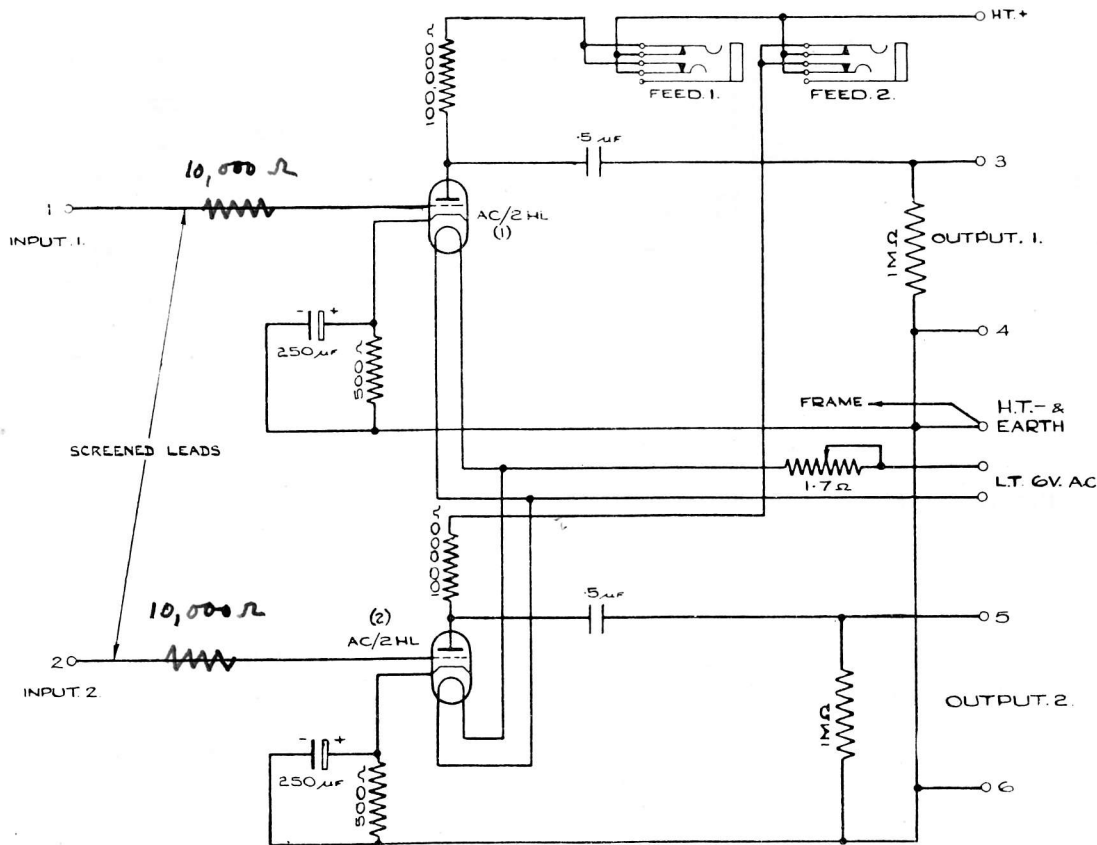


AMPLIFIER PFL/4



Drawing A.4417, Issue 2

Figure 1. Circuit of Amplifier

This is a pre-fade listening amplifier and is installed in the gramophone reproducing desks TD/7A at certain stations. It consists of two separate amplifiers with their inputs connected to the outputs of the two gramophones fitted on the desk. Provision is made for connecting headphones via key switching across the output of either amplifier.

Circuit

The amplifier consists of two independent single-stage amplifiers without either input or output transformers. The grid bias is automatic and jacks are provided for measuring the individual anode currents. No volume control is provided. The rectified H.T. and A.C. L.T. supplies for operating these amplifiers are obtained from the mains unit, MU/1, common to the six amplifier units incorporated in the standard triple desk (six turntables) provided for gramophone reproduction.

AMPLIFIER PFL/4
 Technical Instructions
 Item 3 (PFL/4). July, 1938

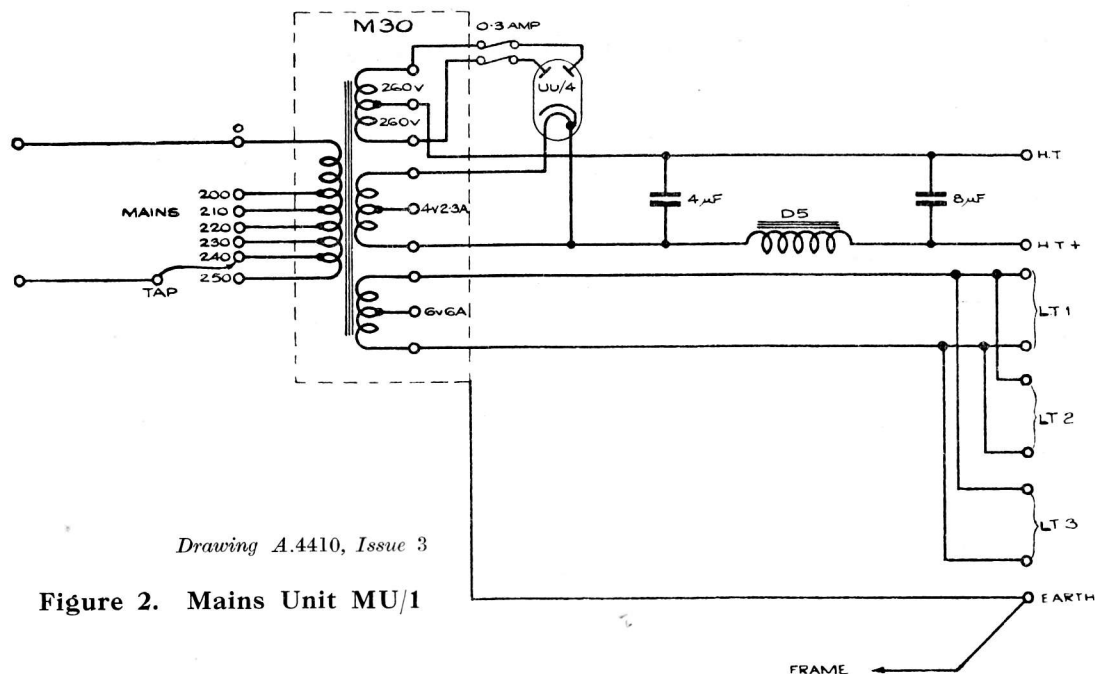


Figure 2. Mains Unit MU/1

Impedances

Input impedance	.. .. .	Infinite
Output impedance	.. .. .	(approx) 15,000 ohms
Normal load impedance (1 pr. Ericsson headphones at 1,000 c/s)	.. .. .	(approx) 18,000 ohms

Supply Data

Stage	Valve	Automatic	Anode Current	Filaments	
		Grid Bias		Volts	Amps
		Volts negative	mA (approx)		
Each stage	AC 2HL	1	2	4	1
		Total (2 stages)	4		2
High Tension Supply	.. .. .	.. .. .	.. .. .	300V rectified A.C.	
Low Tension Supply	.. .. .	.. .. .	.. .. .	6V A.C. (adjusted to 4V by a series resistance).	

Working Voltage Gain

Testing Conditions

Output loaded with 18,000 ohms and at approximately zero level

Gain at 1,000 c/s. 30 ± 2 db.