



FE-10  
Country of origin:  
Germany W

**DATA SUMMARY**

**Organisation:** Bundesnachrichtendienst (BND)  
**Design/Manufacturer:** Telefunken.  
**Year of Introduction:** 1970.  
**Purpose:** Agents receiver.  
**Circuit features:** Single conversion superheterodyne with an IF of 455kHz.  
 RF (hybrid), CO/mixer (hybrid), mechanical IF filter, IF (hybrid), Det/BFO/AF (hybrid). Fine tuning control was effective over  $\pm 300\text{Hz}$ .  
**Mode of operation:** CW, AM and SSB. (A1, A3 and A3J)  
**Frequency coverage:** 2-25MHz covered in 6 ranges.  
 Reception was on a single frequency only, determined by a plug-in type HC-25U crystal, operating 455kHz above the receiving frequency, and a corresponding tuning unit.  
**Power Supply:** Rechargeable 9V battery.  
**Size (mm):** Main unit: Height 23, Length 66, Width 51.  
 Tuning unit: Height 23, Length 32, Width 29.

**REMARKS**

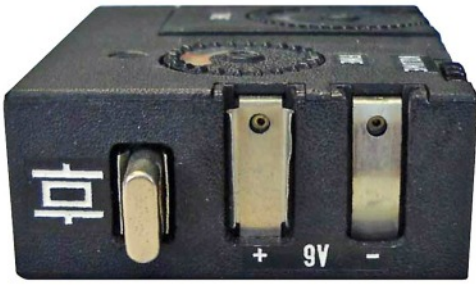
The FE-10 was a follow up of the Uhu receiver (see Chapter 32) and primarily intended for agents, providing a reliable, simple to tune and above all easy to conceal miniature short wave receiver. After its introduction in 1970 the FE-10 was used well into 1980s. The receiver was comprised of a 'L' shaped main unit, and a tuning unit. There were in total 6 tuning units covering the frequency range of 2-25MHz. The RF units were principally tuned RF amplifiers as the receiver was crystal controlled for reception on a single frequency. Crystals for other frequencies were issued, marked with red printed numbers on the crystals representing the station number. Preparing a FE-10 for listening to a specified station involved only the insertion of a crystal in its socket and placing the corresponding tuning unit. As the 9V battery was simply clipped into the contacts at the side, there was no on/off switch. After this initial set-up the RF unit was tuned to maximum reception and the fine tuning control set to the best readable sound.



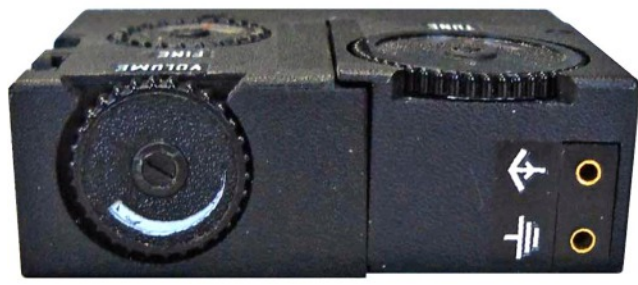
FE-10 receiver main unit with its 6 tuning units, associated receiving crystals in transit box, earphone and 9V rechargeable battery with plug-in mains charger. (Left)  
Note the printed numbers in red on the crystals.

**References:**

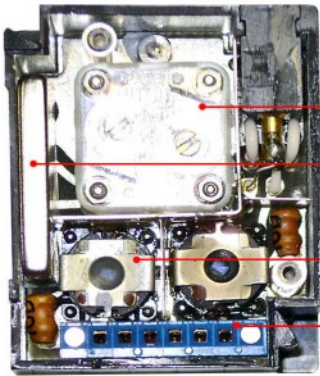
- Photographs and information by Detlev Vreisleben, DC7KG, Germany.
- 'Ein Agentenempfänger von Telefunken'. Investigation of an FE-10 receiver owned by Rudolf Staritz, DL3CS, an unpublished paper by Dr Jochen Jirmann, DB1NV.
- Block circuit diagram and internal view photo courtesy Dr Jochen Jirmann, DB1NV, Germany.



Right hand side view showing crystal socket (with crystal inserted) and rechargeable 9V battery clips.

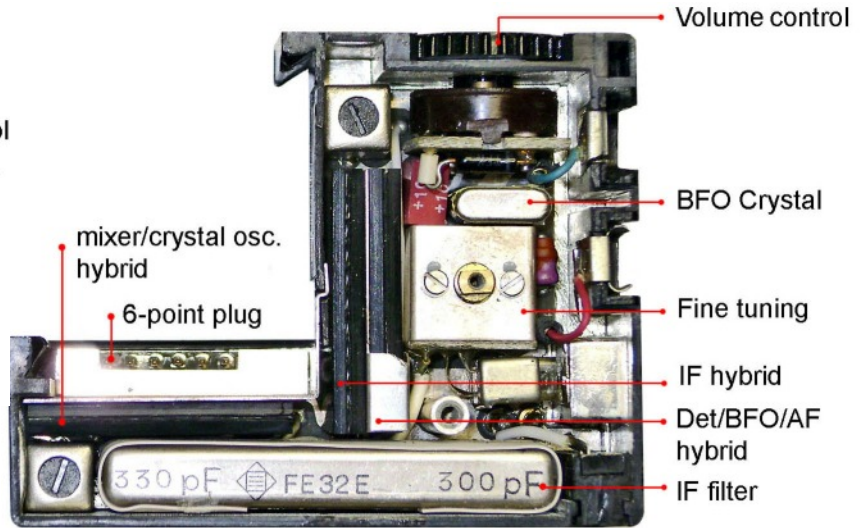


Left hand side view of the FE-10 receiver with volume control (actually manual RF/IF gain control), tuning control of RF stage, and aerial/ground sockets.



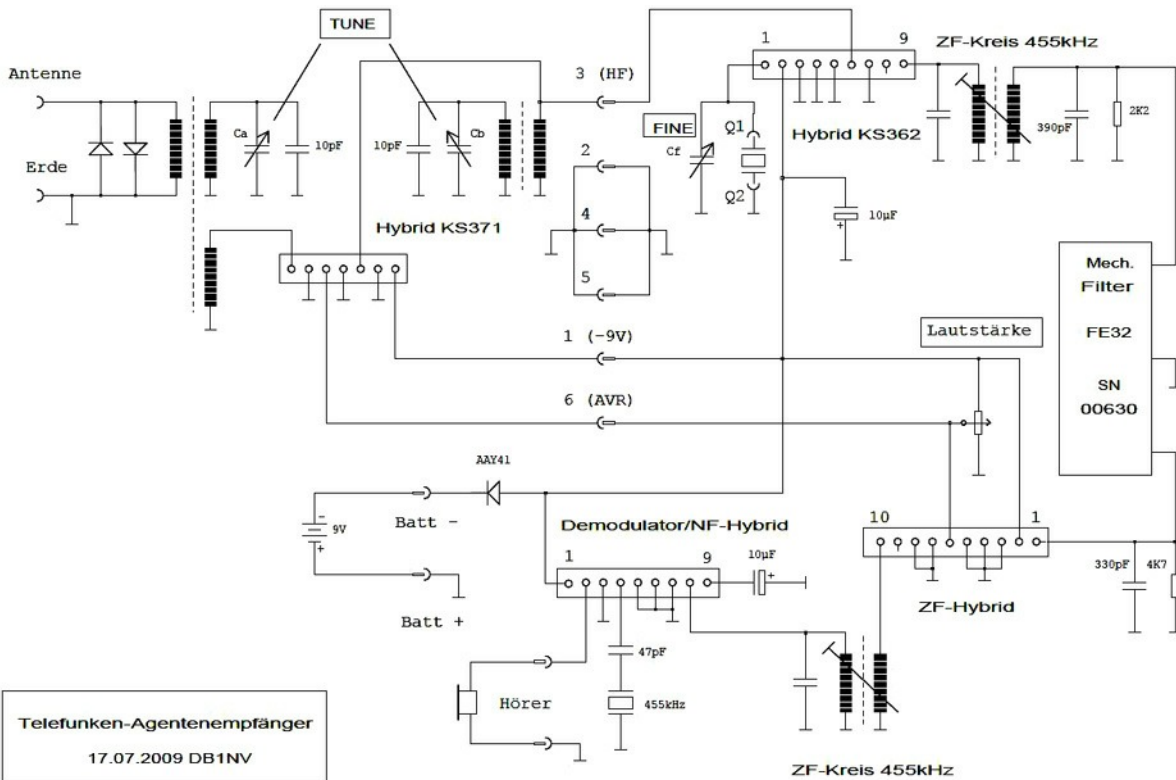
Internal view of a tuning unit.

- 'Tune' control
- RF amplifier hybrid
- RF coils
- 6-pt socket



Top view of main unit printed circuit.

- Volume control
- BFO Crystal
- Fine tuning
- IF hybrid
- Det/BFO/AF hybrid
- IF filter



Circuit diagram of BND FE-10 miniature agents receiver. Four thick-film hybrids allowed significant miniaturisation.