

Specifications

Features

- Superheterodyne circuit with 1N34A germanium diode detector
- Internal ferri-loopstick antenna with external vertical antenna
- RF amplification stage
- Internal 8-ohm 3-inch PM speaker
- 0.4 milliwatt audio output
- Copper clad control face secured to bakelite case

Controls

- Power on/off DPDT pushbutton switch
- Volume control (500K ohm)
- Vernier-controlled tuning capacitor calibrated with broadcast band dial markings

Connections

- Banana jack on top face accepts plug from extendible mast aerial
- Front-mounted 2-circuit headphone jack automatically disconnects internal speaker

Tubes

- 2E32 untuned RF amplifier (fil 1.25 V @ 50 mA; plate 22.5 V @ 0.4 mA)
- 2E22 mixer/oscillator (fil 1.25 V @ 50 mA; plate 22.5 V @ 0.2 mA)
- 2E32 IF amplifier (fil 1.25 V @ 50 mA; plate 22.5 V @ 0.4 mA)
- 2E32 1st audio amplifier (fil 1.25 V @ 50 mA; plate 22.5 V @ 0.4 mA)
- 2E36 power amplifier (fil 1.25 V @ 30 mA; plate 45.0 V @ 0.4 mA)

Power Supplies

- 1.5 VDC filament supply via 2 parallel-connected AA cells
- 36 VDC plate supply via 6 series-parallel connected #23A batteries

Power Consumption

- "A" battery 230 mA
- "B" battery 2 mA

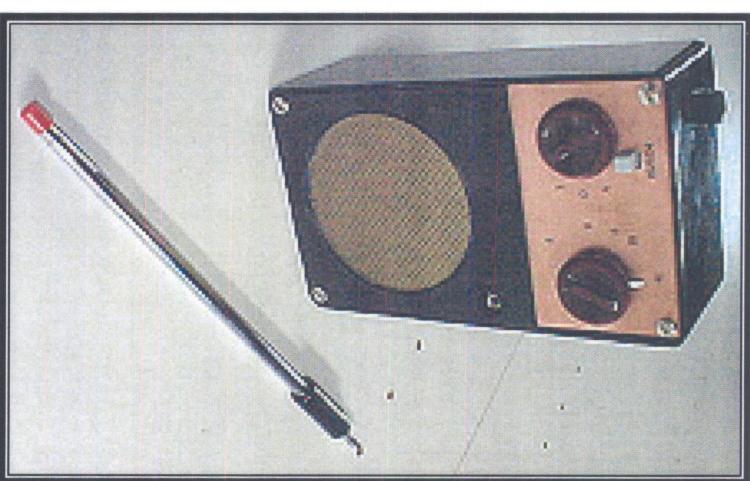
Estimated Battery Life

- "A" battery 21.1 hrs using 2-2450 mAH Alkaline cells
- "B" battery 99 hrs using 6-33 mAH Alkaline cells

Dimensions

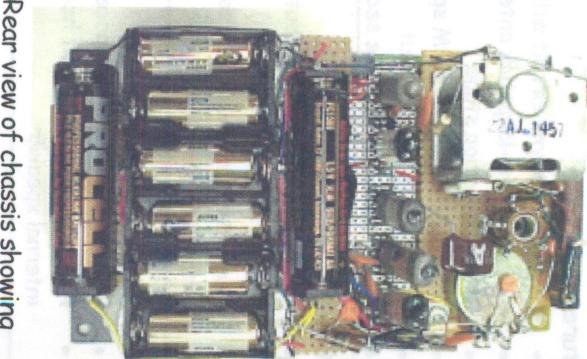
- Width 3.75 in.
- Height 6.25 in.
- Depth 2.00 in.
- Weight (with batteries installed) 2 lbs.

5-Tube Micro-Superheterodyne Receiver



Manufactured for 2003 NJARC Contest

Photo Gallery



Front panel controls for power, volume, tuning, and earphone jack. 3-inch PM speaker is behind gold baffle. Four machine screws secure the front panel to the bakelite case.

Two parallel mounted AA batteries provide 1.5 VDC for tube filaments. Two parallel sets of three series-mounted #23A batteries (inserted into N-sized receptacles) provide 36 VDC for B+.



Bottom end view of chassis showing "sandwich" construction. **All** battery packs are bonded to obverse face of perforated circuit card. All transformers (interstage, audio, and IF), and 3-inch PM speaker are bonded to reverse face of perforated circuit card. Front face of instrument is bonded to speaker and 3-hole island circuit card.

Schematic

