

# ADVANCE TECHNICAL INFORMATION.

## K.B. 530 3 VALVE T.R.F. BATTERY OPERATED RECEIVER.

# KB 530

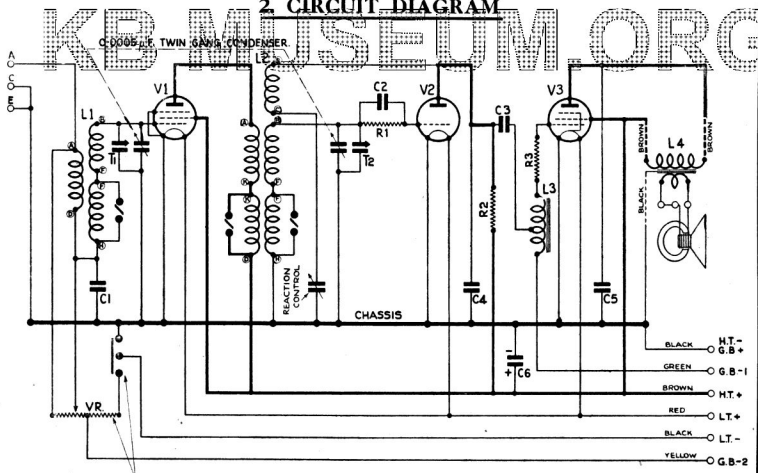
### 1. GENERAL.

The batteries supplied with this receiver are as follows :—

Combined H.T. and G.B.—Drydex 1070. 2-volt accumulator—Exide OCG.3.

Approximate consumption—5.5 to 9.0 m.a. depending upon position of volume control.

### 2. CIRCUIT DIAGRAM



### 3. KEY TO CIRCUIT DIAGRAM

- R1. ... 2 megohms.
  - R2. ... 25,000 ohms.
  - R3. ... 100,000 ohms.
  - VR ... 50,000 ohms.  
volume control
  - C 1. 0.01 microfarad
  - C 2. 0.0001 "
  - C 3. 0.1 "
  - C 4. 0.001 "
  - C 5. 0.0005 "
  - C 6. \* 2 " (Elect.)
- \*Reaction condenser—0.0005 microfarad (solid dielectric).

COMBINED VOLUME CONTROL AND ON-OFF SWITCH

FOR KEY TO LETTERING OF COIL TAGS, (A) ETC., SEE PAGE A3, PARA. 3.3 OF SERVICE MANUAL.

ALL WAVE CHANGE SWITCHES CLOSED ON MEDIUM, AND OPEN ON LONG WAVES

### 4. APPROVED VALVES

	Type	Mullard
V1	H.F. Pentode	VP.2 (met)
V2	Triode Detector	PM.1.HL (met)
V3	Pentode	PM.22.A

### 5. VOLTAGE AND CURRENTS

Voltagcs measured with a 1,000 ohms per volt instrument. H.T. battery used—120 volts.

	Voltage between chassis and :			Current in m.a.	
	Anode	Priming Grid	Control Grid	Anode	Priming Grid
V1	120v	120v	*0-8.5v	*1.8-Zero	*2.2-Zero
V2	70v	—	Zero	1.3	—
V3	118v	120v	0.15v	3.2	0.75

\*Depending on the setting of the volume control.

### 6. BATTERY CONNECTIONS.

- L.T.— (Black lead) } To accumulator
- L.T.+ (Red lead) }
- HT— (Black lead) to HT battery, HT — and GB+ socket
- HT.2 (Brown lead) " " +120v socket
- GB.1 (Green lead) " " —4.5v "
- GB.2 (Yellow lead) " " 6, --7.5 or --9v socket

### 7. RESISTANCES OF COILS

Coil	Winding	Tags	Resistances
L1	Aerial coupling	A.D.	10 ohms
	M.W.	B.F.	4.5 ohms
	L.W.	F.H.	10 ohms
L2	Anode M.W.	A.K.	7 ohms
	" L.W.	K.D.	16.5 ohms
	Grid M.W.	B.F.	4 ohms
	" L.W.	F.H.	10 ohms
	Reaction	E.C.	4 ohms
L3	Auto trans.	Total winding	9,000 ohms
L4	Primary	—	850 ohms

### 8. CIRCUIT ALIGNMENT

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

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.

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

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