

EVER READY**SKY CASKET**

General Description: Four-valve, two-waveband portable receiver with ferrite-rod aerial. A similar circuit is used in the BEREC "Harlequin".

Power Supplies: Combined H.T. (90 volts) and L.T. (1.5 volts), Ever Ready "Batorymax" Type B141. Consumption, H.T. 10.2 mA., L.T. 125 mA.

Wavebands: M.W. 192-550 m.; L.W. 1040-1765 m.

Valve Analysis: Measured on 100-volt range of 1000-ohms/volt meter except where otherwise stated, with volume control at maximum and receiver tuned to the L.F. end of M.W. band.

<i>Valve</i>	<i>Anode, volts</i>	<i>Anode</i>	<i>Screen, volts</i>	<i>Screen</i>	<i>Miscellaneous</i>
V ₁ DK96 .	84	0.38 mA.	68 *	0.1 mA.	Osc. 32.5 v. 1.4 mA.
V ₂ DF96 .	84	1.45 mA.	67 *	0.52 mA.	
V ₃ DAF96 .	42 *	40 μ A.	28 *	10 μ A.	
V ₄ DL96 .	82	5.3 mA.	84	1.00 mA.	Grid-6 v.

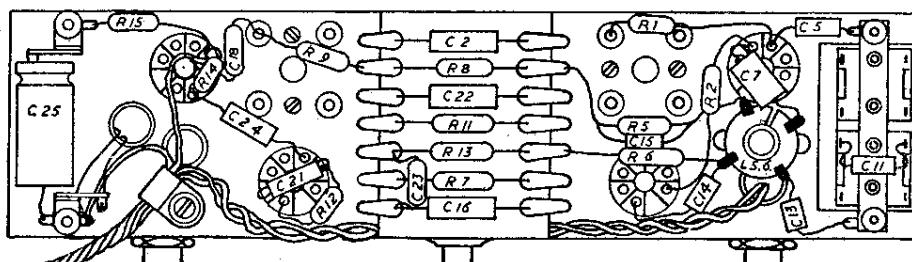
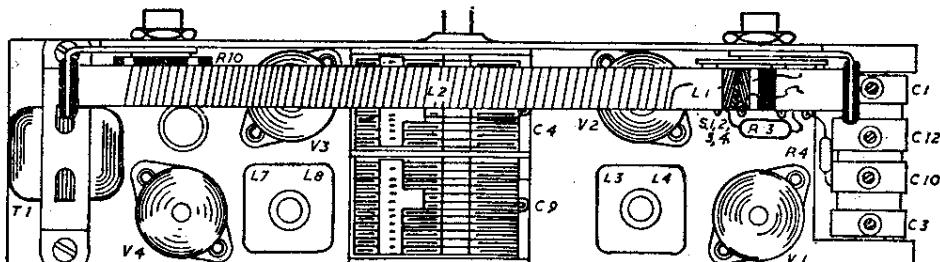
* Measured on electronic testmeter, input resistance > 1000M.

Alignment Procedure: For R.F. adjustments, M.W. circuits should be adjusted before L.W.

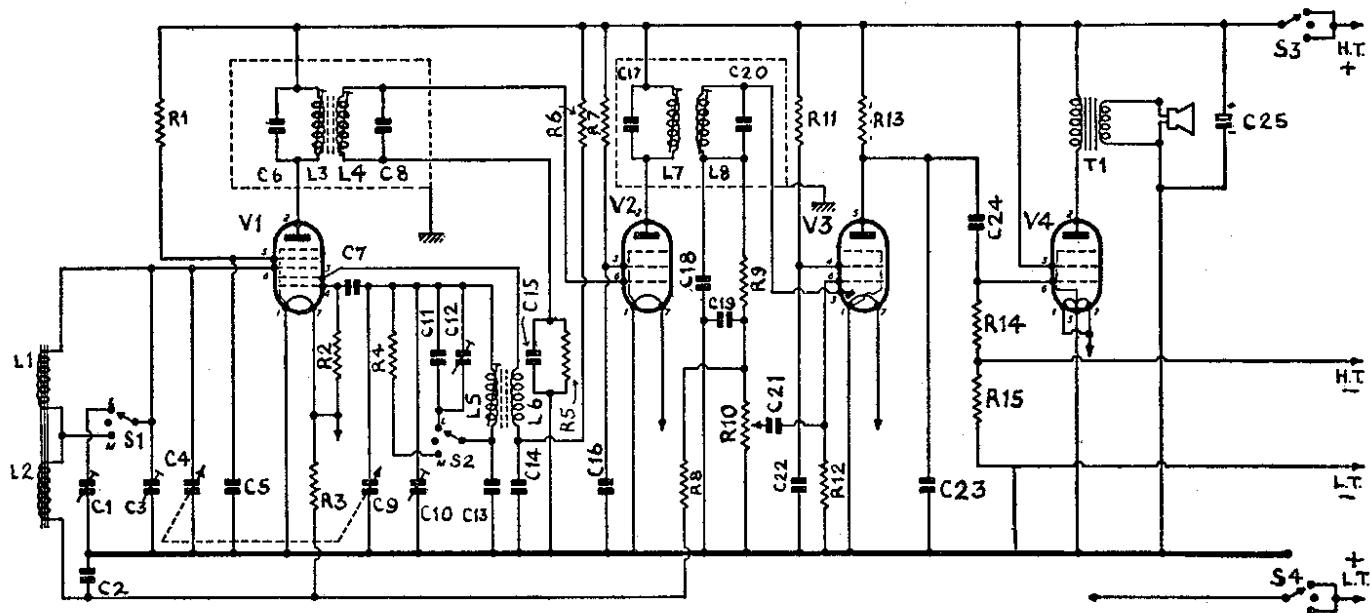
I.F.: Inject a 470-kc/s. signal to signal grid of V₁ (earth lead connected to chassis), and adjust L₈, L₇, L₄ and L₃ in that order. Repeat as necessary.

R.F.: Check that the indicator line is horizontal and in line with the un-numbered marks on the scale when the tuning gang is fully closed.

M.W.: Tune to 500 m., inject a 600-kc/s. signal via coupling loop and



LAY-OUT DIAGRAMS—EVER READY "SKY CASKET"



CIRCUIT DIAGRAM—EVER READY " SKY CASKET "

Note: A lid-operated "warning" switch is fitted to the "Sky Casket" but not to the "Harlequin". This connects the "hot" end of the secondary of the output transformer to the grid of V₃.

Capacitors.

C ₁	200 pF.
C ₂	0.04
C ₃	60 pF.
C ₅	0.04
C ₆	80 pF. (2%)
C ₇	80 pF. (10%)
C ₈	80 pF. (2%)
C ₁₀	60 pF.

C ₁₁	300 pF. (10%)
C ₁₂	200 pF.
C ₁₃	500 pF.
C ₁₄	0.04
C ₁₅	0.01
C ₁₆	0.04
C ₁₇	80 pF. (2%)
C ₁₈	0.04
C ₁₉	100 pF.
C ₂₀	80 pF. (2%)
C ₂₁	0.01
C ₂₂	0.04
C ₂₃	100 pF.
C ₂₄	0.01
C ₂₅	8 (El.)

Resistors.

R ₁	150k
R ₂	27k (10%)
R ₃	2.2M
R ₄	47k
R ₅	1M
R ₆	33k
R ₇	39k (10%)
R ₈	2.2M
R ₉	47k
R ₁₀	500k
R ₁₁	5.6M (10%)
R ₁₂	10M
R ₁₃	1.2M (10%)
R ₁₄	2.2M
R ₁₅	560 (10%)

adjust core of L₅, L₆. Tune to 214-m. mark (on L.F. side of 200 m.), inject a 1400-kc/s. signal, and adjust C₁₀ and C₃. Repeat cycle of operations.

L.W.: Tune to unnumbered mark (line dividing two scales) on the H.F. side of 1050 m., inject a 290-kc/s. signal, and adjust C₁₂. Tune to 1400 m. inject a 214-kc/s. signal and adjust C₁. Repeat as necessary.