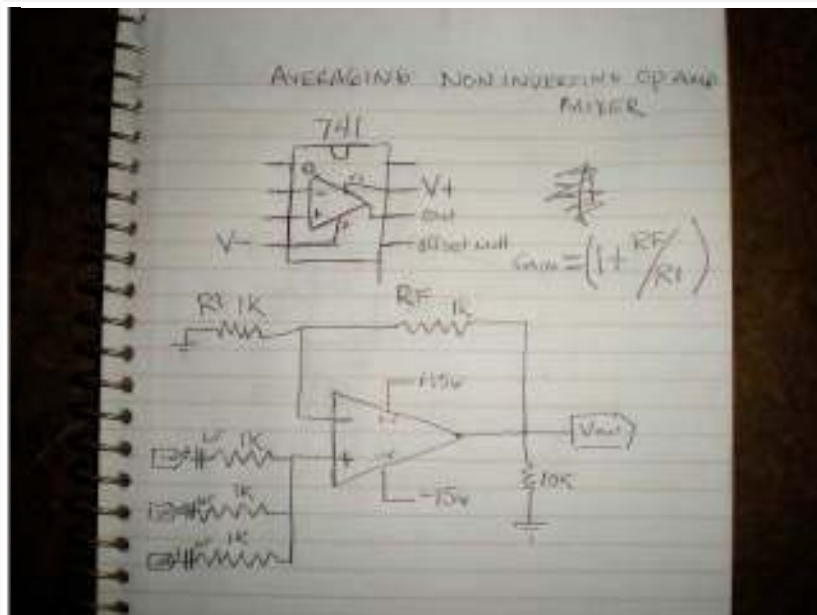


Simple mixer for my modular synthesizer



This is my
schematic
for my
Simple
Mixer. By

"my schematic", I mean I found on the internet. There's no volume or tone control. I wanted to start with something simple and hard to screw up. Without getting into how op amps work, its non-inverting, which means that signals that enter, will leave in the same phase. It's also set up as an "averaging" amp and not a "summing" amp, meaning that the volume after mixing is an average of the volumes before mixing. That doesn't mean it mixes all volumes evenly. Things that were louder coming in will be louder coming out.

I found the schematic [here](#) and modified it just a little bit by adding some Caps on the input. From what I've come to understand, Caps will help filter out DC? I dunno, I'm really just kind of playing around over here. It occurs to me now that I should have put a Cap on the output too.



I built it on a breadboard first without the caps and it seemed to work fine.

So I went ahead and tried out with the caps. It all worked so I stuck it in a perf board and soldered it up.



Turned it into a module.



The mixer is on the Right. just to the left of my Ring Modulator which I haven't written about because I'm still working on it. You can see the mixer has 4 inputs above and an output below.

I build these modules with the intent, to return to them--after my knowledge has grown-- and modify them. I will eventually add some trim pots to this circuit for volume control.

One of the cool things about building a modular synth, is being able to work in steps. Each modules is isolated and if one doesn't work, I can still chug along trying different stuff--teaching myself all along the way. They also share a common power supply, meaning I don't have to build that circuit each time.

There's nothing quite like learning by necessity, and I've learned more about electronics in the last 3 months than I did in the 11 years prior.



My portamento module worked but I'm waiting on some supplies to come from Jameco before I solder it up.