

KOLSTER-BRANDES LIMITED

FOOTSCRAY

SIDCUP

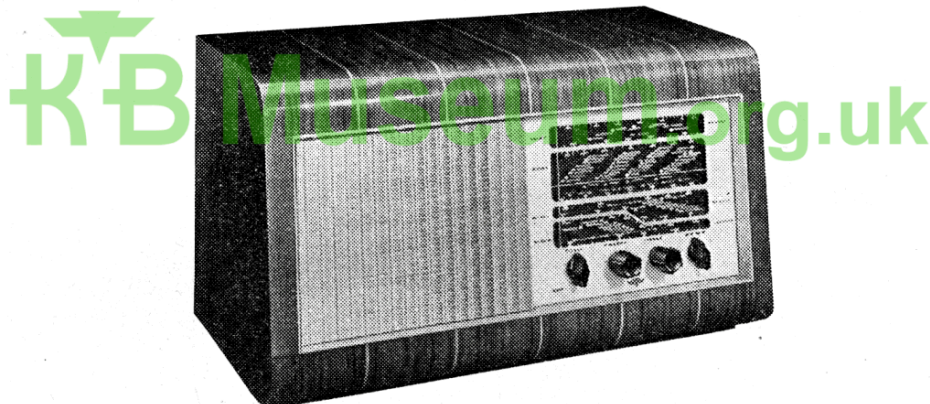
KENT

MODEL
DR 31



SERVICE DATA

ISSUED JUNE, 1948



DESCRIPTION

GENERAL. The K-B DR 31 is a 4-valve superheterodyne receiver for battery operation. An internal loop aerial is incorporated for local station reception.

WAVE BANDS. Four wave bands cover the normal long and medium broadcast frequencies and the 31 metre and 19 metre bands 'band spread' thus :—

Long Wave	- 750-2,200 metres	420-140 kc/s	31 Metre band	- 30-31.8 metres	10.9.4 mc/s
Medium Wave	195-550 metres	1,540-550 kc/s	19 Metre band	- 19.4-20.7 metres	15.4-14.5 mc/s

VALVES. This receiver is fitted with the following valves :—

V1 Frequency Changer	- MULLARD KK32	V3 Det., A.V.C. & L.F. Amp.	- MULLARD KBC32
V2 I.F. Amplifier	- MULLARD KF35	V4 Quiescent push-pull output	MULLARD KLL32

INDICATOR LIGHT. 2.5 v. .06 amp. M.E.S. type.

BATTERY CONSUMPTION. L.T.—6 amps. H.T.—10 m.a. (Quiescent).

BATTERY RECOMMENDED. Ever-Ready super 111v. + 9v. GB or similar.

SENSITIVITY. Better than 120 micro-volts for 50 milli-watts output into a 3-ohm load.

LOUDSPEAKER. 8 in. permanent magnet, moving coil, high flux type (14,500 lines per sq. c.m.).

GRAMOPHONE PICK-UP. Sockets are provided on the back of the chassis for the connection of leads from a gramophone pick-up of the low voltage type. No additional volume or tone control is required.

EXTENSION LOUDSPEAKER. Sockets are provided for an external loudspeaker of 2-4 ohms impedance. A "screw" switch is provided for disconnecting the internal loudspeaker when required.

CABINET. A high quality walnut-veneered cabinet with birch inlays. Overall dimensions are 20 $\frac{1}{4}$ " \times 10 $\frac{1}{4}$ " \times 11 $\frac{1}{2}$ " high.

BATTERY COMPARTMENTS. L.T. 8 $\frac{3}{4}$ " high \times 5 $\frac{1}{8}$ " wide \times 3 $\frac{7}{8}$ " deep.
H.T. 8 $\frac{3}{4}$ " " \times 3 $\frac{1}{4}$ " " \times 6 $\frac{7}{8}$ " "

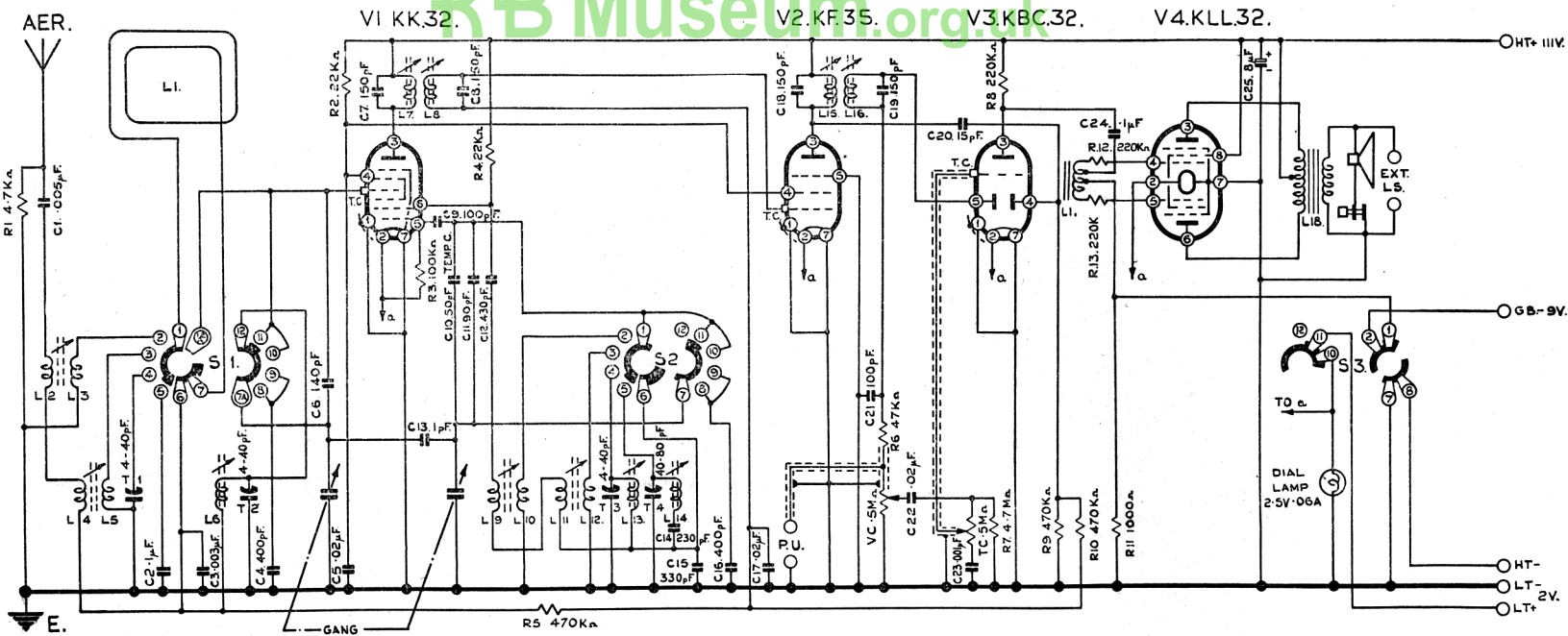
REMOVAL OF QUICK-RELEASE CHASSIS. DO NOT REMOVE KNOBS. All that is necessary is to unscrew and remove the BACK two moulded feet which are immediately under the back of the chassis, then the chassis may be withdrawn from the cabinet with scale and knobs. The loudspeaker is connected by means of a plug and socket.

COIL & TRANSFORMER DATA. D.R. 31

CIRCUIT REF No	FUNCTION	RESISTANCE OHMS	CIRCUIT REF No	FUNCTION	RESISTANCE OHMS	CIRCUIT REF No	FUNCTION	RESISTANCE OHMS
L 1	LOOP AERIAL.	1.4	L 8	1st. I.F. SECONDARY	5.2	L 15	2ND. I.F. PRIMARY	5.2
L 2	19M BAND AER. PRIMARY.	LESS THAN 1	L 9	19 M BAND OSC. PRIMARY.	LESS THAN 1	L 16	2ND. I.F. SECONDARY	5.2
L 3	19M BAND AER. SECONDARY.	LESS THAN 1	L 10	19 M BAND OSC. SECONDARY.	LESS THAN 1	L 17	INT. TRANS.	7,000
L 4	31M BAND AER. PRIMARY.	LESS THAN 1	L 11	31M BAND OSC. PRIMARY.	LESS THAN 1	L 17	INT. TRANS. 1st. TAP.	17,000
L 5	31M BAND AER. SECONDARY.	LESS THAN 1	L 12	31M BAND OSC. SECONDARY.	LESS THAN 1	L 18	OUTPUT TRANS. PRIMARY.	820
L 6	L.W. AERIAL.	22.4	L 13	M.W. OSCILLATOR.	5.4	L 18	OUTPUT TRANS. SECONDARY.	LESS THAN 1
L 7	1st. I.F. PRIMARY.	5.2	L 14	L.W. OSCILLATOR.	10.8			

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N.B.—FOR MODIFIED OSCILLATOR H.T. CIRCUIT, SEE PAGE 6



page TWO

L2, 19M. BAND.

L4, 31M. BAND.

L1. LOOP.

L6. LONG WAVE.

ORDER OF SWITCHING TURNING
CLOCKWISE, 19M, 31M, MW, LW, OFF
AS SEEN FROM FRONT OF SET.
SWITCH SHOWN IN LW POSITION
INTERMEDIATE FREQUENCY 465 KC/S.

L9, 19M. BAND.

L11, 31M. BAND.

L13. MED. WAVE.

L14. LONG WAVE.

CONTACTS 12 AND 12A, 7 AND 7A ON S1 ARE
INSULATED FROM EACH OTHER

L1 USED AS LOOP AERIAL ON LW
L1 USED AS LOOP AERIAL AND MW COIL ON MW
L1 USED AS CAPACITY AERIAL ON 31M BAND
L1 USED AS CAPACITY AERIAL ON 19M BAND.

