

SERVICE MANUAL

S U P E R I O R S E R I E S

AMPLIFIER

S-3000

interM

ELECTRICAL PARTS LIST (S - 3000)

Ref No.	Part No.	Description	Value	Qty	Remark
MAIN B'D (4005188000)					
C918 C929	3609103120-T	CAP MA 0.01UF 100V	MA0.01	2	
C701	3609332120-T	CAP MA 0.0033UF 100V	MA0.0033	1	
C702 C748 C943	3609102120-T	CAP MA 0.001UF 100V	MA0.001	3	
C709	3669474108	CAP MKP1845 0.47UF 400V	MKP 0.47/400	1	
C711 C714	3659101179	CAP MICA DM15 100PF 500V J	MI100P	2	
C723 C725-726 C746-747 C752 C911 C924	3639104255-T	CAP TL 104K 250V K SMA-4000	TL104K/250	8	
C724 C727 C741	3569105933-T	CAP CE MONO 1UF 50V Z SMA-4000	105MC	3	
C749 C913	3509471130-T	CAP CE SL 470PF 50V J	CE470P	2	
C753 C757-758 C762 C767 C769-770 C773-775 C907 C909 C737 C729 C917 C931 C946-947 C949-950 C953-954	3569104933-A	CAP CE MONO 0.1UF 50VZSMA-4000	104MC	22	
C920	3509470130-T	CAP CE SL 47PF 50V J	CE47P	1	
C703 C708	3669225149	CAP MP PPT 2.2UF 200V J	2.2/200	2	
C908 C933 C939	3659180179	CAP MICA DM15 18PF 500V J	MI18P	3	
C938	3639224111-T	CAP ECQ-V 1H224JL2 0.22UF 50VJ	MA224	1	
C937 C928 C916	3609222120-T	CAP MA 0.0022UF 100V J	MA0.0022	3	
C941	3659331179	CAP MICA DM15 330PF 500V J	MI330P	1	
C944	3659270179	CAP MICA DM15 27PF 500V J	MI27P	1	
C771 C942 C772	3509221130-T	CAP CE SL 220PF 50V J	CE220P	3	
C906 C910	3609152120-T	CAP MA 0.0015UF 100V J	MA0.0015	2	
C777	3649104251	CAP ECQ-U2A104KV PANASONIC	ECQ0.1/250	1	
C921 C932	3409847041-T	CAP AF NP 47UF25V 8 P	NP47/25	2	
C925	3409822121-T	3409822121-T	NP220/10	1	
C934 C948	3409847941-T	CAP AF NP 4.7UF 25V 6 P	NP4.7/25	2	
C704-705 C712-713	3419522295	CAP HC 2200UF 200V 40*50	2200/200	4	
C717 C720 C722 C733-735 C742-744 C750 C755 C760	3408247187	CAP AF RZ 470UF 63V SNAP 13P	RZ470/63	12	
C754 C759	3408233141	CAP RSA 330UF 25V SNAP 10 P	330/25	2	
C730 C765 C768 C912 C914	3408247147	CAP AF RX 470UF 25V SNAP 10P	RX470/25	5	
C763 C776 C764 C739	3409210071-T	CAP AF RSG 10UF 50V 5 P	10/50	4	
C904 C951-952	3409247131-T	CAP AF SG 470UF 16V 10X12.5	470/16	3	
C919 C922-923 C926-927 C901	3409247071-T	CAP AF RSG 47UF 50V 6 P	47/50	6	
C936 C935	3409222141-T	CAP AF RSG 220UF 25V J 8 P	220/25	2	
C945 C903	3409210171-T	CAP AF RSG 100UF 50V 8 P	100/50	2	
L700	2698009950	COIL TOROID RF 1.9UH S-4000	1.9uH	1	
L901	2648099800	COIL INDUTOR 2.2UF	2.2UH	1	
T701	2698009920	COIL TRANS 4P SMA-4000	COIL TRANS	1	
T702	2698009910	COIL TRANS 6P(DRIVE) SMA-4000	TRANS	1	

CN901	4428595002	LW5267/LWB0640/2.5MM-02P	BOX(SCREW)	1	
AN812	4428596604	LOCK WAFER LW-1143-04P	CH1143-4P	1	
CN705	4428595005	LW5267/LWB0640/2.5MM-05P	HEADER 5P	1	
CN903	4428598308	CONNECTOR WAFER LW-0640-8P	WAFER 8P	1	
AN101	4428591316	WAFER BOX GDSL-16-254 LATCH	BOX HEADER 16P	1	
D700	2058100998	DIODE KBPC3504	KBPC3504	1	
D701 D703 D723 D730 D734-735 D737 D739-741 D915-918 D921 D931 D933 D936 D940-943 D945-946	2058304100	DIODE 1N4148M	1N4148	24	
D710-711 D906 D914 D934-935 D708-709	2058400995	DIODE 1N4935/4937 TAIWAN	1N4935	8	
D702 D704-705 D707	2058400997	DIODE HER305(UF5404) TAIWAN	HER305	4	
D727 D923-924 D927-928 D728-729 D725 D732 D726 D920 D738 D716	2058100996	DIODE RECTIFIER LT1N4006(4007)	1N4006	13	
D929 D902	2058100105	DIODE LT1N5402(1N5404) F	1N5402	2	
D910 D912	2058400996	DIODE 1N4934 TAIWAN	1N4934	2	
D712 D722	2058300996	DIODE MUR1520 MOTOROLA	U1520	2	
D717 D719	2058400999	DIODE SF1604G "C" TAIWAN	SF1604G-"C"	2	
D721 D724	2058400998	DIODE SF1604G "A" TAIWAN	SF1604G-"A"	2	
D715 D731 D901	2058310993	DIODE UZP-18B PYUNG CHANG	18BM/1W	3	
D742	2058500033	DIODE ZENER UZ-3.3B(1N5226B)	3.3BM	1	
D736 D913 D938-939 D947	2058501076	DIODE ZENER UZ-7.5B(1N5236B)	7.5BM	5	
D930	2058500969	DIODE ZENER 6.2B(1N5234B)	6.2BM	1	
D937 D919	2058512190	DIODE ZENER 10V 1W(1N4740A)	10BM/1W	2	
D903-904	2058510150	DIODE ZENER UZP-15BM(1N4744A)	15BM/1W	2	
L702-704 L706	2648609800	FERRITE BEAD(10*12)MM SMA-4000	FERRITE BEAD	4	
IC904	2178304090	IC HYBRID SWITCHING B	HYBRID B	1	
IC902	2178304091	IC HYBRID SWITCHING A	HYBRID A	1	
IC705	2118080340	IC BA10393 ROHM	BA10393	1	
IC703	2128514004	IC M74HC4024BIR STM	74HC4024	1	
IC704	2118031900	IC OSCILLATOR (7.3728MHZ)	OSC	1	
IC701	2118031700	CC TC1427CPA TELCOM	TC1427	1	
IC903 IC906-907	2168220982	IC NE5532(SIGNETICS)	NE5532N	3	
IC702	2118031800	IC SG3525AN SILICON GENERAL	SG3525	1	
CN701-703 CN902 CN904-905	4465998210	TERMINAL(250)PCB TAB	250TAB	6	
LD901	2300052101	LED LTL-307G-012A LITEON	GREEN	1	
TH701	2438200040	POSISTOR P42T7D100B04 PSR-2800	POSISTOR	1	
TH902	2438007995	POSISTOR PTFM04BH471Q2N34B0	H1	1	
RN701	3099222273	RES ARRAY 8POL 2.2K*4J	2.2K	1	
RN702	3099103273	RES ARRAY 8POL 10K*4	10K	1	
RN901	3099472273	RES ARRAY 8POL 4.7K*4	4.7K	1	
RN902	3099102273	RES ARRAY 8POL 1K*4	1K	1	
RN903	3099473273	RES ANR 08Y 473 J ARRAY	47K	1	
R704 R708 R736 R742	3002100953	RES CF 10K 1/5W F N	10KF	8	

R979-980 R998 R1023					
R739 R723	3003715953	RES CF 7.15K 1/5W FN SMA-4000	7.15KF	2	
R706 R743 R718 R707	3009569973	RES CF 5.6 1/5W JN SMA-4000	5.6	4	
R745	3009124973	RES CF 120K 1/5W J N	120K	1	
R741 R991-992	3009394973	RES CF 390K 1/5W J N	390K	3	
R990	3002680953	RES CF 68K 1/5W F N	68KF	1	
R993	3009184973	RES CF 180K 1/5W J N	180K	1	
R729	3009273973	RES CF 27K 1/5W J N	27K	1	
R1009 R968	3009334973	RES CF 330K 1/5W J N	330K	2	
TH901	2438200060	THERMISTOR NTC5D-400KPC	THERMISTOR	1	
R720 R740 R995 R1013-1014	3003221953	RES CF2.21K 1/5W FN SMA-4000	2.21KF	5	
R733 R951 R974	3002392953	RES CF 39.2K 1/5W F N	39.2KF	3	
R737 R940 R1001 R725 R728	3004280953	RES CF 280 1/5W FN	280F	5	
R902 R1002 R1004 R1010 R1016 R1020	3002121953	RES CF 12.1K 1/5W F N	12.1KF	6	
R916 R912	3003866953	RES CF 8.66K 1/5W FN	8.66KF	2	
R919 R922 R936 R939 R959	3005475953	RES CF 47.5 1/5W FN SMA-4000	47.5F	5	
R932 R929	3002931953	RES CF 93.1K 1/5W F N	93.1KF	2	
R937 R949 R973	3003453953	RES CF 4.53K 1/5W FN SMA-4000	4.53KF	3	
R738 R942 R938 R734-735 R907 R1018 R1022	3004953953	RES CF 953 1/5W FN SMA-4000	953F	8	
R956 R1017 R1021	3002976953	RES CF 97.6K 1/5W F N	97.6KF	3	
R960 R969 R724	3004464953	RES CF 464 1/5W FN SMA-4000	464F	3	
R964 R913	3004536953	RES CF 536 1/5W F N	536F	2	
R967 R982 R988	3002210953	RES CF 21K 1/5W FN SMA-4000	21KF	3	
R926 R962-963 R918 R958 R930	3003348953	RES CF 3.48K 1/5W FN SMA-4000	3.48KF	6	
R985 R971	3004475953	RES CF 475 1/5W FN SMA-4000	475F	2	
R987 R1007 R954	3003590953	RES CF 5.9K 1/5W FN SMA-4000	5.9KF	3	
R997 R746 R914	3009473973	RES CF 47K 1/5W J N	47K	3	
R903 R1015 R965 R1019	3003162953	RES CF 1.62K 1/5W FN SMA-4000	1.62KF	4	
R1006 R1005	3004237953	RES CF 237 1/5W FN	237F	2	
R977	3005562953	RES CF 56.2 1/5W FN SMA-4000	56.2F	1	
R1011-1012	3004100953	RES CF 100 1/5W FN SMA-4000	100F	2	
R999 R984 R1024	3009151973	RES CF 150 1/5W J N	150	3	
R943	3009330973	RES CF 33 1/5W J N	33	1	
R950 R721 R748	3009750973	RES CF 75 1/5W JN	75	3	
R953 R996	3009223973	RES CF 22K 1/5W J N	22K	2	
R976	3003931953	RES CF 9.31K 1/5W FN SMA-4000	9.31KF	1	
R1003	3002680953	RES CF 68K 1/5W F N	68KF	1	
R747	3039181472-T	RES MO 180 1W J T	180/1W	1	
R749 R983 R986 R716	3039150472-T	RES MO 15 1W J N	15/1W	4	
R908 R915 R917 R933 R935 R957 R961 R975 R978 R989	3059228673	RES CE 0.22 3W J RQA T.H	0.22/3W	10	

R928 R972	3039339572-F	RES MO 3.3 2W JN SMA-4000	3.3/2W	2	
R945	3039183572-F	RES MO 18K 2W JN SMA-4000	18K/2W	1	
R947	3039399572-F	RES MO 3.9 2W JN SMA-4000	3.9/2W	1	
R905	3039223574	RES MO 22K 2W	22K/2W	1	
R906	3039271572-F	RES MO 270 2W J N	270/2W	1	
R1000	3039689572-F	RES MO 6.8 2W J N	6.8/2W	1	
R700	3039560572-F	RES MO 56 2W J N	56/2W	1	
R701-702 R909-910 R923-924	3039473574	RES MO 47K 2W	47K/2W	6	
R714 R726-727 R911 R713 R981	3039220572-F	RES MO 22 2W J N	22/2W	6	
R703 R705	3039150572-F	RES MO 15 2W JN SMA-4000	15/2W	2	
R712 R730	3039279572-F	RES MO 2.7 2W J N	2.7/2W	2	
R921 R927	3059302773	RES CE 3K 5W J M	3K/5W	2	
R931 R934 R946 R948	3039100674	RES MO 10 3W J P	10/3W	4	
R955	3039103572-F	RES MO 10K 2W J N	10K/2W	1	
R719	3059103773	RES CE 10K 5W J N	10K/5W	1	
R952	3059018803	RES CE 0.01 10W F AXIAL	0.01/10W	1	
Q705-708	2048209999	FET FQP50N06 (IRFZ44)	FQP50N06	4	
T703	2828067800	TRANS MAIN SWITCHING SMA-3000	MAIN TRANS	1	
Q701-702	2028900101	IGBT N-CH IRG4PC50W IXR	IRG4PC5W	2	
Q712 Q714 Q902 Q916 Q925 Q931 Q933 Q936-938 Q941	2008405998-T	2N3904-AT	2N3904	11	
Q923 Q929 Q915 Q919-920	2028407122	TR NPN 2SC5200 TOSHIBA	2SC5200	5	
Q928	2028348100-T	TR NPN MPSW01A MOTOROLA	MPSW01	1	
Q904	2028406114	TR KTD2059-Y-U	KTD2059Y	1	
Q908	2028407995	TR NPN MJE15032(MOTOROLA)	MJE15032	1	
Q914	2008448099-T	TR NPN MPSA44 MOTOROLA	MPSA44	1	
Q921	2008448100-T	TR NPN MPSA13 MOTOROLA	MPSA13	1	
Q709 Q713 Q901 Q912 Q922 Q926-927 Q932 Q934-935 Q939-940	2008005998-T	2N3906-AT	2N3906	12	
Q924	2028048100-T	TR PNP MPSW51A MOTOROLA	MPSW51	1	
Q909-911 Q905-906	2028107118	TR PNP 2SA1943 TOSHIBA	2SA1943	5	
Q918	2028107995	TR PNP MJE15033 (MOTOROLA)	MJE15033	1	
Q913	2008006100-T	TR PNP UPSA92 KEC	UPSA92	1	
VR901 VR903	3248322220	RES SEMI RH0615C100222	2.2K	2	
VR902	3248310120	RES SEMI RH0615C100101	100	1	

INPUT B'D (4005188820)

C301-302 C401-402	3509221231-A	CAP CE B 220PF 50V K AXIAL	CE220P	4	
C403-404	3569104933-A	CAP CE MONO 0.1UF 50VZSMA-4000	104MC	2	
C31	3409247131-T	CAP AF SG 470UF 16V 10X12.5	470/16	1	
C32-33	3409210141-T	CAP AF RSG 100UF 25V 6 P	100/25	2	
CNO2	4428592516	WAFER BOX PIN 16P (PC-1635)	WAFER BOX 16P	1	
CNO1	4428592526	WAFER BOX TPHB03-1419-26A	BOX HEADER 26P	1	
D31	2058304100	DIODE IN4148M	1N4148	1	
IC301 IC401	2168220982	IC NE5532(SIGNETICS)	5532N	2	
JK302 JK402	4438090310	JACK COMBINATION CXLF-06L	PHONE JACK	2	

JK301 JK401	4438094110	XLR MAIL 3PIN E3MSTM3	SPEACON	2	
LD31-32	2308252262-T	SLR-54GGA 49	GRE	2	
R31	3005475953	RES CF 47.5 1/5W FN SMA-4000	47.5F	1	
R32	3009330973	RES CF 33 1/5W J N	33	1	
R33 R302 R308 R402 R408	3003100953	RES CF 1K 1/5W F N	1KF	5	
R34	3002100953	RES CF 10K 1/5W F N	10KF	1	
R303 R309 R403 R409	3003909953	RES CF 9.09K 1/5W F N	9.09KF	4	
R307 R401 R407 R301	3002200953	RES CF 20K 1/5W F N	20KF	4	
R38-39	3009101973	RES CF 100 1/5W J N	100	2	
R305 R404-406 R304 R310 R306 R410	3003200953	RES CF 2K 1/5W FN SMA-4000	2KF	8	
SW31	4625996110	SW SLIDE JSS 4319A 4C-3P	JSS4319	1	

DISPLAY B'D (4005188840)

AN705	4355843805	CON ASS'Y 5P SMA-4000	CON 5P	1	
LD1	2308252262	LED REF SLR-54MG R5 GRE ROHM	GRE	1	
LD2	2308252222	LED REF SLR-54UR R5 RED ROHM	RED	1	
LD3	2308252302	LED REF SLR 54DU R5 YEL	YEL	1	
RO4	3009271973	RES CF 270 1/5W J N	270	1	
RO1 RO3 RO6-7	3003100953	RES CF 1K 1/5W F N	1KF	4	
RO2	3002100953	RES CF 10K 1/5W F N	10KF	1	
RO5	3009472973	RES CF 4.7K 1/5W J N	4.7K	1	
Q4-5	2008405998-T	2N3904-AT	2N3904	2	

OUTPUT B'D (4005188850)

C501-502	3639104255-T	CAP TL 104K 250V K SMA-4000	104K/250V	2	
C503-504	3639474255	CAP TL 474K 250V K	474K/250V	2	
CGND1	4355866503	RING TERMINAL 100MM	GND	1	
JK1-2	4438191710	BINDING POST (2P) DOM. UL	BINDING POST	2	
ANL904-905 ANR904-905	4465998210	TERMINAL(250)PCB TAB	250TAB	4	

CONTROL B'D (4005188810)

C6-8 C106 C206	3569104933-T	CAP MONO CE 0.1UF 50V	104MC	5	
C203 C103	3639224111-T	CAP ECQ-V 1H224JL2 0.22UF 50VJ	0.22M	2	
C1-2	3409847041-T	CAP AF NP 47UF25V 8 P	NP47/25	2	
C107 C207	3409847941-T	CAP AF NP 4.7UF 25V 6 P	NP4.7/25	2	
C3 C9	3409222141-T	CAP AF RSG 220UF 25V J 8 P	220/25	2	
C5 C4 C104-105 C204-205	3409210071-T	CAP AF RSG 10UF 50V 5 P	10/50	6	
C10-11	3409210171-T	CAP AF RSG 100UF 50V 8 P	100/50	2	
CN101 CN201	4428592516	WAFER BOX PIN 16P (PC-1635)	WAFER BOX 16P	2	
AN1	4428592526	WAFER BOX TPHB03-1419-26A	BOX HEADER 26P	1	
BR101 BR201	2058100977	DIODE BRIDGE DB103G/105G TAIWA	DB103	2	
D100-101 D200-201	2058304100	DIODE IN4148M	1N4148	4	
IC103 IC203	2128000748	IC 4N30 MOTOROLA	4N30	2	
IC101 IC201	2168220982	IC NE5532(SIGNETICS)	5532N	2	
IC2	2118032126	IC LM13600AN NATIONAL	LM13600AN	1	
IC102 IC202	2118032040	IC BA6124 ROHM	BA6124	2	
LD101 LD201	2308252262	LED REF SLR-54MG R5 GRE ROHM	GRE	2	
LD103 LD102 LD202-203	2308252302	LED REF SLR 54DU R5 YEL	YEL	4	
LD104 LD204	2308252222	LED REF SLR-54UR R5 RED ROHM	RED	2	
R1-2 R11-12	3005475953	RES CF 47.5 1/5W FN SMA-4000	47.5F	4	

R5 R4 R13-14 R108 R118 R208 R218	3003357953	RES CF 3.57K 1/5W FN SMA-4000	3.57KF	8	
R8 R105 R117 R119 R121 R205 R217 R219 R221	3002100953	RES CF 10K 1/5W F N	10KF	9	
R104 R124-125 R204 R224-225 R300	3009101973	RES CF 100 1/5W J N	100	7	
R111 R25 R28 R122 R24 R6 R211 R7 R222 R9	3002200953	RES CF 20K 1/5W F N	20KF	10	
R113 R106 R206 R213	3009394973	RES CF 390K 1/5W J N	390K	4	
R114 R214	3009392973	RES CF 3.9K 1/5W J N	3.9K	2	
R128 R123 R116 R223 R228	3003562953	RES CF 5.62K 1/5W FN SMA-4000	5.62KF	5	
R100 R112 R212 R3	3003200953	RES CF 2K 1/5W FN SMA-4000	2KF	4	
R209 R109	3009750973	RES CF 75 1/5W JN	75	2	
R201 R26	3009472973	RES CF 4.7K 1/5W J N	4.7K	2	
R115	3002130953	RES CF 13K 1/5W FN SMA-4000	13KF	1	
R126 R226	3002348953	RES CF 34.8K 1/5W FN SMA-4000	34.8KF	2	
R202 R101	3003100953	RES CF 1K 1/5W F N	1KF	2	
R220 R120	3004536953	RES CF 536 1/5W F N	536F	2	
R207 R107	3004649953	RES CF 649 1/5W FN SMA-4000	649F	2	
R103	3002124953	RES CF 12.4K 1/5W FN SMA-4000	12.4KF	1	
R210 R110	3004200953	RES CF 200 1/5W F N	200F	2	
R203	3003162953	RES CF 1.62K 1/5W FN SMA-4000	1.62KF	1	
R102	3003976953	RES CF 9.76K 1/5W FN SMA-4000	9.76KF	1	
SW1-2	4628987210	SW SPEC122SC051	SW	2	
Q2-3 Q6 Q103 Q203	2008405998-T	2N3904-AT	2N3904	5	
Q101-102 Q201-202 Q204-205	2008005998-T	2N3906-AT	2N3906	6	
VR101 VR201	3228075410	VR PI16 10KB (21 DETENT)	10KB	2	

AC POWER B'D (4005188800)

AC1	4355806910	AC CABLE SMA-4000 DOM	AC CABLE	1	
C801 C807	3649474251	CAP ECQ-U2A474KV PANASONIC	UV0.47/250	2	
C803-804	3549332107	CAP CE 3300PF 400V SCB	0.0033	2	
C805-806 C808	3549222091	CAP DE2E3KH222MA3B	0.0022	3	
C802	3649104251	CAP ECQ-U2A104KV PANASONIC	UV0.1/250	1	
C809	3509103450-T	CAP CE 0.01UF 500V Z	0.01/500	1	
L801-803	2698009930	COIL TOROID 2MH-20AMP SMA-4000	2MH-20A	3	
CN812	4428596604	LOCK WAFER LW-1143-04P	CH-1143-04P	1	
F1-2	5508323930	FUSE 61MS 31.8MM 12A/250V JK	12A	2	
F3	5508412239	FUSE#218T 20MM 1A/250V UCSKJ	1A	1	
E801-802	4465998210	TERMINAL(250)PCB TAB	250TAB	2	
R803-806	2438200100	THERMISTOR POWER NTC 0.5D-30	30A	4	
R801-802	3039754574	RES MO 750K 2W	750K/2W	2	
SW15	4625996611	SW POWER(C1350AT) ARCOLECTRIC	SW POWER	1	
CN801-810	4465998210	TERMINAL(250)PCB TAB	250TAB	10	
CN811	4465996202	SCREW TERMINAL 2P	SCREW TERMINAL2P	1	
T801	2828069500	TRANS POWER S-3000/4000	5.0VA	1	



