

## A75 SERIES II VOLTAGE CHART.

All voltages measured under following conditions unless otherwise stated.

- (a) Readings under 25V taken on AVO 8 25 VDC range.
- (b) Readings over 25V taken on AVO 8 100 VDC range.
- (c) Measurements taken W.R.T. 0V (chassis).
- (d) No signal input.
- (e) Disc sensitivity switch set to max. (2.5mv).
- (f) Amplifier output terminated in 8 $\Omega$ .
- (g) Mains input voltage = 245V.
- (h) Mains tapping adjustment set to 240V.
- (i) RV6, RV7 and RV8 adjusted as per instructions for 'setting up'

Transistor Designation.	Emitter.	Base.	Collector
T1	+15.6	+14.0	+4.5
T2	+4.0	+4.6	+16.0
T3	+1.0	+1.6	+4.5
T4	+0.5	+1.1	+6.6
T5	+1.6	+2.2	+10.0
T6	+0.6	+1.2	+8.2
T7	+7.6	+8.2	+23.0
T8	+13.0	+13.6	+31.0
T9	+13.0	+13.6	+31.0
T10	0	+1.0	+40.0
T11	-40.0	-39.0	0

P.D. Across	ZD1 = 30.0V
" "	C8 = 30.0V
" "	C6 = 28.0V
" "	R66 = 8.0V
" "	R50 = 17.0V
" "	R37 = 7.0V
" "	C7 = 16.0V

TR2 SEC	= 29-0-29 VAC R.m.S.
P.S.V. O/P	= 40-0-40 VDC
L.E.D. Current	= Approx 13MA
TR2 Magnetising Current (SEC O/C)	= Less than 70MA.

### SETTING UP BIAS PRESETS RV7 AND RV8.

This adjustment should be made under no signal conditions, with the amplifier output terminated in  $8\ \Omega$ .

- (a) Turn both presets to the S/C position (towards rear of amp).
- (b) Connect a D.C. Millivoltmeter across R75 (Neg to rear of amp).
- (c) Adjust RV8 for a reading of 40mV.
- (d) Transfer Millivoltmeter to R74 (Neg to rear of amp).
- (e) Adjust RV7 for a reading of 40mV.
- (f) Repeat steps (b) to (e) as they are slightly interdependent.
- (g) Transfer Millivoltmeter to  $8\ \Omega$  terminating resistor and check the offset voltage is within  $0V \pm 10mV$ . If outside these limits a slight adjustment of RV8 is permissible for correction.

NOTE: In the event of a D.C. Millivoltmeter not being available, a suitable alternative is an AVO 8 Multimeter set to the 50  $\mu A$  D.C. range. This corresponds to 125mV F.S.D. with an impedance of 2500 ohms, which although considerably lower than a typical D.C. Millivoltmeter, is still of a sufficiently high value to avoid any inaccuracies due to shunting effects.

### SETTING UP RV6.

- (a) Terminate amplifier output with an  $8\ \Omega$  power meter and a C.R.O.
- (b) Inject a 180mV 1KHz signal into the radio input.
- (c) Turn volume control to max and with amplifier delivering maximum O/P power (45+45w), increase input signal until the waveform on the C.R.O. just begins to clip.
- (d) Adjust RV6 for symmetrical clipping of waveform.