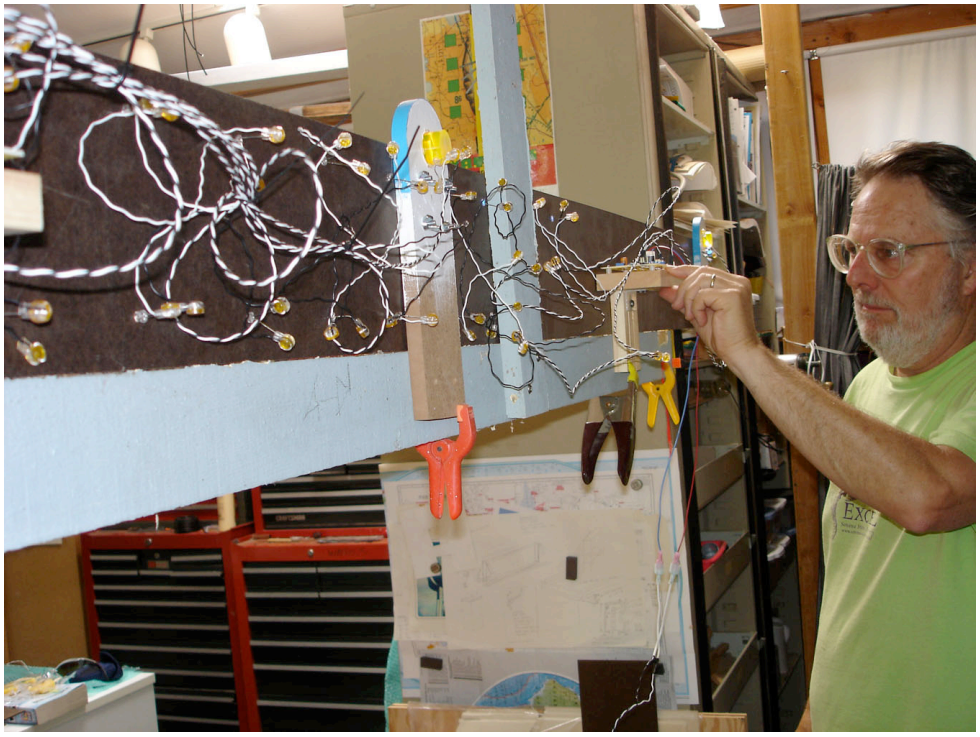
BLUE GRID



John Watrous building a 32 foot long lighting valance in his studio using over 200 pulsing, blue LED's. (photo shows electronics on backside)

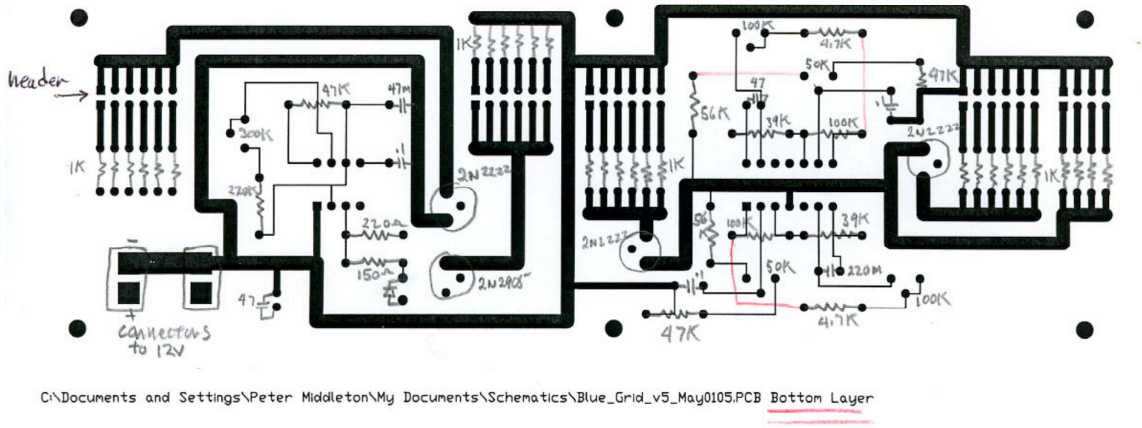
This lighting piece," Blue Grid", was made for Paradise Ridge Winery, for the "Year of the Sculptor" show 2005. Inspired by the Champagne cellar storage wall containing a blue grid of bottle caps, his response was to create a piece that repeated this mathematical format and incorporated his interest in using Light Emitting Diodes in his sculpture and then playing with the rhythms through electronics.

Be patient, observe and see if you can follow the patterns?

Watrous has been making lighted sculpture for some time and has been teaching art at Santa Rosa Junior College for 30 years.
Visit his web site for more info and other works. <jwatrous.org/bluegrid>

The Technical Process

A big part of this piece is hidden. Designing circuits and printing circuit boards is the creative process I went through with the help of my friend Peter Middleton. I am using simple op-amps and timers to build a flexible circuit board to flash and pulse LED's at slow, controllable rates. I decided to experiment with op-amps and timers instead of more complex programmable arrays. The LM555 timer and the LM324 op amps (used as a 2-op-amp triangle-wave generator) were chosen because of the many circuits available which could be modified for light-timing use.



Printed circuit board layout and below, actual board which controls work