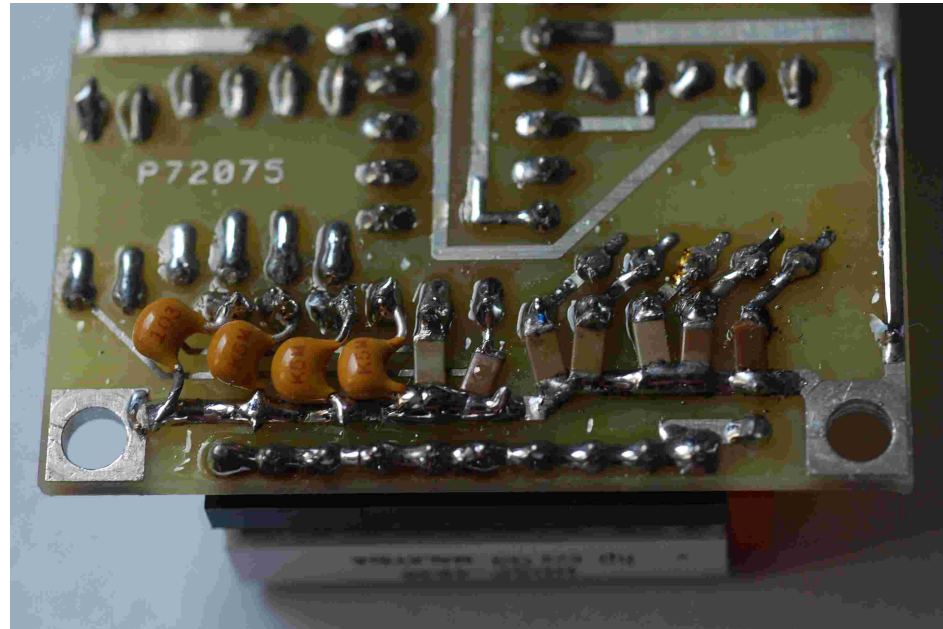


An EMI mod for the Grandson of Zerobeat kit
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Chuck Olson, WB9KZY

Jackson Harbor Press
<http://wb9kzy.com>
wb9kzy@wb9kzy.com



After installing the Grandson of Zerobeat prototype in a plastic case, I noticed some “scratchiness” while listening to SSB on a “random length” type of antenna (a no-feedline, single wire antenna connected directly to rig). I hadn't noticed this with a coax fed antenna. It finally dawned on me that the LED switching was responsible for the noise (proved by turning off the power to the kit).

As shown above, 11 x .01 uF caps were added on the bottom of the board, each connected from an LED cathode to ground. 4 are through hole parts, 7 are 1206 sized SMT caps.

It looks ugly but this seems to quiet the interference.