

BRAIN WAVE

"Pixie 2" OSK Mini Transceiver from the World Wide Web

The smallest QRP transceiver for 80 meters, called "Pixie 2", is a very nice TRX to start building your own equipment. Minimum components, maximum fun. The spec's are poor, but what can you expect for 5 dollars? The crystal oscillator is a simple parallel-mode Colpitts type, designed for 3.5 MHz. The frequency depends on the used crystal, the preferred value is of course 3.56 MHz, the worldwide QRP-frequency! The "PA" is made with a 2N2219, delivering max. 400 mW to the antenna. But, this transistor is also a mixer for receiving signals. The LM386 is a popular AF amplifier, and gives enough gain to hear the stronger stations. **Warning!** You must have a HF amateurs radio licence to build and use this transceiver!

Some hints: You may add a series variable capacitor to the crystal which enables you to tune a little bit in frequency. Of course, you can add more components to improve e.g. receiving quality, but that's not the fun of this transceiver! Just keep it simple... Build the transceiver on a piece of PCB, using the "high-wire" method. All components which are connected to ground are soldered at the PCB, other nodes are floating.

Capacitors

- C1 100pF
- C2 100pF
- C3 82pF
- C4 47nF
- C5 10nF
- C6 820pF
- C7 100pF
- C8 100pF
- C9 10uF
- C10 10uF
- C11 10uF

Inductors

- L1 15.22uH
- L2 100uH
- L3 2.2uH

Other

- X1 Crystal 3.56MHz
- LS1 Speaker 8 ohm 0.3W or headphones
- SW1 Morse Key

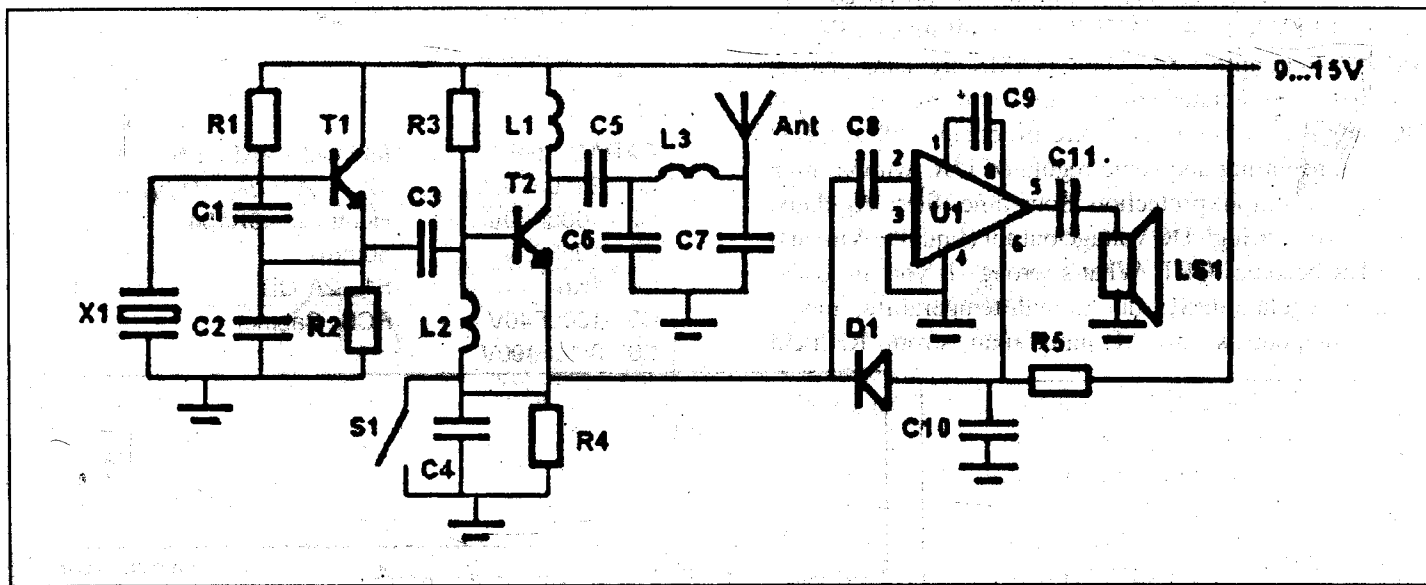
Resistors

- R1 47k
- R2 1.5k
- R3 33k
- R4 10k
- R5 1k

Semiconductors

- D1 1N4148
- T1 2N2222
- T2 2N2219
- U1 LM386N-1

(Courtesy BARC Newsletter)



AWARDS

The 4th Rajiv Gandhi Award-1998 were given to Individuals and Clubs for the Promotional activities in Amateur Radio such as conducting classes, field days, lectures, disaster communication. This award is given by Rajiv Gandhi foundation, New Delhi and its chairperson is Mrs.Sonia Gandhi. Last year (1998) the awards were given to the following persons.

First Prize: Rayaporlu Sarath Babu VU3RSB
Qth: Hyderabad, Andhra Pradesh

Second Prize: H.N.Naveen VU2HNN
Qth Mysore, Karnataka

Third Prize: V.Palamiyappan VU2PKV
Qth: Thanjavur, Tamil Nadu

Consolation: P.B.Phaninder VU3PBP
Qth: Hyderabad.

These awards have since been discontinued from this year onwards due to poor response as per the letter from Rajiv Gandhi Foundation.