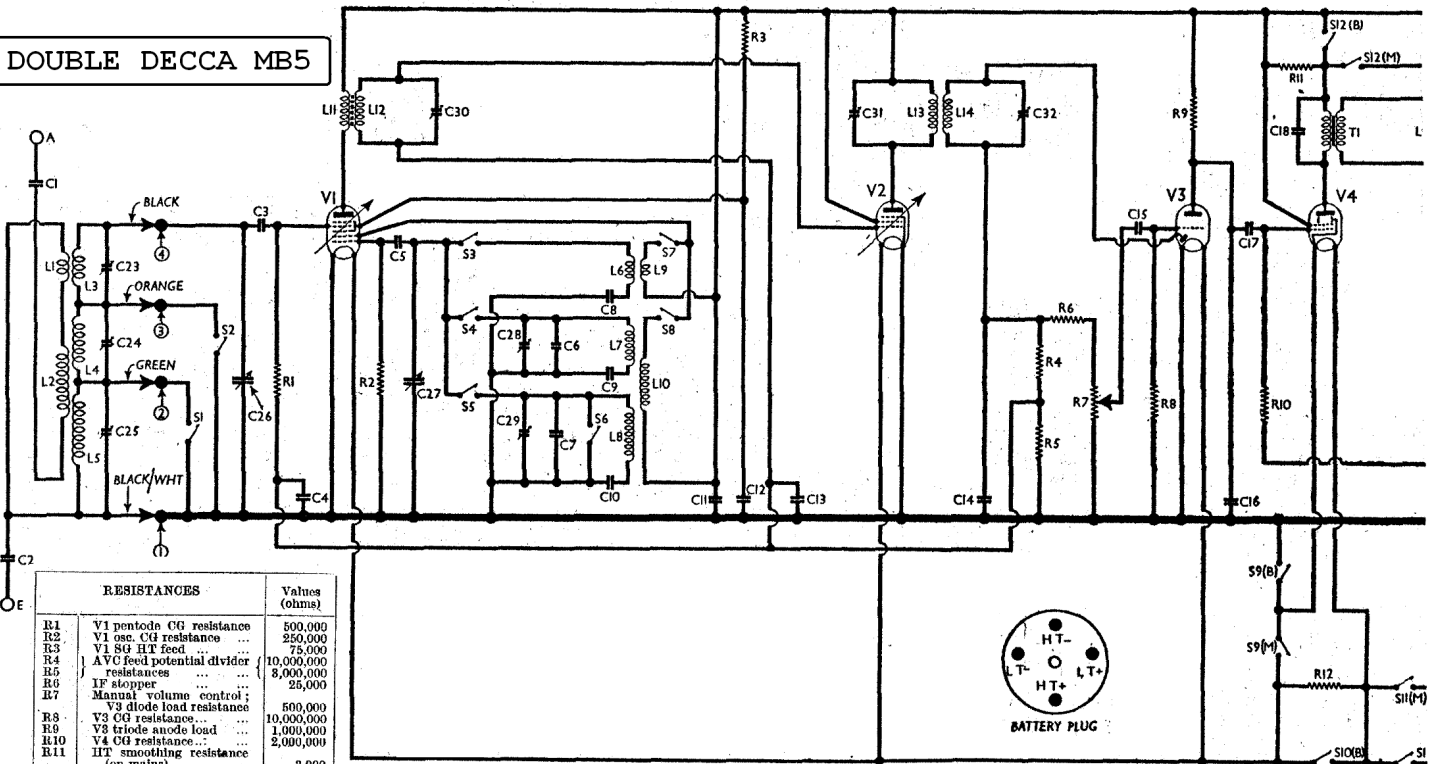


DOUBLE DECCA MB5



RESISTANCES	Values (ohms)
R1	V1 pentode CG resistance
R2	V1 osc. CG resistance
R3	V1 S.G. HT feed
R4	AVC feed potential divider
R5	resistances
R6	1F stopper
R7	Manual volume control
R8	V3 diode load resistance
R9	V3 CG resistance
R10	V3 triode anode load
R11	V4 CG resistance
R12	HT smoothing resistance (on mains)
R13	V4 filament shunt (on mains)
R14	Filament circuit ballast
R15	V4 automatic GB resistance
R16	V5 heater ballast (line cord)
R17	Mains voltage adjustment resistance, total

* Value if V4 is 1Q5GT: 800 Ω for 1C5GT.
† Value if V4 is 1Q5GT: 43 Ω for 1C5GT.
‡ Tapped at 80 Ω + 185 Ω + 100 Ω from R16

CONDENSERS	Values (μF)
C1	External aerial isolator
C2	Earth isolator
C3	V1 pentode CG condenser
C4	V1 pentode CG decoupling
C5	V1 osc. CG condenser
C6	Osc. circ. MW fixed trimmer
C7	Osc. circ. LW fixed trimmer
C8	Osc. circ. SW tracker
C9	Osc. circ. MW tracker
C10	Osc. circ. LW tracker
C11	HT circuit RF by-pass
C12	V1 S.G. decoupling
C13	V2 CG decoupling
C14	1F by-pass
C15	AF coupling to V3 triode
C16	1F by-pass
C17	V3 triode to V4 coupling
C18	Fixed tone corrector
C19*	HT smoothing condensers
C20*	100-0
C21*	16-0
C22*	8-0
C23	Mains RF by-pass
C24	SW aerial circuit trimmer
C25	Frame aerial MW trimmer
C26	Frame aerial LW trimmer
C27	Frame aerial circuit tuning
C28	Oscillator circuit tuning
C29	Osc. circ. MW trimmer
C30	Osc. circ. LW trimmer
C31	1st IF trans. sec. tuning
C32	2nd IF trans. pri. tuning
C33	2nd IF trans. sec. tuning

* Electrolytic. † Variable. ‡ Pre-set.

OTHER COMPONENTS	Approx. Values (ohms)
L1	Ext. aerial SW coupling coil
L2	Ext. aerial coupling coil
L3	Aerial SW tuning coil
L4	Tuned frame aerial
L5	MW and LW windings
L6	Osc. circ. SW tuning
L7	Osc. circ. MW tuning
L8	Osc. circ. LW tuning
L9	Oscillator SW reaction
L10	Osc. MW and LW reaction
L11	1st IF trans. (Pri.)
L12	1st IF trans. (Sec.)
L13	2nd IF trans. (Pri.)
L14	2nd IF trans. (Sec.)
L15	Speaker speech coil
L16	HT smoothing choke
T1	Speaker input (Pri.)
S1-S3	Waveband switches
S9(M, B)	Mains/battery change-over switches
S14(M, B)	HT and 'mains' circuit switch
S16	LT circuit switch

VALVE ANALYSIS

Valve voltages and currents given in the table below are approximate. They represent values to be expected in an average chassis, whether operated from battery or mains, when the voltage adjustment has been properly set. When making measurements, C26 should be short-circuited and a high resistance meter, with its negative lead connected to chassis, should be used. There will, of course, be no voltage reading at V5 cathode on battery operation.

Valve	Anode Voltage (V)	Anode Current (mA)	Screen Voltage (V)	Screen Current (mA)
V1 1A7GT	90	0.25	40	0.8
V2 1N5GT	90	1.0	90	0.3
V3 1H5GT	15	0.03	90	0.8
V4 1Q5GT	80	7.0	90	0.8
V5 25Z6GT	112†	—	—	—

† Cathode to chassis, DC.

Switch Table and Diagram (Waveband Unit)

Switch	SW	MW	LW
S1	—	—	—
S2	—	—	—
S3	—	—	—
S4	—	—	—
S5	—	—	—
S6	—	—	—
S7	—	—	—
S8	—	—	—

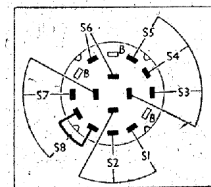


Diagram of the S1-S8 unit, looking at the side facing the chassis deck. The table is above.

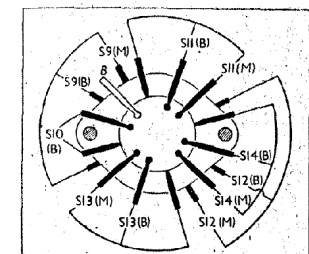
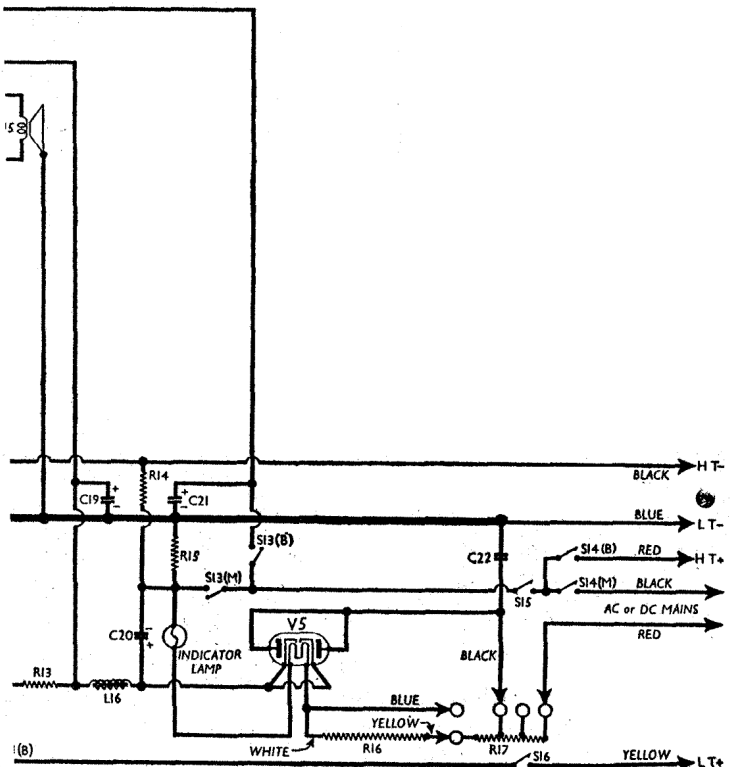


Diagram of the mains/battery change-over switch unit, as seen when viewed from the rear.



CIRCUIT ALIGNMENT

IF Stages.—Remove back of receiver, remove connection to tag 4 on frame aerial connection strip, and connect signal generator to this tag and the E socket. Switch set to SW, feed in a 382 KC/S (785.5 m) signal, and adjust C32, C31 and C30 for maximum output. Disconnect signal generator and replace frame lead on tag 4.

RF and Oscillator Stages.—With gang at maximum, pointer should be horizontal. Connect signal generator to external A and E sockets.

MW.—Switch set to MW, tune to 200 m on scale, feed in a 200 m (1,500 KC/S) signal, and adjust C28, then C24, for maximum output.

LW.—Switch set to LW, tune to 1,200 m on scale, feed in a 1,200 m (250 KC/S) signal, and adjust C29, then C25, for maximum output.

SW.—Switch set to SW, tune to 16 m on scale, feed in a 16 m (18.75 MC/S) signal, and adjust C23 for maximum output.

Finally, replace back of set and adjust C23, C24 and C25 accurately for maximum sensitivity on their respective bands.