RADIO SERVICE BULLETIN

Issue No. 48
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Subject: Model 125 (Portable)

SPECIFICATION OF S.T.C. MODEL 125 (Portable)

CIRCUIT: Five valve battery operated superheterodyne using R.F. amplifier, converter, I.F. Amplifier, detector-audio, and power output stage.
A.V.C. High impedance loop aerial (in lid) combined volume control and battery switch.

TUNING RANGE: Broadcast 540-1620 Kcs.

INTERMEDIATE FREQUENCY: 455 Kc/s.

VALVE COMPLEMENT:
V1 R.F. Amplifier 1T4.
V2 Frequency Changer 1R5.
V3 I.F. Amplifier 1T4.
V4 Detector-audio 1S5.
V5 Power Output 3V4.

POWER SUPPLY:
"A" Battery 1.5 volts, 300 milliamps.
"B" Battery 90 volts, 14 milliamps.

LOUD SPEAKER: Permag. 6 inch cone, 10,000 ohm. Transformer.

CIRCUIT VOLTAGES:

	Plate	Screen	Osc. Plate	Grid	Filament
V1	84	40	—	—	1.4
V2	65	65	*65	—	1.4
V3	84	40	—	—	1.4
V4	84 V. thru 1 Megohm.	84 V. thru 3 Megohms.	—	—	1.4
V5	83	84	—	-6	1.4

*Note: Screen of V2 is used as Oscillator Plate.
These voltages must be measured to receiver earth with voltmeter having a resistance of at least 1000 ohms per volt (Tolerance ± 5%). Volume control must be turned to maximum.

MEASUREMENT SPECIFICATION:
R.F. Sensitivity—V1 grid 15 microvolts average.
I.F. and Signal Frequency—V2 grid 150 microvolts.
I.F. Sensitvity—V3 grid 10 millivolts.
These figures are related to an audio frequency outuput of 22.5 volts measured between plate of V5 and EARTH through a series condenser of .1 MFD capacity.
When measuring sensitivity, a .1MFD condenser should be used between the "hot" signal generator lead, and the grid of the valve (stage) being checked. Do not disconnect any wiring.

ALIGNMENT FREQUENCIES: 1400 Kc/s. and 600 Kc/s.

CHECK POINTS: 1000 Kc/s.

STC MODEL 125