

RECEPTION SET, EDDYSTONE, 730/4 (Z4/ZA 51262)

TECHNICAL HANDBOOK - DATA SUMMARY

PURPOSE

General purpose communications-type single superheterodyne a.m. receiver covering range 480kc/s to 30Mc/s in five bands.

DESCRIPTION

The basic receiver comprises: Two r.f. stages, mixer, local oscillator, two variable bandwidth i.f. stages with gain compensation, detector, two a.f. stages and an output stage. A.G.C., noise limiter, 'S' meter, beat frequency oscillator and crystal calibrator facilities are incorporated. A low impedance i.f. outlet is provided. A crystal filter may be inserted in the i.f. amplifier, and a narrow-band a.f. filter may be switched into the audio stages. A logging scale is fitted. The set is not sealed. Brackets are supplied for 19 in. rack mounting.

PHYSICAL DATA

Weight	Height	Width	Depth overall
59 lb	9.3/8 in.	18.7/8 in. (inside mounting brackets)	13.3/4 in.

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Distribution - Class 880. Code No 4

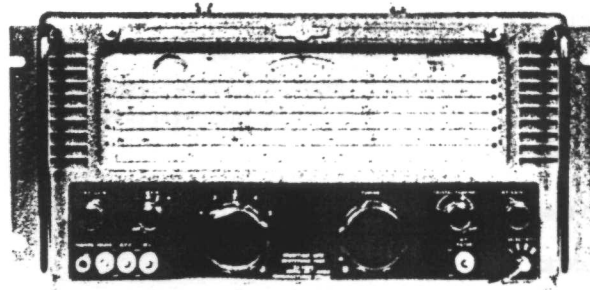


Fig 1 - Front view

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FREQUENCY

Tuning range:-

1	12.3Mc/s	30.0Mc/s
2	5.3Mc/s	12.5Mc/s
3	2.5Mc/s	5.7Mc/s
4	1.1Mc/s	2.5Mc/s
5	480kc/s	1120kc/s

Intermediate frequency: 450kc/s

Intermediate frequency bandwidth (-3dB):-

- (a) Variable coupling - 10.0, 3.6, 2.2, 1.5kc/s
- (b) Crystal filter - 0.6kc/s (asymmetrical)

Crystal calibrator: 500kc/s

B. F. O.: I. F. ± 2.0 kc/s

Audio filter: Centre frequency 1,000c/s
Bandwidth (-6dB) 100c/s

PERFORMANCE

Sensitivity (50mW output, 15dB Signal-to-noise ratio):-

- C.W. - Ranges 1, 2, 3, 4 - better than 1μ V
- Range 5 - better than 2μ V
- R. T. - better than 5μ V

R. F. selectivity:-

Image attenuation varies from -90dB at 2Mc/s to -38dB at 25Mc/s.

Noise factor: 5 to 12dB.

Audio output (600 Ω or 2.5 Ω):-

Max 1000mW	- 20% distortion
500mW	- 7% distortion
100mW	- 3% distortion

I. F. output: 0.3V into 70 Ω at 450kc/s.

A. G. C.: Output variation less than 14dB for signal change of 100dB.

POWER REQUIREMENTS AND CONSUMPTION

A. C.: 80W at 110 to 250V, 50c/s
or
D. C.: 6V, 5A and 250V, 120mA.

AERIAL

80 Ω unbalanced.

287/8C/1017
57/M/7557

END

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