



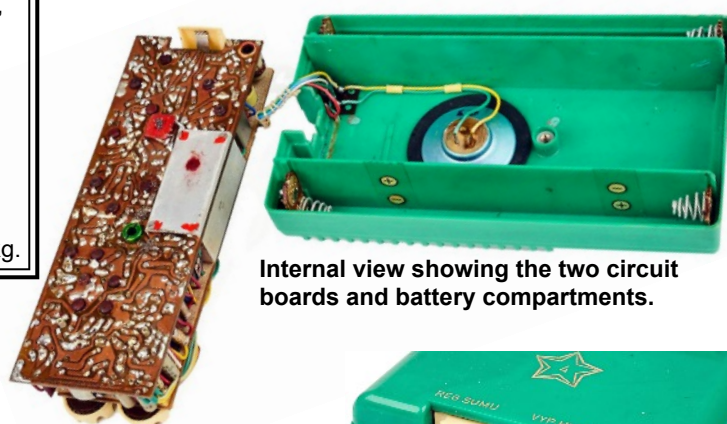
## Hvězda 4 Country of origin: Czechoslovakia

### DATA SUMMARY

**Organisation:** Czech Government.  
**Design/Manufacturer:** 6 Správa - spojovacia technika (Government, Department 6, communication technics).  
**Year of Introduction:** 1961.  
**Purpose:** Czech border police, public surveillance.  
**Receiver:**  
**Circuit features:** Crystal controlled single channel triple conversion superheterodyne. F3.  
**Frequency Coverage:** 43-47MHz band.  
**Intermediate frequencies:** 10.7 and 2MHz.  
**Transmitter:**  
**Circuit features:** MO locked to receiver discriminator, buffer, doubler, push-pull RF power amplifier. F3. ±8kHz deviation.  
**Frequency coverage:** 43-47MHz band  
**RF output:** 100mW.  
**Semiconductors:** In total 20 transistors and 5 diodes.  
**Aerial:** Telescopic rod extendable to 75cm.  
**Power Supply:** 12 AA size batteries. (9+9V)  
**Size (cm):** Height 17, Length 9½, Width 4½. Weight 0.8kg.

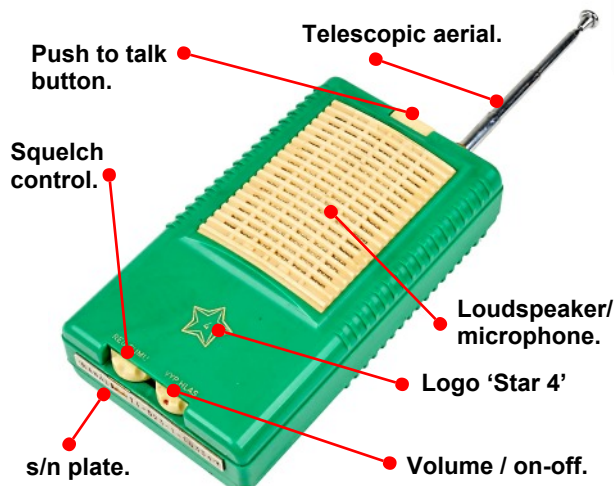
### REMARKS

Hvězda 4 (the Czech word for 'star', hence the logo with a star and number 4) was a handheld VHF/FM transceiver developed and built in 1961 by Správa 6 under project designator TI-523. It was primarily used for public surveillance tasks, such as with the Czechoslovakian Border Police. The set operated on a single channel in the 44 MHz band with a range of about 3 km. It was the first fully transistorised handheld radio produced in Czechoslovakia. Despite the fact that it has a cheap appearance like a bright green toy, it was a well-designed professionally built portable radio. The radio was built from a mixture of very early NPN and PNP transistors, mainly made by Tesla, which was probably the reason for the relatively high battery voltage of 18V.



Internal view showing the two circuit boards and battery compartments.

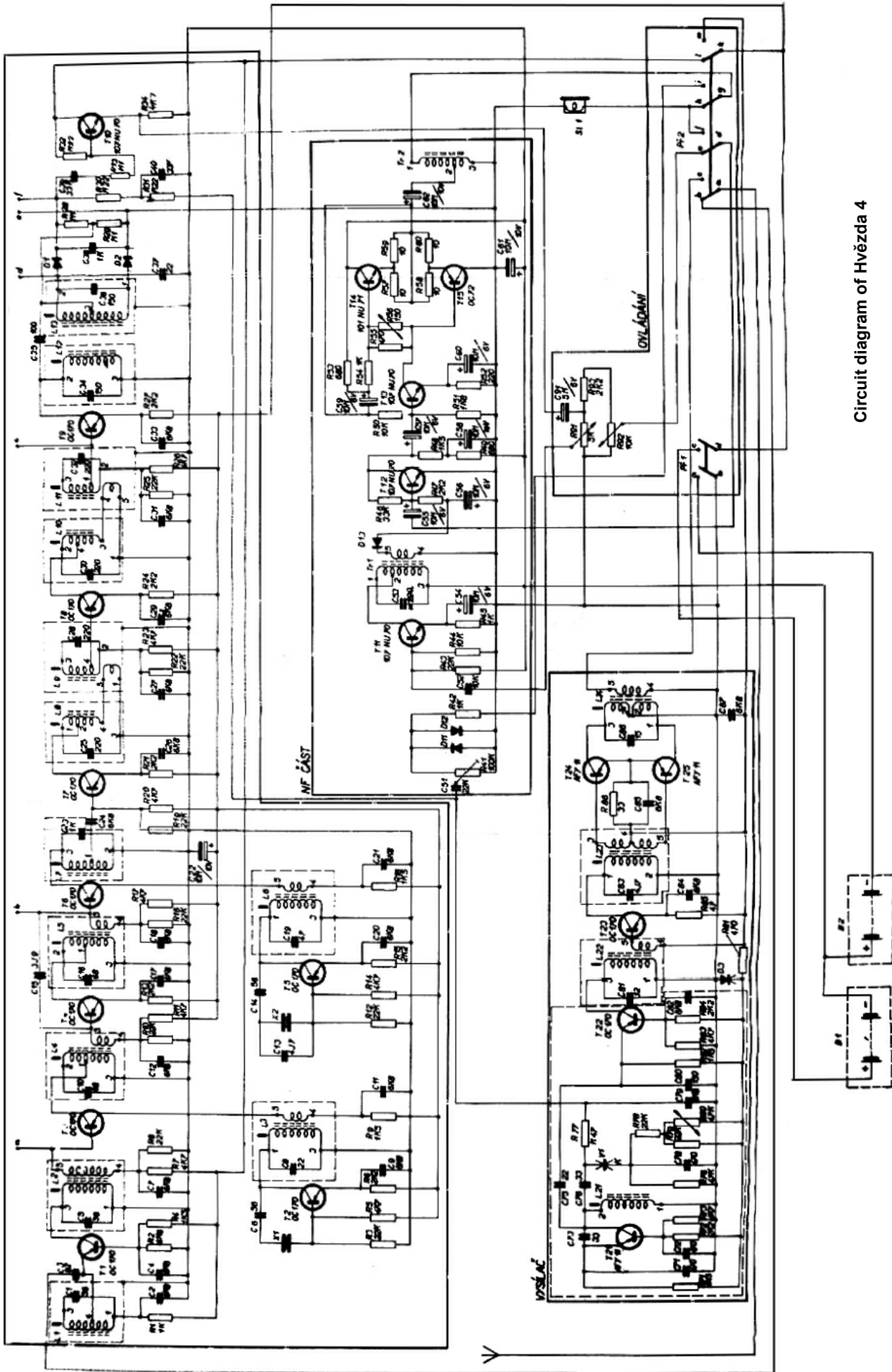
Detailed view of squelch and volume/on-off controls located at the underside of the Hvězda 4.



Functions of controls Hvězda 4

### References:

This chapter is an abridged version based on a full account of the Hvězda 4 described in [www.cryptomuseum.com](http://www.cryptomuseum.com). Photos taken from a Hvězda 4 held in the collection of the museum, and information from the website was published with kind permission of the Crypto Museum, Eindhoven, Holland.



Circuit diagram of Hvězda 4

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