

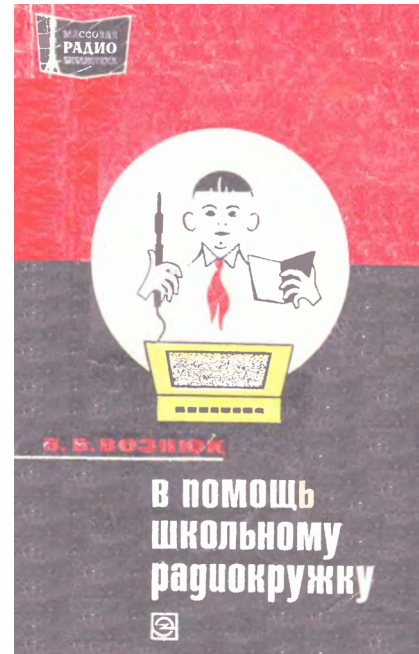
Regenerative Receiver on Pencil (Sputnik) Tubes

Credit Line: pp.: 20- 24 from book:
V.V. Voznyuk, For School Radio Section.- Moscow,
Publishing House Energiya, 1970

The regenerative receiver may be made on pencil tube 1ZH29B, 1ZH24B, 1ZH18B or on almost any pencil tube. The receiver works at LW and MW Bands. However the receiver may work at HF- Bands with proper coils. It should be used high- ohmic headphones with the receiver. **Figure 1** shows schematic of the receiver.

Coil L1 should work at the LW and MW- Bands. At the receiver part of the coil use at MW- Band and all coil used at LW Band. The coil may have any design. Here coil implemented on the form that was used at IF- Filter at an old tube receiver. The L1 has 100 + 200 turns. It is coiled by insulated wire in 0.1- mm (38- AWG). L2 has 60 turns. It is coiled by insulated wire in 0.1- mm (38- AWG).

Figure 2 shows design of the receiver. This one made on wooden or plastic plate with sizes 90 x 120- mm.



Front Cover of the Book

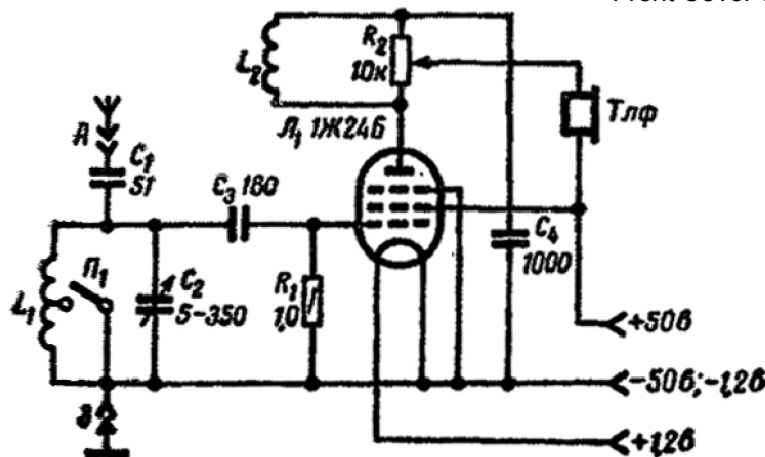


Рис. 5. Схема однолампового приемника с обратной связью.

Figure 1 Schematic of the Regenerative Receiver

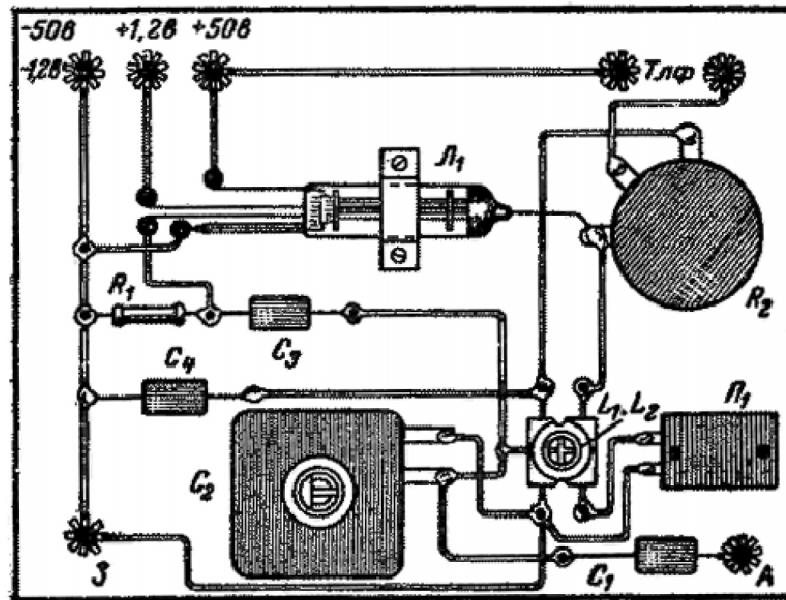


Рис. 6. Монтаж однолампового приемника с обратной связью.

Figure 2 Design of the Regenerative Receiver

The receiver works if montage of the receiver made in the right way. Only antenna, grounding, batteries and headphones should be connected to the receiver. Light noise should be in the in the headphones. After that try to tune on any station at LW or MW- Band. When receiver is tuned on the station turn R2 in left and right position. At one position station should be sound weak then at turning R2 the sound increased and after that receiver goes to generation and the station received with a whistle.

If there is no generation, change L2 terminals one to another.

Adding to the regenerative receiver an audio amplifier should improve stability of the regenerative stage and increase the sound. **Figure 3** shows regenerative receiver with audio amplifier. Any pencil tube could work at the audio amplifier. High- ohmic headphones should be used at the audio amplifier.

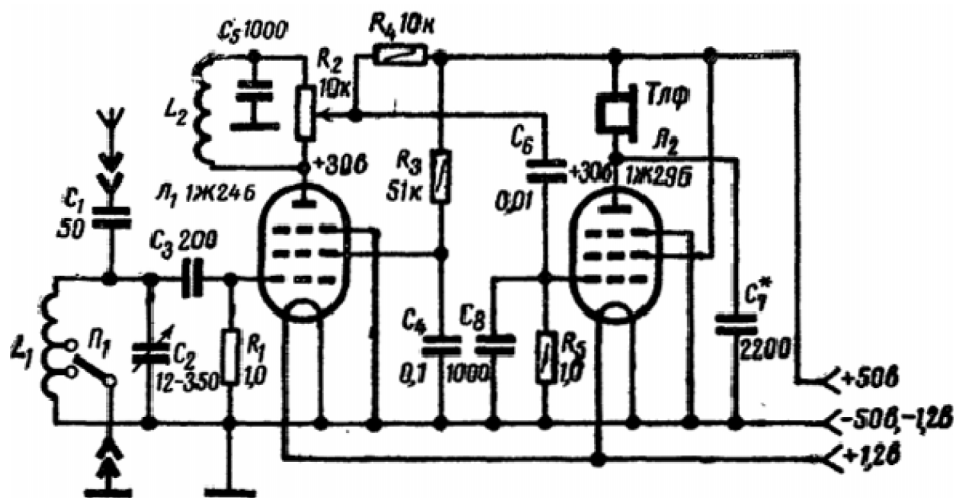


Рис. 7. Схема двухлампового приемника с обратной связью.

Figure 3 Regenerative Receiver with Audio Amplifier