The Citation Eleven

Professional Solid State Stereophonic Preamplifier/Audio Equalizer

Technical Manual

9750-924

harman/kardon

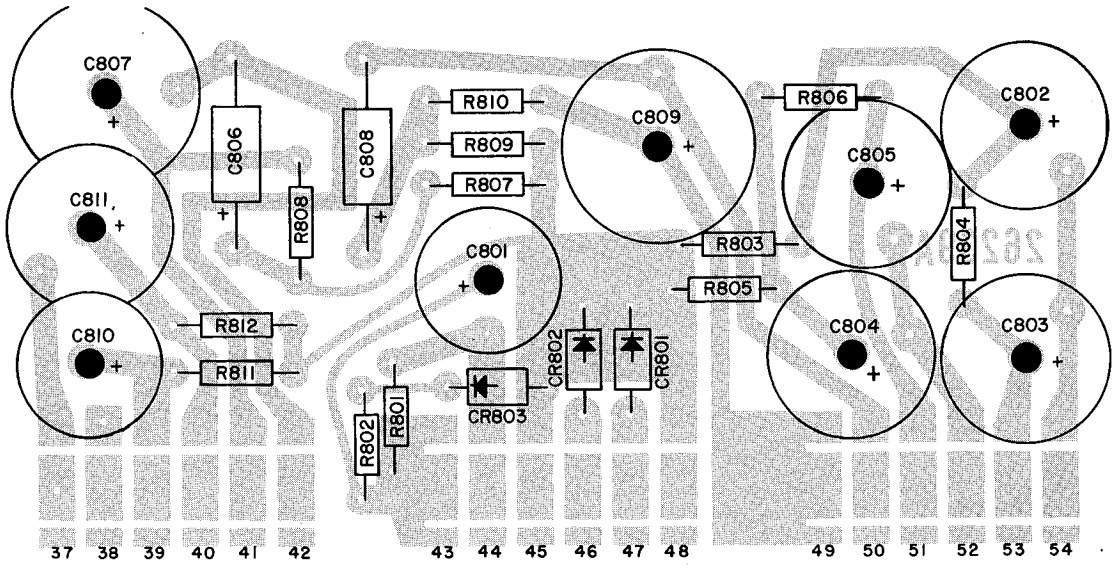
REPLACEMENT PARTS

CIRCUIT REF.	DESCRIPTION	HK PART NO.
	CAPACITORS	
C1, C2	Disc, 600 PF ± 10%, 500V	30418336
C3, C4, C5	Disc, 0.01 UF, 1400V	30418307
C6	Lytic, 1000 UF, 100V	31126416
C7	Mylar 0.1 UF ±10%, 100V	30222073
C8	Poly, 0.01 UF ±5%, 63V	30618929
C9, C10	Mylar, 0.1 UF ±10%, 100V	30222073
C11	Poly, 0.01 UF ±5%, 63V	30618929
C12-C500	Not Used	
C501	Mylar, 1 UFD, ±10%, 100V	31918839
C502	Disc, 150 PF ±10%, 100V	31718873
C503	Mylar, 1 UF, 100V	31918839
C504	Disc, 47 PF ±20%, 100V	31718776
C505	Mylar, 2700 PF ±5%, 100V	31918939
C506	Poly, .01 UF ±5% 63V	30618929
C507	Lytic, 100 UF, 16V	31818880
C508	Mylar, 1 UFD ±10% 100V	31918839
C509	Disc, 150 PF ±10%, 100V	31718873
C510	Mylar, 1 UF, 100V	31918839
C511	Disc, 47 PF ±20%, 100V	31718776
C512	Mylar, 2700 PF ±5%, 100V	31918939
C513	Poly, .01 UF ±5%, 63V	30618929
C514	Lytic, 100 UF, 16V	31818880
C515, C516	Lytic, 10 UF, 35V	31518805
C517	Lytic, 50 UF, 25V	31518919
C518	Mylar, 1 UF, 100V	31918839
C519	Disc, 47 PF ±20%, 100V	31718776
C520	Lytic, 200 UF, 15V	31518802
C521	Disc, 22 PF ±10%, 500V	31718798
C522	Mylar, 1 UF, 100V	31918839
C523, C524	Lytic, 10 UF, 35V	31518805
C525	Disc, 47 PF ±20%, 100V	31718776
C526	Lytic, 200 UF, 15V	31518802
C527	Disc, 22 PF ±10%, 500V	31718798
C528, C529	Disc, 47PF ±20%, 100V	31718776
C530-C600	Not Used	
C601	Mylar, 1 UF, 100V	31918839
C602	Lytic, 10 UF, 35V	31518805
C603	Mylar, 1 UF, 100V	31918839
C604	Disc, 470 PF ±10%, 500V	31718825
C605	Disc, 47 PF ±20%, 100V	31718776
C606	Lytic, 10 UF, 35V	31518805
C607	Lytic, 5 UF, 25V	31818905
C608	Mylar, .39 UF ±10%, 100V	31919089
C609	Mylar, 0.22 UF ±10%, 100V	31918791
C610	Mylar, .047 UF ±10%, 100V	31918808
C611	Mylar, .015 UF ±10%, 100V	31918803
C612-C800	Not Used	
C801-C805	Lytic, 50 UF, 100V	31818897
C806	Lytic, 47 UF, 63V	31518899
C807	Lytic, 500 UF, 50 V	31827095
C808	Lytic, 47 UF, 63V	31518899
C809	Lytic, 500 UF, 50 V	31827095
C810, C811	Lytic, 50 UF, 100V	31818897
	DIODES	
CR1-CR800	Not Used	
CR801-CR803	200 PIV	41022464
	COILS	
L1-L600	Not Used	
L601	Choke, 1H ±10%	12027623
L602	Choke, 0.6H ±10%	12027624
L603	Choke, 102MH ±10%	12025894
L604	Choke, 22 MH ±10%	12025896
L605	Choke, 10 MH ±10%	12025895

CIRCUIT REF.	DESCRIPTION	HK PART NO.
	TRANSISTORS	
Q1-Q500	Not Used	
Q501	BC239C Seimens	43027872
Q502	2N3417 Motorola EL-238 Series	43025972
Q503	BC239C Seimens	43027872
Q504, Q505	2N3417 Motorola EL-238 Series	43025972
Q506	FET P-CHAN AMELCO	43022956
Q507	2N3417 Motorola EL-238 Series	43025972
Q508	FET P-CHAN AMELCO	43022956
Q509	2N3417 Motorola EL-238 Series	43025972
Q510	FET P-CHAN AMELCO	43022956
Q511	2N3417 Motorola EL-238 Series	43025972
Q512-Q600	Not Used	
Q601	2N3417 Motorola EL-238 Series	43025972
	RESISTORS	
R1, R2	15K ±10%, ¼W	33211531
R3	3.3K ±10%, 3W Wire Wound	36613321
R4, R5	3.3K ±10%, ¼W	33213321
R6, R7	330 ±10%, 5W Wire Wound	36713311
R8-R500	Not Used	
R501	1 meg ± 10%, ¼W	33211051
R502	12K ±10%, ¼W	33211231
R503	1K ±10%, ¼W	33211021
R504	100 ±5%, ¼W	33211015
R505	24K ±1%, ¼W	33212433
R506	150K ±10%, ¼W	33211541
R507	470K ±10%, ¼W	33214741
R508	180 ±5%, ¼W	33211815
R509	390K ±1%. ¼W	33213943
R510	560 ± 5%, ¼W	33215615
R511	470K ±10%, ¼W	33214741
R512	2.0K ± 5%, ¼W	33212025
R513	1K ± 10%, ¼W	33211021
R514	1 meg ± 10%, ¼W	33211051
R515	12K ±10%, ¼W	33211231
R516	470K ±10%, ¼W	33214741
R517	150K ±10%, ¼W	33211541
R518	180 ±5%, ¼W	33211815
R519	390K ±10%, ¼W	33213943
R520	24K ±1%, ¼W	33212433
R521	560 ± 5%, ¼W	33215615
R522	470K ±10%, ¼W	33214741
R523	2.0K ± 5%, ¼W	33212025
R524	68K ±10%, ¼W	33216831
R525, R526	68K ±10%, ¼W	33216831
R527	2.2M ±10%, ¼W	33212251
R528	1M ±10%, ¼W	33211051
R529	470K ±10%, ¼W	33214741
R530	1K ±10%, ¼W	33211021
R531	47K ±10%, ¼W	33214731
R532	2.2M ±10%, ¼W	33212251
R533	150K ±10%, ¼W	33211541
R534	390Ω ±10%, ¼W	33213911
R535	220 ±5%, ¼W	33212215
R536	5.6K ±5%, ¼W	33215625
R537	1.5M ±10%, ¼W	33211551
R538	5.6 ±10%, ¼W	33215621
R539	68K ±10%, ¼W	33216831
R540	1K ±10%, ¼W	33211021
R541	470K ±10%, ¼W	33214741
R542	47K ±10%, ¼W	33214731
R543	150K ±10%, ¼W	33211541
R544	390Ω ±10%, ¼W	33213911
R545	220 ±5%, ¼W	33212215
R546	5.6K ±5%, ¼W	33215625
R547	5.6K ±10%, ¼W	33215621

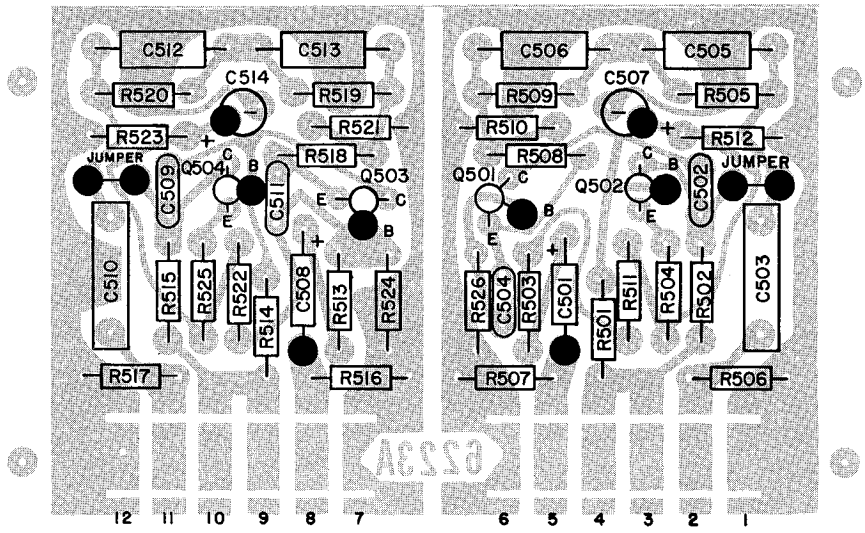
CIRCUIT REF.	DESCRIPTION	HK PART NO.
	RESISTORS	
R548	100 ±10%, ¼W	33211011
R549-R600	Not Used	
R601	470 ±10%, ¼W	33214741
R602	3.3K ±10%, ¼W	33213321
R603	2.2M ±10%, ¼W	33212251
R604	1K ±10%, ¼W	33211021
R605	1.5M ±10%, ¼W	33211551
R606	3.3K ±10%, ¼W	33213321
R607	1M ±10%, ¼W	33211051
R608	270 ±10%, ¼W	33212711
R609-R612	470 ±10%, ¼W	33214711
R613-R800	Not Used	
R801	15K ±10%, ½W	33311531
R802	10K ±10%, ½W	33311031
R803-R806	3.9K ±10%, ½W	33313921
R807-R810	15K ±10%, ½W	33311531
R811, R812	3.3K ±10%, ½W	33313321
	TRANSFORMER	
T1	Power	10125602
	CONTROLS	
VR1	Volume, 50K, Rotary	22026162
VR2	Balance, 50K, Rotary	22026161
VR3-VR7	Audio Equalizers, 50K, Slide	22125397
	MISCELLANEOUS	
	Knob, Rotary	63228028
	Knob, Slide	63228033
	Knob, Pushbutton	00228324
	Escutcheon	63028247
	Top Cover	60125936
	Bottom Plate	60125937
	Rubber Foot	62011692

DESCRIPTION	HK PART NO.
Light Shield, Fishpaper, Slide Control	61426352
Function Switch	24025502
Mode Switch	24025430
Pushbutton Switch, Power	25026153
Pushbutton Switch, DPDT	25026151
Headphone Jack W/Hardware	65426283
Speaker Selector Switch	24025431
Speaker Selector Switch Shaft	60426231
Speaker Switch Shaft Coupler	60426216
Speaker Switch Shaft Bushing	61613253
Pilot Light Jewel	61626346
Pilot Lamp	46527153
Fuse Holder W/Hardware	65410901
Fuse, 0.25A-3AG	45026404
Line Cord	53021115
Strain Relief	65421116
AC Receptacle, Black	65416751
AC Receptacle, White	65427146
Ground Terminal	65426317
Speaker Connection Strip	65426351
Power Amp. Input Conn., Female	65426341
Power Amp. Input Conn., Male	65426340
RCA Jack Ass'y	65426318
Tone Control PC Board W/Components	00126143
Phono Preamp PC Board W/Components	00126344
Preamp Output PC Board W/Components	00126345
Power Supply PC Board W/Components	00126346
PC Board Connector Strip	65425278
PC Board Guide, Edge Mounting	61626248
PC Board Guide, Free Standing	61626267
Owner Manual	90726401
Technical Manual	90728859
Speaker Patch Cable	57526338

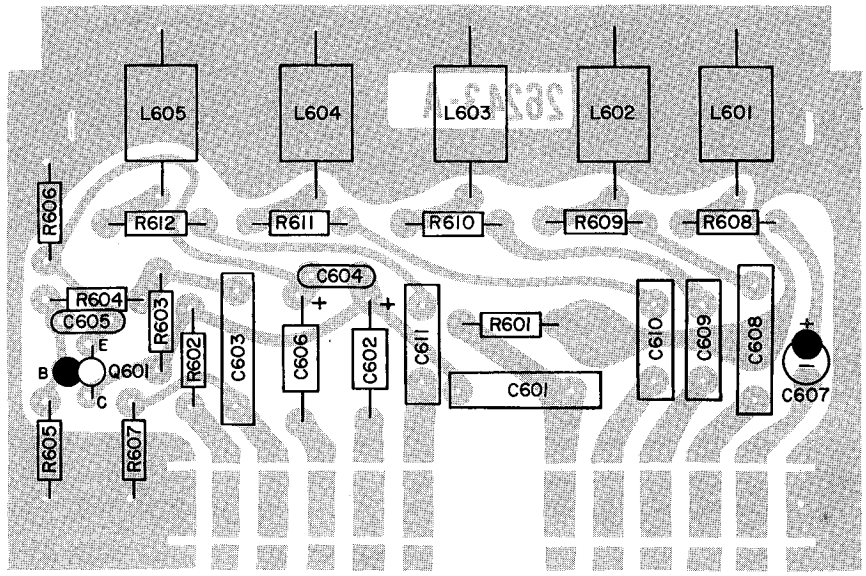


POWER SUPPLY PC BOARD

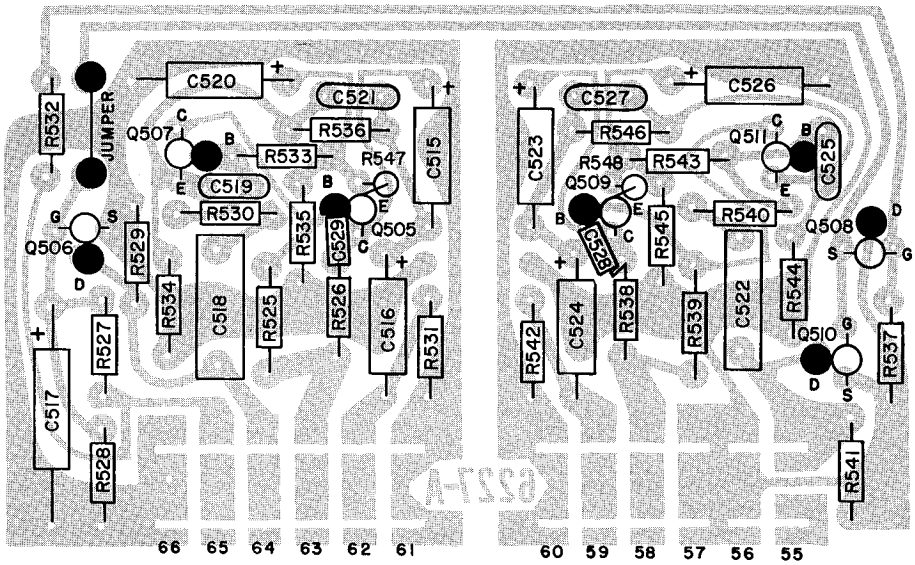
2 H



PHONO PREAMP PC BOARD

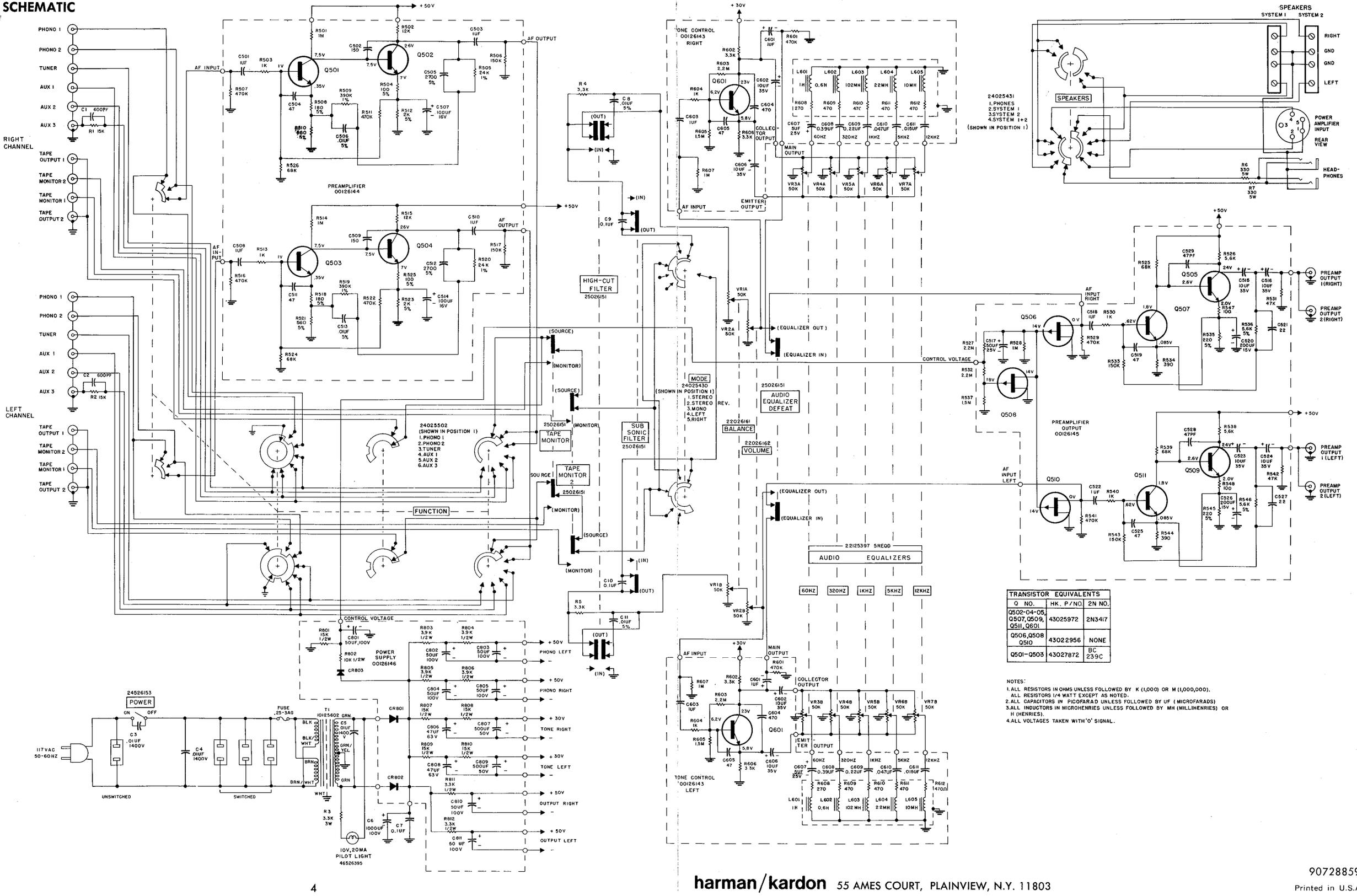


TONE CONTROL PC BOARD



PREAMP OUTPUT PC BOARD

SCHEMATIC



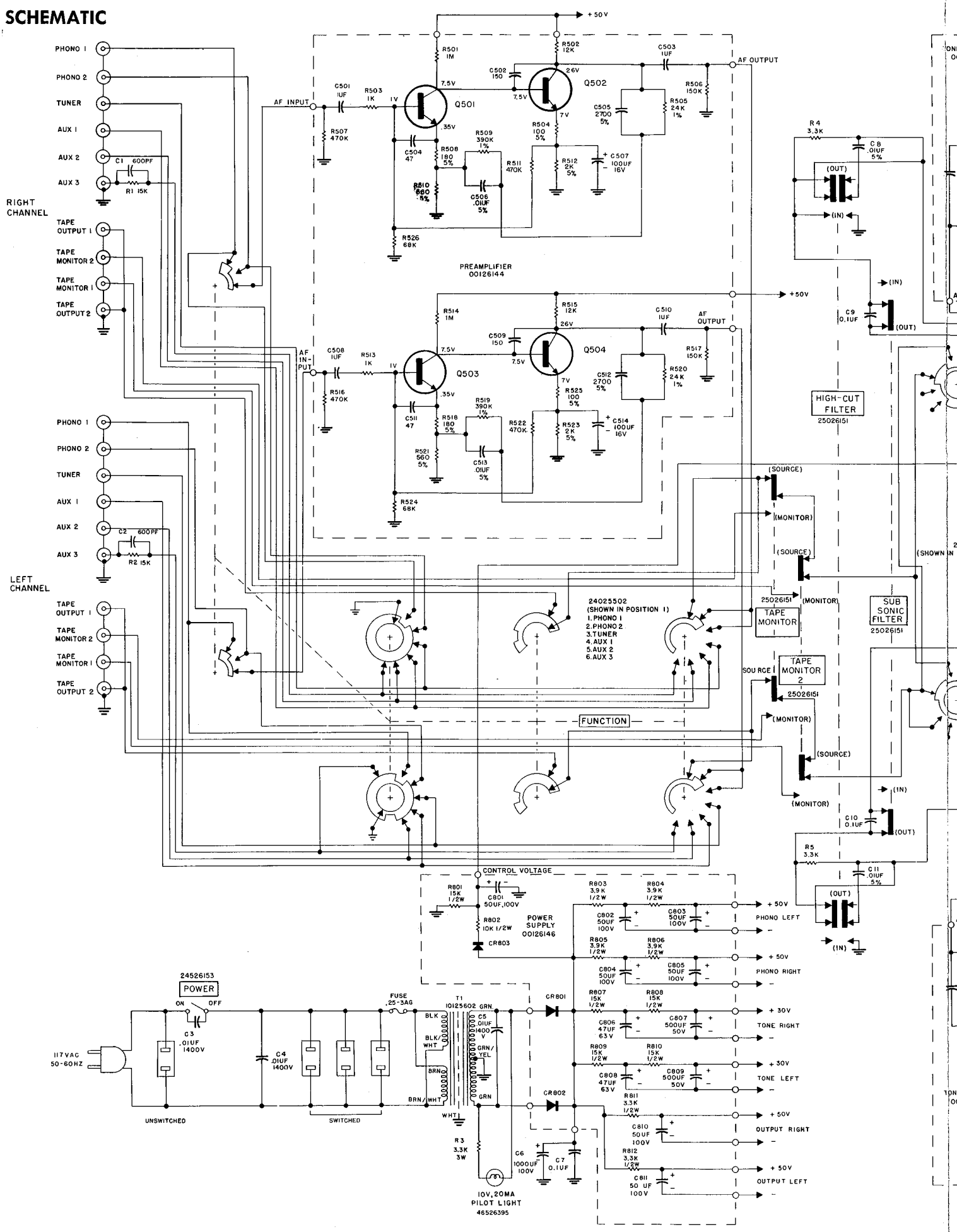
TRANSISTOR EQUIVALENTS		
Q NO.	HK. P/NO.	2N NO.
Q502-04-05, Q507, Q509, Q511, Q601	43025972	2N3417
Q506, Q508 Q510	43022956	NONE
Q501-Q503	43027872	BC 239C

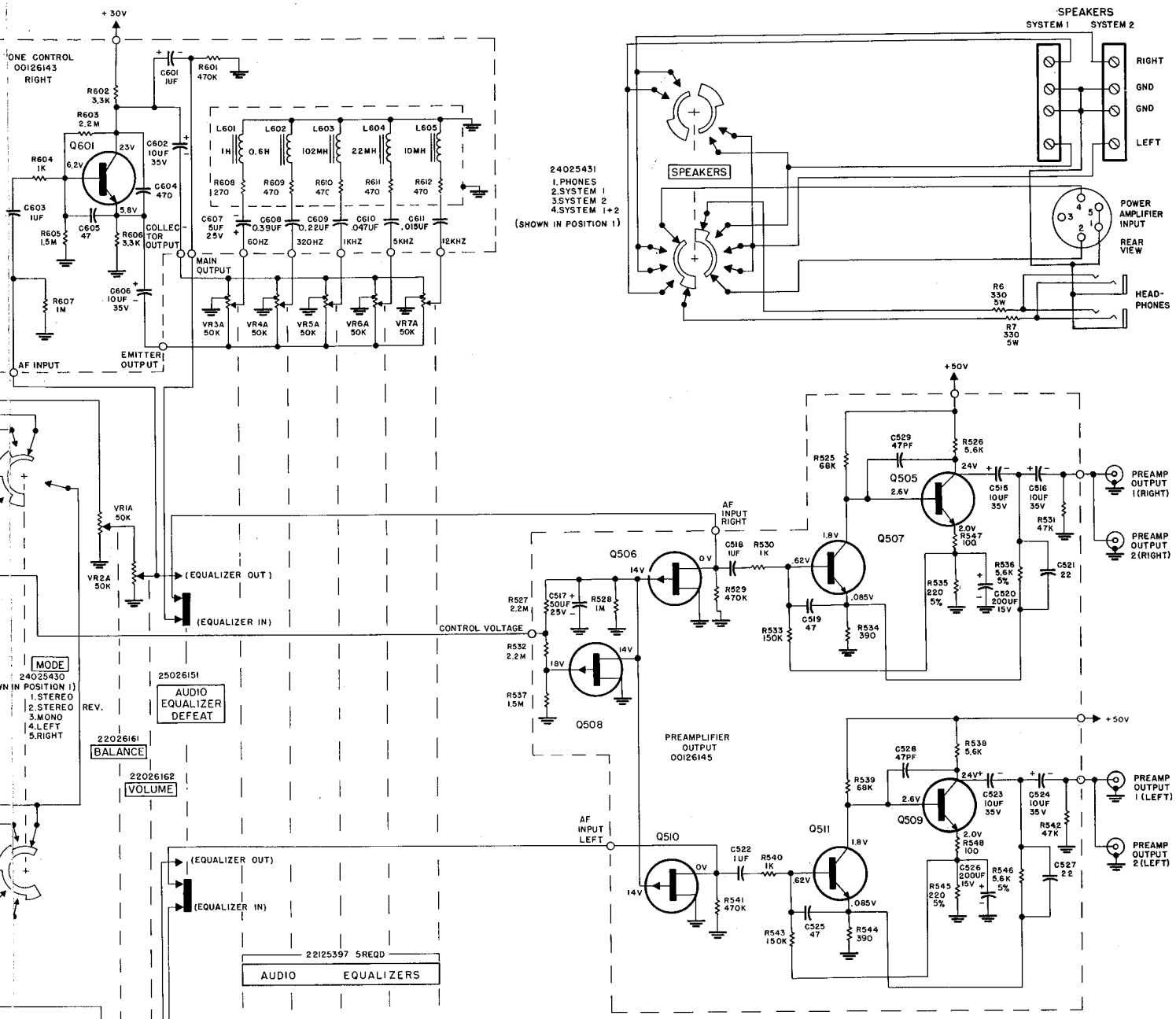
NOTES:
1. ALL RESISTORS IN OHMS UNLESS FOLLOWED BY K (1,000) OR M (1,000,000). ALL RESISTORS 1/4 WATT EXCEPT AS NOTED.
2. ALL CAPACITORS IN PICOFARAD UNLESS FOLLOWED BY UF (MICROFARADS)
3. ALL INDUCTORS IN MICROHENRIES UNLESS FOLLOWED BY MH (MILLIHENRIES) OR H (HENRIES).
4. ALL VOLTAGES TAKEN WITH '0' SIGNAL.

harman/kardon 55 AMES COURT, PLAINVIEW, N.Y. 11803

90728859
Printed in U.S.A.

SCHEMATIC


PHONO 1
PHONO 2
TUNER
AUX 1
AUX 2
AUX 3
C1 600PF
R1 15K
RIGHT CHANNEL
TAPE OUTPUT 1
TAPE MONITOR 2
TAPE MONITOR 1
TAPE OUTPUT 2
AF INPUT
C501 1UF
R503 1K
R501 1M
R502 12K
C503 1UF
AF OUTPUT
C502 150
Q501
Q502
R506 150K
C505 2700 5%
R505 24K 1%
R507 470K
C504 47
R508 180 5%
R509 390K 1%
R511 470K
R512 2K 5%
C507 100UF 16V
R510 680 5%
C506 .01UF 5%
R504 100 5%
R526 68K
+50V
PREAMPLIFIER 00126144
R514 1M
R515 12K
C510 1UF
AF OUTPUT
C509 150
Q503
Q504
R517 150K
C508 1UF
R513 1K
AF IN-PUT
C512 2700 5%
R520 24K 1%
R516 470K
C511 47
R518 180 5%
R519 390K 1%
R522 470K
R523 2K 5%
C514 100UF 16V
R521 560 5%
C513 .01UF 5%
R525 100 5%
R524 68K
PHONO 1
PHONO 2
TUNER
AUX 1
AUX 2
AUX 3
C2 600PF
R2 15K
LEFT CHANNEL
TAPE OUTPUT 1
TAPE MONITOR 2
TAPE MONITOR 1
TAPE OUTPUT 2
24025502
(SHOWN IN POSITION 1)
1. PHONO 1
2. PHONO 2
3. TUNER
4. AUX 1
5. AUX 2
6. AUX 3
FUNCTION
R4 3.3K
C8 .01UF 5%
(OUT)
(IN)
C9 0.1UF
HIGH-CUT FILTER
25026151
(SOURCE)
(MONITOR)
TAPE MONITOR
SUB SONIC FILTER
SOURCE
TAPE MONITOR 2
(SHOWN IN
C10 0.1UF
R5 3.3K
C11 .01UF 5%
CONTROL VOLTAGE
R801 15K 1/2W
C801 50UF,100V
R802 10K 1/2W
CR803
POWER SUPPLY 00126146
R803 3.9K 1/2W
R804 3.9K 1/2W
C802 50UF 100V
C803 50UF 100V
PHONO LEFT
R805 3.9K 1/2W
R806 3.9K 1/2W
C804 50UF 100V
C805 50UF 100V
PHONO RIGHT
R807 15K 1/2W
R808 15K 1/2W
C806 47UF 63V
C807 500UF 50V
TONE RIGHT
R809 15K 1/2W
R810 15K 1/2W
C808 47UF 63V
C809 500UF 50V
TONE LEFT
R811 3.3K 1/2W
C810 50UF 100V
OUTPUT RIGHT
R812 3.3K 1/2W
C811 50 UF 100V
OUTPUT LEFT
+30V
24526153
POWER
ON
OFF
C3 .01UF 1400V
117 VAC 50-60HZ
C4 .01UF 1400V
FUSE .25-3AG
T1 10125602
BLK
BLK/WHT
BRN
BRN/WHT
GRN
GRN/YEL
WHT
C5 .01UF 1400V
CR801
CR802
R3 3.3K 3W
C6 1000UF 100V
C7 0.1UF
10V, 20MA PILOT LIGHT 46526395
UNSWITCHED
SWITCHED



TRANSISTOR EQUIVALENTS		
Q NO.	HK. P/NO.	2N NO.
Q502-04-05, Q507, Q509, Q511, Q601	43025972	2N3417
Q506, Q508 Q510	43022956	NONE
Q501-Q503	43027872	BC 239C

NOTES:
1. ALL RESISTORS IN OHMS UNLESS FOLLOWED BY K (1,000) OR M (1,000,000). ALL RESISTORS 1/4 WATT EXCEPT AS NOTED.
2. ALL CAPACITORS IN PICOFARAD UNLESS FOLLOWED BY UF (MICROFARADS)
3. ALL INDUCTORS IN MICROHENRIES UNLESS FOLLOWED BY MH (MILLIHENRIES) OR H (HENRIES).
4. ALL VOLTAGES TAKEN WITH '0' SIGNAL.