

SERVICE

MANUAL

PROFESSIONAL SOUND REINFORCED

AMPLIFIER

P-2000/3200

interM

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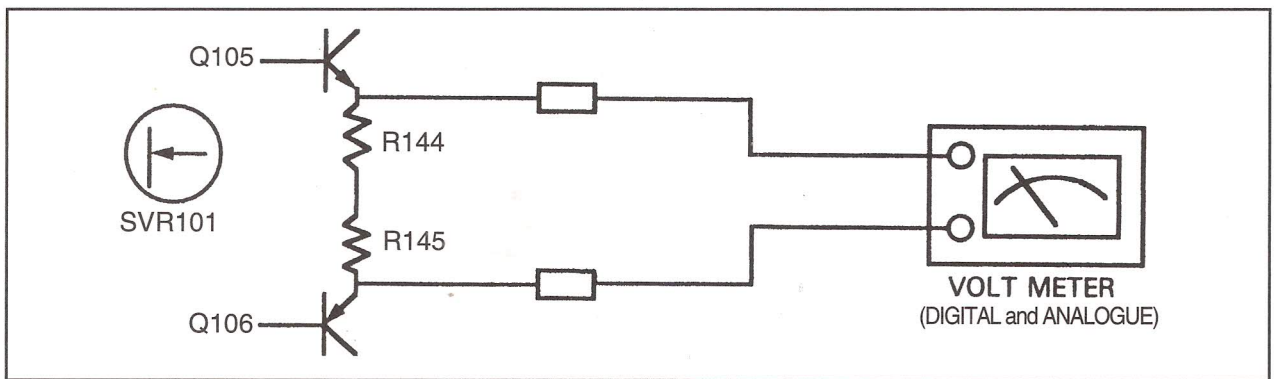
ELECTRICAL ADJUSTMENT PROCEDURE

■ REQUIRED TEST EQUIPMENT

1. Distortion Analyzer with an 80GHz filter
2. Function Generator
3. 20MHz Oscilloscope
4. Digital Multimeter
5. High Power Load (2000W (2Ω)-1EA, 1000W(Ω)-4EA)

■ IDLE CURRENT

1. Setting
Set the master volume controls minimum.
2. Connection



CHANNEL 2

3. Adjustment
Adjust SVR101 so that the voltage through the R144, 145 become 150mV~200mV.

■ TWO-OHM SHORT CIRCUIT

1. Setting
Select a 4-ohm load and verify even clipping on both channels.
Select a 2-ohm load, which will show substantial clipping.
2. Adjustment
Adjust the channel volume control to the threshold of clipping.
Adjust SVR102 and SVR103 for a small amount of current limiting at the peaks of the output waveform.
Apply a short circuit to the output of the channel. The AC line current draw should be approximately 3~4.5 amps (RMS) per channel.

SPECIFICATIONS

■ ELECTRICAL

· Rated Output (1KHz, 1% THD)	
P-3200	
8Ω (per channel).....	750W
4Ω (per channel).....	1200W
2Ω (per channel).....	1400W
8Ω (bridged mono)	2400W
4Ω (bridged mono)	3200W
P-2000	
8Ω (per channel).....	500W
4Ω (per channel).....	750W
2Ω (per channel).....	1000W
8Ω (bridged mono)	1500W
4Ω (bridged mono)	2000W
· Input Sense	1Vrms
· T.H.D	0.1%
· Frequency Response	20Hz~20KHz, ±0.5dB
· S/N	-100dB
· Damping Factor.....	better than 200
· Indicators	
Power	Green
Level	Yellow
Clip Limiter	Red
Temp Prot.....	Red
· Connectors	
Input	COMBO, XLR-male jack
Output.....	5 Way Binding Post : Speakon
· Protection.....	Full short, RF prot, DC fault Thermal limiting/Muting ON/OFF muting, Output fuse, etc.
· Output Circuit	
P-3200.....	3 step high efficiency circuit
P-2000	2 step high efficiency circuit
· Cooling Method.....	Continuous variable speed fan, front-to-rear flow

■ GENERAL

· Power Source	AC 120~240V, 50/60Hz
· Power Consumption.....	P-3200 : 3860W P-2000 : 2800W
· Weight	P-3200: 25Kg P-2000: 24.5Kg
· Dimensions	482(W) × 132(H) × 437(D)mm

* Specifications and design subject to change without notice for improvements.

ELECTRICAL PARTS LIST

Ref No.	Part No.	Description	Value
PCB INPUT B'D (4005186210)			
C401	3509221130-T	CAP CE SL 220PF 50V J	220P
C402	3509471130-T	CAP CE SL 470PF 50V J	470P
C403	3509471130-T	CAP CE SL 470PF 50V J	470P
C404	3509104530-T	CAP CE F 0.1UF 50V Z	0.1
C405	3509104530-T	CAP CE F 0.1UF 50V Z	0.1
C406	3509471130-T	CAP CE SL 470PF 50V J	470P
C407	3509471130-T	CAP CE SL 470PF 50V J	470P
CN401	4428595005	5267-05A/2.5MM/MH5264	5P
CN402	4428595005	5267-05A/2.5MM/MH5264	5P
FB406	2648609900-T	FERITE BEAD H5B	FB
FB407	2648609900-T	FERITE BEAD H5B	FB
FB408	2648609900-T	FERITE BEAD H5B	FB
FB409	2648609900-T	FERITE BEAD H5B	FB
JK401	4438090310	JACK/XLR/F,COMBO	XLR
JK402	4438094110	XLR MALE 3 PIN	JACK
JK403	4438090310	JACK/XLR/F,COMBO	XLR
JK404	4438094110	XLR MALE 3 PIN	JACK
R401	3009243973	RES CF 24K 1/5W J N CDC-9300	24K
R402	3009203973	RES CF 20K 1/5W J N	20K
SW401	4618999910	SW/8P, SLIDE/2POLE	3-POS
PCB MAIN B'D (4005192000)			
AN101	4355806500	CON ASS' Y 5P	CON 5P
AN104	4355813110	CONNECTOR ASS' Y 13P(LED METER)	CON 13P
C100	3609103120-T	CAP MA 0.01UF 100V	0.01M
C101	3619473153	CAP POLY TM 0.047UF 400V	0.047/400
C102	3619473153	CAP POLY TM 0.047UF 400V	0.047/400
C103	3619473153	CAP POLY TM 0.047UF 400V	0.047/400
C104	3619473153	CAP POLY TM 0.047UF 400V	0.047/400
C105	3619473153	CAP POLY TM 0.047UF 400V	0.047/400
C106	3619473153	CAP POLY TM 0.047UF 400V	0.047/400
C107	3619473153	CAP POLY TM 0.047UF 400V	0.047/400
C108	3619473153	CAP POLY TM 0.047UF 400V	0.047/400
C109	3619473153	CAP POLY TM 0.047UF 400V	0.047/400
C110	3619473153	CAP POLY TM 0.047UF 400V	0.047/400
C111	3619473153	CAP POLY TM 0.047UF 400V	0.047/400
C112	3619473153	CAP POLY TM 0.047UF 400V	0.047/400
C113	3409210071-T	CAP AF RSG 10UF 50V 5P	10/50
C114	3409210171-T	CAP AF RSG 100UF 50V 8P	100/50
C115	3409210071-T	CAP AF RSG 10UF 50V 5P	10/50
C116	3409210071-T	CAP AF RSG 10UF 50V 5P	10/50
C117	3409247139	CAP AF RG 470UF 16V (105)	470/16
C118	3609332120-T	CAP MA 0.0033UF 100V	0.0033M
C119	3509470130-T	CAP CE SL 47PF 50V J	47P
C120	3409847041-T	CAP AF NP 47UF 25V 8P	47/25 NP
C121	3409247071-T	CAP AF RSG 47UF 50V 6P	47/50
C122	3409247071-T	CAP AF RSG 47UF 50V 6P	47/50
C123	3509470130-T	CAP CE SL 47PF 50V J	47P
C124	3409210171-T	CAP AF RSG 100UF 50V 8P	100/50
C125	3409210171-T	CAP AF RSG 100UF 50V 8P	100/50
C126	3408222271	CAP RSA 2200UF 50V SNAP 22P	2200/50
C127	3408222271	CAP RSA 2200UF 50V SNAP 22P	2200/50
C128	3409210071-T	CAP AF RSG 10UF 50V 5P	10/50
C129	3409247071-T	CAP AF RSG 47UF 50V 6P	47/50
C130	3409247071-T	CAP AF RSG 47UF 50V 6P	47/50
C131	3409821121-T	CAP NP AF 220UF 10V	220/10 NP
C132	3409247139	CAP AF RG 470UF 16V(105)	470/16
C133	3409247139	CAP AF RG 470UF 16V(105)	470/16
C134	3409847041-T	CAP AF NP 47UF 25V 8P	47/25 NP
C135	3659180179	CAP MICA DM15 18PF 500V J	18P
C136	3609154122-T	CAP MA 0.15UF 100V MINI	0.15M
C137	3609222120-T	CAP MA 0.0022UF 100V J	0.0022M
C138	3509680130-T	CAP CE SL 68PF 50V J	68P
C139	3609103120-T	CAP MA 0.01UF 100V	0.01M
C140	3609332120-T	CAP MA 0.0033UF 100V	0.0033M
C141	3419515379	CAP E LPW 15000UF 50V JAMICON	15000/50
C142	3419515379	CAP E LPW 15000UF 50V JAMICON	15000/50
C143	3419515379	CAP E LPW 15000UF 50V JAMICON	15000/50

Ref No.	Part No.	Description	Value
C144	3419515379	CAP E LPW 15000UF 50V JAMICON	15000/50
C145	3419515379	CAP E LPW 15000UF 50V JAMICON	15000/50
C146	3419515379	CAP E LPW 15000UF 50V JAMICON	15000/50
C147	3419515379	CAP E LPW 15000UF 50V JAMICON	15000/50
C148	3419515379	CAP E LPW 15000UF 50V JAMICON	15000/50
C149	3419515379	CAP E LPW 15000UF 50V JAMICON	15000/50
C150	3419515379	CAP E LPW 15000UF 50V JAMICON	15000/50
C151	3419515379	CAP E LPW 15000UF 50V JAMICON	15000/50
C152	3419515379	CAP E LPW 15000UF 50V JAMICON	15000/50
C153	3609104140-T	CAP MA 0.1UF 200V J SMALL	0.1M
C154	3409247071-T	CAP AF RSG 47UF 50V 6P	47/50
C155	3609104140-T	CAP MA 0.1UF 200V J SMALL	0.1M
C156	3409247071-T	CAP AF RSG 47UF 50V 6P	47/50
C157	3509681130-T	CAP CE B 680PF 50V K	680P
C158	3609222120-T	CAP MA 0.0022UF 100V J	0.0022M
C159	3609104140-T	CAP MA 0.1UF 200V J SMALL	0.1M
C160	3609104140-T	CAP MA 0.1UF 200V J SMALL	0.1M
C161	3609104140-T	CAP MA 0.1UF 200V J SMALL	0.1M
C162	3409247139	CAP AF RG 470UF 16V (105)	470/16
C163	3409247139	CAP AF RG 470UF 16V (105)	470/16
C164	3509100130-T	CAP CE SL 10PF 50V D	10P
C170	3609104140-T	CAP MA 0.1UF 200V J SMALL	0.1M
C1000	360222120-T	CAP MA 0.0022UF 100V J	0.0022M
CN102	4428556212	CONNECTOR WAFER AMP 12P (6.5MM)	CON12P
CN103		NOT USED	
CN104		NOT USED	
CN105	4428596604	LOCK WAFER LW-1143-04P	4P
CN106	4428596605	LOCK WAFER LW-1143-05P	5P
D101	2058100996	DIODE RECTIFIER LT1N4006(T/R)	1N4006
D102	2058100996	DIODE RECTIFIER LT1N4006(T/R)	1N4006
D103	2058100996	DIODE RECTIFIER LT1N4006(T/R)	1N4006
D104	2058100996	DIODE RECTIFIER LT1N4006(T/R)	1N4006
D105	2058100996	DIODE RECTIFIER LT1N4006(T/R)	1N4006
D106	2058100996	DIODE RECTIFIER LT1N4006(T/R)	1N4006
D107	2058100996	DIODE RECTIFIER LT1N4006(T/R)	1N4006
D108	2058512140	DIODE ZENER 6.2V 1W(1N4735A)	1N4735 6.2V
D109	2058304100	DIODE 1N4148	1N4148
D110	2058512140	DIODE ZENER 6.2V 1W(1N4735A)	1N4735 6.2V
D111	2058304100	DIODE 1N4148	1N4148
D112	2058100996	DIODE RECTIFIER LT1N4006(T/R)	1N4006
D113	2058501076	DIODE ZENER UZ-7.5BM	7.5V
D114	2058501076	DIODE ZENER UZ-7.5BM	7.5V
D115	2058514218	DIODE ZENER 1N 5955, (PANJIT)	1N5955A
D116	2058514218	DIODE ZENER 1N 5955, (PANJIT)	1N5955A
D117	2058300996	DIODE MUR1520 MOTOROLA	MUR1520
D118	2058300996	DIODE MUR1520 MOTOROLA	MUR1520
D119	2058300996	DIODE MUR1520 MOTOROLA	MUR1520
D120	2058300996	DIODE MUR1520 MOTOROLA	MUR1520
D121	2058100105	DIODE LT1N5402 F	1N5402
D122	2058100105	DIODE LT1N5402 F	1N5402
D123	2058100985	DIODE BRIDGE W04G LITEON	PB104M
D124	2058100978	DIODE BRIDGE GL3504 PANJIT	GL3504
D125	2058100978	DIODE BRIDGE GL3504 PANJIT	GL3504
D126	2058100978	DIODE BRIDGE GL3504 PANJIT	GL3504
D127	2058510150	DIODE ZENER UZP-15B (13.9, 15.9)	UZP15BM
D128	2058510150	DIODE ZENER UZP-15B (13.9, 15.9)	UZP15BM
D129	2058100996	DIODE RECTIFIER LT1N4006(T/R)	1N4006
D130	2058304100	DIODE 1N4148	1N4148
D131	2058304100	DIODE 1N4148	1N4148
D132	2058100996	DIODE RECTIFIER LT1N4006(T/R)	1N4006
IC101	2178304089	IC HYBRID CONTROL(PSR-2800)	HIC
IC102	2178304091	IC HYBRID SWITCHING A	HIC
IC103	2178304091	IC HYBRID SWITCHING A	HIC
IC104	2178304090	IC HYBRID SWITCHING B	HIC
IC105	2178304090	IC HYBRID SWITCHING B	HIC
IC106	2118031107	IC KA2284 S.S	KA2284
IC107	2168220982	IC IN 5532 (SIGNETICS)	5532
IC108	2168220982	IC IN 5532 (SIGNETICS)	5532
IC109	2168220982	IC IN 5532 (SIGNETICS)	5532
IC110	2168640988	IC 7815 SAMSUNG	7815
IC111	2168640987	IC 7915 SAMSUNG	7915

Ref No.	Part No.	Description	Value
IC112	2408000101	PHOTO COUPER NTL5C4(VACTAC)	5224
L101	2648099800	COIL INDUCTOR 2.2UF	2.2UF
PSW101	2423000999	SW POLY 50VX110 JX3K-T	JX3K-T
PSW102	2423000999	SW POLY 50VX110 JX3K-T	JX3K-T
Q101	2028448100-T	TR NPN MPSW01A MOTOROLA	MPSW01
Q102	2028448098-T	TR NPN 2N4410 MOTOROLA	2N4410
Q103	2028448098-T	TR NPN 2N4410 MOTOROLA	2N4410
Q104	2028448098-T	TR NPN 2N4410 MOTOROLA	2N4410
Q105	2028407995	TR NPN E15032 (MOTOROLA)	E15032
Q106	2028107995	TR PNP E15033 (MOTOROLA)	E15033
Q107	2028107118	TR PNP 2SA1302 (0) 2SA1215	2SA1302
Q108	2028107118	TR PNP 2SA1302 (0) 2SA1215	2SA1302
Q109	2028107118	TR PNP 2SA1302 (0) 2SA1215	2SA1302
Q110	2028107118	TR PNP 2SA1302 (0) 2SA1215	2SA1302
Q111	2028107118	TR PNP 2SA1302 (0) 2SA1215	2SA1302
Q112	2028107118	TR PNP 2SA1302 (0) 2SA1215	2SA1302
Q113	2028407122	TR NPN 2SC3281 , 0/WACC	2SC3281
Q114	2028407122	TR NPN 2SC3281 , 0/WACC	2SC3281
Q115	2028407122	TR NPN 2SC3281 , 0/WACC	2SC3281
Q116	2028407122	TR NPN 2SC3281 , 0/WACC	2SC3281
Q117	2028407122	TR NPN 2SC3281 , 0/WACC	2SC3281
Q118	2028407122	TR NPN 2SC3281 , 0/WACC	2SC3281
Q119	2048209999	FET IRFZ44 (SEC)	IRFZ44
Q120	2048209999	FET IRFZ44 (SEC)	IRFZ44
Q121	2048209999	FET IRFZ44 (SEC)	IRFZ44
Q122	2048209999	FET IRFZ44 (SEC)	IRFZ44
Q123	2048209999	FET IRFZ44 (SEC)	IRFZ44
Q124	2048209999	FET IRFZ44 (SEC)	IRFZ44
Q125	2048209999	FET IRFZ44 (SEC)	IRFZ44
Q126	2048209999	FET IRFZ44 (SEC)	IRFZ44
R101	3009152973	RES CF 1.5K 1/5W J N	1.5K
R102	3009103973	RES CF 10K 1/5W J N	10K
R103	3009105973	RES CF 1M 1/5W J N	1M
R104	3009103973	RES CF 10K 1/5W J N	10K
R105	3009101973	RES CF 100 1/5W J N	100
R106	3009392973	RES CF 3.9K 1/5W J N	3.9K
R107	3009681973	RES CF 680K 1/5W J N	680
R108	3009152973	RES CF 1.5K 1/5W J N	1.5K
R109	3009101973	RES CF 100 1/5W J N	100
R110	3003100953	RES CF 1K 1/5W F N	1K 1%
R111	3009472973	RES CF 4.7K 1/5W J N	4.7K
R112	3003100953	RES CF 1K 1/5W F N	1K 1%
R113	3009471973	RES CF 470 1/5W J N	470
R114	3009334973	RES CF 330K 1/5W J N	330K
R115	3002610953	RES CF 61K 1/5W F N	61K 1%
R116	3009273973	RES CF 27K 1/5W J N	27K
R117	3039103572-F	RES MO 10K 2W J N	10K 2W
R118	3039103572-F	RES MO 10K 2W J N	10K 2W
R119	3039100572-F	RES MO 10 2W J N	10 2W
R120	3039471572-F	RES MO 470 2W J N	470 2W
R121	3009682973	RES CF 6.8K 1/5W J N	6.8K
R122	3004405953	RES CF 405 1/5W F N	405 1%
R123	3002303334	RES CF 30K 1/2W FN 1%	30K 1/2W
R124	3009753973	RES CF 75K 1/5W J N	75K
R125	3039470572-F	RES MO 47 2W J N	47 2W
R126	3039473574	RES MO 47K 2W	47K 2W
R127	3004580953	RES CF 580 1/5W F N	580 1%
R128	3039220572-F	RES MO 22 2W J N	22 2W
R129	3039220572-F	RES MO 22 2W J N	22 2W
R130	3039223574	RES MO 22K 2W	22K 2W
R131	3039279572-F	RES MO 2.7 2W	2.7 2W
R132	3039220572-F	RES MO 22 2W J N	22 2W
R133	3039220572-F	RES MO 22 2W J N	22 2W
R134	3039279572-F	RES MO 2.7 2W	2.7 2W
R135	3039223574	RES MO 22K 2W	22K 2W
R136	3009202973	RES CF 2K 1/5W J N	2K
R137	3009153973	RES CF 15K 1/5W J N	15K
R138	3039754574	RES MO 750K 2W	750K 2W
R139	3004332953	RES CF 332 1/5W F N	332 1%
R140	3003133953	RES CF 1K 1/5W F N	1K 1%
R141	3003100953	RES CF 1K 1/5W F N	1K 1%

Ref No.	Part No.	Description	Value
R142	3039754574	RES MO 750K 2W	750K 2W
R143	3004332953	RES CF 332 1/5W F N	332 1%
R144	3039479572-F	RES MO 4.7 2W J N	4.7 2W
R145	3039479572-F	RES MO 4.7 2W J N	4.7 2W
R146	3039220572-F	RES MO 22 2W J N	22 2W
R147	3059228673	RES CE 0.22 3W J ROA T.H	0.22 3W
R148	3059228673	RES CE 0.22 3W J ROA T.H	0.22 3W
R149	3059228673	RES CE 0.22 3W J ROA T.H	0.22 3W
R150	3059228673	RES CE 0.22 3W J ROA T.H	0.22 3W
R151	3059228673	RES CE 0.22 3W J ROA T.H	0.22 3W
R152	3059228673	RES CE 0.22 3W J ROA T.H	0.22 3W
R153	3039220572-F	RES MO 22 2W J N	22 2W
R154	3059228673	RES CE 0.22 3W J ROA T.H	0.22 3W
R155	3059228673	RES CE 0.22 3W J ROA T.H	0.22 3W
R156	3059228673	RES CE 0.22 3W J ROA T.H	0.22 3W
R157	3059228673	RES CE 0.22 3W J ROA T.H	0.22 3W
R158	3059228673	RES CE 0.22 3W J ROA T.H	0.22 3W
R159	3059228673	RES CE 0.22 3W J ROA T.H	0.22 3W
R160	3039100674	RES MO 10 3W	10 3W
R161	3039100674	RES MO 10 3W	10 3W
R162	3039100674	RES MO 10 3W	10 3W
R163	3039100674	RES MO 10 3W	10 3W
R164	3039100674	RES MO 10 3W	10 3W
R165	3039302574	RES MO 3K 2W	3K 2W
R166	3039302574	RES MO 3K 2W	3K 2W
R167	3039279572-F	RES MO 2.7 2W	2.7 2W
R168	3039229572-F	RES MO 22 2W J N	22 2W
R169	3039229572-F	RES MO 22 2W J N	22 2W
R170	3039279572-F	RES MO 2.7 2W	2.7 2W
R171	3039302574	RES MO 3K 2W	3K 2W
R172	3039220572-F	RES MO 22 2W J N	22 2W
R173	3039220572-F	RES MO 22 2W J N	22 2W
R174	2438200040	POSISTOR P42T7D100B04 P-3200	PTC-60C
R175	3039471572-F	RES MO 470 2W J N	470 2W
R176	3039479572-F	RES MO 4.7 2W J N	4.7 2W
R1000	3009470973	RES CF 47 1/5W J N	47
RA101	3099103273	RES ARRAY 8POL 10K*4	10K
RA102	3099103273	RES ARRAY 8POL 10K*4	10K
RA103	3099102273	RES ARRAY 8POL 1K*4	1K
RA104	3099102273	RES ARRAY 8POL 1K*4	1K
RA105	3099103273	RES ARRAY 8POL 10K*4	10K
RA106	3099102273	RES ARRAY 8POL 1K*4	1K
SVR101	3248310120	RES SEMI CS 100B 10/5	100B
SVR102	3248310320	RES SEMI CS 10KB 10/5	10KB
SVR103	3248310320	RES SEMI CS 10KB 10/5	10KB
T1	4465998210	TERMINAL (250) PCB TAB	250TAB
T2	4465998210	TERMINAL (250) PCB TAB	250TAB
T3	4465998210	TERMINAL (250) PCB TAB	250TAB
T4	4465998210	TERMINAL (250) PCB TAB	250TAB
T5	4465998210	TERMINAL (250) PCB TAB	250TAB
T6	4465998210	TERMINAL (250) PCB TAB	250TAB
T7	4465998210	TERMINAL (250) PCB TAB	250TAB
T8	4465998210	TERMINAL (250) PCB TAB	250TAB
TH102	2438200060	THERMISTOR NTCS5D-400KPC	50Ω 25C
PCB OUTPUT B'D (4005186200)			
AN201	4355813310	CONNECTOR ASS' Y 8P (3.96MM)	CON8P
C201	3409222141	CAP AF RSA 220UF 25V 10P	220/25
C202	3409847081-T	CAP NP 47UF 63V 10P	47NP
C203	3609103120-T	CAP MA 0.01UF 100V	0.01M
C204	3509471130-T	CAP CE SL 470PF 50V J	470P
C205	3509471130-T	CAP CE SL 470PF 50V J	470P
D201	2058100996	DIODE RECTIFIER LT1N4006(T/R)	1N4006
D202	2058100996	DIODE RECTIFIER LT1N4006(T/R)	1N4006
D203	2058304100	DIODE 1N4148	1N4148
D204	2058304100	DIODE 1N4148	1N4148
D205	2058304100	DIODE 1N4148	1N4148
D206	2058304100	DIODE 1N4148	1N4148
F201	5508224430	FUSE NB 31.8MM 20A/250V KS	TS20A/250V
F401	5508224430	FUSE NB 31.8MM 20A/250V KS	TS20A/250V
FAN1	7308998510	FAN(F1238E 24B)	24V

Ref No.	Part No.	Description	Value
JK201	4438091710	JACK SPEAKON(PCB INSERT TYPE)	BRUSHLESS FAN
JK202	4438091710	JACK SPEAKON(PCB INSERT TYPE)	SPEAKON
JK203	4438091710	JACK SPEAKON(PCB INSERT TYPE)	SPEAKON
JK204	4438191710	BINDING POST(2P)	SPEAKON
JK205	4438191710	BINDING POST(2P)	SPEAKON
O201	2008448098-T	TR NPN 2N4410 MOTOROLA	TERMINAL
O202	2008209999	TR PNP 2N2907A(MOTOROLA)	TERMINAL
O203	2028107984	TR PNP 2SA 1306A(Y), KTA 1659A(Y)	2N4410
R201	3009472973	RES CF 4.7K 1/5W J N	2N2907
R202	3009472973	RES CF 4.7K 1/5W J N	4.7K
R203	3009223973	RES CF 22K 1/5W J N	4.7K
R204	3009184973	RES CF 180K 1/5W J N	22K
R205	3009184973	RES CF 180K 1/5W J N	180K
R206	3009272973	RES CF 2.7K 1/5W J N	180K
R207	3039121574	RES MO 120 2W	2.7K
RY201	5528009850	RELAY T90S5D12-24	120 2W
RY202	5528009850	RELAY T90S5D12-24	RELAY
T201	4465998210	TERMINAL (250) PCB TAB	RELAY
T202	4465998210	TERMINAL (250) PCB TAB	250TAB
T203	4465998210	TERMINAL (250) PCB TAB	250TAB
T204	4465998210	TERMINAL (250) PCB TAB	250TAB
T205	4465998210	TERMINAL (250) PCB TAB	250TAB
T206	4465998210	TERMINAL (250) PCB TAB	250TAB
T207	4465998210	TERMINAL (250) PCB TAB	250TAB
T208	4465998210	TERMINAL (250) PCB TAB	250TAB
T209	4355806600	CON ASS' Y 1P(FAN DRIVE)RD	RED
T210	4355806700	CON ASS' Y 1P(FAN DRIVE)BL	BLACK
J202		JUMPER	

PCB AC TERMINAL B'D (4005186220)

C301	3619683153	CAPACITOR TM 0.068UF 400V	0.068/400
C302	3619683153	CAPACITOR TM 0.068UF 400V	0.068/400
F301	5508223930	FUSE NB 31.8MM 12A/250V KS	NB12A/250V
F302	5508223930	FUSE NB 31.8MM 12A/250V KS	NB12A/250V
R301	2438200070	THERMISTOR POWER NTC 1D-22	1D-22
R302	2438200070	THERMISTOR POWER NTC 1D-22	1D-22
T1	4465998210	TERMINAL (250)PCB TAB	250TAB
T2	4465998210	TERMINAL (250)PCB TAB	250TAB
T3	4465998210	TERMINAL (250)PCB TAB	250TAB
T4	4465998210	TERMINAL (250)PCB TAB	250TAB
T5	4465998210	TERMINAL (250)PCB TAB	250TAB
T6	4465998210	TERMINAL (250)PCB TAB	250TAB
T9	4465998210	TERMINAL (250)PCB TAB	250TAB
T12	4465998210	TERMINAL (250)PCB TAB	250TAB
T15	4465998210	TERMINAL (250)PCB TAB	250TAB
T18	4465998210	TERMINAL (250)PCB TAB	250TAB

PCB VR1 B'D (4005186230)

CN501	4355813110	CONNECTOR ASS' Y 13P (LED METER)	CON 13P
LD501	2308257262-T	SLR 54GGF 20	GRN
LD502	2308257322-T	SLR 54DUF 20	YEL
LD503	2308257322-T	SLR 54DUF 20	YEL
LD504	2308257222-T	SLR 54URF 20	RED
LD505	2308257222-T	SLR 54URF 20	RED

PCB VR2 B'D (4005186240)

VR501	3228070100	VR P116 10KB (21 DETENT)	10K
CN601	4355813110	CONNECTOR ASS' Y 13P (LED METER)	CON13P
LD601	2308257262-T	SLR 54GGF 20	GRN
LD602	2308257322-T	SLR 54DUF 20	YEL
LD603	2308257322-T	SLR 54DUF 20	YEL
LD604	2308257222-T	SLR 54URF 20	RED
LD605	3228070100	SLR 54URF 20	RED

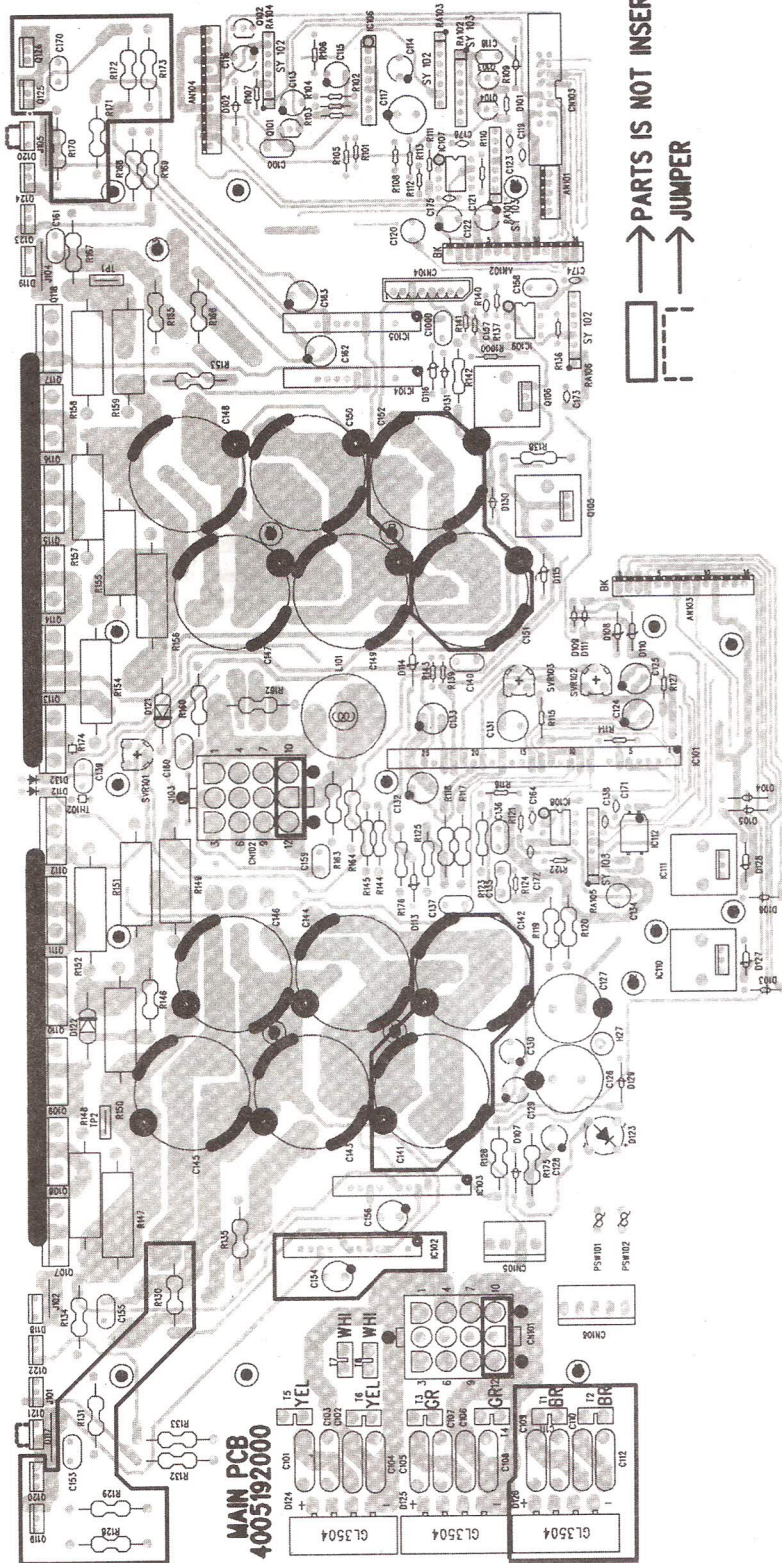
ASS'Y PART

VR601	3228075410	VR P116 10KB (21 DETENT)	10K
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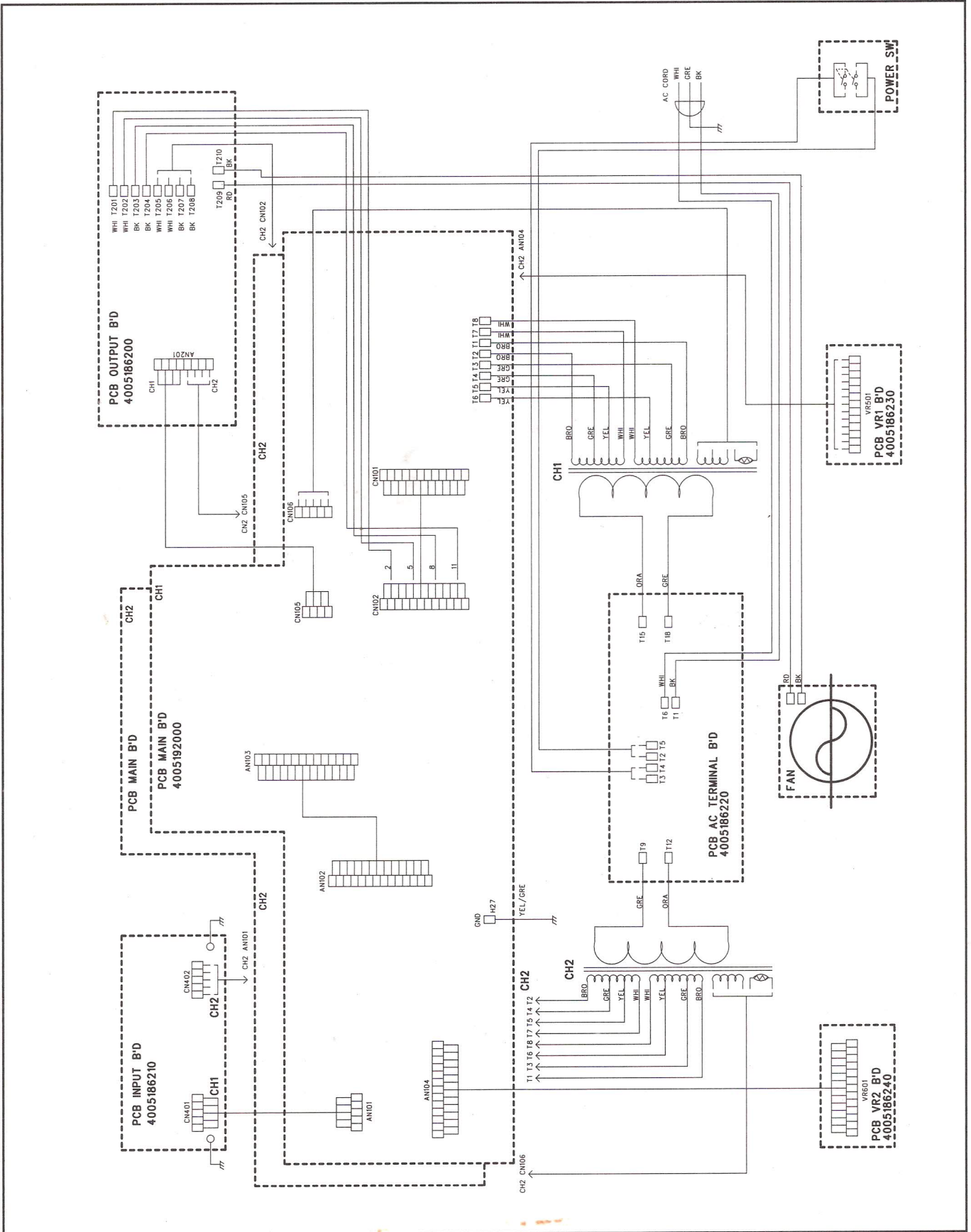
Ref No.	Part No.	Description	Value
AC1	4355806900	CABLE AC (3.5MM) P-3200	AC220V
PT9	2828070400	POWER TRANS 220V P-3200	POWER TRANS
PT10	2828070400	POWER TRANS 220V P-3200	POWER TRANS
SW1	4625996610	SW POWER (C1550AT)	POWER SW
CN1	4355813410	CONNECTOR ASS' Y 1P	POWER CON
CN2	4355813410	CONNECTOR ASS' Y 1P	POWER CON
CN3	4355813410	CONNECTOR ASS' Y 1P	POWER CON

ASS'Y PART

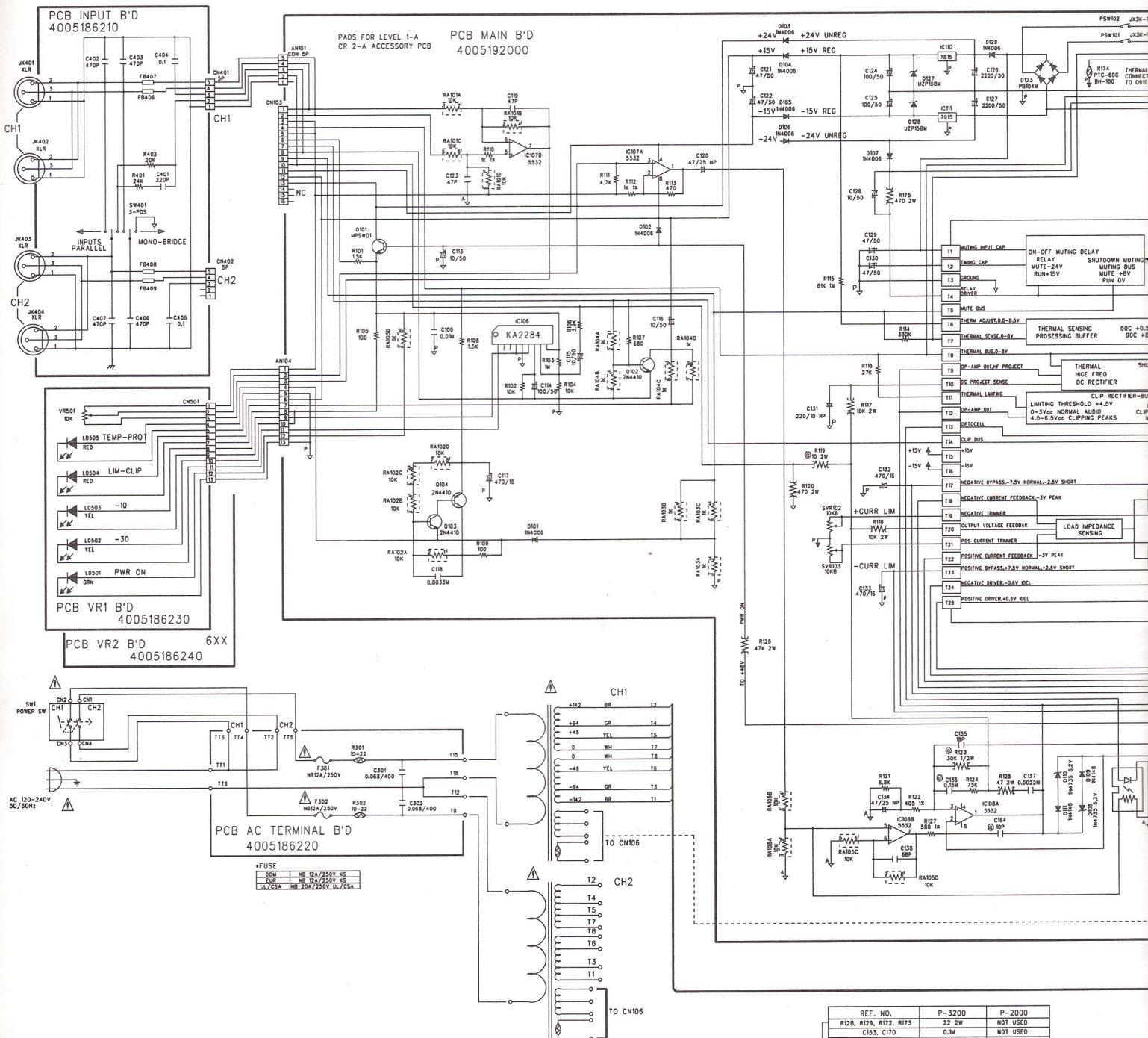
Ref No.	P-3200	P-2000
R128, R129, R172, R173	22 2W	NOT USED
C153, C170	0.1M	NOT USED
Q119, Q120, Q125, Q126	IRFZ44	NOT USED
R131, R170	2.7 2W	NOT USED
R130	22K 2W	NOT USED
D126	GL3504	NOT USED
C109, C110, C111, C112	0.0047/400	NOT USED
T1, T2	+142V, -142V	NOT USED
C141, C142, C151, C152	15000/50	NOT USED
C163	470/16	NOT USED
IC105, IC102	HIC	NOT USED
R171	3K 2W	NOT USED
C154	47/50	NOT USED
R123	30K 1/2W	21.5K 0.5W
R119	10 2W	8.2K 2W
C136	0.15M	MILER 0.1μF 100V
C164	10P	CERAMIC 15P 50V
C157	880P	CERAMIC 680P 50V
C143, C144, C145, C146		
C149, C150, C147, C148	15000/50	ELECTRIC 10000/63



WIRING DIAGRAM



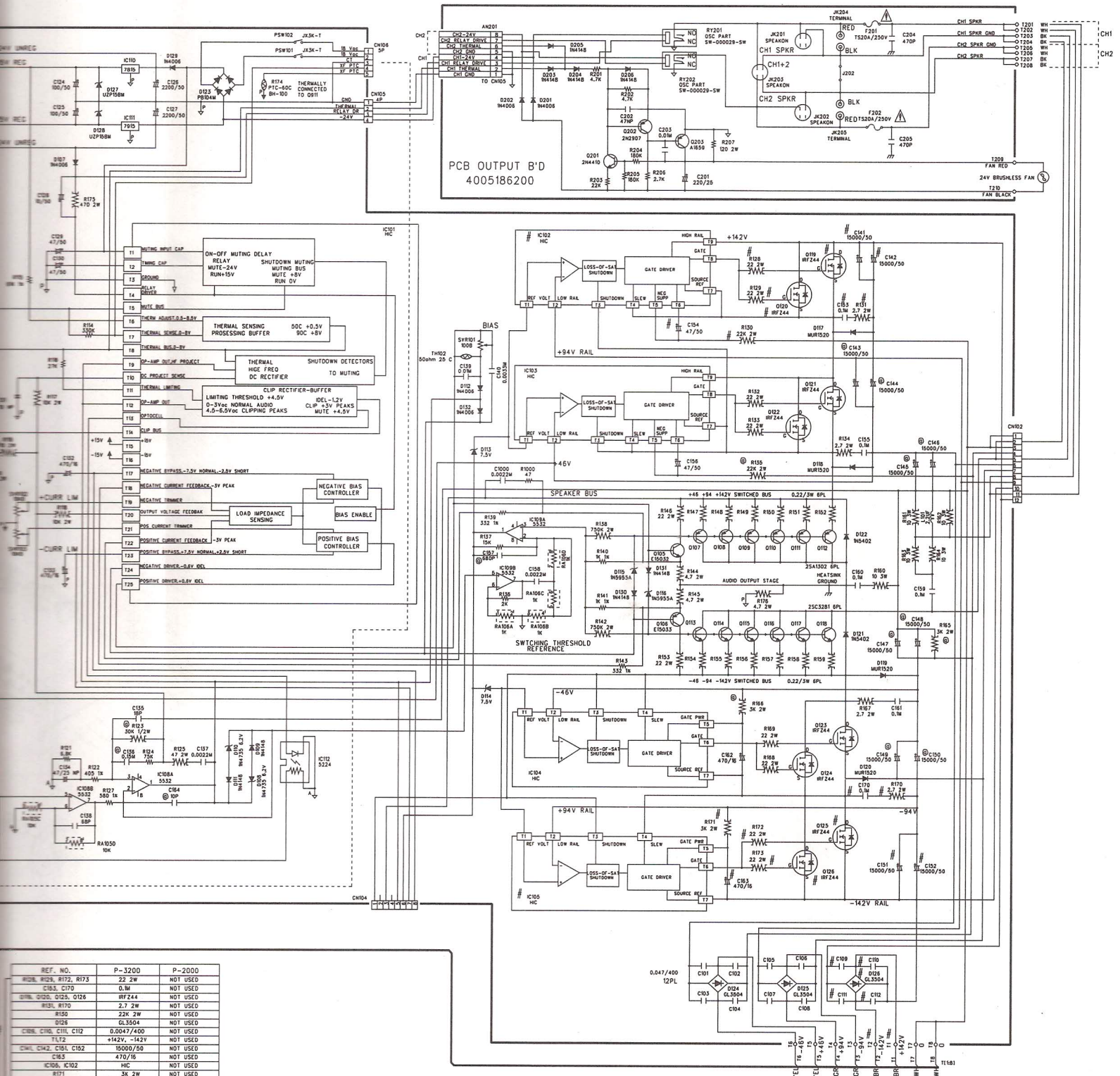
CHEMATIC DIAGRAM



***SERVICE INFORMATION**

1. RESISTANCE VALUES ARE INDICATED IN OHMS UNLESS OTHERWISE SPECIFIED. (K=1,000, M=1,000,000)
2. CAPACITANCE VALUES ARE SHOWN IN MICROFARADS UNLESS OTHERWISE NOTED. (P=MICRO-MICROFARADS)
3. ALL VOLTAGES ARE REFERRED TO GROUND UNDER THE FOLLOWING CONDITIONS:
AC: RMS
DC: NO SIGNAL EXCEPT WHERE INDICATED.
4. PRECAUTION-
A) ALL COMPONENTS MARKED MUST BE REPLACED ONLY WITH ORIGINAL TYPE SPECIFIED BY THE MANUFACTURER, INTER M CORPORATION AND INSTALLED AS THE ORIGINAL SPACE AND POSITIONED AWAY FROM ADJACENT COMPONENTS WHERE APPLICABLE.
B) ALL SOLDERING MUST BE DONE IN A PROFESSIONAL MANNER USING SOLDER WHITE RESINE CORE ONLY.
C) ALL COVERS, SHIELD AND INSULATING SPACERS MUST BE REPLACED BEFORE RETURNING APPLIANCE TO CUSTOMER.
D) DAMAGE POWER SUPPLY CORD MUST BE REPLACED BEFORE RETURNING TO CUSTOMER.
E) DIELECTRIC TEST CONSISTING OF 120V AC 60HZ IS TO BE APPLIED BETWEEN BOTH BALDES OF THE POWER SUPPLY CORD ATTACHMENT PLUG THE EXPOSE CONDUCTIVE SURFACE OF THE APPLIANCE FOR A PERIOD OF NOT LESS THAN ONE SECOND BEFORE RETURNING APPLIANCE TO CUSTOMER.
F) THE 3W- MARKED RESISTORS ARE MOUNTED THE P.C.B ON SLEEVES.

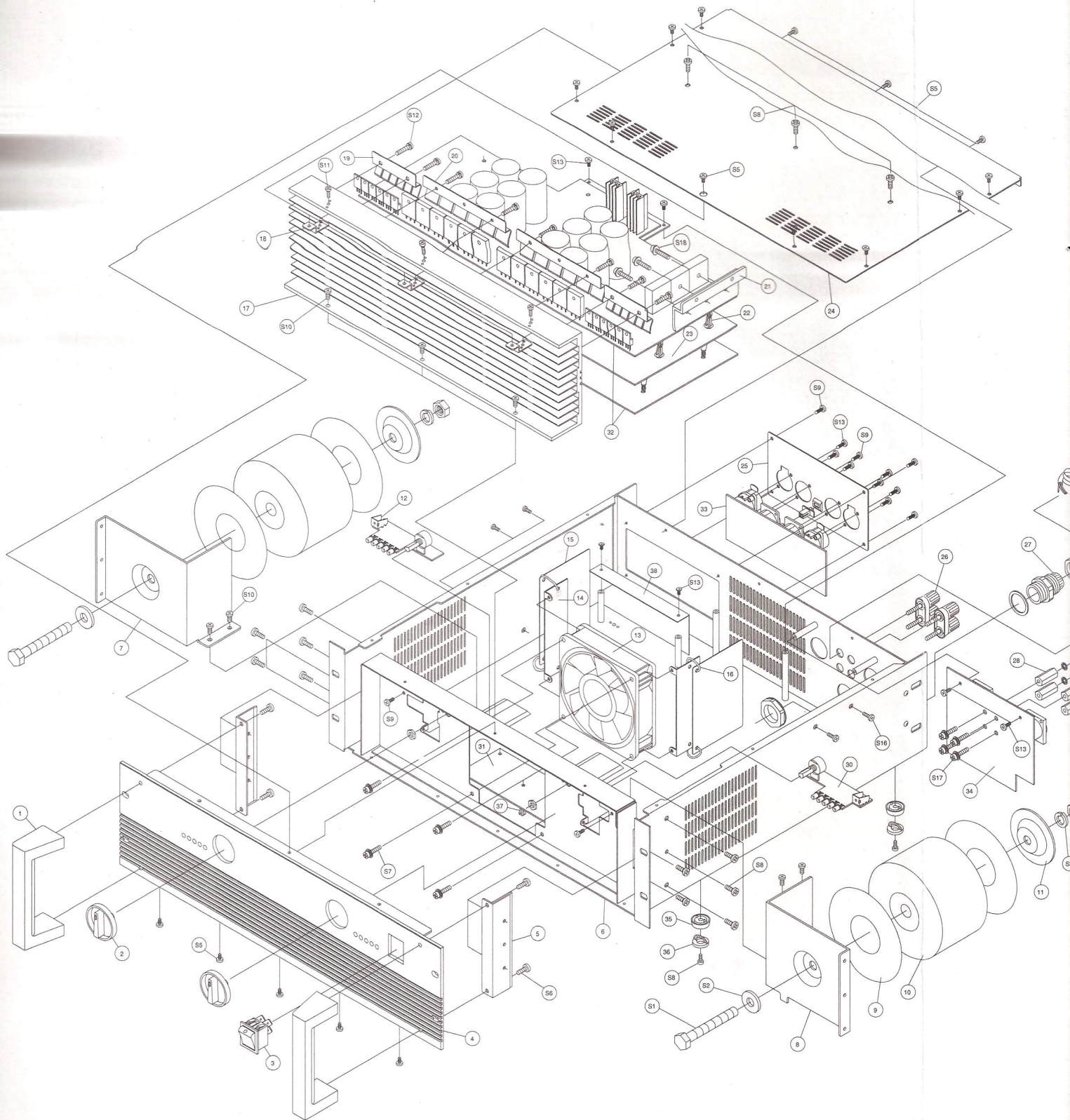
REF. NO.	P-3200	P-2000
R128, R129, R172, R173	22 2W	NOT USED
C153, C170	0.1M	NOT USED
Q19, Q20, Q25, Q26	MP244	NOT USED
R131, R170	2.7 2W	NOT USED
R150	22K 2W	NOT USED
D126	GL3004	NOT USED
C109, C110, C111, C112	0.0047/400	NOT USED
C113	+142V, -142V	NOT USED
C141, C142, C151, C152	15000/50	NOT USED
C163	470/16	NOT USED
IC105, IC102	HIC	NOT USED
R171	3K 2W	NOT USED
C154	47/50	NOT USED
R123	30K 1/2W	215K 0.5W
R119	10 2W	8.2K 2W
C136	0.15M	MILER 0.1UF 100V
C164	100	CERAMIC 15P 50V
C157	680P	CERAMIC 680P 50V
C143, C144, C145, C146, C149, C150, C147, C148	15000/50	ELECTRIC 10000/63
R155	32K 2W	22K 3W
R165, R166	3K 2W	3K 3W

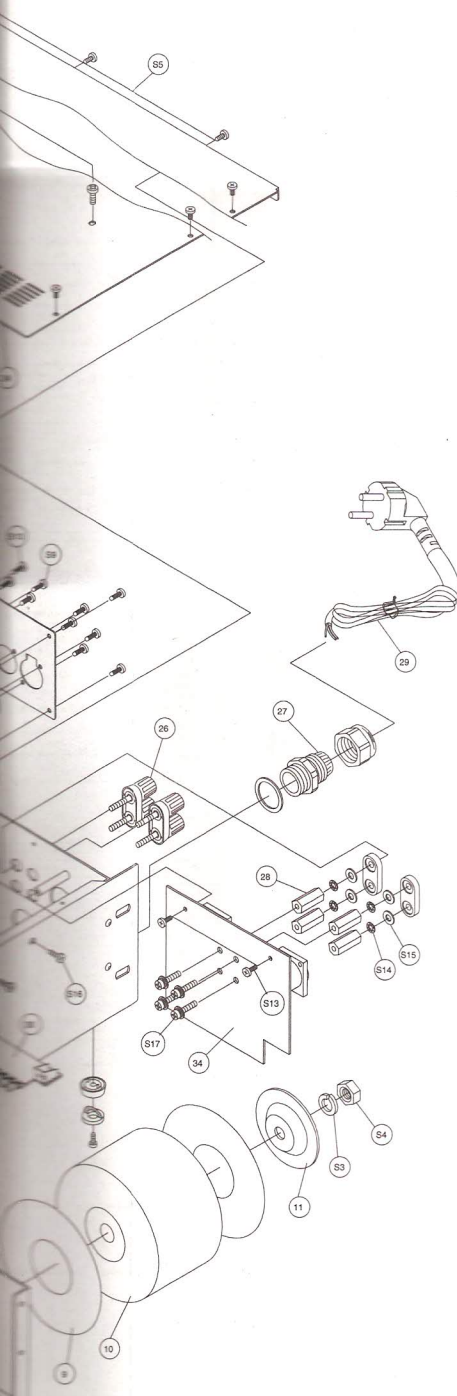


PCB OUTPUT B'D
4005186200

REF. NO.	P-3200	P-2000
R008, R029, R172, R173	22 2W	NOT USED
C183, C170	0.1M	NOT USED
DI08, DI20, DI23, DI26	RF244	NOT USED
R009, R170	2.2 2W	NOT USED
R150	22K 2W	NOT USED
DI28	GL3504	NOT USED
C108, C110, C112	0.0047/400	NOT USED
T112	+142V -142V	NOT USED
C104, C102, C101, C102	15000/50	NOT USED
C185	470/16	NOT USED
IC106, IC102	HC	NOT USED
R171	3K 2W	NOT USED
C154	47/50	NOT USED
R123	30K 1/2W	21.5K 0.5W
R119	10 2W	8.2K 2W
C136	0.1M	MILR 0.1M 100V
C184	10P	CERAMIC 10P 50V
C107	680P	CERAMIC 680P 50V
C102, C104, C105, C106, C108, C109, C147, C148	15000/90	ELECTRIC
R135	22K 2W	22K 3W
R166, R166	3K 2W	3K 3W

EXPLODED VIEW OF CABINET & CHASSIS/MECHANICAL PARTS LIST





P-2000/3200 EXPLODED VIEW DWG PARTS, LIST

N O	PARTS NAME	PARTS NO	QTY	DESCRIPTION
1	HANDLE 3H	048603995230	2	
2	CONTROL KNOB	048543985921	2	
3	S/W POWER	4625996610	1	
4	FRONT PANEL	048602981113	1	P-2000
		048602981114	1	P-3200
5	HANDLE BRACKET	6503986880	2	
6	MAIN CHASSIS	046121679311	1	P-2000
		046121679312	1	P-3200
7	TRANS BRACKET (B)	6503976020	1	
8	TRANS BRACKET (A)	6503976010	1	
9	RUBBER TRANS	6735986410	4	
10	TRANS POWER	2828070410	2	
11	TRANS BRACKET (C)	6505943310	2	
12	PCB BRACKET	6505956710	2	
13	FAN	7308998510	1	
14	BRACKET FAN	6503976210	2	
15	PLATE FAN	6735985910	2	
16*	TIE BAND		4	
17	HEAT SINK	7502092810	1	
18	B.K.T HEAT SINK	6535995520	3	
19	TR B.K.T 2	6505944210	4	
20	TR B.K.T 1	6503976120	4	
21	BRIDGE HEAT SINK	7503094510	2	
22	SUPPORT(DABS 6R) BUTTON	6538999906	19	
23	SHIELD PLATE	6122093210	1	
24	TOP COVER	046122093310	1	
25	JACK PLATE	046503972312	1	P-2000
		046503972314	1	P-3200
26	BINDING POST (2P)	4438191720	2	
27	CORD STOPPER	6518998210	1	
28	STUD	6535995510	4	
29	AC CORD	4308999710	1	
30	V/R PCB	4005194130,40	2	
31	TERMINAL PCB	4005194120	1	
32	MAIN PCB	4005194000	1	
33	OUTPUT PCB	4005194100	1	
34	INPUT PCB	4005194110	1	
35	FOOT	6335999510	4	
36	FOOT FELT	6735994110	4	
37	BUTTON SUPPORT	6538999908	5	
38	PLATE SHIELD *A*	6163195910	1	

S1	BOLT M10X75	8078100751	2	
S2	WASHER SCREW PLAIN	8319100011	2	
S3	WASHER SPRING	8309100013	2	
S4	NUT M10	8209110013	2	
S5	DOT SCREW #3BTC 3X6B	8095996610	17	
S6	SCREW BM 4X10Y	8009140101	4	
S7	ASS'Y SCREW PM 4X16N	8095997010	4	
S8	DOT SCREW #3BTC 4X8B	8095995510	10	
S9	DOT SCREW #2BTC 3X8B	8095996510	10	
S10	ASS'Y SCREW PM 4X8B	8095996910	7	
S11	SCREW BM 3X8B	8009130083	3	
S12	SCREW PM 4X18B	8095994810	16	
S13	DOT SCREW BM 3X8B	8095996720	10	
S14	WASHER THD/IN E'4Y	8329040011	4	
S15	WASHER PLATE E'4Y	8309040011	4	
S16	SCREW BM 4X8BK	8009140083	4	
S17	ASS'Y SCREW PM 4X8N	8095994710	4	
S18	ASS'Y SCREW PM 4X18B	8095996930	6	

NOTE