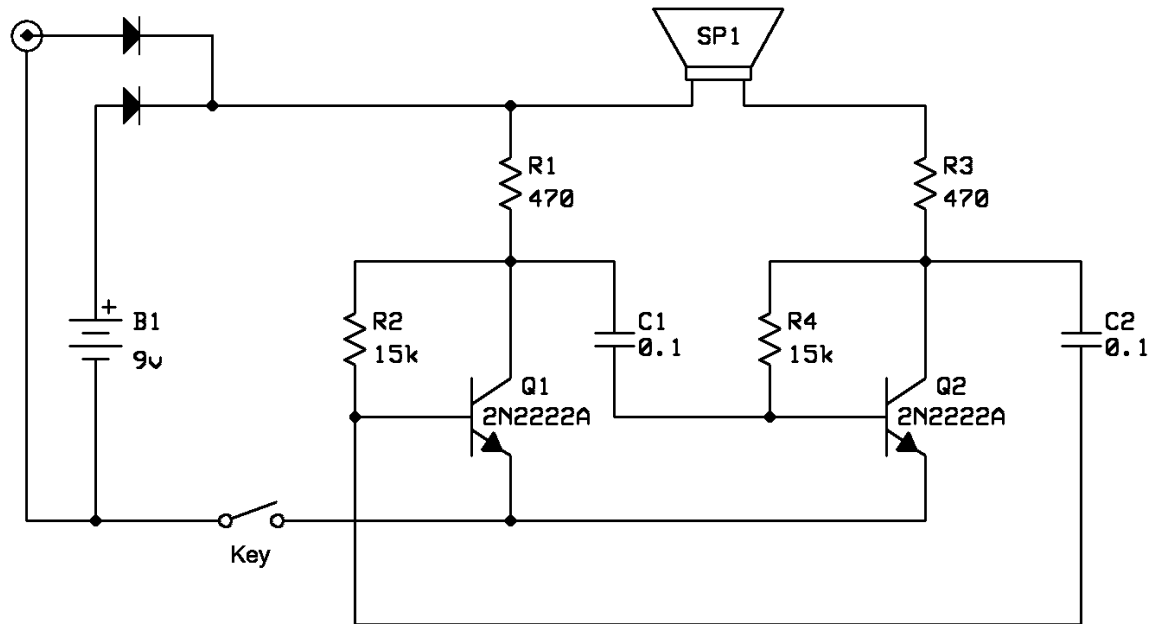


**A very simple morse practice oscillator by Paul Evans, W4/VP9KF, G4BKI and EI6LC. 2020-04-11**

This project is extremely simple and constructed to fulfill a function I couldn't find in an 'internet buy a gadget' class of items (well, there are a couple, but they cost a few dollars). A small square of vector board (or Vero board) can be used to make this handy little circuit.

The oscillator is directly keyed on and off by the key in the ground side of the supply. Two voltage supplies can be used; a 9 V battery or an external 12 V supply (both with polarity protection diodes, just in case). The sound of the tone is quite pleasant and is about 600 Hz, which should suit most users. 2N3904 transistors can be used or BC107/BC108. Only two resistor values and only one capacitor value make construction a 'snip'.



Parts cost: about \$3, including box, board and other parts. All came from my scrap box.



**Please note: This circuit is open-hardware. Do not change these notes or remove reference to the design source. You may link to it, but do not copy to other servers or group files.**