## Simple Transverter Interface for FT-817/FT-818

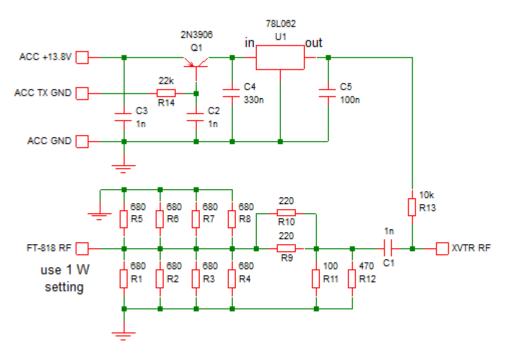
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I needed an interface for a very specific application and it turned out to be pretty simple. My 24 GHz transverter has oodles of conversion gain...too much really, resulting from it being a dual-conversion design with gain stages at 24 GHz, at the  $1^{st}$  IF of 2304 MHz, and at the  $2^{nd}$  IF of 144 MHz. It was designed to operate with an FT-290R running in the low power setting (50-100 mW). The FT-290R also provides a positive voltage through a large resistor on the antenna jack, when in the transmit state.

When the time came to replace the ailing FT-290R with a new FT-818ND, I didn't want to modify the transverter. The following circuit allows the FT-818ND (or an FT-817/817ND) running 1 watt output to emulate an FT-290R in the low power setting. In many cases the attenuation in the interface circuit provided by R1-R12 will be too much to maintain transverter receive sensitivity, but in my specific case it was just right, due to the excess gain in the transverter.

Having read how the 13.8V output from the FT-817 ACC jack can be easily damaged by a short circuit, I may add a fuse in that line.



24 GHz Transverter FT-818ND Interface Circuit May 2019