



S.T.C. 225

S.T.C. 225

CIRCUIT: Five valve, dual wave, battery operated superheterodyne with R.F. stage, converter, I.F. stage, detector-audio stage, and power output stage.

FEATURES: A.V.C. variable tone control, high impedance loop aerial, (detachable when set used with external aerial). High gain aerial coil, provision for external batteries.

TUNING RANGE:

Broadcast 530-1620 Kc/s.
Short Wave 5.9-18 Mc/s.

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 M.A.
"B" Battery 90 Volts—15 M.A.

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

CIRCUIT VOLTAGES:

	Plate	Screen	Osc. Plate	Grid	Filament
V1	84	30	—	—	1.4
V2	67.5	67.5	* 67.5	—	1.4
V3	84	40	—	—	1.4
V4	84 volts thru 1 megohm	84 volts thru 3 megohms	—	—	1.4
V5	83	84	—	—	1.4

* NOTE Screen of V2 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 \pm 5%).
Volume control must be turned to maximum.

MEASUREMENT SPECIFICATION:

I.F. Sensitivity—V2 grid 170 microvolts.

I.F. Sensitivity—V3 grid 10 millivolts.

Broadcast Sensitivity 4 microvolts average.

Shortwave Sensitivity 60 microvolts average.

These figures are related to an audio frequency output of 22.5 volts measured between plate of V5 and CHASSIS through a series condenser of .1 MFD capacity.

When measuring sensitivity, a .1 MFD 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:

Broadcast 1400 Kc/s and 600 Kc/s.

Shortwave 16 Mc/s and 6 Mc/s.

CHECK POINTS:

Broadcast 1000 Kc/s.

Shortwave 10 Mc/s.