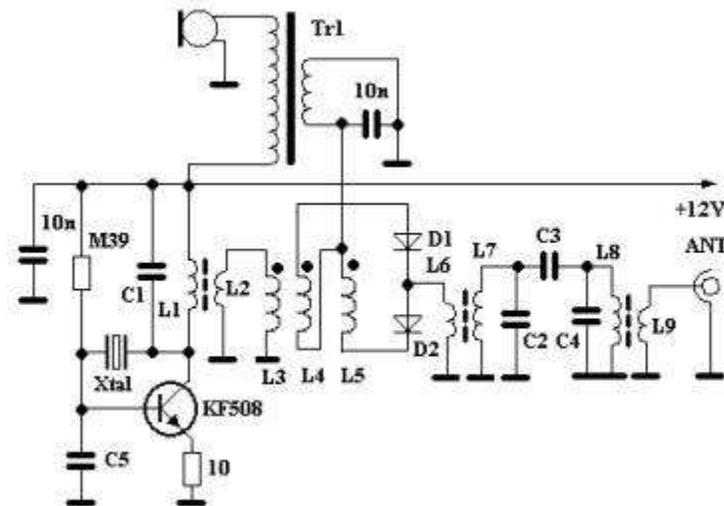


EASIEST DSB TX



This involvement is (probably) the simplest DSB transmitter has only one active element - a transistor KF508 or something similar. Its use can establish connection with normal SSB stations, few people know that it is not a "pure" SSB signal as carrier wave is suppressed. Output power, while only 5 mW, but using a more perfectly tuned antenna works perfectly. But this excludes the various internal and temporary antennas such as "piece of wire out the window, then you can work up the street. Yet the involvement mention as an example of what all can be built with minimal cost.

Source modulation signal representing the current carbon microphone (from RM31, or regular old telephone inset), which without further amplification gives a sufficiently large voltage nf. Balanční modulator with diodes D1 and D2 is driven first RF signal from a crystal controlled oscillator and the first-mentioned audio. On its output is a modulated RF signal with a suppressed carrier wave, just the two side bands. This signal is through band-pass filter, tuned to the desired frequency, brought to the antenna connector. Here you can connect either a dipole with an impedance of 50 ohms, or any other antenna, but through the adjustment member (such as L article).

Carbon microphone is powered by the same tension as an oscillator, it is also possible to prepend resistance around 1 to 5 kohm, some carbon microphones do not like more power. Nf signal for balanční modulator is taken through nf transformer transfer $900 \Omega / 100 \Omega$, originating from the old TV sets. I think that would cater to the old excitation transformer tranzistoráků, where used excitation and the output transformer. The secondary transformer should be nf voltage amplitude of 800 mV.

Oscillator is in the current engagement, which has nothing to add. Output power at the coil L2 is the load of 50Ω around 40 mW, a voltage of about 2 V. The parameters C1, L1 and L2 is chosen by the crystal frequency used. Threading ratio is 1: 3 (coupling: tuned coil).

Modulator is composed of "trifilárně" wound RF transformer, which I have often described the toroid or ferrite core dvouděrovém from input TV receiver. Nf The mixing and RF frequency (ie the modulation) is a pair Ge diodes, which should of course be paired, the carrier frequency will be best suppressed. Followed by capacity coupled band-pass filter, inductance and capacitance used is chosen according to the used frequency. Threading ratio is 1: 6 (coupling: tuned coil).

This involvement has published on its website known bastliř JF1OZL, it looked interesting, so I had to try it. No - frankly, it works, but ...

Well, do not give anything a try, so a simple device comes across a couple of minutes. For connection to the next door quite simply, is frame antenna, no, and who is not a more - please.