AMPLIFIER RS/1 Technical Instructions Item 3 (RS/1). July, 1938

0 HT.+ **c**9 ZUF łł 97 a Mine OUTPUT NPU 50.4F <u></u>–ĺ⊧ 20 00 -www 1200 L Q V.M. www. o LT+ L.T.-PANEL D FRAME

AMPLIFIER RS/1

Drawing A.2995, Issue 2

This amplifier is used at London (Maida Vale) as a recording supply amplifier for terminating lines incoming from Broadcasting House.

Circuit

It is a single-stage amplifier with an input transformer and with its output choke-capacity coupled to the output transformer. The grid bias is automatic.

Impedances

Input impedance	 	 	(approx) 600 ohms
Output impedance	 		$({ m approx})$ 56 ${ m ohms}$
Normal load impedance	 • •	 	(approx) 80 or 160 ohms

Transformers

					Impedance	Turns
				Number	Ratio	Ratio
\mathbf{Input}		 	 • •	54	1/10.9	1/3.1
Output	••	 ••	 • •	191	91/1	9.53/1

AMPLIFIER RS/1

Technical Instructions

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Supply Data	1.2.2			* I .					
Valve	AutomaticValueGrid BiasVolts negative		Anode Current mA approx.			Filaments			
						Volts A		Amps	$\mathbf{Amps.}$
ACP	15			12.5		4	Ł	1	
H.T. supply					250	volts	rectifie	d A.C).
L.T. supply		••	••	•••	6		rectifie ted to resistan	4V	
600 Ohm Test Gain									

Loss Pads key set at	30	db.		
T.M.S. sending level	••	• •	••	+ 5 db.
Gain at 1,000 c/s				\dots 9 \pm 1 db.
Gain at 50—5,000 c/s.		. ··	•••	$\ldots \pm 0.5$ db. $igcap$ Relative to gain
Gain at 5,000–9,000 c/s.	••	· · ·	••	$\ldots \pm 1.0$ db. \int at 1,000 c/s.

Working Voltage Gain

Gain at 1,000 c/s

Output loaded with 80 ohms and at zero level $5 \pm$ Output loaded with 160 ohms and at zero level7.5

 5 ± 1 db. 7.5 ±1 db.