



31210

(GDR bugs I)

Country of origin: GDR

REMARKS

The 31210 was a fully transistorised UHF FM receiver developed and produced in 1967 by PGH Funkmechanik (PGH = Produktionsgenossenschaft des Handwerks), in Freiberg, GDR. It was used for reception of covert wireless bugs operating in the frequency range 355-400MHz. (Band IV). An example of a band IV bug was the 31211, published in Chapter 124. For covert operations the receiver was carried in a pocket on the body, tuning and on/off switching was by a small remote control unit held in the hand and connected to the receiver via a multi core cable. Three AF outputs were available: headphones, tape recorder and a 29-35kHz pass-band for an external dual-FM decoder. When stationary, the receiver could operated from another location via the 31212 remote control system, (see Chapter 125) superposed on a standard subscriber telephone line. Noted is a 31210-3 version of which no details were known, believed modified for connecting an external scanning unit. A later produced version of this receiver was the 31220 (see Chapter 130) which had a built-in scanning facility. Both 31210 and 31220 receivers were superseded by 31215 (Chapter 125) operating in Band V. (940-980MHz).

DATA SUMMARY

Organisation: MfS, Abt 26, GDR.

Design and manufacturer: PGH Funkmechanik, Freiberg, GDR. (PGH Frb).

Year of Introduction: About 1967.

Purpose: Receiver for Band IV bugs.

Receiver: Double conversion superhet, variable tuning by means of varicaps. IF: 36MHz and 10.7MHz. Wideband FM.

Frequency coverage: 360-400MHz. (Band IV).

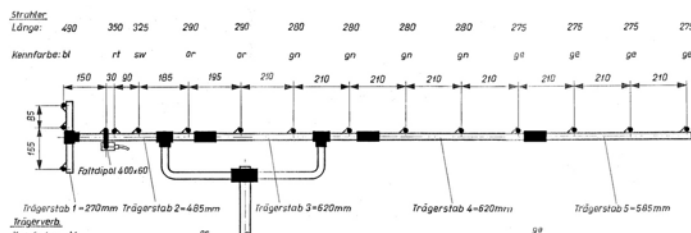
Aerial: Quarter wave rod or directional aerial.

Power Supply: Rechargeable 6V 450mAh NiCad battery. Drain 35-40mA. 220V AC charger/adapter.

Dimensions (mm):

| | Height | Length | Width | Weight |
|-----------------|--------|--------|-------|--------|
| Receiver | 125 | 30 | 100 | 650g |
| Battery | 35 | 30 | 100 | 200g |
| Remote control | 70 | 60 | 30 | 200g |
| Battery charger | 80 | 30 | 100 | 600g |

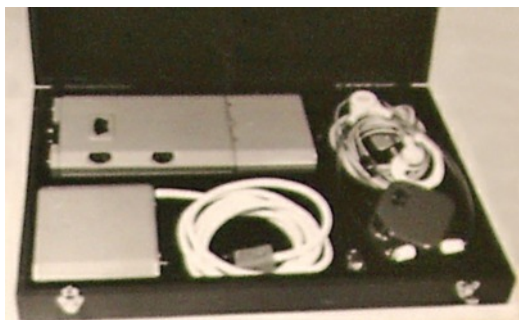
Accessories: Rechargeable batteries, battery charger, charging adapter, remote control unit, aerial, earphones, carried or stored in a case. (See illustration below).



A 16 element Yagi aerial was employed when the receiver was used at a fixed position and the field strength of a bug was low.



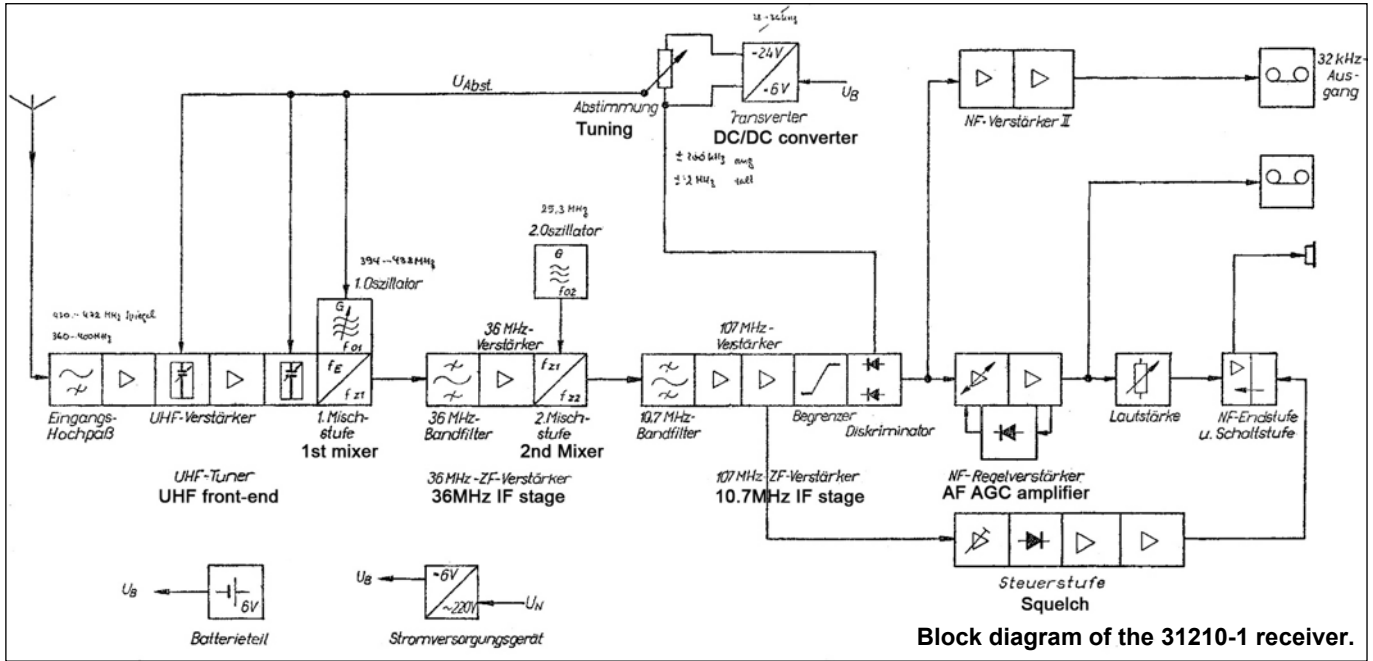
A Crouset Magnetton MP 300/6 tape recorder was normally used in combination with 31210 and 31220 receivers.



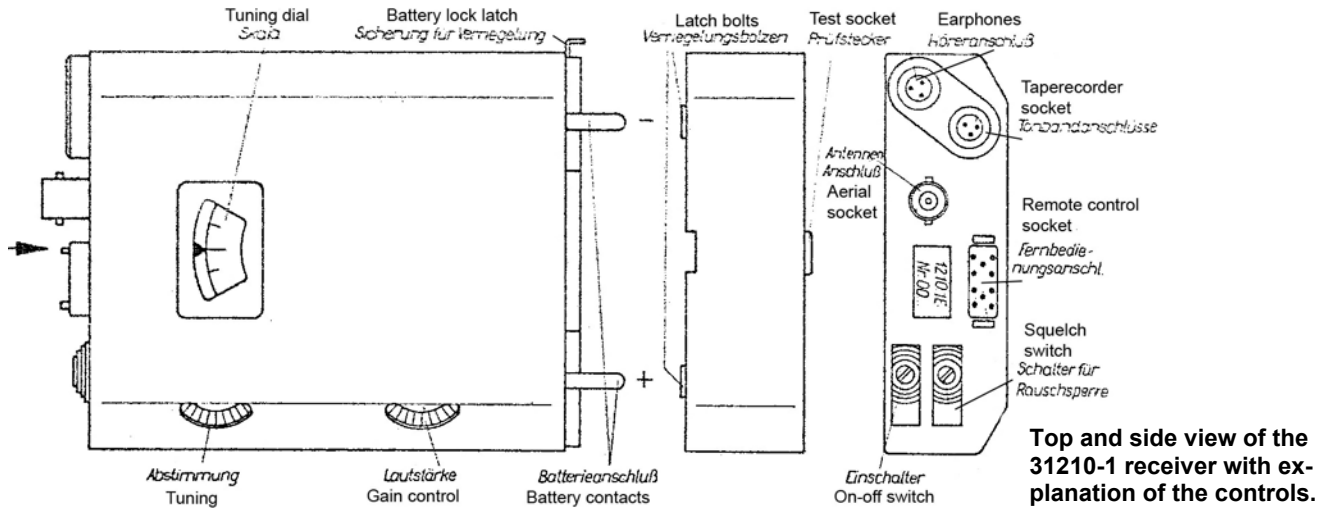
Transport/storage case for the 31210 receiver.

References:

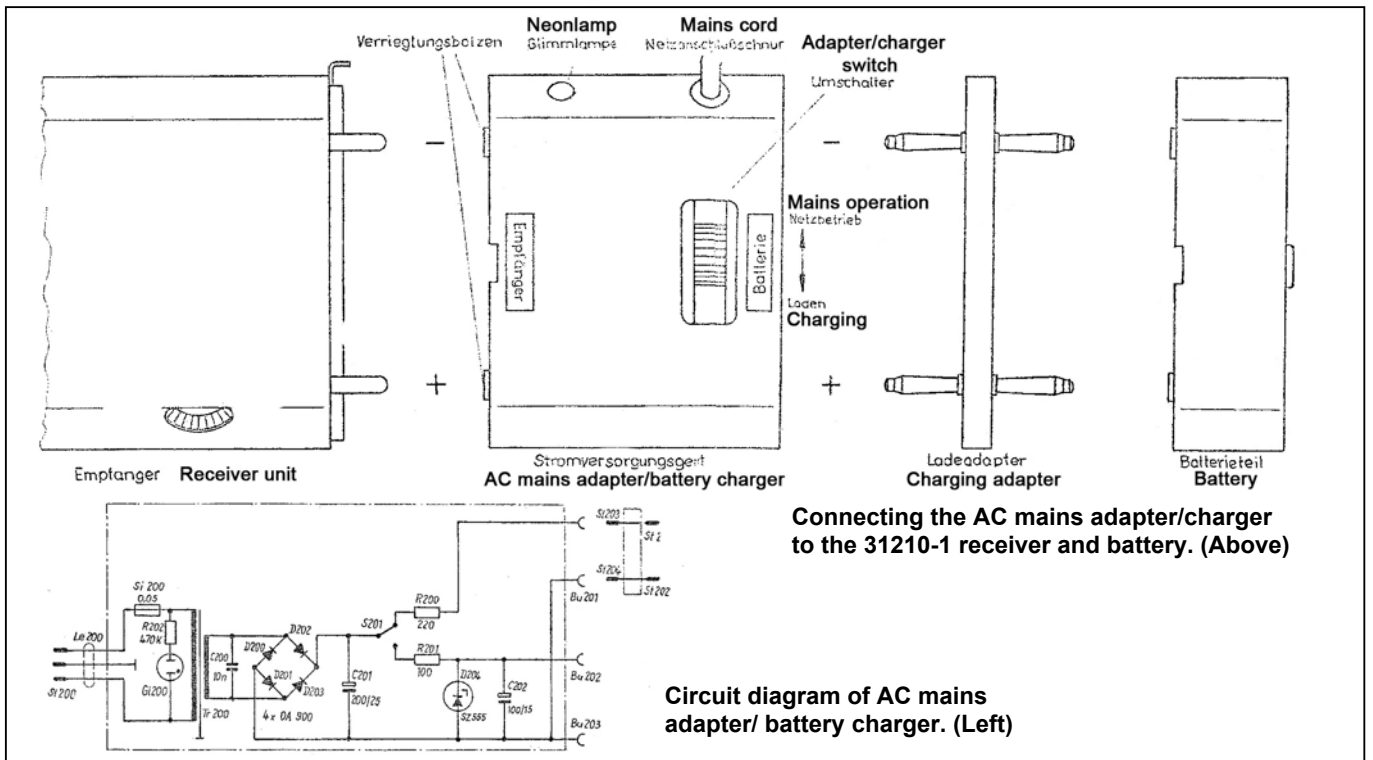
- With thanks to Detlev Vreisleben, DC7KG, Germany for taking excellent photographs and scans, and providing further technical and historical information.
- Gerät 1210.1 Technische Unterlagen. n.d.



Block diagram of the 31210-1 receiver.



Top and side view of the 31210-1 receiver with explanation of the controls.



Connecting the AC mains adapter/charger to the 31210-1 receiver and battery. (Above)

Circuit diagram of AC mains adapter/ battery charger. (Left)