

WIRELESS SET, BURNDPT, BE 201

TECHNICAL HANDBOOK - DATA SUMMARY

Note: This issue, supersedes Pages 1 and 2 of Issue 1, dated 30 Jan. 1951. It has been amended.

PURPOSE

Air/ground R/T (A.M.) communication, replacing the Wireless set CN 346.

DESCRIPTION

Splash proof, man-portable (four men) or vehicle station with crystal controlled sender/receiver using a separate power supply unit. The sender employs five valves; crystal oscillator, two frequency treblers, frequency doubler and power amplifier. The modulator uses three valves, an amplifier followed by a push-pull output stage. The ten valves of the receiver are R.F. amplifier, mixer, three I.F. amplifiers, detector/ A.V.C. stage and A.F. amplifier. The local oscillator/treiber is crystal-controlled and is followed by a second trebler and a doubler.

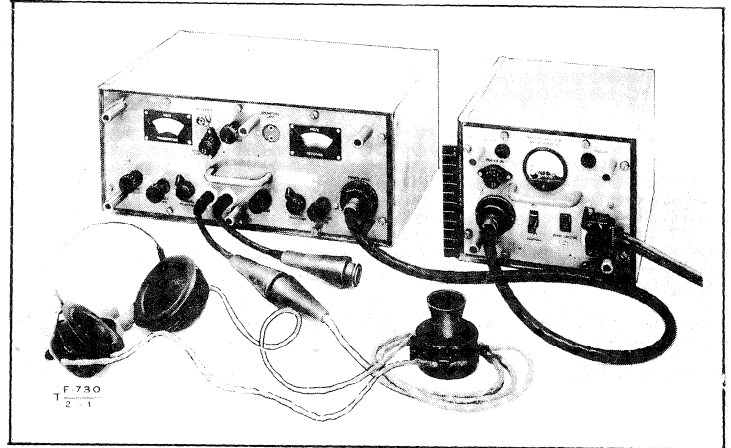


Fig. 1 - General view of equipment

PHYSICAL DATA

	Wireless set	Power supply unit
Weight:	30 lb.	24 lb.
Height:	7½ in.	7½ in.
Length:	17 in.	9 in.
Depth:	13½ in.	13 in.

FREQUENCY

Coverage: 100-156Mc/s

Frequency is crystal-controlled and any one of four plug-in crystals may be selected by a switch. Intermediate frequency: 9.72Mc/s.

Transmit crystal = $\frac{\text{R.F. operating frequency}}{18}$

Receiver crystal = $\frac{\text{R.F. operating frequency} - 9.72}{18}$

PERFORMANCE

Approximate range : 50 miles with aircraft at 5,000 ft.
 Sender output : 4-5W into 80Ω
 Receiver sensitivity: 5μV input for 1mW output

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POWER REQUIREMENTS AND CONSUMPTION

12V, normally from a 75Ah or 22Ah accumulator.
 Consumption: Send 12.5A, Receive 6A

AERIAL SYSTEM

- (a) Vertical quarter-wave rod, vehicle mounted.
- (b) Vertical half-wave dipole, pole or tree mounted with 27 ft. 80Ω coaxial feeder.

VALVES

Panel	Circuit reference	Type	Remarks
Sender	V1	CV 133	Crystal oscillator
	V2	CV 309	1st trebler
	V3	CV 309	2nd trebler
	V4	CV 309	Doubler
	V5	CV 309	Power amplifier
Modulator	V13	CV 492	Amplifier
	V14) V15)	CV 511	Push-pull output
Receiver	V6	CV 138	R.F. amplifier
	V7	CV 133	Mixer
	V8	CV 131	1st I.F. amplifier
	V9	CV 131	2nd I.F. amplifier
	V10	CV 131	3rd I.F. amplifier
	V11	CV 140	Detector/A.V.C.
	V12	CV 138	A.F. amplifier
	V16	CV 138	Doubler
	V17	CV 138	2nd trebler
	V18	CV 138	Oscillator/treiber

END

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