

LEKMEK RADIO LABORATORIES

TECHNICAL DATA

Model No. 803

(3 Sheets)

Sheet No. 1

SERVICE NOTES.

MODEL 803 ELECTRIC.

The Model 803 Lekmek Superheterodyne is similar to the Broadcast section of the Model 1101, thus ensuring first class results on the Broadcast Band. The special push-pull output system used in this receiver gives excellent reproduction, throughout the full audio spectrum.

Owing to the incorporation of an R.F. stage and two stages of intermediate frequency amplification, the sensitivity is such that consistent daylight reception may be expected in the country, and interstate and overseas stations tuned with ease at night. In congested city areas in close proximity to Broadcasting Stations, the high selectivity of this receiver will guarantee complete freedom from cross modulation, image and other similar interference.

CIRCUIT. The circuit arrangement adopted in the Model 803 is as follows:

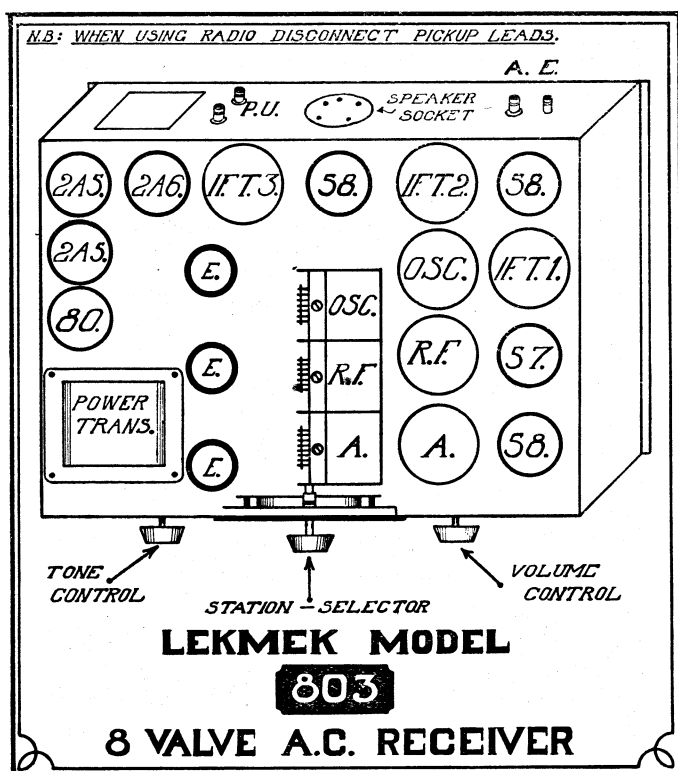
The signal passes from the aerial coil to a type 58 valve which is transformer coupled to the first detector using a 57 type valve also functioning as an autodyne oscillator. The frequency is now changed to 186kc and is fed through two stages of intermediate frequency amplification using 58 type valves. The output from the last intermediate stage is demodulated by a dual purpose valve type 2A6, which is resistance coupled to two 2A5 valves in Push Pull, driving an Amplion type Q075 speaker. The high tension supply is rectified with a 280 type valve, and adequate filtering is provided by a 500 ohm filter choke and the speaker field, bypassed with three 8 M.F. electrolytic condensers.

VOLTAGE LIMITS. A chart is shown on next page of voltages taken with a 1000 ohm per volt meter these values tabulated being measured at the valve sockets with the valves in position and the speaker connected. The readings shown may vary slightly, owing to valves ageing and line fluctuations.

MODEL 803 ELECTRIC.

VOLTAGE CHART.

| VALVE FUNCTION | VALVE TYPE | PLATE VOLTS | SCREEN VOLTS | BIAS VOLTS | FIL. VOLTS |
|----------------|------------|-------------|--------------|------------|------------|
| R.F. AMP. | 58 | 250 | 100 | 3-40 | 2.5 |
| 1ST DET. OSC. | 57 | 250 | 100 | 4 | 2.5 |
| 1ST I.F. STAGE | 58 | 250 | 100 | 3-40 | 2.5 |
| 2ND I.F. STAGE | 58 | 250 | 100 | 3-40 | 2.5 |
| DIODE 2ND DET. | 2A6 | 110 | - | 1.5 | 2.5 |
| OUTPUT | Push | 2A5 | 250 | 16.5 | 2.5 |
| OUTPUT | Pull | 2A5 | 250 | 16.5 | 2.5 |
| RECTIFIER | 80 | 385-385 | - | - | 5 |



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LEKMEK A.C. RECEIVER TYPE 803.

VALVES: $\frac{3}{58}$, $\frac{1}{57}$, $\frac{1}{2A6}$, $\frac{2}{2A5}$, $\frac{1}{280}$.

