

Issue: No. 74

Date of Issue: September, 1951

Subject: Model B2510

SPECIFICATION OF S.T.C. MODEL B2510

CIRCUIT: Five valve, dual wave, battery operated superheterodyne with R.F.

stage, converter, I.F. amplifier, detector audio stage, power output stage. A.V.C.; combined volume control and battery on-off switch;

continuously variable tone control.

TUNING RANGE:

Broadcast: 530-1620 Kc/s. Shortwave: 5.9-18 Mc/s.

INTERMEDIATE FREQUENCY:

455 Kc/s.

VALVE COMPLEMENT:

VI R.F. Amplifier IT4

V2 Frequency Changer IR5. V3 I.F. Amplifier IT4.

V4 Detector-Audio IS5.

V5 Power Output 3V4.

POWER SUPPLY:

"A" Battery, 1.5 volts, 300 milli-amps.

"B" Battery, 90 volts, 16 milli-amps.

LOUD SPEAKER:

9 x 6 inch oval. 10000 Ohm transformer.

CIRCUIT VOLTAGES:

	Plate	Screen	Osc. Plate	Grid	Filament
۷I	84	35	·		1.4
V2	. 84	60	*60		1.4
V3	84	35	-		1.4
V4	84 thru	84 thru		-	1.4
V5	.5 meg. 82	3 meg. 84	-	6 thru I meg.	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.

When measuring I.F. Sensitivity a .I 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.

MEASUREMENT SPECIFICATION:

I.F. Sensitivity—V2 grid 85 microvolts. I.F. Sensitivity—V3 grid 6 millivolts.

Broadcast Sensitivity 3 microvolts average.

Shortwave Sensitivity 15 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.

ALIGNMENT FREQUENCIES:

Broadcast—1400 Kc/s and 600 Kc/s.

Shortwave—10 Mc/s.

* C21&C22 75 PF C27&C28 100 PF 3 × 4 RI3 SIMEG 814 3000 \$00K SMEG 4 × 1 S 5 OOFF MODEL B2510 **%**₹ OFFO 5 × SO MF SO MF .¥€. ς \ 7 ھ V2 IR5 SFC CANGED > <u>+</u> + DIAL CORD DETAIL 5 00 X TURNS