OSCILLATOR, TEST, NO. 2

TECHNICAL HANDBOOK - DATA SUMMARY

Note: This Issue 2 supersedes Issue 1, dated 5 Sep 52. It has been revised throughout.

PURPOSE

To provide an R.F. signal, amplitude modulated (A.M.) frequency modulated (F.M.) or continuous wave (C.W.) for use when carrying out unit or field repairs to field wireless equipment.

DESCRIPTION

The oscillator is a portable, sealed equipment with leads and terminating unit carried in the lid. The R.F. signal is variable in frequency and output. For A.M. the modulation is fixed in depth and frequency, for F.M. the deviation is variable. The equipment may be operated from A.C. mains or an external battery.

PHYSICAL DATA

Height: 81 inches
Length: 12% inches
Height: 10% inches (including lid)
Weight: 20 lb

FREQUENCY

The equipment covers the range 20-60Mc/s in two ranges:

Range 1  20 - 40Mc/s  accuracy ±2%
Range 2  40 - 60Mc/s

Fig 1 - Oscillator Test No. 2

Distribution - Class 930, Code No. 6
TELECOMMUNICATIONS
Z 150/2

PERFORMANCE

R.F. output:
Variable from 1mV to 100mV by means of two attenuators. Coarse attenuator 0-60dB in 20dB steps, fine attenuator 0-20dB in 2dB steps. Accuracy ±2dB ±16V
A.M.: Pre-set to approximately 30% at 1kHz
F.M.: Deviation variable up to 40kHz with indications at 10, 20, 30, 40kHz.

Output Impedance:
The output is taken via concentric cable and a terminating unit, giving 75Ω or 75Ω. With the lower impedance the output is reduced to approximately one-tenth of that indicated.

POWER REQUIREMENTS
The equipment may be operated from either A.C. mains or a battery.
Mains: 110, 115, 120, 220, 230, 240V 45-66Hz
Consumption 50VA (approx)
Battery: 12V
Consumption 12W (approx)

END

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ELECTRICAL AND MECHANICAL ENGINEERING REGULATIONS

VALVES

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<td>CV 128</td>
<td>Reactor</td>
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<tr>
<td>V2</td>
<td>CV 133</td>
<td>R.F. Oscillator</td>
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<td>V3</td>
<td>CV 128</td>
<td>Limiter (Range 1) Doubler (Range 2)</td>
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<td>V4</td>
<td>CV 133</td>
<td>Output</td>
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<td>V5</td>
<td>CV 126</td>
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<td>V6</td>
<td>CV 287</td>
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<td>V7</td>
<td>CV 493</td>
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SPECIAL FACILITIES
The modulation tone is available at a fixed level at a pair of terminals for A.F. tests. The load should not be less than 600Ω.