

The PCB you have purchased is organized a certain way and it is recommended that the parts be added in a certain order (this is only a recommendation). The first thing is to compare the schematic with the PCB. **Figure 1** is the schematic from the Nuts & Volts article. The major sections are shown.

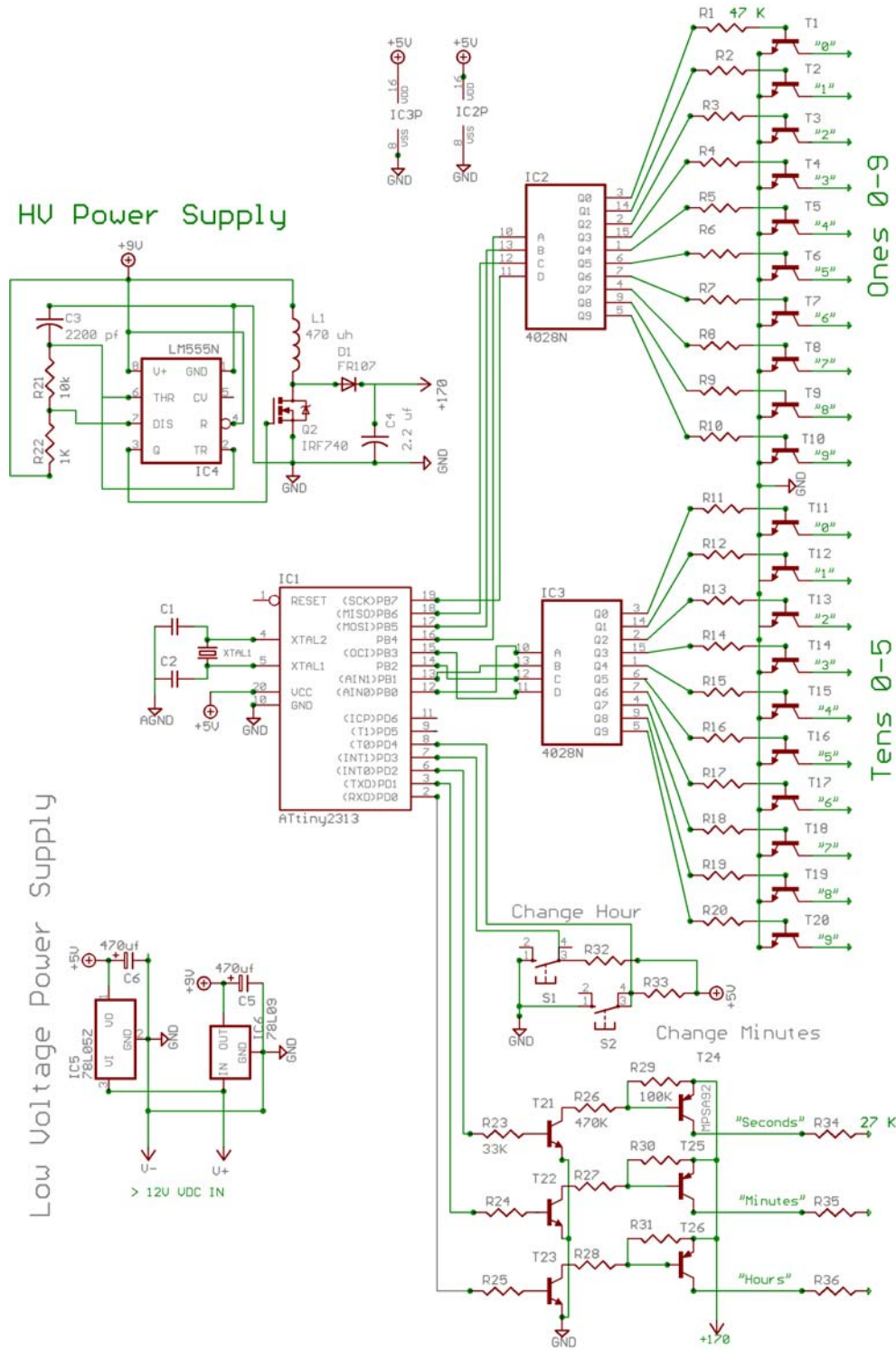
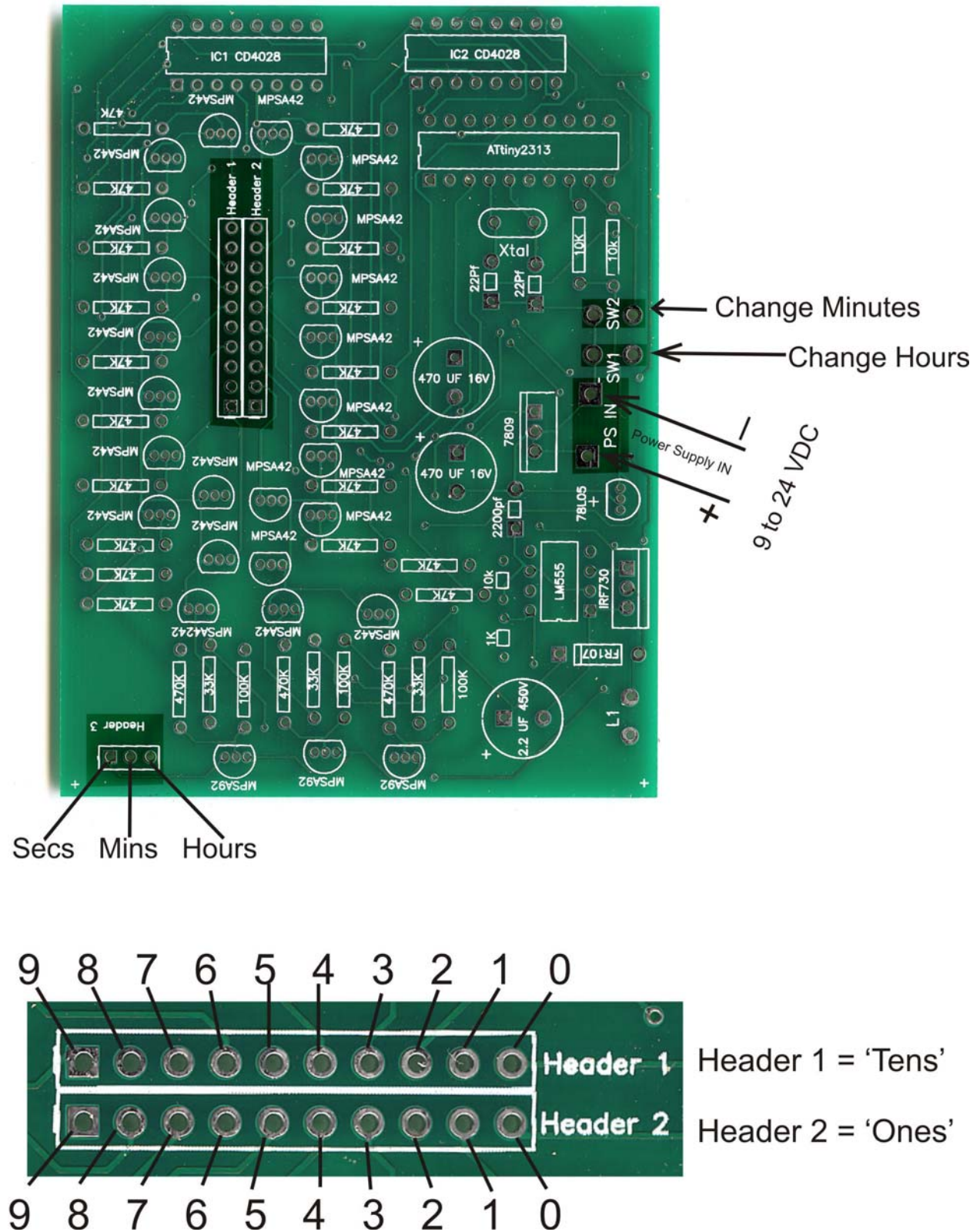


Figure 3 shows the connections and the pinouts for the PCB



There are a number of things that the builder must be aware of when soldering up the PCB. The primary one is the High voltage section. When connected and powered up the HV generator can deliver 300V DC, under load this drops to around 150V DC. This is a substantial voltage and can deliver a powerful shock. **Always be aware of this. Once soldered in don't touch this section.**

Semiconductors are heat sensitive, when soldering the transistors try and heat them just enough to solder them but not get a cold joint. **Never heat them for more than ten seconds.**

The best way of assembly is to follow a logical order. I install the components that are closest to the board first, usually in this order:

- 1: Sockets (if there are any)
- 2: Resistors
- 3: Small capacitors
- 4: Transistors
- 5: Tall capacitors, cables and connectors

Have fun assembling the board.

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