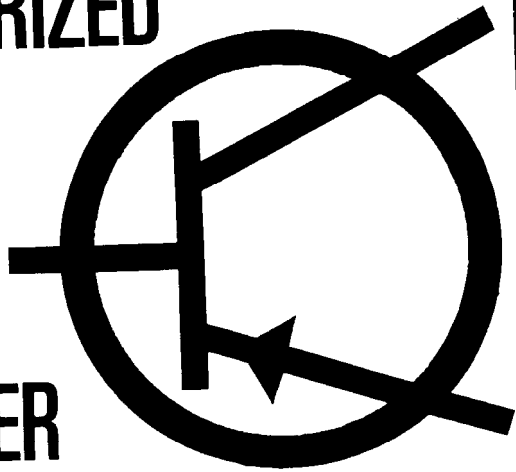


A TRANSISTORIZED 10 METER DSB TRANSMITTER



by Roland L. Guard, Jr. K4EPI

The DSB transmitter described herein uses crystal control and runs 1 watt or so, which can be used barefoot or to drive an rf amplifier.

The unit should be assembled in a small minibox or built on perf-board or PC board and then installed in a small minibox, as stray hand capacitances can upset the carrier balance.

The transmitter consists of speech amp, carrier oscillator, balanced modulator, and PA stages.

The amount of carrier suppression available with a diode-type balanced modulator is -40 dB.

Care should be taken in selecting the diode pair. Check the forward resistance of several diodes with your VOM until you find two with the same or nearly the same forward resistance. Germanium diodes were used in this unit which were in a grab-bag pack of 50 for \$1 from Poly-Paks. The diodes should read at least 10:1 (forward-to-reverse resistance ratio).

Capacitors C2 and C3 are 30 pF variables. Cb is a variable, and capacitor C1 is a 4-30 pF trimmer. Coils L1, L2, and L3 are ¼ in. slug-tuned types removed from a TV PC boards many types of these coil forms

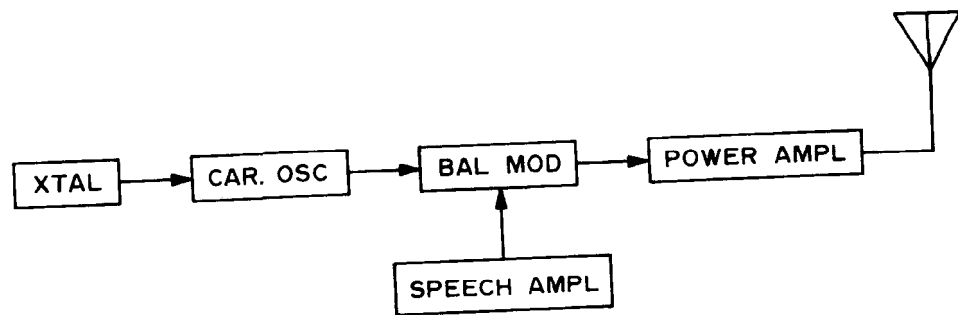


Fig. 1. This block diagram shows the simplicity of the homebrew 10m DSB transmitter. The tenth-watt unit can be used to drive a low-power linear or, for QRP fun, it can be used barefoot.

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