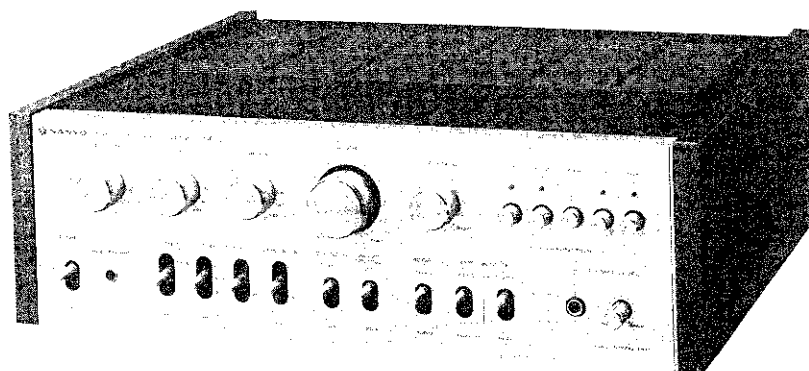




SANYO STEREO AMPLIFIER DCA 650_{SEV} SERVICE MANUAL



SPECIFICATIONS

POWER AMPLIFIER SECTION

Music Power (IHF):

Amplifier load at	4 ohms	190 Watts
	8 ohms	130 Watts

Continuous Power Output:

Amplifier load at	4 ohms	60W/60W
	8 ohms	55W/55W

(1KHz, each channel driven)

Amplifier load at	4 ohms	50W/50W
	8 ohms	45W/45W

(1KHz, both channel driven)

Power Output in the range
of 20 to 20KHz

Amplifier load at	4 ohms	52W/52W
	8 ohms	43W/43W

(Both channel driven)

Harmonic Distortion: Less than 0.1% (Continuous Power)

Less than 0.05% at Power 1W/ch

Intermodulation Distortion: Less than 0.1% (Continuous Power)

Less than 0.04% at Power 1W/ch

Power Bandwidth (HF): 5 to 80KHz (both channel driven)

Frequency Response: 5 to 100KHz $\pm$ 1dB

Input Sensitivity/Impedance:

Main Power Input: 1.0V/50K ohms

Matching Speaker Impedance: 4 to 16 ohms

POWER AMPLIFIER SECTION

Damping Factor: More than 60 (1KHz, 8 ohms)

Signal to Noise Ratio: More than 110dB (IHF, short circuit
A network)

Residual Hum and Noise: 0.3mV (at 8 ohms)

Less than 0.8mV

(8 ohms, pre & main power amp.)

Slow Rate: Switchable

5 V/ μ s to 20 V/ μ s

PRE-AMPLIFIER SECTION

Input Sensitivity/Impedance:

(1KHz, at rated power)	PHONO 1, 2. : 2.5mV/50K ohms
	TUNER : 140mV/60K ohms
	AUX 1, 2. : 140mV/60K ohms
	TAPE 1, 2: : 140mV/60K ohms
	MIC : 2.5mV/50K ohms

Phono Overload Input: RMS 400mV Max.

Peak to Peak 1100mV Max.

Mic Overload Input:

RMS 500mV Max.

ADJUSTMENT

*Tool to be provided.

DC V.T.V.M. or TESTER (Input impedance: more than 50K Ω /V)
(Mili-Volt Meter)

*Note on adjustment

1. No signal at input terminals.
2. Connect 8 Ω - dammy load to the output terminals.

CENTER ZERO-VOLT ADJUSTMENT

(A) Turn the semi-fixed variable resistor (VR401 - 1k -B) so that the voltage of the output terminal becomes zero volt.

(B) Turn the semi-fixed variable resistor (VR402 - 1k-B) so that the idling current becomes 30 mA Measure the voltage of the both
side of the R430 resistor (0.47 Ω) and adjust the VR402 so that the value becomes 0.014 volts.

Signal to Noise:

PHONO 1, 2. More than 70dB
(IHF, B network)

MIC More than 70dB
(IHF, B network)

TUNER More than 90dB
(IHF, B network)

AUX 1, 2. More than 90dB

TAPE More than 90dB
(IHF, B network)

Output Level/Impedance:

TAPE REC 1, 2 : 140mV/1K ohms

TAPE REC DIN : 35mV/80K ohms

PRE-AMP OUT : 1.2V/1K ohms

Max.....5.0V/1K ohms

Harmonic Distortion:

PRE-AMP OUT : 0.04%

(At nominal Output Level)

Frequency Response:

PHONO

TUNER/TAPE/AUX

TUNER/TAPE/AUX

MIC

RIAA S. T. D. equalization

30 to 15KHz $\pm$ 0.5dB

10 to 60KHz +0, -1dB

10 to 10KHz +0, -1dB

Tone Control:

Bass Control:

Turnover 250Hz, $\pm$ 10dB at 50Hz

Turnover 500Hz, $\pm$ 10dB at 100Hz

Turnover 2.5KHz, $\pm$ 10dB at 10KHz

Turnover 5KHz, $\pm$ 10dB at 20KHz

Treble Control:

Filter Control:

Subsonic Filter:

Low Filter:

20KHz (12dB/oct.)

70Hz (12dB/oct.)

Loudness Control:

100Hz, +8dB

(Power output level at -30dB)

10KHz, +3dB

Audio Muting:

1KHz, -20dB

MISCELLANEOUS

Power Requirements:

110V, 220V 50/60Hz

AC Outlets:

Switched: Two 150 Watts

Unswitched: One 200 Watts

Dimensions (overall):

Width

420mm

Height

130mm

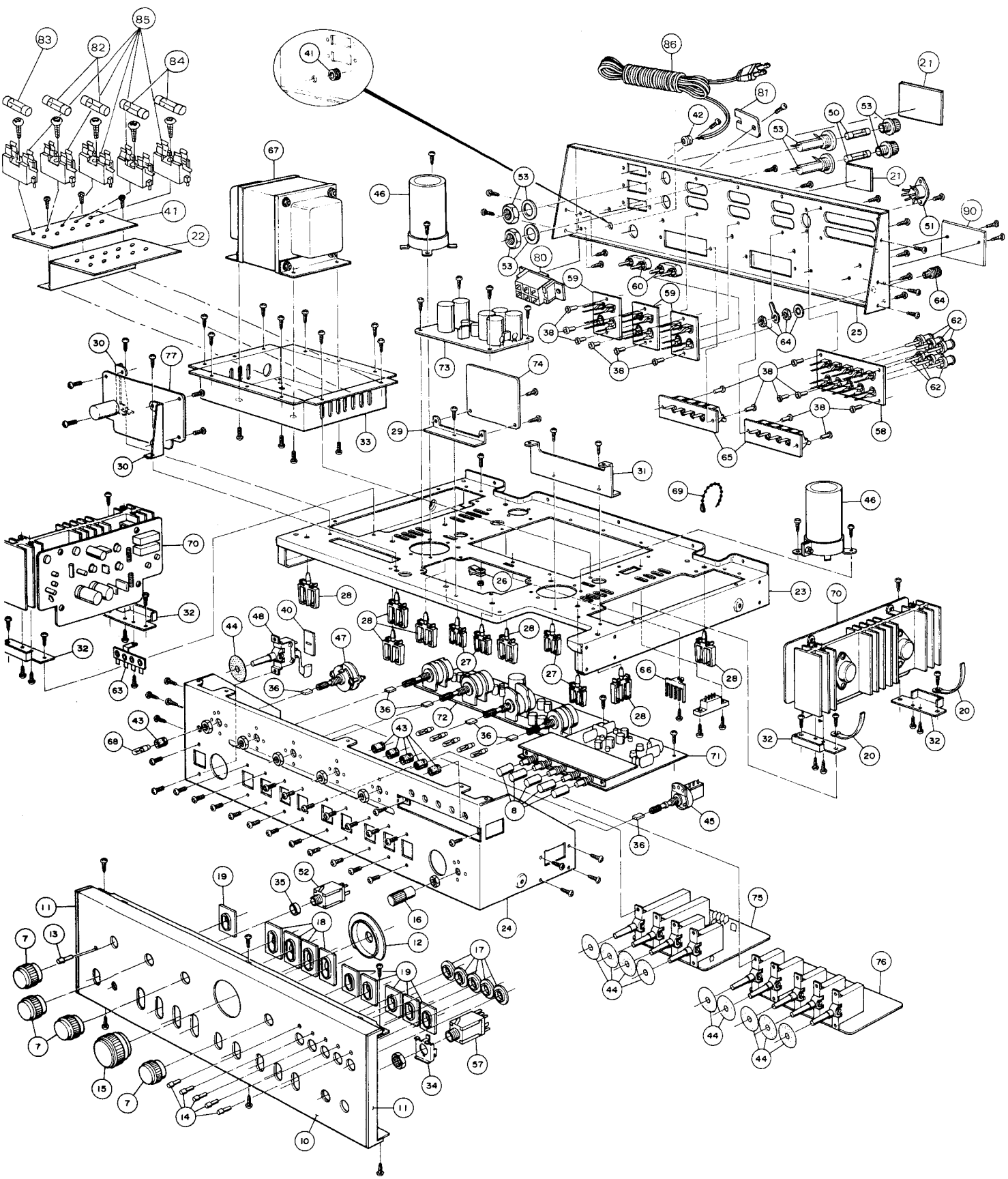
Depth

330mm

Weight: (Approx.)

Without Package 10.2 Kg

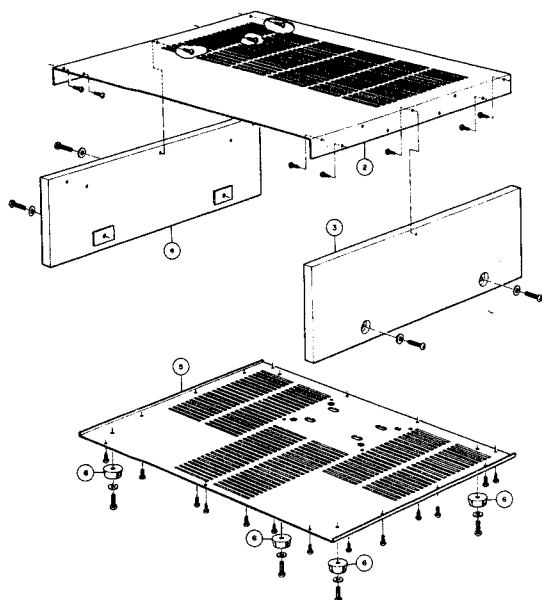
EXPLODED VIEW



PARTS LIST

Key No.	Part No.	Description	Q'ty
PACKING			
	131 2 5205 13400	Cushion	2
	131 6 1139 48113	Box corrugate exp.	1
	131 6 2119 01440	Bag, Polyethylene exp	1
	131 6 2719 10600	Bag, Fan	1
	131 6 3009 18600	Pad	2
	131 6 4119 36507	Explanatory booklet	1
	131 6 4559 10100	Manufacturing No.	1
CABINET			
	101 3 1104 00600	Screw Pan Hd., 4x6	6
	101 3 1104 01203	Screw Pan Hd., 4x12	4
	101 3 1504 02000	Screw, Truss Hd., 4x20	4
	102 3 1203 00604	Screw, Pan Hd. tpg., 3x6	7
	106 3 1103 11302	Screw, Round Hd. wood., 3.1x13	14
	131 0 1101 06000	Cabinet assy	1
2	131 2 1312 11100	Grill	1
3	131 2 1101 25300	Cabinet, Right	1
4	131 2 1101 25400	Cabinet, Left	1
5	131 2 1105 13100	Plate, Bottom	1
6	131 2 1801 13300	Leg, Rubber	4
	131 2 7103 19800	Label	1
	131 2 4203 84204	Washer, 4.2x14x1	4
	131 2 7103 19900	Caution Label, Cabinet L side	1
APPEARANCE			
7	131 0 1001 26800	Knob assy, Bass, Treble, Balance	4
8	131 0 1001 26900	Knob assy, Function	5
9	131 0 1016 18202	Panel decorate assy	1
10	131 2 1203 29302	Panel control	1
11	131 2 1311 33800	Sash	2
12	131 2 1116 12700	Frame, VR	1
13	131 2 1504 10900	Plate, Sign lamp, Power SW	1
14	131 2 1504 10902	Plate, Sign lamp, Function	5
15	131 2 1601 30600	Knob, VR	1
16	131 2 1601 30700	Knob, Mic VR	1
17	131 2 6111 13600	Busing, Function	5
18	131 2 6113 16200	Shelter, Lever SW	4
19	131 2 6113 16300	Shelter, Lever SW	6

EXPLODED VIEW



NOTES: 1. Part orders must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and/or resistors must be multiple of 10 pcs.

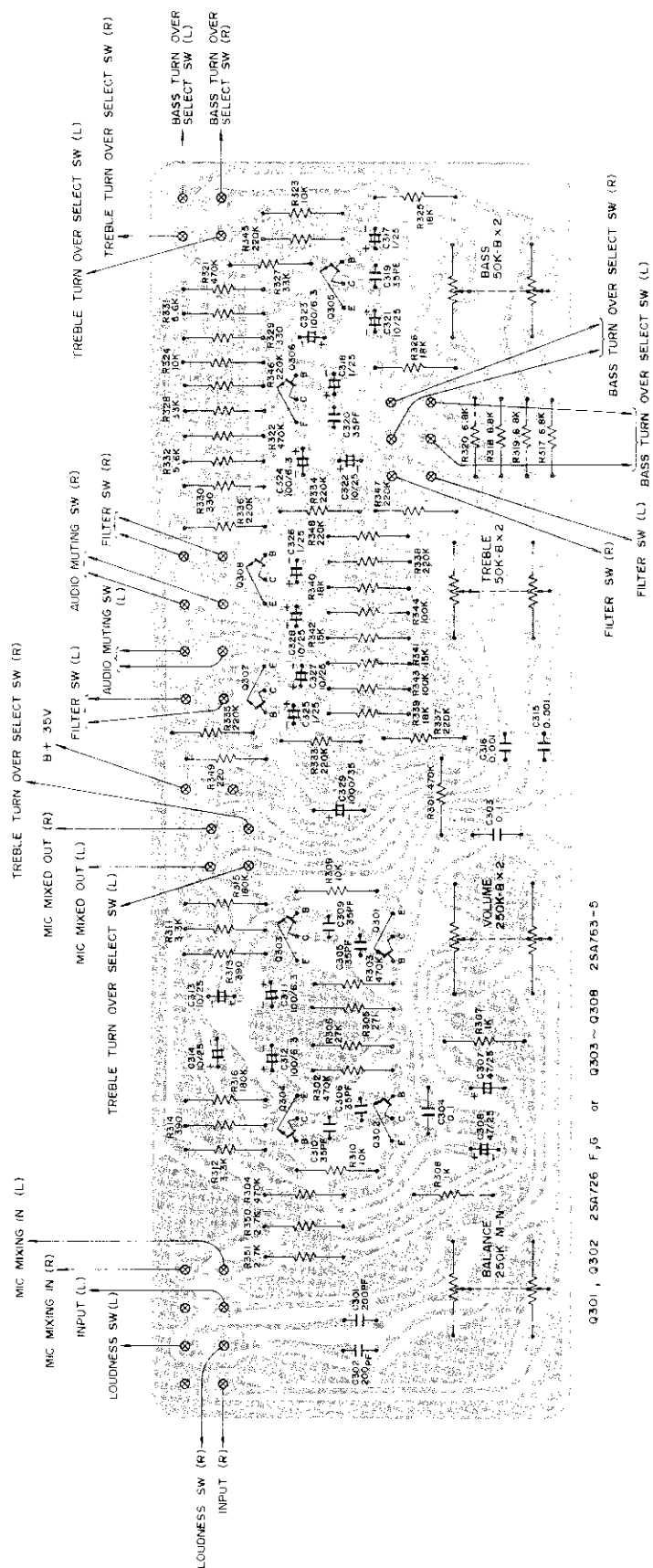
Key No.	Part No.	Description	Q'ty
CHASSIS			
	101 3 1103 00610	Screw, Pan Hd., 3x6	2
	101 3 1103 00603	Screw, Pan Hd., 3x6	24
	101 3 1104 00602	Screw, Pan Hd., 4x6	4
	102 3 1203 00602	Screw, Pan Hd. tpg., 3x6	61
	102 3 1203 00604	Screw, Pan Hd. tpg., 3x6	13
	102 3 1203 00802	Screw, Pan Hd. tpg., 3x8	5
	102 3 1203 01204	Screw, Pan Hd. tpg., 3x12	10
	102 3 2403 00601	Screw, Flat Hd. tpg., 3x6	8
	102 3 2203 50601	Screw, Button Hd., 3.5x6	2
20	131 0 3016 10500	Cramp wire assy	4
21	131 2 1110 17001	Plate Decorate	1
22	131 2 3701 18200	Metal Mount, Electric Part	1
23	131 2 3301 17402	Chassis	1
24	131 2 3305 17100	Panel, Front	1
25	131 2 3306 16903	Panel, Rear	1
27	131 2 3608 11700	Cramp wire	3
28	131 2 3608 11701	Cramp wire	9
29	131 2 3614 13100	Mount, PCB, Mic amp.	1
30	131 2 3614 13300	Mount, PCB, Muting	2
31	131 2 3614 15900	Mount, PCB, EQ amp.	1
32	131 2 3614 16000	Mount, PCB, Power amp.	4
33	131 2 3617 11600	Metal mount, Trans	1
34	131 2 3701 16200	Mount, Electric part, Mic jack	1
35	131 2 4208 15100	Spacer, Headphone	1
36	131 2 4208 16200	Spacer, VR, Mic knob	2
38	131 2 4221 00100	Rivet	14
39	131 2 5205 13200	Cushion, Power SW	2
40	131 2 6107 14200	Plate sever, Power SW	1
41	131 2 7103 22000	Label	1
42	131 2 6111 11300	Bushing	1
43	131 2 6111 11600	Bushing, Sign lamp	6
44	131 2 6113 11400	Shelter, Lever SW	10
ELECTRICAL PARTS			
45	4 2229 23990	VR 50KB Mic. VR, VR901	1
46	4 2239 20550	Electrolytic capacitor 4700μF 50V	2
47	4 2319 22710	Rotary SW, Speaker selector	1
48	4 2319 23470	Lever SW, Power	1
82	4 2349 20400	Fuse 0.63A	2
83	4 2349 20410	Fuse 0.315A	1
84	4 2349 20590	Fuse 4A	2
50	4 2349 20540	Fuse 3.15A	2
51	4 2359 20190	Socket 5P DIN	1
52	4 2359 21080	Jack Headphone	1
53	4 2359 21820	Fuse holder	2
57	4 2359 21670	Jack, Mic	1
58	4 2359 21860	Wrapping pin jack 10P	1
59	4 2359 21870	Wrapping pin jack 4P	3
60	4 2369 20520	Plug connector	2
62	4 2369 20561	Plug 1P	6
63	4 2379 20400	Terminal lug 3P R	1
64	4 2379 21060	Terminal, Grand	1
65	4 2379 21210	Terminal SP 4P	2
66	4 2379 21260	Grandterminal lug 5P	1
86	4 2439 20521	Power cord) or	1
	4 2439 20550	Power Card	1
67	4 2519 22755	Power trans	1
68	4 6129 20214	Pilot lamp, 6.3V 80mA	1
69	131 2 3608 11300	Cramp wire	10
D901		Diode 5B2, Rectifier	1
80	4 2319 21531	Switch, slide voltage select	1
81	131 2 7104 00101	Plate Pad, switch	1
85	4 2359 21021	Fuse Holder	5
90	131 2 1310 21818	Name Plate	1
CAPACITORS			
C901	C2EHRM103A	MP 0.01μF 250V ±20%	1
C904 905	C1HYDK473A	Ceramic 0.047 F 50V ±10%	2
RESISTORS			
R907	R2EDPK392A	Carbon 3.9KΩ ¼W ±10%	1
R903 904	R2EDPK124A	Carbon 120KΩ ¼W ±10%	2

PARTS LIST

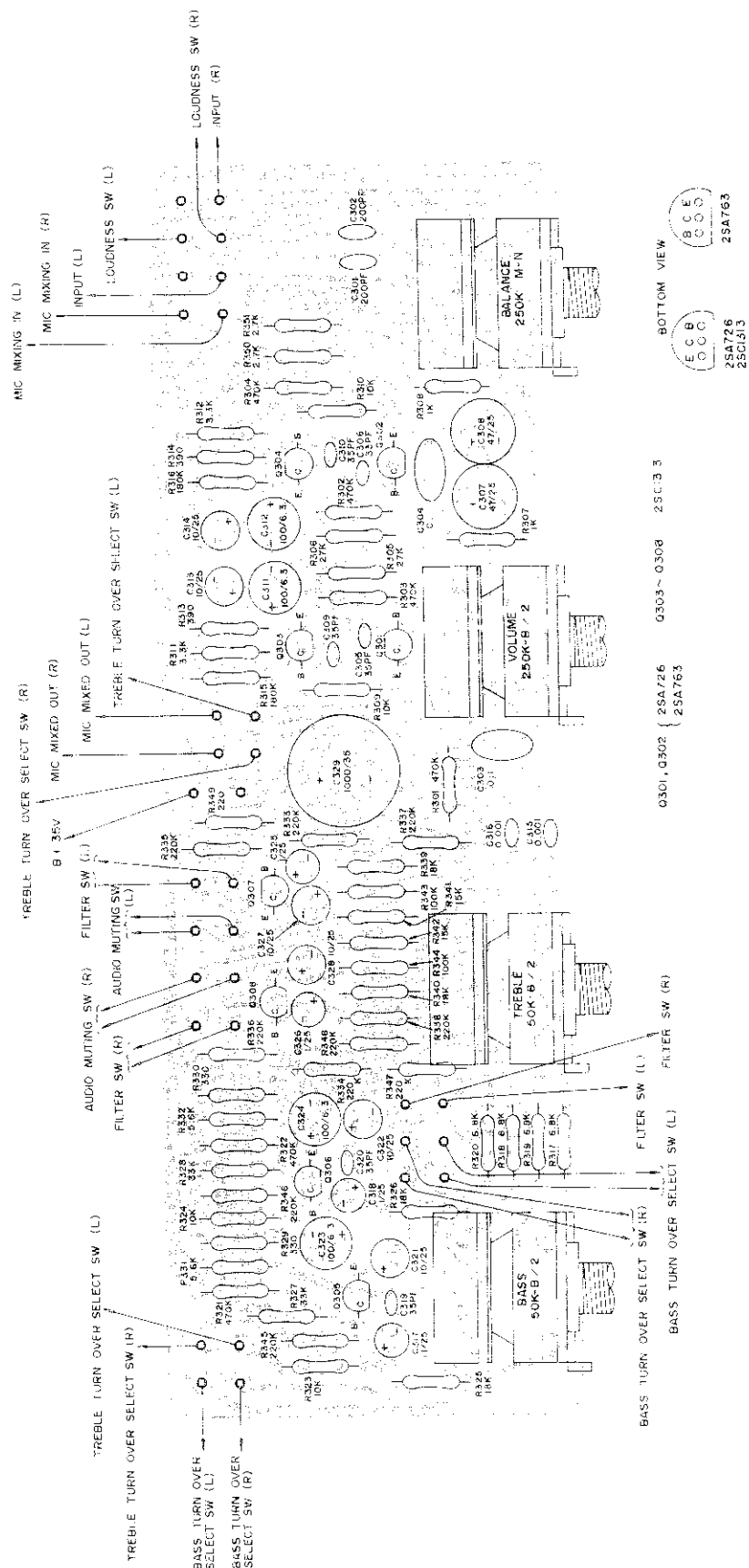
Key No.	Part No.	Description	Q'ty
ELECTRICAL PARTS			
R901,902	R2EDPK334A	Carbon 330K Ω 1/4W $\pm$ 10%	2
R905,906	R3AXPK561A	Oxide metal 560 Ω 1W $\pm$ 10%	2
PRE AMP PCB ASSY			
72	131 0 4001 49600	Pre amp PCB assy	1
	4 2229 22810	VR B-50K Bass, Treble	2
	4 2229 22820	VR MN-250K Balance	1
	4 2229 22830	VR B-250K Volume	1
CAPACITORS			
C305,306	C1HCSK350SL-	Ceramic 35pF 50V $\pm$ 10%	6
309,310			
319,320			
C301,302	C1HCSK201SL-	Ceramic 200pF 50V $\pm$ 10%	2
C315,316	C1HFAK102A--	Mylar 0.001 μ F 50V $\pm$ 10%	2
C303,304	C1HFAM104A--	Mylar 0.1 μ F 50V $\pm$ 20%	2
C317,318	C1FRB-105A--	Electrolytic 1 μ F 25V	4
325,326			
C313,314	C1FRB-106A--	Electrolytic 10 μ F 25V	6
321,322			
327,328			
C307,308	C1FRB-476A--	Electrolytic 47 μ F 25V	2
C311,312	C0JRB-107A--	Electrolytic 100 μ F 6.3V	4
323,324			
C329	C1VRB-108A--	Electrolytic 1000 μ F 35V	1
RESISTORS			
R349	R2EDPJ221A	Carbon 220 Ω 1/4W $\pm$ 5%	1
R329,330	R2EDSK331A	Carbon 330 Ω 1/4W $\pm$ 10%	2
R313,314	R2EDSK391A	Carbon 390 Ω 1/4W $\pm$ 10%	2
R307,308	R2EDSK102A	Carbon 1K Ω 1/4W $\pm$ 10%	2
R350,351	R2EDSK272A	Carbon 2.7K Ω 1/4W $\pm$ 10%	2
R311,312	R2EDSK332A	Carbon 3.3K Ω 1/4W $\pm$ 10%	2
R331,332	R2EDSK562A	Carbon 5.6K Ω 1/4W $\pm$ 10%	2
R317,318	R2EDSK682A	Carbon 6.8K Ω 1/4W $\pm$ 10%	4
319,320			
R309,310	R2EDSK103A	Carbon 10K Ω 1/4W $\pm$ 10%	4
323,324			
R341,342	R2EDSK153A	Carbon 15K Ω 1/4W $\pm$ 10%	2
R325,326	R2EDSK183A	Carbon 18K Ω 1/4W $\pm$ 10%	4
339,340			
R305,306	R2EDSK273A	Carbon 27K Ω 1/4W $\pm$ 10%	2
R327,328	R2EDSK333A	Carbon 33K Ω 1/4W $\pm$ 10%	2
R343,344	R2EDSK104A	Carbon 100K Ω 1/4W $\pm$ 10%	2
R315,316	R2EDSK184A	Carbon 180K Ω 1/4W $\pm$ 10%	2
R333,334	R2EDSK224A	Carbon 220K Ω 1/4W $\pm$ 10%	10
335,336			
337,338			
345,346			
347,348			
R301,302	R2EDSK474A	Carbon 470K Ω 1/4W 10%	6
303,304			
321,322			
SEMICONDUCTORS			
Q301,302	TJJ-2SA763--5-	Transistor 2SA763, or 2SS726	2
Q303,304	TMM-2SC1313-6-	Transistor 2SC1313	6
305,306			
307,308			

NOTES: 1. Part orders must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and/or resistors must be multiple of 10 pcs.

PRE AMP P.C.B. ASS'Y BOTTOM VIEW



RE AMP P.C.B. ASS'Y TOP VIEW



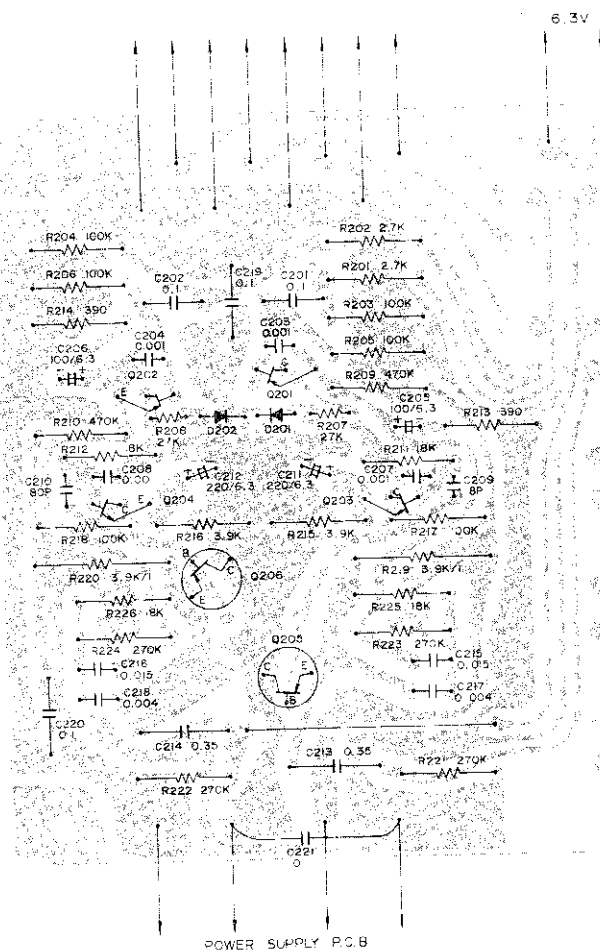
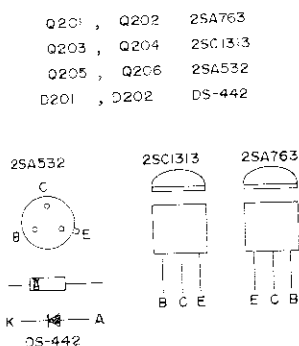
PARTS LIST

Key No.	Part No.	Description	Q'ty
EQ AMP PCB ASSY			
71	131 0 4001 49700	EQ AMP PCB ASSY	1
	4 2319 33550	Switch, Push 5 key	1
	4 6129 20206	Pilot lamp 6.3V 80mA	5
CAPACITORS			
C209,210	C1HCSC080SL-	Ceramic 8 pF 50V $\pm 0.25\mu F$	2
C217,218	C1HFAJ402A--	Mylar 0.004 μF 50V $\pm 5\%$	2
C215,216	C1HFAJ153A--	Mylar 0.015 μF 50V $\pm 5\%$	2
C201,202	C1HFAK104A--	Mylar 0.1 μF 50V $\pm 10\%$	2
C221	C1HFRK104A--	Mylar 0.1 μF 50V $\pm 10\%$	1
C213,214	C1HFAK354A--	Mylar 0.35 μF 50V $\pm 10\%$	2
C205,206	C0JRE-107A--	Electrolytic 100 μF 6.3V	2
C211,212	C0JRF-227A--	Electrolytic 220 μF 6.3V	2
C203,204	C1HYSZ102A--	Ceramic 0.001 μF 50V	4
207,208		+80-20%	
C219,220	C1HYSZ104A--	Ceramic 0.1 μF 50V +80-20%	2

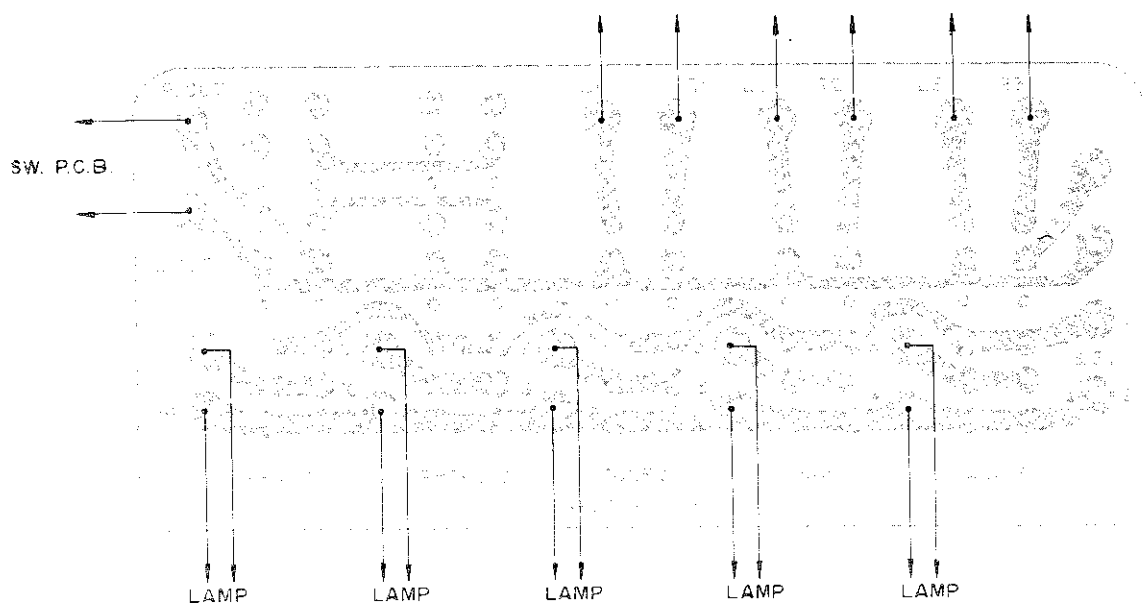
Key No.	Part No.	Description	Q'ty
EQ AMP PCB ASSY			
RESISTORS			
R213,214	R2EDSJ391A	Carbon 390 Ω $\frac{1}{4}W$ $\pm 5\%$	2
R201,202	R2EDSK272A	Carbon 2.7K Ω $\frac{1}{4}W$ $\pm 10\%$	2
R215,216	R2EDSK392A	Carbon 3.9K Ω $\frac{1}{4}W$ $\pm 10\%$	2
R219,220	R3ADPK392A	Carbon 3.9K Ω 1W $\pm 10\%$	2
R211,212	R2EDSJ183A	Carbon 18K Ω $\frac{1}{4}W$ $\pm 5\%$	4
225,226			
R207,208	R2EDCK273A	Carbon 27K Ω $\frac{1}{4}W$ $\pm 10\%$	2
R203,204	R2EDSK104A	Carbon 100K Ω $\frac{1}{4}W$ $\pm 10\%$	5
205,206			
218			
R221,222	R2EDSJ274A	Carbon 270K Ω $\frac{1}{4}W$ $\pm 5\%$	4
223,224			
R209,210	R2EDSK474A	Carbon 470K Ω $\frac{1}{4}W$ $\pm 10\%$	2
SEMICONDUCTORS			
Q201,202	TJJ-2SA763--S-	Transistor 2SA763	2
Q203,204	TMM-2SC1313-G-	Transistor 2SC1313	2
Q205,206	203 5 7100 53240	Transistor 2SA532 (D)	2
D201,202	205 5 9040 44210	Diode DS-442	2

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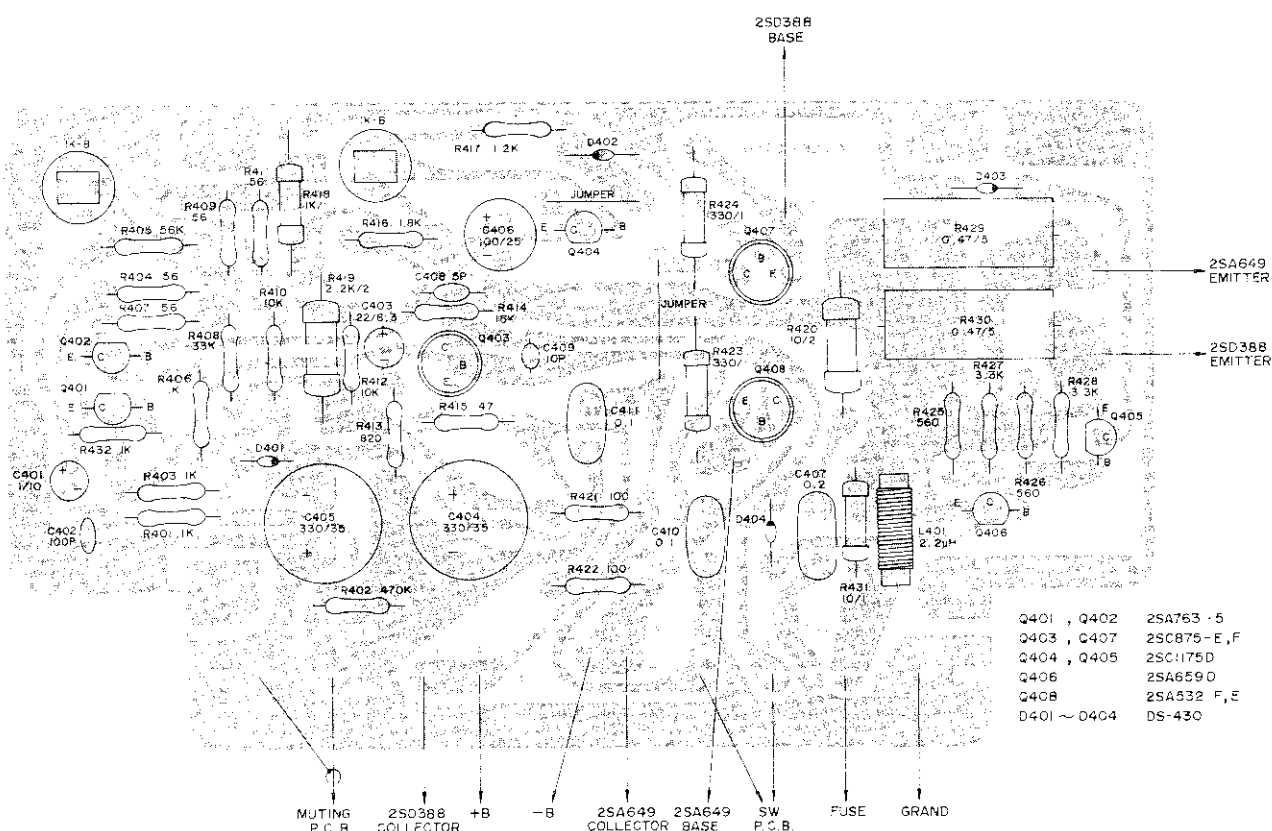
EQUALIZER P.C.B. ASS'Y BOTTOM VIEW(1)



EQ AMP P.C.B. ASS'Y BOTTOM VIEW(2)



MAIN AMP P.C.B. ASS'Y TOP VIEW



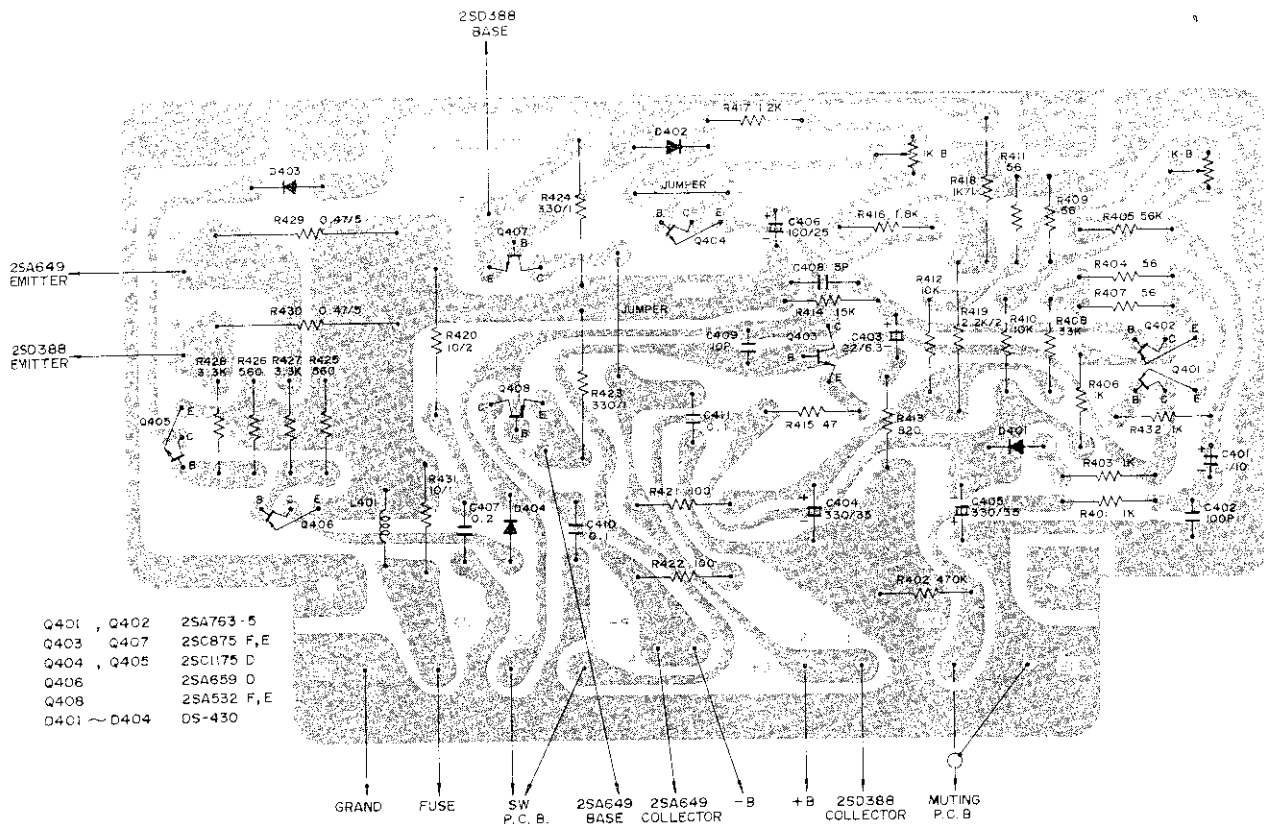
PARTS LIST

Key No.	Part No.	Description	Q'ty
MAIN AMP PCB ASSY			
70	131 0 4001 49501	Main amp PCB assy	2
VR401,402	4 2229 22910	Potentiometer B-1K Ω	2
L401	4 2539 20160	Choke coil, 22 μ F	1
	131 2 3614 13400	Mount, PCB	2
	131 2 3701 12900	Mount, Electric part	1
	131 2 3701 13000	Mount, Electric part	1
	131 2 6201 19301	Plate, Heat sink	1
C408	C1HCDC050SL-	Ceramic 5pF 50V ± 0.25 pF	1
C409	C1HCSC100SL-	Ceramic 10pF 50V ± 0.25 pF	1
C402	C1HCSM101SL-	Ceramic 100pF 50V $\pm 20\%$	1
C410,411	C1HFAM104A--	Mylar 0.1 μ F 50V $\pm 20\%$	2
C407	C1HFAM204A--	Mylar 0.2 μ F 50V $\pm 20\%$	2
C401	C1ARB-105A--	Electrolytic 1 μ F 10V	1
C403	C0JRB-226A--	Electrolytic 22 μ F 6.3V	1
C406	C1ERB-107A--	Electrolytic 100 μ F 25V	1
C404,405	C1VRB-337A--	Electrolytic 330 μ F 35V	2
RESISTORS			
R415	R2EDSK470A	Carbon 47 Ω $\frac{1}{4}$ W $\pm 5\%$	1
R404,407	R2EDSK560A	Carbon 56 Ω $\frac{1}{4}$ W $\pm 5\%$	2
R409,411	R2EDSJ121A	Carbon 120 Ω 1/4W $\pm 5\%$	2
R421,422	R2HZPK101A	Fuse 100 Ω 1/2W $\pm 10\%$	2
R425,426	R2EDSK561A	Carbon 560 Ω $\frac{1}{4}$ W $\pm 5\%$	2
R413	R2EDSK321A	Carbon 820 Ω $\frac{1}{4}$ W $\pm 5\%$	1
R401,403	R2EDSK102A	Carbon 1K Ω $\frac{1}{4}$ W $\pm 5\%$	4
406,432			
R418	R3AXPK102A	Oxide Metal 1W $\pm 10\%$	1
R417	R2EDSK122A	Carbon 1.2K Ω $\frac{1}{4}$ W $\pm 5\%$	1
R416	R2EDSK182A	Carbon 1.8K Ω $\frac{1}{4}$ W $\pm 5\%$	1

Key No.	Part No.	Description	Q'ty
MAIN AMP PCB ASSY			
R427,428	R2EDSK332A	Carbon 3.3K Ω $\frac{1}{4}$ W $\pm 5\%$	2
R410,412	R2EDSK103A	Carbon 10K Ω $\frac{1}{4}$ W $\pm 5\%$	2
R414	R2EDSK153A	Carbon 15K Ω $\frac{1}{4}$ W $\pm 5\%$	1
R408	R2EDSK333A	Carbon 33K Ω $\frac{1}{4}$ W $\pm 5\%$	1
R405	R2EDSK563A	Carbon 56K Ω $\frac{1}{4}$ W $\pm 5\%$	1
R402	R2EDSK474A	Carbon 470K Ω $\frac{1}{4}$ W $\pm 5\%$	1
R429,430	R3FHPK0R5A	Cemen 0.5 Ω 5W $\pm 10\%$	2
R431	R3AXPK100A	Oxide metal 10 Ω 1W $\pm 10\%$	1
R420	R3DXPK100A	Oxide metal 10 Ω 2W $\pm 10\%$	1
R423,424	R3AXPK331A	Oxide metal 330 Ω 1W $\pm 10\%$	2
R419	R3DXPK222A	Oxide metal 2.2K Ω 2W $\pm 10\%$	1
SEMICONDUCTORS			
Q401,402	TJJ-2SA763--5-	Transistor 2SA763 or 2SA726	2
Q409	TNN-2SD388--N	Transistor 2SD388	1
Q410	TNN-2SA649--N--	Transistor 2SA649	1
Q403,407	203 5 4600 87550	Transistor 2SC 875 (E)	2
Q404,405	203 5 8701 17540	Transistor 2SC 1175(D)	2
Q406	203 5 6800 65940	Transistor 2SA 659(D)	1
Q408	203 5 7100 53250	Transistor 2SA 532(E)	1
D401,402	205 5 9020 43011	Diode DS 430	4
403,404			

NOTES: 1. Part orders must contain Model Number, Part Number and Description.
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MAIN AMP P.C.B. ASS'Y BOTTOM VIEW



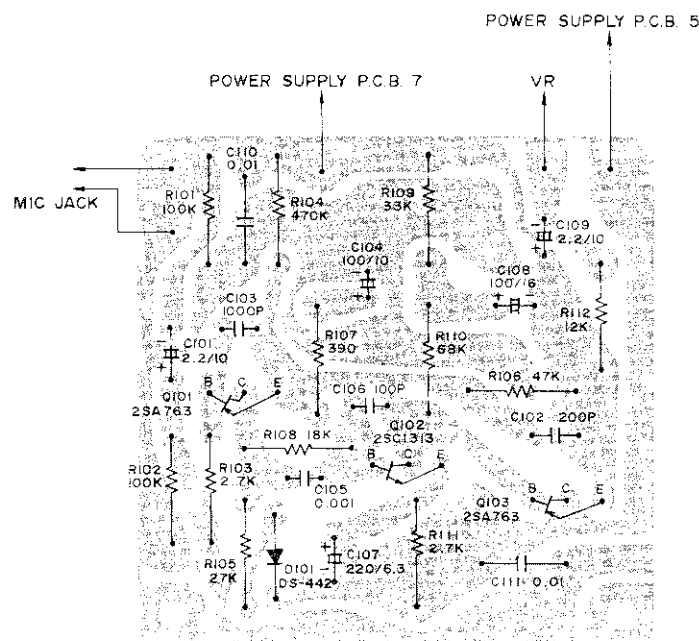
PARTS LIST

Key No.	Part No.	Description	Q'ty
MIC AMP PCB ASSY			
74	131 0 4001 49800	MIC AMP PCB assy	1
CAPACITORS			
C102	C1HCSK201SL-	Ceramic 200 pF 50V ±10%	1
C104	C1ARB-107A--	Electrolytic 100µF 10V	1
C108	C1CRB-107A--	Electrolytic 100µF 16V	1
C107	C0JRF-227A--	Electrolytic 220µF 6.3V	1
C101,109	C1AURM225A--	Alsicon 2.2µF 10V ±20%	2
C106	C1HYSZ101A--	Ceramic 100pF 50V ±80-20%	1
C103,105	C1HYSZ102A--	Ceramic 0.001µF 50V ±80-20%	2
C110,111	C1HYSZ103A	Ceramic 0.01µF 50V ±80-20%	2
RESISTORS			
R107	R2EDSK391A	Carbon 390Ω ¼W ±5%	1
R103,111	R2EDSK272A	Carbon 2.7KΩ ¼W ±5%	2
R112	R2EDSK123A	Carbon 12KΩ ¼W ±5%	1
R108	R2EDSK183A	Carbon 18KΩ ¼W ±5%	1
R105	R2EDSK273A	Carbon 27KΩ ¼W ±5%	1
R109	R2EDSK333A	Carbon 33KΩ ¼W ±5%	1
R106	R2EDSK473A	Carbon 47KΩ ¼W ±5%	1
R110	R2EDSK683A	Carbon 68KΩ ¼W ±5%	1
R101,102	R2EDSK104A	Carbon 100KΩ ¼W ±5%	2
R104	R2EDSK474A	Carbon 470KΩ ¼W ±5%	1
SEMICONDUCTORS			
Q101,103	TJJ-2SA763--5-	Transistor 2SA763	2
Q102	TMM-2SC1313-G-	Transistor 2SC1313	1
D101	205 5 9040 44210	Diode DS-442	1

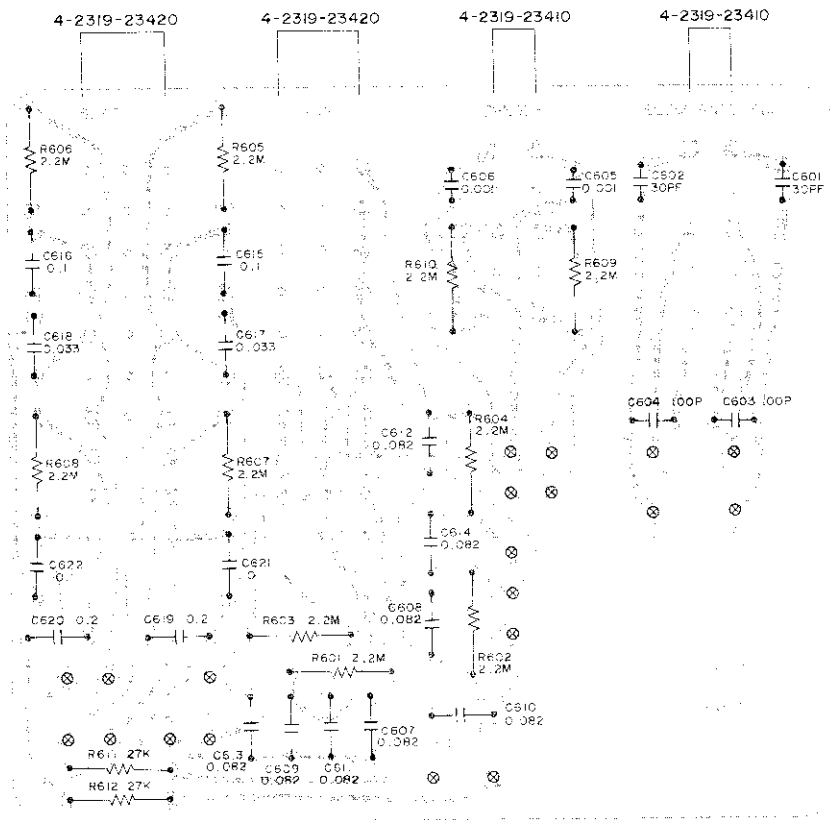
Key No.	Part No.	Description	Q'ty
FILTER PCB ASSY			
75	131 0 4001 50200	Filter PCB assy	1
	4 2319 23410	Lever switch 10P	2
	4 2319 23420	Lever switch 30P	2
CAPACITORS			
C601,602	C1HCSK300SL-	Ceramic 30pF 50V ±10%	2
C603,604	C1HCSK101SL-	Ceramic 100pF 50V ±10%	2
C605,606	C1HFAK102A--	Mylar 0.001µF 50V ±10%	2
C617,618	C1HFAK333A--	Mylar 0.033µF 50V ±10%	2
C607,608	C1HFAK823A--	Mylar 0.082µF 50V ±10%	8
609,410			
611,612			
413,614			
C615,616	C1HFAK104A--	Mylar 0.1µF 50V ±10%	4
621,622			
C619,620	C1HFAK204A--	Mylar 0.2µF 50V ±10%	2
RESISTORS			
R611,612	R2EDSK273A	Carbon 27KΩ ¼W ±10%	2
R601,602	R2EDSK225A	Carbon 2.2MΩ ¼W ±10%	10
603,604			
605,606			
607,608			
609,610			
ACCESSORY FUNCTION PCB ASSY			
76	131 0 4001 49900	Accessory function PCB Assy	1
	4 2319 23400	Lever, Switch 6P	3
	4 2319 23401	Lever, switch non short	2
CAPACITORS			
C503,504	C1HCSK200SL-	Ceramic 20pF 50V ±10%	2
C501,502	C1HFAK103A--	Mylar 0.01µF 50V ±10%	2
RESISTORS			
R501,502	R2EDSK272A	Carbon 2.7KΩ ¼W ±10%	2
R503,504	R2EDSK273A	Carbon 27KΩ ¼W ±10%	2

NOTES: 1. Part orders must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and/or resistors must be multiple of 10 pcs.

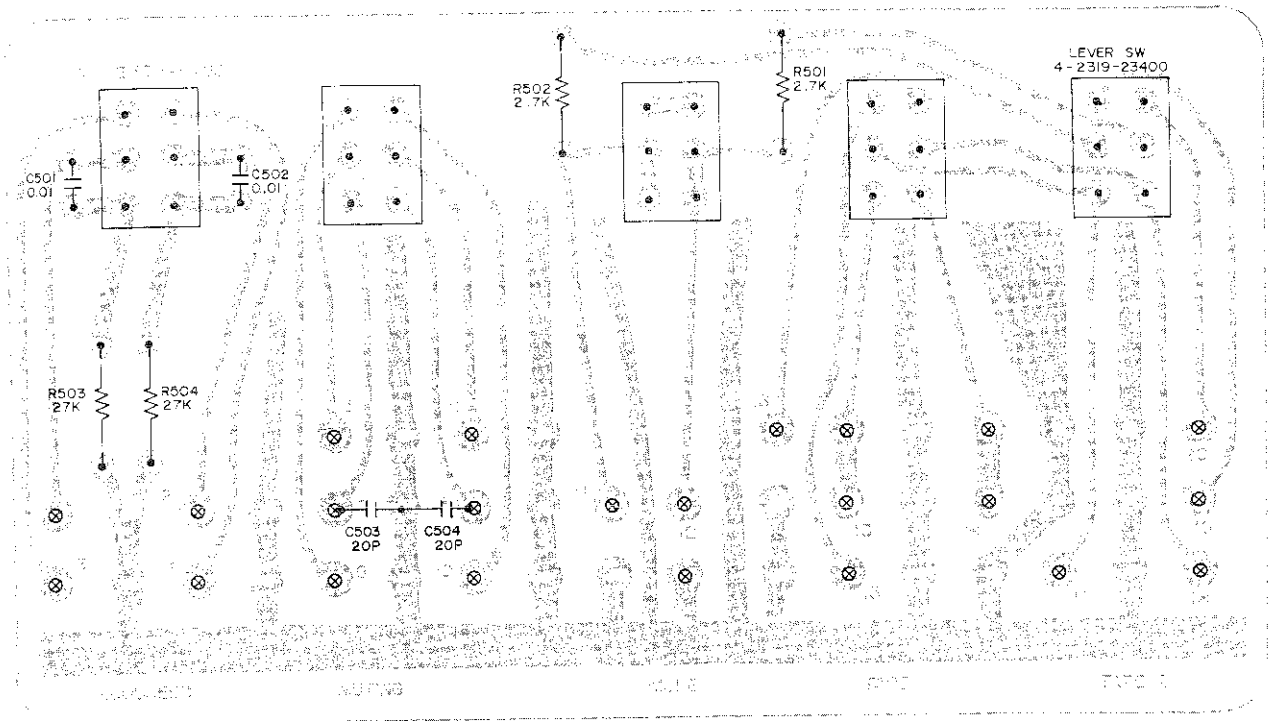
MIC AMP P.C.B. ASS'Y BOTTOM VIEW



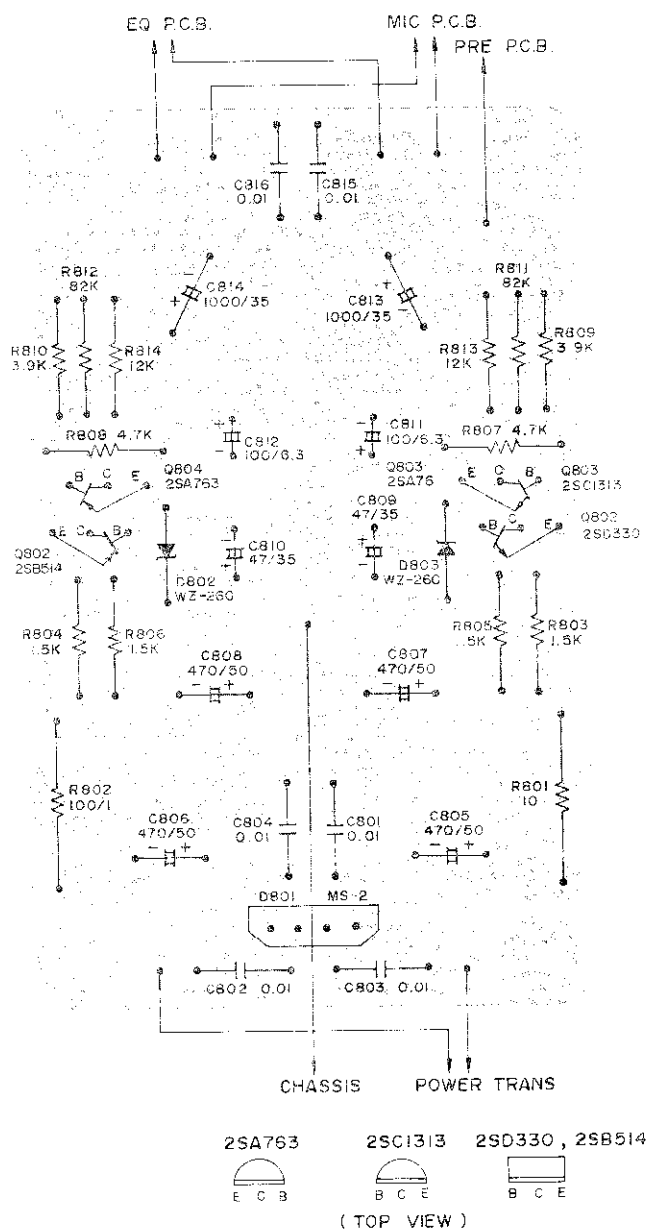
FILTER P.C.B. ASS'Y BOTTOM VIEW



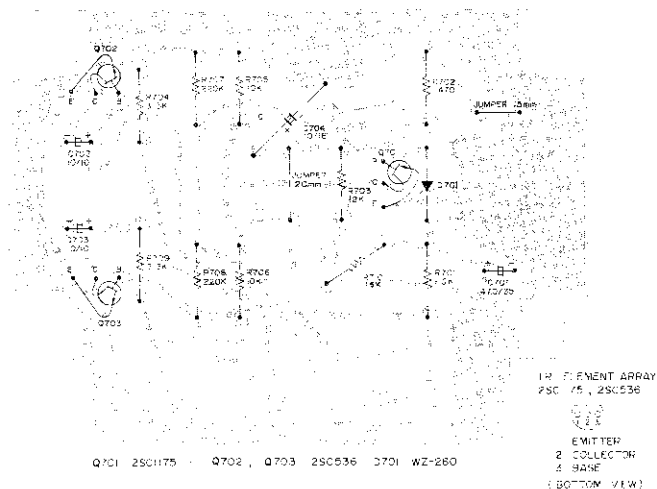
ACCESSORY FUNCTION P.C.B. ASS'Y BOTTOM VIEW



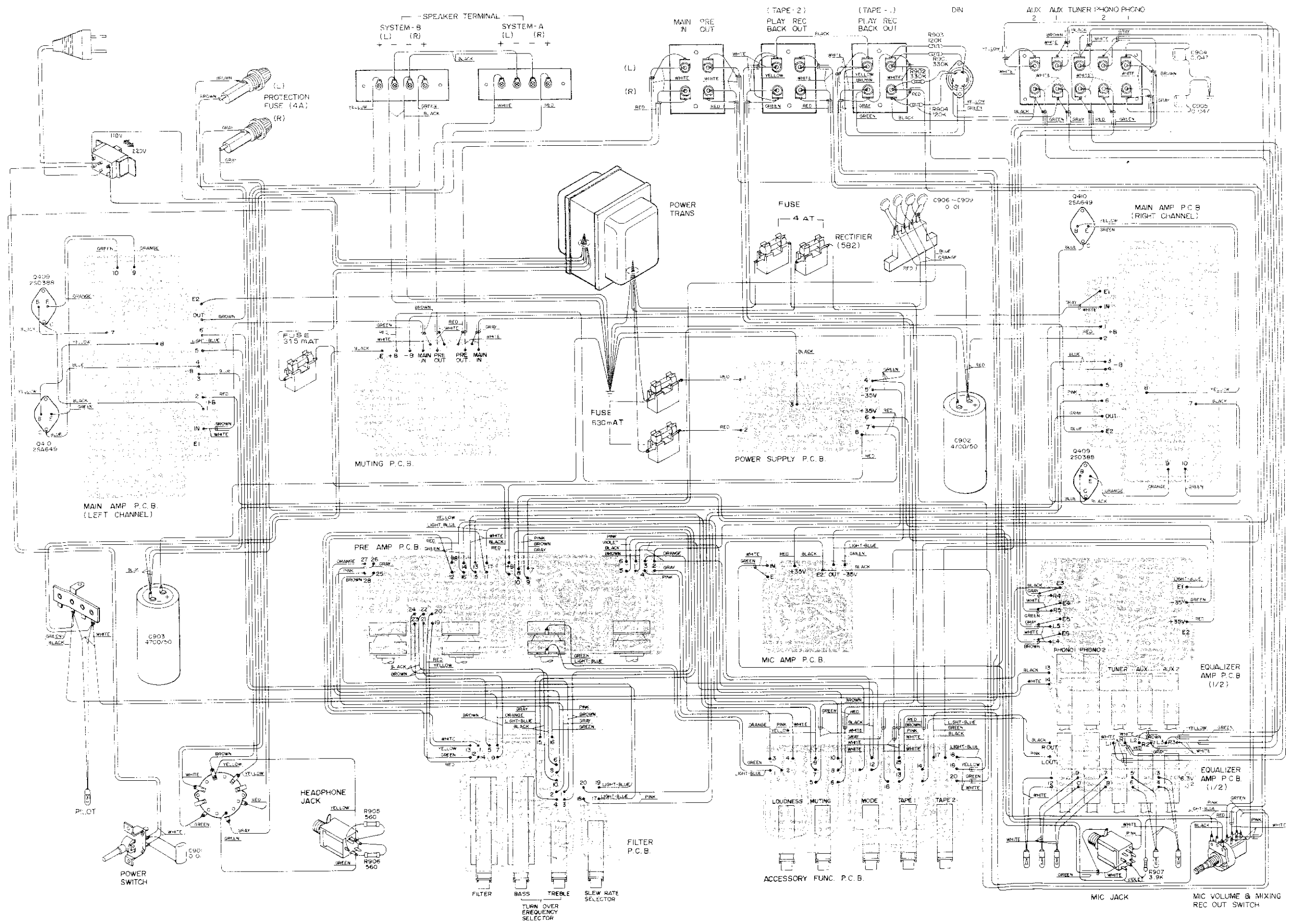
Key No.	Part No.	Description	Q'ty
MUTING PCB ASSY			
77	131 0 4001 33201	Muting PCB assy	1
CAPACITORS			
C702,703	C1ARB-106A--	Electrolytic 10 μ F 10V	2
C704	C1CRF-106A--	Electrolytic 10 μ F 16V	1
C701	C1VRB-477A--	Electrolytic 470 μ F 35V	1
RESISTORS			
R702	R2EDSJ471A	Carbon 470 Ω $\frac{1}{4}$ W $\pm 5\%$	1
R701	R2EDSK132A	Carbon 1.8K Ω $\frac{1}{4}$ W $\pm 5\%$	1
R704,709	R2EDSK332A	Carbon 3.3K Ω $\frac{1}{4}$ W $\pm 10\%$	2
R705,706	R2EDSK103A	Carbon 10K Ω $\frac{1}{4}$ W $\pm 10\%$	2
R703	R2EDSJ123A	Carbon 12K Ω $\frac{1}{4}$ W $\pm 5\%$	1
R710	R2EDSJ183A	Carbon 18K Ω $\frac{1}{4}$ W $\pm 5\%$	1
R707,708	R2EDSK224A	Carbon 220K Ω $\frac{1}{4}$ W $\pm 10\%$	2
SEMICONDUCTORS			
C702,703	203 5 5100 53640	Transistor 2SC 536 (D)	2
Q701	203 5 6701 17540	Transistor 2SC 1175D	1
D701	DJJ-WZ-260	Zener Diode WZ-260	1
POWER SUPPLY PCB ASSY			
73	131 0 4001 50100	Power supply PCB assy	1
CAPACITORS			
C809,810	C1VRB-476A--	Electrolytic 47 μ F 35V	2
C811,812	C0JRB-107A--	Electrolytic 100 μ F 6.3V	2
C805,806	C1HRB-477A--	Electrolytic 470 μ F 50V	4
807,808	C1VRB-108A--	Electrolytic 1000 μ F 35V	2
C813,814	C1HYSZ102A--	Ceramic 0.01 μ F 50V +80-20%	6
C801,802			
803,804			
815,816			
RESISTORS			
R801	R2EDPJ100A	Carbon 10 Ω $\frac{1}{4}$ W $\pm 5\%$	1
R802	R3ADPK101A	Carbon 100 Ω 1W $\pm 10\%$	1
R803,804	R2EDSK152A	Carbon 1.5K Ω $\frac{1}{4}$ W $\pm 5\%$	4
805,806			
R809,810	R2EDSJ392A	Carbon 3.9K Ω $\frac{1}{4}$ W $\pm 5\%$	2
R807,808	R2EDSK472A	Carbon 4.7K Ω $\frac{1}{4}$ W $\pm 10\%$	2
R813,814	R2EDSJ123A	Carbon 12K Ω $\frac{1}{4}$ W $\pm 5\%$	2
R811,812	R2EDSJ823A	Carbon 82K Ω $\frac{1}{4}$ W $\pm 5\%$	2
SEMICONDUCTORS			
Q804	TJJ-2SA763-5-	Transistor 2SA763 or 2SA726	1
Q803	TMM-2SC1313-G-	Transistor 2SC1313	1
Q802	203 5 6460 51440	Transistor 2SB 514(D)	1
Q801	203 5 8220 33040	Transistor 2SD 330(D)	1
D801	DCC-MS-2	Bridge diode MS-2 200V 1A	1
D802,803	DJJ-WZ-260	Zener diode WZ-260	2

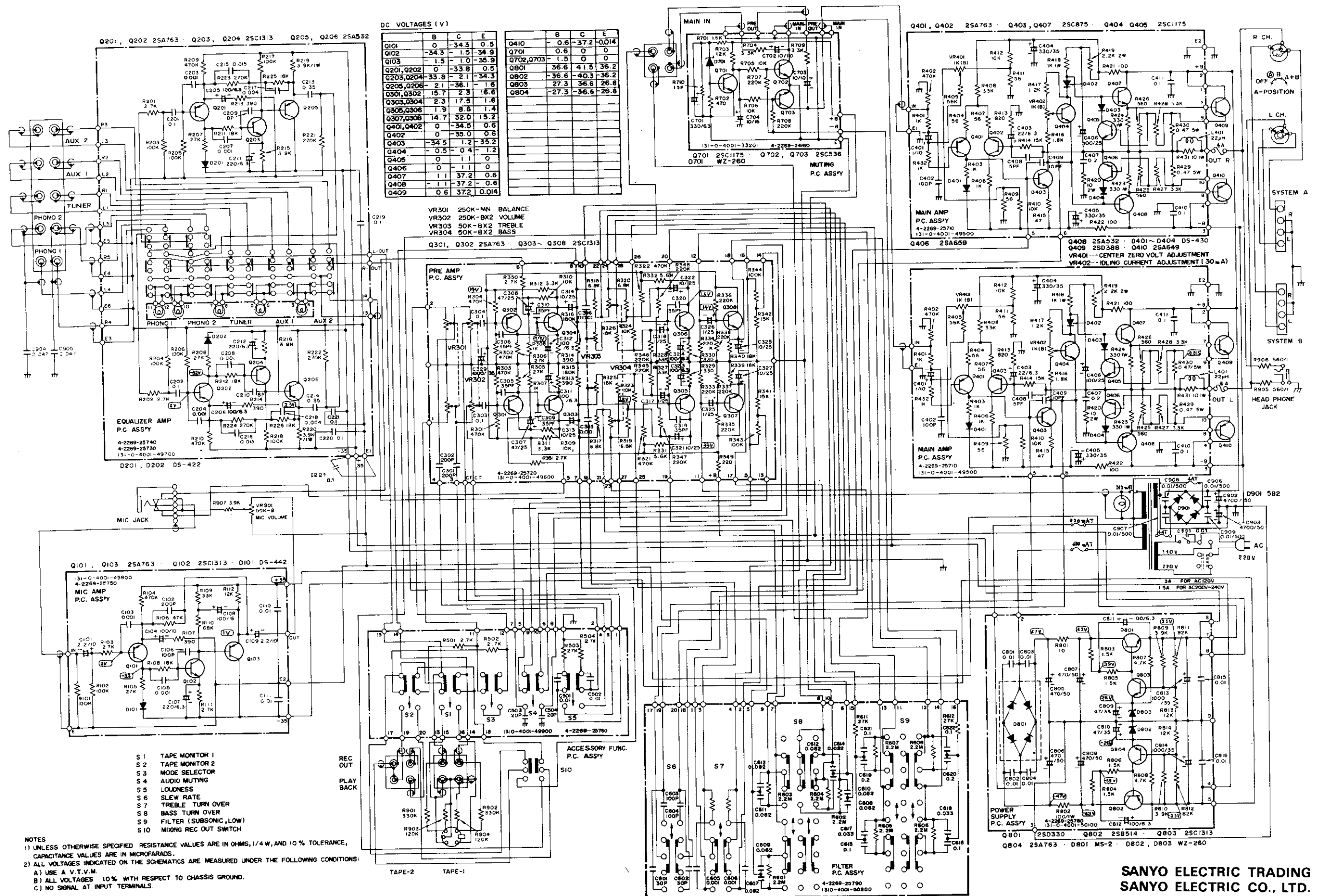


MUTING P.C.B. ASS'Y BOTTOM VIEW



WIRING DIAGRAM





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