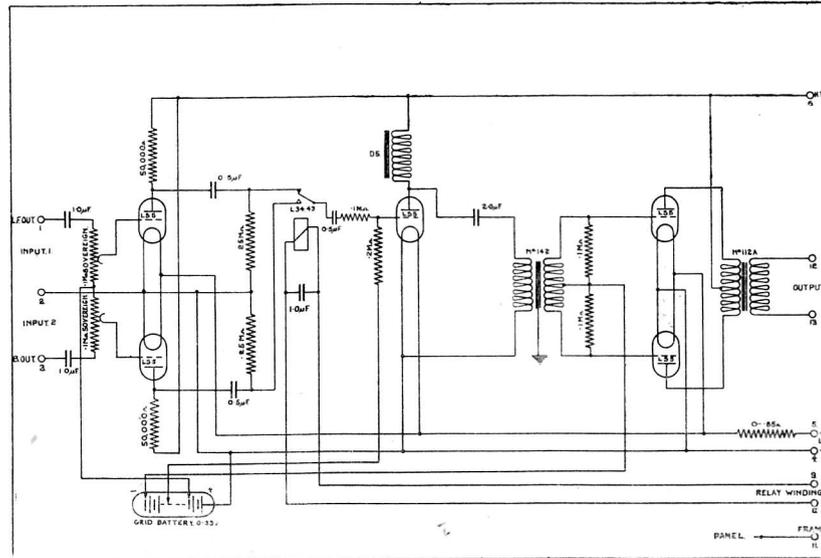


AMPLIFIER LCT/2



Drawing A.1603, Issue 4.

Function—This amplifier is used at S.R.T. and W.R.T. for comprehensive checking purposes. It has two input circuits, one of which can be connected via switching to either of the 'B' amplifier outputs, and the other connected to the L.F. output of the LFT/3 amplifier which operates in the output of the check receiver. The output is normally connected to the quality checking loudspeaker which is of the Rice-Kellogg Senior moving-coil type. When, however, comprehensive checking facilities are required in the control room, the control room loudspeaker can also be switched to operate in parallel with the quality checking loudspeaker in the output of the LCT amplifier.

Circuit—It is a three-stage amplifier with the first stage duplicated. Relay switching is provided in the coupling circuit between the first and second stages so that either of the two first stages may be connected. The second stage is choke-capacity-transformer coupled to the push-pull output stage which is transformer coupled to the loudspeaker. Both input circuits are of high impedance, being capacitatively coupled to the LFT and 'B' amplifier outputs, respectively, and each includes a potentiometer by means of which the two inputs can be equalised.

Impedances

Input impedance	..	..	..	..	..	..	..	100,000 ohms.
Output impedance	..	..	..	..	..	..	..	6 ohms.

Transformers

	Number	Impedance Ratio	Turns Ratio
Output	112A	2,000/1	44.6/1
Intervalve	142	1/4	1/2

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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> mA. (approx.)	<i>Filament</i>	
		Volts	mA. (approx.)		Volts	Amps
1	2—LS.5	4.5	3.0	5	1.5	
2	LS.5	12.0	15.0	5	0.75	
3	2—LS.5 (in push-pull)	24.0	35.0	5	1.5	
<i>Total</i>				53.0	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 12 ohms and at a

level of +5 db.) 4.5 ±2 db.