Detefon RD sII

AUTHOR

TIME AND PLACE OF CREATION

Time:
1929 - 1932

Place:
, Poland

TECHNICAL DATA

Dimensions:
height: 90 mm, width: 100 mm, length: 150 mm

OTHER

MIM 969/V/225

KEYWORDS

czas wolny, dźwięk, fale radiowe, elektronika, handel, komunikacja, łączność, międzywojnie, muzyka, nagłośnienie, odtwarzanie dźwięku, poczta, propaganda, przemysł, radio, sprzęt RTV, urządzenia mobilne, wzornictwo polskie

DESCRIPTION

In 1929, Polskie Radio SA launched a campaign promoting radio reception, driven by the desire to reach the remotest places in Poland with its programming. The receiver to effectively promote this medium throughout Poland had to fulfil a list of requirements. First of all, it was expected to enable reception of radio stations in the Polish backcountry. At the same time, it had to be simple to operate and durable. In the light of the general poverty of the society, the originators of the campaign also proposed the condition of low price. The first result of the work on the fulfilment of such expectations was a detector receiver – the Detefon, developed at the Państwowa Wytwórnia Łączności by Wilhelm Rotkiewicz and Czesław Rajski. The price of the receiver with all its equipment (earphones, antenna,

antenna switch with surge arrester, isolators for hanging the antenna on, etc.) was 39 zlotys, while a vacuum tube receiver cost several hundred zlotys at the time. The Detefon could be bought not only in radio shops, but also in all offices of Polish Radio as well as at post offices. The Detefon is one of early types of radio devices, and makes use of the ability to detect radio waves using a lead sulphide crystal, hence the name “crystal radio”. The device allows reception of two radio wave bands – long and short wave. Radio waves captured by the antenna induced an alternating current in it, which was rectified by passing it through the crystal detector. The electrical impulses were then converted to vibrations of the membrane and these could be heard in an earphone. The device did not require an external power source, which was its advantage, as the majority of the territory of Poland at the time did not yet have access to electricity. Sales began in December 1930 and about 500,000 units had been manufactured by the end of 1939. The Detefon was built based on two single-layer coils placed at right angles to each other, and two capacitors (including one for tuning) and a crystal detector. The radio has a 0-100 scale in the upper part of the housing, placed on the collar of the tuning knob. On the top wall of the housing there is a connection socket for the crystal and the inscription “Detefon” with the manufacturer’s logo. On the side wall, there is an antenna socket and a ground socket, as well as a knob for changing the band to shortwave (280-420 m) and longwave (1200-1500 m). On the opposite side wall there are two earphone inputs. Volume is set by adjusting the tension of the magnetic speaker anchor, available at the back of the housing. Authors: Piotr Turowski, Filip Wróblewski