



RADIO SERVICE BULLETIN

Issue No. 60.

Date of Issue: July, 1949.

Subject: Model 285.

SPECIFICATION OF S.T.C. MODEL 285 CONSOLE, OR TABLE MODEL

CIRCUIT: Five valve, dual wave, battery operated superheterodyne, with R.F. stage; converter; one stage of I.F. amplification; detector-audio stage; power output stage, A.V.C.; variable tone control.

TUNING RANGE:

Broadcast—530-1620 Kc/s.
Short Wave—5.9-17.9 Mc/s.

INTERMEDIATE FREQUENCY: 455 Kc/s.

VALVE COMPONENT:

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. 8 inch or 12 inch cone; 10000 ohm transformer.

CIRCUIT VOLTAGES:

	Plate	Screen	Osc. Plate	Grid	Filament
V1	84	35	—	—	1.4
V2	67	67	*67	—	1.4
V3	84	35	—	—	1.4
V4	—	—	—	—	1.4
V5	82	84	—	†-6	1.4

*Note.—Screen of V2 used as oscillator plate.

†Measured across R14.

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. The plate and screen voltages on V4 cannot be accurately measured.

MEASUREMENT SPECIFICATION:

I.F. Sensitivity—V2 grid 120 microvolts.

I.F. Sensitivity—V3 grid 10 millivolts.

Broadcast Sensitivity—4 microvolts average.

Shortwave Sensitivity—35 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 I.F. 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.
Short Wave—16 Mc/s and 6 Mc/s.

CHECK POINTS:

Broadcast—1000 Kc/s.
Short Wave—10 Mc/s.



MODEL '285

