

12WG

Country of origin:
Germany W

Corrections to the '12WG' section of WftW Volume 4:

- There is an error in the connections to the receiver plug in the original circuit diagram. See the new layout on the next page. (Source: Crypto Museum)
- The accumulator voltage is 6 volt and NOT 12 volt.

This Supplement chapter is a follow up and should be read in conjunction with the '12WG' section in the 'Germany after 1945' chapter of WftW Volume 4 with more detailed information, a picture of the two-unit variation and circuit diagram.

DATA SUMMARY

Organisation: Organisation Gehlen (OG), later Bundesnachrichtendienst. (BND)
Design/Manufacturer: Wandel & Goltermann.
Year of Introduction: Developed 1951/52; produced from 1953 onwards. In total 260 sets were made.
Purpose: Agents.
Receiver: 12WG/E.
Circuit features: Mixer, oscillator, IF stage with regeneration, detector, AF, stabiliser. AM and CW.
Frequency Coverage: 3-16MHz in three ranges.
Valves: 6J6, 9001 (2x), OB2.
Transmitter: 12WG/S.
Circuit Features: CO/PA. CW only.
Frequency Coverage: 3-16MHz.
Valve: 6AQ5.
Power Supply: 12WG/N; Metering unit 12WG/M.
 AC Mains 90-220V; Accumulator 6V. 6X4 rectifier.
Size (cm): Height 7, Length 24, Width 28.
 (Four-unit set in case)

REMARKS

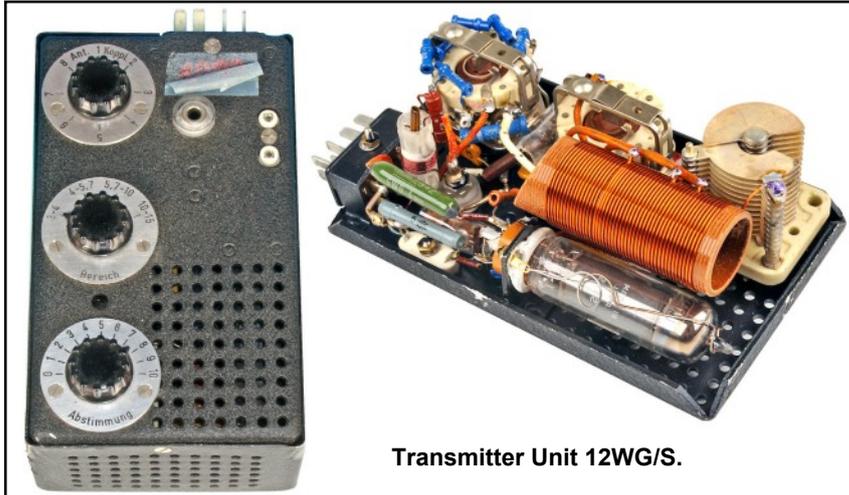
The 12WG agents set was originally developed for Organisation Gehlen as a more powerful successor to the 3WU in 1953. It remained in use till 1964 after OG was formally established as BND in April 1956. Two variations of the 12WG were known: an easier to conceal four separate unit set comprising transmitter, receiver, AC/DC power unit and metering unit. The second, not very common two-unit variation had a combined transmitter-receiver, and power supply with integrated metering unit. In both variations the units were interconnected by miniature Jones type plugs and sockets.



12WG four-unit variation set captured in possession of an agent in the GDR. (Above). Along with the 12WG came a box with crystals for operating on other frequencies, code tables and a set of 78rpm records with a Morse code course. The 12WG was complicated and mainly issued to agents with a background in operating similar equipment, for example former military signallers.



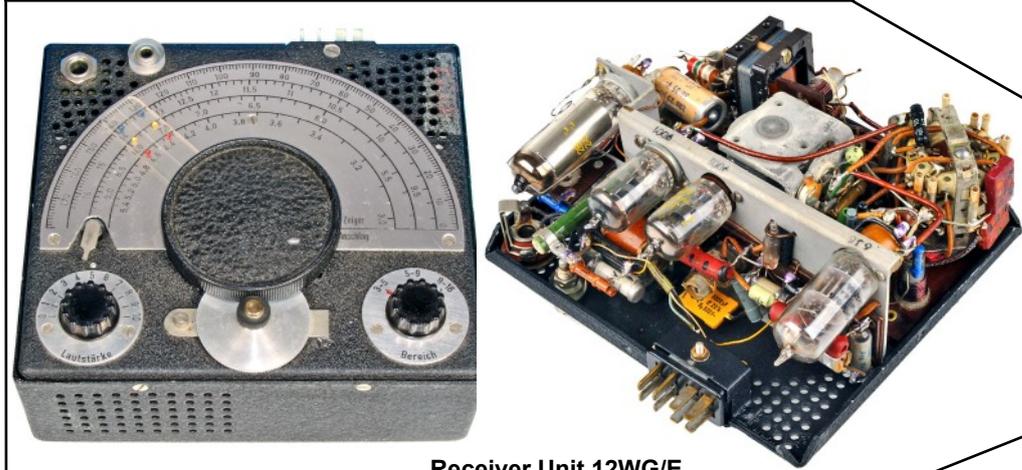
A 12WG with accessories as kept in the DHM (Left). Note the use of a WW2 'mouse' Morse key and accumulator charging resistor left in front of the receiver.



Transmitter Unit 12WG/S.



Metering Unit 12WG/M.



Receiver Unit 12WG/E.



Front panel and internal view of the four individual units of the 12WG.

Different cables were issued for connecting the 12WG power supply unit to AC mains and the 6V battery. A separate cable assembly with resistor was used to charge the 6V battery by the 12WG/N Power Supply Unit.



Power Supply Unit 12WG/N.



AC mains cable.



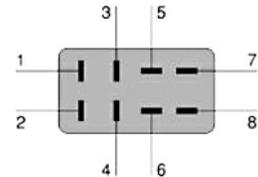
6V battery cable.



Battery charging cable.

Correct pin-out of the receiver plug:

- 1= 0V Chassis earth.
- 2= 6.3V LT.
- 3= 215V HT.
- 4= Sidetone.



References:

- Photographs and historical information courtesy Detlev Vreisleben, DC7KG, Germany.
- Photos of the internal views and cables were taken by Paul Reuvers of the CryptoMuseum and published with permission pending an extensive and full account on a 12WG held in the museum collection.