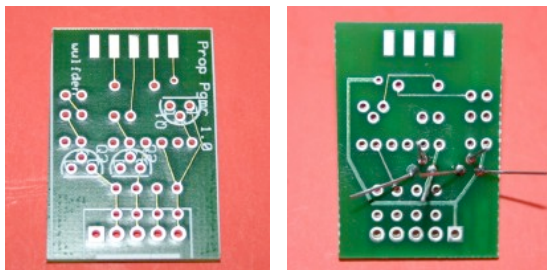
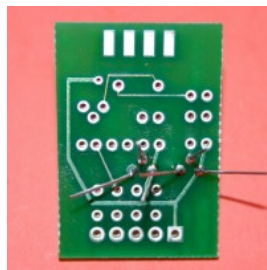


## 1. P1 - Assembly Instructions

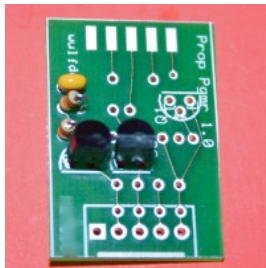
- The P1 pcbord (figure #1). Please take note of the double row of 4 holes immediately above the holes for the J5 connector. Nothing goes into these holes under most circumstances. However if you have reason to rearrange the i/o signals and voltage input, you may cut these four traces and solder in jumper wires to make the connections as you like
- We will populate the board in sections, stopping to solder and clip leads after each section. The density of the board is such that doing all the resistors at once makes for very awkward soldering.
- Referring to figure #2, identify and insert the two NPN transistors, Q2 and Q3 (2N3904), into the first row above the double row of 4 pins. Observe the body outlines on the silkscreen. Solder and clip leads.
- Refer to figure #3, Insert resistors vertically bend top lead down - R1 (10Kohms brown-black-orange), R2 (10Kohms), and C1 (.01 uF marked "103" or "153") moving up from Q2. Solder and clip
- Refer to figure #4. Insert R3 (10 Kohms), and R4 (10 Kohms) vertically working up from Q3. Insert R5 (10 Kohms) horizontally. Solder and clip
- Refer to figure #5. Insert vertically R6 (4.7 Kohms yellow-violet-red) to the right of R3, the insert R7 (1 Kohm brown-black-red) to the right of R6. Insert transistor Q1 (2N3906) above R7. Observe body outline and orientation in silkscreen. Solder and clip
- Push the DB9 plug pins over the edge of the boards. On some of the boards they do not line up perfectly but well enough that they can be soldered on without making any unwanted solder bridges. Figure #6 covers this and the next step.
- Attach the 5 pin female socket header and solder. If this board is going to be used just for breadboard work, you may wish to substitute a 5 pin, straight up header section, inserting it from the solder side of the board with the long pins down, and soldering on the top side.
- Slide DB9F on as appropriate and solder. Inset right
- Slide the clear heatshrink over the unit and **gently** heat with a heat gun or over a stove. Hold unit with forceps or hot dog tongs and keep it moving so as not to damage the board or plastic connectors
- The Pinouts of the P1 header connector as as follows. Holding the P1 with the socket header towards you and the DB9 away. (refer to figure #6) Left to right, Pins 1(square pad), 2, 3, 4 & 5;
  - Pin 1 - Vss (Gnd)
  - Pin 2 - Reset
  - Pin 3 - TxD
  - Pin 4 - RxD
  - Pin 5 - Vdd (+ 3-5 volts)



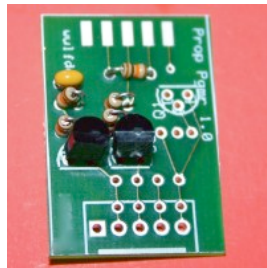
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2



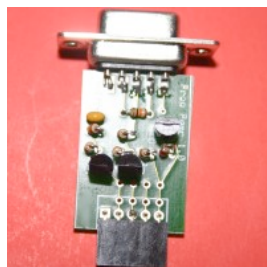
3



4



5



6

Wulfden P1 - Propeller/Basic Stamp  
Programming Adapter, adapted from a  
circuit on the Parallax Forums

<<http://www.wulfden.org/pa/>>

PC Serial Port

