

# HauntMaven.com - Wolfstone's Haunted Halloween Site



[http://wolfstone.halloweenhost.com/Lighting/litexo\\_ExoticLightSources.html](http://wolfstone.halloweenhost.com/Lighting/litexo_ExoticLightSources.html)

## Exotic Light Sources

Here are some exotic light sources for those unusual haunt situations.



### Tiny Cold-Cathode Lamps

Sometimes you need just a tiny bit of light. Perhaps you need a small source of UV to fit inside your FCG marionette. Maybe you need a devilish red glow in the middle of your graveyard and want it to run on batteries. You might consider a company that makes small, affordable cold-cathode fluorescent lamps: [JKL Components Corporation](#).

Their Micro-Lume fluorescent lamps range in length from 50mm to 300mm and in diameter from 5.6mm to 8.0mm. They have the following colors:

- Warm White
- Red
- Green
- Blue
- Orange
- Yellow
- Pink
- LCD Hi-Out. White
- Cool White

They also have a line of UV lamps ranging in length from 25mm to 240mm and in diameter from 3mm to 9 mm. These are described as "narrow-band", and are available in several different wavelengths. Go for something 345 to 400 nM.

Straight from JKL, the visible lamps cost about \$10 apiece. Power inverters go for \$15. I have also seen JKL fluorescent lamps and inverters at [Fry's Electronics](#) and [All Electronics](#).

As of 5/2000, All Electronics offers the following lamps:

color	diameter	length	cat#	price
white	3mm	100mm	BF-3100	\$12.50
white	3mm	160mm	BF-3160	\$13.75
white	5mm	200mm	BF-5200	\$15.00
white	3mm	228mm	BF-3228	\$15.00
green	6mm	100mm	BF-6100G	\$5.00
red	6mm	100mm	BF-6100R	\$5.00
blue	6mm	100mm	BF-6100B	\$5.00
UV	3mm	25mm	UV-325	\$8.25
UV	3mm	50mm	UV-350	\$8.50
UV	3mm	100mm	UV-3100	\$10.75

**INVERTERS FOR CCFT LAMPS**  
 Operate on 12 Vdc. The connectors on the 4" and 12" lamps, CAT #s FL-4 and FL-12 mate with the connectors on these inverters. Designed to operate one lamp, will work with most miniature CCFT lamps.

CAT# INV-4 for 4" lamps \$6.00 each  
 CAT# INV-12 for 12" lamps \$6.00 each



**12 Vdc INVERTER**  
 1.75" x 0.78" x 0.5" Will drive one or two lamps.  
 Includes spec/hook-up sheet.  
 CAT # BXA-12529 \$9.95 each



**MINIATURE 12 Vdc INVERTER**  
 2.2" x 0.25" x 0.2" Will drive one lamp only. Includes spec/hook-up sheet.  
 CAT # BXA-12576 \$10.95 each



**INVERTER, 5 VDC INPUT**  
 TDK-2050. Inverter for small to medium CCFT lamps.  
 Operates on 3-5 Vdc.  
 No official specs available. Our tests indicate that it lights lamps of 500mm length or less.  
 Module is 2.17" x 1.1" x 0.4" high. PC pins on 2" x 0.84" centers. Large quantity available.  
 CAT# INV-7 \$3.75 each  
 10 for \$3.25 each - 100 for \$2.50 each



Tiny, inexpensive, long life, cool-running, easy to use. Could you ask for more? It's scary! I'll bet that there are hundreds of haunt applications for colored fluorescent lamps the size of a pencil.

All of these lamps require special power supplies. JKL carries inverters that run on 5V, 14V, and 24V.

This page from the [All Electronics](#) catalog (#203, Spring 2003) shows various inverters for cold-cathode fluorescent lamps.

# Glow Sticks

Glow sticks, also known as light sticks, are plastic tubes containing a liquid that glows brightly for a time.

The stick is activated by bending. This breaks a small glass vial inside the plastic tube, allowing two chemicals to mix, producing light. The light is produced without heat or flame, giving it the nickname "cold light". It works rather like the chemical light emitted by a "fire fly" or "lightning bug".

Glow sticks are available in various colors. Some are very bright and last for half an hour. Others are not so bright and last for hours.

Glow sticks are handy anywhere you need a small, disposable, self-contained light source. They are especially nice because they do not produce fire, sparks, heat, or smoke. You should have some in your earthquake kit. They have many haunt uses.

You can also get novelty light sticks, in the form of rings, necklaces, and buttons.

Notes:

- When glow sticks get cold, they give out less light, but do so for a longer period of time. If they get cold enough, they stop glowing entirely until warmed up again.

If you put a light stick in bowl of dry ice and water to color the fog, the light will soon fade away as the light stick gets cold.

- An activated light stick can be kept for later reuse by putting it in the refrigerator, or perhaps the freezer. Since light sticks are quite inexpensive, there isn't much reason to try this.
- If you don't activate a light stick, it will keep for a long time, so long as it remains sealed in the original airtight pouch.

If you have light sticks in your emergency supplies, you should pay attention to the expiration date stamped on the pouch. Use the expired sticks in your haunt and buy new light sticks for your emergency kit.





Here are some web-based glow-stick suppliers:

- <http://www.glowsticks.com>  
- <http://www.omniglow.com>  
- <http://www.glow-magic.bigstep.com>  
- <http://www.epartyunlimited.com/glowsticks1.html>  
- [Extreme Glow](#)  

## Optical Fibers

Optical fibers are glass or plastic fibers that conduct light in the same way that a hose conducts water. They allow you to hide your bulky light source out of the way and pipe the light to wherever you want - with pinpoint precision.

Here are some web-based resources for optical fiber:

- <http://www.toddsfiber.com/>  
- <http://www.fiberopticproducts.com>  

## Electroluminescent Panels

An electroluminescent panel is a flexible sheet about as thick as a playing card, made of several materials sandwiched together. When a high voltage is applied, the entire surface of the panel lights up. Unlike phosphorescent and fluorescent materials, electroluminescent material does not need a black light source to make it glow. The driving voltage can be supplied by a battery-powered "inverter" circuit. E.L. panels aren't terribly bright, but they last a long time, take little power, and run without getting hot. They are available in many different colors, and by changing the frequency of the driving power, the color can be made to shift.

Here are some resources for electroluminescent panels:















- The "Lime Light" night light is built around an E.L. panel. These are available at [Home Depot](#) (set of 3, \$10), [Sears](#), and many other stores.
- The "Krill Lamp" is a small, battery-powered lantern built with E.L. You can find them at [Extreme Glow](#).
- E.L. panels often pop up on the surplus market. Try [All Electronics](#) and [Electronic Goldmine](#).

## Electroluminescent Fiber

Electroluminescent fiber is a thin metal wire with several layers of special coatings that make it emit light when electricity is applied. Unlike phosphorescent and fluorescent materials, electroluminescent fiber does not need a black light source to make it glow. Think "thin, flexible, battery-operated neon". Also, think "expensive".

Here are some web-based resources for electroluminescent fiber:

- <http://www.elam.co.il>  

- <http://www.livewireent.com>  
- <http://www.skeletoncoast.com/WOT/Catalog/Livewire/livewire.html>  
- <http://www.neontrim.com>  
- <http://www.softneon.com>  
- <http://www.varad.com>  
- <http://www.coollight.com>  
- <http://www.coolwireusa.com>  

## Light Emitting Diodes

Light emitting diodes (LEDs) are electronic components that produce light without heat or the use of high voltages.

We have a whole page devoted to [light emitting diodes](#).

## LASER



LASER stands for Light Amplification by Stimulated Emission of Radiation. LASER light is [monochromatic](#), meaning that all the [photons](#) in the beam have the same wavelength.

When all the photons in a monochromatic light beam are synchronized, the beam is said to be "[coherent](#)". This is what makes LASER light unique.



This is a small Helium-Neon gas laser given to me by a friend. Thanks, Jeff!

The high-voltage power supply is built into the black plastic base and sealed with epoxy. All it needs to run is 12VDC.

Traditionally, LASER light has been costly and/or difficult to produce, requiring flash lamps, high voltage discharge, or other other fussy machinery. All of that changed with the invention of the [LASER light emitting diode](#).

**CAUTION:** Because LASER light is coherent, it packs a punch far greater than its brightness might suggest. LASER light can be dangerous. Keep it away from eyes.