

# Systema R Country of origin: Russia

### DATA SUMMARY

Organisation: USSR and Warsaw Pact countries

Year of Introduction: 1980s.

Purpose: Agents. Transmitter:

Circuit Features: Synthesiser frequency control. FSK: F1 in 11 steps of 200Hz separation. Keying speed 180 char/sec. Time to transmit a group of 100 (a group was 5 characters and space) with start and stop sequences was 3.6 sec. Memory 1024 characters. Frequency Coverage: 2.993-29.992MHz in 1kHz steps.

RF output: 75-150W.

Aerial: 9m long horizontal wire and similar counterpoise.

Power Supply: AC mains or 12.6 V DC at 20A. Size (cm): Height 8½, Length 35, Width 27.

Weight (kg): 9.

**Accessories:** High speed encoder/keyer, aerial and counterpoise on spools. Mains and DC leads.

View of Systema R transmitter showing the encoder/keyer in position, when not in use it was stowed in the cover (top picture). Note the aerial and counterpoise on spools.

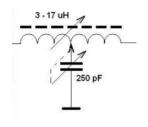
### Remarks

The Russian Systema R was a high power agents transmitter used by most of the Warsaw Pact countries in the 1980s. A separate receiver was possibly required, though the frequency synthesiser allowed blind transmission on a predefined frequency and time. Rejection of harmonic frequencies was at 20dB rather poor. The selectivity came only from the single 'T' aerial matching. The transmitter had a separate programmable encoder/keyer with a

memory of 1024 characters.



Detail view of 'T' aerial matching section of the Systema R transmitter. One rotation of the capacitor (W) automatically engaged one tap up- or downwards on the coil. This could also be done manually by a switch (Z).





## References:

- Photographs and general (technical) information was kindly provided by Miro Hornik, OM3CU, Slovak Republic.
- More information on Miro's website: www.om3cu.sk