

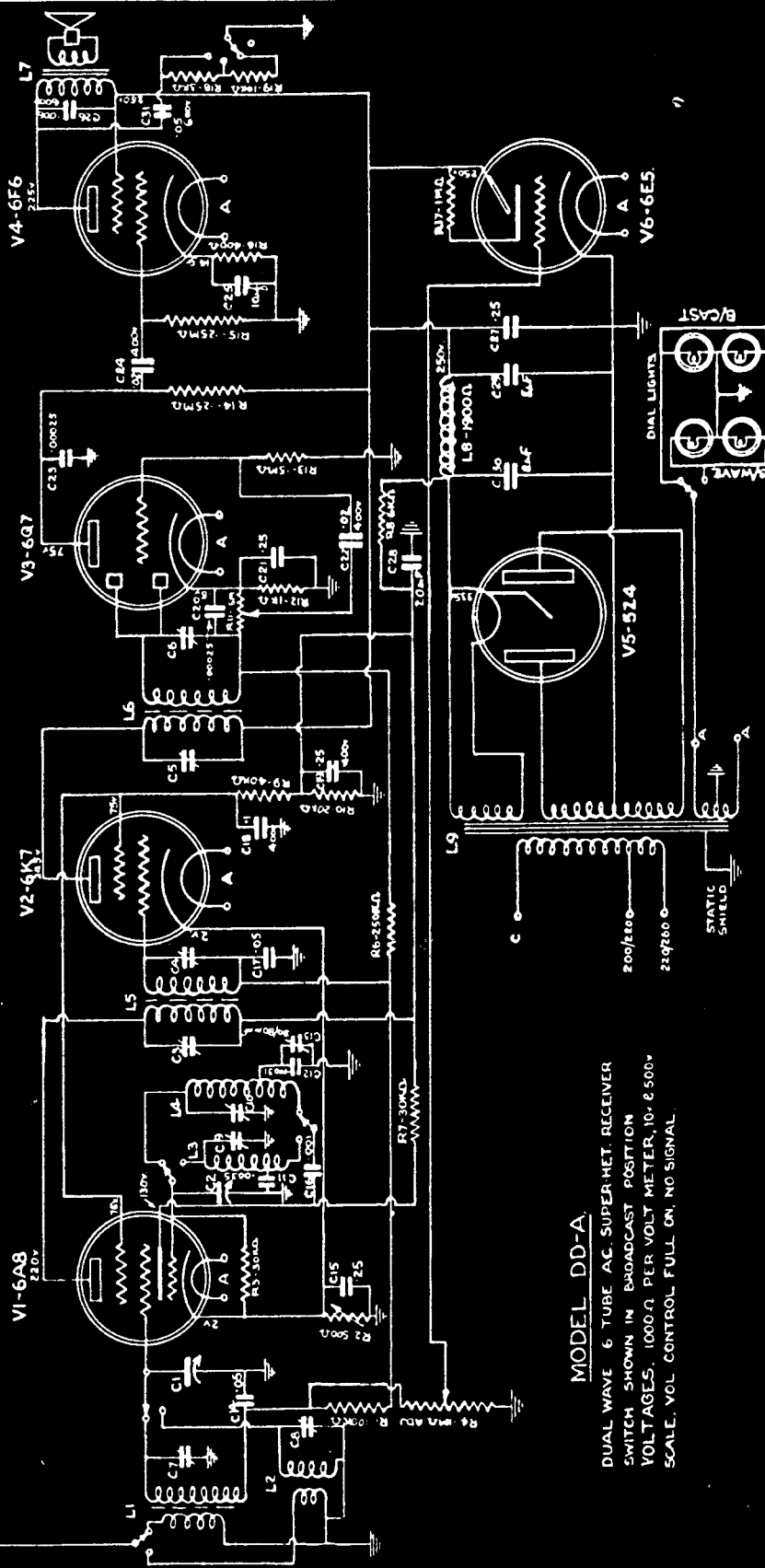
"Astor" A.C. Model 66 A.V.—Chassis type DD-A

Astor model 66AV, chassis type DD-A, is a five-valve receiver designed for dual-wave coverage and operation from 200-260 volts A.C. mains. This receiver is of the console type and is fitted with four panel controls—volume, tuning, wave-change, tone (4 positions)—and an 8 inch, 1,900 ohms field, loudspeaker. In addition to the panel controls, two "internal" controls are fitted in the form of R2 (500 ohms adjustable) for adjusting the bias of the converter and I.F. valves; and R4 (1 megohm potentiometer) for adjusting the amount of A.V.C. voltage applied to the 6E5 tuning indicator grid.

The design of this receiver follows standard "Astor" lines and requires no particular description. Attention should be paid, however, to the presence of the "anti-flicker" network RS (6,000 ohms) and C28 (20 mfd.), which ensures a steady plate, screen, and oscillator high-tension supply for the converter valve. This network is fed from the rectifier side of the loudspeaker field in order to obtain maximum stability. It should be noted that resistor R8 must have a rating of at least 2 watts. To provide still greater stabilisation of the voltage supplied to the converter elements, a "bleeder" resistance (R10—20,000 ohms) is inserted; the voltage drop across this is about 220 volts and a unit with a rating of at least 3 watts must be employed.

The I.F. used in this receiver is exactly 472.5 KC., and adjustment to this frequency is effected by means of the trimmers C3, C4, C5, C6. Broadcast alignment is effected by means of the trimmers C7, C10, and the padder C13 (30/80 mfd.); note that the latter is shunted by a 300 mmfd. (0.0003 mfd.) fixed condenser (C12). S.W. alignment is by trimmers C8, C9; the padder (C11) is fixed.

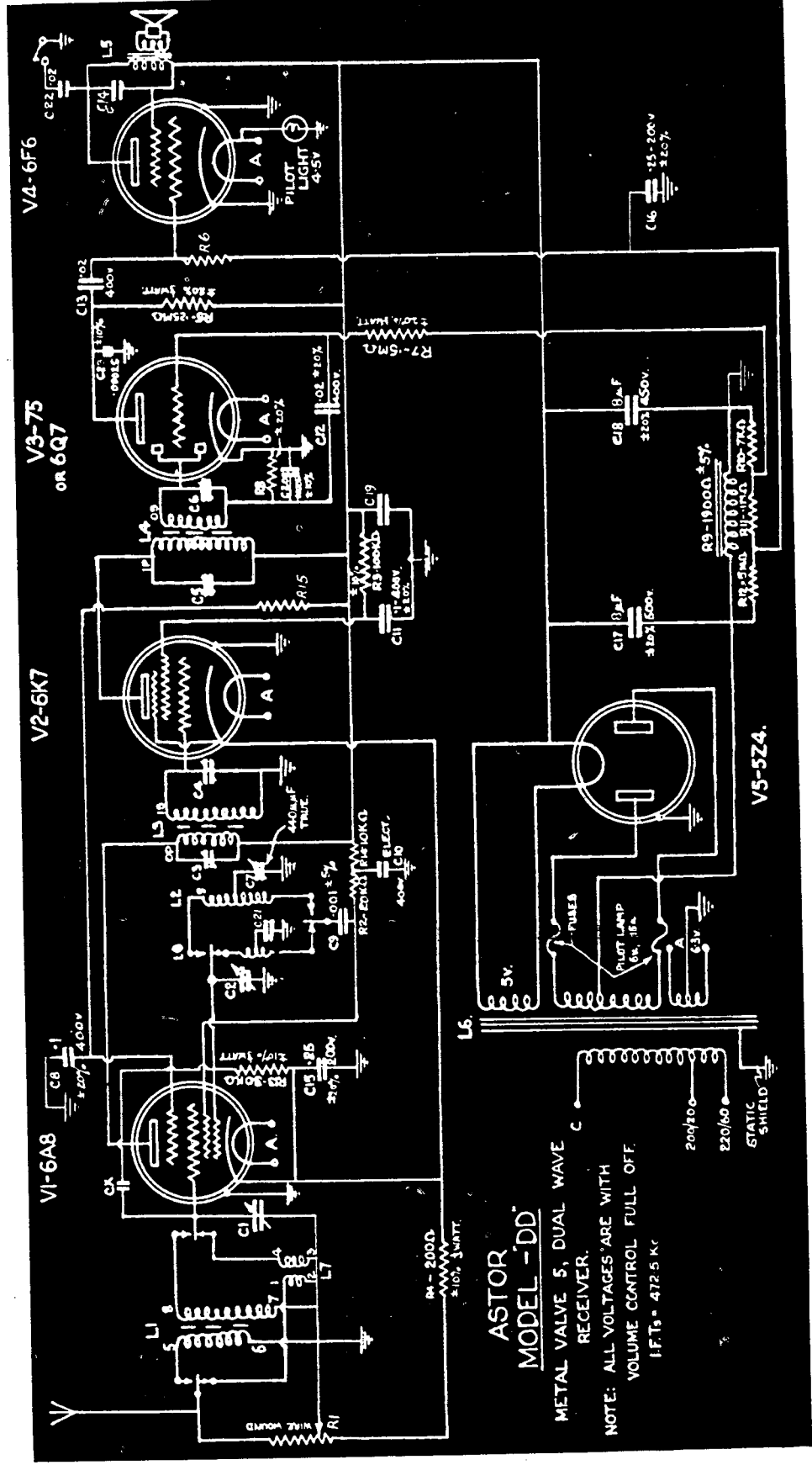
Finally, it should be noted that a small neutralising capacity is connected between the oscillator and mixer circuits of the 6A8. This takes the form of two or three turns of insulated wire twisted around the 6A8 grid lead and connected to the oscillator section of the gang condenser. Do not disturb this when servicing the receiver.



MODEL DD-A

DUAL WAVE 6 TUBE AC. SUPER-HET. RECEIVER
SWITCH SHOWN IN BROADCAST POSITION
VOLTAGES, 1000 Ω PER VOLT METER, 10, & 500+
SCALE, VOL CONTROL FULL ON, NO SIGNAL

"Astor" A.C. Operated Dual-Wave Console Model 66S



ASTOR MODEL - "DD"

METAL VALVE 5, DUAL WAVE RECEIVER.
 NOTE: ALL VOLTAGES ARE WITH VOLUME CONTROL FULL OFF.
 I.F.T.s - 472.5 KC

ASTOR CONSOLE 66S 1936/37 Chassis-type "DD"

Uses "R.F." type Volume Control, no A.V.C. Loud-speaker is 8-inch unit with field-coil resistance of 1,900 ohms.

RESISTORS:

- R1—5,000 ohms, 1/2 W.; R2—100,000 ohms, 1/2 W.; R3—100,000 ohms, 1/2 W.; R4—200 ohms, 1/2 W.; R5, R6—250,000 ohms, 1/2 W.; R7, R8, R12—5,000 ohms, 1/2 W.; R9—1,900 ohms, 1/2 W.; R10—7,000 ohms, 1/2 W.; R11—100,000 ohms, 1/2 W.; R13—30,000 ohms, 1/2 W.; R14—10,000 ohms, 1/2 W.; R15—60,000 ohms, 1/2 W.

COILS, ETC.

- L1—Iron cored B.C. aerial coil; L2—osc. coil; L3, L4—Iron cored 1st and 2nd I.F. trans., resp., 472.5 kc.; L5—loudspeaker trans.; L6—power trans.; L7—S.W. aerial coil; L8—S.W. osc. coil.

CONDENSERS:

- C1, C2—Sections of 2-gang variable; C3, C4, C5, C6—I.F.T. trimmers; C7—440 mmfd.; B.C. padder; C8, C11—0.1 mfd., 400 v.; C9—0.001 mfd., 5%; C10—1 mfd., 400 v.; elec. tro; C12, C13—0.02 mfd., 400 v.; C14—0.006 mfd., 400 v.; C15, C16—0.25 mfd., 200 v.; C17—8 mfd., 500 v.; C18—8 mfd., 450 v.; C19—0.5 mfd., 400 v.; C20, C23—250 mmfd.; C21—S.W. padder; C22—0.03 mfd., 1,000 v.; Cx—approx. 2 mmfd. "gimmick" for neutralization of space charge effect in 6A8. This is composed of a short length of insulated wire connected to the osc. section of the tuning gang, and having its free end twisted around the mixer input grid lead.