

Regenerative Transceiver for 160- meter Band

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There is experimental AM transceiver that may be used at local communication. Practically any pentode would work at the circuit. Frequency of the transmitter is not stable because antenna is switched on directly to the oscillator's inductor. Regime of the regenerative receiver could not be optimal because of high coupling of the antenna with receiver's inductor. However, at small antenna length – in 2... 5 meter and small distances the transceiver is quite well for experimental work. Transceiver may be retuned for high bands however stable of operation at the bands would be low. Antenna length at the high bands should be decreased to 1 meter.

Parts List.

Microphone: Carbon microphone from old telephone set.

Transformer 1 and 2: An audio transformer from an old tube radio receiver would work fine

Relay: Any suitable Relay with 4- groups contacts.

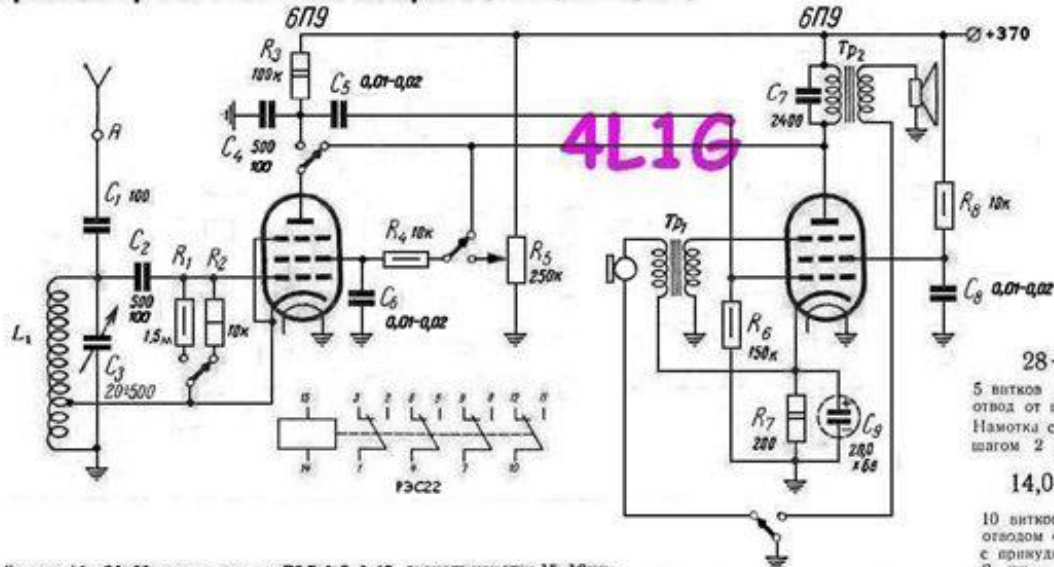
L for 160-m: 50-turns, wire 0.5-mm (AWG-24). Tap from 20s turn from cold end. Diameter 15... 18-mm.

L for 40-m: 20-turns, wire 0.7-mm (AWG-21). Tap from 6s turn from cold end. Diameter 30-mm. Coiled with gap between turns 2 mm.

L for 20-m: 10-turns, wire 0.7-mm (AWG-21). Tap from 4s turn from cold end. Diameter 30-mm. Coiled with gap between turns 2 mm.

L for 10-m: 5-turns, wire 0.7-mm (AWG-21). Tap from 2s turn from cold end. Diameter 30-mm. Coiled with gap between turns 2 mm.

Трансивер на 180-250 метров. (схема в режиме передачи)



Катушка L1- 20+30 витков провода ПЭЛ 0,5-0,65 диаметр намотки 15-18мм.
 TP1- собран на П-образном сердечнике сечением 0,5см². Микрофонная обмотка содержит 300 витков провода ПЭЛ 0,1.
 Вторичная обмотка содержит 6 000 витков провода ПЭЛ 0,1.
 TP2- собран на сердечнике из пластин Ш-15 (набор 25мм). первичная, анодная состоит из 2 600 витков провода ПЭЛ 0,23, вторичная обмотка из 61 витка провода ПЭЛ 1,0.
 Угальный микрофон можно применять любого типа.

