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Loudmouth - Occasional No Audio Output

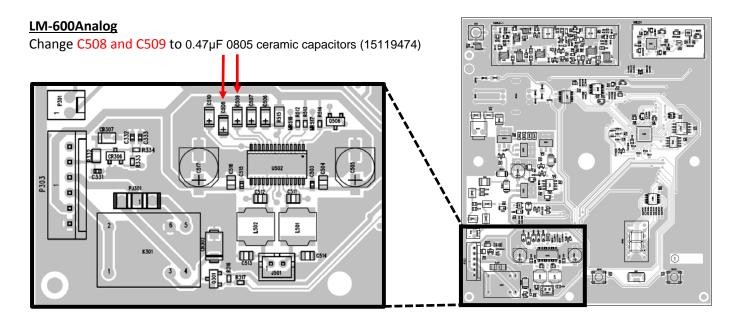
Loudmouth Models covered:

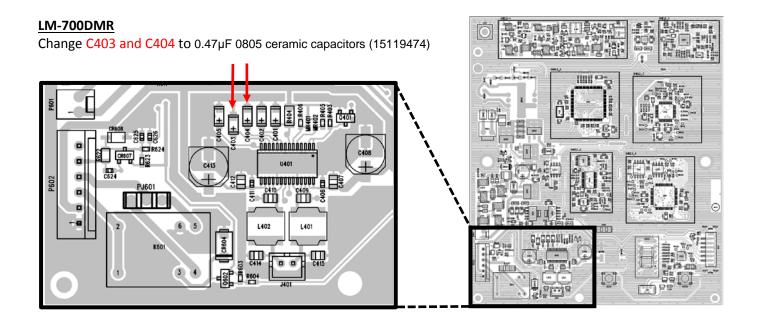
LM-600Analog, LM-700DMR, LM-U450, LM-V150

Change audio PA input capacitors from 1µF tantalum capacitors (152A8105) to 0.47µF 0805 ceramic capacitors (15119474)

This change is to correct a problem where the Loudmouth will occasionally not pass received audio to the speaker. The radio gives every indication that it has received a valid signal (ie. relay closes, SQ indication on display), but received audio is not heard on the speaker.

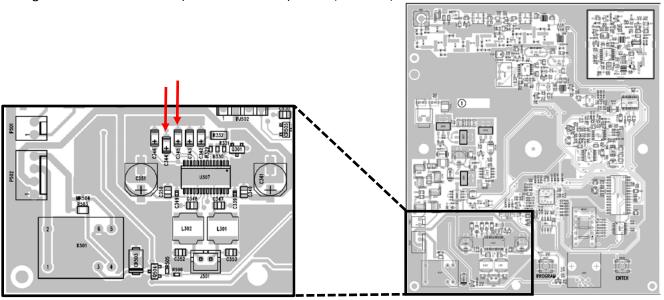
The problem is due to reverse voltage on the audio PA tantalum input capacitors when the radio is in standby mode. When the radio goes to receive mode the voltage reverse on the capacitor causes an input voltage offset on the audio PA that triggers an internal shutdown. This appears to be a condition that is more likely to occur over time.





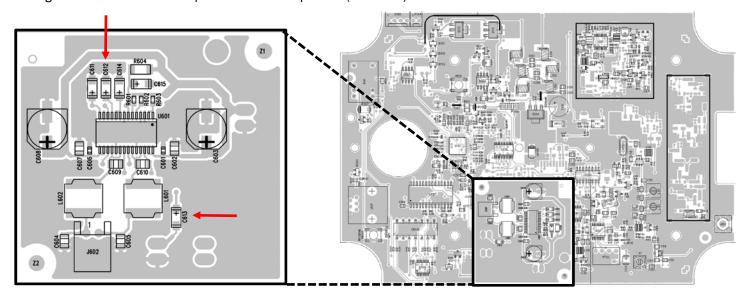
LM-U450, LM-V150 Gen 3

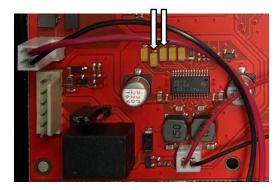
Change C344 and C345 to 0.47µF 0805 ceramic capacitors (15119474)



LM-U450, LM-V150 Gen 2

Change C612 and C613 to 0.47µF 0805 ceramic capacitors (15119474)





Before Change – Tantalum capacitors



After Change - Ceramic capacitors