



<http://www.spookyblue.com/halloween/flickerlight/spookyfire/>

"Spookyfire" flickering firelight effect using flashing LEDs

Introduction

LED's kick ass. They come in lots of colors and they're easy to work with. All you need is a single AA battery to light one up. And trick or treaters get really uncomfortable under the malicious gaze of a ghoulish goblin with red glowing LED eyes.



There is a flashing variety available that doesn't need any external circuitry. The problem is that a pair of flashing eyes isn't really all that scary. Woooo they're flashing. Big deal. But what if you wadded a bunch of them together? The result is a very convincing and spooky flickering firelight effect.

Materials list

- Flashing LEDs AllElectronics.com
- Switch AllElectronics.com
- 2 or 4 battery box AllElectronics.com
- Hot glue gun You don't already have one?

The "spookyfire" effect



A single flashing LED is kind of neat to watch. Especially if you're semi-autistic or have spent many years working with (and breathing the fumes of) industrial adhesives. If one flashing light is cool then

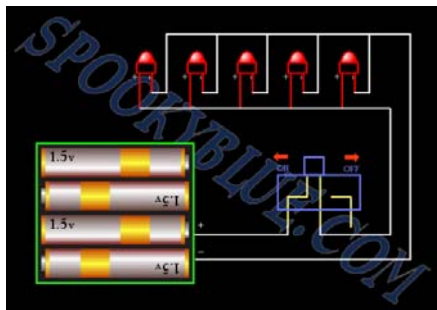
4 LEDs all flashing at different times ought to send you into seizure.

Place a spookyfire "blob" inside a pumpkin, a skull, or anything that would look cool if it were lit with a guttering candle. This effect works great as an indirect light source, but is lessened if you can actually see the blob. The reflected, totally random flicker makes an extremely convincing firelight effect, is very portable, and totally safe.

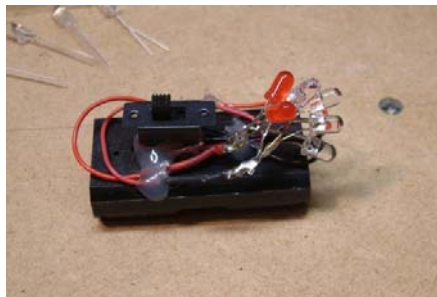
Construction

"Blob - n : an indistinct shapeless form ~ WordNet ® 2.0, Princeton University"

That pretty much describes this thing to a tee.



Our circuit diagram to the left shows what the blob would look like if I were an engineer. The actual circuit is shown on the right.



Basically, tie all the positive leads together and run them to the switch. Tie all the negative leads together and run them to the negative terminal of the battery box.

Run the other side of the switch to the positive terminal of the battery box, and there's your circuit. Mount the switch and LEDs to the back of the battery box with hot glue.



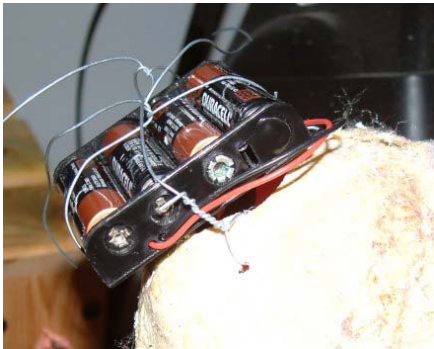
You'll notice that the above photograph doesn't match the circuit diagram. That's because I already installed the larger blob in a corpse skull. Just drill a hole in the back of his head large enough for the LEDs to fit and use stout wire to hold the package in place. Some cobwebs will hide the assembly, and cobwebs stuffed inside the skull will hide the blob while reflecting its light. The smaller variety (2 battery box) can fit right inside a skull.



You can also add a piece of cloth to the blob as a diffuser. This is handy if your blob will be in plain view and you don't want visitors to see all the pretty flashy lights inside. Just wrap a piece of cloth around the LED mass and tack together with hot glue.

A diffuser can be nice but it will reduce the amount of light the blob puts out. Better to place it somewhere out of sight and use its reflected light (off the inside of a skull or pumpkin, for example).

Here is another shot of the blob starving to death trying to suck the brains out of a corpse.



If you're not crazy about a mass of electronics poking out the back of your prop then don't mount the LEDs to the battery box. Instead, run long wires from the LEDs to the box and tuck the box and switch away someplace inconspicuous.

I know what you're thinking. This thing must look like a Christmas tree or a robot from the old Buck Rogers television show. Looking directly at the blob, you're right. It's the **reflected** light that is so intriguing to watch. As the LEDs randomly fire the overall glow varies in intensity, making the light flicker and dance. What's really interesting is that there is nothing abrupt about it. The light will seem to flare from time to time, then calm down, then look like it's about to go out. There are no repeating patterns, and it's pretty neat to watch.

Here are three video clips of a test rigged corpse. Have fun haunting!

Additions, improvements, & comments

Spookyblue: The folks at JohnnysPage.com built four different flickering light circuits and took video of them for you to compare. See if you can figure out which one is the SpookyFire blob. [Click here for Johnny's project.](#)

Spookyblue: Here is an [ingenious "flickering candle" effect](#) we came across in the gardening section of Meijers.

Spookyblue: By using different colored LEDs and adding a single non-flashing LED, [Nephilim](#) has refined the Spookyfire effect. [Click here for Neph's project.](#)

Gary Adams (Otaku): I put a 150 ohm resistor on the non-flashing LED. I found that it was drastically overheating (a green LED should not glow orange and burn your fingers). I love this effect, and will make a couple more to use with the skull piles in the cemetery. Thanks for a cheap and easy way to get realistic flame effects.

Spookyblue: You are correct, Gary. Folks, if you will be adding a non-flashing LED like Nephilim, you should include a resistor in series to drop the extra voltage that's going to fry your LED. If you don't have a clue what I'm talking about, just solder a 150 ohm resistor in between the positive lead of your non-flashing LED and the switch. This will most likely cover you. Otherwise, there's this thing called [Ohm's Law](#) ...

Gary Adams Spookyfire enhancements (Update 06-03-2005): Gary has rigged a piece of cardboard to hold his LEDs and effectively expand the "blob". This gives him more control over (and probably increases) the flicker effect. Here are some photos of his project: [Photo1](#) [Photo2](#) [Photo3](#) Hopefully we'll have some video of his enhancement at some point.

Obtained from
Omarshauntedtrail.com