



RCA Victor Model BP-10 'Personal'

Country of origin:
USA

DATA SUMMARY

Organisation: SOE

Design/Manufacturer: RCA Victor, USA.

Year of Introduction: Late 1940.

Purpose: Commercial radio issued to the French resistance for listening to BBC broadcasts.

Circuit Features: Superheterodyne with mixer/oscillator, IF stage, detector/AVC/1st AF stage and AF output.

Frequency Coverage: 550kHz to 1600kHz.

Intermediate Frequency: 455kHz.

AF Output: Maximum 0.12W.

Valves: 1R5, 1T4, 1S5, 1S4.

Power Supply: 1.5V LT (Eveready No. 950) and 67.5V HT (Eveready No. 467) dry batteries.

Consumption: LT 250mA and HT 8½mA.

Size (cm): Height 7.6, length 22.3, width 9.3.

Weight (kg): 1.5 kg empty and 1.9 kg with batteries.

Antenna: Loop aerial inside the top cover.

Remarks

The RCA Victor BP-10 "Personal" was a miniature battery operated medium wave broadcast receiver. It was made in the USA by RCA Manufacturing Company Inc., Camden, NJ, and introduced in late 1940. It was one of the first portable radios to use miniature valves technology. The BP-10 was enclosed in a small metal box covered with black leather and a chrome plated front panel, Bakelite top and bottom covers with spring hinges, and a catch button (later models). The receiver was activated when the top cover was opened.

BP-10 receivers were issued to the French Resistance pending the mass production of MCR 1 'biscuit tin' receiver. In 1943 150 units were delivered in France during a clandestine landing (operation 'Orion'), to Commander Paul Riviere alias 'Marquis'. A BP-10 receiver which belonged to him, can be seen in the 'Museum of the Order of the Liberation' in Paris.

References:

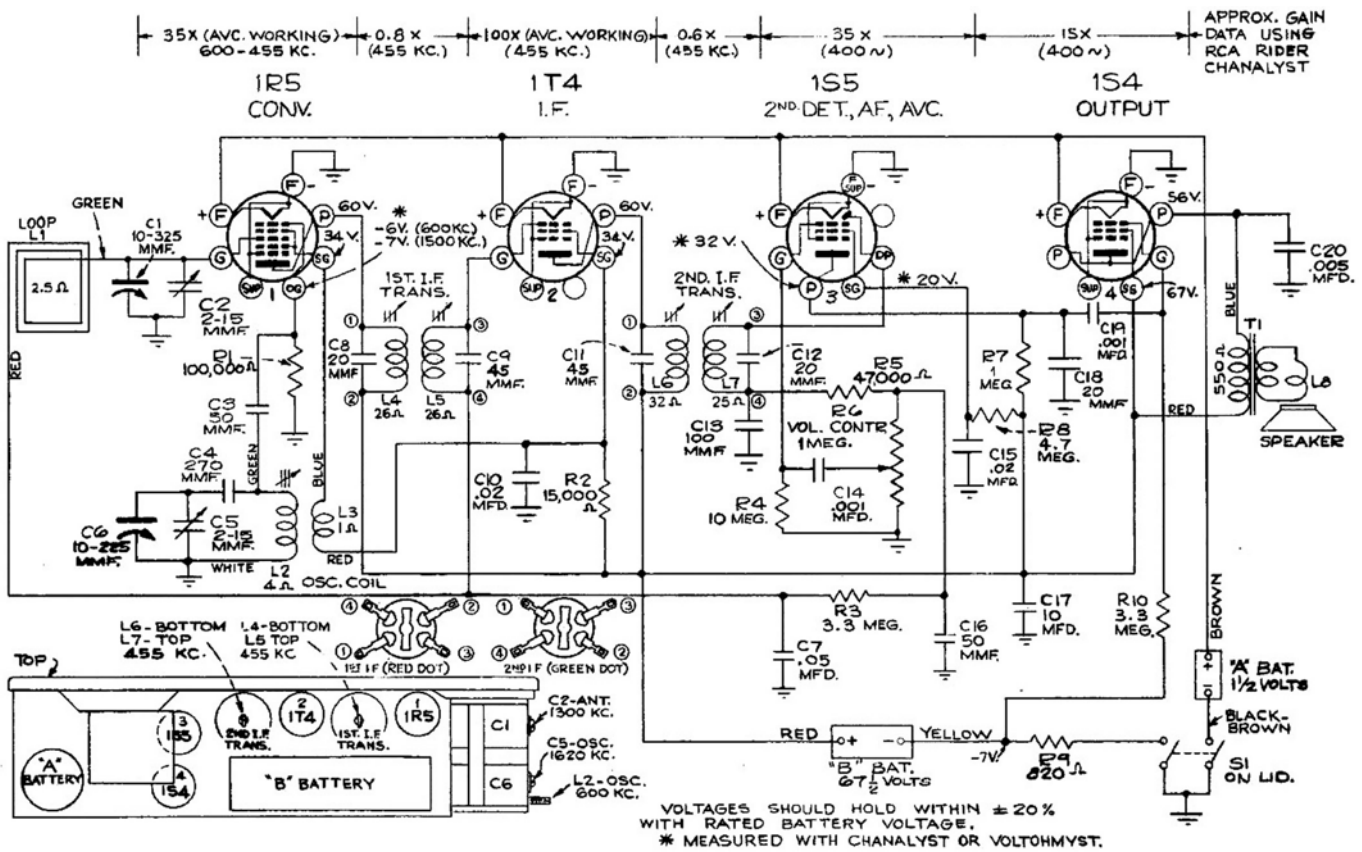
Photos and historical information courtesy **Eric Pierret, France.**



Bottom cover and batteries for the RCA Victor BP-10 'Personal'.



Internal view of the RCA Victor Model BP-10 with back cover removed. The 1.5V LT 'A' battery was carried on the left hand side and the 67.5V HT 'B' battery in the centre of the chassis.



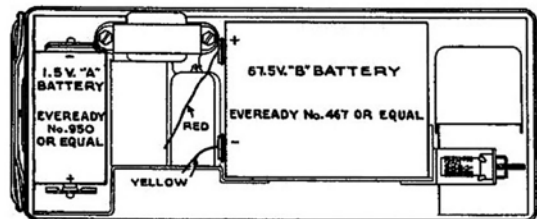
Circuit diagram and chassis layout of the RCA Victor Model BP-10 'Personal' battery operated receiver.

Alignment Procedure

Steps	Connect the high side of test-osc. to—	Tune test-osc. to—	Turn radio dial to—	Adjust the following for max. peak output—
1	Tuning condenser stator (ant.) in series with .01 mfd.	455 kc	Quiet point at 1,600 kc end of dial	L7, L6, L5, L4 (2nd and 1st I-F transformers)
2	Radiated signal 1,620 kc	1,620 kc	Full clockwise (out of mesh)	C5 (oscillator)
3	Radiated signal 1,300 kc	1,300 kc	1,300 kc signal	C2 (antenna)
4	Radiated signal 600 kc	600 kc	600 kc	L2 (osc.)
5	Repeat steps 2, 3 and 4.			

Output Meter Alignment.—If this method is used, connect the meter across the voice coil, and turn the receiver volume control to maximum.

Test-Oscillator.—For all alignment operations, keep the output as low as possible to avoid a-v-c action.



Alignment procedure of the RCA Victor Model BP-10 'Personal'.