

K-B

Model FB10

General Description : Five-valve (including rectifier), two-waveband transportable superheterodyne receiver. Weight $4\frac{3}{4}$ lb. Released May 1950.

Power Supply : A.C. mains, 200–250 volts (two voltage-adjustment positions). Consumption 40 watts.

Wavebands : M.W. 185–570 m. (1610–525 kc/s.); L.W. 900–2000 m. (333–145 kc/s.).

Output : 2 watts.

Intermediate Frequency : 422 kc/s.

Valves : Brimar. (V₁) 6BE6; (V₂) 6BA6; (V₃) 6AT6; (V₄) 6V6GT; (V₅) 6X5GT.

Alignment Procedure : Operations must be carried out in the order indicated. *Warning*—Chassis may be "Live".

Operation	Circuits	Signal Generator Connection	Input Signal	Set Pointer to *	Adjust for Maximum Response
1	I.F.	Grid of V ₁ via 0.1- μ F. capacitor	422 kc/s.	1610 kc/s.	L ₁₁ , L ₁₀ , L ₉ and L ₈
2	M.W.	Aerial socket via dummy aerial or 200- μ F. capacitor	600 kc/s.	600 kc/s.	L ₄
3	—	—	1400 kc/s.	1400 kc/s.	C ₆ , C ₂
4	L.W.	—	175 kc/s.	175 kc/s.	L ₃

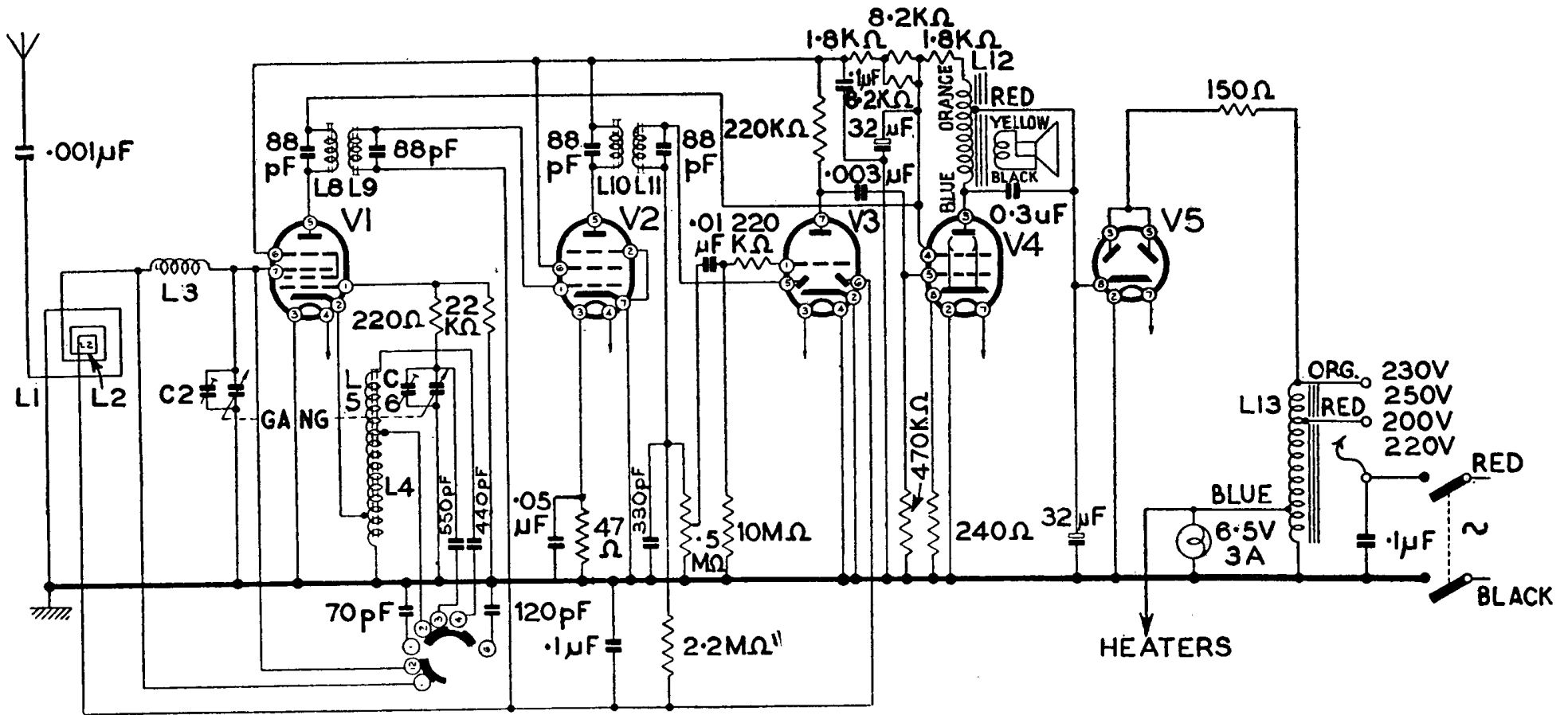
* Tracking and datum points are shown on scale plate.

Notes : The tuning pointer should be set to the datum mark with the gang fully in mesh before alignment. Operations 2 and 3 should be repeated until scale accuracy and maximum sensitivity have been attained. The M.W. range should be re-checked after L.W. alignment. The tuning gang should be rocked slightly whilst finally adjusting aerial trimmers. Progressively reduce signal input as sensitivity increases.

Voltage Chart : The following readings, which should be regarded as approximate, were taken with the aerial and earth disconnected, band switch in M.W. position and volume control set at minimum gain. Mains input 225 volts with appropriate input tapping. Voltage across smoothing resistor 38, total H.T. current 60 mA., total mains current 150 mA.*

Valve	Volts Measured between Socket and Chassis							
	Pin 1	2	3	4	5	6	7	8
V ₁	—	—	—	6.3 *	195	85	—	—
V ₂	—	—	—	6.3 *	85	85	—	—
V ₃	—	—	6.3 *	—	—	—	33	—
V ₄	—	—	219	195	—	—	6.3 *	8.4
V ₅	—	—	230 *	—	230 *	—	6.3 *	233

* A.C. measurements.



SWITCH IN
M.W. POSITION I.F. 422 Kc/s

CIRCUIT DIAGRAM—K-B MODEL FB10

D.C. Resistances.

L1, L2 Less than 1 ohm
L3 11 ohms
L4 3 ohms

L5 4 ohms
L8, L9, L10, L11 20 ohms

L12 (total primary) 400 ohms
(tap to finish) 6 ohms
L13 (total) 153 ohms

Lay-out of Trimmers

L3 is above the chassis, close to V1 and towards the rear of the chassis. The former of L4-L5-L6 is mounted horizontally beneath the chassis close to the two-bank trimmer C6-C2, C2 being adjacent to the wave-change switch. The secondary windings of both I.F. transformers are above the primary windings.