

AMPLIFIER CCT/1
 Technical Instructions
 Item 3(CCT/1). May, 1938

Circuit (Contd)

between each of the input stages and the output transformer. The two input potentiometers should be adjusted so that when the output connection is changed from the check receiver output to the 'B' amplifier output there is no appreciable change of volume in the loud-speaker. 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

'Radio' input impedance	(approx)	100,000 ohms
'B' amplifier input impedance	(approx)	100,000 ohms
Output impedance	(approx)	480 ohms

Transformers

	<i>Number</i>	<i>Impedance Ratio</i>	<i>Turns Ratio</i>
'B' amplifier input	243	1/1	1/1
Output	133	12/1	3.46/1

Volume Control

Two continuously variable potentiometers of resistance 100,000 ohms (approx).

Supply Data

<i>Stage</i>	<i>Valve</i>	<i>Automatic Grid Bias</i>		<i>Anode Current</i> mA (approx)	<i>Filaments</i>	
		Volts negative			Volts	Amps
Radio input	ACP	7.2		6.4	4	1
'B' Amp.	ACP	7.2		6.4	4	1
	<i>Total</i>			12.8		2
High Tension Supply			(approx) 250 volts	rectified A.C.	
Low Tension Supply			(approx) 6 volts	rectified A.C. (adjusted to 4 volts by a series resistance).	

Working Voltage Gain

Testing Conditions

Volume control set for maximum output.
 Output loaded with 3,000 ohms and at approximately zero level.

Gain at 1,000 c/s.

'Radio' output (relay unoperated)	4.0 ± 1 db.
'B' amplifier output (relay operated)	4.0 ± 1 db.