



# MODELS 3001 & 3001R

## SPECIFICATION

### MODEL 3001

#### Physical

Height	..	..	37 inches (94 cm)	} approx. overall.
Depth	..	..	21 inches (53.4 cm)	
Width	..	..	46 inches (116 cm)	
Weight	..	..	232 lb. net.	

#### Mains Supply and Consumption

195—255 volts, A.C. 50 cycles only  
200 watts approx.

#### Valves

##### PRE-AMPLIFIER

V1	Z729	Gram. equalizer stage
V2	Z729	Treble filter stage
V3	Z729	Bass filter stage
V4	Z729	Tone control stage

##### POWER AMPLIFIER

V5A	12 AU7	Voltage Amplifier
V5B		Phase-Splitter
V6A	12 AU7	Push-Pull driver stage
V6B		
V7	KT66	Push-Pull output stage
V8	KT66	
V9	53KU	H.T. rectifier.

#### Fuses and Lamp

H.T. fuse, 350 mA  
Two mains fuses, 3 amp. } cartridge type  
Lamp, 6 volt, 3 watt, bayonet type

#### Rated Output

10 watts for less than 0.1% distortion  
20 watts maximum

#### Frequency Response

- (a) Overall  $\pm 1$  db 30 c/s to 13 kc/s.  
(b) Power Amplifier only  $\pm 1$  db 20 c/s to 20 kc/s.

#### Loudspeakers

Two loudspeakers are used. These are both 13½ inch elliptical p.m. units, with aluminium cone centres. The speech coils have a d.c. resistance of 4 ohms and impedance of 5 ohms at 1,000 cycles.

The two units differ in the following respects:

LS1 (upper) has a light copper speech coil for extended h.f. range and has a 12,000 gauss p.m.

LS2 (lower) has a very low resonance frequency for good bass response, and has a 10,000 gauss p.m.

#### Pick-up

No. 18 electro-magnetic cantilever type with separate plug-in heads for standard (78 r.p.m.) records and micro-groove (33½ or 45 r.p.m.) records.

D.C. resistance of signal and humbucking coils 1 ohm.

Playing weight—10 grammes, approx.

#### Styli

Standard Head—Sapphire tipped.

Micro-groove Head—Diamond tipped.

#### Record Auto-changer

Three speed, 33½ r.p.m., 45 r.p.m. and 78 r.p.m. (capacity 8 records), type 48540N.

Refer to Service Manual for Basic Type 48540B, Part No. 93370 for operation of mechanism.

Motor *41394H 78 R.P.M. Head Complete (Beise)*  
*41394J 33/45 4-1-1-1-1 (Beise)*

Type No. 5 Squirrel cage motor.

#### Radio Input

Provision for fitting a specially designed high quality radio unit. For details see under Model 3001R.

### MODEL 3001R

As model 3001 specification, but with the addition of the following:

#### RADIO UNIT

##### Wave Ranges

L.W.	901—2,000 metres (333—150 kc/s)
M.W.	187.5—575 metres (1602—522 kc/s)
S.W.	16.3—51.7 metres (18.4—5.8 Mc/s)

##### Intermediate Frequency

470 kc/s

##### Scale Lamps

Three lamps, 6.8 v. 0.3 A.

##### Valves

V1	X79	Frequency Changer
V2	ZD152	I.F. Amplifier, Signal and A.G.C. Rectifier
V3	Z729	Audio Amplifier
V4	EM34	Tuning Indicator



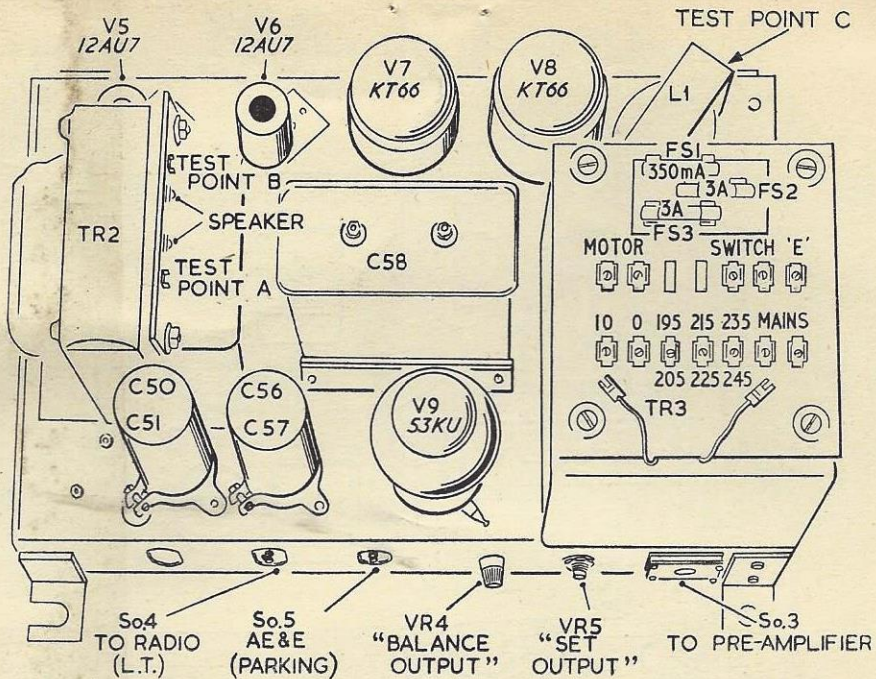
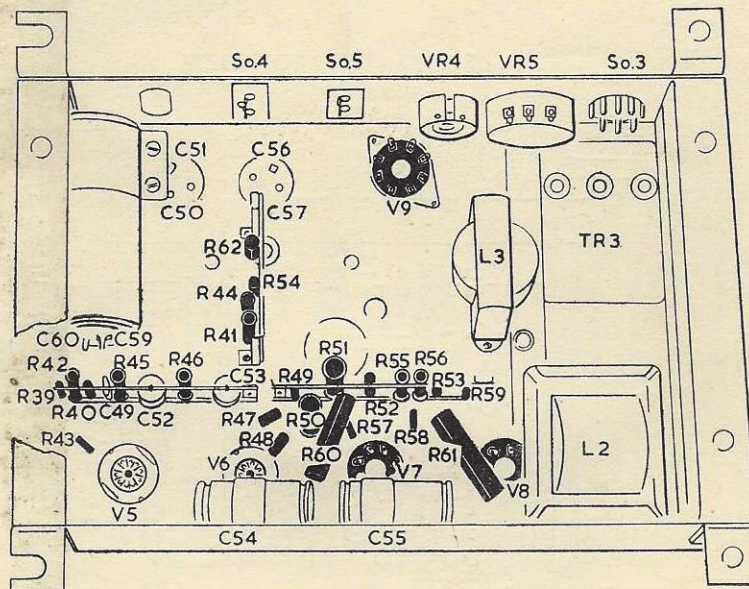
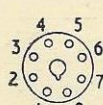


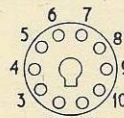
FIG. 7. MAIN AMPLIFIER AND POWER UNIT, TOP VIEW



V5, V6



V7, V8, V9



So.3

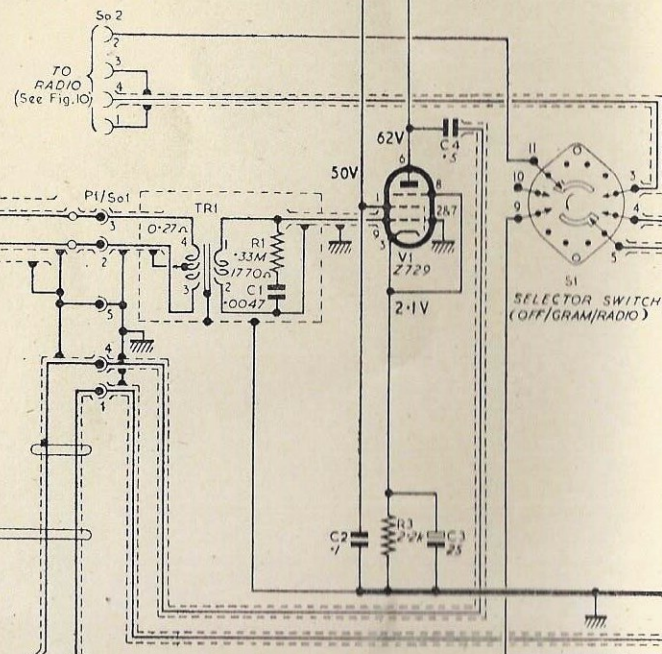
CONNECTIONS VIEWED FROM UNDERSIDE

FIG. 8. MAIN AMPLIFIER AND POWER UNIT, UNDERSIDE VIEW

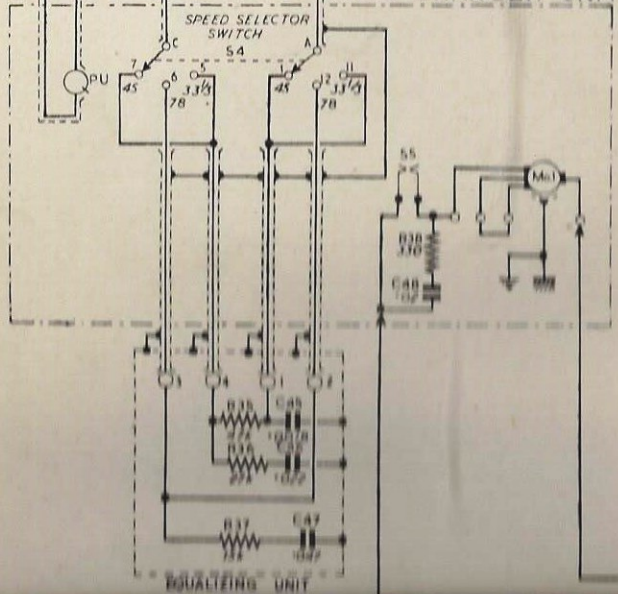


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R	35,36,37										38	1	2	3	4											39	40	41,42	43	44,45	46	47,48	9	11	10	12	13	14	15	16	17	19	18	20	21,24,22,23	25,26	27	28	29	30	31	33	32		
MISC	PU	PI/So.1		So.2		TR1		S5		4		Mo.1		V1		S1		V5A		V5B		VR1		V2		V6A&B		S2 CARDS 2&1		VR4		VR5		L1,V7,V8		V3		TR2		LS1		L2		LS2		VR2,VR3		V9,5a,4,L3		FS1		TR3		V4	

## PRE-AMPLIFIER UNIT



## 3 SPEED RECORD AUTO-CHANGER UNIT



## MAIN AMPLIFIER & POWER UNIT

