



## Clandestine Midget Receivers (2)

Country of origin: Holland



Tobacco tin receiver with its lid closed.

### DATA SUMMARY

**Design/Manufacturer:** Employees of Philips Eindhoven.  
**Year of Introduction:** Mid- to the end of WW2.  
**Purpose:** Listening to BBC shortwave broadcasts.  
**Circuit Features:** TRF with reaction.  
**Frequency Coverage:** Believed 49m band.  
**AF output:** High impedance headphones.  
**Valve:** UCH21.  
**Power Supply:** 220V AC mains.  
**Size (cm):** Height 3.3, Length 12.5, Width 8.5.

### Remarks

In the German occupied countries, particularly in the second part of WW2, it was strictly forbidden to listen to Allied radio broadcasts and eventually all broadcast receivers in most countries were confiscated. As a substitute small and easy to conceal receivers were constructed by many amateurs. A large number of these receivers in many variations were secretly constructed at the Philips Radio Works in Eindhoven under the eyes of the Germans. Needless to say that these were not serial production but each receiver was separately assembled with the available components in any suitable housing, largely depending on the components which could be smuggled out of the regular production.

The receiver in this chapter was built for Mr JHC (Jacobus) Anker from Eindhoven who was in his mid-twenties during the war, and at the time employed by Philips as a chemistry technician. His receiver was built in an empty Niemeijer 'Red Star' pipe tobacco tin. The main component was an UCH21 valve of which the triode was used as rectifier. Tuning and reaction was by two Philips beehive trimmers, obviously by means of an insulated trimming tool. A double 'Superphone' 4000Ω and a single 'Friho' headphones were used when listening to the BBC transmissions on the 49M broadcast band. The aerial was a short piece of curled wire.



General view of the tobacco tin receiver. All components for this receiver were produced in the Philips factories. To save space, the wiring to the UCH21 valve (top left) was directly soldered to the valve contacts.



Paxonin strip with banana sockets fitted inside the tobacco tin receiver showing mains input (left marked with an AC symbol), headphones (centre) and aerial (right).

### References:

- Information and photographs were published with kind permission of Ronald Evers, Herveld, Holland.