#### HauntMaven.com - Wolfstone's Haunted Halloween Site



http://wolfstone.halloweenhost.com/ColorOrgans/cloint\_ColorOrgan.html

# **Dynamic Lighting Effects - Color Organs**

A "color organ" is a device that controls the brightness of a light according to sound levels.





## What Is A Color Organ?

A "light organ" is a device that controls the brightness of a light according to sound levels. The louder the sound, the brighter the light. The softer the sound, the dimmer the light.

A "color organ" is a slightly more sophisticated device with several channels, each one sensitive to a different part of the audio spectrum. So low notes might flash a blue light, mid notes might light up yellow, and high notes might flash a red light. For each channel, the louder the sound in the that rance of pitch, the brighter the light.

# Why Should I Care?

There are numerous haunt applications for a device that synchronizes light to sound. The most obvious, and my favorite, is simulating lightning: you play a nice loud tape or CD with the sounds of a thunderstorm, and pipe the sounds into the color organ, which is also attached to a

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big light bulb. When the sound of the thunder crash is heard, the increased volume will cause the lamp to light up brightly. When the sound dies away, the lamp goes out.

Here's another idea: as you walk down the corridor, you hear a heartbeat that grows louder and louder. The corridor is lit by a red glow that pulses with the heartbeat, growing brighter and brighter with each beat. Get the idea?

Color organs are useful for more than just flickering light. The light is made by electricity, so the true function of the color organ is to use sound to control electricity. As such, it can animate a skull by using a solenoid attached to the jaw. In fact, the popular Douglas Fir, often hacked to make Halloween animations, is essentially a color organ circuit.

## Where can I buy one?

Color organs are a bit harder to find than they once were. They were trendy once, and will be again, but might be hard to find in the meantime.

We have a list of some commercial color organs and kits.

If you can't find a suitable color organ ready to use, you might have to build one yourself.

## **Can I Build One Myself?**

You seldom save money by building something yourself nowadays. But it is a way to obtain something that is no longer trendy enough to show up in stores.

Your general choices are:

- Design it yourself, shop for the parts, and build it.
- Find a schematic for a color organ, then shop and build.
- Buy an electronic kit.

Of course, you can hire somebody to do this for you, or get a buddy who is good with electronics to help you.

Unfortunately, building a color organ from scratch is probably the most expensive way to get one! You have to drive all over town, shopping for the bits and pieces, all at marked up prices.

Frankly, I recommend some sort of electronic kit. They are easy to build, educational, and often save money (over shopping for the individual parts). Take the money that you save and buy more props! You can never have enough Bucky skeletons!

