

# TECHNICAL INFORMATION MODEL RBO

## 6V. A.C.-BATT. PORTABLE

DESIGNED AND MANUFACTURED

by

## RADIO (1936) LTD.

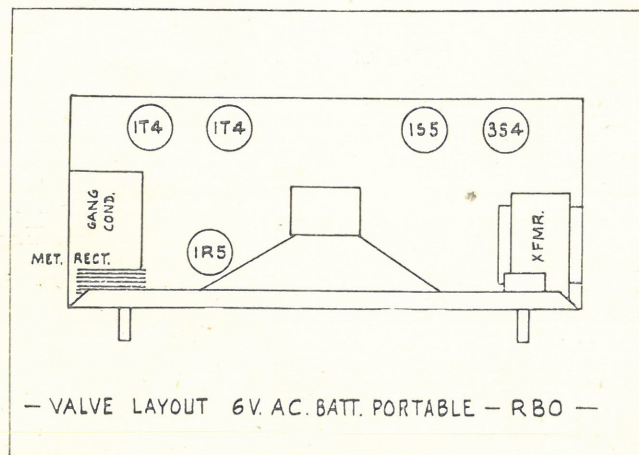
Power Supply	230v. 50CP/S A.C. — BATT	Rating	20 Watts
Tuning Range	1500KC/S — 550KC/S	Speaker	Rola 6 H
Current Drain A	50 M.A.	Power Output	200 M.W.
Current Drain B	13 M.A.	I.F. Frequency	460 KC/S

### CIRCUIT DESCRIPTION:

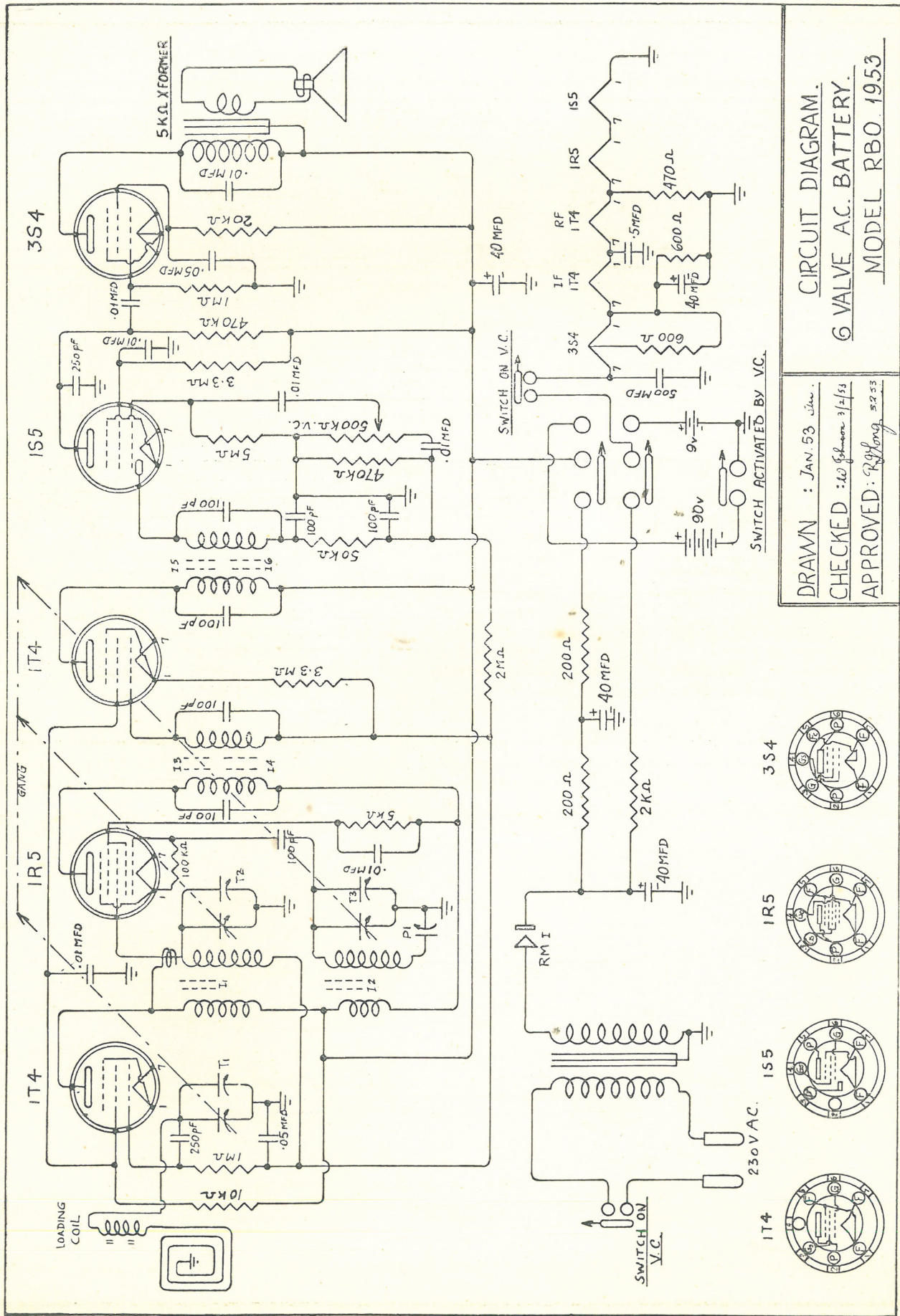
A Type IT4 valve is employed as a radio frequency amplifier and is coupled to a type IR5 frequency changer which is in turn coupled by means of a double wound intermediate frequency amplifier. A type IS5 performs the functions of detection, AGC. source and voltage amplification and is capacitively coupled to a type 3S4 valve supplying audio power to a 6" Rola speaker. On A.C. the 230v. mains are converted to direct current by means of a double wound transformer, type RM1 selenium rectifier and filter system.

### ANTENNA:

A high gain loop ant. is built into this receiver and it is important that the receiver be orientated until max. signal strength is received. Provision is made for the use of an external antenna and for max. results this ant. should have a flat top of approximately 40 feet.

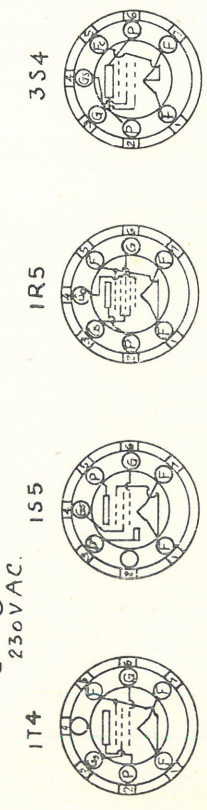






CIRCUIT DIAGRAM.  
 6 VALVE AC BATTERY.  
 MODEL RBO 1953

DRAWN : JAN. 53  
 CHECKED : 10/1/53  
 APPROVED : R. G. Long





### VOLTAGES APPEARING BETWEEN VALVE PINS AND CHASSIS FRAME

VALVE PIN No.	1	2	3	4	5	6	7	8
IT4	2.6v.	88v.	67v.	—	—	1.5v.	3.9v.	
IR5	1.3v.	88v.	74v.	25v.	—	1.5v.	2.6v.	
IT4	3.9v.	88v.	67v.	—	—	1.5v.	5.2v.	
IS5	—	24v.	—2v.	24v.	38v.	—2v.	1.3v.	
3S4	5.2v.	—	.1v.	67v.	6.5v.	86v.	7.8v.	

Receiver on A.C. Mains 230v.

NOTE.—D.C. reading taken with vacuum tube voltmeter.  
Receiver tuned off station.

### D.C. RESISTANCES:

AER. Coil Prim.	—	—	—	I.F. Prim.	—	—	—	14ohms.
AER. Coil Sec.	—	—	—	I.F. Sec.	—	—	—	14ohms.
DET. Coil Prim.	—	—	100ohms.	Power Xformer Prim.	—	—	—	125ohms.
DET. Coil Sec.	—	—	40ohms.	Power Xformer Sec.	—	—	—	48ohms.
OSC. Coil Prim.	—	—	.75ohms.	Speaker Xformer Prim.	—	—	—	300ohms.
OSC. Coil Sec.	—	—	2ohms.	Speaker Xformer Sec.	—	—	—	.25ohms.

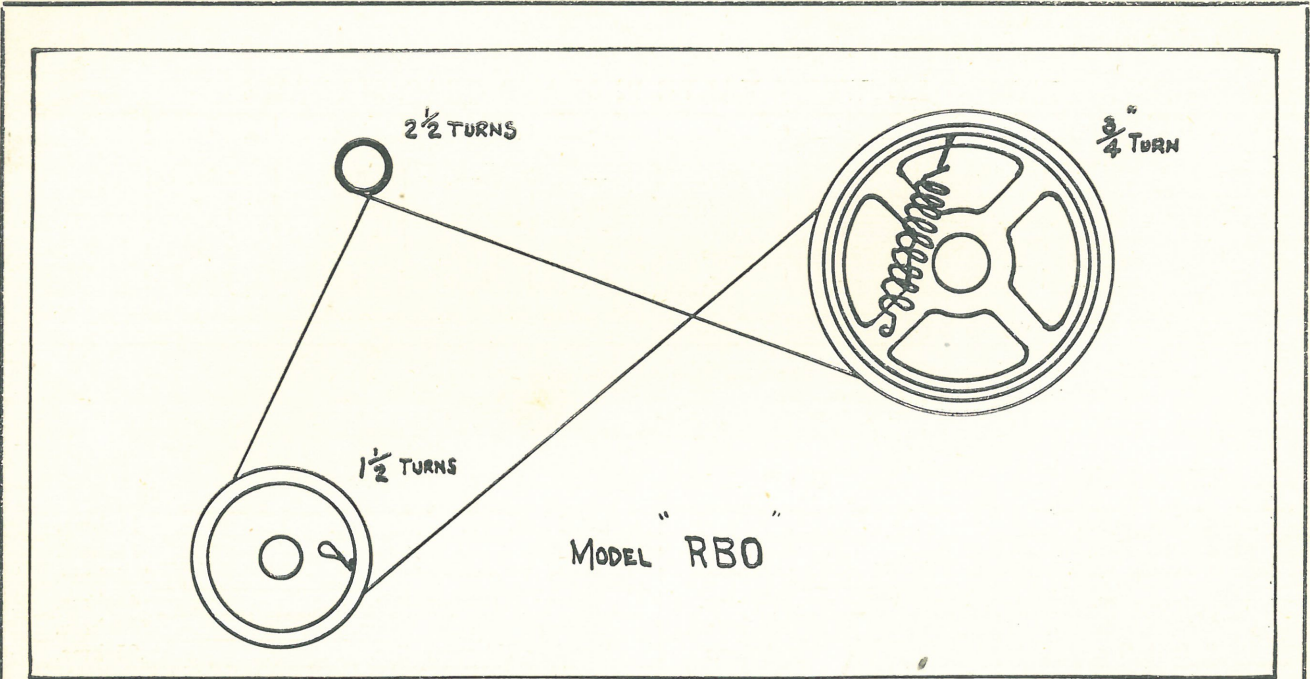
### ALIGNMENT INFORMATION:

Adjust Volume Control for Max. Gain.

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 50m.w. output
.1 mfd.	Grid IT4	460KC/S	550KC/S	2nd I.F. Trimmers	6500 m.v.
.1 mfd.	Grid IR5	460KC/S	550KC/S	1st and 2nd I.F. Trimmers	150m.v.
R.M.A. Standard	Ant.	1400KC/S	1400KC/S	Osc. Trimmer for Max.	
"	"	1400KC/S	1400KC/S	Ant. and Det. Trimmers for Max.	Better than 1 m.v.
"	"	600KC/S	Through 600KC/S	Padder for Max.	4 m.v.





AMENDMENTS AND REMARKS: