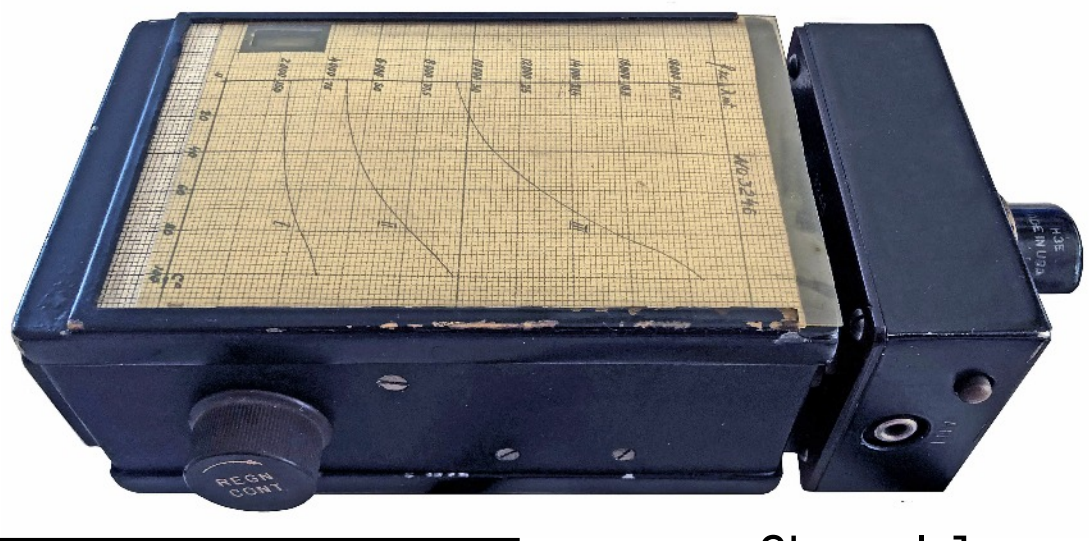


Signal 1

Country of origin: USSR

This Supplement Chapter is a follow up of the 'Signal-3' Chapter 238 (v1.01) of WftW Volume 4 Supplement and receiver 'Signal' section in the '*USSR'* chapter of WftW Volume 4.

DATA SUMMARY

Organisation: GRU

Design/Manufacturer: Not known.

Year of Introduction: Believed early WW2.

Purpose: Agents.

Receiver: TRF with aperiodic RF stage, regenerative detector and two AF stages.

Frequency coverage: 2.4-18.2 in three ranges.

Valves: 6K1 (2x), 6C1 (2x).

Power: 110/220V AC/DC mains via a plug-in power assembly and resistance mains cord or separate 150V HT and 25V LT.

Size (cm):	height	length	width
Receiver	5.9	14.5	11.2
Power unit	5.9	6	11.2

Weight (g): 946 (receiver and power unit)

REMARKS

Signal 1 (Russian = Сигнала) was a miniature short wave agents receiver. Although issued with the type 'Jack' (Russian=Джек) transmitter, it was believed also used as a stand alone receiver.

Four variations of the receiver were noted of which only Signal 1 and Signal 3 could be positively identified.

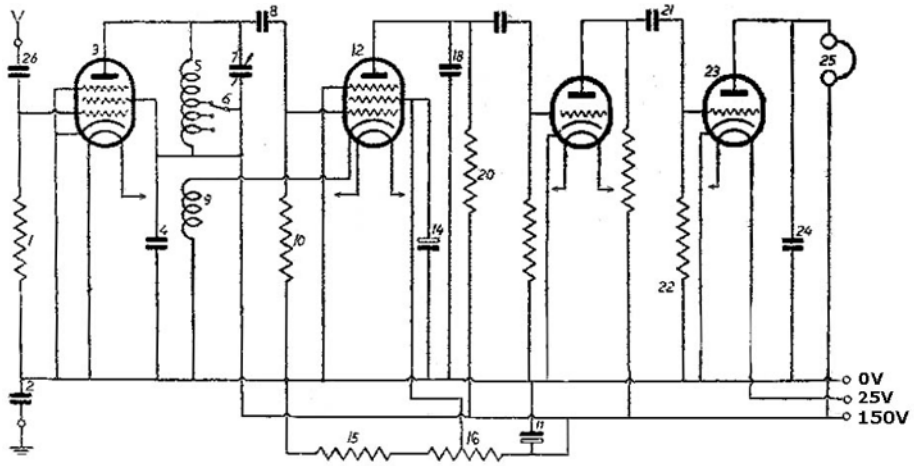
The Signal 1 was a TRF with aperiodic (untuned) RF stage, regenerative detector and two AF stages. It covered 2.4 to 18.2MHz in three ranges. Miniaturisation was achieved by the use of four acorn valves of USSR production. Series connecting of all the filaments allowed further miniaturisation with direct connection to AC or DC mains.

The associated plug-in power assembly with an 12H6 HT rectifier valve had a special mains cord with extra resistance wire for connecting to 220V mains. In an emergency the receiver could be powered by separate 150V HT and 25V LT sources.

Note that the electrolytic capacitors (Aerovox) and other capacitors (Cornell Dublier) were from American production.

References:

- With many thanks to Reinhard Glogowski, Germany, for taking photographs of the Signal 1 from his collection, and providing further information.
- WftW Volume 4, Clandestine Radio, Sep. 2004.
- WftW Volume 4, Supplement, Chapter 238 (v1.01), Nov. '21.



This circuit diagram is a mock-up and believed to be close to that of the Signal 1. It is basically an adaptation of the Tensor circuit with addition of an AF amplifier. Note that the filaments were connected in series (along with the 12H6 rectifier located on top of the power assembly).

220 or 110V AC/DC mains voltage selection was done by reorienting the two pins.

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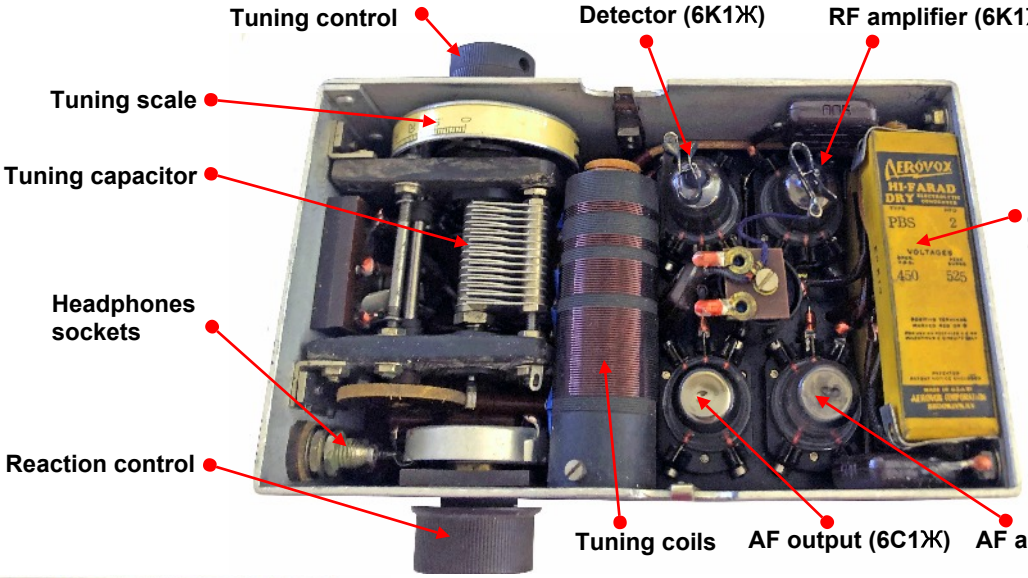
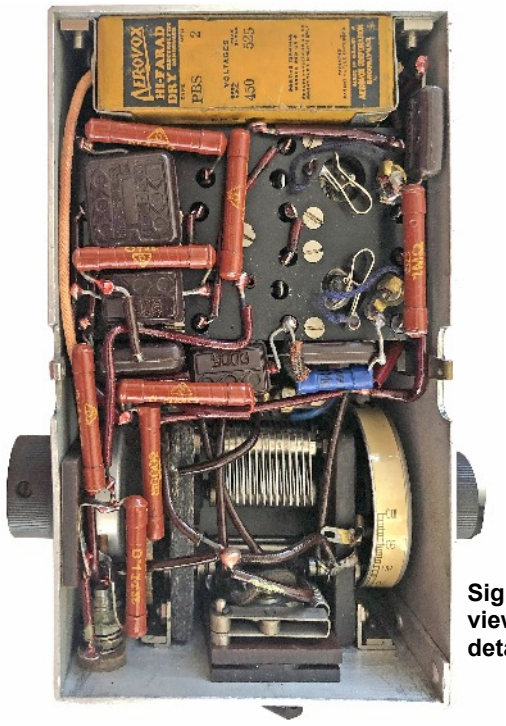
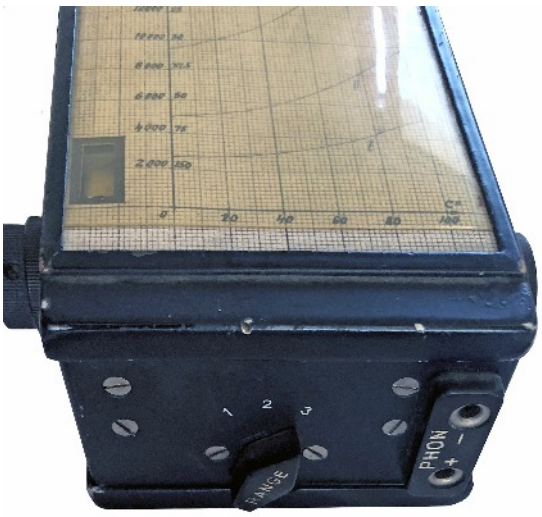
Right hand side view of the Signal 1 and separate power assembly with special mains cord and 12H6 rectifier valve.





Signal 1 bottom view with cover detached.



Left hand side view with wave range switch and headphones sockets.

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