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

TECHNICAL HANDBOOK - DATA SUMMARY

PURPOSE

General purpose communications-type single superheterodyne a.m. receiver covering range 400kc/s to 30kc/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, "Q" 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
5 lb 9.3/8 in. 14.7/8 in. 13.3/4 in. (inside mounting brackets)

Fig 1 - Front view

Distribution - Class 880. Code No 4

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TELECOMMUNICATIONS

E 740

RESTRICTED

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FREQUENCY

Tuning range:

1 12.3kc/s 30.0kc/s
2 5.3kc/s 12.3kc/s
3 2.8kc/s 5.7kc/s
4 1.1kc/s 2.8kc/s
5 480kc/s 1120kc/s

Intermediate frequency: 450kc/s

Intermediate frequency bandwidth (-3db):

(a) Variable coupling - 10.0, 5.0, 2.2, 1.5kc/s
(b) Crystal filter - 0.6kc/s (asymmetrical)

Crystal calibrator: 500kc/s

B.F.O.:

I.F. 12.0kc/s

Audio filter:

Centre frequency 1,000kc/s

Bandwidth (-3db) 100kc/s

PERFORMANCE

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

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

R.F. selectivity:

Image attenuation varies from -30db at 1kc/s to -35db at 2kc/s.

Noise factor: 5 to 12db.

Audio output (600ohm or 2.5):

Max 1000mw - 2% distortion
500mw - 7% distortion
100mw - 3% distortion

I.F. output: 0.3V into 75cl at 450kc/s.

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

POWER REQUIREMENTS AND CONSUMPTION

A.C.: 80W at 250V, 60c/s or 8W, 250V, 12mA.

D.C.: 6V, 5A and 250V, 12mA.

AERIAL

scl unbalanced.

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