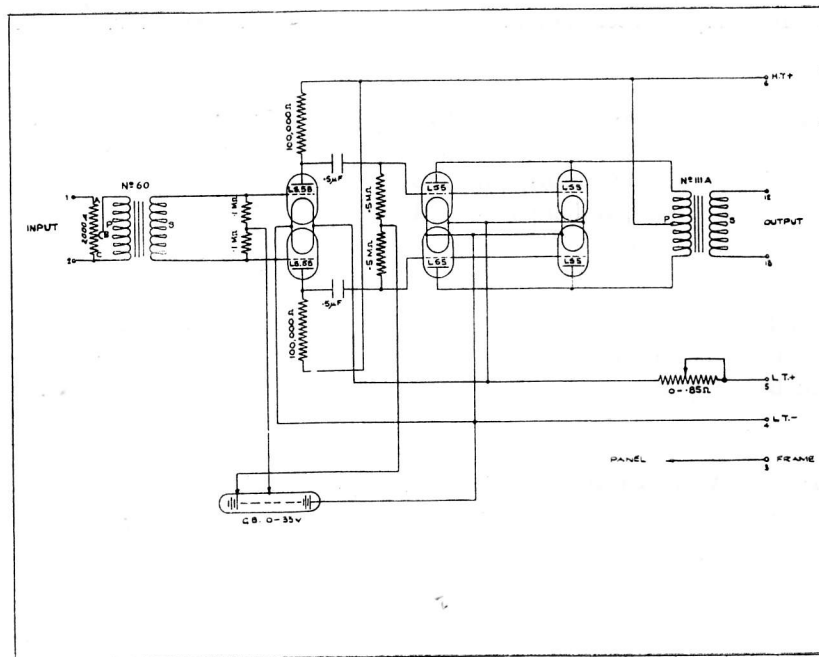


AMPLIFIER LST/1



Drawing A.832, Issue 3.

Function—This is a loudspeaker amplifier used at N.R.T. It is connected on the input side to the L.F. output of the **LFT/2** amplifier, which in turn operates in the output of the check receiver. The control room loudspeaker is normally connected in its output but may be switched over to the output of the **LCT/1** amplifier for comprehensive checking purposes. In addition to the control room loudspeaker this amplifier also operates loudspeakers in other parts of the building.

Circuit—It is a two-stage push-pull amplifier the output stage of which employs four valves connected in parallel push-pull. It is provided with an input transformer and resistance capacity coupling is employed between stages. The output stage is transformer coupled to the loudspeaker and is designed to operate two Rice-Kellogg Senior moving-coil type loudspeakers in parallel. A volume control potentiometer is connected in the primary circuit of the input transformer.

Impedances

Input impedance	1,500 ohms.
Output impedance	3 "

Transformers

Transformers	<i>Number</i>	<i>Impedance Ratio</i>	<i>Turns Ratio</i>
Input	60	1/30.3	1/5.5
Output	111A	2,000/1	44.6/1

AMPLIFIER LST/1

Technical Instructions

Item 3 (LST/1). March, 1935

Volume Control

Continuously variable potentiometer of resistance 2,000 ohms.

Supply Data

Stage	Valve	Grid Bias		Anode Feed		Filament	
		Volts		mA. (approx.)	Volts	Amps	
1	2—LS.5B (in push-pull)	3		3.0	5	1.5	
2	4—LS.5 (in parallel push-pull)	24		70.0	5	3.0	
	<i>Total</i>			73.0		4.5	
	High Tension Supply	..	..	..	..	300 volts.	
	Low Tension Supply	..	..	..	..	6 volts.	
	Grid Bias Supply	..	..	..	..	33 volts. (Dry battery.)	

Test Data

Maximum Voltage Gain at 500 c/s. (Output loaded with 6 ohms and at a level of 0 db.) 17 ±2 db.