

# PYRAMID AUDIO

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## Repairing the Kenwood KR-9600 with the TA-200W+

Maybe your symptom is the speaker relay won't close and it is not blowing fuses. You need to make sure only the TA-200W+ needs replacing.

Un-plug your amp and Ohm the TA-200W. No pin should measure shorted to pin 5, not even close. If you find a short you have identified a bad IC. Remove the bad old TA-200W and clean up the white paste, alcohol works best.

Now you can test the rest of KR-9600 without the old TA-200W.

Connect pad 3 to pad 5 with a resistor, 220 to 1000 ohm will do

Connect pad 8 to pad 5 with a resistor, 220 to 1000 ohm will do

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 POWER IN with 500 mV at 400Hz.

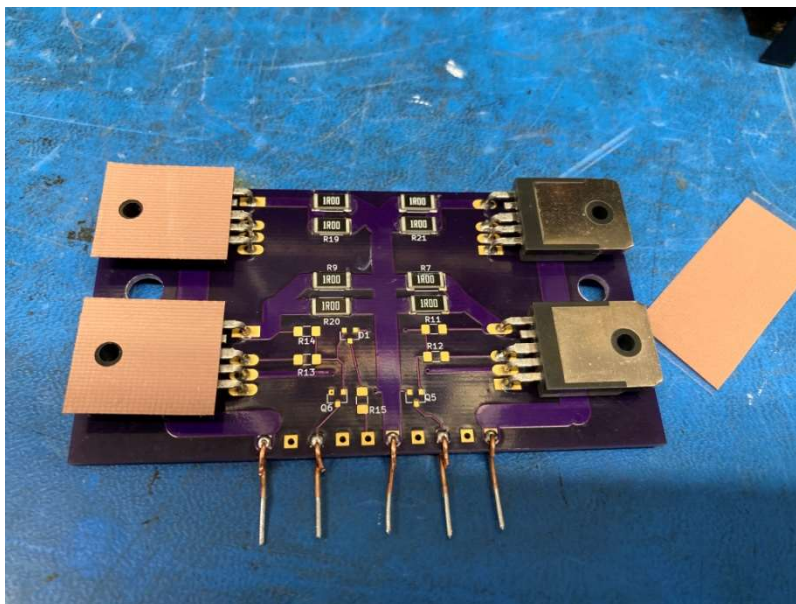
**TURN IT ON** with the bypass resistors in place, if the rest of the amp is ok the traces should stay within 0.2 volts of zero. If the rest of the KR-9600 is ok the relay should close and produce sound. YAY!

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

If it works, NOW is the time to use the PRE OUT to catch other problems like noisy controls and switches and power supplies. By the way, every KR-9600 I have seen needed the speaker relays polished and the 2SC1345 on the driver PCB replaced. Plus the kit comes with 2 KTA1024 to replace the two 2SA912 on the driver board. This prevents parasitic oscillation in the MHz range. The label side faces the same way.

## Installing the TA-200W+

PEEL AND STICK the silpads to the back of the power transistors. Thought I'd make this whole process easy.



Speaking of easy, line up the hardware next. Bolt-Lockwasher-ClampBar-Barrel bolt. The clampbar is not flat on purpose. The slight bumps go down against the PCB.



Insert the TA-200W+ into the driver PCB. Line up the new TA-200W+ holes with the heat sink holes.

Don't solder it now, that will be the last step to avoid stress on the solder joints.

Insert the hardware and snug it up tight. Now, solder the pins. Time for a smoke test.

Honestly? When I tested these, half of them didn't work only because I got distracted and forgot to solder the module to the PCB. Please double check your solder.

The bias is preset during testing. Nothing left except music.