

## GDR bug 308-1 ('Gera 4/1') and associated equipment.

### DATA SUMMARY

**Organisation:** Ministerium für Staatssicherheit (MfS). (East German Ministry for State Security).

**Design:** Abteilung 26. (Department 26).

**Manufacturer:** Believed MfS Abt. 26.

**Year of Introduction:** 1961.

**Purpose:** Wireless bug for covert overhearing.

**Transmitter 308 (Gera 4):**

**Circuit details:** Free running oscillator, AF amplifier. Frequency modulation. Speech inversion with optional 'Maiglöckchen' ('Lily of the valley') module.

**Frequency coverage:** 128-143MHz (Band III).

**Frequency response:** 0.3-4.5kHz depending on type of microphone.

**RF power:** Input < 60mW.

**Aerial:** Shorted dipole 2x 30cm flex wire.

**Range:** About 100m; without aerial 30m.

**Microphone:** Miniature dynamic type MM21 or MC30, or similar dynamic microphone.

**Power Supply:** 9-12V DC derived from a separate dry Battery (usually Mallory RM), AC mains adapter 308-2, or DC mains adapter 308-3.

**Battery drain:** Circa 5.5mA at 10.5V.

Estimated life with battery pack comprising 6 Mallory 1.2V cells: RM1 about 150 hours; RM4 600 hours and RM630 50 hours.

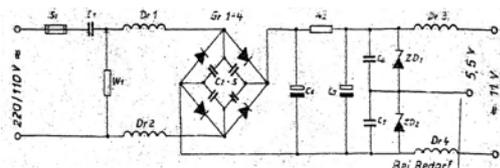
### REMARKS

Gerät (Device) 308-1, also known as 'Gera 4/1', was an early band III wireless bug used for covert room interception and surveillance. The actual transmitter was a single self oscillating transistor pre-set on a frequency in the range 128-143MHz and a one stage audio amplifier, both mounted on a printed circuit board fitted in a small plastic enclosure. A separate miniature dynamic microphone was connected by a shielded cable of up to 5m length from the transmitter unit. It was powered by batteries or a mains power adapter. The aerial was a shortened dipole comprising two flex wires stretched out 180° from each other. (Unfortunately neither an illustration nor a circuit diagram were found at the time of compiling this chapter). In place of a microphone, a tapped subscriber telephone line could be connected via adapter unit Gerät 308-4. Other operational accessories were a speech inversion unit 'Maiglöckchen' ('Lily of the valley') and an on/off remote control receiver.

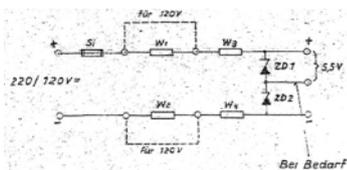
PRAG 10 was a commercial portable broadcast transistor radio of W German manufacture (model and brand not known) of which the standard FM band was modified to receive 128-143MHz for reception of band III bugs. Further modifications were fitting of sockets for tape recorder output, headphones/telephone line and external aerial. The loudspeaker was disconnected in FM mode.

PRAG 14 was a later development (1969) of a battery powered transistorised receiver for reception of band III bugs believed to be developed by MfS Abt. 26. It had basically the same features as Prag 10, but was miniaturised and could be worn on the body.

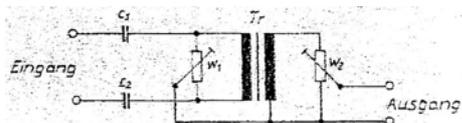
PRAG 16 was a commercial West German 'Accord' portable receiver modified for band III. No further details are currently known.



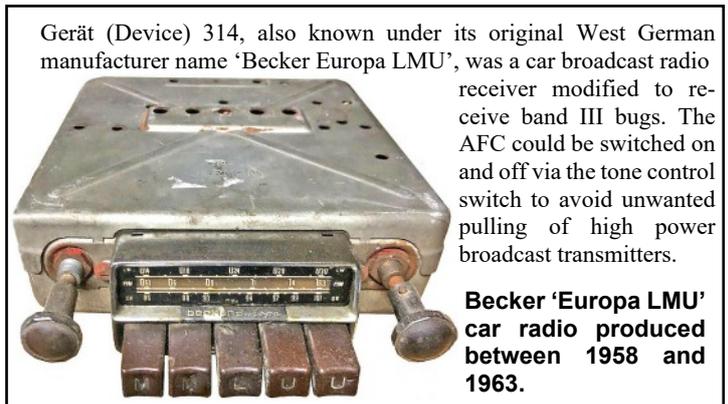
Gerät (Device) 308-2 was developed for powering a 308-1 transmitter and an optional remote control receiver from 220/110V AC mains.



Gerät 308-3 could power a 308-1 transmitter and additional equipment from 220/110V DC mains.



Gerät 308-4 was an adapter unit ('Telefon-Vorsatz') allowing external modulation of a 308-1 (or a similar transmitter) from tapped subscriber telephone line.



Gerät (Device) 314, also known under its original West German manufacturer name 'Becker Europa LMU', was a car broadcast radio receiver modified to receive band III bugs. The AFC could be switched on and off via the tone control switch to avoid unwanted pulling of high power broadcast transmitters.

**Becker 'Europa LMU' car radio produced between 1958 and 1963.**

### References:

- With many thanks to Detlev Vreisleben who provided copies of the original GDR technical information of the 308 system.
- Beschreibung zum Gerät 308-1 (Gera 4/1), MfS Abt. 26, 27-8-1961. (Description of Device 308-1 (Gera 4/1).
- Beschreibung zum Gerät Becker 'Europa' (believed 314), MfS Abt. 26, 21-8-1961. (Description of Device Becker 'Europa').
- Bedienungsanleitung zu Prag 10, MfS Abt. 26, n.d. (Operating instructions of Prag 10).
- Beschreibung und Bedienungsanleitung UKW Empfänger 'Prag 14' (Description and operating instructions of Prag 14), MfS Abt. 26, probably issued in 1969.