

SERVICE

MANUAL

DUAL CHANNEL POWER

AMPLIFIER

PA-2312

interM

ELECTRICAL PARTS LIST (PA-2312)

Ref No.	Part No.	Description	Value	Qty
---------	----------	-------------	-------	-----

INPUT B'D (4005186500)

C33 C333	3539104531-A	CAP CE Y 10000PF 50V Z AXIAL	0.1/50	2
C01-02 C32 C301-302 C332	3509102231-A	CAP CE YB 1000PF 50V K AXIAL	1000P	6
C12 C15 C312 C315	3509101231-A	CAP CE B 100PF 50V K AXIAL	100P	4
C05 C16 C305 C316	3509221231-A	CAP CE B 220PF 50V K AXIAL	220P	4
C30 C330	3529220311-A	CAP CE SL 22PF 50V J AXIAL	22P	2
AN101	4355772110	CON ASS'Y 7P 210MM,AN101	ASS'Y 7P	1
AN102	4355772011	CON ASS'Y 7P 230MM,AN102	ASS'Y 7P	1
C06 C31 C306 C331	3409210971-T	CAP AF RSG 1UF 50V 5 P	1/50	4
C03-04 C11 C13-14 C17 C303-304 C311 C313-314 C317	3409210071-T	CAP AF RSG 10UF 50V 5 P	10/50	12
C34 C334	3409222141-T	CAP AF RSG 220UF 25V J 8 P	220/25	2
JKO1 JKO3	4438193810	XLR JACK(F) 3P(E203A0040N)	XLR JACK	2
JKO2 JKO4	4408194310	XLR JACK (M) E503A0150N	XLR-3-M	2
VRO1-2	3228070100	VR RK16311E0Z0113B	10KB	2
C120 C320	3609103120-T	CAP MA 0.01UF 100V	0.01/100(M)	2
C121-122 C321-322	3609823120-T	CAP MA 0.082UF 100V J	0.082/100	4
IC101 IC301	2118010332	IC NJM 5532DD JRC	NJM 5532DD	2
R26 R326	3039100575-T	RES MO 10 2W JR	10 2W	2
R5-7 R11 R18 R38-39 R305-307 R311 R318	3009103973	RES CF 10K 1/5W J N	10K	12
R36 R336	3039151575-T	RES MO 150 2W J RADIAL	150 2W	2
R35 R335	3009154973	RES CF 150K 1/5W J N	150K	2
R33 R333	3009222973	RES CF 2.2K 1/5W J N	2.2K	2
R34 R334	3009271973	RES CF 270 1/5W J N	270	2
R13-14 R313-314	3009473973	RES CF 47K 1/5W J N	47K	4
R1-2 R12 R15 R32 R301-302 R312 R315 R332	3009562973	RES CF 5.6K 1/5W J N	5.6K	10
R37 R337	3009560973	RES CF 56 1/5W J N	56	2
R31 R331	3009682973	RES CF 6.8K 1/5W J N	6.8K	2
R16 R316	3009681973	RES CF 680 1/5W J N	680	2
R3-4 R303-304	3009822973	RES CF 8.2K 1/5W J N	8.2K	4
SWO1-3	4625995910	SW SLIDE SSSU022NA011	SLIDE SW	3
Q4 Q304	2028407118	KTC2238A-Y-U	2SC 2238Y	2
Q1 Q301	2008606104-T	TR NPN KTC3198-Y-AT TO-92	KTC 3198Y	2
Q3 Q2 Q302-303	2008606101-T	KTC3198L-BL-AT	KTC 3198BL	4
AN106	4355771314	CON ASS'Y 6P 300MM AN106	ASS'Y 6P	1
CN106	4428595006	LW5267/LWBO640/2.5MM-06P	LW 6P	1
D81 D381	2058500973	DIODE UZ-4.7BM	UZ 4.7BM	2

AMP B'D (4005186600)

C77-78 C80 C280	3539104531-A	CAP CE Y 10000PF 50V Z AXIAL	0.1/50	4
-----------------	--------------	------------------------------	--------	---

C90-91 C290-291	3539332331-A	CAP CE X 3300PF 16V M AXIAL	3300P	4
C41 C45 C241 C245	3509471231-A	CAP CE B 470PF 50V K AXIAL	470P	4
D01-04 D74 D77-78 D80 D82 D201-204	2058304100	DIODE IN4148M	1N 4148	13
C44 C48 C75-76 C244 C248	3409210071-T	CAP AF RSG 10UF 50V 5 P	10/50	6
C73-74 C79 C81-83 C279 C281-283	3409210171-T	CAP AF RSG 100UF 50V 8 P	100/50	10
C71	3419515376	CAP AF HE 15000UF 50V	15000/50	1
C35 C235	3408222241	CAP RSA 2200UF 25V SNAP 16 P	2200/25	2
C72	3409233071-T	CAP AF RSG 33UF 50V 6 P	33/50	1
C84	3609103120-T	CAP MA 0.01UF 100V	0.01/100(M)	1
C00	3609104140-T	CAP MA 0.1UF 200V J	0.1/100(M)	1
ICO2	2118010590	IC NJM4558D JRC	NJM 4558D	1
T01 T201	2808098300	TRANSFORMER INPUT (PA-9324)	IPT	2
R58-59 R63-64 R258-259 R263-264	3049278786	RES CE 0.27 5W J F MANNAE	0.27 5W	8
R89	3009132973	RES CF 1.3K 1/5W J N	1.3K	1
R50 R57 R250 R257	3009182973	RES CF 1.8K 1/5W J N	1.8K	4
R85	3009101973	RES CF 100 1/5W J N	100	1
R80 R92	3009104973	RES CF 100K 1/5W J N	100K	2
R94 R294	3039100575-T	RES MO 10 2W JR	10 2W	2
R88	3009103973	RES CF 10K 1/5W J N	10K	1
R48 R54 R248 R254	3009151973	RES CF 150 1/5W J N	150	4
R75	3009102973	RES CF 1K 1/5W J N	1K	1
R44-45 R244-245	3039102575-T	RES MO 1K 2W J RADIAL	1K 2W	4
R78	3009105973	RES CF 1M 1/5W J N	1M	1
R76	3039200575-T	RES MO 20 2W J RADIAL	20 2W	1
R51 R56 R251 R256	3009203973	RES CF 20K 1/5W J N	20K	4
R96 R296	3009221973	RES CF 220 1/5W J N	220	2
R46 R52 R246 R252	3009220973	RES CF 22 1/5W J N	22	4
R74	3009223973	RES CF 22K 1/5W J N	22K	1
R49 R55 R249 R255	3009271973	RES CF 270 1/5W J N	270	4
R19 R91	3009202973	RES CF 2K 1/5W J N	2K	2
R86	3009332973	RES CF 3.3K 1/5W J N	3.3K	1
R77	3009330973	RES CF 33 1/5W J N	33	1
R500-503 R700-703	3089479275	RES NFR 4.7 1/4W J R PHILKO	FR 4.7	8
R41 R95 R241 R295	3009472973	RES CF 4.7K 1/5W J N	4.7K	4
R42 R47 R53 R72 R242 R247 R253	3009471973	RES CF 470 1/5W J N	470	7
R79 R82-84 R93	3009473973	RES CF 47K 1/5W J N	47K	5
R90	3009562973	RES CF 5.6K 1/5W J N	5.6K	1
R43 R243	3009561973	RES CF 560 1/5W J N	560	2
R73	3009682973	RES CF 6.8K 1/5W J N	6.8K	1
R87	3009753973	RES CF 75K 1/5W J N	75K	1
R81	3009823973	RES CF 82K 1/5W J N	82K	1
TH1 TH71TH201 CN105	4428595002	LW5267/LWB0640/2.5MM-02P	LW 2P	2
D71	2058300997	DIODE SCHOTTKY SBL-3040PT	SBL 3040PT	1
P1-2 P5	4465998210	TERMINAL(250)PCB TAB	TERMINAL 250	3

P3	4355833107	CON ASS'Y 1P (RED)	ASS'Y 1P	1
P6	4355771903	CON ASS'Y 1P BLK 100MM P6	ASS'Y 1P	1
P7-9 P207-209	4355874810	CONNECTOR ASS'Y 4P PA-9324	CONNECTOR	6
P18 P17	4355875101	CONNECTOR ASS'Y 1P	ASS'Y 1P	2
P14 P13	4355875001	CONNECTOR ASS'Y 1P PA-9324	ASS'Y 1P	2
P210	4355833201	CON ASS'Y 1P (BLK)	ASS'Y 1P	1
TP2 TP202-203 TP3	4225000810-T	TEST POINT (NZ0352-001Z)	TEST POINT	4
Q6 Q8 Q206 Q208	2028407118	KTC2238A-Y-U	2SC 2238Y	4
Q9-10 Q14-15 Q209-210 Q214-215	2028427998	TR 2SC 3856 W/ACC	2SC 3856	8
Q77 Q277	2008606108-T	KTC3200-BL-AT	KTC 3200BL	2
Q5 Q7 Q205 Q207	2008606107-T	KTC3206-Y-AT	KTC 3206Y	4
Q73	2008606999-T	KTC3198-BL-AT	KTC 3198BL	1
Q13 Q19 Q72 Q75 Q213 Q219	2008606104-T	TR NPN KTC3198-Y-AT TO-92	KTC 3198Y	6
Q71 Q76 Q276	2028406113	KTD2058-Y-U	KTD 2058Y	3
Q74	2008606105-T	TR NPN KTA1266-Y-AT TO-92	KTA 1266Y	1
SVR02-03 SVR202-203	3248310120-T	RES RH063MC12R	100B	4
CN72 CN104	4428595003	LW5267/LWB0640/2.5MM-03P	LW 03P	2
CN103	4428595004	LW5267/LWB0640/2.5MM-04P	LW 04P	1
CN101-102	4428595007	LW5267/LWB0640/2.5MM-07P	LW 7P	2
D75-76	2058502120	DIODE ZENER UZ-12BM(1N5242B)	UZ 12BM	2
D72	2058502180	DIODE ZENER UZ-18BM(1N5248B)	UZ 18BM	1
D79 D279	2058502200	DIODE ZENER UZ-20BM(1N5250B)	UZ 20BM	2
D73	2058502082	DIODE ZENER UZ-8.2BM(1N5237B)	UZ 8.2BM	1
TP1 TP4 TP204	4678699411			3

LED DRIVE B'D

C107 C407	3509331130-T	CAP CE SL 330PF 50V J	330P	2
C103 C403	3409247871-T	CAP AF RSG 0.47UF 50V 5 P	0.47/50	2
C102 C402	3409210971-T	CAP AF RSG 1UF 50V 5 P	1/50	2
C101 C401	3409210071-T	CAP AF RSG 10UF 50V 5 P	10/50	2
C104-106 C404-406	3409247971-T	CAP AF RSG 4.7UF 50V 5 P	4.7/50	6
D104-105 D404-405	2300050105	LED LTL-307E-041A LITEON	307E-041A	4
D106-107 D406-407	2300052105	LED LTL-307G-041A LITEON	307G-041A	4
IC103-104 IC403-404	2118010590	IC NJM4558D JRC	NJM 4558D	4
R109 R409	3009101973	RES CF 100 1/5W J N	100	2
R104 R404	3009104973	RES CF 100K 1/5W J N	100K	2
R122 R422	3009102973	RES CF 1K 1/5W J N	1K	2
R105 R405	3009222973	RES CF 2.2K 1/5W J N	2.2K	2
R108 R408	3009272973	RES CF 2.7K 1/5W J N	2.7K	2
R113 R115 R117-120 R413 R415 R417-420	3009202973	RES CF 2K 1/5W J N	2K	12
R103 R403	3009334973	RES CF 330K 1/5W J N	330K	2
R101 R401	3002330953	RES CF 33K 1/5W FN PL-2404	33K 1%	2
R125 R425	3003300953	RES CF 3K 1/5W FN	3K 1%	2
R107 R407	3009472973	RES CF 4.7K 1/5W J N	4.7K	2
R124 R424	3009473973	RES CF 47K 1/5W J N	47K	2
R110-112 R410-412	3009682973	RES CF 6.8K 1/5W J N	6.8K	6

R126 R426	3002610953	RES CF 61K 1/5W F N	61K 1%	2
R123 R423	3009681973	RES CF 680 1/5W J N	680	2
R102 R402	3003820953	RES CF 8.2K 1/5W FN	8.2K 1%	2
R106 R406	3009822973	RES CF 8.2K 1/5W J N	8.2K	2
Q101-105 Q401-405	2008606104-T	TR NPN KTC3198-Y-AT TO-92	KTC 3198Y	10
D101-103 D401-403	2058502120	DIODE ZENER UZ-12BM(1N5242B)	UZ 12BM	6
AN104	4355772214	CON ASS'Y 2P 300MM,AN104	ASS'Y 3P	1
AN103	4355772303	CON ASS'Y 4P 100MM,AN103	ASS'Y 4P	1

LED B'D (4005186610)

AN105	4353986914	CON ASS'Y 2P	ASS'Y 2P	1
D701	2300050101	LED LTL-307E-012A	307E-012A	1

SW B'D (4005186530)

C100	3549472407	CAP DE2E3KH472MA4B	472/400	1
FO2	4255000410	FUSE CLIP 6*31.8	FUSE CLIP	1
SW1	4648098210	SW POWER JPP 2197BCS32	POWER SW	1
P11 P19 P21-22	4625998210	SW PUSH SPUN50X2C011	250	4

TERMINAL B'D (4005186520)

C700-703	3609473160	CAP MA 0.047UF 400V J	0.047/400(M)	4
R700 R701	3059101776	RES WWCE 100 5W J T	100 5W	2
TER1	4465997604	SCREW TERMINAL 4P(D)	TER 4P	1
CN107-108	4355923805	WAFER LW(3.96) 5P JIS	WAFER LW 5P	2
J100-103 J00-03				8

VR B'D (40085186540)

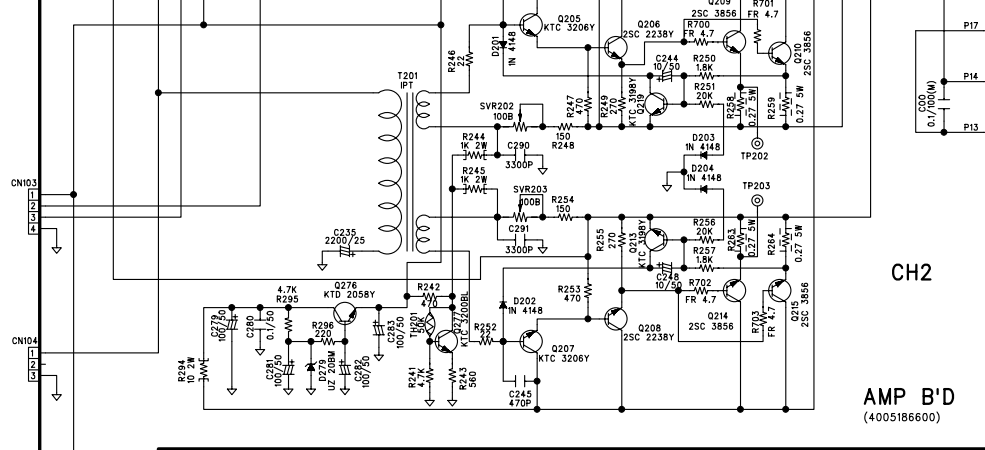
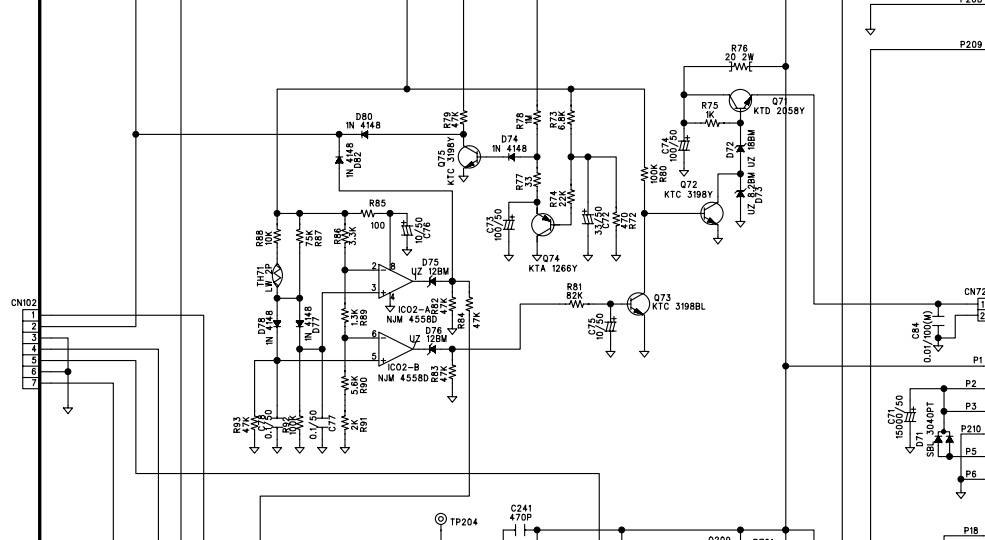
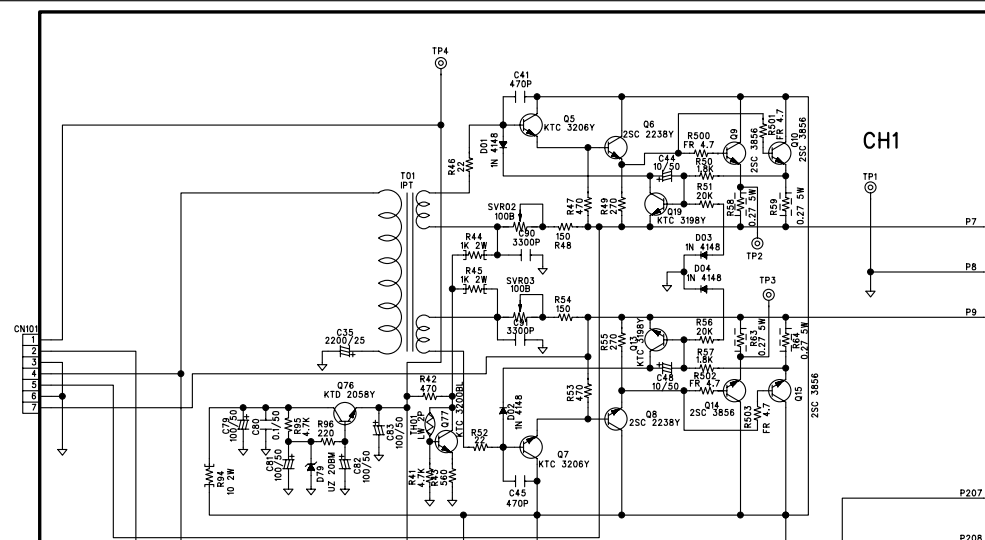
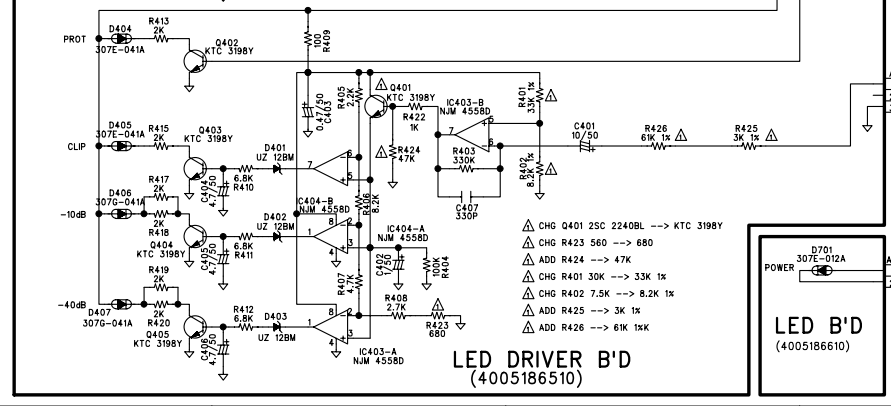
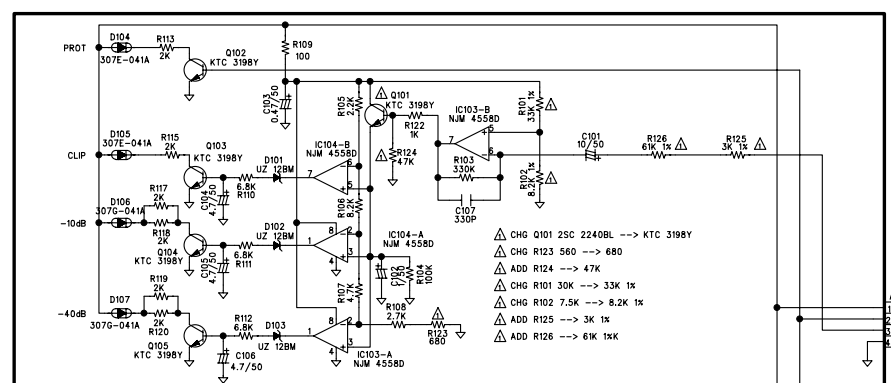
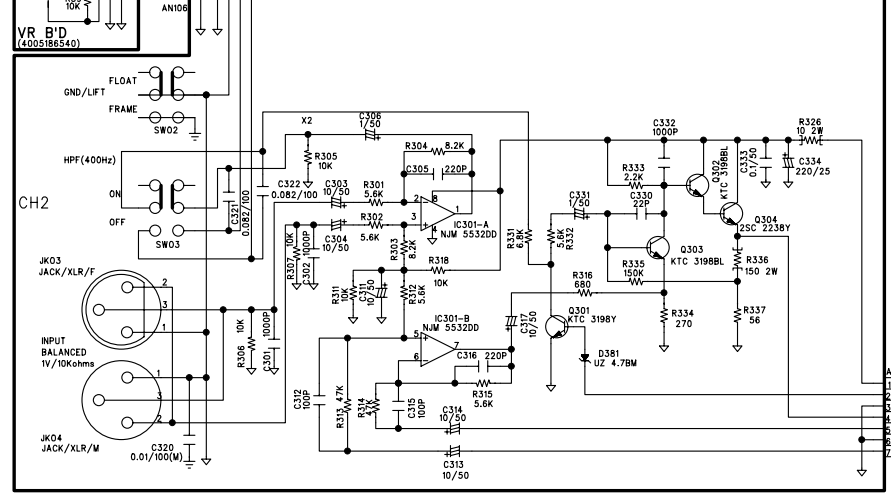
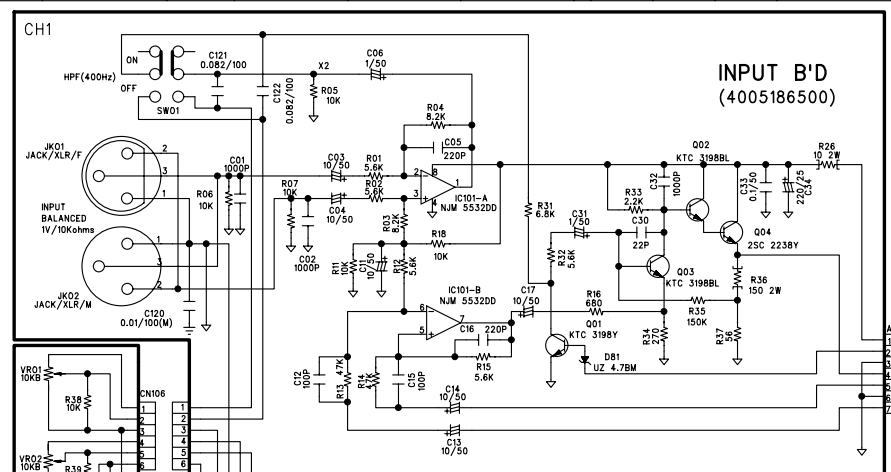
VRO1-2	3228070100	VR RK16311E0Z0113B	10KB	2
R38-39	3009103973	RES CF 10K 1/5W J N	10K	2
CN106	4428595006	LW5267/LWB0640/2.5MM-06P	LW 6P	1

DC B'D (4005186550)

P15-16	4625998210	SW PUSH SPUN50X2C011	250 TAB	2
DC TERMINAL	4438094610	DC TERMINAL 2P		1

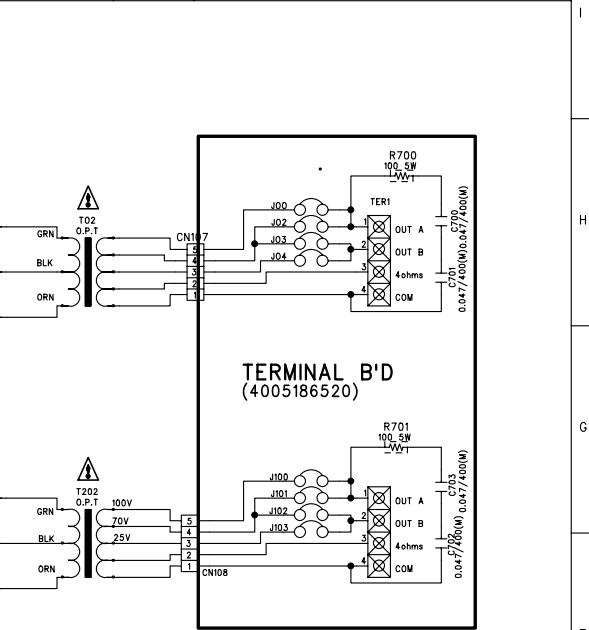
ASS'Y

PT	2828064410	TRANS POWER 220V PA-2312		1
	2828064420	TRASNS POWER 230V PA-2312	B ,C ,R	1
	2828064430	TRANS POWER 240V PA-2312	D	1
	2828064400	TRANS POWER 120V PA-2312	E	1
AC CORD	4308997310	AC CORD DOME 3-CORES		1
	4308999410	AC CORD V+VII6A-250VHOVV-F3G	B ,R	1
	4308996710	AC CORD (WITHOUT PLUG)	C	1
	4308998000	AC CORD POWER FOR SAA	D	1
	4308999310	AC CORD UL 3 (INLET)	E	1
FUSE	5508213239	FUSE#217F 20MM 4A/250V UCSKJ		1
	5508124433	FUSE SB 31.8MM 20A/250V U/C	B ,C ,D ,E ,R	1
	5508224430	FUSE NB 31.8MM 20A/250V KS		1
	5508413239	FUSE#218T 20MM 4A/250V UCSKJ	B ,C ,D ,R	1
	5508213739	FUSE#234F 20MM 8A/250V UCKJ	E	1

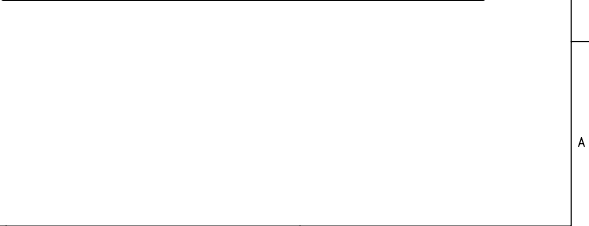
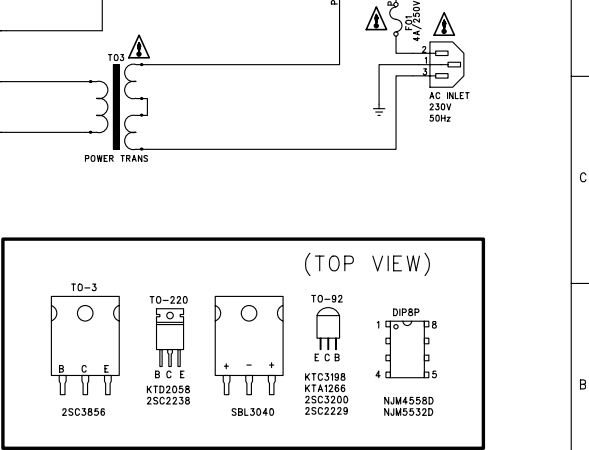
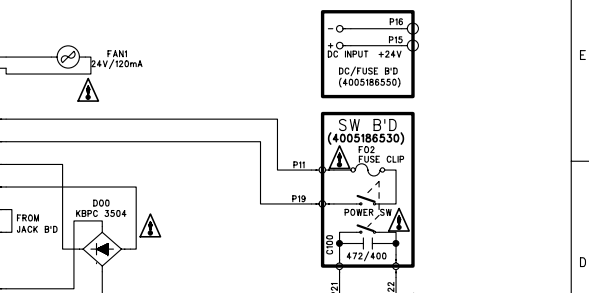


SERVICE INFORMATION

- RESISTANCE VALUES ARE INDICATED IN OHMS UNLESS OTHERWISE SPECIFIED. (K=1,000, M=1,000,000)
- CAPACITANCE VALUES ARE SHOWN IN MICROFARADS UNLESS OTHERWISE NOTED (P=MICRO-MICROFARADS)
- ALL VOLTAGES ARE REFERRED TO GROUND UNDER THE FOLLOWING CONDITIONS:
DC : NO SIGNAL EXCEPT WHERE INDICATED.
AC : RMS
- 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) A DAMAGE POWER SUPPLY CORD MUST BE REPLACED BEFORE RETURNING APPLIANCE 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 $\overline{\text{M}}\overline{\text{W}}$ MARKED RESISTORS ARE MOUNTED THE P.C.B ON SLEEVES.



USA/CANADA & Associated	DOM. EC & Associated
OUT A	J2:70V
OUT B	J4:8ohm
	J3:70V



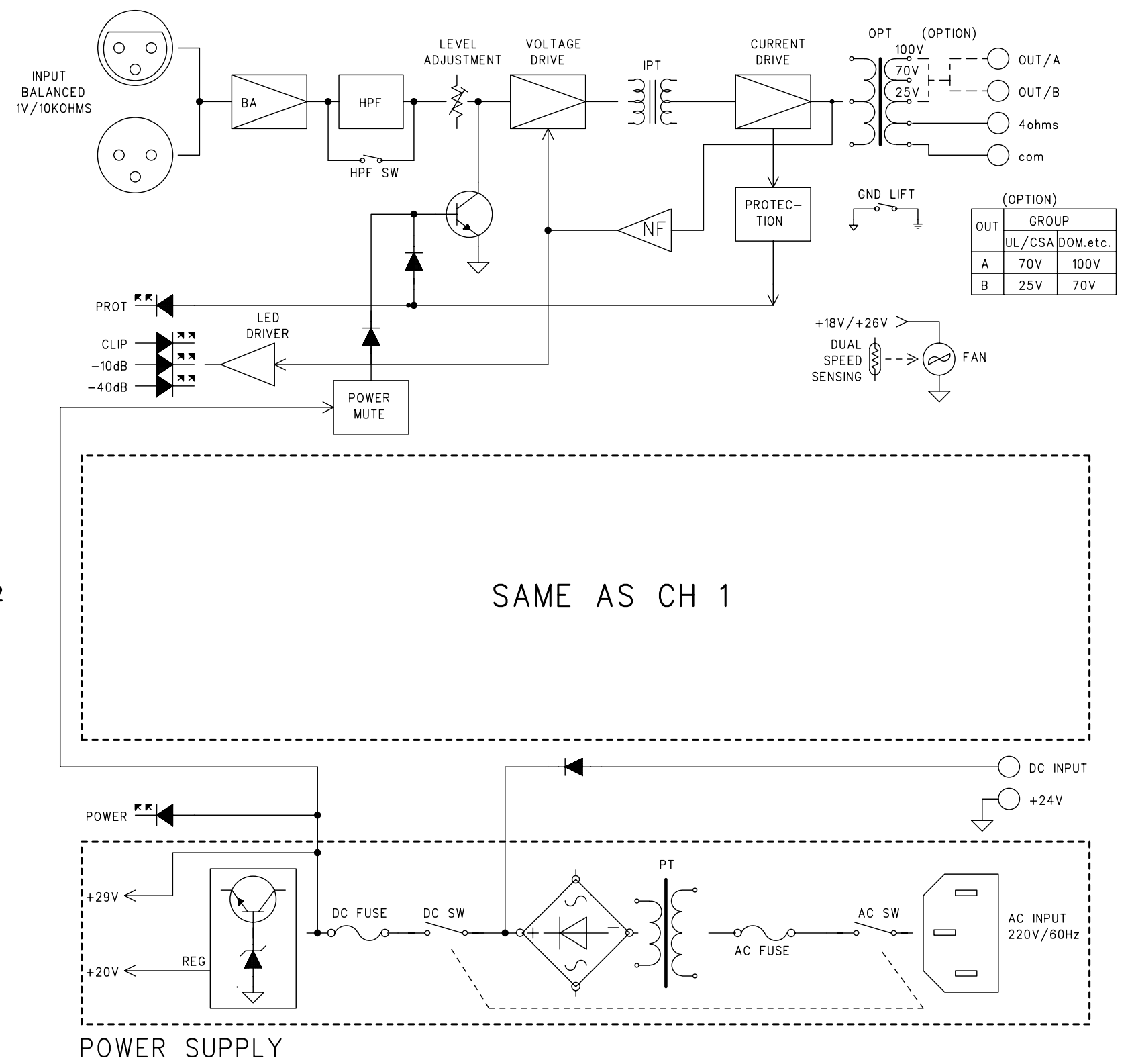
1		2			3			4		5		6	
COMPANY	INTER.M	APPLICANT	REVISED NUMBER AND DATE			SIGN	DRAWN	CHECKED	APPROVED	NOTE	SHEET NO.	BLOCK DIAGRAM	
TYPE CODE			1.	4.	7.							MODEL : PA-2312	
APPROVED DATE	000208		2.	5.	8.								
			3.	6.	9.								

CH 1

CH 2

SAME AS CH 1

POWER SUPPLY



(OPTION)

OUT	GROUP	UL/CSA	DOM.etc.
A	70V	100V	
B	25V	70V	

