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.

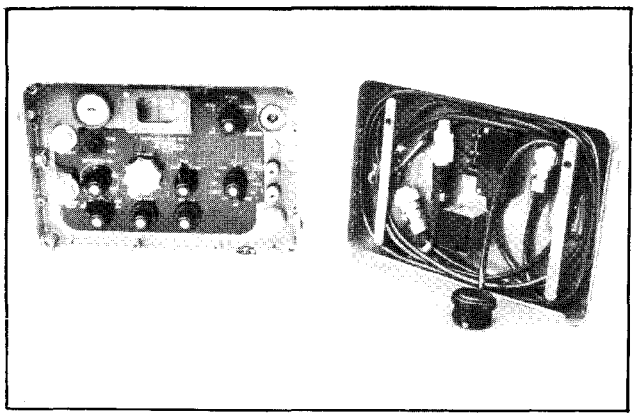

Fig 1 - Oscillator test No. 2

PHYSICAL DATA

Height:	8½ inches
Length:	12⅝ inches
Depth:	10¾ inches (including lid)
Weight:	28 lb

FREQUENCY

The equipment covers the range 20-80Mc/s in two ranges.

Range 1 20 - 40Mc/s)
Range 2 40 - 80Mc/s) accuracy ±2%

PERFORMANCE

R.F. output:-

Variable from 1μV to 100mV by means of two attenuators. Coarse attenuator 0-80db in 20db steps, fine attenuator 0-20db in 2db steps. Accuracy ±2db ±1μV

A.M.: Pre-set to approximately 30% at 1kc/s
F.M.: Deviation variable up to 40kc/s with indications at 10, 20, 30, 40kc/s.

Output impedance:-

The output is taken via concentric cable and a terminating unit, giving 7.5Ω 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 - 66c/s
Consumption 50VA (approx)

Battery: 12V
Consumption 42W (approx)

57/Maint/2678

VALVES

Reference	*Type*	*Function*
V1	CV 138	Reactor
V2	CV 138	R.F. Oscillator
V3	CV 138	Limiter (Range 1) Doubler (Range 2)
V4	CV 138	Output
V5	CV 136	Modulation oscillator
V6	CV 287	Stabilizer
V7	CV 493	Mains rectifier

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.

END