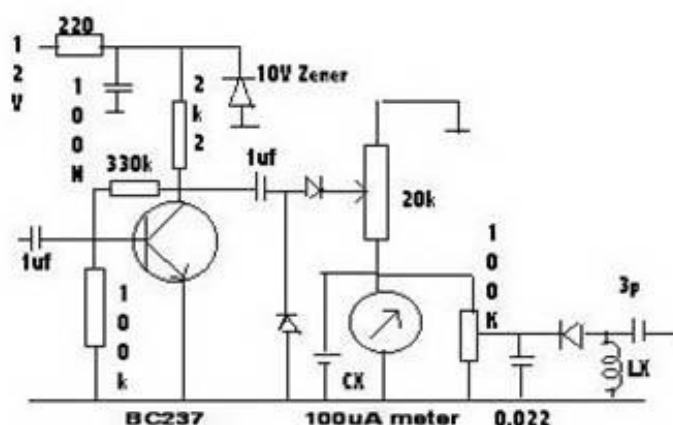


Add A Relative Power And S Meter To Your Radio

By Kevin Mc Donald ZS6KMD

The original design for this little gem of a project is courtesy of Bill Bartlett G4KIH and kudos to him for sharing it with us. I have built and tested the circuit for use on my Pixie "Real Ham Radio" featured in a previous article in the magazine. The physical size of the board I used was about 3 x 3 cm of Vero board.

Adding this circuit to a homebrew PIXIE or other QRP radio just provides that final touch making for a professional little radio. The project can be build Manhattan style or on a small piece of Vero board.



Like I said, construction is not critical remembering to just keep component leads short, use screened cable from the RF pickup to eliminate noise and that is about it. All resistors are 1/4W and all capacitors are 25V for electrolytic and 50V for ceramic. Diodes are all Germanium (OA90/91 or equivalent) excepting for the 10V Zener. Normal signal diodes (1N4148) could be used with a loss of sensitivity.

The meter I used was salvaged from an old Zodiac CB radio. CX is selected for required meter dampening and should be a value between 47 and 100uF.

Typical values for LX are: 80m – 1mH, 40m – 180uH, 20m – 47uH, 15m – 18uH and 10m – 10uH.

Note: The input of the 1uF capacitor to the "S" meter goes directly to the input of the audio amplifier, and the RF pickup (3pF) for the relative power meter is a direct connection to the transmitter output.

The meters can be calibrated using the 20K and 100K mini potentiometers for full scale reading.

Happy Building

73 de Kevin ZS6KMD