

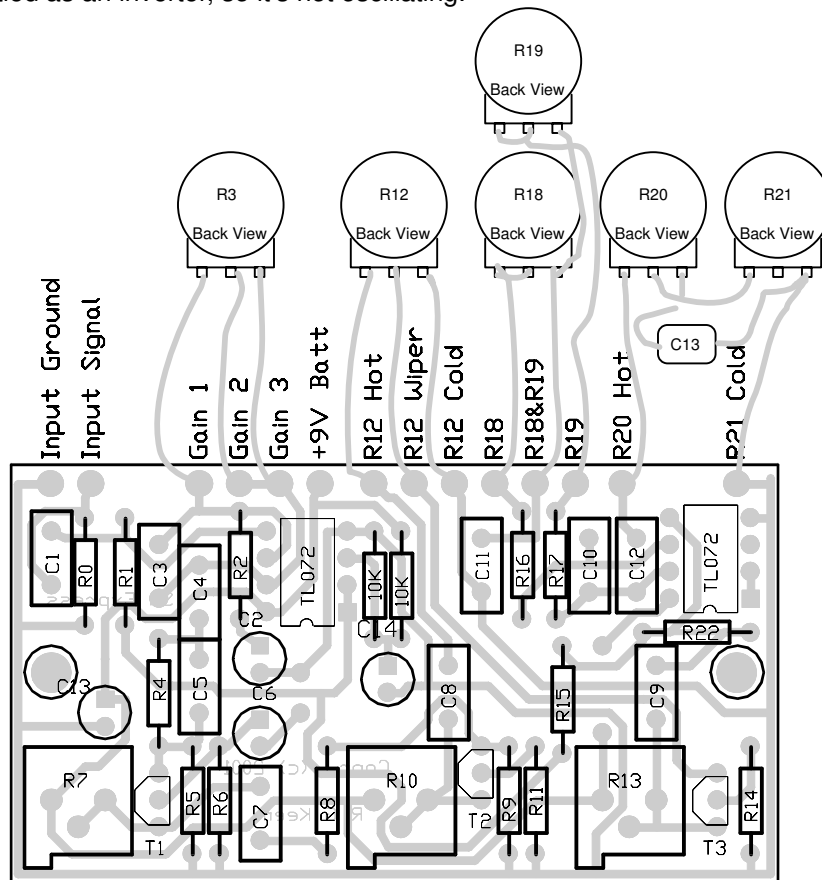
# A PCB layout for the Shaka Express, as designed by Aron Nelson

The circuit follows Aron's with the following exceptions.

- I used two dual opamps for ease of layout. Duals cost about the same as singles, and are easier to do layout with.
- I added R0, a 1M pulldown on the front end of the unit for clickless bypassing.
- I added R22, to allow insertion of Ed Rembold's mod. It's shorted out by a trace underneath it, so if you want to do the mod, you have to cut the skinny trace under R22.
- I added a power supply filter cap to lower the supply impedance.

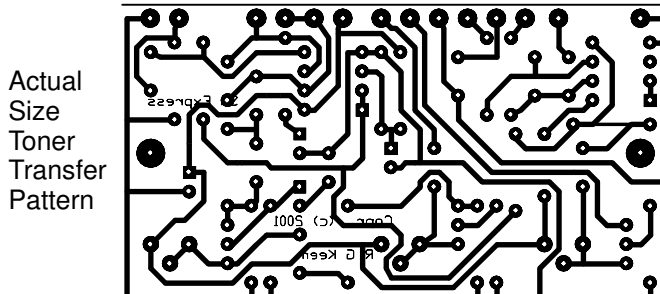
The circuit as shown inverts the phase of the signal from input to output. This may cause cancellation problems in some setups. You might need to add a phase inverter before or after it to preserve phase in those limited circumstances.

I had these two extra opamps, so I used one of them to make an opamp buffered bias voltage source. The other is just tied as an inverter, so it's not oscillating.



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