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"TRADER" SERVICE SHEET

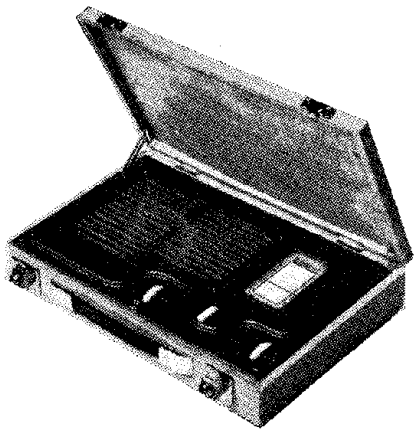
1052

EVER READY Model N

Suitcase Battery Portable

FASHIONED on very slim lines, the Ever Ready Type N portable is a 4-valve 2-band superhet operating from self-contained all-dry batteries. The waveband ranges are 192-535 m and 950-1,850 m. Accessibility for service work is achieved by mounting the chassis, which is of open construction, on the underside of a hinged control panel, secured by two screws.

Release date and original price: September, 1951; £9 15s, plus batteries. Purchase tax extra.



CIRCUIT DESCRIPTION

Tuned frame aerial input **L1, C19** (M.W.) or **L1, L2, C19** (L.W.) precedes heptode valve **(V1, Every Ready DK91)** operating as frequency changer with electron coupling.

Oscillator grid coils **L3** (M.W.) and **L3, L4** (L.W.) are tuned by **C20.** Parallel trimming by **C21** (M.W.), and **C6, C21, C22** (L.W.); series tracking by **C7, C23** (M.W.) and **C7, C8, C23, C24** (L.W.). Inductive reaction coupling from oscillator anode via **L5** (M.W.) and **L6** (L.W.).

Second valve **(V2, Ever Ready DF91)** is a variable-mu R.F. pentode operating as intermediate frequency amplifier with tuned transformer couplings **C2, L7, L8, C3** and **C10, L9, L10, C11.**

Intermediate frequency 470 kc/s

Diode signal detector is part of diode pentode valve **(V3, Ever Ready DAF91).** A.F. component in rectified output is developed across volume control **R6,** which acts as diode load, and passed via **C13** to control grid of pentode section, which operates as A.F. amplifier. I.F. filtering by **C12.** G.B. for pentode section of **V3** is obtained from "Contact" potential resulting from the use of a very high value for grid resistor **R7.** D.C. potential developed across **R6** is fed back as bias via decoupling circuit **R5, C5** to **V1** and **V2** grid circuits, giving automatic gain control.

Resistance-capacitance coupling via **R8, C15** and **R11** between **V3** pentode and pentode output valve **(V4, Ever Ready DL92).** Grid bias for **V4** is obtained from the voltage drop across **R10,** which is in series with the H.T. negative lead to chassis. **C16** by-passes the H.T. battery.

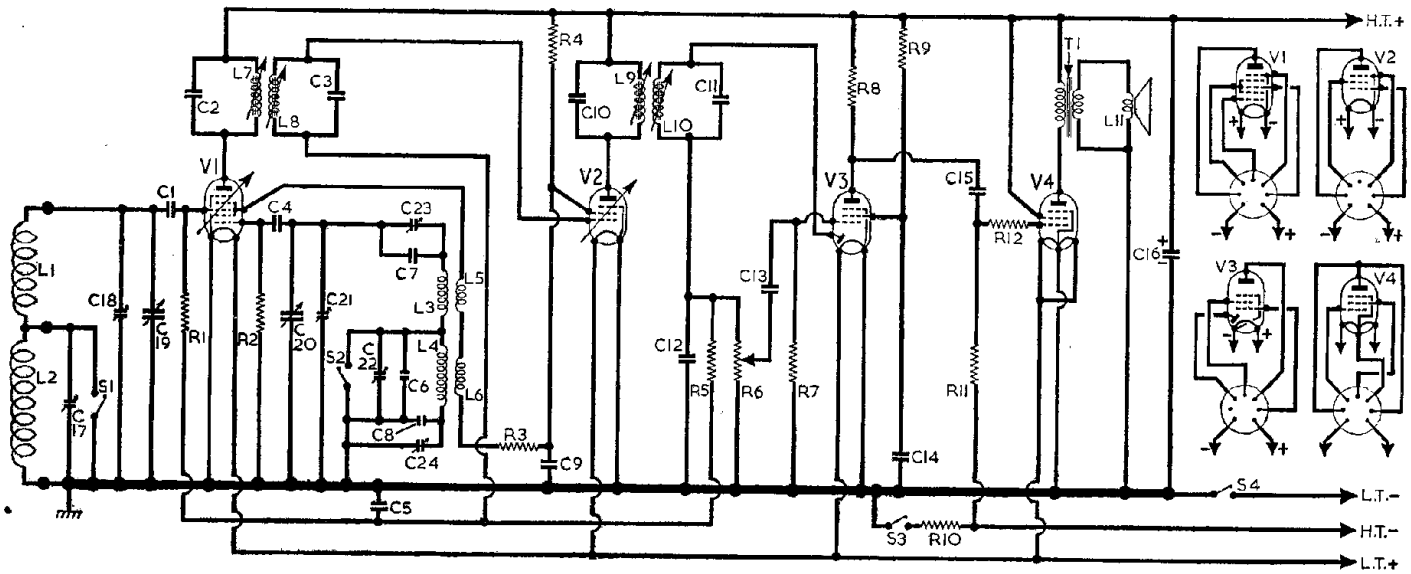
COMPONENTS AND VALUES

	CAPACITORS	Values	Locations
C1	V1 C.G.	200pF	D2
C2	1st I.F. trans. tuning	100pF	A1
C3	1st I.F. trans. tuning	100pF	A1
C4	V1 osc. C.G. ...	100pF	E2
C5	A.G.C. decoupling	0·01μF	D2
C6	L.W. osc. trim. ...	50pF	E2
C7	M.W. osc. tracker...	450pF	F3
C8	L.W. osc. tracker...	50pF	F3
C9	S.G. decoupling ...	0·1μF	E2
C10	2nd I.F. trans. tuning	100pF	B1
C11	2nd I.F. trans. tuning	100pF	B1
C12	I.F. by-pass ...	100pF	F2
C13	A.F. coupling ...	0·01μF	F2
C14	V3 S.G. decoup. ...	0·01μF	G2
C15	A.F. coupling ...	0·01μF	G2
C16*	H.T. reservoir ...	8μF	F2
C17‡	L.W. aerial trim. ...	120pF	F3
C18‡	M.W. aerial trim....	35pF	E3
C19†	Aerial tuning ...	§528pF	E2
C20†	Osc. tuning ...	§528pF	E2
C21‡	M.W. osc. trim. ...	35pF	E3
C22‡	L.W. osc. trim. ...	120pF	F3
C23‡	M.W. osc. tracker...	200pF	F3
C24‡	L.W. osc. tracker...	200pF	F3

* Electrolytic. † Variable. ‡ Pre-set.
§ "Swing" value, min. to max.

If the component numbers given in the accompanying tables are used when ordering replacement parts, dealers are advised to mention the fact on the order, as these numbers may differ from those used in the manufacturers' diagram.

	RESISTORS	Values	Locations
R1	V1 C.G.	2·2MΩ	E2
R2	V1 osc. C.G. ...	100kΩ	D2
R3	Osc. anode feed ...	820Ω	E2
R4	S.G. feed	10kΩ	E2
R5	A.G.C. decoupling	2·2MΩ	E2
R6	Volume control ...	500kΩ	F2
R7	V3 C.G.	4·7MΩ	F2
R8	V3 anode load ...	1·5MΩ	F2
R9	V3 S.G. feed ...	6·8MΩ	F2
R10	V4 G.B.	820Ω	D3
R11	V4 C.G.	4·7MΩ	G2
R12	V4 C.G. stopper ...	2·2MΩ	G2



Circuit diagram of the Ever Ready Model N portable superhet. Battery switches **S3, S4** are lid operated.