

TECHNICAL INFORMATION

MODEL RBY

6 Valve Multiwave Mantel 1953

DESIGNED AND MANUFACTURED BY
RADIO (1936) LTD.

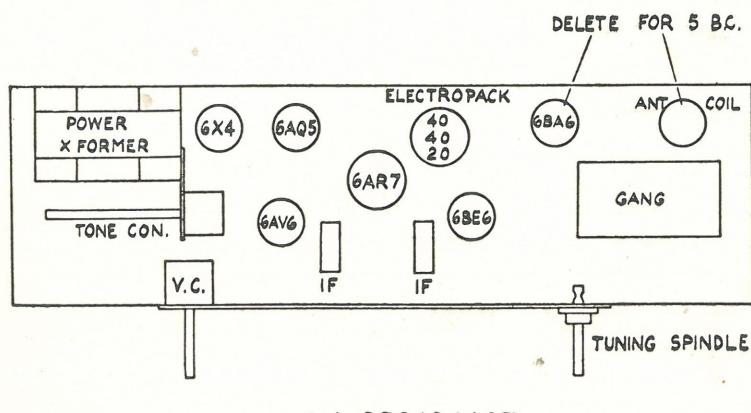
Power Supply	230v. A.C. 50 c.p./s.	||	Rating	50 watts
Tuning Range	1600 KC/S - 550 KC/S 17.8 MC/S - 6 M.C./S	||	Speaker	Rola 6-9 H 5K XF
I.F. Frequency	460 KC/S	||	Power Output	3 watts approx.

CIRCUIT DESCRIPTION :

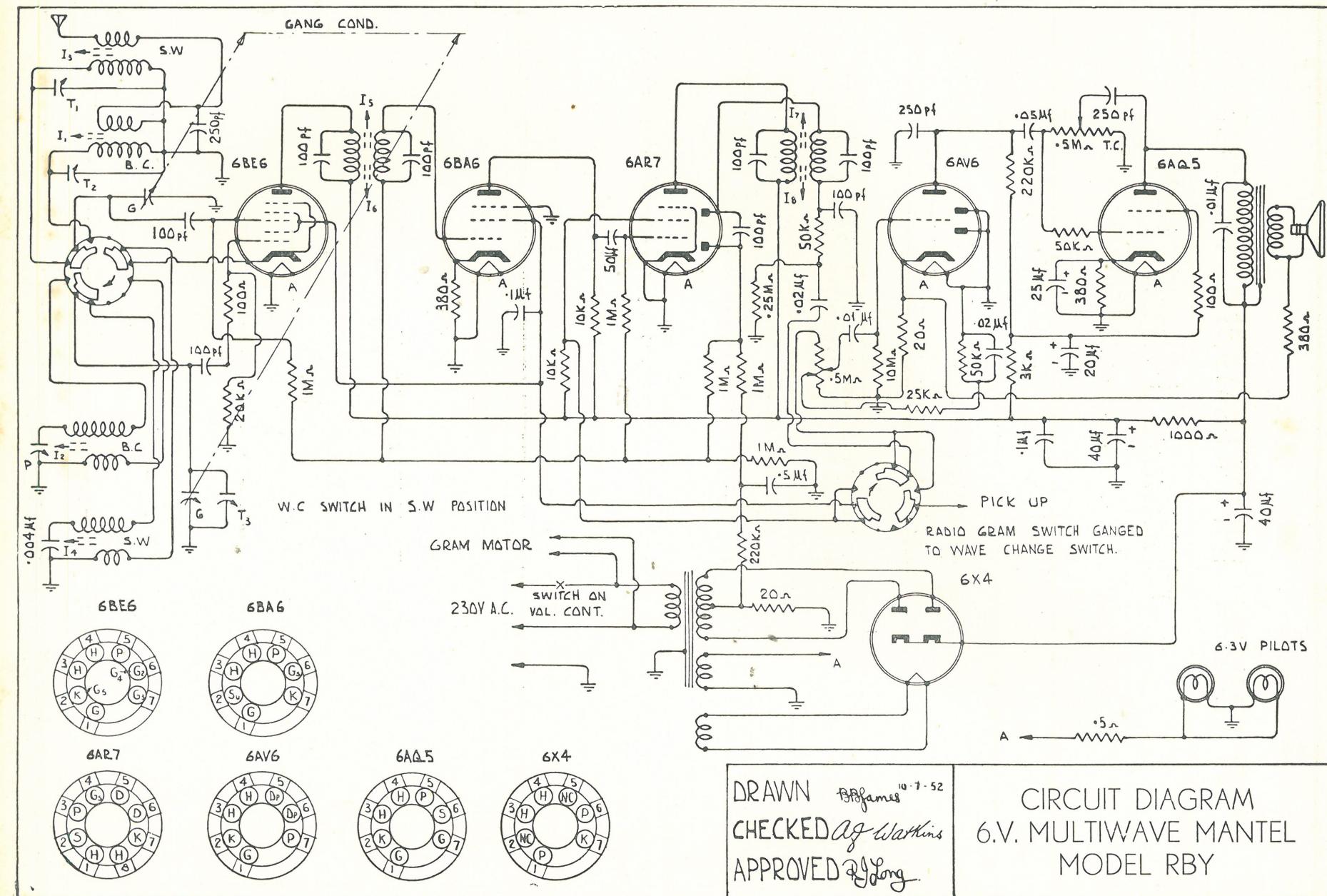
A Type 6BE6 valve is employed as a Frequency changer and is coupled by means of a double tuned high gain intermediate transformer to a type 6BA6 which is in turn capacitively coupled to a type 6AR7GT combining the functions of intermediate frequency amplification, detection and automatic gain control source. Voltage amplification is by means of a type 6AV6 and is capacitively coupled to a 6AQ5 valve used as a power amplifier and delivering approximately 3 watts to a type 6-9H. Rola Speaker. Direct current potentials are derived from a double-wound power transformer type 6X4 full wave rectifier and resistive capacitive filter network.

ANTENNA :

A Standard inverted "L" type Antenna with a flat top of approximately 30 feet is recommended.



Maple



VOLTAGES APPEARING BETWEEN VALVE PINS & CHASSIS FRAME

VALVE PIN No.	1	2	3	4	5	6	7	8
6BE6	—9v	—	—	6.3v A.C.	205v	100v	—.5v	—
6BA6	—.6v	—	—	6.3v A.C.	140v	95v	2.4v	—
6AR7GT	6.3v A.C.	—	205v	95v	—.8v	—.4	—	—
6AV6	—.7v	—	—	6.3v A.C.	—	—	75v	—
6AQ5	—	8v	—	6.3v A.C.	225v	180v D.C.	—	—
6X4	220v A.C.	—	—	—	—	220v A.C.	232v	—

NOTE.—D.C. Readings taken with a Vacuum Tube Voltmeter.

Receiver tuned off station.

D.C. RESISTANCES.

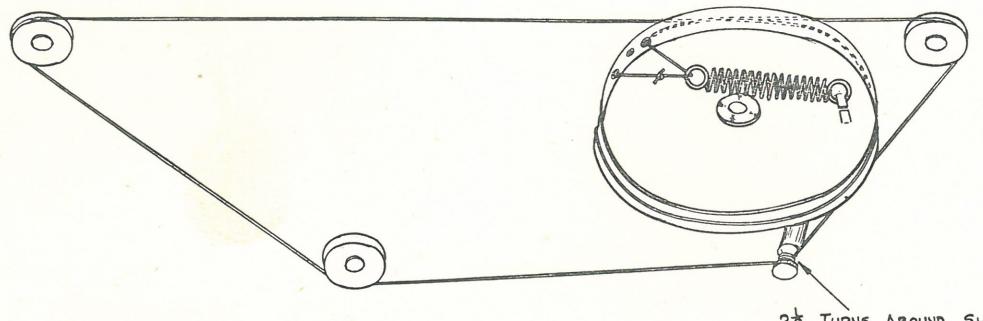
B.C. Ant. Coil Primary	....	20	ohms	||	P.X. Primary	....	....	75	ohms
B.C. Ant. Coil Secondary	....	3.2	ohms	||	P.X. Secondary	....	....	250	ohms
B.C. OSC. Coil Primary	....	.3	ohms	||	O.X. Primary	....	....	520	ohms
B.C. OSC. Coil Secondary	....	2.	ohms	||	O.X. Secondary	....	....	.5	ohms
I.F. Transformer Primary	....	13.	ohms	||					
I.F. Transformer Secondary	....	13.	ohms	||					

ALIGNMENT INFORMATION.

Adjust Volume Control for Max.

Adjust Signal Generator output to no higher than is necessary to obtain output meter reading.

DUMMY ANT.	Generator Coupled to	Generator Freq.	Receiver Dial Setting	ADJUST:	Approx. Sens. for 50 M.W. Output
.1 ufd.	Grid 6AR7GT	460 KC/S	550 KC/S	1 ⁵ -1 ⁶ for Max	2500 u.v.
.1 ufd.	Grid 6BE6	460 KC/S	550 KC/S	1 ³ -1 ⁴ for Max.	15 u.v.
R.M.A. STANDARD	ANT.	17.8 MC/S	17.8 MC/S	Osc. Trimmer for Max.	
"	"	17.8 MC/S	17.8 MC/S	Ant. Trimmer for Max.	
"	"	6 MC/S	6 MC/S	Ant. Core	
"	"	1400 KC/S	1400 KC/S	Osc. Trimmer T ⁴ for Max.	
"	"	"	"	Ant. Trimmer T for Max.	10 u.v.
"	"	600 KC/S	Through 600 KC/S	Padder P for Max.	12 u.v.



VIEW FROM UNDER CHASSIS

2 1/2 TURNS AROUND SHAFT

AMENDMENTS :

In this model the R/G switch has been removed.

A variable trimmer T⁴ has been connected between top of B.C. osc. coil secondary and ground.