

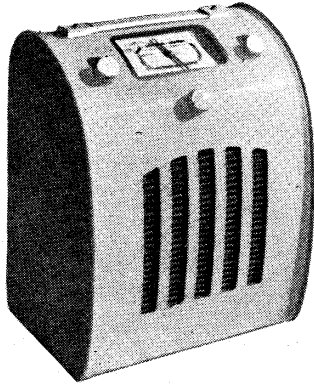
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Supplement to Wireless & Electrical Trader, 5 May 1956

"TRADER" SERVICE SHEET
1241

EVER READY C/A & C/E

4-valve All-dry Battery Portables



THE Ever Ready model "C/E" is a 4-valve 2-band portable designed to operate from all-dry batteries. The waveband ranges are 200-550 m and 950-1,850 m. Model "C/A" is an earlier version of the "C/E." Circuit differences between the two receivers are explained under "Associated Models." The original Model "C" receiver, which is similar in appearance to the "C/A" and "C/E", is covered in *Service Sheet 816*.
Release dates: C/A, November 1947. C/E, September 1948. Original price, both models, £11 15s. Purchase tax and batteries extra.

CIRCUIT DESCRIPTION

Tuned frame aerial input by L3, C4 (M.W.) and L3, loading coil L2, C4 (L.W.), which precede heptode valve (V1, Ever Ready DK91) operating as frequency changer with electron coupling. Provision is made for the connection of an external aerial and earth in model C/E via frame aerial winding L1.
Oscillator grid coils L4 (M.W.) and L4, L5 (L.W.) are tuned by C8. Parallel trimming by C9 (M.W.) and C9, C10 (L.W.); series tracking by C12 (M.W.) and C11, C12 (L.W.). Reaction coupling from anode by anode coils L6 (M.W.) and L6, L7 (L.W.).

Second valve (V2, Ever Ready DF91) is a variable-mu R.F. pentode operating as intermediate frequency amplifier with tuned transformer couplings C5, L8, L9, C6 and C14, L10, L11, C15.

Intermediate frequency 452 ko/s.

Diode signal detector is part of single diode pentode valve (V3, Ever Ready DAF91). Audio frequency component in rectified output is developed across volume control R7, which operates as diode load, and is passed via C18 to pentode section of V3, which operates as A.F. amplifier. I.F. filtering by C16, R6, C17. D.C. potential developed across R6, R7 is fed back as bias to V1 and V2 giving automatic gain control. Resistance-capacitance coupling by R10, C20 and R11 between V3 and pentode output valve (V4, Ever Ready DL92). Grid bias for V4 is provided by the voltage developed across R13 in the H.T. negative circuit. Tone correction by C21 in V4 anode circuit.

GENERAL NOTES

Switches.—S1-S5 are the band/battery switches, ganged in a single rotary unit on the control panel. The unit is indicated in the

rear chassis illustration, and is shown in detail in the top left corner of the circuit diagram.

Drive Cord Replacement.—About sixteen inches of good quality flax fishing line, plaited and waxed, is required for a new tuning drive. It should be run as indicated in the front illustration of the chassis.

Battery.—This is an Ever Ready "Batrymax" type B103, whose H.T. and L.T. sections are rated at 90 V and 1.5 V respectively. A diagram of the connecting plug, as seen from the free ends of the pins, is inset in the top left corner of the circuit diagram to show the polarity of the pins.

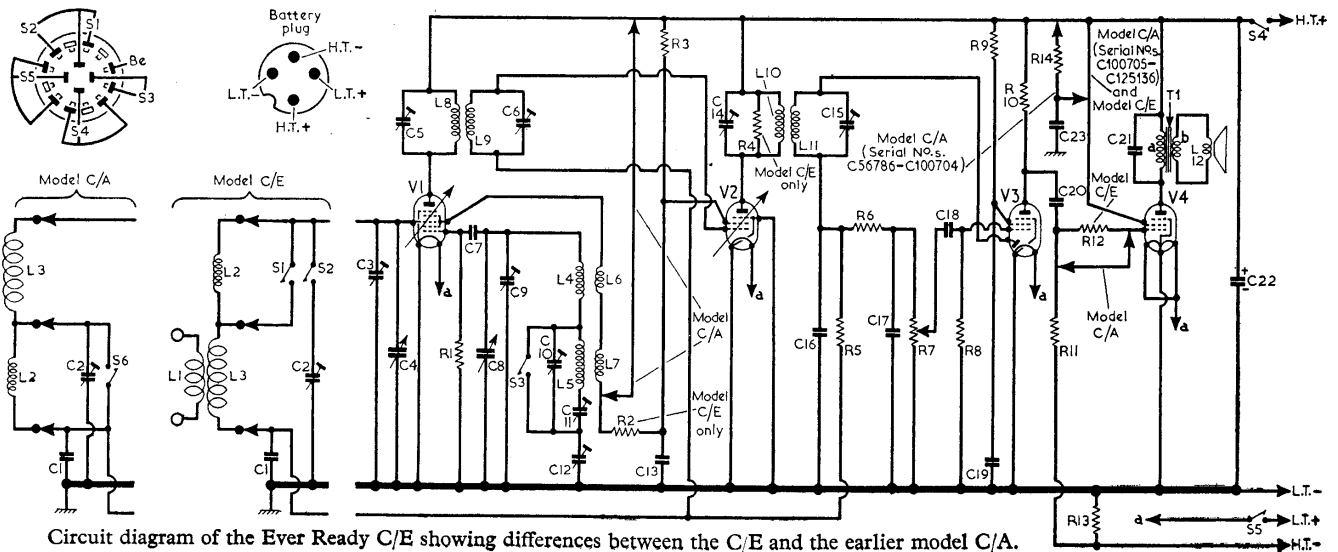
CAPACITORS		Values	Locations
C1	A.G.C. decoupling ...	0.05µF	D3
C2	L.W. aerial trim. ...	100pF	B2
C3	M.W. aerial trim. ...	50pF	A1
C4	Aerial tuning ...	44µF	A2
C5	1st I.F.T. tuning {	100pF	A1
C6		100pF	A2
C7	V1 osc. C.G. ...	100pF	A1
C8	Oscillator tuning ...	44µF	A1
C9	M.W. osc. trim. ...	50pF	B2
C10	L.W. osc. trim. ...	100pF	B2
C11	L.W. osc. tracker ...	600pF	A2
C12	M.W. osc. tracker ...	600pF	A2
C13	H.T. decoupling ...	0.01µF	D4
C14	2nd I.F.T. tuning {	100pF	B2
C15		100pF	B2
C16	I.F. by-passes {	50pF	C4
C17		50pF	C4
C18	A.F. coupling ...	0.001µF	B1
C19	V3 S.G. decoupling ...	0.1µF	C3
C20	A.F. coupling ...	0.005µF	C3
C21*	Tone corrector ...	0.005µF	A2
C22	H.T. battery by-pass ...	8 µF	B1
C23†	V4 S.G. decoupling ...	0.1µF	—

RESISTORS		Values	Locations
R1	V1 osc. C.G. ...	100kΩ	D3
R2*	Osc. anode feed ...	2.2kΩ	D4
R3†	V2 S.G. feed ...	10kΩ	D4
R4	2nd I.F.T. shunt ...	470kΩ	C4
R5	A.G.C. decoupling ...	10MΩ	C4
R6	I.F. filter ...	100kΩ	C4
R7	Volume control ...	500kΩ	B1
R8	V3 C.G. ...	10MΩ	B1
R9	V3 S.G. feed ...	4.7MΩ	C3
R10	V3 pentode load ...	1MΩ	C3
R11	V4 C.G. ...	4.7MΩ	C3
R12*	V4 C.G. stopper ...	2.2MΩ	C3
R13	V4 G.B. ...	820Ω	C3
R14†	V4 S.G. feed ...	35kΩ	—

*Model C/E only. †68kΩ in model C/A. ‡Model C/A (serial numbers C56786—C100704) only.

OTHER COMPONENTS		Approx. Values (ohms)	Locations
L1	Aerial coupling coil	0.5	—
L2	L.W. loading coil ...	9.0	A1
L3	Frame aerial coil ...	1.0	A2
L4	Oscillator grid coils {	1.5	A1
L5		6.0	A1
L6	Osc. reaction coils {	3.0	A1
L7		9.0	A1
L8	1st I.F.T. {	25.0	A2
L9		25.0	A2
L10	2nd I.F.T. {	25.0	B2
L11		25.0	B2
L12	Speech coil ...	3.0	—
T1	O.P. trans. {	500.0	B2
S1-S5	Band/batt. switches	—	A1

*0.001µF in model C/A. †Model C/A (serial numbers C56786—C100704) only.



Circuit diagram of the Ever Ready C/E showing differences between the C/E and the earlier model C/A.

