

Kitchen Under Cabinet Lights

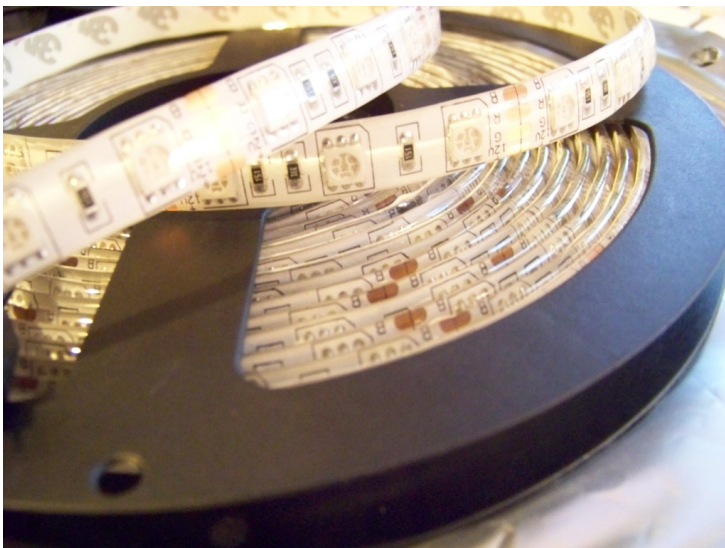
I'm starting a project to install under cabinet lighting in my kitchen. Most of the options at Lowe's aren't really attractive, to say nothing of the price. One major requirement is to use LED lighting to keep the heat under control.

At my local electronics store, [Unicorn Electronics](#), I found this [LED strip](#):



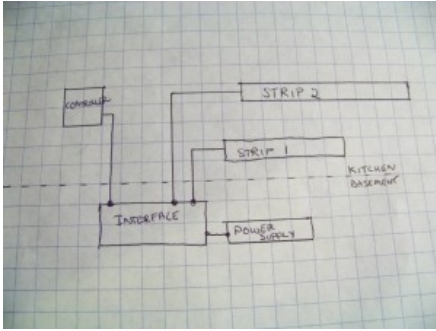
It's a 5 meter strip of 5050 RGB LEDs, on a spool, covered in waterproof resin. You can cut them every 3 LEDs (50mm) and the strip has a self-adhesive backing. Seems perfect for cabinets!

These things are pretty neat, and are very bright. The electrical connection to the strip is very simple. You supply 12V to a common rail, and each of the colors has a ground connection. The store sold an LED light strip controller so you can change colors, brightness, etc, but where's the fun in that? I set off to make my own.



I wanted to be able to control them from the kitchen, but I don't want yet another remote that I'll either lose, or the dog will eat, or whatever. I also don't want a big power brick or extra power cord plugged in anywhere.

So I came up with this type of solution:



The controller will be in the kitchen, but the interface (where everything plugs in to) will be in the basement, directly below.

For the controller, I had an idea of using a blank electrical outlet cover



and putting a rotary encoder (spinning knob) in the middle. Sparkfun.com sells just such an item!



I actually already had a bunch for a flight simulator project I'm working on.

Next up, I'll design the controller. Stay tuned.