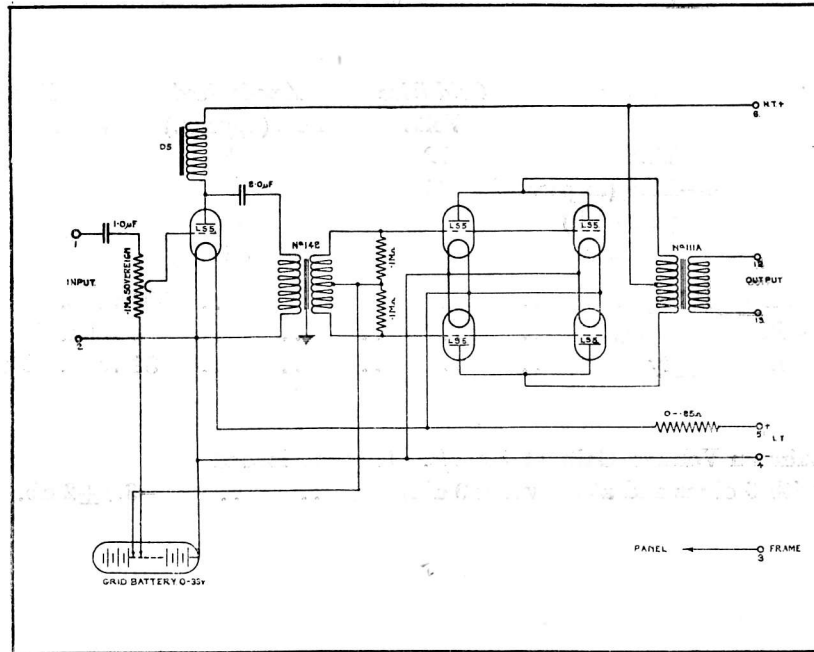


AMPLIFIER LST/2



Drawing A.1602, Issue 1.

Function—This is a loudspeaker amplifier used at S.R.T. and W.R.T. It is connected on the input side to the L.F. output of the LFT/3 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/2 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 amplifier the output stage of which employs four valves connected in parallel push-pull. It has a high impedance, capacity-coupled input circuit, which includes a volume control potentiometer. Choke-capacity-transformer coupling is employed between the stages and the output stage is transformer coupled to the loudspeaker. It is designed to operate two Rice-Kellogg Senior moving-coil loudspeakers in parallel.

Impedances

Input impedance	..	..	..	..	..	..	..	..	100,000 ohms.
Output impedance	..	..	..	..	..	..	..	..	3 ohms.

Transformers

	Number	Impedance Ratio	Turns Ratio
Output	111A	2,000/1	44.6/1
Intervalve	142	1/4	1/2

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

Volume Control

Continuously variable potentiometer of resistance 100,000 ohms.

Supply Data

<i>Stage</i>	<i>Valve</i>	<i>Grid Bias</i>		<i>Anode Feed</i>		<i>Filament</i>	
		Volts		mA. (approx.)		Volts	Amps
1	LS.5	12		15		5	0.75
2	4—LS.5 (in parallel push-pull)	24		70		5	3.0
	<i>Total</i>			85			3.75
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.) -3.6 ± 2 db.