G3VPX "PEAK-SWR" PCB

http://www.g3vpx.net/peakswr/peakswr.htm

MODS BY VK3PE APRIL/JULY 2014

Tx INPUT

COAX CABLE

FT50-43 TOROID

10 bifilar turns (5+5)

ANTENNA

VK3PE's setup values.

The values of R5 - R6 and R9 - R10 were reversed from the Schematic by G3VPX in order to obtain a better range. The values used are now shown on this Schematic.

On test into a good dummy load of 50 ohms, with Approx. 100W fed into the board from PICASTAR, the trim pot VR2 was adjusted for ~4.8V in the forward direction.
The trim cap. VC1 is then adjusted for minimum reverse voltage.

Then, the input/ouput coax cables were reversed and the 'reverse' pot VR1 was adjusted also for 4.8V

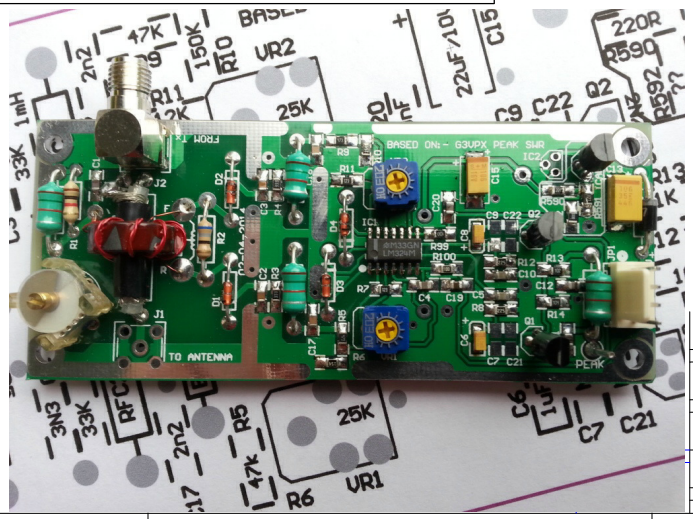
Power was then fed into the input side again (with 50R load on output again) to check the residual reverse voltage. It was about 0.37V A little higher than expected as it equates to about a 1.17:1 VSWR. (The load used is known to be better than that)

If using with Trxavr, then ensure the maximum input from PEAK SWR does not exceed 5V into the analog port of the Atmega device ! You may need to alter some values in the input section of Trxavr.

VK3PE used an LM324 in his version. This is not a rail to rail Op-Amp like the specified TLC2264 device used by G3VPX.

WIRE LINK FOR PEAK MODE

Alternate to IC2



170714 op amps are not LM324 in original design

180414 add o/p Zeners to Sch but not PCB

Updated on:	April 2014
Updated by:	vk3pe

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