don't expect 100% accurate shapes, instead be prepared to think more organically.

One trick with making shapes is to attach the EL to the garden wire first, keeping both as straight as possible. Print an A4 image of your shape, tape that to a wooden board or kitchen worktop, next bend and tape the co-joined wire around the printed shape. 1 Meter of EL-Wire is roughly enough for a single A4 sized shape.

To attach wire to wire, there's a few ways, each with its own advantages and disadvantages, especially if you wish to reuse the EL.

<p>Kit Supplied Bits</p> <p>From tiny clear rubber bands through to larger semi transparent plastic clips. The former is near invisible but awkward to apply and the latter is more visible and a lot more expensive.</p> <p>Kids Hula Hoop</p> <p>Yep seriously here! Works great with a Fuze Light Striper.</p>	<p>Monofilament/Invisible Thread</p> <p>Available from any sewing shop, great if you can sew or for attaching wire to cloth. Though can be fiddly to work with as it slides easy.</p> <p>Supporting the Support</p> <p>To hold the shape once you've made it, try some pound-shop clamps with an old/cheapo lightweight tripod, hold it down with a brick and string from the centre post.</p>	<p>Sticky Tape/Sticky Back Plastic</p> <p>Cut into short lengths and wrapped around both wires. Easy to remove from with a fingernail and damp cloth, big downside is it can "flake" after a few days, which can cause a fringing effect.</p> <p>Older stuff can sometimes have a subtle yellow, so try to use a new roll. Avoid the ultra cheapo as this can have air-bubbles or leave a sticky residue.</p>
<p>Rubber Glue/UHU</p> <p>Tricky to use, though good for sticking wire to card and some types of plastic sheet. Just weight the whole lot down with a bit of wood and books while it's drying. Moderately easy to remove from the EL with a fingernail and damp cloth.</p>	<p>Superglue</p> <p>Not recommended as application and removal can craze the surface of the EL. Plus superglue removal can need a craft knife, way too easy to slice through and ruin the EL.</p>	<p>Epoxy Resin</p> <p>Not tested</p> <p>Heat Shrink Tubing</p> <p>Not tested this yet, but I wonder if this stuff might be suitable.</p>

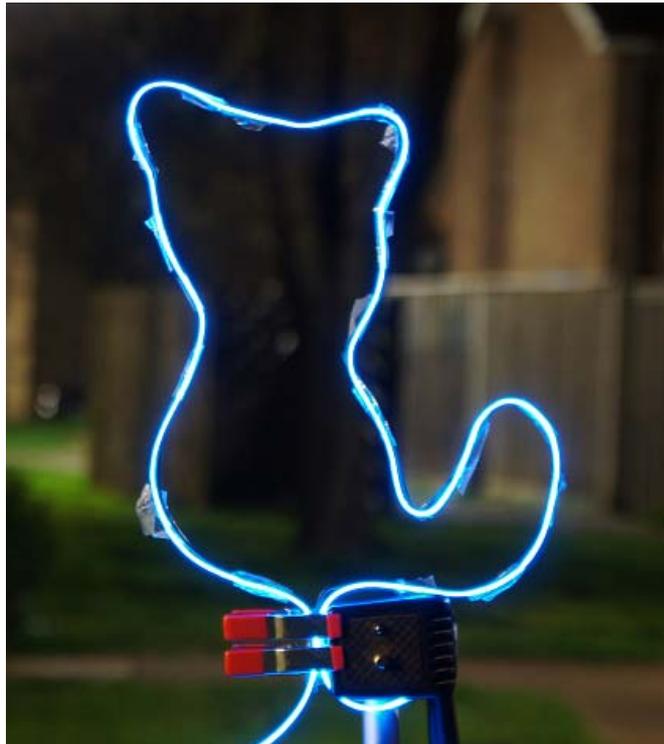
Taking Your Shots

Think Safety. Don't Work Alone. Use a Tripod

You'll need an assistant to help you, plus more people equals more fun and more ideas. Though you don't need an expensive tripod, a small 10 quid lightweight jobbie like a desktop/video model will do the job. These ones are also handy for locations that wouldn't allow a large tripod.

Lightweight tripods and small clamps are also useful for holding the EL-Shapes in place.

Note image shows the effect of 'flaking' caused by using old sticky tape.



Camera Settings

If you have a snazzy model.... set it to bulb mode. Then set the ISO to anywhere between 100-400 ISO. If possible use a remote release cable. While cool devices like Trigger-Trap are brilliant, a simple cheapo cable from e-bay or a second hand camera shop will do just as well.

Time-wise, unless your camera is limited to fixed set time, then how long you leave the shutter open is totally down to you. There's no precise science here.

For compacts or smart phones without bulb mode, look for any setting which gives a long exposure: such as 30 seconds or longer. Scene modes such as fireworks or night-time can often do this. If there's no remote control for your compact or phone then try using the self timer.

If images are too bright, on a SLR try adjusting the F settings. Keep going up a notch until it works, even as high as F22. Another trick, if you have a set, is to use your ND grads. Holding a sheet of semi-transparent plastic over the lens can also work, certainly does for compacts and smart phones.

Oh, and be prepared to look like a total idiot when taking your shots :)

Getting Focus

The main problem you'll face is getting your camera to focus. Light painting purists will argue always use manual focus, but that's not strictly true.

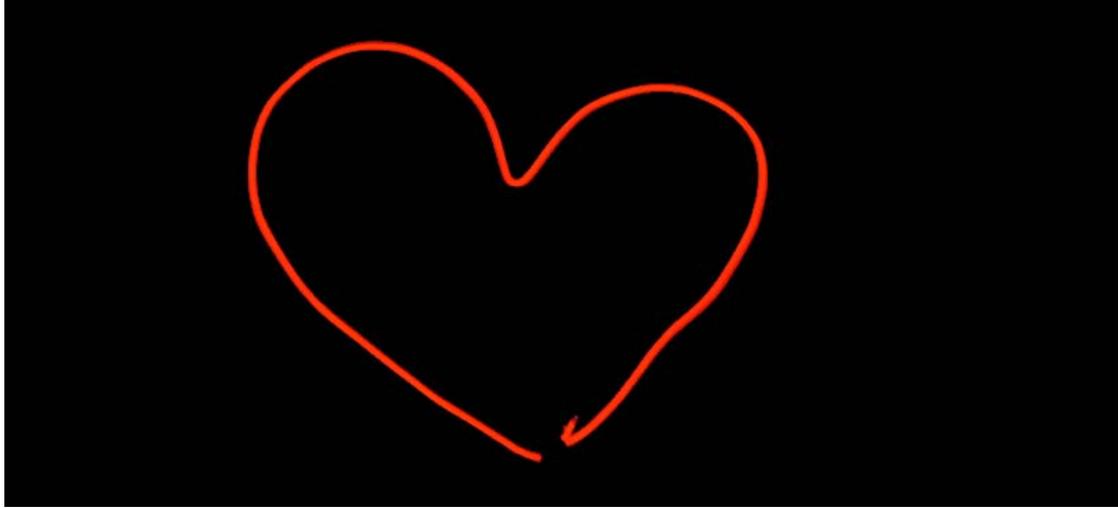
If you illuminate the scene with a torch long enough for the camera to get focus, hit the shutter then quickly place the torch against your leg. What you'll find is most cameras can keep focus and if you're quick enough that torchlight won't show in the image.

Another trick is to illuminate parts of the scene. People with lots of money and kit could use flash guns and lighting gels, but for us cheapskates, a few cheap flat panel LED torch/inspection light can do a similar job. Aim for ones which have lots of LEDs, such as 24 rather than 16.

To colour the scene cover the light with thin sheets of coloured plastic – such as stationary binder covers and punch pockets. The *Tiger* brand is good value at 50 sheets for a fiver.



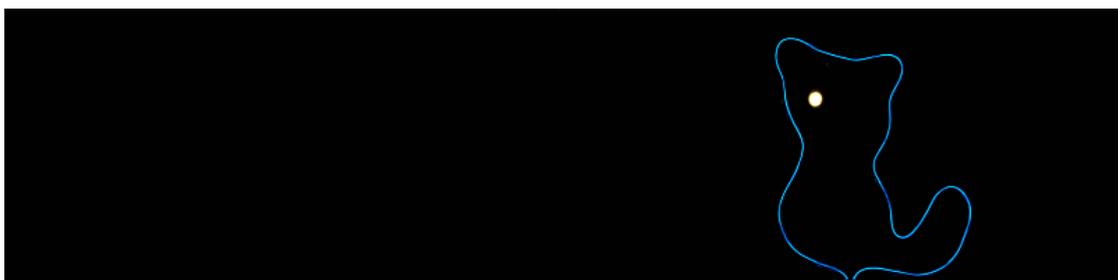
Ideas



There's the simple neon effect. Heart shapes look great against a face or torso.

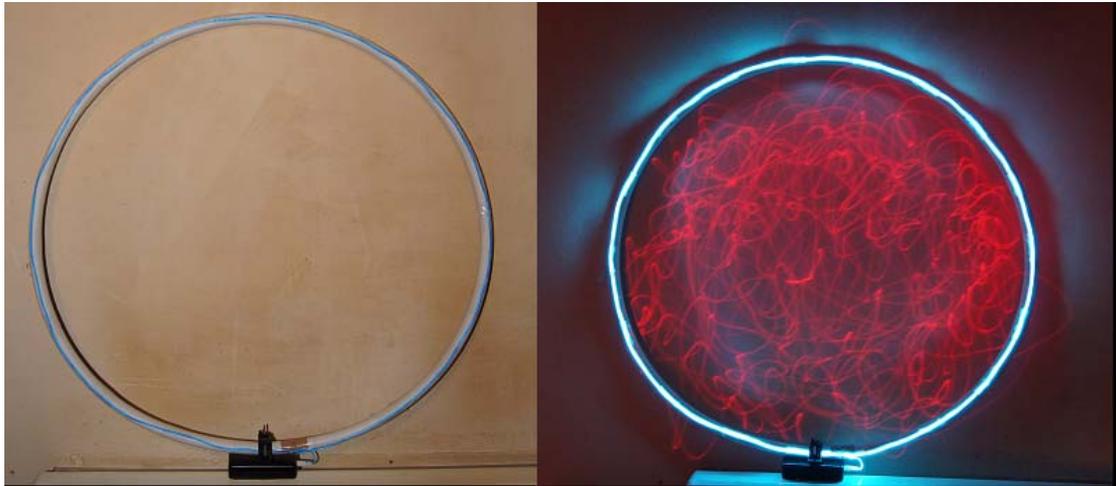


Zooming the lenses in/ out during long exposure lens or moving the object.



Use other lights within the scene as objects.
Such as the cat's eye here is actually a distant streetlamp.

A hula hoop with EL can be used in various ways, looks cool and you get fit at the same time! Note the left-hand image shows the "Fuze" striper EL kit with the handy mounting box and bracket. The right uses the EL/hula hoop combo and a builder's laser pointer.



If you're lucky enough to be owned by a cat and it honours you with a game, you might be lucky enough to get some flashes of feline colour within your plasma hoop! :)



I'm also looking at ways of motorising the hula hoop so it can rotate 360 around the base, then capping the lens every few seconds to see the effects on global illumination and also if can create a staggered globe effect.

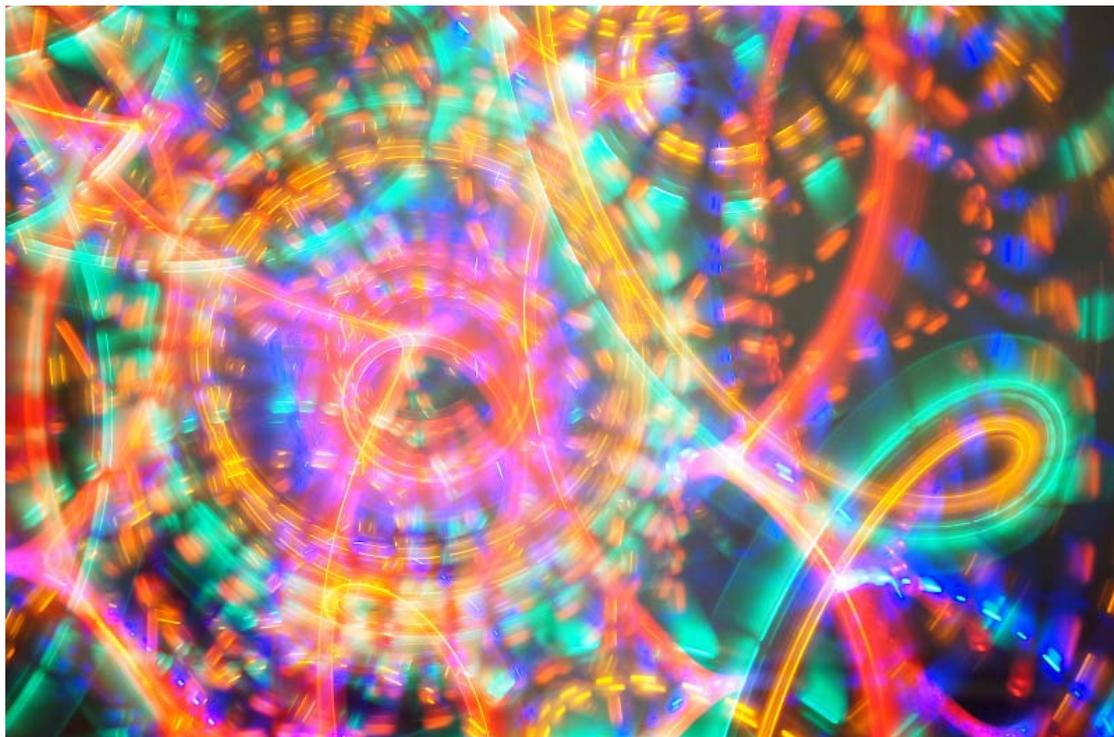


Note the lower image has a "ghost", this (as here sometimes unwanted) effect can happen if you pause or walk too slowly during the exposure.

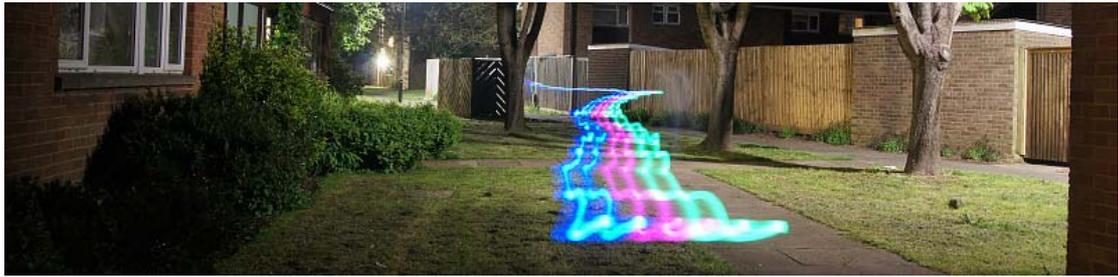
But you don't need EL-wire to do stuff like this; anything that generates light can do the trick. Especially those kids light up toys as sold at events, funfairs and seaside resorts.



1. Swirllys

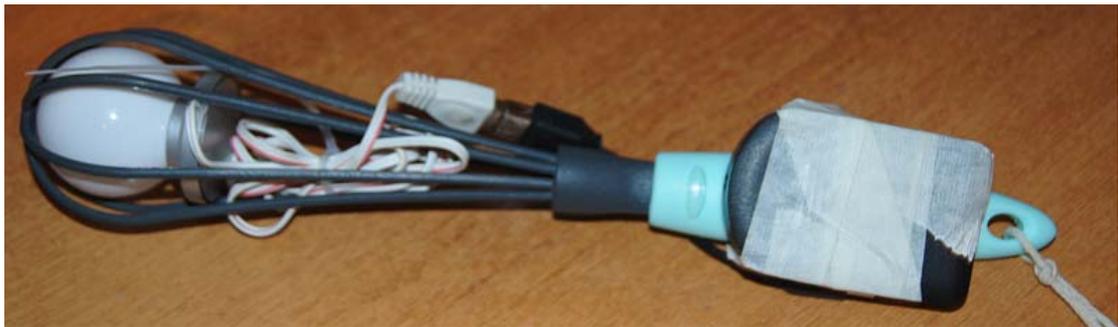


2. Light Sabres



3. LED Light Swinger

Safer than chucking around burning steel, especially indoors :) this uses a USB battery pack, USB powered LED orb mood lamp and a plastic whisk. The whole lot cost just 3 quid.



4. Reading Lights

For those of us who don't like the cold outside there are always small USB and LED lights, such as the mini angle-poise style lights available from Poundland.



For example to take studio quality shots of toys and models, great for online auction sellers, use LED lights what's sometimes called an infinity curve. Simply place your object on a sheet of A4 coloured paper or card, propping up the card at back to give the card a slight curve at the rear.

If you want moody shots, find a smoker or burn some josh sticks. Another trick is use shapes over the lights to create masks.

5. Cut-Out Shapes

As seen on the right, Make a simple cut-out shape from thin card. Hold it front of the camera using either natural or EL/LED light, combined with a sheet of semi-transparent coloured plastic behind the card.

6. Single Colours – Not tested.

Wondering if your camera has a selective colour scene mode, if that setting the camera to the colour of your light/wire the light will appear as colour and everything else will appear grey.



Well that's my crazy idea ...now it's your turn! So please post your images, ideas, tips and suggestions in the relevant threads at r'osity and daz. That's where your help and input will really improve this, which in turn will help other artists.