

1. Tight Layout. Austin crams a LOT of electronic parts onto a 40mm x 35mm printed circuit board. Components are close together, making it easy to accidentally create a solder bridge that shorts two nodes together. I gently suggest that Austin might be a little too much of a challenge for beginners, newbies, rank amateurs, and oh so casual builders. If you haven't soldered at least ten other PCBs already, I recommend that you hire a very experienced person to stuff and solder the Austin PCBs for you. Austin boards are quite a bit more **busy** than the other M2X input stage daughter cards.

If you decide to solder your Austin boards anyway, please make sure you've got adequate lab equipment to, at the very least, apply the requisite  $\pm 25\text{V}$  DC power supplies and measure the supply current. If you've got an incorrectly assembled board, it's vastly preferable to have it catch fire on your lab bench, near your lab fire extinguisher, rather than inside your M2X amplifier.

2. Transistor Orientation. I expect that many builders will substitute different bipolar transistors in their Austin boards, either to use what they've already got, or to "improve" the Austin circuit, or to avoid ordering a new transistor type they've never used before, with a goofy sound prefix (KSA/KSC?? c'mon, really?). So I've used a PCB footprint that is circular and symmetric. It will accommodate Japanese transistors with ECB pinout, it will accommodate European transistors with CBE pinout, it will accommodate American transistors with EBC pinout. HOWEVER, it is the builder's responsibility to look up the pinouts of the transistors s/he is using (it's on the datasheet), and to correctly orient the transistor on the board so the Emitter pin goes into the hole labeled E, the Collector pin goes into the hole labeled C, and the Base pin goes into the hole labeled B. It is very easy to make a mistake when doing this; I got it wrong myself when building early prototypes of the Austin board. Go slow, be careful, and check your work. Twice.