

November 1936



Note No. 15

LIGHT GUN FACTORY, ERITH, KENT

SERVICE NOTES

Model C.N. 252

UNIVERSAL "ALL WAVE" BANDPASS RECEIVER.

To examine the underside of the chassis, remove sub-base of the cabinet. Instructions for removing the chassis from the cabinet are given on the label affixed to the inside of all cabinets.

Wavebands :—13·5—48·5, 48—145, 190—550, and 800—2100 metres.

For use on either A.C. mains, 200—260 volts, 50—100 cycles, or D.C. mains 200—250 volts.

Mains Voltage Adjustment :—For supply voltages of 200—220 the flex lead to the resistance must be put under the lower terminal and under the middle and top for voltages of 220—240 and 240—260 respectively.

IMPORTANT—Engineers should remember that the chassis of a Universal Receiver is liable to be above earth potential. Care should be taken to see that no direct earth connection is made.

GANGING—Set the tuning pointer to coincide with both the top and bottom ends of the scale.

Unscrew the anode trimmer (under chassis, behind the SP13C valveholder) and the G and A trimmers (on the gang Condenser) to minimum. The reaction condenser must also be turned right off. Turn the pointer to 250 metres and inject a strong 250 metre signal via the A and E terminals. Adjust A trimmer on gang condenser (nearest back of chassis) for maximum volume.

Then without touching the main tuning control, adjust the anode trimmer for maximum output, with the reaction condenser advanced as far as possible without reaction actually taking place, at the same time reducing the input from the signal generator as the set comes into gang.

Finally adjust the grid trimmer (centre one on gang condenser) for maximum volume.

Calibration should then be found correct on all wavebands.

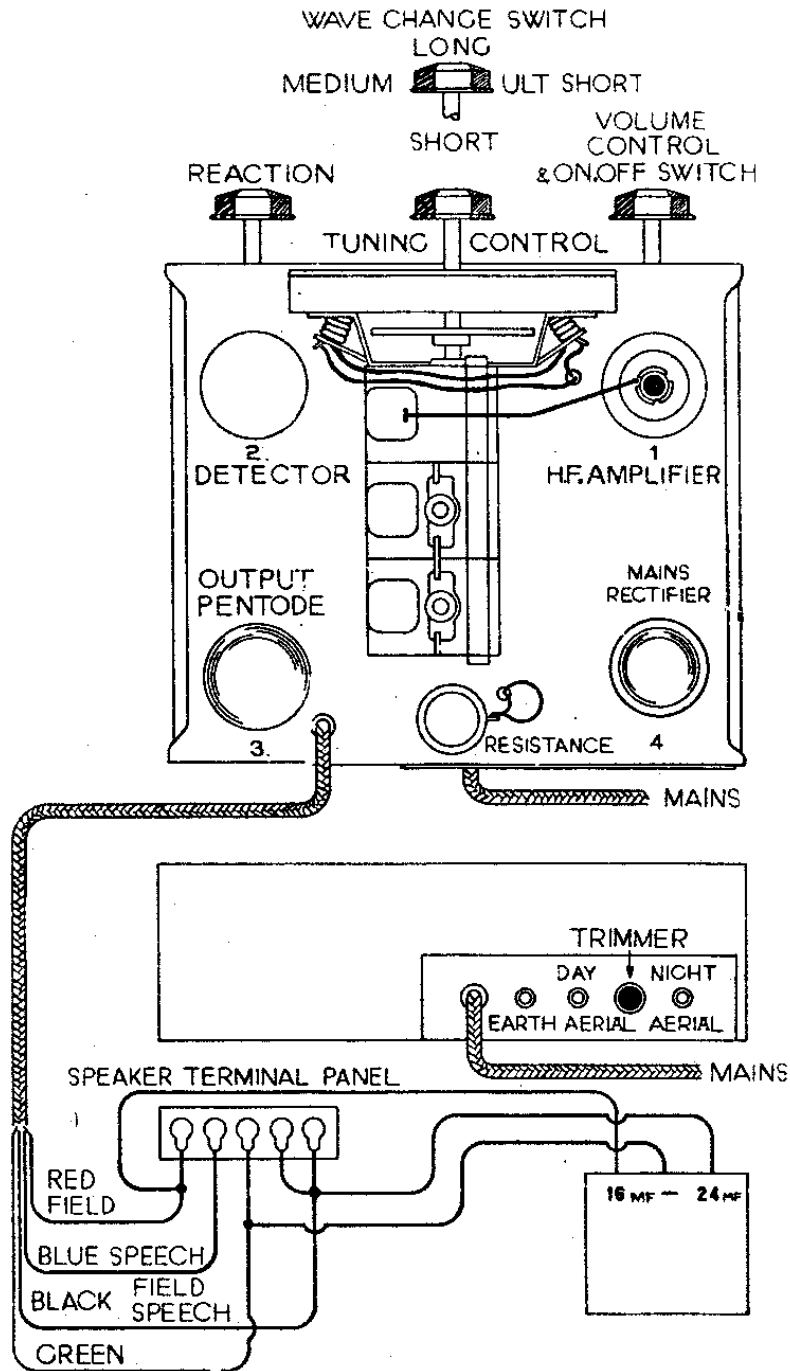
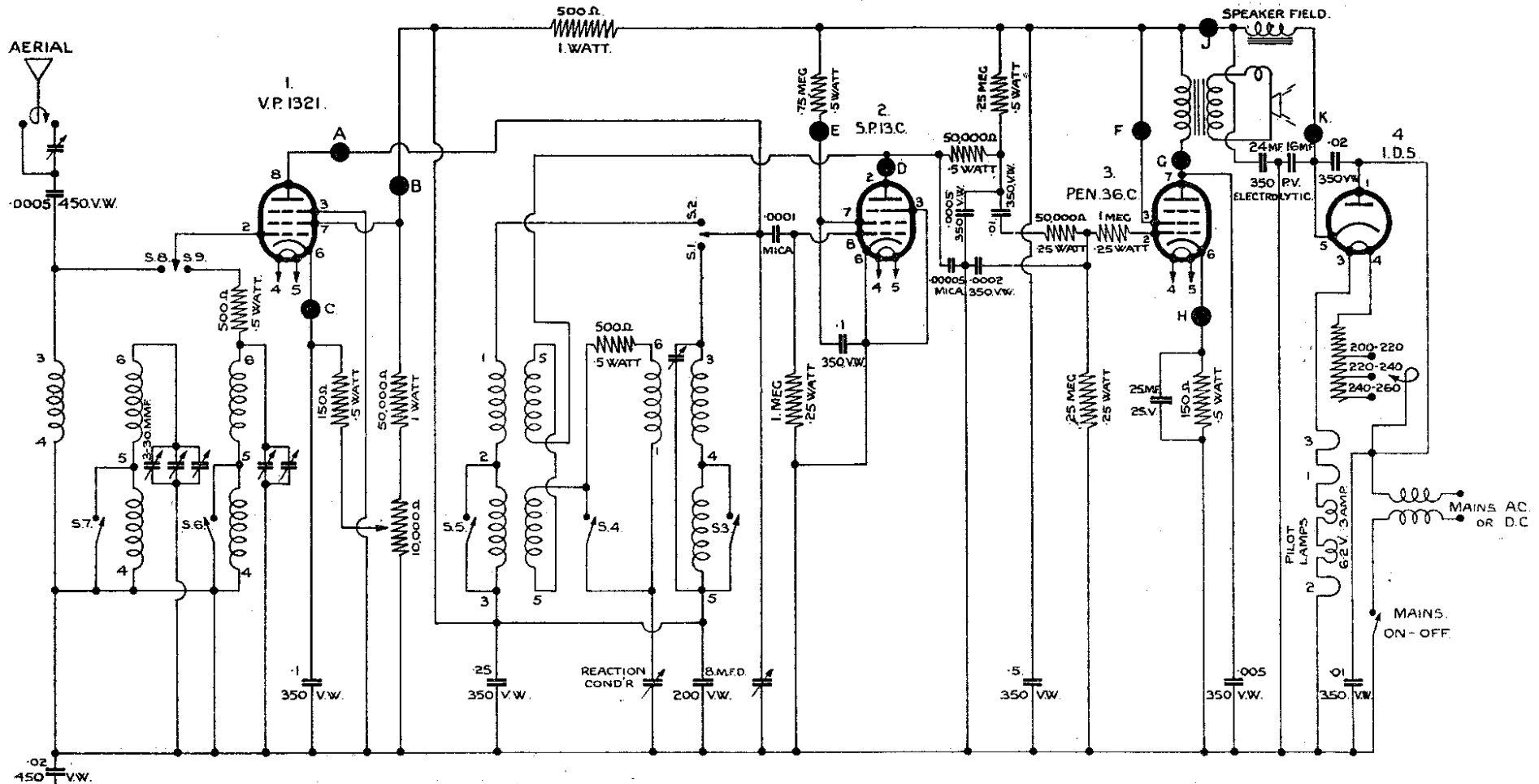


Fig. 1. Top View of Chassis and Connections.

CIRCUIT DIAGRAM OF MODEL CN 252



02
450 V.W.
EARTH.

AVERAGE VOLTAGE FIGURES OBTAINED WITH UNIVERSAL AVOMETER BETWEEN POINT INDICATED & EARTH UNDER "NO SIGNAL" CONDITIONS.

VALVE	VP.1321	SP.13.C	PEN.36.C	I.D.5.
REF. N°	1	2	3	4
METALLISING.	1	1		
HEATER.	4	4	4	3
HEATER.	5	5	5	4
CATHODE.	6	6	6	5
ANODE.	8.T.C.	2	7	1.
SUPPRESSOR GRID.	3	3		
SCREEN GRID.	7	7	3	
CONTROL GRID.	2	8.T.C.	2	

	VOLTS	CURRENT M/A.
A.	150	7
B.	150	4.5
C.	1.1	8.6
D.	38	.5
E.	30	.2
F.	210	6
G.	175	40
H.	6.7	46
J.	210	58.2
K.	250	58.2

MAINS. 220V AC

X = CONTACTS CLOSED

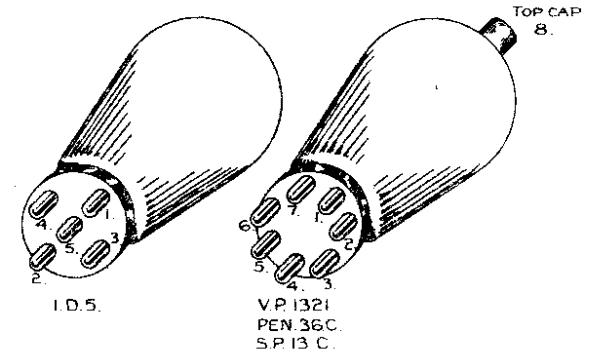
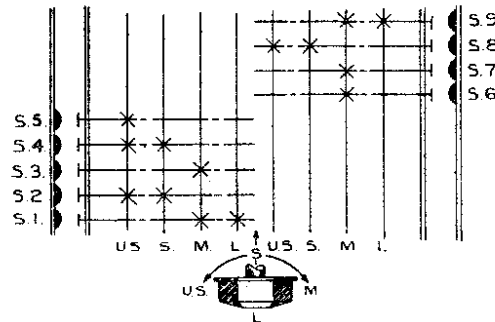


Fig. 2

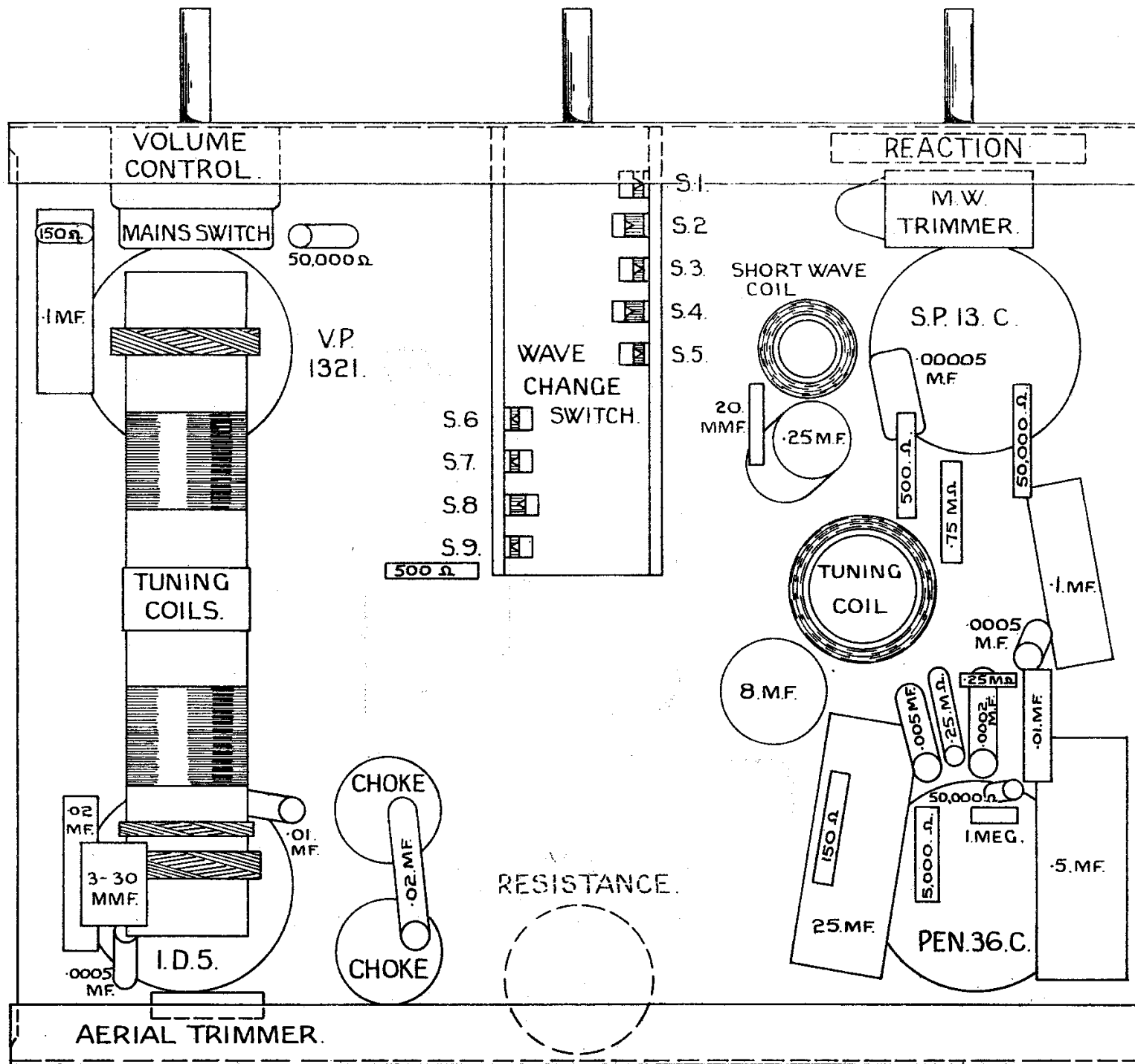


Fig. 3. Underside View of Chassis.