

Subject: DC/RF Sensing PA Switching

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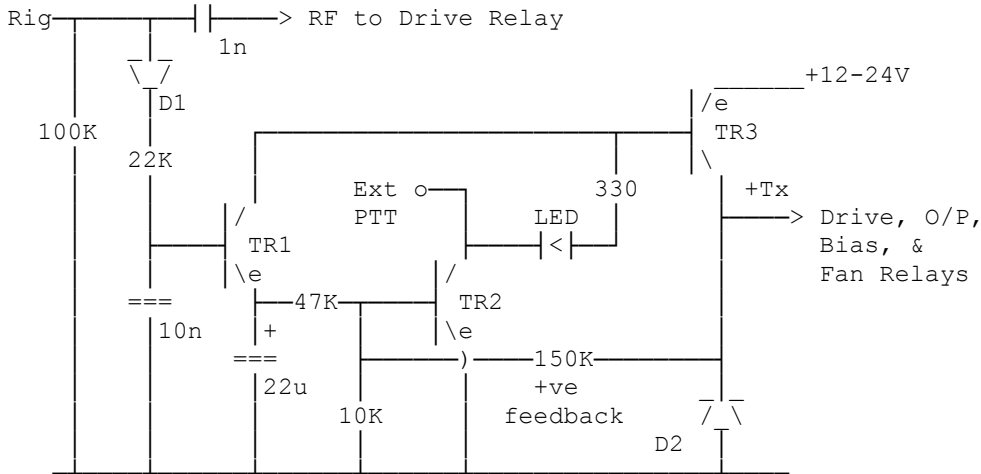
To : TECH@WW

By G8MNY

(Graphics updated Dec 03)

For PA with RF/DC sense switching (as some rigs put out DC on Tx), that used a diode to detect any +ve signals (RF/DC) on the transceiver to operate the PA PTT system....

The time constants are ok for SSB & FM, but 22uF can be omitted for FM only. TR1 & 2 BC107 etc, TR3 a TIP type PNP, D1 rf diode 1N4148 etc, D2 1N4001.



HOW IT WORKS

D1 detects RF & passes any DC to turn on TR1. TR1 turning on charges up the 22uF & makes TR3 initially conduct to give fast Tx attack. When 22uF is over 2V TR2 is turned on & passes higher base current into TR3 via a Tx LED ensuring it is well turned on. The 150K +ve feedback ensure snap action.

External PTT earth can be put in/out on TR2 collector.

I have found it was heat sensitive, due to the sensitivity of the 1st NPN.

Why Don't U send an interesting bul?

73 De John, G8MNY @ GB7CIP