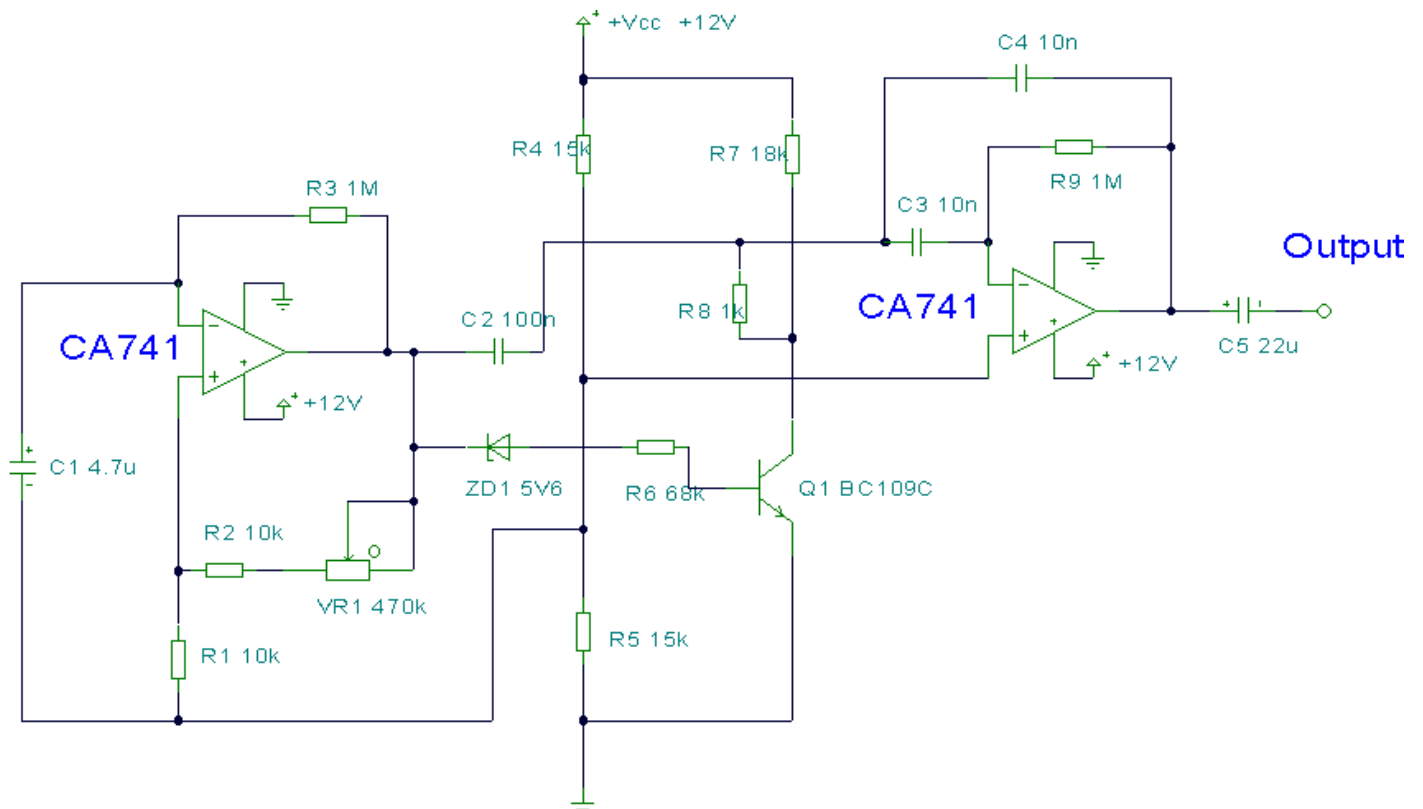


# Metronome Circuit



## Notes:

This circuit uses a couple of Op-amps to produce an interesting sound effect. The left hand CA741 is wired as a standard astable and produces the timing pulses, controlled by C1, R2 and VR1. The output is fed via C2 to the second op-amp and is also direct coupled via the zener ZD1 to Q1. The right hand CA741 is configured as an integrator, its purpose being to distort the output pulse from the first op-amp. This produces a ringing effect on the output pulse and gives the circuit a characteristic "tick" sound. The output pulse at the first op-amp will cause the zener and Q1 to conduct on every positive transition. The 1k resistor R8 then acts as a low impedance shunt at the input of the integrator and produces a characteristic "tock" effect. R8,R7,R9,C3 and C4 may all be adjusted to tailor the sound effect.