

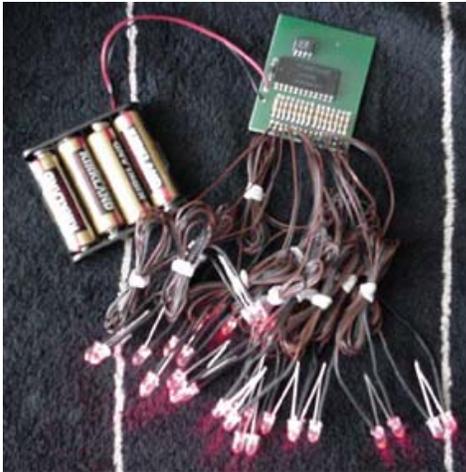


# Cowlacious Designs™

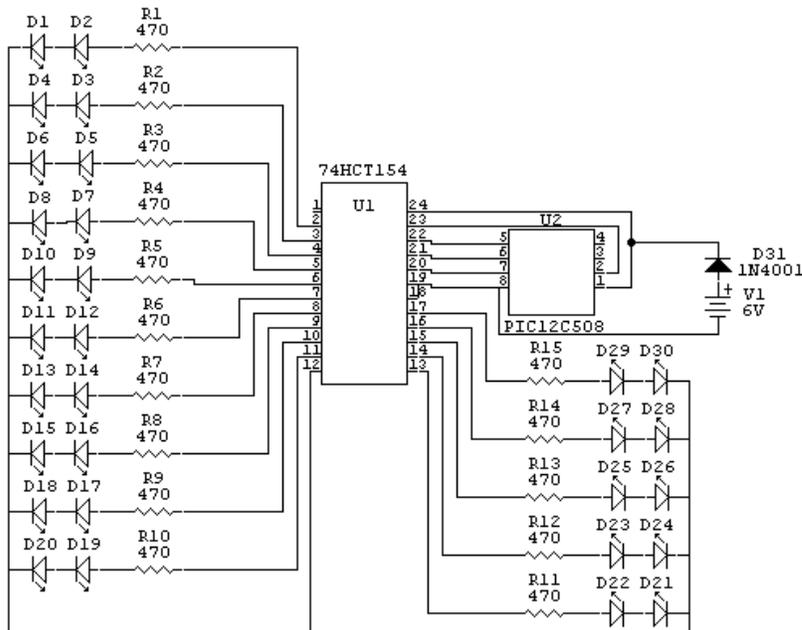


## Cave Eyes

<http://www.cowlacious.com/CaveEyes.htm>



This is a little microcontroller circuit that has 15 pairs of L.E.D.'s that look like rodent eyes. The pairs of eyes blink in a semi-random fashion. So, what you end up with is 15 pairs of eyes staring out at you with one pair blinking (looks like the animal had to close their eyes briefly) at a time. The pairs of eyes are on wires so that they can be placed around the cave, bushes, etc. Runs off of 4 AA batteries.



NOTE: Pins 18 & 19 are connected on the schematic. It is kind of hard to see, so I thought I had better point it out.

## Parts List

D1 - D30 LED's, I used Red, but you could make different pairs of eyes different colors. You also might want to try using Ultra High brightness LED's if you really want them to show up.

See my [LED design](#) page if you have any questions on how to hook them up.

R1 - R15 470 Ohm Resistors, 1/4W U1 74HCT154 U2 PIC12C508 microcontroller, must be programmed with the code shown below. V1 AA x 4 battery holder. The unit runs off of 6 volts, so any six volt supply will work. I use AA battery pack of 4 batteries. The positive lead should go into the hole on the board that connects to diode 31. D31 1N4001 or any like silicone power diode, i.e. 1N4002, 1N4003, 1N4004, etc.

The code for the 12F675 is the newest version of the code and gives the best effect. The zip file the hex file necessary for programming the microcontroller.

## Circuit Board Layout

Click [here](#) to see the circuit board layout. It is done as a PDF file so that if you want to print it and use it to make your own board, it will keep the proper aspect ratio etc.

For completed units or kits of parts, please go to:

[Cowlacious Designs](#)