

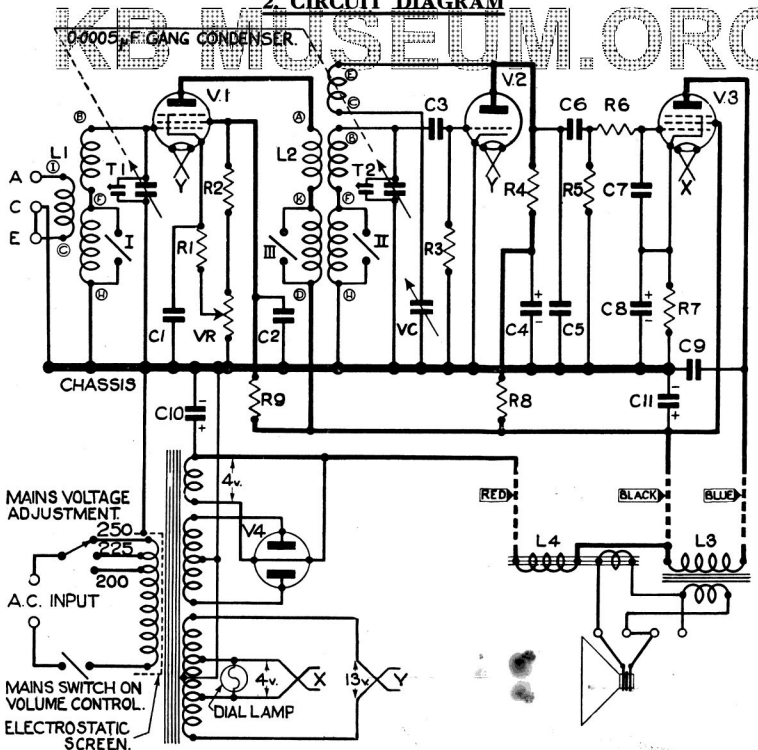
ADVANCE TECHNICAL INFORMATION.

K.B. 510 3 VALVE T.R.F. A.C. RECEIVER.

1. GENERAL.

This receiver is designed to operate upon mains supplies between 188 and 265 volts, A.C. ONLY. 40 to 60 c.p.s.
The power consumption is approximately 60 watts.

2. CIRCUIT DIAGRAM



3. KEY TO

CIRCUIT DIAGRAM

- R1. ... 300 ohms.
 - R2. ... 15,000 ohms.
 - R3. ... 2 megohms.
 - R4. ... 25,000 ohms.
 - R5. ... 250,000 ohms.
 - R6. ... 100,000 ohms.
 - R7. ... 150 ohms.
 - R8. ... 10,000 ohms.
 - R9. ... 25,000 ohms.
 - VR. ... 10,000 ohms.
 - C 1. 0.1 mfd.
 - C 2. 0.1 mfd.
 - C 3. 0.0001 mfd.
 - C 4. 2 mfd. (Electro)
 - C 5. 0.001 mfd.
 - C 6. 0.05 mfd.
 - C 7. 0.0005 mfd.
 - C 8. 25 mfd. (Electro)
 - C 9. 0.003 mfd.
 - C10. 8 mfd. (Electro)
 - C11. 8 mfd. (Electro)
 - VC. 0.0003 mfd.
- C1 and C2 are in a single block.
- R3 and C3 are mounted on L2 coil assembly.
- C4, C10 and C11 are in a single block.

⊗ ETC. COIL TAGS, SEE PAGE A3 PARAGRAPH 3.3

WAVESWITCH: CONTACTS I, II & III, CLOSED FOR MEDIUM WAVES.

4. APPROVED VALVES

	Type	Brimar	Mullard
V1	H.F. Pentode	9D2	
V2	Triode Det.	4D1*	HL 13C (met)
V3	Output Pentode	7A3	Pen. 4VB
V4	Rectifier	R2	—

*This valve may only be used where a valve screen is provided on the chassis.

5. VOLTAGE AND CURRENTS

Voltages measured with 1,000 ohms per volt instrument.

	Voltage between chassis and :			Current in m.a.	
	Anode	Priming Grid	Cathode	Anode	Priming Grid
V1	212	80	4.48*	11.0*	2.0*
V2	107	—	0	4	—
V3	212	215	5½	34	4½
V4	Voltage across C10. 350				

*Depending upon setting of volume control.

6. RESISTANCES OF COILS

Coil	Winding	Tags	Resistance
L1	Aerial coupling	I.C.	11 ohms
	M.W.	B.F.	3 ohms
	L.W.	F.H.	10 ohms
L2	Anode M.W.	A.K.	7 ohms
	„ L.W.	K.D.	16 ohms
	Grid M.W.	B.F.	4 ohms
	„ L.W.	F.H.	10 ohms
	Reaction	E.C.	4 ohms
L3	Primary		400 ohms
L4			1,700 ohms

7. CIRCUIT ALIGNMENT

Adjust, if necessary, the pointer on the gang condenser spindle to line up with the datum mark (horizontally) when the condenser is fully closed.

The volume control should be turned fully clockwise and the reaction condenser fully counter-clockwise.

Then turn the condenser until the pointer indicates 214 metres (1,400 Kc/s.)

With the aid of a signal generator adjusted to the above frequency, and an output meter, trim T1 and T2 trimmers until maximum output is indicated.

When trimmed in the above manner the calibration is correct for both wavebands.