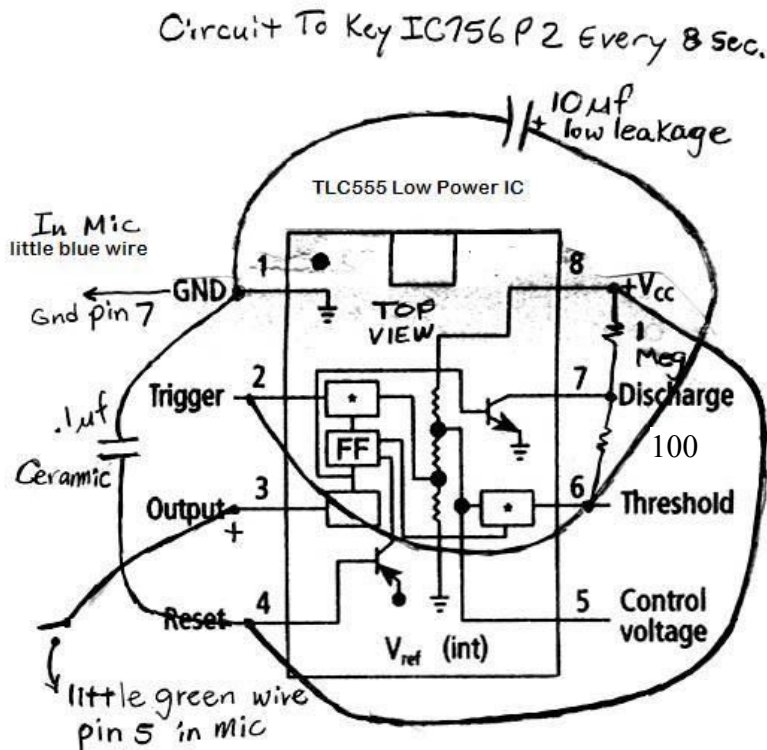# ICOM 756 Pro II and Pro III Automatic Mic Keying Circuit For Better NR

The noise reduction works well on the Icom 756 P2 and P3, except it does have one irritating little feature. If you are listening to cw on a narrow filter (600 Hz or less) and have the NR set to mid scale (knob mark is on top) then after a while every static burst or key down cw signal has a rather loud pop sound on the leading edge. If you key the mic you will notice that the popping sound goes away for a few seconds and then slowly returns. This effect is worse on the Pro 2 than the Pro3 which was supposed to have this problem fixed. Well, Icom only partially fixed the problem. I owned and sold a Pro 2 and then bought a second hand Pro 3. I can tell you that the problem still exists with the Pro 3 except to a lesser degree. The Pro 2 works as well as the Pro 3 when this PTT circuit is added to your hand or desk mic. So, don't sell your Pro 2 just yet, if this popping noise is bothering you. Below is a circuit that will fix this problem.

The fix for the leading edge pop problem on the Pro 2 and 3 is to automatically key the mic every few seconds for a very short period of time using an electronic circuit to key the mic. You will need to buy the following items: a TLC555 low power timer (Radio Shack has them), a 1 meg resistor, a 100 ohm resistor, a low leakage 10 uf capacitor (preferably a tantalum capacitor), a 0.1 uf disk or ceramic capacitor, and a small single pole single throw slide switch.   The circuit below shows how to wire these together to provide a PTT on your rig about every 8 seconds.

Circuit To Key IC756 P2 Every 8 Sec.

I have wired up two of these circuits. Here is the latest one. Note that I used a socket so I could test other TLC555 ICs in case one did not work. The first one I tried worked fine. The SPST switch is glued to the mic's PC board. I used a pocket knife to carefully carve out the opening for the switch (take your time).
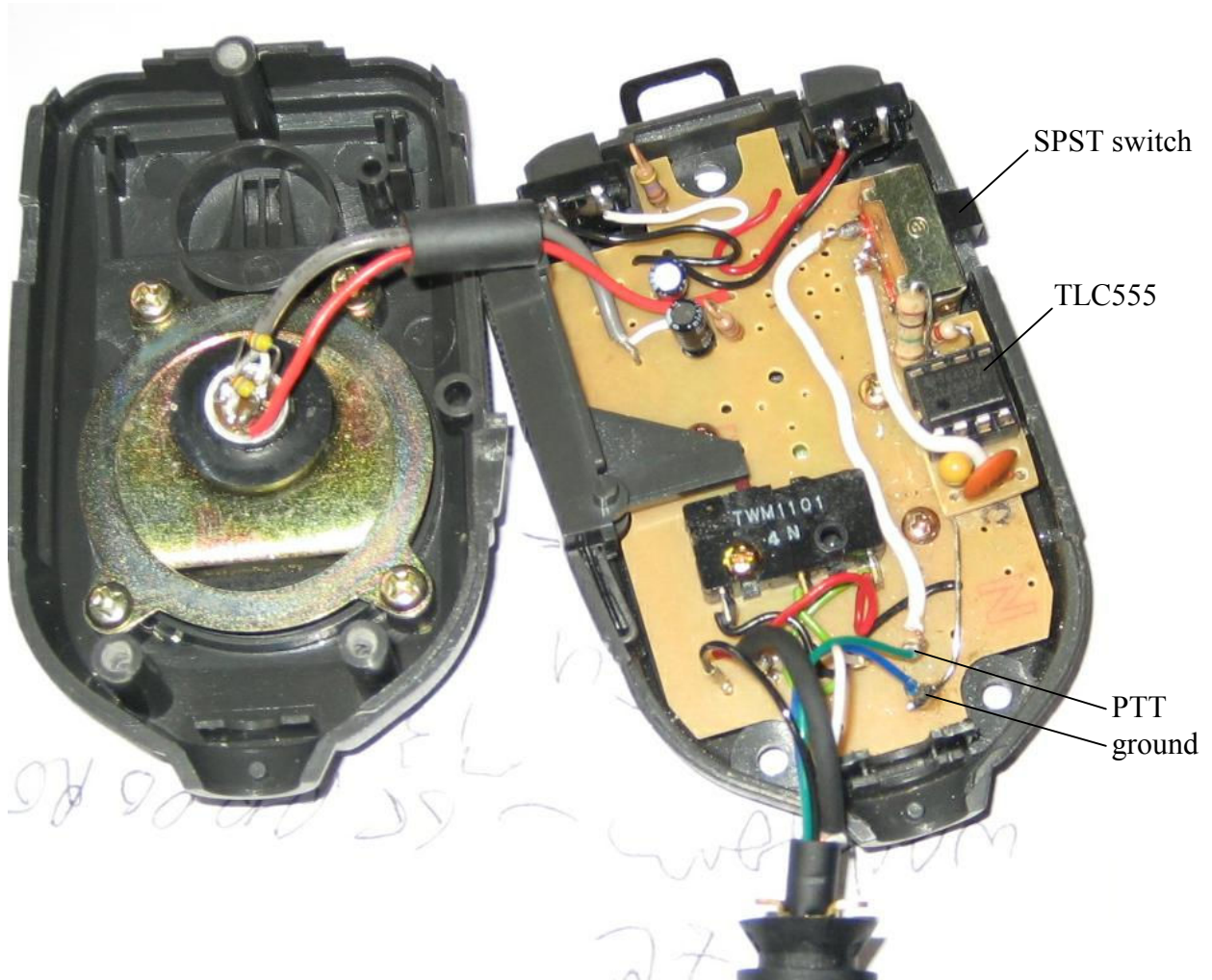
73 de K5GP, Gene
http://egpreston.com

ps: listen to http://egpreston.com/IC756P3_pop_noise.avi to hear what the popping sound is like and what keying the mic does to remove this noise.