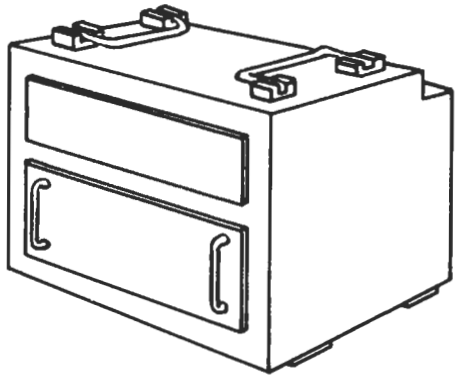
## SUMMARY OF DATA

### PURPOSE

Receiver Outfits CJD(1) (Single-Receiver Cabinet) and CJD(2) (Five-Receiver Cabinet) are attended or unattended communications receivers for the reception of voice, C.W., single and multi-channel RATT and facsimile signals in the L.F. band. CJD(3) is fitted in SSNs. CJD(4) is as CJD(1) but using the CJD(3) Cabinet.



SINGLE RECEIVER CABINET

### FREQUENCY RANGE

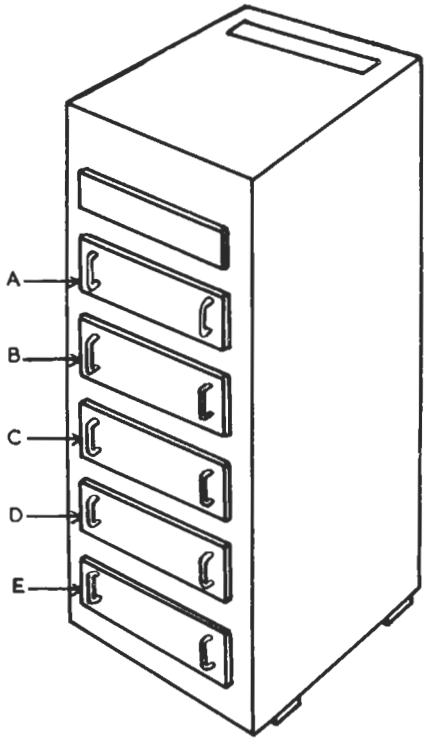
Five bands giving continuous coverage from 10 kHz to 200 kHz. Intermediate frequencies 61.5 and 21.5 kHz (Band 1) and 21.5 kHz (Bands 2-5)

### POWER REQUIREMENTS AND CONSUMPTION

Single-receiver Cabinet 115/230 V 50/60 Hz ± 6% at 130 W.
Five-receiver Cabinet 115/230 V 50/60 Hz ± 6% at 650 W.

Anti-condensation heaters;-

Single-receiver Cabinet 115/230 V 50/60 Hz ± 6% at 30 W
Five-receiver Cabinet 115/230 V 50/60 Hz ± 6% at 150 W.




FIVE RECEIVER CABINET

### ELECTRICAL CHARACTERISTICS

Sensitivity: 1 μV for 10 mW output.
Signal + Noise to Noise ratio
21 dB, bands 1-5, CJD(3)
bands 2-5, CJD(1)(2)(4)
24 dB, band 1, CJD(1)(2)(4)

Selectivity: Switched to 3000 Hz, 1000 Hz, 300 Hz or 120 Hz. (Bands 2-5); limiter to 300 Hz (Band 1).

A.G.C. Performance : Delayed and amplified; for 80 dB increase in input voltage above 0.1 μV the output voltage change is less than 6 dB.

Stability :
(1) Local oscillator locked: ± 5 Hz.
(2) Local oscillator free-running; 1 part in 1000.

### PHYSICAL DATA

| | Height | Width | Depth | Weight |
|---|---|---|---|---|
| 5820-99-916-4905 | | | | |
| Five-receiver Cabinet | 5 ft 3 in | 2 ft | 2 ft 3 in | 362 lb (without receivers) |
| (with lifting eyebolts) | 5 ft 5½ in | | | |
| 5820-99-916-4904 | | | | |
| Single-receiver Cabinet | 1 ft 8¼ in | 1 ft 11 in | 1 ft 5 in | 63 lb |
| Receiver chassis for single receiver chassis | 1 ft 4¾ in | 1 ft 9¾ in | 1 ft 6¼ in | 140 lb |
| Receiver chassis for five-10½ in. receiver cabinet | | 1 ft 9¾ in | 2 ft 1½ in | 140 lb |

## BRIEF DESCRIPTION

R.F.

Amplifiers : Switched; One amplifier with a high-efficiency aerial, two with low efficiency aerial, feeding two frequency conversion stages (Band 1) or one frequency conversion stage (Bands 2-5).

I.F.

Amplifier : Three stages of amplification, bandwidth controlled by two sets of four band-pass filters (Bandwidths 120 Hz, 300 Hz, 1000 Hz, or 3000 Hz) switched to any one of ten combinations to provide variable selectivity. Also provides an external output at the I.F. of 21.5 kHz.

Synthesiser : Consists of a variable oscillator 11.5 - 21.5 kHz, internal crystal-controlled 10 kHz oscillator, or a switched 10 kHz standard frequency input, and a harmonic selector, which produce a frequency 40 kHz above the local oscillator to lock the local oscillator to the synthesiser. A 40 kHz output is taken to provide the Band 1 I.F. of 61.5 kHz. Operated by a three-position switch:-

(1) LOCKED: local oscillator locked to synthesiser.

(2) UNLOCKED: local oscillator free-running.

(3) CALIBRATED: calibrates the variable-frequency oscillator.

B.F.O. Provides two crystal-controlled tones (1 kHz and 1.5 kHz) and a variable tone ± 3 kHz.

Audio output: 10 mW into a 600-ohm line, via A.F. output amplifier. An additional amplifier feeds either a loudspeaker or headphones for monitoring.

## AERIAL SYSTEM

Common aerial working, standard wire or whip aerial. Receiver input impedance 100 ohms.

## HANDBOOK

BR 2407(1)(2).

## ESTABLISHMENT LIST

E1373.

## INSTALLATION SPECIFICATION

Part of B919.