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RADIO TELEGRAPH ADAPTOR, NO 1 AND NO 2

TECHNICAL HANDBOOK - DATA SUMMARY

NOMENCLATURE

- Radio telegraph adaptor, No 1 -
(type L/607/00) *24V* Z1/5820-99-106-1262
- Radio telegraph adaptor, No 2 -
(type L/607/01) *MAINS* Z1/5820-99-106-1263

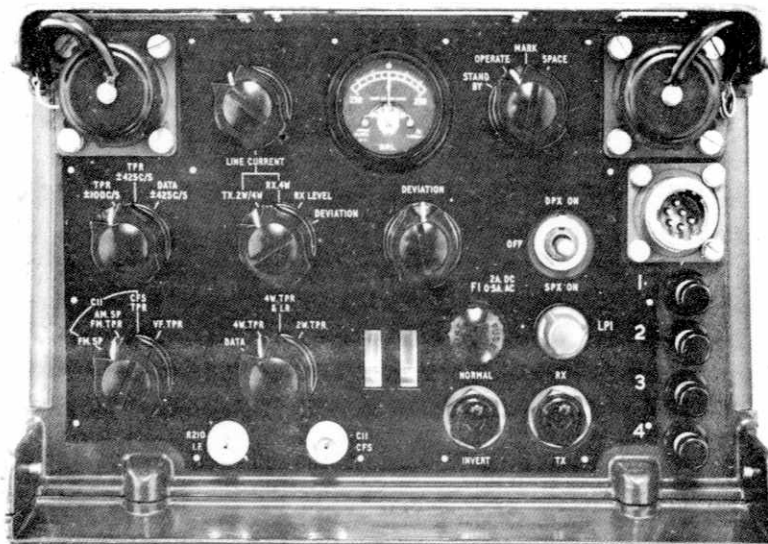
ROLE

Used by Royal Signals to provide radio/teleprinter facilities, in conjunction with the Teleprinter T100R, for the following radio equipments:

C11/R210, C13, C13 No 2, C14, C15, Q42 No 1, 2 and 3, C45 No 1, 2 and 3, and C11 (S.S.B.)

DESCRIPTION

The adaptor is a multi-purpose equipment providing facilities for either two-wire or four-wire simplex, or four-wire half duplex. It is designed for single-current operation as used on the T100R teleprinter, but double-current teleprinters can be used by suitably biasing the receive solenoid of the teleprinter to the receive condition and using only the tongue and mark contacts of the teleprinter transmitter in the transmit condition. The No 1 equipment is for operation from 24V d.c. and the No 2 equipment is for operation from a.c. mains. Provision has been made for operation at speeds of 50 bauds (86 w.p.m.) or 75 bauds (100 w.p.m.) with an extra provision for 750 baud data operations.



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RESTRICTED

TELECOMMUNICATIONS
L 570

ELECTRICAL AND MECHANICAL
ENGINEERING REGULATIONS

Facilities provided:

C42, C45 and C13:

Transmit:

Matched 2kHz tone to microphone input of transmitter, frequency modulated by the telegraph or data signal.

Receive:

Tones taken from receiver headset socket and applied to the adaptor band-pass filter, limiter and audio discriminator are given out as d.c. signals of positive and negative polarity. This is amplified and shaped giving either a telegraph supply (60V-0V) to the teleprinter line or ±6V to the data terminals by use of an in-built electronic relay.

C11/R210 (S.S.B.), C14 and C15:

Similar facilities to those for C42, C45 and C13 but since the C11/R210 (S.S.B.), C14 and C15 use s.s.b., tone modulation results in the radiation of a c.w. r.f. signal entirely compatible with conventional c.f.s. stations which can operate on nets using international teleprinter standards. Special connectors are required when using the C14 or C15.

C11/R210:

- a. Simultaneous f.m. telegraphy and a.m. voice.
- b. f.m. voice
- c. c.f.s. telegraphy.

Outputs:

1. f.m. telegraphy, 0-30V p-to-p into C11 reactor.
2. v.f. at 2kHz ±100Hz or ±425Hz; 200mV into 300Ω.
3. c.f.s. telegraphy, 0 to ±3V d.c. for operation of C11 reactor.

Receiver section:

Inputs:

- V.F.: 2.75V r.m.s. into 50Ω with a range of -50db.
- I.F.: 480kHz ±2kHz deviation, 100mV into 50Ω.

Teleprinter:

50/75 bauds adjustable up to 40mA into a maximum loop resistance of 1000Ω.

Data:

±6V into 1000Ω. Mark positive

Speech:

Maximum v.f. output 2.75V r.m.s.

ASSOCIATED EQUIPMENT

Unit	Type	Part No
A	YL 3147	Z1/5820-99-106-1422
B	YL 3148	Z1/5820-99-106-1423
C	YL 3149	Z1/5820-99-106-1424
D	YL 3150	Z1/5820-99-106-1425
E	YL 3151	Z1/5820-99-106-1465

PHYSICAL DATA

Height	Width	Depth	Weight
7 in.	10.3/8 in.	15.1/4 in.	30 lb

CLIMATIC RANGE

+55°C to -40°C

PACKAGING DATA

S.P.I.S.: SRDE 1554

ELECTRICAL DATA

Transmitter section:

Inputs:

Teleprinter: 50/75 baud, 2-wire or 4-wire, single-current. A built-in telegraph supply provides 40mA into a line of maximum loop resistance of 1000Ω.

Data:

±6V (750 baud). Mark positive

Speech:

Matched to electro-magnetic standard insert No 1.

Facilities:

Unit A: For c.f.s. working when the transmitter is remotely situated from the receiver adaptor terminals.

Unit B: For connecting the teleprinter to the adaptor for either 2-wire or 4-wire operation.

Unit C: For f.m. speech and f.m. telegraph working remote transmitter. This unit is connected between the C11 CFS output on the adaptor and the D10 Cable to the remote position.

Unit D: Similar to unit C but is connected between the D10 line and the C11 CFS input to the transmitter.

Unit E: For v.f. telegraphy over a 4-wire v.f. line.

POWER REQUIREMENTS

No 1 adaptor(L607/00): 24V d.c. 1A. Internal stabilizers control input variations between 19 and 32V. Reverse polarity protection is provided.

No 2 adaptor(L607/01): 100-120V or 200-240V a.c. 40-8CHz.

ASSOCIATED PUBLICATIONS

Complete Equipment Schedule:

Army Code No (Not yet issued).

EME/8c/2528/Tels

END