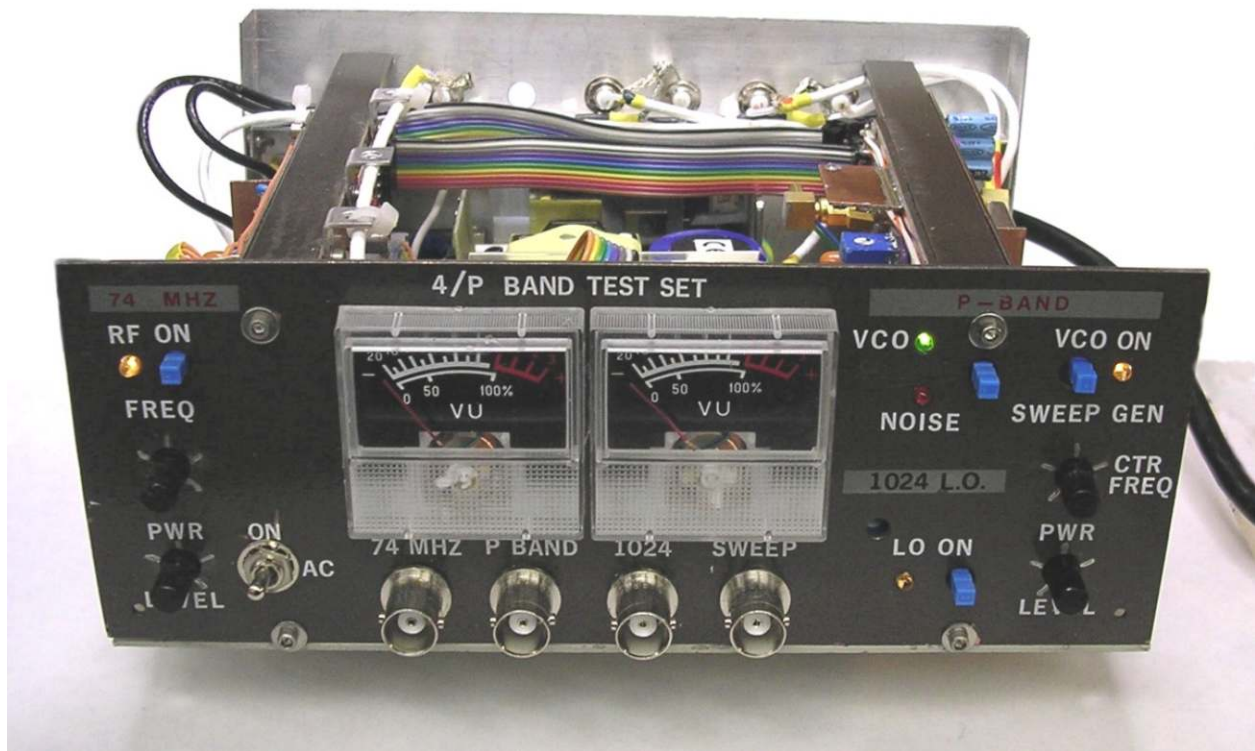


The "4/P CONVERTER TEST SET" – MANHATTAN STYLE

This is a specialized piece of test equipment that simulates the 74 MHz (4-band) and 308-348 MHz (P-band), in addition to the 1024 MHz local oscillator and a 50–1000 MHz noise generator. These signals are used for testing and calibrating the "4/P Converter" module. This EVLA module simultaneously upconverts the 74MHz and P-band receivers to an L-band IF (1100–1450 MHz). The test set was built "ugly style" using copper clad "Manhattan pads" since it is a one-of-a-kind. Without this test set, three of the labs signal generators would need to be used – and finding 3 not being used at any given time is next to impossible. It has proven to be quite useful, and it's small size allows it to be taken up into a VLA antenna to test the 74/P-band equipment "in situ."



Most parts came from Mouser or MiniCircuits. The copper clad, meters and a few other parts were purchased from Electronic Goldmine. The rest of the parts were lab stock or what could be scrounged around the lab. Metal work was cut, bent, drilled and milled in our own model shop. I used copper clad pads made from a nibbling tool for the most part, or long, narrow strips for Vcc runs, etc.

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