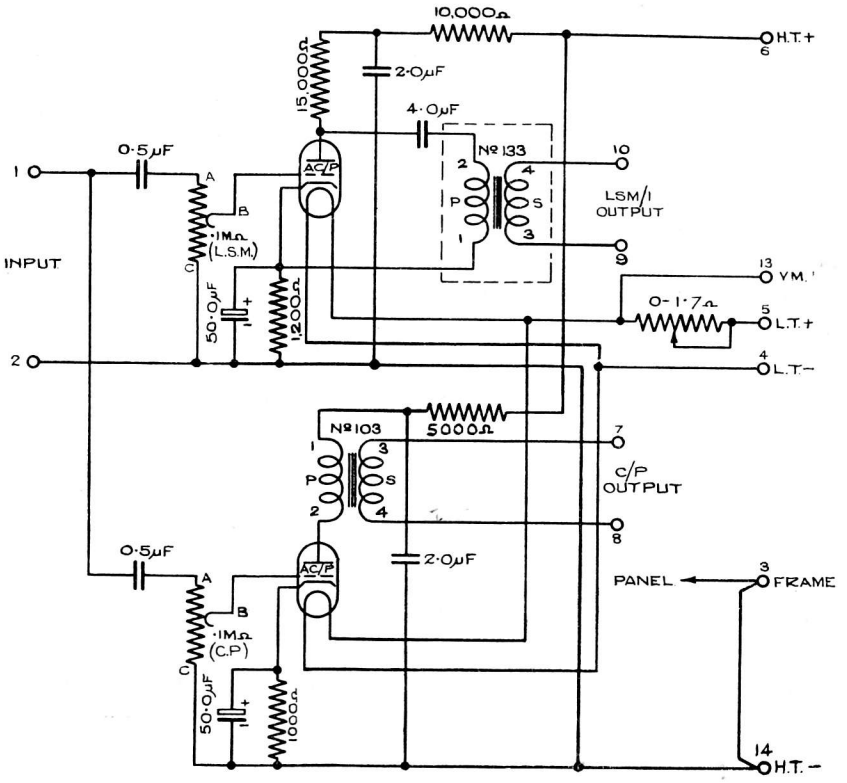
AMPLIFIER CPL/2



Drawing A.2538, Issue 5.

This amplifier operates in the output of the check receiver. It has two output circuits one of which supplies the checkphones and the other the comprehensive checking and loudspeaker amplifiers.

It is used at **Droitwich, Lisnagarvey, Burghead, Penmon, Stagshaw, Bangor** and **Belfast.**

Circuit

It comprises two amplifiers with a common high-impedance input circuit, which is resistance-capacity coupled to the output of the receiver unit. The loudspeaker output is resistance-capacity coupled to the output transformer and the checkphones output is provided by a transformer with its primary connected in series with the anode. The grid bias is automatic.

In the amplifier supplied to **Droitwich** the H.T. is applied by means of an external relay which is caused to operate by a DLS.1 (thermal delay switch) in the amplifier.

Impedances

Input impedance	50,000 ohms
CP output impedance	400 ohms
LS output impedance	400 ohms

Transformers

	Number	*Impedance Ratio*	*Turns Ratio*
CP output	103	12/1	3.46/1
LS output	133	12/1	3.46/1

Volume Control

Two continuously variable potentiometers of resistance 100,000 ohms.

Supply Data

Stage	*Valve*	*Automatic Grid Bias* Volts negative	*Anode Current* mA (approx)	*Filaments* Volts	Amps
LS	ACP	6—7	6—7	4	1
CP	ACP	15—20	12—15	4	1
	Total		18—22		2

High Tension Supply	250 volts rectified A.C.
Low Tension Supply	6 volts rectified A.C. (adjusted to 4V by a series resistance)

Working Voltage Gain

Testing Conditions

Volume controls set for maximum output

CP output loaded with 1,000 ohms and LS output loaded with 750 ohms. Output in both cases at approximately zero level

Gain at 1,000 c/s.

CP output	0.8 ± 1 db.
LS output	0.8 ± 1 db.