



The cigar box and flashing light bulb method you describe for the flashing eyes is a good one, and is similar to the current method used at the end of the Pirates ride. However there is a much simpler method that you can use if you can control the lighting in the area. In fact, this is the original method used at the exit to Pirates.

Note: Since this project uses electricity, young children should be monitored by adults when building this project.

Difficulty: Beginning hobbyist

Parts List

- Black light. Preferably a spotlight.
- Flat black spray paint.
- Cardboard or stiff material.
- Black light paint. The most commonly available black light paint will glow a sickly yellow-green, but black light paint is available in many colors, including bright red.
- A motor from a barbeque might do, or you can find small motors that will turn at maybe 1 to 10RPM at surplus and hobby stores.
- A rough idea of how to draw the outline of animal's eyes

Building Instructions

You need a darkened area with predominately black or very dark scenery.

1. Cut the cardboard into as many groups of eyes you want.
2. Paint the cardboard black.
3. Paint glowing eyes with florescent "black light" paint. These eyes will be invisible until they are lit with a black light lamp.

4. Cut a cardboard shutter for the black light (the shutter will be affixed to the motor so make the shutter large enough to cover the black light)
5. Paint the cardboard black.
6. Place your "eyes" in your darkened place.
7. Mount the black light lamp pointing at the eyes, but hidden from the view of the audience. Move the "eyes" to get the best response. The eyes will glow nicely if you have done everything right.
8. Mount the shutter disk on the motor shaft, and mount this right in front of the black light so that the disk completely covers the output from the light.
9. Cut out holes in the shutter to illuminate the "eyes".
10. As the disk rotates it will cover and uncover the black light lamp, sweeping patterns of light and dark over the scene. As the light catches the florescent eyes they will light up. As the cardboard "fan blade" blocks the light the eyes will blink out.
11. You've now imagineered another eyes in the darkness scene.

The advantage of this technique is that you only have to make one piece of equipment, the black light with the motorized shutter. Then you just dob a little paint around on some black cardboard or construction paper to make eyes where you want them. The drawback is that you need very low light levels to have a good effect, or else a UV (black light) spotlight will be seen.