

WIRELESS STATION MK 121 AND MK 122

TECHNICAL HANDBOOK - DATA SUMMARY

PURPOSE

Portable, low-power, c.w., h.f. transmitter-receiver for limited use. R.T. communication is possible with the W. S. Mk 122 using a separate modulator unit.

DESCRIPTION

The set is an amplitude modulated transmitter-receiver and operates from either a power pack, vibrator pack or a hand/pedal driven generator. The receiver is a three valve superheterodyne designed for c.w. reception. The transmitter is a class C amplifier driven by a crystal controlled oscillator. Crystals of fundamental frequency, half or one third of required frequency may be used.

PHYSICAL DATA

	Depth	Width	Height	Weight
Transmitter-receiver	3.3/8 in.	13 in.	9 in.	12.1/4 lb
Supply units, vibratory, No 14, 6V	3.1/8 in.	6.5/8 in.	8.3/4 in.	7.1/4 lb

Depth Width Height Weight

Generating sets, a.c., 10.3/8 11.3/4 16 38
45W, 110V, hand/pedal in. in. in. lb
driven, No 1, Mk 1 (including Charging set,
7A, No 1, Mk 1)

Spares box 3.3/8 13 9 8
in. in. in. lb

FREQUENCY

W.S. Mk 121

W.S. Mk 122

2.5 to 20Mc/s on 3 bands

Model	Range	Band	Range
A	2.9 to 6Mc/s	1	2.5 to 5Mc/s
B	4.4 to 8Mc/s	2	5 to 10Mc/s
C	6.6 to 14Mc/s	3	10 to 20Mc/s
D	8 to 17Mc/s		
E	9.4 to 20Mc/s		

Intermediate frequency: 470kc/s

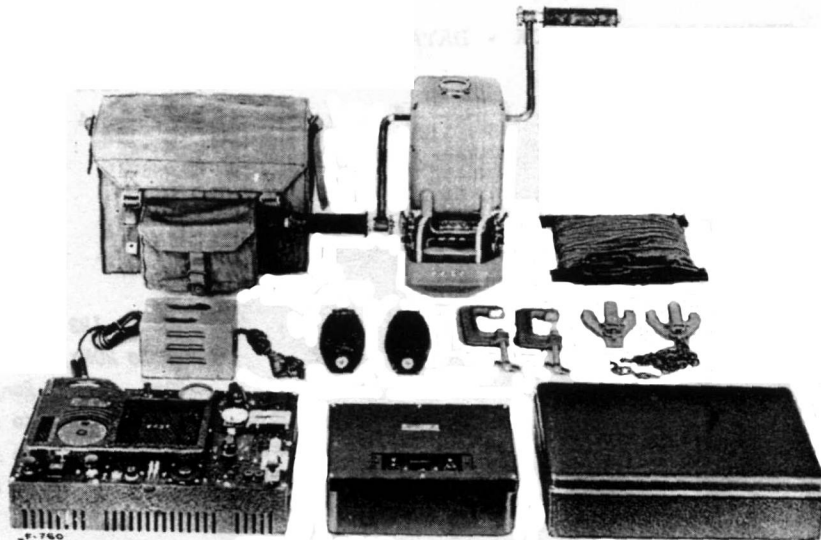


Fig 1 - Complete station (MK 122)

PERFORMANCE

Power output: Transmitter: 10-13W
Receiver sensitivity: 1-5 μ V for 20dB signal-to-noise ratio

Generating sets, a.c. 45W 110V, hand/pedal driven, No 1, Mk 1

Supplies up to 45W at 110V a.c. 200-250c/s, when operated at 75 rev/min

POWER REQUIREMENTS AND CONSUMPTION

Power pack: For a.c. mains only, 40-400c/s, 100-250V in 10V steps

Power consumption:-

Receive: 34W
Transmit: 22-65W

Supply units, vibratory, No 14, 6V

Power consumption:-

Receive: 5A
Transmit: 3.5A key up
10A key down

AERIAL SYSTEMS

- (a) 50 ft reel aerial
- (b) 100 ft wire aerial

VALVES

Transmitter:	Type: CV 3889	CV 3990	NE 48
	Qty 1	1	1
Receiver:	Type: CV 3888	CV 3883	CV 1833
	Qty: 2	1	1

EME8c/647

END