



UFT-435
Country of origin: GDR

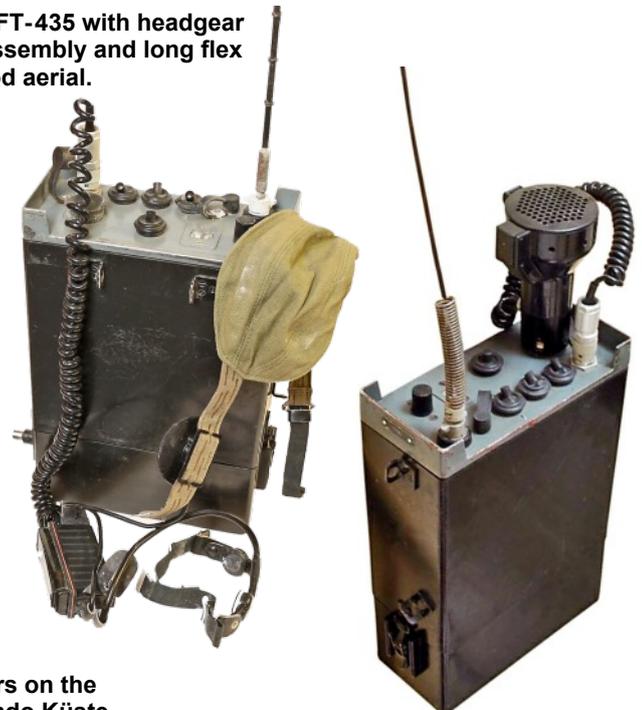
DATA SUMMARY

Organisation: Ministry of the Interior.
Design/Manufacturer: V.E.B. Robotron-Messelektronik 'Otto Schön', Dresden.
Year of Introduction: Mid 1970s.
Purpose: Believed general purpose radio for guard duties.
Receiver:
Circuit features: Double conversion superheterodyne.
Frequency coverage: 45.6 to 47.075MHz, covered in 60 channels with 25kHz channel spacing. PM simplex.
Transmitter: Phase modulation; Max deviation ±5kHz.
Frequency response: 300Hz-2.4kHz. Tone call 1kHz.
RF power output: 800mW, +4/-3dB.
Aerial: Blade aerial, short and long flex rod aerial.
 Elevated ground plane for stationary use.
Power Supply: 12V 3Ah NiCad battery. 2 spares issued.
Size (cm): Height 24, Length 10½, Width 24. (Set only)
Weight: 3.9 kg. (Set only). Complete set in box 26kg.

REMARKS:

The UFT-435 (known as type 85 242) was a VHF FM transceiver, developed in the mid 1970's and in service until 1989. Its use was believed to be general purpose for guard duties such as Grenzschutz Grenztruppen (Border control troops), Volkspolizei, Grenzkommando Kuste (formally part of Volksmarine) and guards of the GDR Airforce which were also formally part of the Grenztruppen. Though primarily developed as a portable radio, it could be used stationary or in a vehicle with the components in the standard kit. By means of a special floating waterproof container, the radio (this variation known as UFT-435-T) could be operated on the water surface, or transported to a depth of max 20m under water. The radio operated normally powered by NiCad rechargeable batteries; for stationary operation a combined AC mains and 12/24V power unit could be used. A special box for 10 'A' type (dry) batteries was issued for use on special occasions only; it was not part of a standard kit. The appearance of the UFT-435 was not very attractive, though functional, simple to operate and sturdily build. The operational range was given as 5-30km, depending on location and type of aerial being used.

UFT-435 with headgear assembly and long flex rod aerial.

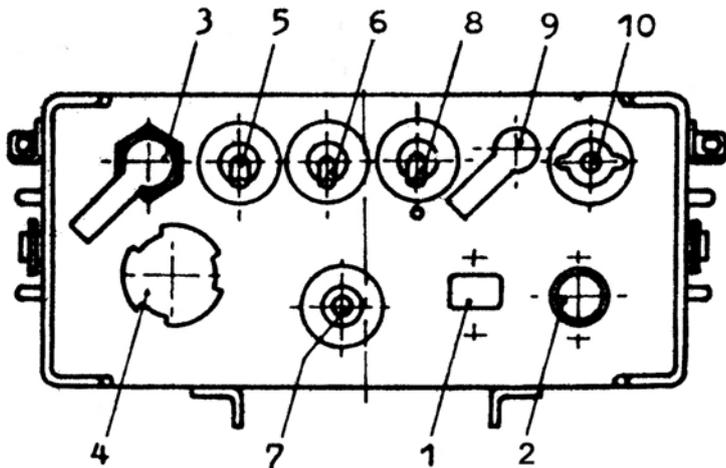


UFT-435 with speaker microphone and short flex rod aerial.



UFT-435 used by border soldiers on the Baltic Sea coast. Grenzkommando Küste (GKK), (Coastal Border Command) which was formally part of the DDR Volksmarine (GDR Navy).

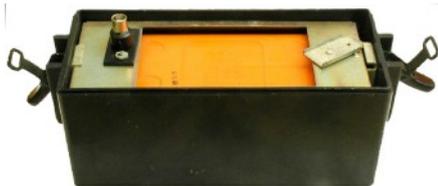
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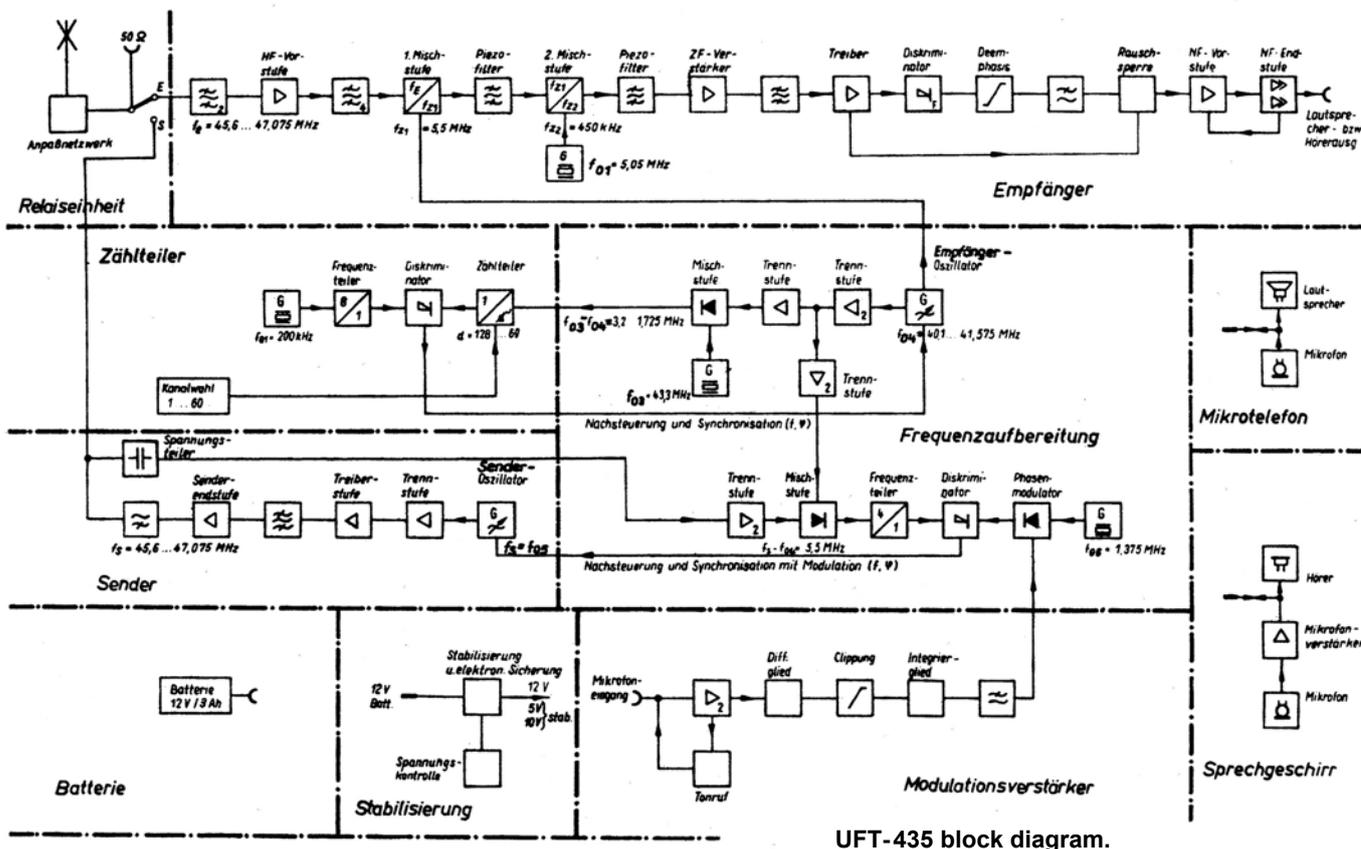
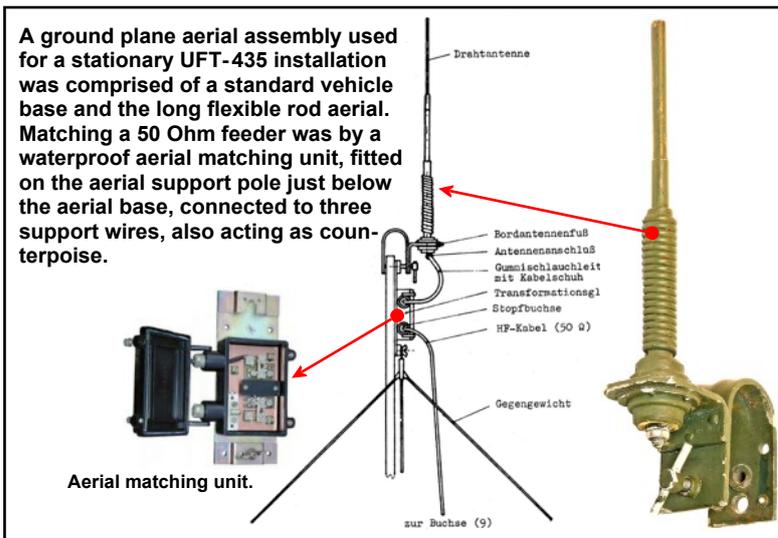
- 1 Channel indication
- 2 Channel selector knob
- 3 Speaker-microphone socket
- 4 Holder for speaker-microphone
- 5 Volume control switch
- 6 Squelch on-off switch
- 7 Light push button
- 8 On-off switch
- 9 50 ohm aerial socket
- 10 Aerial base for flexible rod



Combined AC mains and 12/24V DC power unit, type number 85 373. (Left)



Battery box 85 246 for 10 'A' dry batteries. (Below)



UFT-435 block diagram.

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The UFT-435 was built extremely robust and rugged to withstand harsh field conditions. The operating temperature range of - 20°C to + 50°C and the degree of protection IP 54 (splash proof) secured the operability even in heavy rain and mud. The serviceability of the equipment was excellent. Individual modules could be folded out, allowing measurements directly on the circuit board.



Blade aerial

Flex rod aerial (long)

UFT-435

Battery 1

Aerial feeder and counterpoise

Headgear assembly

Battery 3

Short flex aerial

User handbook

Carrying harness straps

Tools and spares

Battery 2

Vehicle aerial base

Aerial matching unit

Speaker-microphone

Layout of UFT-435 and associated components in transport case.



Battery charger LGT 7, type number 85 248, for charging four UFT-435 batteries.

References:

- Bedienungsanleitung Funksprechgerät UFT-435 (User handbook for radio UFT-435, Dec. 1976. Downloadable at various sources on the Internet. E.g. <https://archive.org/details/DDRBedienungsanleitungFunksprechgeraetUFT43533S.scan>
- Information from Wikipedia and other not yet confirmed Internet sources.
- Correspondence with Klaus-Peter Jung, DJ4PY, Germany. http://www.greenradio.de/e_uft435.htm
- Photographs and scans by L.Meulstee and a not yet confirmed Internet source.