

# PYRAMID AUDIO

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## Repairing the SX-780 with the STK0050+

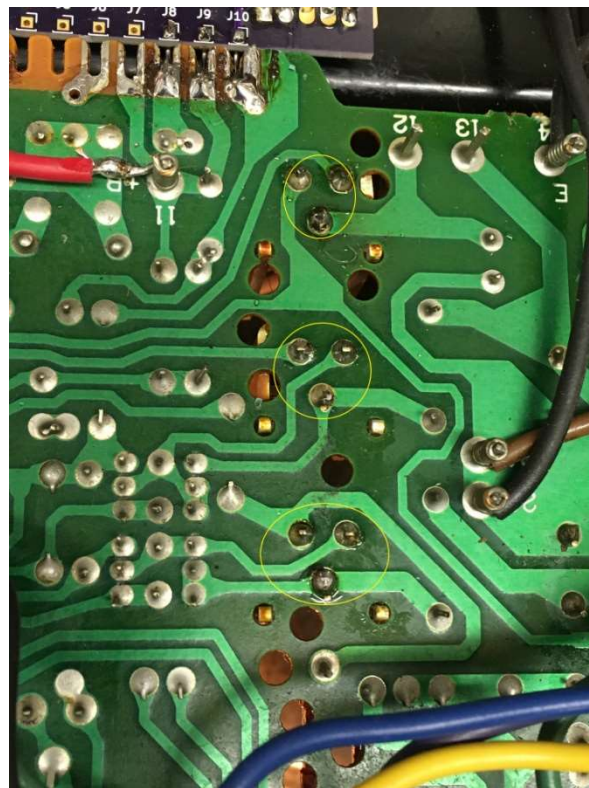
Make sure only the STK needs replacing. Check the emitter resistors. The new PCB has the pins labeled. You should measure about 1 Ohm from pin 3 to pin 8 because pins 3 and 8 connect to emitter resistors on the PCB. These open up sometimes. Replace as needed.

Ohm out the rest of the STK. No adjacent pins should measure shorted, not even close. If you find a short you have identified a bad STK. Remove the bad STK and clean up the white paste. Don't lose the screws, you will need them later.

Now we can test the SX-780 without the bad STK.

Connect pad 1 to pad 3 and pad 8 to pad 10 with resistors, 220 to 1000 ohm will do.

Resolder these 3 regulators. Even with small aluminum heat sinks they are famous for heat stress bad solder joints.



TEST with NO LOAD, NO SPEAKERS. Headphones are ok if you don't have a scope.

Connect your scope to a bypass resistor. It does not matter which resistor or which end of the resistor you chose.

Set scope to 20V/division and 1mS/division. Drive the AUX input with 500 mV at 400Hz. Set the receiver to AUX and the VOLUME to ¼ or less.

**TURN IT ON** with the bypass resistors in place and the rest of the amp is ok, the traces should stay within 0.2 volts of zero. With the regulators soldered and working the relay should close and produce sound. YAY! The rest of the circuit is good!

If not, DO NOT proceed until you find the problem and pass this step. Otherwise, you may ruin a new module.

### **Installing the STK0050+**

Clean away all of the previous white paste. Place the silpads then set the module in place.



The 6 wires should fit neatly in the slots of the PCB. Solder them next.

Tighten the transistor screws. Time for a smoke test.

The bias is preset during testing. Nothing left except music and maybe re-lubing the controls and switches.