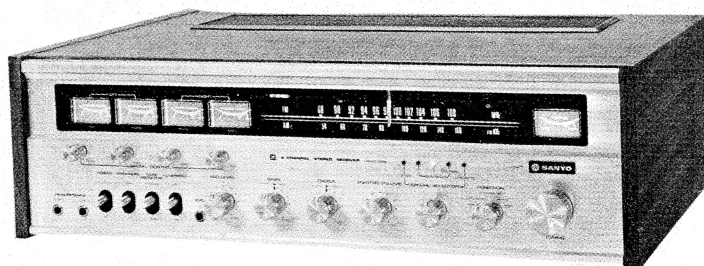




**SANYO
4 CHANNEL
STEREO RECEIVER
DCX 3300KB
SERVICE MANUAL**



SPECIFICATIONS

GENERAL

Transistors	2SK41 x 1, 2SC668 x 1, 2SC930 x 4 2SC536 x 4, 2SC929 x 1, 2SC693 x 18 2SC537 x 2, 2SA608 x 2
IC amplifiers	LA1201 x 1, LA3301 x 1, STK-024 x 4
Diodes	1S188 x 19, DS-442 x 1, DS-430 x 4 WZ-094 x 1, DS-118 x 4
Power source	AC 220V - 110V 50/60 Hz
Power consumption	175 watts
Dimensions (approx.)	21-1/4"(W) x 15-3/4"(D) x 6"(H)
Weight (approx.)	24 lbs

AUDIO SECTION

Continuous power output (at 8 ohms 1% T.H.D.)	30W/ch x 2 ... 2 channel operation 20W/ch x 4 ... 4 channel operation
Frequency response (1W power output)	80 - 120,000 Hz ± 3 dB

Hum and noise

(volume position: : at rated power	AUX, PHONO, TAPE 30 mV
: at min.	AUX, PHONO, TAPE 3.0mV

Power bandwidth	80 - 10,000 Hz (at 5% T.H.D.)
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Input sensitivity/ impedance	AUX 200mV/100K ohms PHONO 2.5mV/50Kohms PLAYBACK RCA 200mV/70K ohms DIN 200mV/70K ohms
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Record output	RCA 110mV/6.8Kohms DIN 50mV at 50K ohms terminate
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Bass control	100 Hz -10 - +8 dB
Treble control	10,000 Hz -10 - +8 dB

Loudness control

(volume position: at -30 dB)	100 Hz + 8 dB 10,000 Hz + 3 dB AUX 60 dB PHONO 60 dB TAPE 60 dB MIC 45 dB
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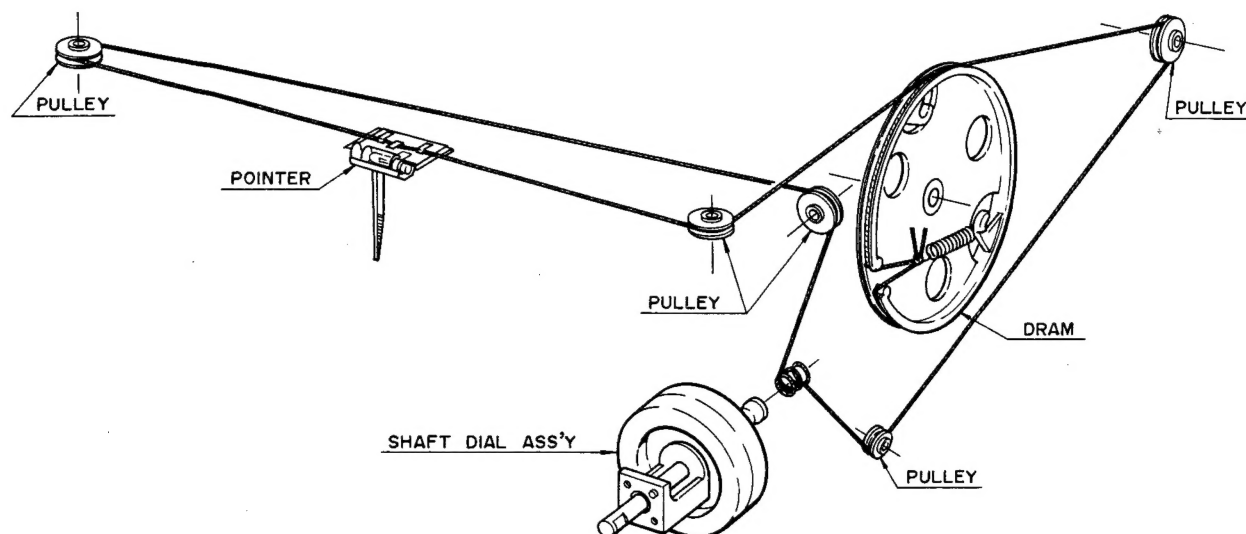
FM TUNER SECTION

Frequency range	88 MHz - 108 MHz
IF	10.7 MHz
Aerial impedance	300 ohms balanced
IHF sensitivity	5 μ V
Selectivity (IHF)	40 dB
Image rejection	45 dB
IF rejection	70 dB
AM suppression	45 dB
S/N	45 dB (stereo), 55 dB (mono)
Stereo separation	30 dB
SCA rejection	50 dB
Capture ratio	4 dB
Spurious response	70 dB

AM TUNER SECTION

Frequency range	535 kHz - 1,605 kHz
IF	455 kHz
20 dB S/N sensitivity	250 μ V/m
Image rejection	35 dB
IF rejection	35 dB
S/N	43 dB
Selectivity	23 dB (1 ACA) 40 dB (2 ACA)

DIAL CORD STRING



ADJUSTMENT

AM ADJUSTMENT

Step	Adjusting circuit	Connections		SG. frequency	Position of tuning dial	Adjustment	V.T.V.M. Oscilloscope
		Input	Output				
1	IF	Connect sweep generator to VC4.	Connect oscilloscope to test point TP7.	455 KHz (400Hz 30% modulation)	Near max. capacity of VC. at position with no unrequired signal	AM 1st 9-20970 (Red, Blue) AM 2nd 9-20980 (Non adj.)	
2	RF	Connect standard loop aerial to output terminals of SG. Place receiver 2 feet from loop aerial.	Connect V.T.V.M. to speaker terminals.	600 KHz (400Hz, 30% modulation)	600 KHz	AM ANT 9-21081 AM OSC 9-20690 (Red)	Max.
3				1400 KHz (400Hz, 30% modulation)	1400 KHz	TC4 TC5	Max.
4	Repeat adjustments.						

PREPARE

- Variable capacitor completely closed.
- Set the dial pointer to very left line dial scale.
- Connect sweep generator, SG, V.T.V.M. and oscilloscope.
- Function switch to "AM".
- Use a screwdriver with plastic grip for all adjustments.

FM ADJUSTMENT

ADJUSTMENT

Step	Adjusting circuit	Connections		SG frequency	Position of tuning dial	Adjustment	V.T.V.M. Oscilloscope
		Input	Output				
1	IF	Connect sweep generator to test point TP1 through 0.01μF	Connect oscilloscope to test point TP2.	10.7 MHz (none modulation)	Near max. capacity of VC. at position with no unrequired signal	FM 1st 9-21040 (Violet) 9-21050 (Orange)	
2	Ratio Det.		Connect oscilloscope to test point TP3.			FM 2nd 9-21080 9-21090 FM 3rd 9-21070 9-21080 FM DET 9-20850 (Pink) 9-20860 (Blue)	
3	RF	Connect FM SG. to FM AERIAL terminals.	Connect V.T.V.M. to speaker terminal.	90 MHz (400Hz, 30% modulation)	90 MHz	FM AERIAL 9-21090 FM OSC 9-20460 FM RF 9-20330	Max.
4				106 MHz (400Hz, 30% modulation)	106 MHz	TC1 TC2 TC3	Max.
5	Repeat adjustments.						

PREPARE

- Variable capacitor completely closed.
- Set the dial pointer to very left line of dial scale.
- Connect sweep generator, FM SG, V.T.V.M. and oscilloscope. FM aerial input impedance is 300 ohm.
- Function switch to "FM"
- Use a screwdriver with plastic grip for all adjustments.

FM MPX ADJUSTMENT

Step	Adjusting circuit	Connections		Position of tuning dial	Adjustment	V.T.V.M.
		Input	Output			
1	38 KHz	Connect FM stereo SG to FM aerial terminals. 19KHz signal ON. Main channel, sub channel signal ON. Add 1000Hz signal from L Ch.	Connect V.T.V.M. to test point TP6.	Near max. capacity of VC. at position with no unrequired signal.	38KHz 9-20210 (Black) 9-20220 (White)	Max.
2	FM stereo signal separation		Connect V.T.V.M. to R speaker terminal.			
3		Connect FM stereo SG to FM aerial terminals. 19KHz signal ON. Main channel, sub channel signal ON. Add 1000Hz signal from R Ch.	Connect V.T.V.M. to L speaker terminal.		38KHz 9-20210 (Black)	Min.
4	Repeat steps 2~3. Set at position with max. channel separation.					

PREPARE

- Variable capacitor completely closed.
- Connect FM stereo SG. and V.T.V.M.
- Function switch to "STREO AFC".
- Use a screwdriver with plastic grip for all adjustments.



PARTS LIST

Key No.	Part No.	Description	Q'ty
PACKING			
	4 2449 20230	Aerial FM	1
	131 6 1139 36404	Box, Corrugate Exp.	1
	131 6 2119 00570	Bas, Polyethylene	1
	131 6 2719 10400	Bag, Fan	1
	131 6 3009 17450	Pad	2
	131 6 4119 35200	Explanatory Booklet	1
	131 6 4559 10100	Manufacturing No.	1
CABINET			
1	131 2 1101 20803	Cabinet	1
2	131 2 1804 10401	Leg, Rubber	4
3	131 2 3101 12501	Metal Mount	1
4	131 2 3201 11600	Angle, Reinf	2
	131 2 3901 10200	Staple	10
5	131 2 4203 15200	Washer	4
6	131 2 6101 16700	Plate, Shield	1
7	131 2 6201 12600	Gril	1
		Screw, Pan Hd. 4 x 20	7
		Screw, Truss Hd. Tapping 3 x 8	15
		Screw, Truss Hd. Tapping 4 x 12	4
		Washer 4.2 x 12 x 1	4
		Washer 4.2 x 16 x 1.6	3
APPEARANCE			
8	131 0 1001 19200	Knob Ass'y	1
9	131 0 1016 17800	Panel Decorate Ass'y	1
10	131 2 1203 22605	Panel, Control	1
11	131 2 6113 11700	Shelter, Lever Switch	4
12	131 2 1504 10900	Plate, Sign Lamp	5
13	131 2 1205 10800	Decorate, Plate Dial	1
112	131 0 3011 13700	Pointer Ass'y	1
14	131 2 1201 23601	Plate Dial	1
15	131 2 1301 13700	Badge	1
16	131 2 1601 22500	Knob, Tuning	1
17	131 2 1601 22600	Knob, Selector	4
18	131 2 1601 22700	Knob, Lever	4
19	131 2 1601 22800	Knob, Bass, Treble	2
20	131 2 1601 22900	Knob, Bass, Treble	2
21	131 2 4201 12400	Screw, Tuning	1
22	131 2 4201 12500	Screw, Bass, Treble	2
23	131 2 4202 12100	Nut, Function	1
24	131 2 4202 12400	Nut, Mic Volume	1
25	131 2 4208 15500	Spacer, Mic Volume	1
26	131 2 6110 17900	Shelter Light, Dial	1
27	131 2 6110 18000	Shelter Light, Dial R,L	2
28	131 2 6308 12400	Filter, Pointer Lamp	1
		Screw, Button Hd. 3 x 8	7
		Screw, Flat Hd. 3 x 5	3
CHASSIS			
29	131 0 3002 10201	Drum Ass'y	1
30	131 0 3003 14400	Shaft Dial Ass'y	1
31	131 0 3008 11700	Support Aerial Ass'y	1
32	131 0 3020 01200	Pulley Ass'y	1
33	131 2 3101 21200	Metal Mount	1
34	131 2 3301 19200	Chassis	1
35	131 2 3305 15000	Panel, Front	1
36	131 2 3306 16401	Panel, Rear	1
37	131 2 3608 10800	Cramp Wire	2
38	131 2 3608 11300	Cramp Wire	10
39	131 2 3614 13800	Mount, Equalizer PCB	1
40	131 2 3614 14600	Mount, Power, Protector PCB	2
41	131 2 3617 12100	Metal, Mount, Trans	1
42	131 2 3701 15500	Mount Electric Part	1
43	131 2 4107 10300	Pulley	4
44	131 2 4108 10300	Spindle, Pulley	4
45	131 2 4111 00200	Spring, Rope	1
46	131 2 4112 10200	Rope 0.5	1
47	131 2 4120 10500	Slide, Rail, Pointer	1
48	131 2 4201 12701	Screw, Ground Terminal	1
49	131 2 4203 14200	Washer, Mic Jack	1
50	131 2 4203 15300	Washer, Trans	4
51	131 2 4203 15400	Washer, Trans	4

Key No.	Part No.	Description	Q'ty
CHASSIS			
52	131 2 4208 13500	Spacer, Mount PCB	2
53	131 2 4208 15400	Spacer, Level Volume	4
54	131 2 4221 00100	Rivet	7
55	131 2 5206 11300	Mold Plane 5 x 18 x 5t	5
56	131 2 6101 14701	Plate Shield, SQ PCB	1
57	131 2 6107 13900	Plate Sever, PL Holder	1
58	131 2 6107 15800	Plate Sever, Dial Lamp	1
59	131 2 6107 17300	Plate Sever, Elect. Part	1
60	131 2 6110 17700	Shelter Light, Level Meter	1
61	131 2 6110 17800	Shelter Light, Tuning Meter	1
62	131 2 6110 19700	Shelter Light, Dial	1
63	131 2 6111 11300	Bushing	1
64	131 2 6111 11500	Bushing, Stereo Ind.	1
65	131 2 6111 11600	Bushing, 2/4 Chl.	5
66	131 2 6113 11400	Shelter, Power SW, Lever SW	4
67	131 2 6113 14600	Shelter	1
68	131 2 7104 00101	Plate Pad, Switch	1
		Screw, Pan Hd 3 x 6	10
		Screw, Pan Hd. 3 x 8	2
		Screw, Pan Hd. Tapping 2.6 x 10	5
		Screw, Pan Hd. Tapping 3 x 5	4
		Screw, Pan Hd. Tapping 3 x 8	68
		Screw, Pan Hd. Tapping 3 x 16	2
		Screw, Pan Hd. Tapping 3.5 x 8	14
		Hex. Nut 4mm	4
		Washer 4.2 x 12 x 1	4
ELECTRICAL PARTS			
69	4 2239 20371	Electrolytic Capacitor 2200µF 63V	1
70	4 2319 21530	Switch, Slide	1
71	4 2319 22344	Switch, Lever 12P, Tape mon. SP SW	2
72	4 2319 22620	Switch, Rotary, 2/4 Chl.	1
73	4 2319 22840	Switch, Lever, Power	1
74	4 2319 23310	Switch, Rotary, Mode	1
75	4 2319 23320	Switch, Rotary, Function	1
76	4 2349 20580	Fuse 3.15 A, Secondary	5
77	4 2349 20620	Fuse, Protector	2
78	4 2359 20160	Fuse Holder, Tuning Lamp	1
79	4 2359 20190	Socket, 5P DIN	1
80	4 2359 21020	Socket	5
81	4 2359 21080	Jack, Headphone	2
82	4 2359 21110	Fuse Holder, Protector	2
83	4 2359 21230	Socket, Phono 4P, REC, Tape PB	2
84	4 2359 21250	Socket, Phono 6P	1
85	4 2359 21410	Mic Jack	1
86	4 2379 20020	Terminal, Aerial 3P	1
87	4 2379 20080	Terminal 4P	2
88	4 2379 20130	Terminal Lug 1-3PL	1
89	4 2379 20140	Terminal Lug 2P	1
90	4 2439 20521	Power Cord	1
91	4 2519 23050	Power Trans	1
92	4 2539 20170	Choke Coil, L1002	1
93	4 2579 21081	Aerial Coil MW	1
94	4 2659 20190	Multiplex Coil, L1001	1
95	4 5119 20291	Meter, VU	4
96	4 5119 20304	Meter, Tuning	1
97	4 6129 20153	Pilot Lamp, Stereo Ind.	1
98	4 6129 20280	Pilot Lamp, Tuning Meter	1
99	4 6129 20310	Pilot Lamp, Pointer	1
CAPACITORS			
C1005		Ceramic 200pF 50V ±10%	1
C1004		Mylar 0.068µF 50V ±20%	1
C1002,1003		MP 0.01µF 250V ±20%	2
C1006,1007		Ceramic 0.04µF 50V +80 -20%	2
RESISTORS			
R1004,1005		Carbon 220 1/4W ±10%	2
R1001		Carbon 820 1/4W ±10%	1
R1002,1003		Carbon 47K 1/4W ±10%	2
R1006,1007		Oxide Metal Film 0.12Ω1W ±10%	4

- NOTES: 1. Part orders must contain Model Number, Part Number and Description.
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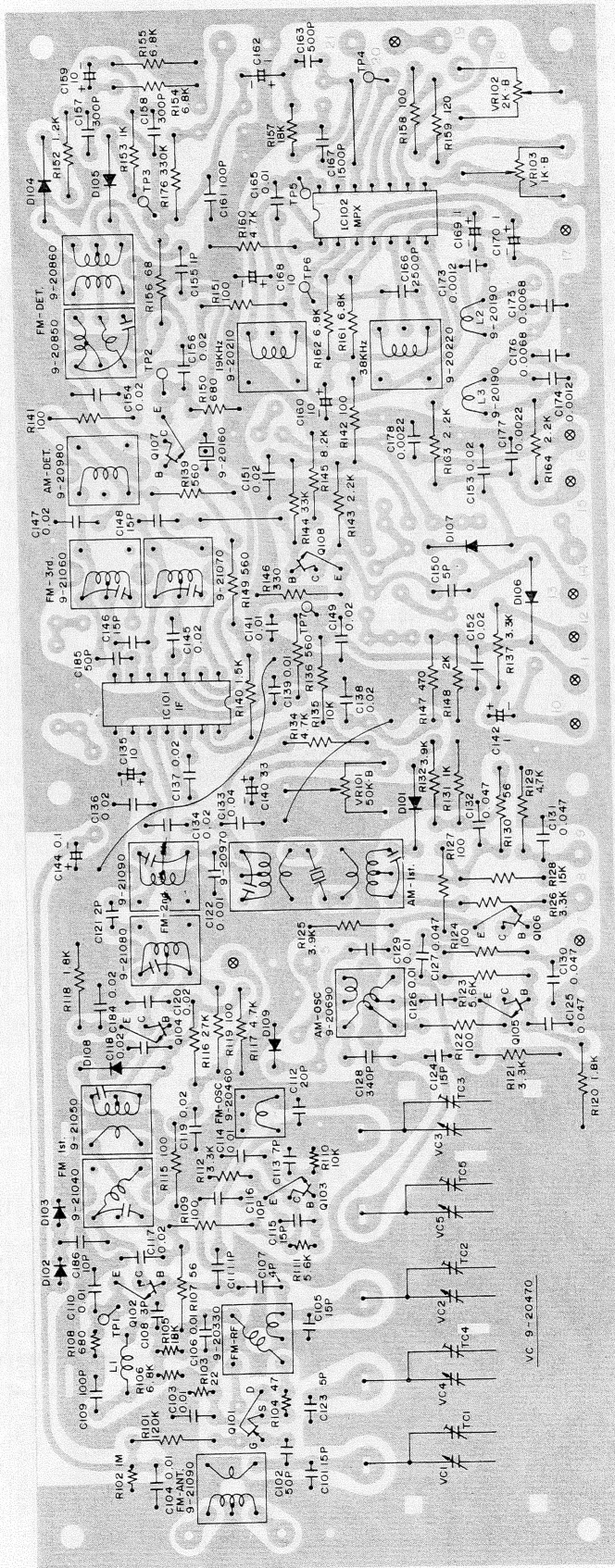
PARTS LIST

Key No.	Part No.	Description	Q'ty	Key No.	Part No.	Description	Q'ty
RF, IF, MPX P.C.B. ASSY				RF, IF, MPX P.C.B. ASSY			
100	131 0 4001 40304	RF, IF, MPX PCB Ass'y	1	C142,162		Alsicon 1μF 10V ±20%	4
	4 2229 23450	Potentiometer B-50K, Bias Adjust	1	169,170			
	4 2229 23580	VR 2K-B Level Adjust	1	C103,104		Ceramic 0.01μF 25V +80-20%	5
	4 2249 20480	Variable Capacitor	1	106,110			
	4 2279 20160	Ceramic Filter 10.7MHz	1	114			
	4 2379 21120	Terminal, Test Point	7	C118,119		Ceramic 0.02μF 25V +80-20%	17
	4 2539 20180	IF Trap	1	120,117			
	4 2569 20850	Voice IF Trans	1	134,136			
	4 2569 20860	Voice IF Trans	1	137,138			
	4 2569 20970	IF Trans AM-1st	1	151,145			
	4 2569 20980	IF Trans AM-Det.	1	147,149			
	4 2569 21040	IF Trans FM-1st.	1	152,153			
	4 2569 21050	IF Trans FM-1st.	1	154,156			
	4 2569 21060	IF Trans FM-3rd.	1	184			
	4 2569 21070	IF Trans FM-3rd.	1	C133		Ceramic 0.04μF 25V +80-20%	1
	4 2569 21080	IF Trans FM-2nd.	1			RESISTORS	
	4 2569 21090	IF Trans FM-2nd.	1	R103		Carbon 22Ω 1/4W ±10%	1
	4 2579 21090	Aerial Coil, FM	1	R104		Carbon 47Ω 1/4W ±10%	1
	4 2589 20460	OSC Coil FM	1	R107,130		Carbon 56Ω 1/4W ±10%	2
	4 2589 20690	OSC Coil AM	1	R156		Carbon 68Ω 1/4W ±10%	1
	4 2599 20330	RF Coil FM	1	R109,115		Carbon 100Ω 1/4W ±10%	10
	4 2659 20190	Multiplex Coil	2	119,122			
	4 2659 20210	Multiplex Coil 19KHz	1	124,127			
	4 2659 20220	Multiplex Coil 38KHz	1	141,142			
		SEMICONDUCTORS		151,158			
Q102	203 5 4510 66840	Transistor 2SC 668N-D-RF	1	R159		Carbon 120Ω 1/4W ±10%	1
Q105	203 5 5100 53640	Transistor 2SC 536 D,E	1	R146		Carbon 330Ω 1/4W ±10%	1
Q106	203 5 5510 92940	Transistor 2SC 929 D,E	1	R147		Carbon 470Ω 1/4W ±10%	1
Q104,108	203 5 5510 93040	Transistor 2SC 930 N-D	2	R136,139		Carbon 560Ω 1/4W ±10%	3
Q103,107	203 5 5510 93050	Transistor 2SC 930 E	2	149			
Q101	203 5 6500 04160	Transistor 2SK 41 F	1	R108		Carbon 680Ω 1/4W ±10%	1
D101,102	202 5 9110 18820	Diode 1S188FM1	7	R150		Carbon 680Ω 1/4W ±10%	1
103,104				R131,153		Carbon 1KΩ 1/4W ±10%	2
105,106				R152		Carbon 1.2KΩ 1/4W ±10%	1
107				R140		Carbon 1.5KΩ 1/4W ±10%	1
D108	205 5 9040 44210	Diode DS-442	1	R118,120		Carbon 1.8KΩ 1/4W ±10%	2
IC101	206 5 0081 20122	IC LA 1201 B-H	1	R148		Carbon 2KΩ 1/4W ±10%	1
IC102	206 5 0673 30110	IC LA 3301	1	R143,163		Carbon 2.2KΩ 1/4W ±10%	3
		CAPACITORS		164			
C111,155		Ceramic 1pF 50V ±0.25pF	2	R169		Carbon 2.7KΩ 1/4W ±10%	1
C121		Ceramic 2pF 50V ±0.25pF	1	R112		Carbon 3.3KΩ 1/4W ±10%	1
C108		Ceramic 3pF 50V ±0.25pF	1	R121,126		Carbon 3.3KΩ 1/4W ±10%	3
C107		Ceramic 4pF 50V ±0.25pF	1	137			
C150		Ceramic 5pF 50V ±0.25pF	1	R125,132		Carbon 3.9KΩ 1/4W ±10%	2
C123		Ceramic 5pF 50V ±0.5pF	1	R117,129		Carbon 4.7KΩ 1/4W ±10%	4
C113		Ceramic 7pF 50V ±0.25pF	1	134,160			
C116		Ceramic 10pF 50V ±5%	1	R111		Carbon 5.6KΩ 1/4W ±10%	1
C186		Ceramic 10pF 50V ±5%	1	R123		Carbon 5.6KΩ 1/4W ±10%	1
C115,146,148		Ceramic 15pF 50V ±5%	3	R106		Carbon 6.8KΩ 1/4W ±10%	1
C124		Ceramic 15pF 50V ±5%	1	R154,155		Carbon 6.8KΩ 1/4W ±10%	4
C101,105		Ceramic 15pF 50V ±10%	2	161,162			
C112		Ceramic 20pF 50V ±5%	1	R145		Carbon 8.2KΩ 1/4W ±10%	1
C102,185		Ceramic 50pF 50V ±10%	2	R110		Carbon 10KΩ 1/4W ±10%	1
C109,161		Ceramic 100pF 50V ±10%	2	R135		Carbon 10KΩ 1/4W ±10%	1
C157,158		Ceramic 300pF 50V ±10%	2	R128		Carbon 15KΩ 1/4W ±10%	1
C122		Mylar 0.001μF 50V ±20%	1	R105,157		Carbon 18KΩ 1/4W ±10%	2
C173,174		Mylar 0.0012μF 50V ±20%	2	R116		Carbon 27KΩ 1/4W ±10%	1
C177,178		Mylar 0.0022μF 50V ±20%	2	R144		Carbon 33KΩ 1/4W ±10%	1
C175,176		Mylar 0.0068μF 50V ±20%	2	R101		Carbon 120KΩ 1/4W ±10%	1
C126,129,139,141		Mylar 0.01μF 50V ±20%	4	R102		Carbon 1MΩ 1/4W ±10%	1
C125,127		Mylar 0.047μF 50V ±20%	5				
130,131							
132							
C135,159,160,168		Electrolytic 10μF 10V	4				
C140		Electrolytic 33μF 10V	1				
C128		Styrol 340pF 35V ±5%	1				
C163		Styrol 820pF 35V ±10%	1				
C167		Styrol 1500pF 35V ±10%	1				
C166		Styrol 2500pF 35V ±10%	1				
C165		Styrol 10000pF 35V ±10%	1				
C144		Alsicon 0.1μF 10V ±20%	1				

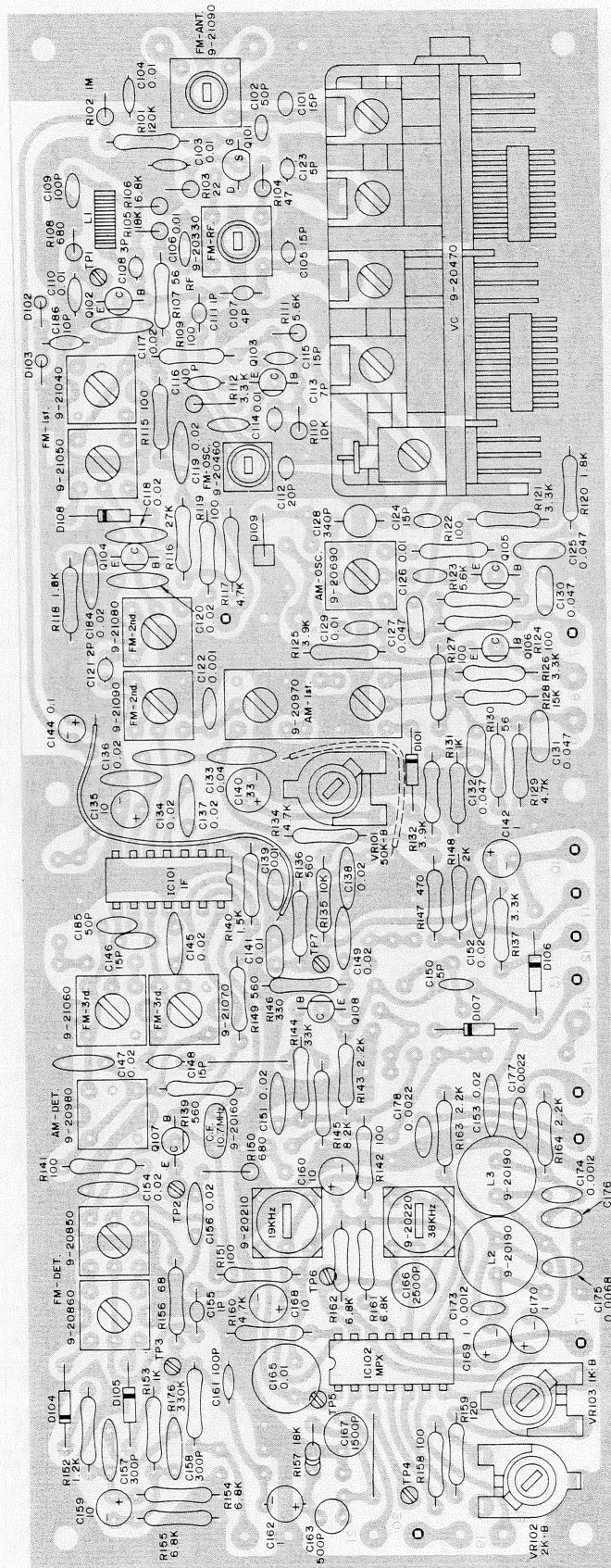
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2. Unless otherwise noted, component parts indicated by parentheses in the column Q'ty are not available.

3. Ordering quantity of screws and/or resistors must be multiple of 10 pcs.



CLASSIFICATION	IC101	IC102	Q101	Q102	Q103	Q104	Q105	Q106	Q107	Q108	D101, D108	D102~D107	D109
	LA1201	LA3300	2SK41	2SC668	2SC930	2SC930	2SC536	2SC929	2SC930	2SC930	DS-442	IS188 FMI	IS553
RANK			F	D, E	D, E	D	D, E	D, E	D, E	D			



CLASSIFICATION	IC101	IC102	Q101	Q102	Q103	Q104	Q105	Q106	Q107	Q108	Q109	DI01, DI08	DI02~DI07	DI09
RANK	LA1201	LA3300	25K41	F	25C668	25C930	25C930	25C936	25C929	25C930	25C930	DS-442	IS188 FMI	IS553
					D, E	D, E	D, E	D, E	D, E	D, E	D	D	D	D

№	Наименование	Единица измерения	Количество
1	Средства для уборки помещений	шт.	10
2	Средства для уборки помещений	шт.	10
3	Средства для уборки помещений	шт.	10
4	Средства для уборки помещений	шт.	10
5	Средства для уборки помещений	шт.	10
6	Средства для уборки помещений	шт.	10
7	Средства для уборки помещений	шт.	10
8	Средства для уборки помещений	шт.	10
9	Средства для уборки помещений	шт.	10
10	Средства для уборки помещений	шт.	10

№	Наименование	Единица измерения	Количество
1	Средства для уборки помещений	шт.	10
2	Средства для уборки помещений	шт.	10
3	Средства для уборки помещений	шт.	10
4	Средства для уборки помещений	шт.	10
5	Средства для уборки помещений	шт.	10
6	Средства для уборки помещений	шт.	10
7	Средства для уборки помещений	шт.	10
8	Средства для уборки помещений	шт.	10
9	Средства для уборки помещений	шт.	10
10	Средства для уборки помещений	шт.	10

Итого: 20 шт. средств для уборки помещений.

PARTS LIST

Key No.	Part No.	Description	Q'ty
EQUALIZER P.C.B. ASSY			
102	131 0 4001 47900	Equalizer PCB Assy	1
CAPACITORS			
C203,204		Ceramic 20pF 50V $\pm 10\%$	2
C213,214		Ceramic 100pF 50V $\pm 10\%$	2
C207,208		Mylar 0.01 μ F 50V $\pm 20\%$	2
C209,210		Mylar 0.033 μ F 50V $\pm 20\%$	2
C205,206		Electrolytic 100 μ F 10V	2
C211,212		Alsicon 0.5 μ F 25V $\pm 20\%$	2
C201,202		Alsicon 1 μ F 25V $\pm 20\%$	2
RESISTORS			
R209,210		Carbon 330 Ω 1/4W $\pm 10\%$	2
R213,214		Carbon 470 Ω 1/4W $\pm 10\%$	2
R211,212		Carbon 3.3K Ω 1/4W $\pm 10\%$	4
R201,202		Carbon 8.2K Ω 1/4W $\pm 10\%$	2

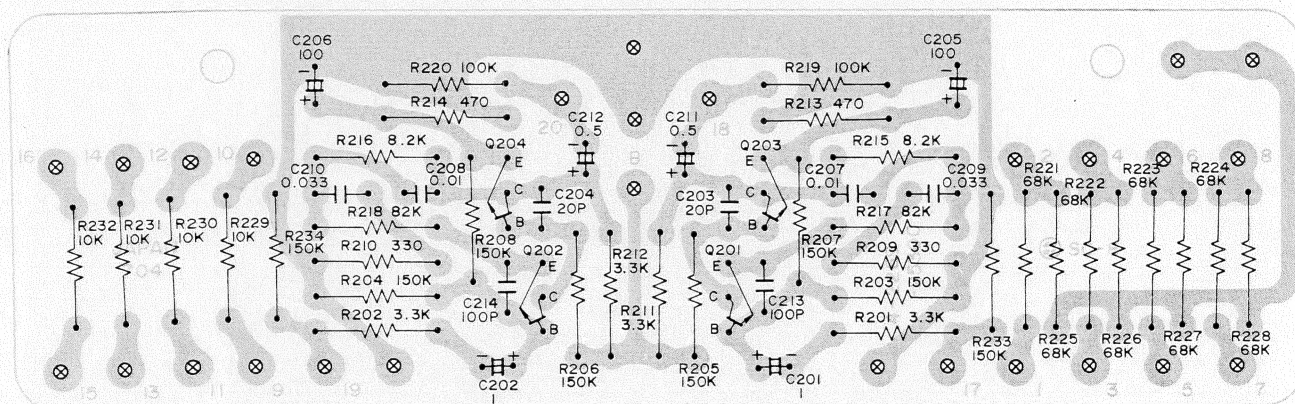
Key No.	Part No.	Description	Q'ty
EQUALIZER P.C.B. ASSY			
R229,230		Carbon 10K Ω 1/4W $\pm 10\%$	4
231,232		Carbon 68K Ω 1/4W $\pm 10\%$	8
R225,226		Carbon 82K Ω 1/4W $\pm 10\%$	2
227,228		Carbon 100K Ω 1/4W $\pm 10\%$	2
221,222		Carbon 150K Ω 1/4W $\pm 10\%$	8
223,224			
R217,218			
R219,220			
R203,204			
205,206			
233,234			
207,208			
SEMICONDUCTORS			
Q201,202	203 5 5100 69369	Transistor 2SC693 F-L, G-L	4
203,204			

NOTES: 1. Part orders must contain Model Number, Part Number and Description.

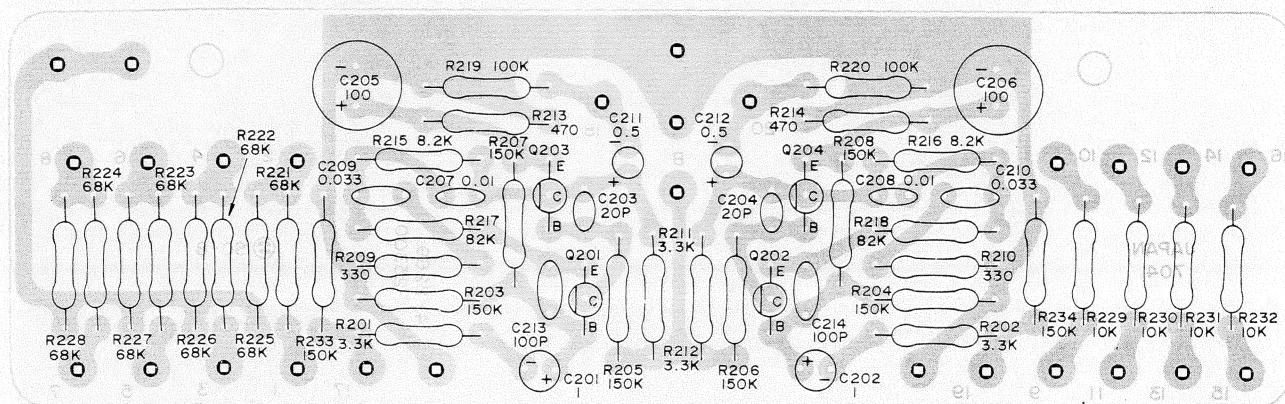
2. Unless otherwise noted, component parts indicated by parentheses in the column Q'ty are not available.

3. Ordering quantity of screws and/or resistors must be multiple of 10 pcs.

EQUALIZER P.C.B. BOTTOM VIEW



EQUALIZER P.C.B. TOP VIEW



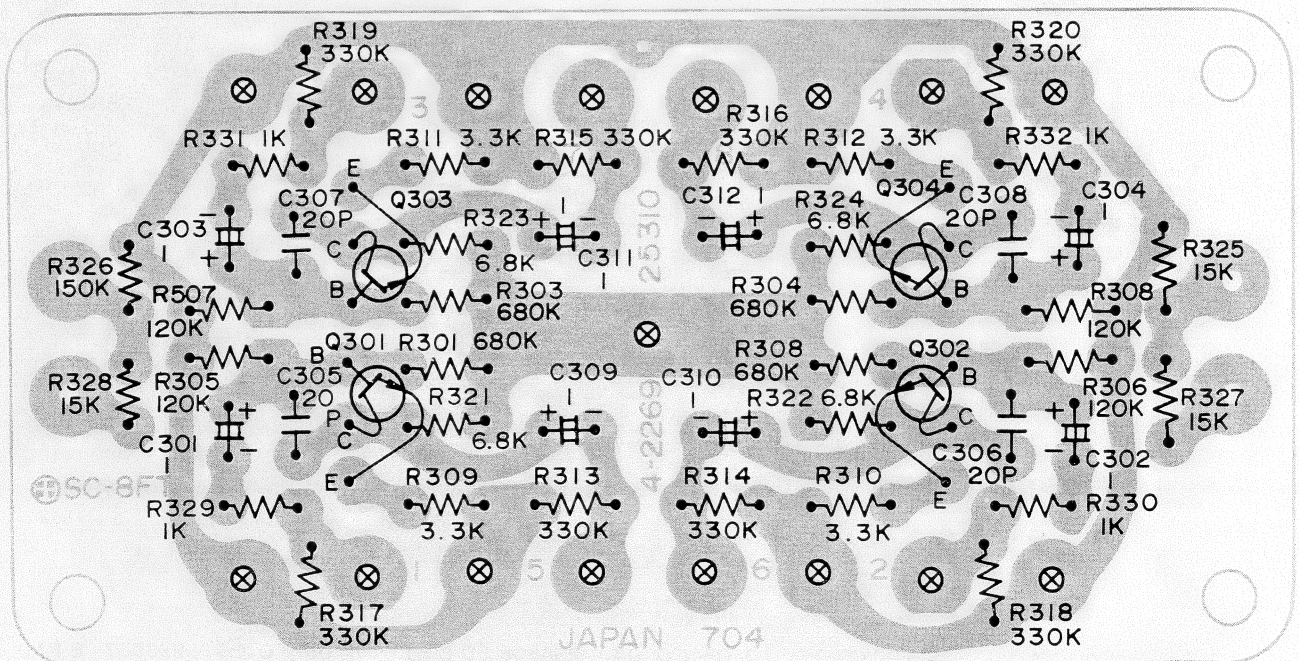
Q201 ~ Q204 2SC693 FL or GL

PARTS LIST

Key No.	Part No.	Description	Q'ty
PRE-2 P.C.B. ASSY			
111	131 0 4001 48100	Pre-2 PCB Assy	1
CAPACITORS			
C305,306 307,308		Ceramic 20pF 50V ±10%	4
C301,302 303,304 309,310 311,312		Alsicon 1μF 25V ±20%	8
RESISTORS			
R329,330 331,332		Carbon 1KΩ 1/4W ±10%	4
R309,310 311,312		Carbon 3.3KΩ 1/4W ±10%	4
R321,322 323,324		Carbon 6.8KΩ 1/4W ±10%	4
R325,326 327,328		Carbon 15KΩ 1/4W ±10%	4
R305,306 307,308		Carbon 120KΩ 1/4W ±10%	4
R317,318 319,320 313,314 315,316		Carbon 330KΩ 1/4W ±10%	8
R301,302 303,304		Carbon 680KΩ 1/4W ±10%	4
SEMICONDUCTORS			
Q301,302 303,304	203 5 5100 69369	Transistor 2SC693 FL, GL (W)	4

- NOTES: 1. Part orders must contain Model Number, Part Number and Description.
2. Unless otherwise noted, component parts indicated by parentheses in the column Q'ty are not available.
3. Ordering quantity of screws and/or resistors must be multiple of 10 pcs.

PRE-2 P.C.B. BOTTOM VIEW



Q301 ~ Q304 2SC693 FL or GL

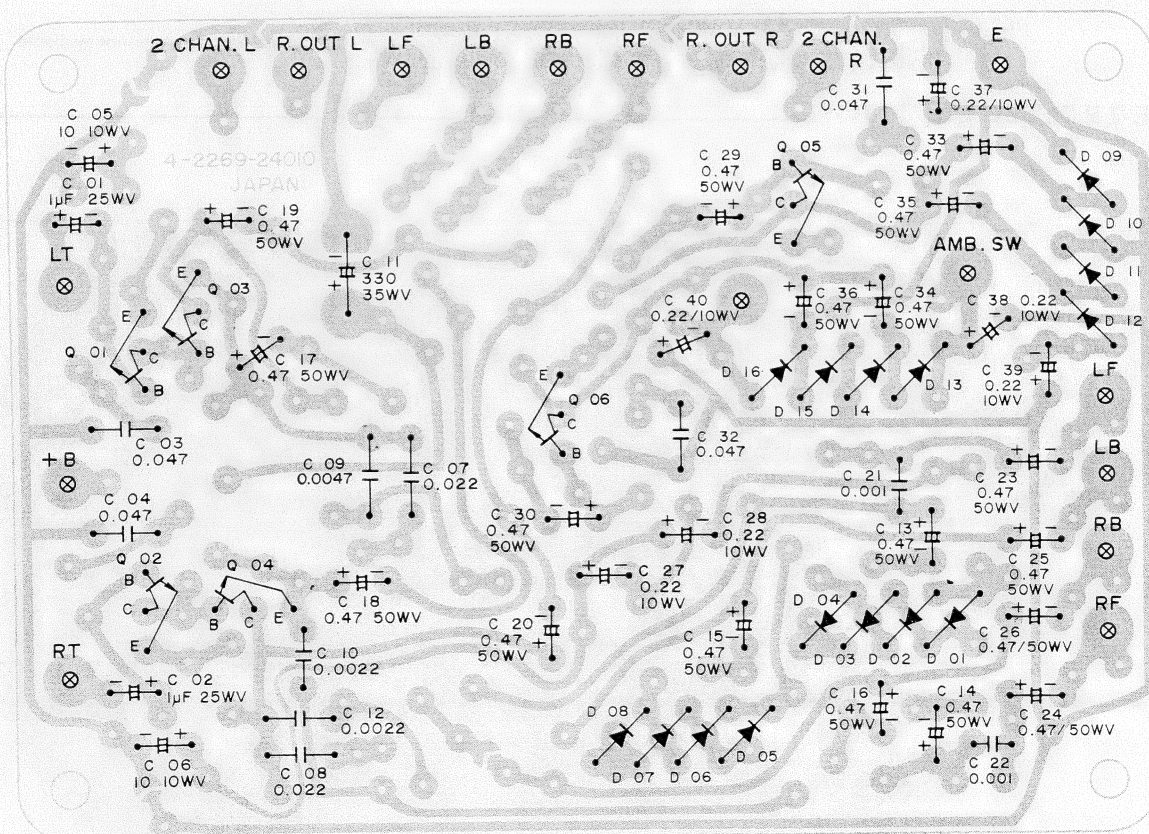
PARTS LIST

Key No.	Part No.	Description	Q'ty	Key No.	Part No.	Description	Q'ty
MATRIX P.C.B. ASSY				MATRIX P.C.B. ASSY			
105	131 0 4001 32300	Matrix PCB Assy	1	SEMICONDUCTORS			
CAPACITORS				Q05,06	203 5 5100 53750	Transistor 2SC537 E	2
C21,22		Mylar 0.001 μ F 50V $\pm$ 20%	2	Q01,02	203 5 5100 69369	Transistor 2SC693 F-L, G-L	2
C10,12		Mylar 0.0022 μ F 50V $\pm$ 20%	2	Q03,04	203 5 7200 60840	Transistor 2SA608D, E, F	2
C09		Mylar 0.0047 μ F 50V $\pm$ 20%	1	D09,10,11	202 5 9110 18820	Diode 1S188FM1	8
C07,08		Mylar 0.022 μ F 50V $\pm$ 20%	2	12,13,14			
C03,04,31		Mylar 0.047 μ F 50V $\pm$ 20%	4	15,16			
32,				D01,02,03	205 5 9020 43011	Diode DS430	8
C13,14,15		Electrolytic 0.47 μ F 50V	18	04,05,06			
16,17,18				07,08			
19,20,23							
24,25,26							
29,30,33							
34,35,36							
C05,06		Electrolytic 10 μ F 10V	2				
C11		Electrolytic 330 μ F 35V	1				
C27,28,37		Alsicon 0.22 μ F 10V $\pm$ 20%	6				
38,39,40							
C01,02		Alsicon 1 μ F 25V $\pm$ 20%	2				

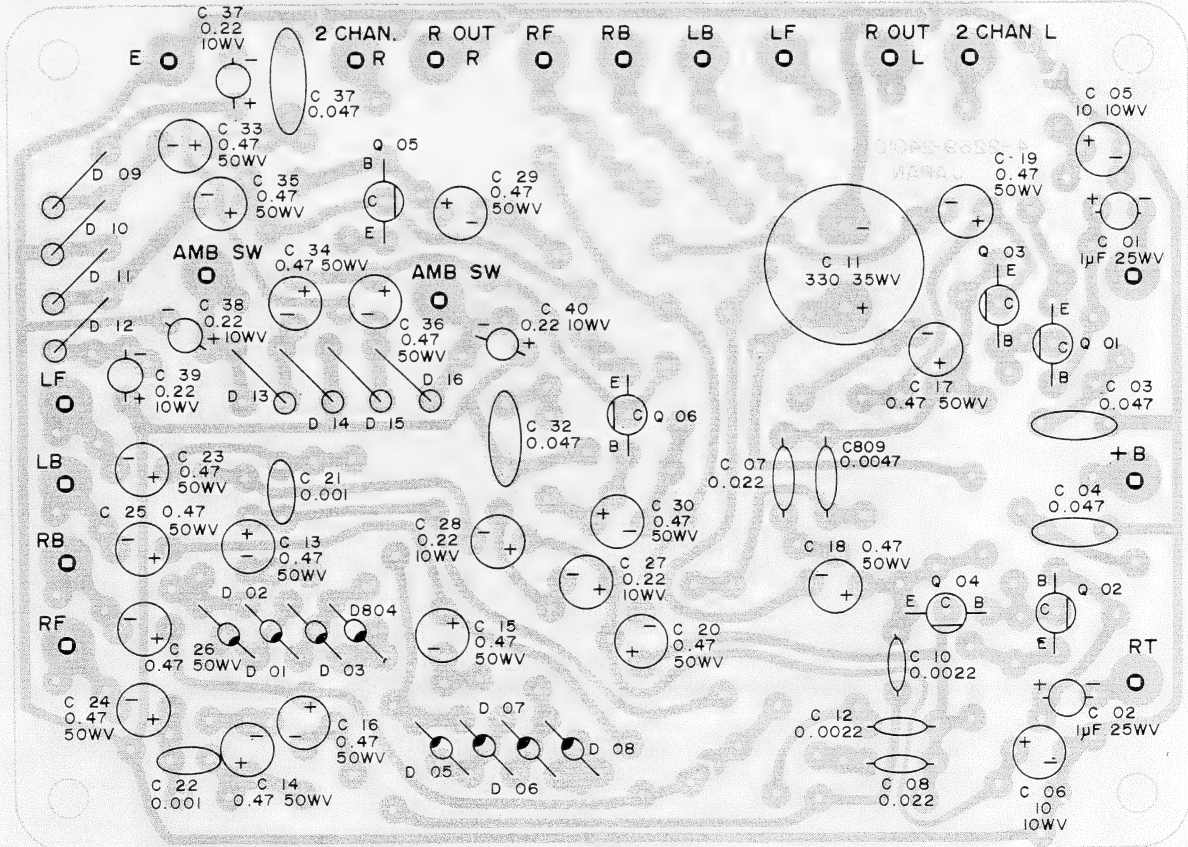
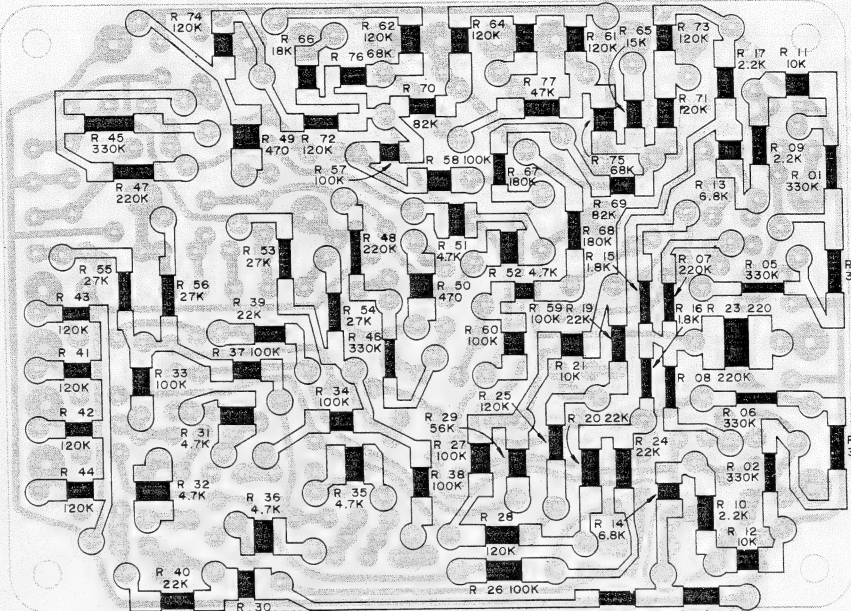
- NOTES: 1. Part orders must contain Model Number, Part Number and Description.
2. Unless otherwise noted, component parts indicated by parentheses in the column Q'ty are not available.
3. Ordering quantity of screws and/or resistors must be multiple of 10 pcs.

MATRIX P.C.B. BOTTOM VIEW

SORROUND OUT



Q 01, Q 02 2SC693 (FL) · Q 03, Q 04 2SA608 (D E F) · Q 05, Q 06 2SC537 (E F)
D 01~D 08 DS-430 · D 09~D 16 1S188 FM1



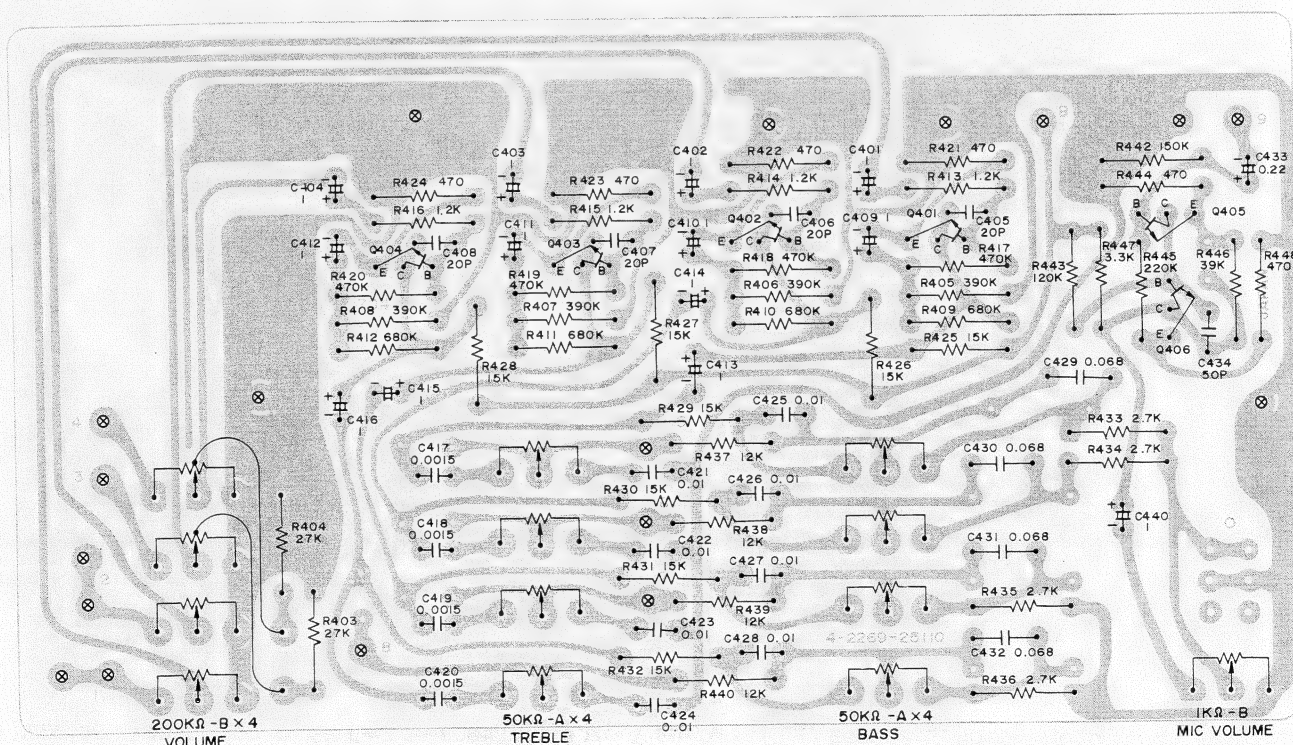
Q 01 , Q 02 2SC693 (F L) · Q 03 , Q 04 2SA608 (D E F) · Q 05 , Q 06 2SC537 (E F)
D 01 ~ D 08 DS-430 · D 09 ~ D 16 IS188 FM1

PARTS LIST

Key No.	Part No.	Description	Q'ty	Key No.	Part No.	Description	Q'ty
PRE AMP P.C.B. ASSY				PRE AMP P.C.B. ASSY			
103	131 0 4001 43002	Pre PCB Assy.	1	R421,422		RESISTORS	
	4 2229 22991	VR B-200K Master	1	423,424		Carbon 470Ω 1/4W ±10%	6
	4 2229 23000	VR A-50K Bass, Treble	2	444,448			
	4 2229 23670	VR B-1K Mic. Volume	1	R413,414		Carbon 1.2KΩ 1/4W ±10%	4
				415,416			
		CAPACITORS		R433,434		Carbon 2.7KΩ 1/4W ±10%	4
				435,436			
C405,406		Ceramic 20pF 50V ±10%	4	R447		Carbon 3.3KΩ 1/4W ±10%	1
407,408				R437,438		Carbon 12KΩ 1/4W ±10%	4
C434		Ceramic 50pF 50V ±10%	1	439,440			
C417,418		Mylar 0.0015μF 50V ±20%	4	R425,426		Carbon 15KΩ 1/4W ±10%	8
419,420				427,428			
C421,422		Mylar 0.01μF 50V ±20%	8	429,430			
423,424				431,432			
425,426				R403,404		Carbon 27KΩ 1/4W ±10%	2
427,428				R446		Carbon 39KΩ 1/4W ±10%	1
C429,430		Mylar 0.068μF 50V ±20%	4	R443		Carbon 120KΩ 1/4W ±10%	1
431,432				R442		Carbon 150KΩ 1/4W ±10%	1
C409,410		Electrolytic 1μF 10V	4	R445		Carbon 220KΩ 1/4W ±10%	1
411,412				R405,406		Carbon 390KΩ 1/4W ±10%	4
C433		Alsicon 0.22μF 10V ±20%	1	407,408			
C401,402		Alsicon 1μF 25V ±20%	9	R417,418		Carbon 470KΩ 1/4W ±10%	4
403,404				419,420			
413,414				R409,410		Carbon 680KΩ 1/4W ±10%	4
415,416				411,412			
440						SEMICONDUCTORS	
				Q401,402	203 5 5100 69369	Transistor 2SC693 FL, GL (W)	6
				403,404			
				405,406			

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

PRE AMP. P.C.B. BOTTOM VIEW

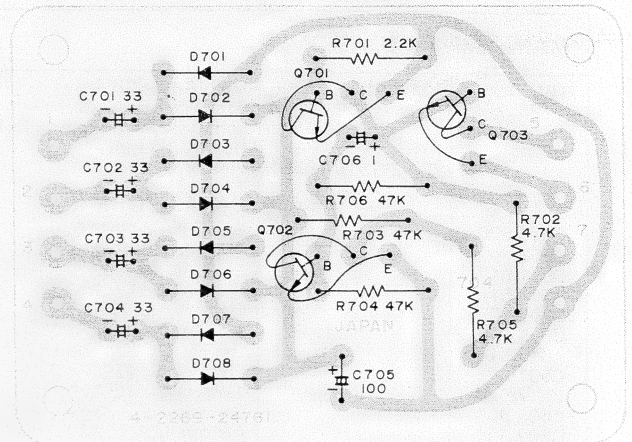


Q401 - Q406 2SC693

PARTS LIST

PROTECTOR P.C.B. BOTTOM VIEW

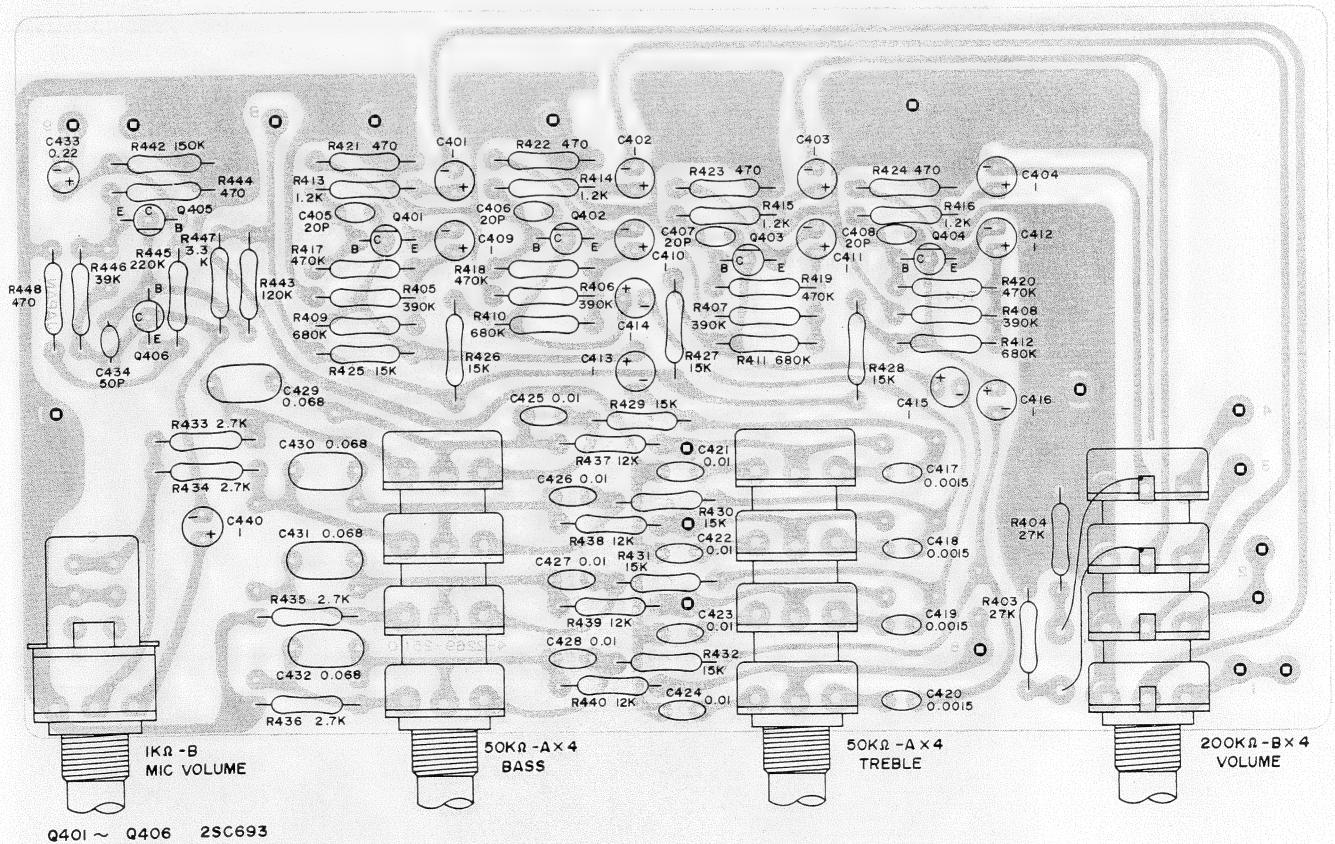
Key No.	Part No.	Description	Q'ty
PROTECTOR P.C.B. ASSY			
110	131 0 4001 42500	Protector PCB Assy	1
CAPACITORS			
C706		Electrolytic 1 μ F 50V	1
C701,702 703,704 C705		Electrolytic 33 μ F 10V	4
		Electrolytic 100 μ F 16V	1
RESISTORS			
R701		Carbon 2.2K Ω 1/4W $\pm$ 10%	1
R702,705		Carbon 4.7K Ω 1/4W $\pm$ 10%	2
R703,704 706		Carbon 47K Ω 1/4W $\pm$ 10%	3
SEMICONDUCTORS			
D701,702 703,704 705,706 707,708	202 5 9 110 18820	Diode 1S188FM1	8
Q701,702 Q703	203 5 5 100 53660	Transistor 2SC536F	2
	203 5 5 100 53670	Transistor 2SC536G	1



Q701, Q702 2SC536F · Q703 2SC536G
D701 ~ D708 1S188

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PRE AMP. P.C.B. TOP VIEW

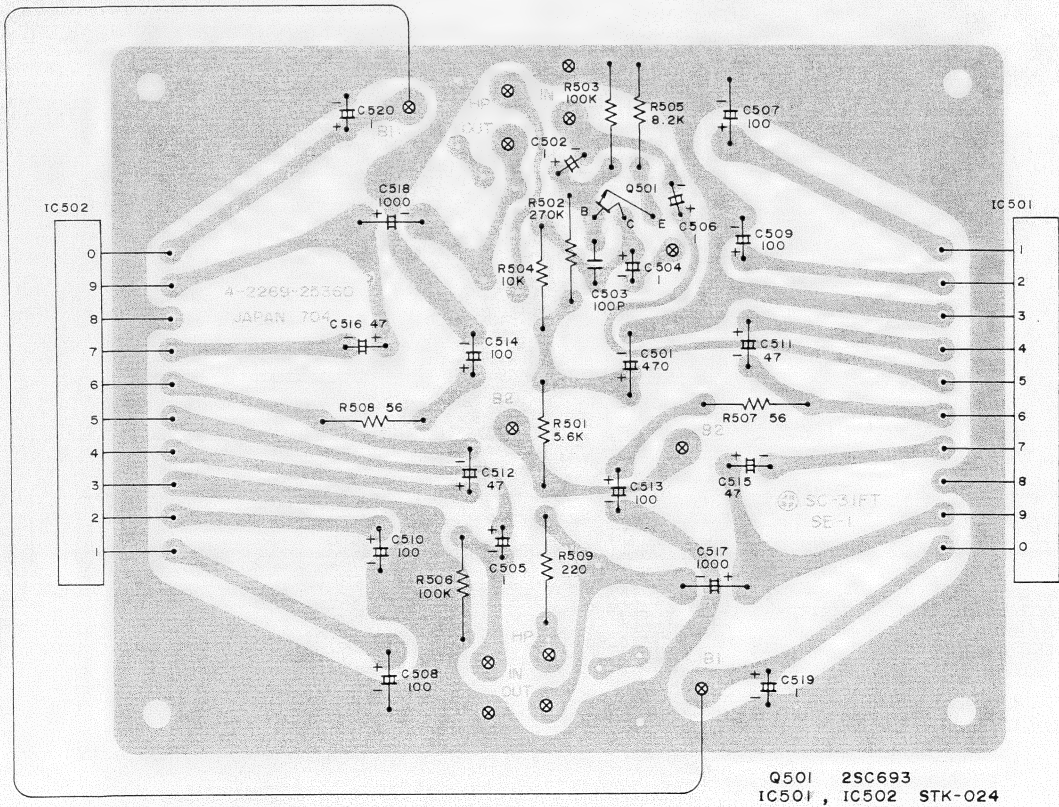


PARTS LIST

Key No.	Part No.	Description	Q'ty	Key No.	Part No.	Description	Q'ty
MAIN AMP P.C.B. ASSY				MAIN AMP P.C.B. ASSY			
101	131 0 4001 44400	Main Amp PCB Assy	2	R507,508		Carbon 56Ω 1/4W ±10%	2
		Screw Pan Hd. 3x8	4	R509		Carbon 220Ω 1/4W ±10%	1
		Screw, Pan Hd. Tapping 3x14	4	R501		Carbon 5.6KΩ 1/4W ±10%	1
		Hex. Nut 3 mm	4	R505		Carbon 8.2KΩ 1/4W ±10%	1
	131 2 6201 16500	Plate Heat Sink	2	R504		Carbon 10KΩ 1/4W ±10%	1
		CAPACITORS		R503,506		Carbon 100KΩ 1/4W ±10%	2
C519,520		Electrolytic 1μF 63V	2	R502		Carbon 270KΩ 1/4W ±10%	1
C503		Ceramic 100pF 50V ±10%	1			SEMICONDUCTORS	
C511,512		Electrolytic 47μF 25V	2	Q501	203 5 5100 69369	Transistor 2SC693 F-L	1
C515,516		Electrolytic 47μF 35V	2	IC501,502	206 5 6240 02410	IC STK0241	2
C507,508		Electrolytic 100μF 63V	2				
C509,510		Electrolytic 100μF 35V	4				
513,514							
C501		Electrolytic 470μF 35V	1				
C517,518		Electrolytic 1000μF 35V	2				
C505,506		Ceramic 1μF 35V ±20%	2				
C502,504		Alsicon 1μF 25V ±20%	2				

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

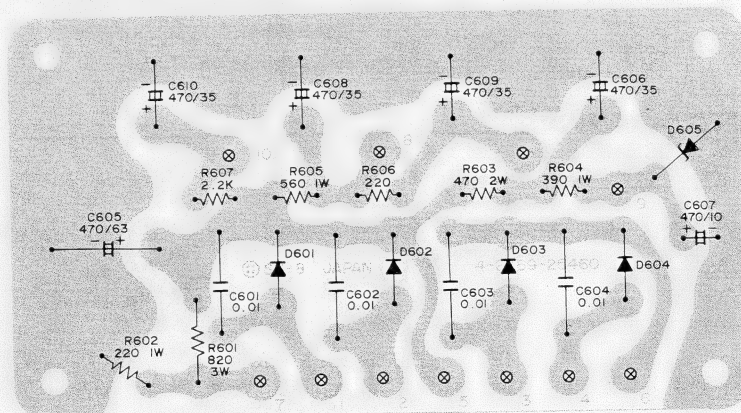


PARTS LIST

Key No.	Part No.	Description	Q'ty	Key No.	Part No.	Description	Q'ty
POWER SUPPLY P.C.B. ASSY				METER P.C.B. ASSY			
104	131 0 4001 48000	Power Supply PCB Assy	1	106	131 0 4001 32001 4 2229 22711	Meter PCB Assy VR C-100K	1 4
C607		CAPACITORS		C801,802		CAPACITORS	
C605		Electrolytic 470 μ F 10V	1	803,804		Electrolytic 1 μ F 50V	4
C606,609		Electrolytic 470 μ F 63V	1				
608,610		Electrolytic 470 μ F 35V	4				
C601,602		Ceramic 0.01 μ F 250V +80-20%	4				
603,604							
R606		RESISTORS		R805,806		RESISTORS	
R607		Carbon 220 Ω 1/4W $\pm$ 10%	1	807,808		Carbon 1K Ω 1/4W $\pm$ 10%	4
R602		Carbon 2.2K Ω 1/4W $\pm$ 10%	1	R813,814		Carbon 1.2K Ω 1/4W $\pm$ 10%	4
		Oxide Metal Film 220 Ω	1	815,816		Carbon 15K Ω 1/4W $\pm$ 10%	4
		1W $\pm$ 10%		R809,810			
R604		Oxide Metal Film 390 Ω	1	811,812			
		1W $\pm$ 10%					
R603		Oxide Metal Film 470 Ω	1				
		2W $\pm$ 10%					
R605		Oxide Metal Film 560 Ω	1				
		1W $\pm$ 10%					
R601		Oxide Metal Film 820 Ω	1				
		3W $\pm$ 10%					
		SEMICONDUCTORS				SEMICONDUCTORS	
D605		Diode WZ-094	1	D801,802	202 5 9110 18820	Diode 1S188FM-1	4
D601,602	202 5 2700 11810	Diode DS118D	4	803,804			
603,604				D805,806	205 5 9020 43011	Diode DS430	4
				807,808			

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

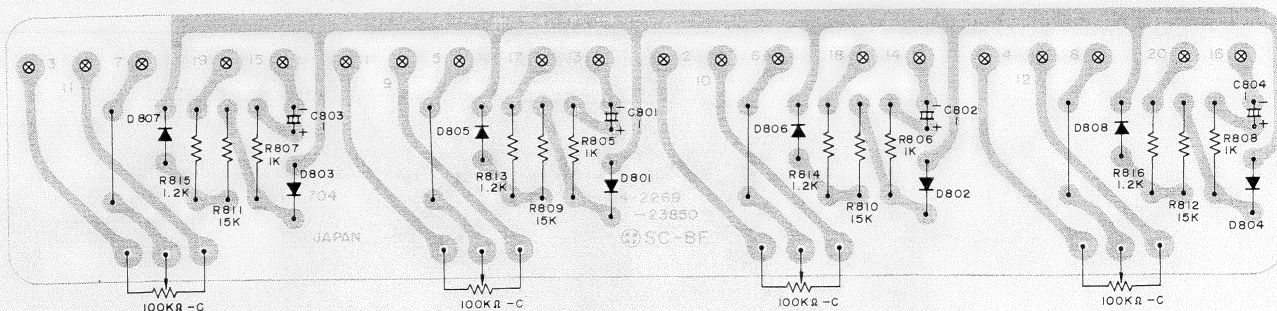
POWER SUPPLY P.C.B. BOTTOM VIEW



D601 ~ D604 DS-118 D605 WZ-094

METER P.C.B. BOTTOM VIEW

D801 ~ D804 1S188A D805 ~ D808 DS-430

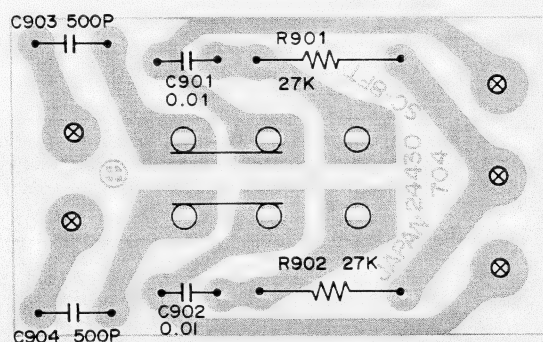


PARTS LIST

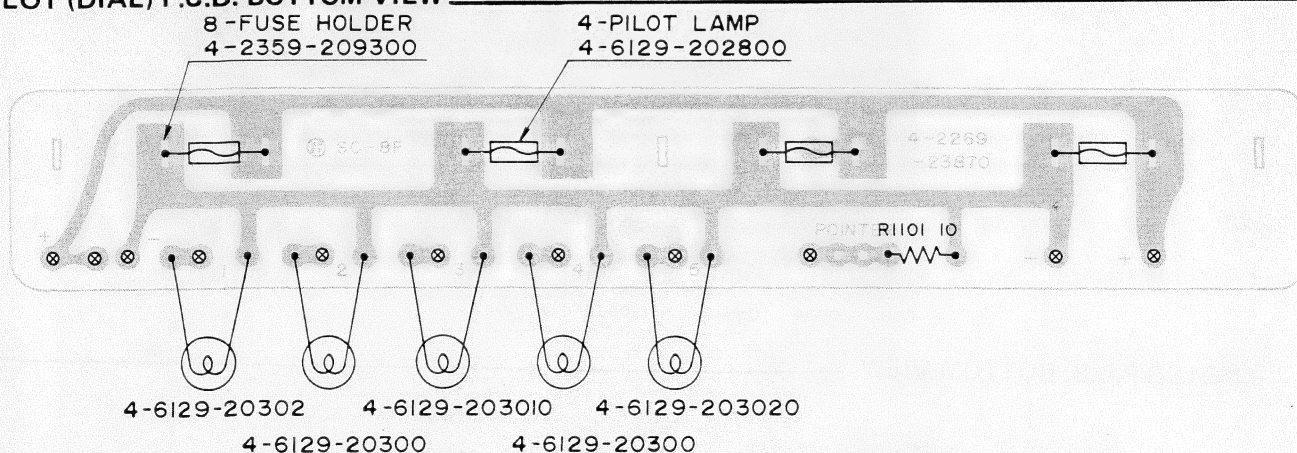
Key No.	Part No.	Description	Q'ty	Key No.	Part No.	Description	Q'ty
LOUDNESS P.C.B. ASSY				PILOT (DIAL) P.C.B. ASSY			
109	131 0 4001 34501 4 2319 22333	Loudness PCB Switch Lever 6P	1 1	107	131 0 4001 32101 4 2359 20930 4 6129 20280 4 6129 20300 4 6129 20301 4 6129 20302	Pilot Dial PCB Fuse Holder Pilot Lamp Pilot Lamp, 2/4 Chl. Pilot Lamp, 2/4 Chl. Pilot Lamp, 2/4 Chl.	1 8 4 2 1 2
C903,904 C901,902		CAPACITORS Ceramic 500pF 50V $\pm 10\%$ Mylar 0.01 μ F 50V $\pm 20\%$	2 2	R1101		Resistor Carbon 10 Ω 1/4W $\pm 10\%$	1
R901,902		RESISTORS Carbon 27K Ω 1/4W $\pm 10\%$	2	PILOT (METER) P.C.B. ASSY			
				108	131 0 4001 32200 4 2359 20930 4 6129 20280	Pilot Meter PCB Fuse Holder Pilot Lamp	1 8 4

NOTES: 1. Part orders must contain Model Number, Part Number and Description.
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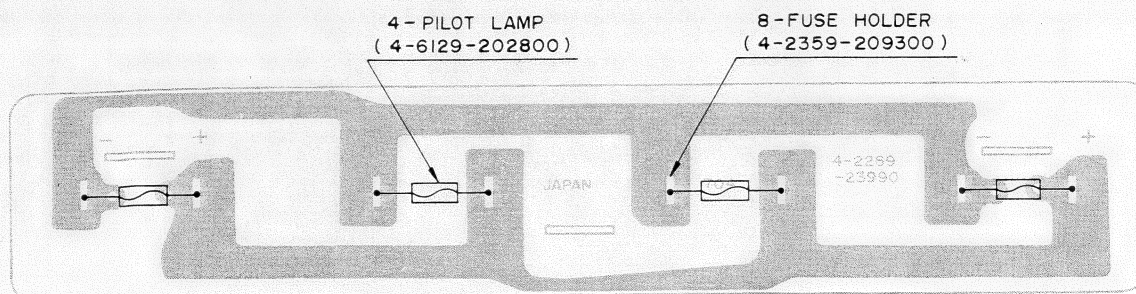
LOUDNESS P.C.B. BOTTOM VIEW



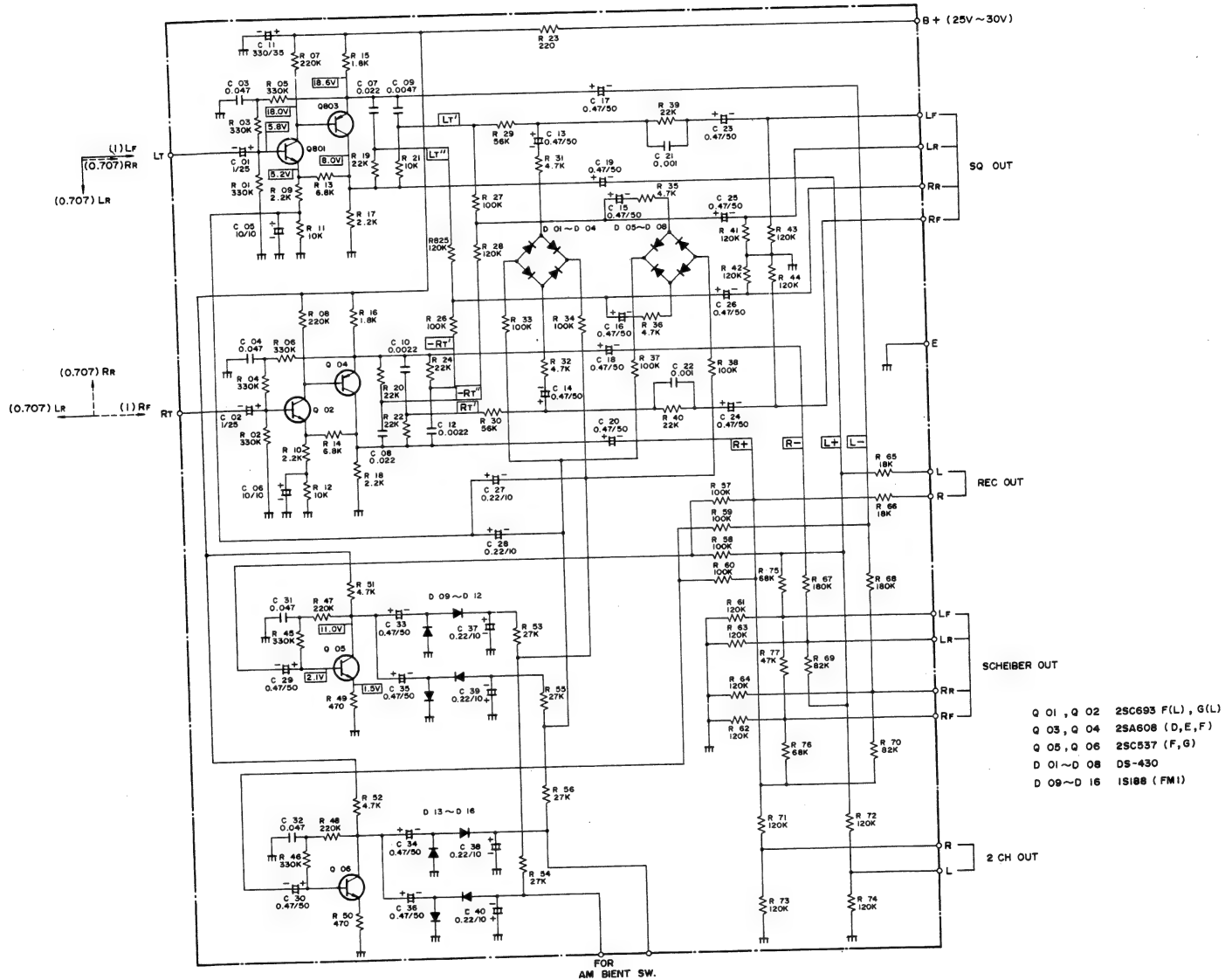
PILOT (DIAL) P.C.B. BOTTOM VIEW

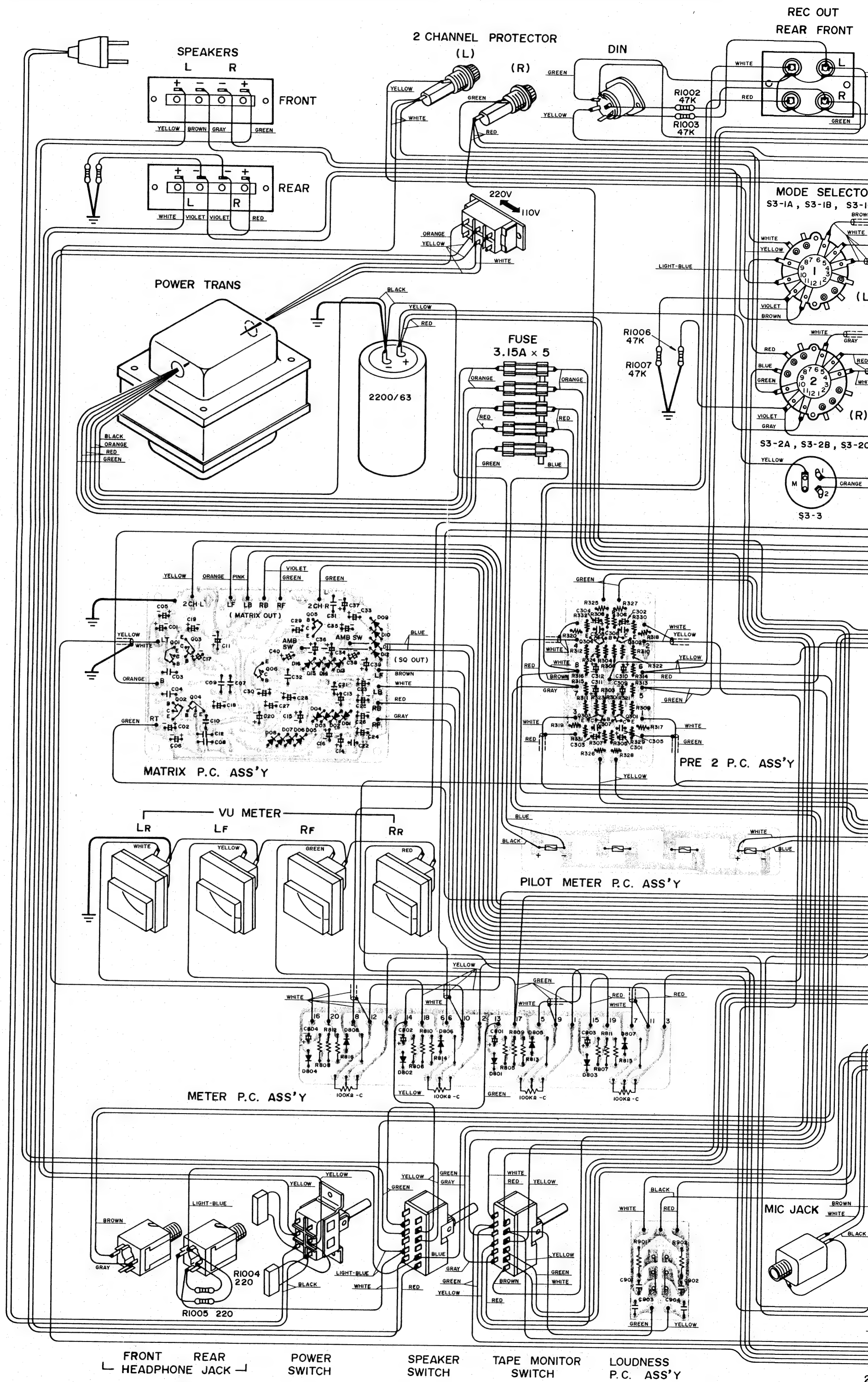


PILOT (METER) P.C.B. BOTTOM VIEW

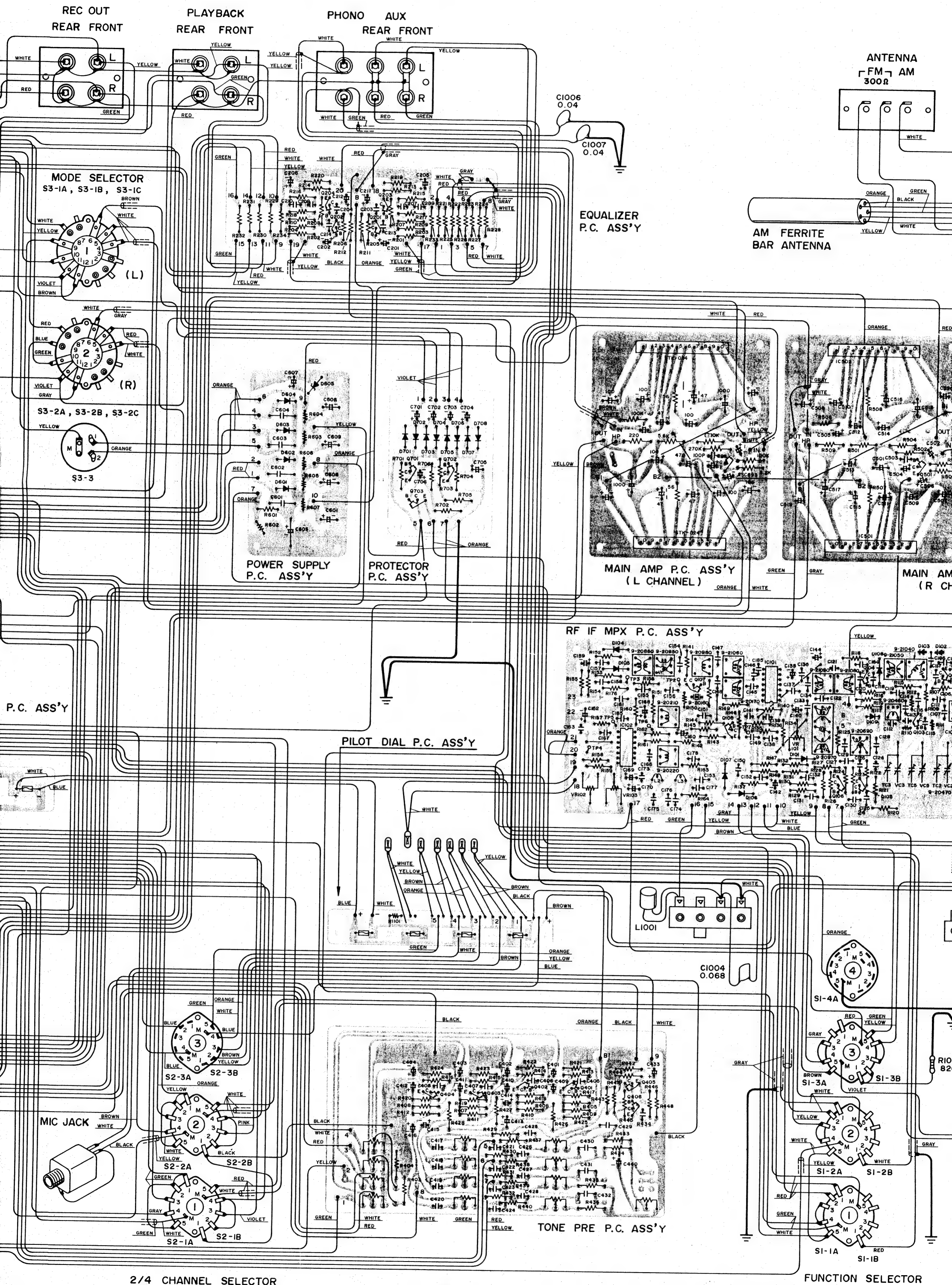


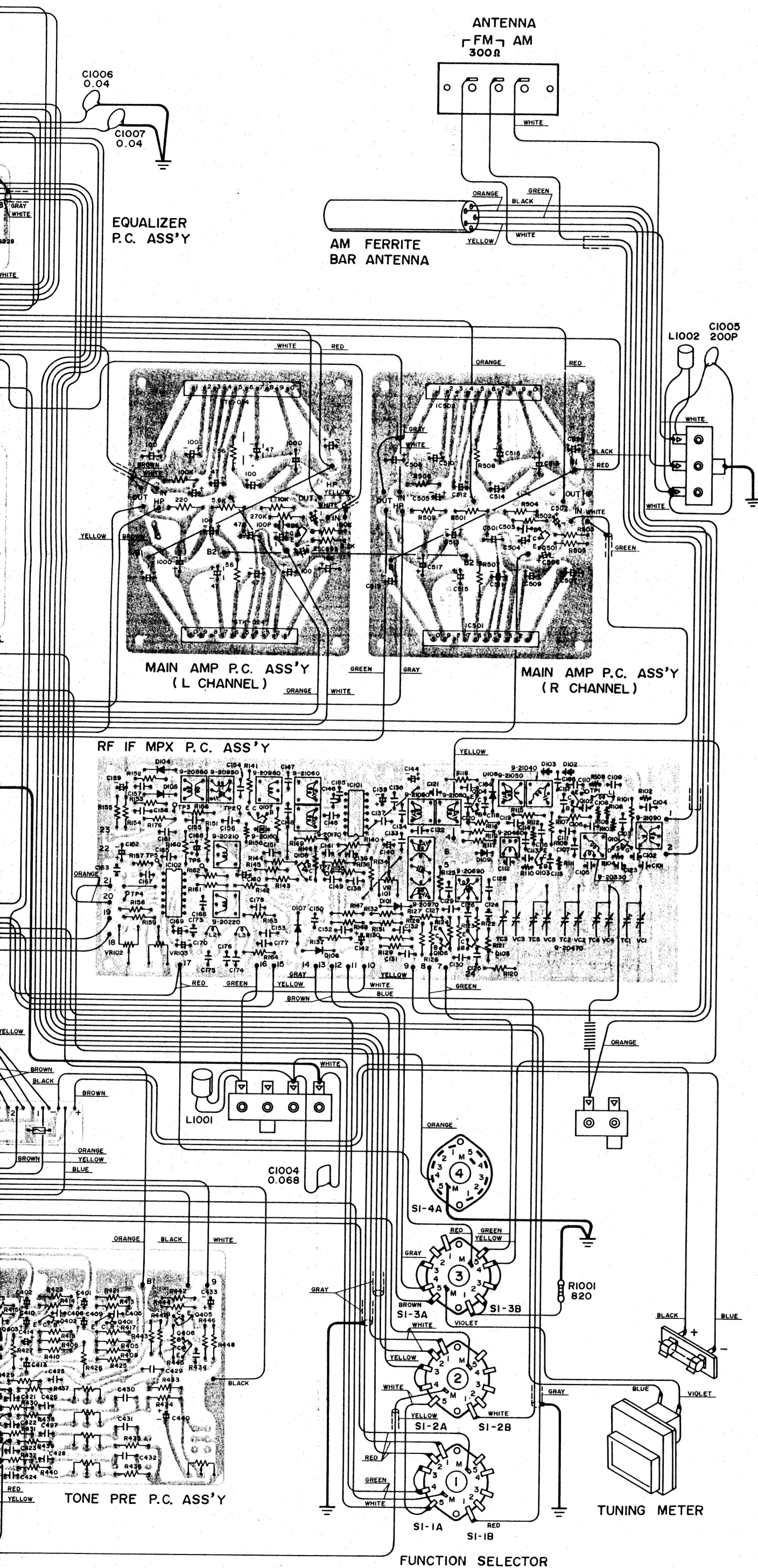
SCHEMATIC DIAGRAM (MATRIX SECTION)





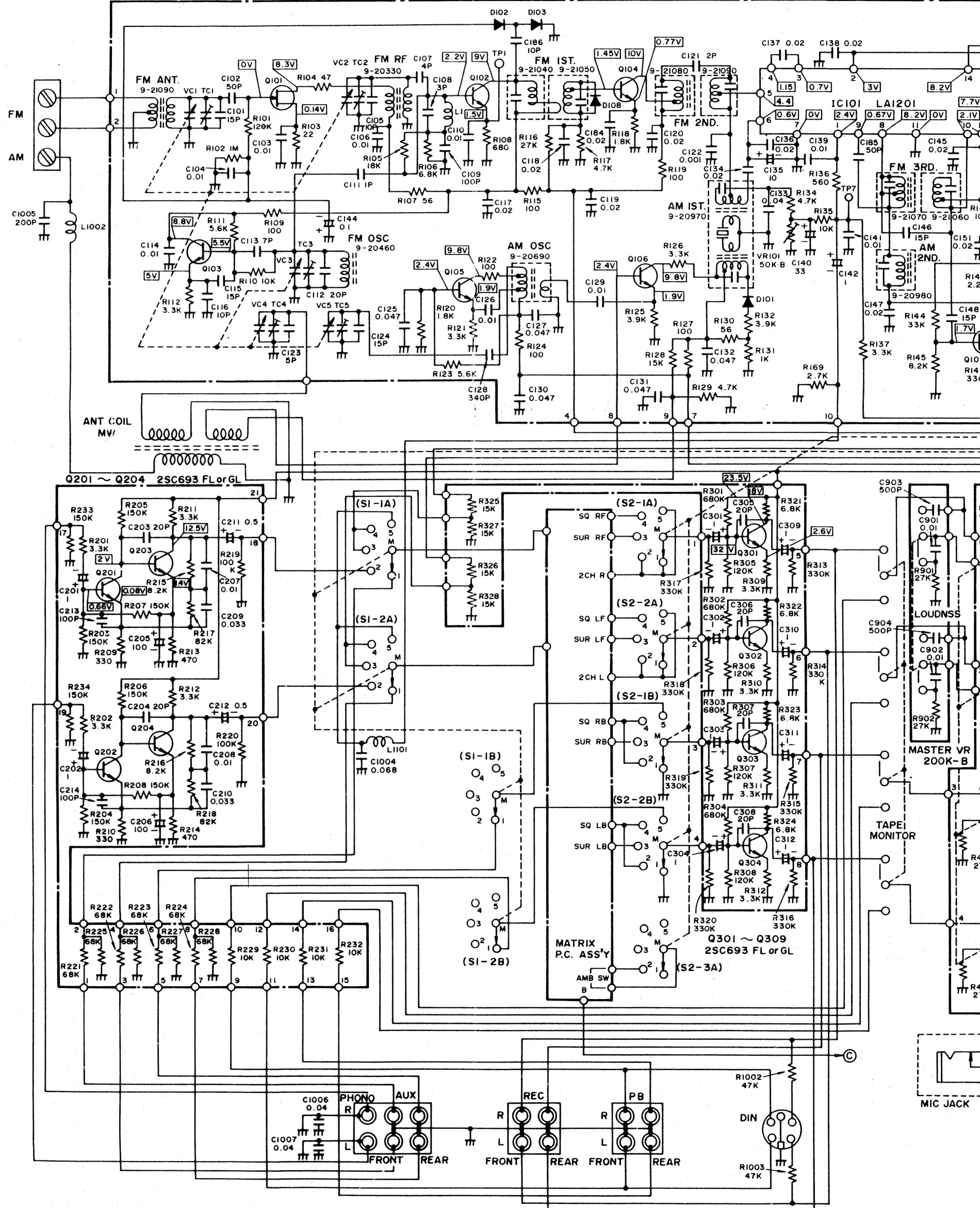
MODEL DCX3300KB WIRING DIAGRAM



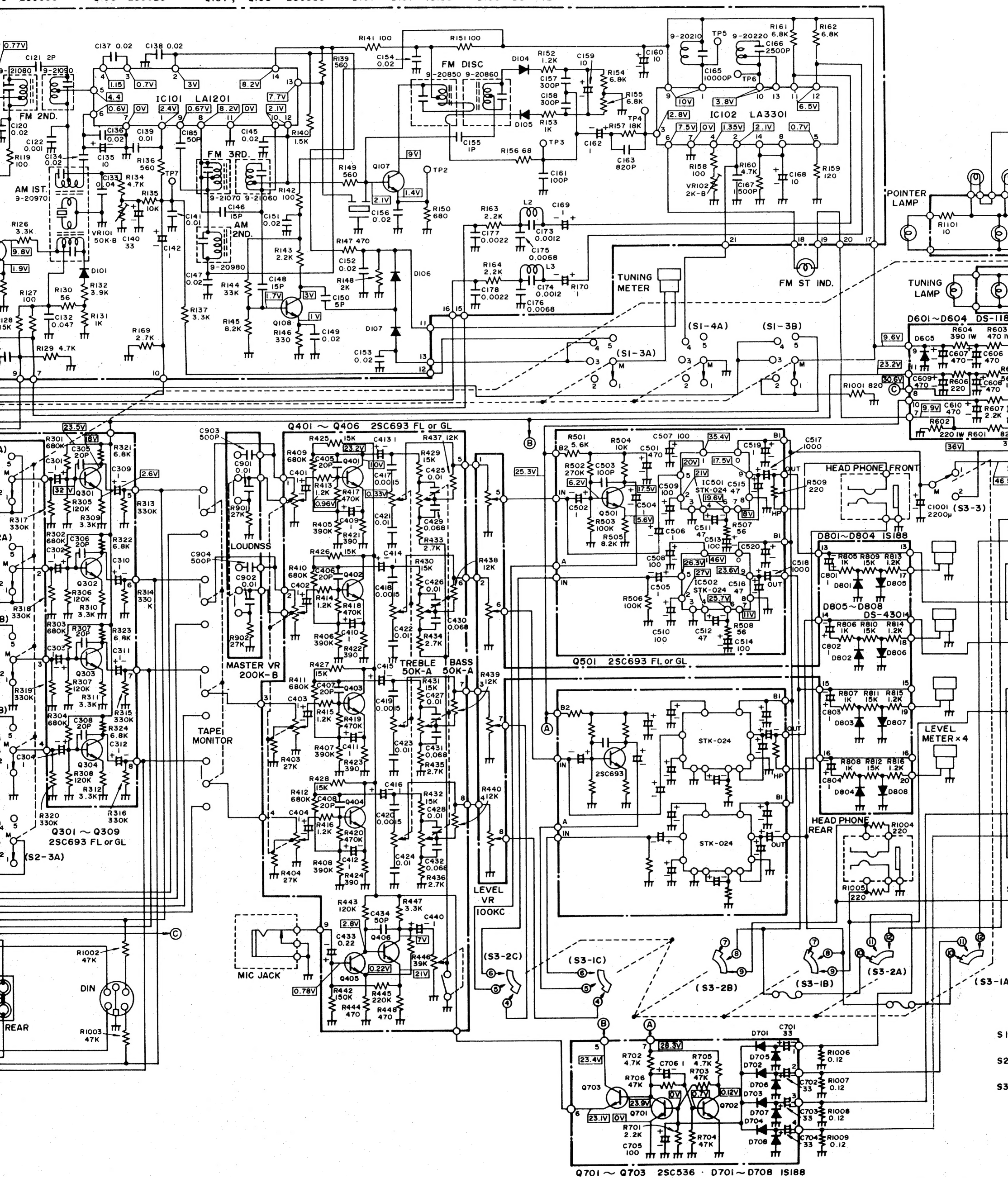


MODEL DCX3300

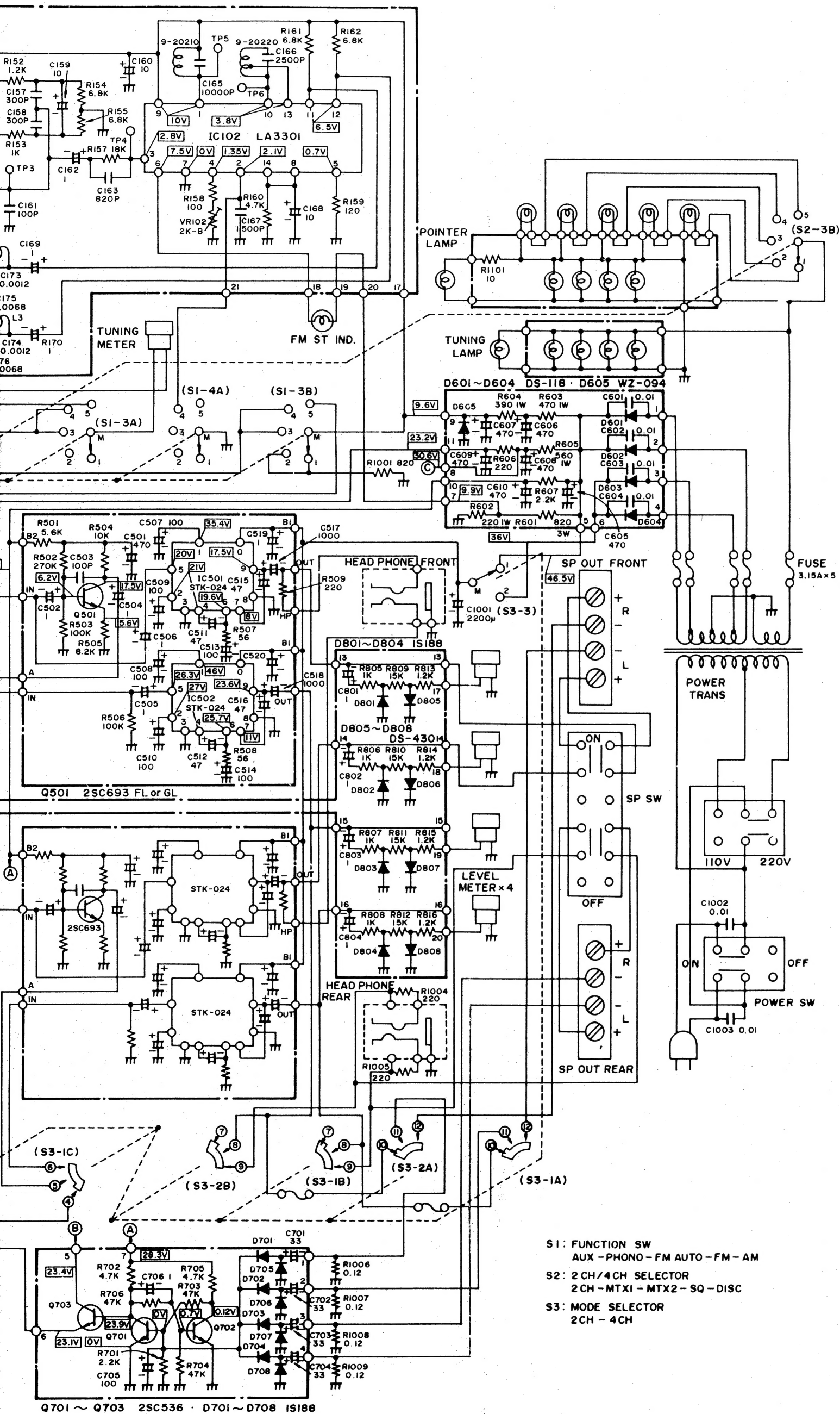
Q101 2SK41 · Q102 2SC668 · Q103 2SC930 · Q104 2SC930 · Q105 2SC536 · Q106 2SC929 · Q107, Q108



5 2SC536 · Q106 2SC929 · Q107, Q108 2SC930 · D101 ~ D107 1S188 · D108 DS-442



Q701 ~ Q703 2SC536 · D701 ~ D708 1S188



- S1: FUNCTION SW
AUX - PHONO - FM AUTO - FM - AM
- S2: 2 CH/4 CH SELECTOR
2 CH - MTX1 - MTX2 - SQ - DISC
- S3: MODE SELECTOR
2 CH - 4 CH

Q701 ~ Q703 2SC536 · D701 ~ D708 IS188