

**SERVICE**

**MANUAL**

PUBLIC ADDRESS POWER

**AMPLIFIER**

**PA-9312/9324**

**interM**

# ELECTRICAL PARTS LIST

Ref No.	Part No.	Description	Value
<b>AMP B'D (4005196001)</b>			
R50 R57(PA-9312)	3009681973	RES CF 680 1/5W J N	680
R50 R57(PA-9324)	3009102973	RES CF 1K 1/5W J N	1K
R43(PA-9312)	3009561973	RES CF 560 1/5W J N	560
R43(PA-9324)	3009391973	RES CF 390 1/5W J N	390
D71(PA-9312)	2058300998	DIODE SCHOTTKY SBL2040/SR2040	SBL 2040
D71(PA-9324)	2058300997	DIODE SCHOTTKY SBL-3040PT	SBL 3040
TP1 TP2 TP3 TP5	4225000810-T	TEST POINT(NZ0352-001Z)	TEST POINT
Q1 Q19-20 Q72-73 Q75	2008606104-T	TR NPN KTC3198-Y-AT TO-92	KTC 3198Y
Q74	2008606105-T	TR NPN KTA1266-Y-AT TO-92	KTA1266Y
Q5 Q7	2008606107-T	KTC3206-Y-AT	KTC 2229Y
Q77	2008606108-T	KTC3200-BL-AT	C2240
Q71 Q76	2028406113	KTD2058-Y-U	KTD 2058Y
Q9 Q13-14 Q16 Q18 Q11	2028427998	TR 2SC 3856 W/ACC	2SC 3856
Q10 Q12 Q15 Q17(PA-9312)	NOT USED	NOT USED	NOT USED
Q10 Q12 Q15 Q17(PA-9324)	2028427998	TR 2SC 3856 W/ACC	2SC 3856
Q4 Q6 Q8	2028407118	KTC2238A-Y-U	2SC 2238Y
D1-4,74,77-78,80-82	2058304100	DIODE IN4148M	1N4148
D81	2058500973	DIODE UZ-4.7BM	UZ 4.7BM
D73	2058502082	DIODE ZENER UZ-8.2BM(1N5237B)	UZ 8.2BM
D75-76	2058502120	DIODE ZENER UZ-12BM(1N5242B)	UZ 12BM
D72	2058502180	DIODE ZENER UZ-18BM(1N5248B)	UZ 18BM
D79	2058502200	DIODE ZENER UZ-20BM(1N5250B)	UZ 20BM
IC02A	2118010590	IC NJM4558D JRC	NJM 4558D
TH1 TH71	2438209031	THERMISTOR YSG-503J L=100	50K
T1	2808098300	TRANSFORMER INPUT (PA-9324)	IPT
R93	3002536953	RES CF 53.6K 1/5W F N	53.6K 1%
R87	3002715953	RES CF 71.5K 1/5W FN	71.5K 1%
R89	3003130953	RES CF 1.3K 1/5W F N	1.3K 1%
R86	3003332953	RES CF 3.32K 1/5W F N	3.32K 1%
R90	3003634953	RES CF 6.34K 1/5W F N	6.34K 1%
R85	3009101973	RES CF 100 1/5W J N	100
R75 R91	3009102973	RES CF 1K 1/5W J N	1K
R81 R88	3009103973	RES CF 10K 1/5W J N	10K
R80 R92	3009104973	RES CF 100K 1/5W J N	100K
R78	3009105973	RES CF 1M 1/5W J N	1M
R48 R54	3009151973	RES CF 150 1/5W J N	150
R35	3009151973	RES CF 150 1/5W J N	150K
R19	3009202973	RES CF 2K 1/5W J N	2K

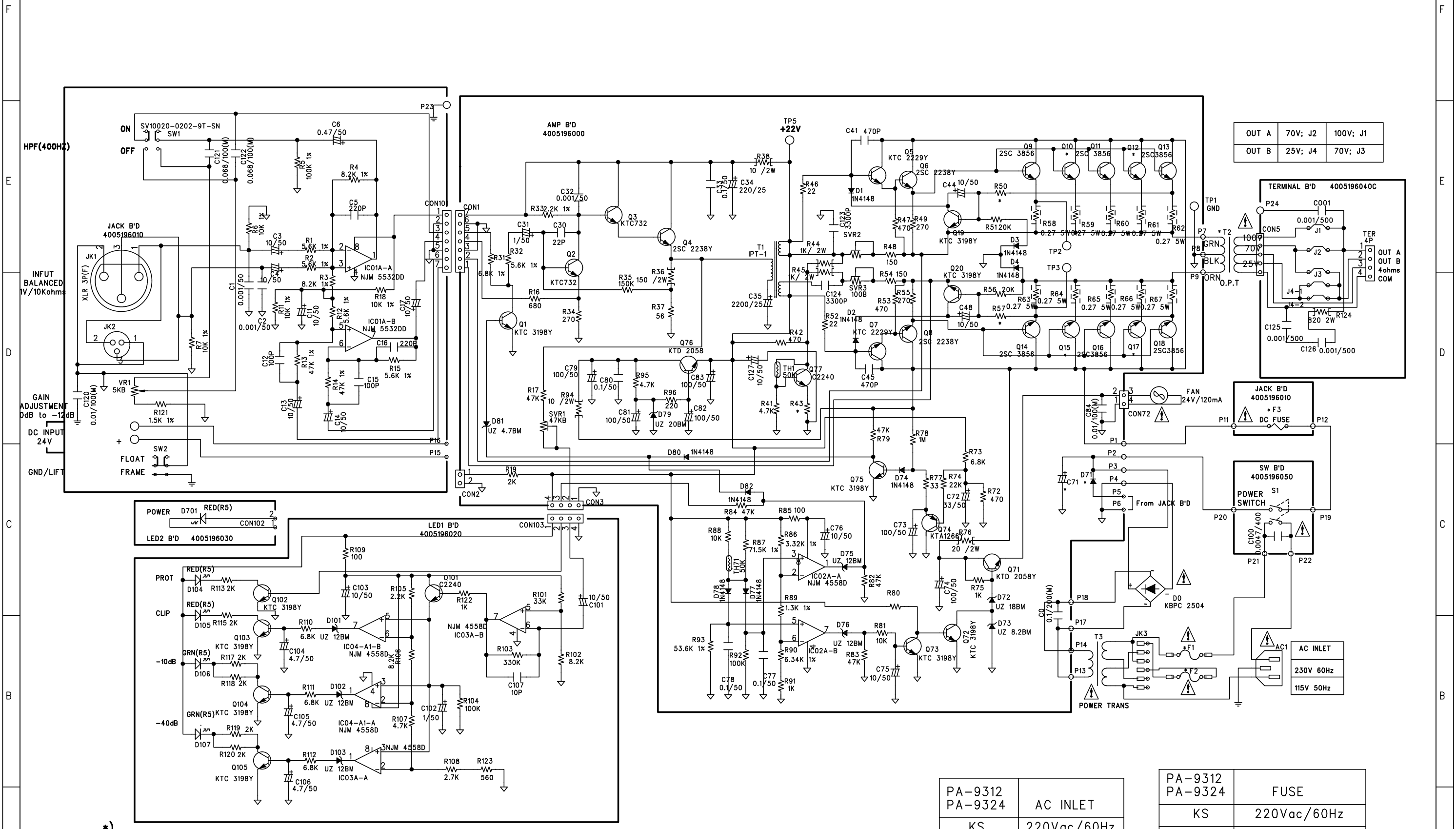
R51 R56	3009203973	RES CF 20K 1/5W J N	20K
R46 R52	3009220973	RES CF 22 1/5W J N	22
R96	3009221973	RES CF 220 1/5W J N	220
R33	3009222973	RES CF 2.2K 1/5W J N	2.2K 1%
R74	3009223973	RES CF 22K 1/5W J N	22K
R34 R49 R55	3009271973	RES CF 270 1/5W J N	270
R77	3009330973	RES CF 33 1/5W J N	33
R42 R47 R53 R72	3009471973	RES CF 470 1/5W J N	470
R41 R95	3009472973	RES CF 4.7K 1/5W J N	4.7K
R17 R79 R82 - 84	3009473973	RES CF 47K 1/5W J N	47K
R37	3009560973	RES CF 56 1/5W J N	56
R32	3009562973	RES CF 5.6K 1/5W J N	5.6K 1%
R16	3009681973	RES CF 680 1/5W J N	680
R31	3009682973	RES CF 6.8K 1/5W J N	6.8K 1%
R73	3009682973	RES CF 6.8K 1/5W J N	6.8K
R38 R94	3039100575 - T	RES MO 10 2W JR	10 /2W
R44 - 45	3039102572 - F	RES MO 1K 2W J N	1K/ 2W
R36	3039151575 - T	RES MO 150 2W J RADIAL	150 /2W
R76	3039200575 - T	RES MO 20 2W J RADIAL	20 /2W
R58 - 67	3059278783	RES CE 0.27 5W J T	0.27 5W
SVR2 - 3	3248310120	RES SEMI RH 0615C100101	100B
SVR1	3248347320	RES RH0615C100473	47KB
C35	3408222241	CAP RSA 2200UF 25V SNAP 16 P	2200/25
C44 C48 C75 - 76	3409210071 - T	CAP AF RSG 10UF 50V 5 P	10/50
C73 - 74 C79 C81 - 83	3409210171 - T	CAP AF RSG 100UF 50V 8 P	100/50
C31	3409210971 - T	CAP AF RSG 1UF 50V 5 P	1/50
C34	3409222141 - T	CAP AF RSG 220UF 25V J 8 P	220/25
C72	3409233071 - T	CAP AF RSG 33UF 50V 6 P	33/50
C71(PA-9312)	3419510378	CAP AF HS 10000UF 50V 30 P LUG	10000/50
C71(PA-9324)	3419515376	CAP AF HE 15000UF 50V	15000/50
C32	3509102530 - T	CAP CE B 0.001UF 50V J	0.001/50
C33 C77 - 78 C80	3509104530 - T	CAP CE F 0.1UF 50V Z	0.1/50
C30	3509221130 - T	CAP CE SL 220PF 50V J	220P
C41 C45	3509471130 - T	CAP CE SL 470PF 50V J	470P
C84	3609103120 - T	CAP MA 0.01UF 100V	0.01/100(M)
C0	3609104140 - T	CAP MA 0.1UF 200V J	0.1/200(M)
P3	4355833101	CON ASS'Y 1P (RED)	1P
P4	4355833201	CON ASS'Y 1P (BLK)	1P
P7 - 9	4355874810	CONNECTOR ASS'Y 4P PA-9324	CON ASS'Y 4P
CON2	4428595002	LW5267/LWB0640/2.5MM-02P	CN 2P
CON72	4428596602	WAFER LW - 1143 - 02P	2P
CON3	4428598304	WAFER LW - 0640 - 4P	4P

CON1	4428598307	CONNECTOR WAFER LW-0640-7P	7P
P1-2 P5-6	4465998210	TERMINAL(250)PCB TAB	250TERMINAL
TP1/2	4678699411	CNT PLUG 1P	1P
Q2-3	S20160505001	TR NPN KTC4375-Y-RTF SOT-89	KTC732
C124 C123	3539332331-A	CAP CE YR 3300PF 16V M AXIAL	3300P
C127	3409210071-T	CAP AF RSG 10UF 50V 5 P	10/50
R97			
<b>JACK B'D (4005196010)</b>			
DC FUSE (PA-9312)	4458999310	FUSE CARRIER FEK-0031.1661 SUT	220V 60Hz 240V 50Hz 120V 60Hz
	4458999410	FUSE CARRIER FEU-0031.1663 SUT	230~240V 50Hz 230V 50Hz
DC FUSE (PA-9324)	4458999310	FUSE CARRIER FEK-0031.1661 SUT	220V 60Hz
P11-12	4465998210	TERMINAL(250)PCB TAB	250TERMINAL
IC01A	2118010332	IC NJM 5532DD JRC	NJM 5532DD
R6-7 R11 R18	3009103973	RES CF 10K 1/5W J N	10K 1%
R5	3009104973	RES CF 100K 1/5W J N	100K 1%
R121	3009152973	RES CF 1.5K 1/5W J N	1.5K 1%
R13-14	3009473973	RES CF 47K 1/5W J N	47K 1%
R1-2 R12 R15	3009562973	RES CF 5.6K 1/5W J N	5.6K 1%
R3-4	3009822973	RES CF 8.2K 1/5W J N	8.2K 1%
VR1	3238081410	VR RV09A-20-25K-B53(ALPHA)	5KB
C3-4 C11 C13-14 C17	3409210071-T	CAP AF RSG 10UF 50V 5 P	10/50
C6	3409247871-T	CAP AF RSG 0.47UF 50V 5 P	0.47/50
C12 C15	3509101130-T	CAP CE SL 100PF 50V J	100P
C1-2	3509102530-T	CAP CE B 0.001UF 50V J	0.001/50
C5 C16	3509221130-T	CAP CE SL 220PF 50V J	220P
C120	3609103120-T	CAP MA 0.01UF 100V	0.01/100(M)
C121-122	3609683120-T	CAP MA 0.068UF 100V J	0.068/100(M)
CON101	4353989510	CONNECTOR ASS'Y 7P	7P
JK2	4408194610	XLR JACK (M) (E403A0090N)	XLR JACK
CON2	4428595002	LW5267/LWB0640/2.5MM-02P	CN 2P
JK1	4438193710	XLR JACK(F) 3P(E303A0070N)	XLR 3P(F)
P15-16	4465998210	TERMINAL(250)PCB TAB	250TERMINAL
SW1-2	4618001110	SW SV10020-0202-9T-SN	SV10020-0202 -9T-SN
P23	4678699411	CNT PLUG 1P	CNT1P
<b>LED1 B'D (4005196020)</b>			
Q102-105	2008606104-T	TR NPN KTC3198-Y-AT TO-92	KTC 3198Y
Q101	2008606108-T	KTC3200-BL-AT	C2240
D101-103	2058502120	DIODE ZENER UZ-12BM(1N5242B)	UZ 12BM
IC04-A1	2118010590	IC NJM4558D JRC	NJM 4558D

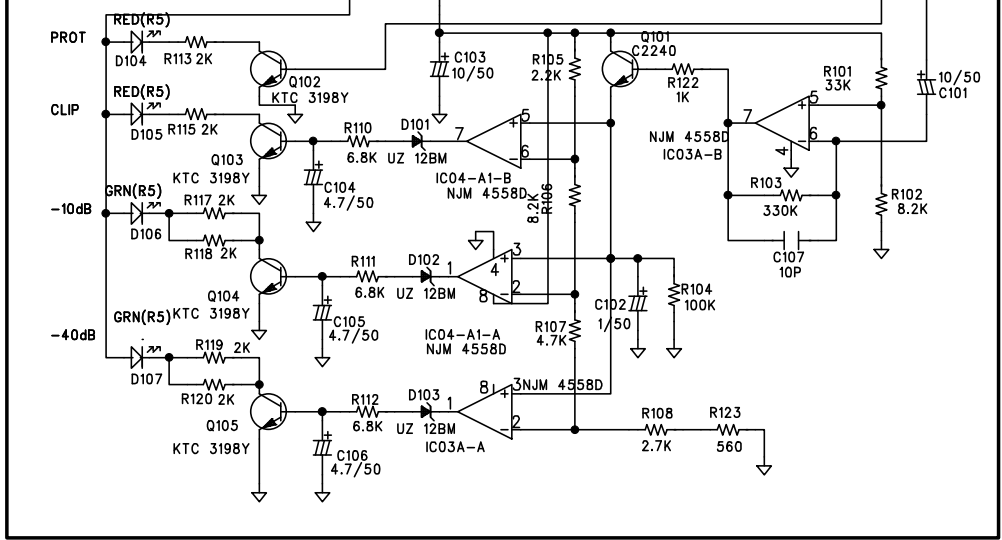
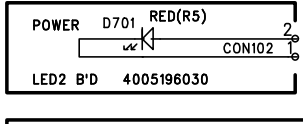
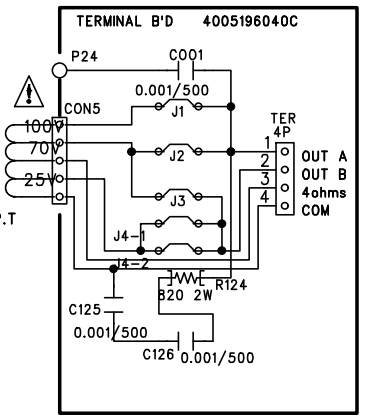
IC03A	2118010590	IC NJM4558D JRC	NJM 4558D
D104 - 105	2300050105	LED LTL - 307E - 041A LITEON	LTL - 307E - 041A
D106 - 107	2300052105	LED LTL - 307G - 041A LITEON	LTL - 307G - 041A
R109	3009101973	RES CF 100 1/5W J N	100
R122	3009102973	RES CF 1K 1/5W J N	1K
R113 R115 R117 - 120	3009202973	RES CF 2K 1/5W J N	2K
R105	3009222973	RES CF 2.2K 1/5W J N	2.2K
R108	3009272973	RES CF 2.7K 1/5W J N	2.7K
R101	3009333973	RES CF 33K 1/5W J N	33K
R103	3009334973	RES CF 330K 1/5W J N	330K
R107	3009472973	RES CF 4.7K 1/5W J N	4.7K
R123	3009561973	RES CF 560 1/5W J N	560
R110 - 112	3009682973	RES CF 6.8K 1/5W J N	6.8K
R102 R106	3009822973	RES CF 8.2K 1/5W J N	8.2K
C101 C103	3409210071 - T	CAP AF RSG 10UF 50V 5 P	10/50
C104 - 106	3409247971 - T	CAP AF RSG 4.7UF 50V 5 P	4.7/50
CON103	4428598704	CONNECTOR WAFER LA - 0640 - 4P	LA - 04P
C107	3509100130 - T	CAP CE SL 10PF 50V D	10P
<b>TERMINAL B'D (4005196040)</b>			
CON5	4428596605	LOCK WAFER LW - 1143 - 05P	5P
J1 J2 J3 J4 - 1 - 2	JUMPER	JUMPER	JUMPER
TER	4465997704	SCREW TERMINAL 4P	4P
P24	4678699411	CNT PLUG 1P	CNT1P
R124	3039821572	RES MO 820 2W JN	820 2W
C125 COO1 C126	3509102556	CAP CE 0.001UF 500V	0.001/500
<b>LED2 B'D (4005196030)</b>			
D701	2300050101	LED LTL - 307E - 012A	LTL - 307E - 012A
CON102	4353986914	CON ASS'Y 2P	LA 2P
<b>SW B'D (4005196050)</b>			
C100	3549472407	CAP DE2E3KH472MA4B	0.0047/400
P19 - 21	4465998210	TERMINAL(250)PCB TAB	250TERMINAL
P22	4465998210	TERMINAL(250)PCB TAB	250TERMINAL
S1	4648099010	POWER SWITCH ESB - 99831V MAST	220V/110V
<b>ASS'Y</b>			
POWER TRANS (PA - 9312)	2828079500	TRANSFORMER POWER PA - 9312	220V 60Hz 240V50Hz
	2828079501	POWER TRANS(EUROPE) PA - 9312	230~240V 50Hz 230V 50Hz
	2828079510	POWER TRANS (UL) PA - 9312	120V 60Hz
POWER TRANS (PA - 9324)	2828079400	TRANSFORMER POWER PA - 9324	220V 60Hz
	2828079401	POWER TRANS(EUROPE) PA - 9324	230~240V 50Hz 230V 50Hz

POWER TRANS (PA-9324)	2828079420	TRANS POWER PA-9324 240V	240V 50Hz
	2828079410	POWER TRANS (UL) PA-9324	120V 60Hz
AC INLET (PA-9312/9324)	4448996910	AC INLET BACI-05-E1A (BELTON)	220V 60Hz 240V 50Hz 120V 60Hz
	4448997110	AC INLET NO.KE-10.2100.151	230V 50Hz 230~240V 50Hz
AC CORD (PA-9312/9324)	4308997310	AC CORD DOME 3-CORES	220V 60Hz
	4308996710	AC CORD (WITHOUT PLUG)	230~240V 50Hz
	4308998000	AC CORD POWER FOR SAA	240V 50Hz
	4308999310	AC CORD UL 3 (INLET)	120V 60Hz
	4308999410	AC CORD V+VII6A-250VHOVV-F3G	230V 50Hz
VOLTAGE (PA-9312/9324)	4448996914	VOLTAGE SELECTOR 220V ONLY	220V 60Hz
	4448997112	VOLTAGE 4305.0048.17(115/230)	230V~240V 50Hz 230V 50Hz
	4448996916	VOLTAGE SELECTOR 120/240V	240V 50Hz 120V 60Hz
FUSE DRAWER (PA-9312/9324)	4448996911	FUSE DRAWER(31.8MM)	220V 60Hz 240V 50Hz 120V 60Hz
	4448997120	FUSE DRAWER NO.4305.0001(20MM)	230~240V 50Hz 230V 50Hz
FUSE (PA-9312)	5508222730	FUSE NB 31.8MM 2A 250V KS	220V 60Hz
	5508223830	FUSE NB 31.8MM 10A/250V KS	220V 60Hz
	5508213830	FUSE 234F 20MM 10A/250V UCKJ	230~240V 50Hz 230V 50Hz
	5508412734	FUSE TS 20MM 2A/250V U/C/S	230~240V 50Hz 230V 50Hz
	5508222733	FUSE NB 31.8MM 2A/250V U/C	240V 50Hz 120V 60Hz
	5508223831	FUSE NB 31.8MM 10A/250V UL	240V 50Hz 120V 60Hz
	5508223233	FUSE NB 31.8MM 4A/250V U/C	120V 60Hz
FUSE (PA-9324)	5508223230	FUSE NB 31.8MM 4A/250V KS	220V 60Hz
	5508413234	FUSE 218T 20MM 4A/250V UCSKJ	230~240V 50Hz 230V 50Hz
	5508223233	FUSE NB 31.8MM 4A/250V U/C	240V 50Hz
	5508223733	FUSE NB 31.8MM 8A/250V U/C	120V 60Hz
DIODE	2058100103	DIODE KBPC-2504 LUG TYPE	
FAN	7308998910	FAN(A8025H24B)	24V/120mA

1		2			3		4		5		6	
COMPANY	INTER.M	APPLICANT	REVISED NUMBER AND DATE			DRAWN	CHECKED	APPROVED	NOTE	SIZE	SHEET NO.	SCHEMATIC DIAGRAM MODEL: PA-9312/9324
TYPE CODE		E.S	1.	4.	7.					A3	1/1	
APPROVED DATE	000000		2.	5.	8.							
			3.	6.	9.							



OUT A	70V; J2	100V; J1
OUT B	25V; J4	70V; J3



\*)

PART MODEL	Q10, Q12, Q15, Q17	C71	T2	T3	F1	F2	F3	D71	R43	R50, R57
PA-9312	NOT USED	10000/50	2818091200	2828079500	4A/250V	2A/250V	10A/250V	SBL2040	560	680
PA-9324	2SD718(0)	15000/50	2818091100	2828079400	8A/250V	4A/250V	20A/250V	SBL3040	390	1K

PA-9312	AC INLET
PA-9324	AC INLET
KS	220Vac/60Hz
EUROPE	230Vac/50Hz
UL/CSA	120Vac/60Hz

PA-9312	FUSE
PA-9324	FUSE
KS	220Vac/60Hz
EUROPE	230Vac/50Hz 230~240Vac/50Hz 240Vac/50Hz
UL/CSA	120Vac/60Hz