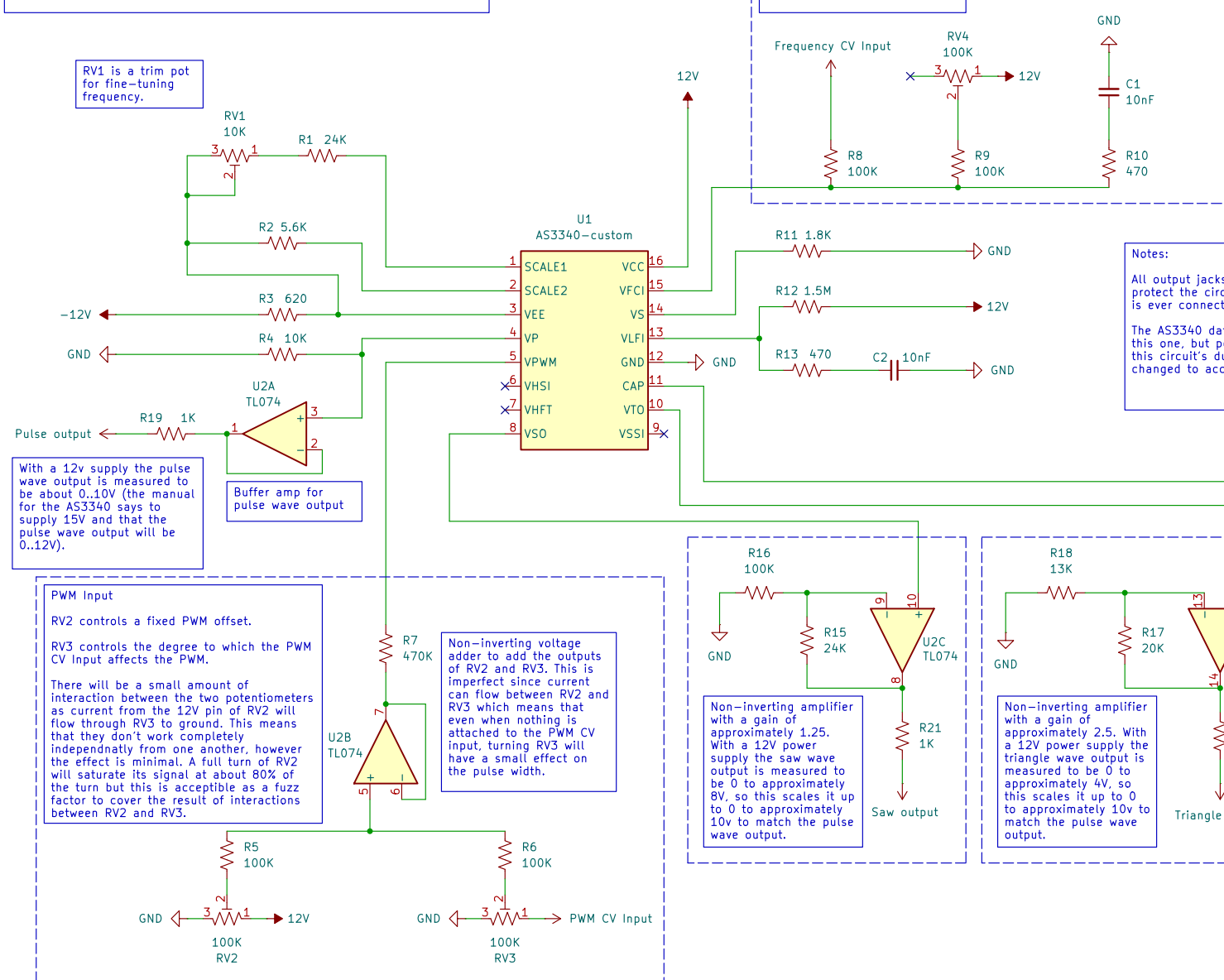


Based on these designs:

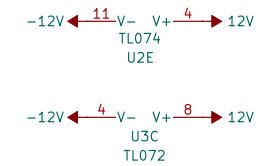
- <https://www.lookmumnocomputer.com/projects#/cem-3340-diy-simple>
- <https://youtu.be/GsTG2V7tcU>

RV1 is a trim pot for fine-tuning frequency.



All output jacks connect to the circuit via a 1K resistor to protect the circuit from drawing excess current if the jack socket is ever connected directly to ground.

The AS3340 datasheet gives an example circuit very similar to this one, but powered with a dual 15V power supply instead of this circuit's dual 12V power supply. Component values are changed to accomodate for the different power supply voltage.



Higher capacitance means a lower frequency. The design this is based off used lower valued capacitors here but I found these values to produce a more useful low-end of the frequency spectrum produced by the oscillator.

Non-inverting amplifier with a gain of approximately 1.25. With a 12V power supply the saw wave output is measured to be 0 to approximately 8V, so this scales it up to 0 to approximately 10v to match the pulse wave output.

Non-inverting amplifier with a gain of approximately 2.5. With a 12V power supply the triangle wave output is measured to be 0 to approximately 4V, so this scales it up to 0 to approximately 10V to match the pulse wave output.