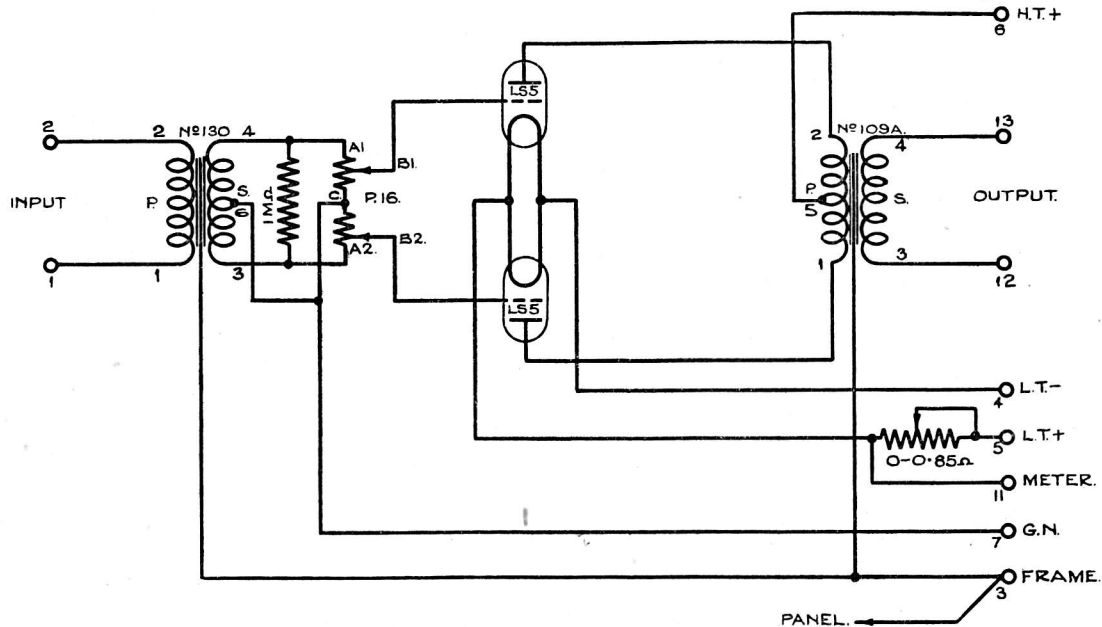


AMPLIFIER C/2



Circuit

The C/2 is a single stage push-pull amplifier with input and output transformers and a balanced volume control. The grid bias is obtained from an external battery.

The gain of this amplifier has recently been increased from 6 db. to 12 db. by paralleling the two halves of the input transformer primary winding. In a few special cases a gain of 18 db. has been obtained by paralleling the four sections of this winding.

Impedances

Input impedance	.. .. .	(approx) 16,000 ohms
Output impedance	.. .. .	(approx) 550 ohms
Normal load impedance	.. .. .	(approx) 600 ohms

Transformers

						<i>Impedance</i>	<i>Turns</i>
						<i>Ratio</i>	<i>Ratio</i>
Input	..	..	..	..	..	130	1/10
Output	..	..	..	..	..	109A	20/1
							1/3.16
							4.47-1

Volume Control

<i>Type</i>	<i>Total Resistance</i>	<i>No. of Studs</i>	<i>Loss per Stud</i>	<i>Loss on Lowest Stud</i>
P16	200,000 Ω	10	2 db.	Infinite

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Supply Data

<i>Stage</i>	<i>Valve</i>	<i>Grid Bias</i>				<i>Anode Current</i>	<i>Filaments</i>	
		Volts negative				mA (approx)	Volts	Amps
1	2—LS5 (in push-pull)	24				40—55	5	1.6
High Tension Supply	..	..	..	..	..	300 volts		
Low Tension Supply	..	..	..	..	..	6 volts (adjusted to 5 V. by a series resistance)		

600 Ohm Test Gain

Testing Conditions

Volume control set for maximum output.

Loss Pads key at 30 db.

T.M.S. sending level	..	..	..	..	..	+10 db.	
Gain at 1,000 c/s	..	..	..	..	..	12 ± 1 db. (or 18 db.)	
Gain at 50—5,000 c/s.	..	..	..	..	..	±0.5 db.	} Relative to gain at 1,000 c/s.
5,000—9,000 c/s.	..	..	..	..	..	±1.0 db.	

Working Voltage Gain

Testing Conditions

Amplifier volume control set for maximum output.

Output loaded with 600 ohms and at a level of approximately +10 db.

Gain at 1,000 c/s	0 ± 1 db.	
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