SIGNAL GENERATOR NO. 1, Mks. 1 (WY 0063), 2 (WY 0062) and 2B (WY 0268)

DATA SUMMARY

PURPOSE
To provide an R.F. signal of constant amplitude to an internal accurately calibrated variable attenuator. The output from the attenuator is used in measuring the performance of telecommunications equipment.

DESCRIPTION
A R.F. oscillator provides a C.W. signal, variable in frequency over a wide range. The output is adjusted during operation to IV R.M.S., by means of a thermocouple monitor, and fed to the variable attenuator, from which any output from 1μV to 1V may be taken. A modulator stage allows of internal amplitude modulation at an audio frequency to a known variable depth, if required. Provision is also made for the application of external modulation, either direct or amplified.

PHYSICAL DATA
Weight: .78 lb.
Height: 12 in.
Length: 29 in.
Width: 10 in.

FREQUENCY
R.F.: 85 kc.s in eight ranges.
Internal modulation: 400 c.s.

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Distribution Class 930. Code No. 6
TELECOMMUNICATIONS

PERFORMANCE
Output is continuously variable from 1 μV to 1 V.
R.F. accuracy: Below 4.5 Mc/s: 5μV, 0.2μV
4.5 to 15 Mc/s: 10μV, 0.3μV
15 to 25 Mc/s: 20μV, 0.5μV
Modulation: depth 0 to 75%; Accuracy 5%
Output impedance (Mk. 1): 1 to 10μV: 10Ω
10 to 100μV: 15Ω
100μV to 1 V: 525Ω
Output impedance (Mks. 2 and 2a): 1 to 100μV: 10Ω
100μV to 1 V: 525Ω

POWER REQUIREMENTS AND CONSUMPTION
Mains or battery supply may be used.
Mains: 200 to 250V, 40 to 100 c/s, A.C. Consumption: 40W.
Battery: H.T., 200V at 30mA.
L.T., 4V at 3.5A.

OUTPUT TERMINATION
The output is taken via a screened coaxial cable terminating in a dummy aerial, which may be put in or out of circuit. The minimum external impedance should be not less than 200Ω for outputs of 1μV to 100mV, and not less than 1kΩ for outputs of 100mV to 1V.

VALVES

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<th>Mks. 1 and 2</th>
<th>Mk. 2a</th>
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<td>R.F. oscillator</td>
<td>AC P</td>
<td>ML4</td>
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<tr>
<td>A.F. oscillator</td>
<td>AC P</td>
<td>ML4</td>
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<tr>
<td>A.F. amplifier</td>
<td>AC P</td>
<td>ML4</td>
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<tr>
<td>F.W. rectifier</td>
<td>AU3A (UUS or MUI2 14)</td>
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