## Assembling the PCBSNR kit – version 1.5

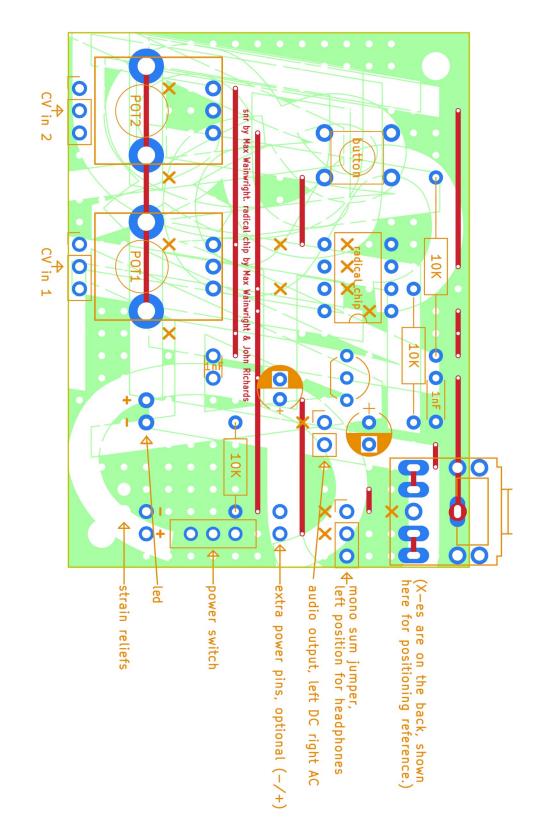
First, a list of components. They are listed in the suggested assembly order. **Begin from the top of the list,** and check the boxes as you go along. I suggest you watch some soldering tutorials before you begin if this is your first DIY project ever. One note about the PCBSNR – it's modelled after a strip-board synth, so it has a lot of extra holes that you can mistakenly put the components in. Make extra sure you've put the component in correctly before soldering. The holes for components have a bigger silver ring than the other ones. Double check!

The extra holes mean that the SNR is easy to modify. See the website below for tips.

- □ **1x** socket, 8-pin DIP
- □□□ **3x** resistors, 10kOhm
- **2x** electrolytic capacitors, 47uF 16V **note orientation,** long leg = +!
- **2x** ceramic capacitors, 1nF (brown with marking: 102)
- □ 1x 78L05 voltage regulator (black, three legs) note orientation!
- **1x** momentary push-button changes the program **note orientation!**
- □ **1x** slide switch
- **1x** led, red and rectangular **note orientation,** long leg = +, to the left!
- □ **1x** mini jack, audio output
- □ **1x** 3-pole pin header, for mono sum.
- **1x** 2-pole pin header. For patching or dc coupling output.
- 2x potentiometers. Insert firmly, don't bend the legs, and check before soldering!The three legs should be oriented up, towards the chip socket.
- □ □ **2x** 3-pole pin headers *or* socket headers, that go "underneath" the pots. For patching. The middle pin is the input (0-5V), the outer pins are ground.
- 1x PIC12F1840, or Radical Chip. Carefully place over the socket, with the little Ushape (notch) facing right and gently push down. The legs are pre-bent so it should fit fine on the first try. Note the orientation: notch right.
- 1x battery lead note the two holes in the PCB for strain relief. Run the wires through these from behind the board, before you solder them on. This will greatly improve their longevity. Note the orientation: positive (red) to the right, negative (black) to the left.

If you want to, you can avoid batteries by soldering on a DC barrel jack socket, e.g. Boss standard (centre negative) instead of the battery clip – or better yet using an adapter from dc plug to battery lead.

The diagonal screw holes (M3) are useful if you want to attach the SNR onto something. Distance is: vertical: 38.1mm horizontal: 54.24mm diagonal: 65.55mm.



The symbol for the headers looks like this:  $\Box$  (the rectangle is a square for the two-pin header). Orientation does not matter, but do note that the pin headers need to have the long pins facing upwards, the short ones go in the board.

For more information: <u>www.noise.technology/diypcbsnr.html</u>, or email me.