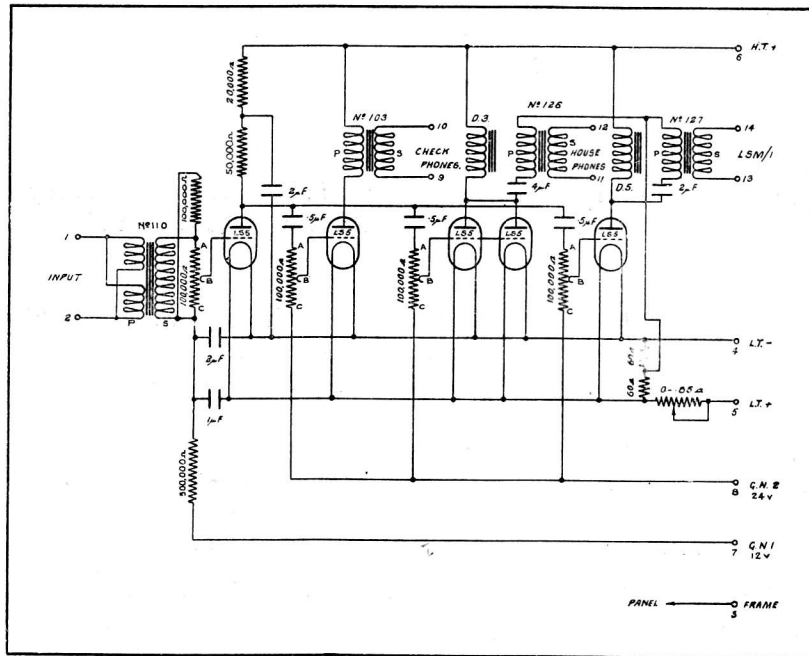


## AMPLIFIER TV/2



*Drawing A.1070 Issue 5.*

**Function**—This trap valve amplifier is used in **London** and is connected to the output of the ‘B’ amplifier, in parallel with the ‘C’ amplifiers associated with the lines taking the particular programme. It has three independent outputs which feed the checkphone, housephone and loudspeaker circuits, respectively. The maximum load for which each of these circuits is designed is as follows :—

Checkphones	.. .. .	4 pairs of headphones.
Housephones	.. .. .	100 ” ” ” ”
Loudspeakers	.. .. .	150 LSM/1 amplifiers.

**Circuit**—It is a two-stage amplifier with three output stages fed in parallel via a resistance-capacity coupling from the anode circuit of the first stage.

**Impedances**

Input impedance	.. .. .	3,300 ohms.
Output impedances		
CH.	.. .. .	430 ”
H.P.	.. .. .	10 ”
LSM/1	.. .. .	10 ”

**AMPLIFIER TV/2**  
 Technical Instructions  
 Item 3 (TV/2). March, 1935

Transformers	Number	Impedance	Turns
		Ratio	Ratio
Input	110	1/15.2	1/3.9
CH. Output	103	12/1	3.46/1
H.P. ,,	126	300/1	17.3/1
LSM/1 ,,	127	600/1	24.5/1

**Volume Control**

Input stage and each of the output stages, independent continuously variable potentiometers of total resistance approximately 100,000 ohms.

**Supply Data**

Stage	Valve	Grid Bias	Anode Feed	Filament	
		Volts	mA.	Volts	Amps
1	LS.5	12	2 — 4	5	0.8
CH	LS.5	24	18 — 24	5	0.8
H.P.	2—LS.5 (in parallel)	24	36 — 48	5	1.6
LSM/1	LS.5	24	18 — 24	5	0.8
<i>Total</i>			74—100	4.0	

H.T. Supply .. .. . 300 volts.  
 L.T. Supply .. .. . 6 volts (adjusted to 5V. by a series resistance).

**Test Data**

Maximum Voltage Gain at 1,000 c/s.

CH. Output (loaded with 1,000 ohms)	..	23 ±2 db.
H.P. ,, ( ,, ,, 20 ,, )	..	9.2 ±2 db.
LSM/1 ,, ( ,, ,, 20 ,, )	..	6.2 ±2 db.

Output level for test purposes, in each case .. 0 db.