

# *SERVICE MANUAL*

*V3001 Plus*

*MODEL NO.: V3001 Plus*

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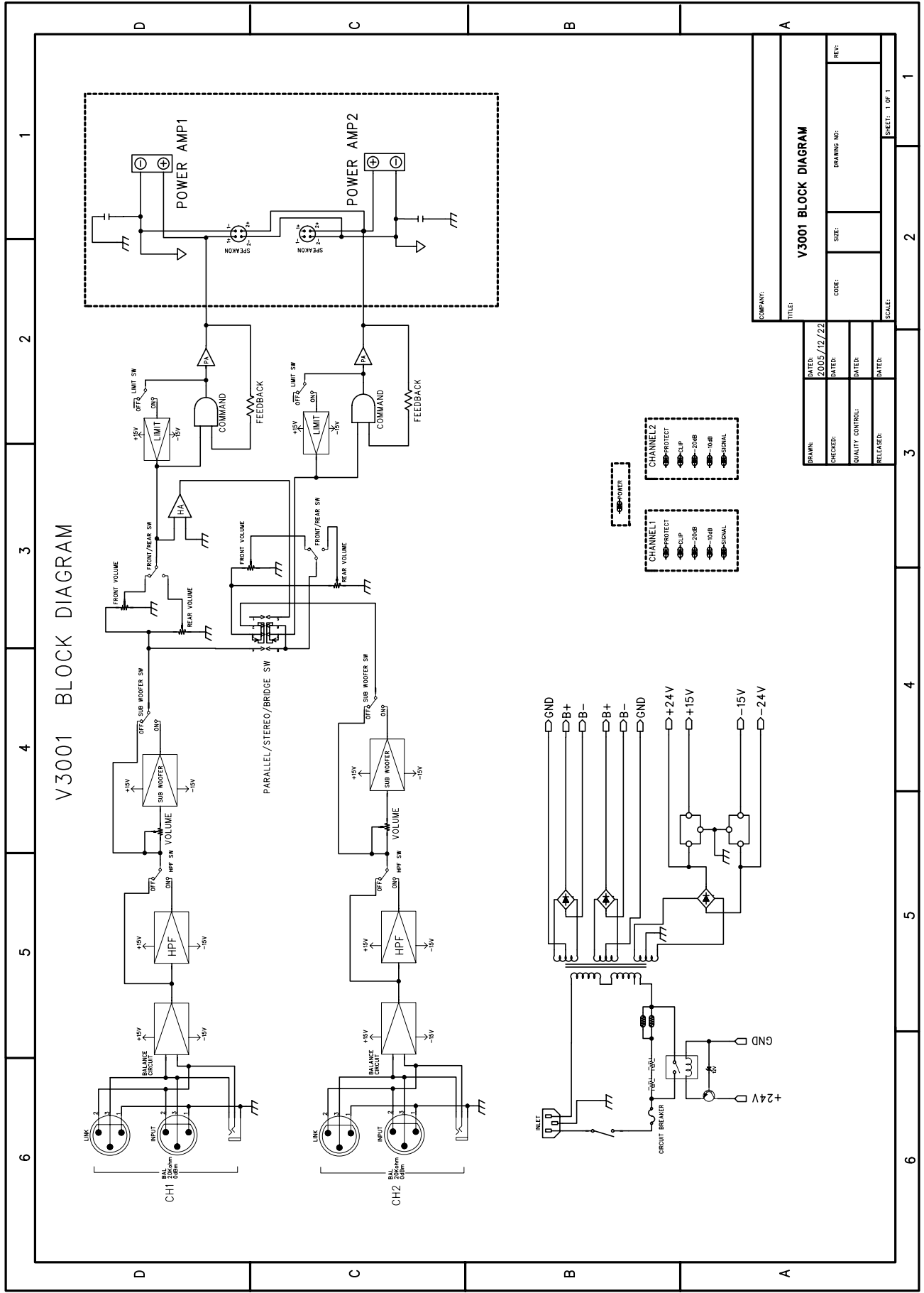
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*General Specification*

NORMAL

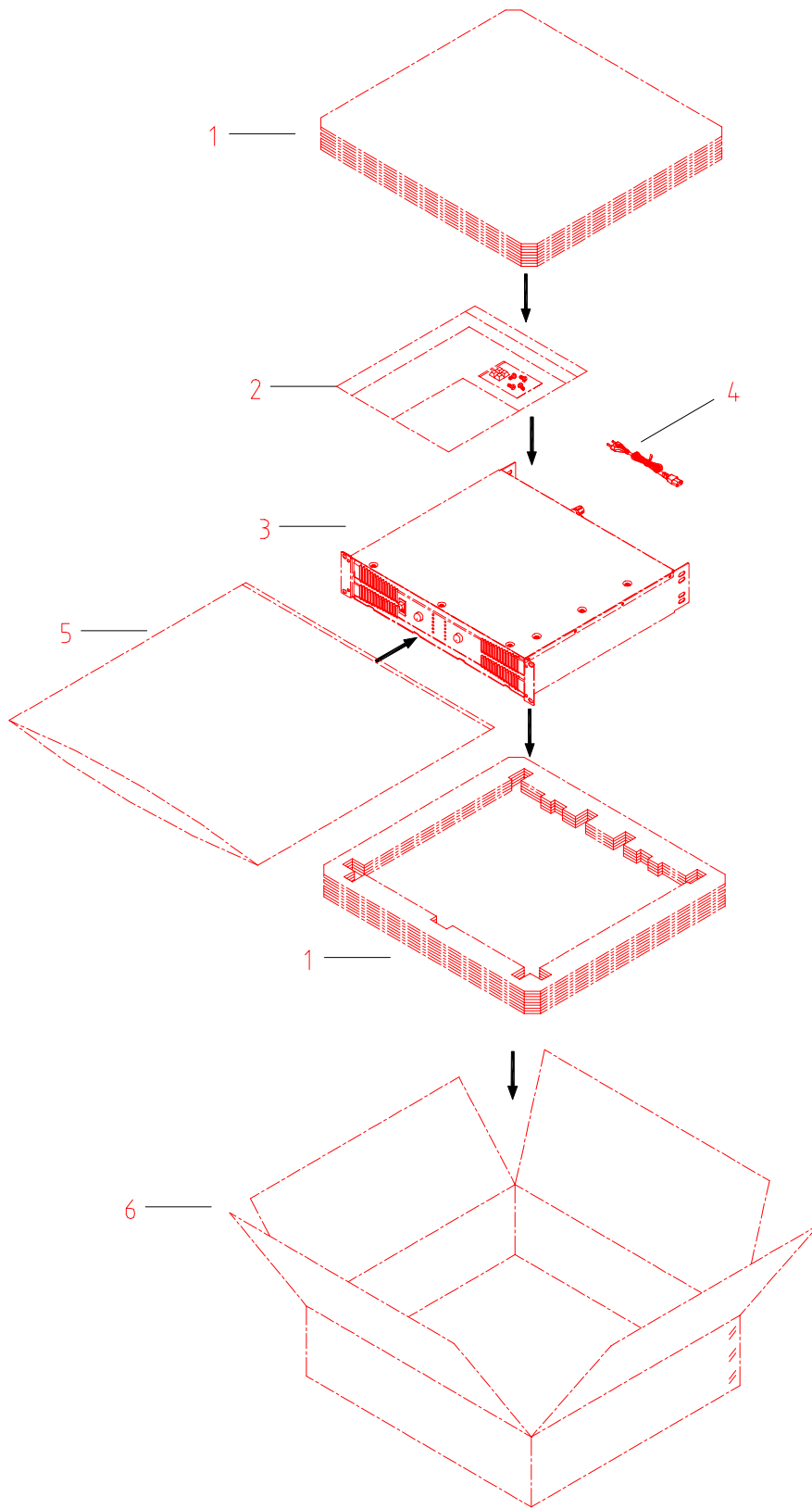
LIMIT

	NORMAL	LIMIT
* Rated Output Power(1KHz,THD+N 1%)/BOTH CHANNEL DRIVE (PARALLEL) 8 ohm 1KHz, THD+N 1%		350W
4 ohm 1KHz, THD+N 1%		600W
2 ohm 1KHz, THD+N 1%		900W
(BRIDGE MONO) 8 ohm 1KHz, THD+N 1%		1200W
* THD+N 4 ohm 1KHz, per channel 1/2 rated power,at 1KHz/both drive		0.1%
* Frequency response 8 ohm 1W, Check point 1KHz, From 20Hz~20KHz		+0.5/-1dB
* Input Sensitivity 8 ohm rated power	1.24V	0.992V~1.561V
* Input Clipping 8 ohm 1W, Input: 12dB(600 ohm)		THD+N < 1%
* S/N Ratio 4 ohm rated power, audio filter weighted		85dB
* Crosstalk 4 ohm rated power, "A" weighted		70dB
* Damping Factor 8 ohm, 400Hz 1W		>200
* Indicator Senitivity Clip LED(@ 4 ohm 1KHz, Just Light)		>=0.01%
Signal LED(@Audio analyzer 4 ohm Loader,Set No Load, 1KHz ,Output:600W<=>0dBr)		
-10dB LED Just Light	-10dB	-10dB+/-2dB
-20dB LED Just Light	-20dB	-20dB+/-2dB
Signal LED Just Light	-36dB	-36dB+/-2dB
* HPF TEST @8 ohm 1KHz 1W, Again Input 20Hz		-10dBr Down
* Limiter @4 ohm 1KHz Input: +4dBm(600 ohm) Volume MAX		<=1%
* SUB WOOFER No Load Input:20Hz,Output:36dBm(Audio Analyzer Input/100K SUB VR MIN),Again Input 45Hz		-10dB DOWN
No Load Input:200Hz,Output:36dBm(Audio Analyzer Input/100K SUB VR MAX),Again Input 400Hz		-10dB DOWN
* VOLUME CONTROL(FRONT/REAR SWITCH 'REAR') 8 ohm 1KHz, THD+N 1%		350W



**V3001 BLOCK DIAGRAM**

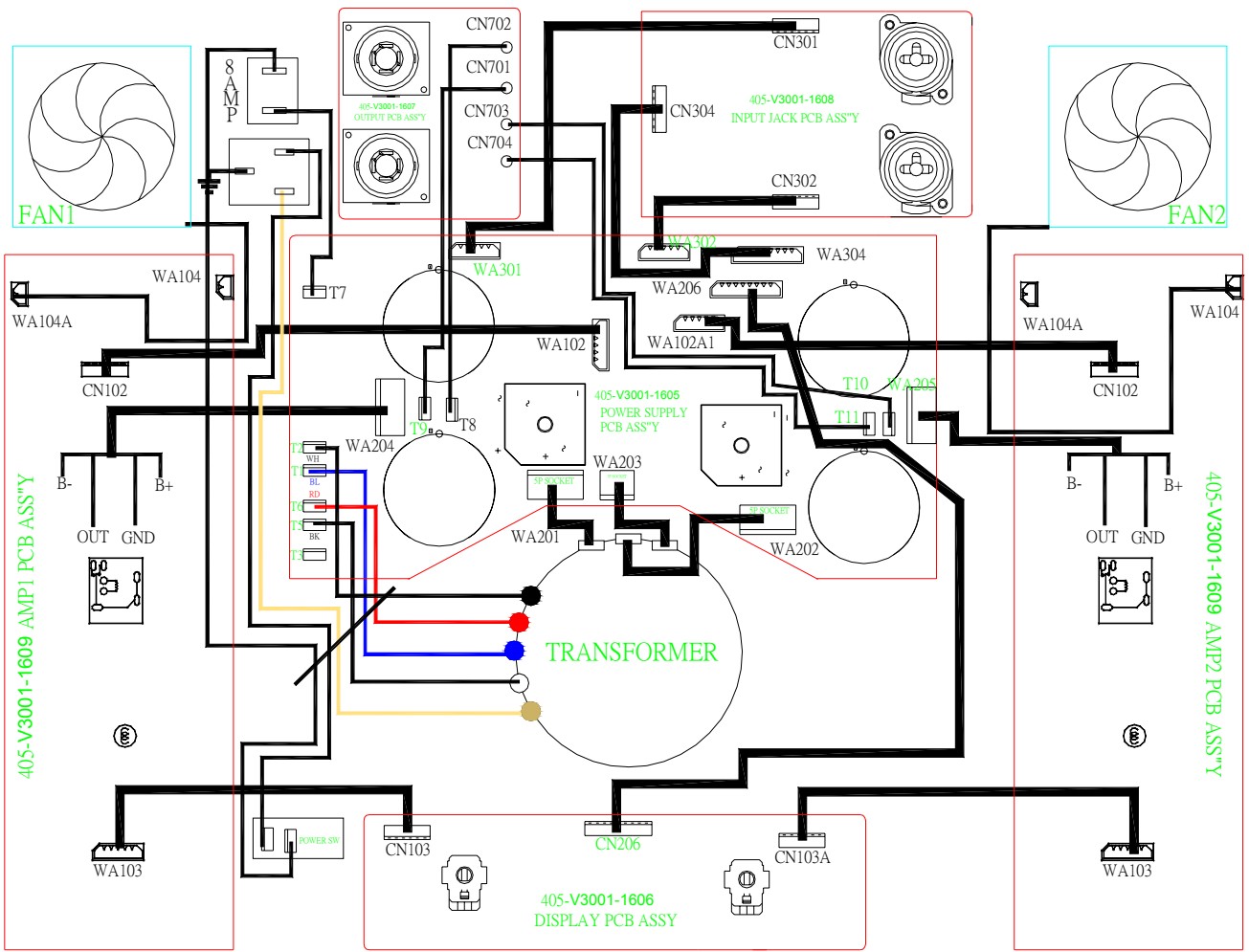
COMPANY:	
TITLE:	
DRAWN:	DATE: 2005/12/22
CHECKED:	DATE:
QUALITY CONTROL:	DATE:
RELEASED:	DATE:
CODE:	DRAWING NO:
SIZE:	REV:
SCALE:	SHEET: 1 OF 1



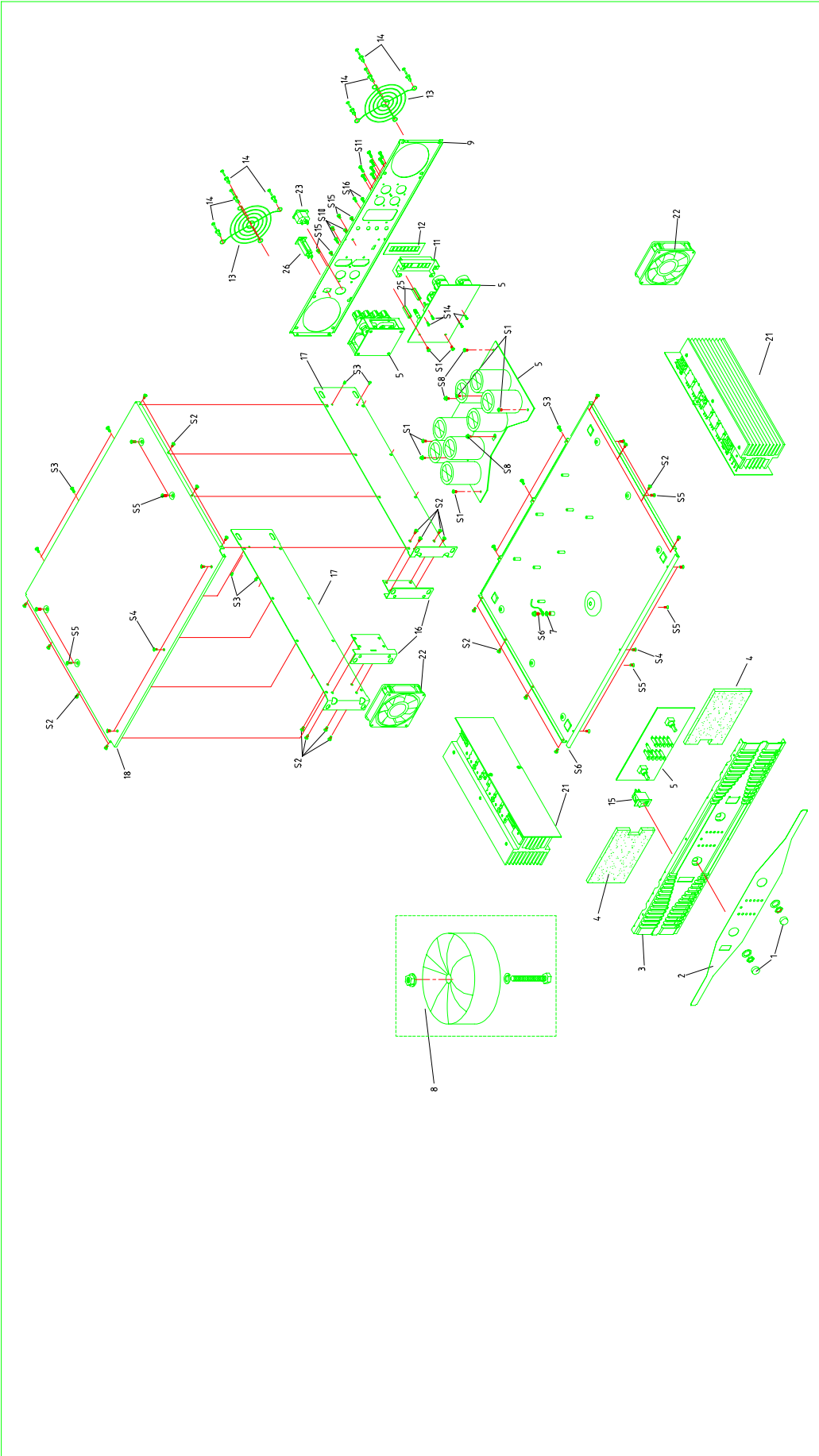
V3001B



Point to Point Wiring Diagram



Exploded View



MATERIAL	FINISHING	TOLERANCE	MODEL NO
3RD ANGLE'S	SCALE	1:1	V3001B
			DESCRIPTION
			EXPLODE DRAWING
			PART NO
			DRAW NO

*Exploded View Part List*

REF NO.	DESCRIPTION	PART NO.	Q'TY	REMARK
1	CONTROL KNOB	100-V1001-2342	2	
2	ALUMINUM PLATE	501-V3001-1820	1	
3	FRONT PANEL	703-V1001-974	1	
4	FILTER	612-V1001-206	2	
5	POWER/DISPLAY/IN/OUTPUT PCB ASS'Y	704-V3001-5886	1	
6	BOTTOM COVER	703-V4001-997	1	
7	TOOTH WASHER	606-F200-002	1	
8	TRNASFORMER	411-V3001B-498	1	
9	REAR PANEL	300-V3001-1235	1	
11	SWITCH BRACKET	300-V1001-1237	1	
12	INLAY	501-V1001-1821	1	
13	FAN SHIELD	703-V1001-931	2	
14	MOUNTING BUTTON	504-SX1200-167	8	
15	POWER SWITCH	403-V1001-232	1	
16	RACK EAR BRACKET	300-V1001-1262	2	
17	SIDE FRAME	300-V1001-1234	2	
18	TOP COVER	300-V2001-1232	1	
21	AMP PCB ASS'Y	704-V3001-5887	2	
22	FAN	401-V1001-063A	2	
23	AC INLET	420-SX1800-195	1	
25	SUPPORT M3(H:24)	200-SX1200-451	2	
26	CIRCUIT BREAKER	403-SX1800C-222	1	
S1	SCREW M3*6 B-HEAD YELLOW	602-XM610-511	7	
S2	SCREW TTS4*6 B-HEAD BLACK	602-SX1200-541	24	
S3	SCREW TTS3*6 B-HEAD BLACK	602-SX1200-542	10	
S4	SCREW TTS4*6 F-HEAD BLACK	602-V1001-556	6	
S5	SCREW M4*8 B-HEAD BLACK	602-SX1200-543	8	
S6	SCREW M4*10 B-HEAD ASS'Y WASHERS YELLOW	602-XM410-552	1	
S8	SCREW M 3*8 P-HEAD WASHER ASS'Y	602-XM610-530	3	
S10	SCREW BTTB3*6 BLACK	602-QMX2BPM-322	3	
S11	SCREW TTB 3*10 B-HEAD BLACK(TEETH)	602-XM610-522	8	
S14	SCREW	602-XM610-515	4	
S15	SCREW M3*8 B-HEAD BLACK	602-SX1200-544	4	
S16	SCREW	602-XM610-514	2	



Power/Display/In/Out PCB Ass'y

REF NO.	DESCRIPTION	PART NO.	Q'TY	REMARK
	POWER/DISPLAY/IN/OUT PCB ASS'Y	704-V3001-5886	1	
	BRACKET(M3*24.5)	200-SX-459	2	
GND2,GND3,GND1	GROUNDING SHIELD	300-F202-001	3	
	OUTPUT JACK BRACKET(SECC 1.0t)	300-SX-1186A	1	
SW11	SLIDE SW(SST1040-0202-9T-NP)-Alpha	403-V3001-229	1	
SW301,SW302,SW303,SW304,SW305,SW306,SW307	SLIDE SW(SST1040-0202-0T-NP)-Alpha	403-V3001-230	7	
SW308	SLIDE SW/6P/Vertical/Selflock(SS65010-0203-LH ALP)	403-XM910-200	1	
WA102,WA102A1	6P SOCKET(JST P=2.5mm WHITE)	404-3113-056	2	
WA301,WA302	5P SOCKET(CKM2501WV-5P 180°WHITE)(Cd,Pb,Hg,Cr)	404-H200-007A	2	
WA304	8P SOCKET(CKM2501WV-8P 180°WHITE)(Cd,Pb,Hg,Cr)	404-HMD510-253A	1	
WA206	9P SOCKET(CKM2501WV-9P 180°WHITE)(Cd,Pb,Hg,Cr)	404-HV3700K-668A	1	
CN703	1P CONNTOR WIRE(AWM1015,AWG18 L=175mm 250T-B'D IN RED)(Cd,Pb)	404-SX1800-1931	1	
CN103,CN103A	6P CONNECTOR WIRE(P=2.5mm, L=200mm,UL 2468#26 CKM2501)	404-V1001-2126	2	
AN302	9P CONNECTOR WIRE(P=2.54mm, L=500mm,UL 2468#26 CKM2501)	404-V1001-2130	1	
CN702	1P CON ASS'Y(L=150mm UL1015#18 250T-B'D IN BLACK)	404-V2001-2071	1	
CN701	1P CON ASS'Y(L=150mm UL1015#18 250T-B'D IN RED)	404-V2001-2072	1	
CN704	1P CON ASS'Y(L=230mm UL1015#18 250T-B'D IN BLACK)	404-V2001-2074	1	
CN302	5P CONNECTOR WIRE(P=2.54mm, L=150mm,UL 2468#26 CKM2501)	404-V3001-2132	1	
CN301	5P CONNECTOR WIRE(P=2.5mm, L=250mm,UL 2468#26 CKM2501)	404-V3001-2133	1	
CN304	8P CONNECTOR WIRE(P=2.5mm, L=150mm,UL 2468#26 CKM2501)	404-V4001-2129	1	
WA203	3P BASE(P=3.96mm CKM3962WV-3P)	404-XM610-1789	1	
WA201,WA202,WA204,WA205	5P BASE(P=3.96mm CKM3962WV-5P)	404-XM910-1791	4	
LD601,LD602,LD603,LD608	LED ( RED )	410-CD6000-122	4	
LD606,LD611	LED ( YELLOW )	410-CD6000-123	2	
LD604,LD605,LD609,LD610	LED ( GREEN )	410-CD6000-124	4	
LD607	LED ( LTL42UB5N,BLUE )	410-NT2000-149	1	
R1,R2	CEMENT RESISTOR(12 OHM J 10W)	412-V1001-1043	2	
CPTC501,CPTC502	PTC RES(MZ11-12P10RH265)	412-V1001-1044	2	
R613	M.O.RES(330 ohm J 2W AXIAL TAPING 74mm)	412-V2001-972	1	
C209	ELEC. CAPACITOR(1000uF/35V,M, 105°C,BULK 13*21)(Cd,Pb,Hg,Cr)	413-DJ1900-110	1	
C501,C216,C217	E.C(470uF/35V M 105°C,TAPING 10*17)(Cd,Pb,Hg,Cr)	413-LAC58A-728	3	
C201,C202,C205,C206	MAYLAR.CAP(0.47uF/250V M BULK STRONG:MEF 474J 250A EI)	413-SX1800-891	4	
C203,C204,C207,C208	ELEC.CAP(6800uF/100V M BULK)	413-SX2800-906	4	
C214,C215	E.C(220uF/50V,M, 105°C,TAPING 10*16)(Cd,Pb,Hg,Cr)	413-XM910-858	2	
D203,D204,D205,D206,D207,D208,D502,D503	RECTIFYING DIODE(RECTIFIER LTIN4006)	414-MX1824-155	8	
ZD601	DIODE(UZP 15BM/1W)	414-SX2800-194	1	
D501	DIODE (UZ 12BM/1W)	414-SX2800-196	1	
BD203	DIODE-BRIDGE KBP203G 2A	414-XM610-182	1	
RY501	RELAY(NT90RNAS12CB)	415-V4001-274	1	
Q501	TRANSISTOR(KTC4370A-Y TO 220IS)	416-MX1436-235	1	
IC201	IC(NJM7815FA 3PIN)	417-DV330-216	1	
IC202	IC(NJM7915FA)	417-RCC955A-291	1	

Power/Display/In/Out PCB Ass'y

REF NO.	DESCRIPTION	PART NO.	Q'TY	REMARK
IC203	IC(LOW NOISE AMPLIFER NJM2068DD DIP8 JRC)	417-XM910-697	1	
IC301,IC302,IC303,IC304	IC(LOW NOISE AMPLIFER NJM2068L SIP8 JRC)	417-XM910-698	4	
VR303,VR304	VOLUME(RV09BC-40-30B-B10K)-Alpha	418-V3001-282	2	
VR301,VR302	VR (RV112BC-40-30B-C500K)-Alpha	418-V3001-283	2	
VR601,VR602	VOLUME(R1111NOAV1B103FJ0941 10KB)	418-V4001-312	2	
JK302,JK304	BALANCE JACK(JY-5030-030G)(Pb,Cd)	420-CDMIX1-083	2	
F201,F202	FUSE CLIPS(FC-1206/WL-210A,15A)	420-KT350A-004	4	
SPEAKCON701,SPEAKCON702	SPEAKCON JACK(JS001-120)-ALPHA	420-SX1800-196	2	
SP701	JACK	420-SX1800-197	1	
SP702	JACK	420-SX1800-198	1	
JK301,JK303	COMBO JACK/9P/VERTICAL/NON-LOCKING(CXFL-06BELTON)	420-XM910-181	2	
F201,F202	FUSE(2A/250V,VDE)	422-VP9812B2-055	2	
T8,T9,T10,T11,T1,T2	CONNCTOR PCB PIN(TERMINAL-250)	424-XM910-090	6	
	LED HOLDER	504-V1001-174	11	
	SCREW(M3*6)	602-XM610-511	6	
	SCREW(TTB3*8)	602-XM610-528	2	
BD201,BD202	BRIDGE ASS'Y	704-SX1200-3364	2	
	DIODE-BRIDGE KBPC3504W 35A	414-SX1800-187	1	
	HEATSINK-DIODE	425-XM610-077	1	
BRIDGE DIODE TO HEATSINK DIODE	SCREW(M4*16)	602-XM610-523	1	
	CERAMIC TUBE ( 4*2*11.5mm )	605-KMD510P-034	4	
C701,C702	CERAMIC CAPACITOR(0.01uF/50V,Z,TAPING,Z5V)	413-3113-028	2	
C604,C607	CERAMIC CAPACITOR(470pF/50V,K,TAPING,Y5P)	413-3113-036	2	
C603,C606	ELEC. CAPACITOR(10uF/50V,M,105°C,TAPING 5*7,MINI)(Cd,Pb,Hg,C	413-DM1000-348	2	
C602,C218,C219	ELEC. CAPACITOR(10uF/50V,M,105°C,TAPING 5*11)(Cd,Pb,Hg,Cr)	413-DM1000-352	3	
C222,C225	LOSE ELEC. CAPACITOR(2.2uF/50V M 105°C TAPING LL)	413-HF6011D-481	2	
C220,C223	CERAMIC CAPACITOR(22pF/50V,J,TAPING,NPO)	413-HP1010K-199	2	
C502,C304,C307,C310,C314,C317,C320,C321,C323,C324,C325,C326,C327	ELEC. CAPACITOR ( 47uF/25V M 105°C, TAPING 5*11 )(Cd,Pb,Hg	413-HS100-181	13	
C322	CERAMIC CAPACITOR(47pF/50V,J,TAPING,NPO)	413-HT8015-153	1	
C211,C210,C212,C213	CERAMIC CAPACITOR(4700pF/50V,K,TAPING,Y5P)	413-HT8015-167	4	
C601,C605	POLYESTER CAPACITOR(0.1uF/100V,J,TAPING)	413-KT350-089	2	
C301,C311	CERAMIC CAPACITOR(5pF/50V,C,TAPING,NPO)	413-KT350-092	2	
C302,C303,C312,C313	CERAMIC CAPACITOR(100pF/50V,J,TAPING,NPO)	413-PMSE1-258	4	
C309,C308,C319,C318	MYLAR CAPACITOR(0.012uF/100V J TAPING)	413-XM910-874	4	
C305,C306,C315,C316	MAYLAR CAPACITOR(0.068uF/100V J TAPING)	413-XM910-879	4	
Q603,Q610	TRANSISTOR(NPN KTC3200BL TO-92 TAPING KEC)	416-XM910-261	2	
Q601,Q602,Q608,Q609	TRANSISTOR(NPN KTC3198BL TO-92 TAPING KEC)	416-XM910-265	4	
Q604,Q605,Q606,Q607,Q611,Q612,Q613,Q201,Q202,Q203,Q204,Q615	TRANSISTOR(PNP KTA1268BL TO-92 TAPING KEC)	416-XM910-266	12	
R203,R216	CARBON FILM RESISTOR(33K OHM,1/6W,J,T-26)	412-3113-045	2	

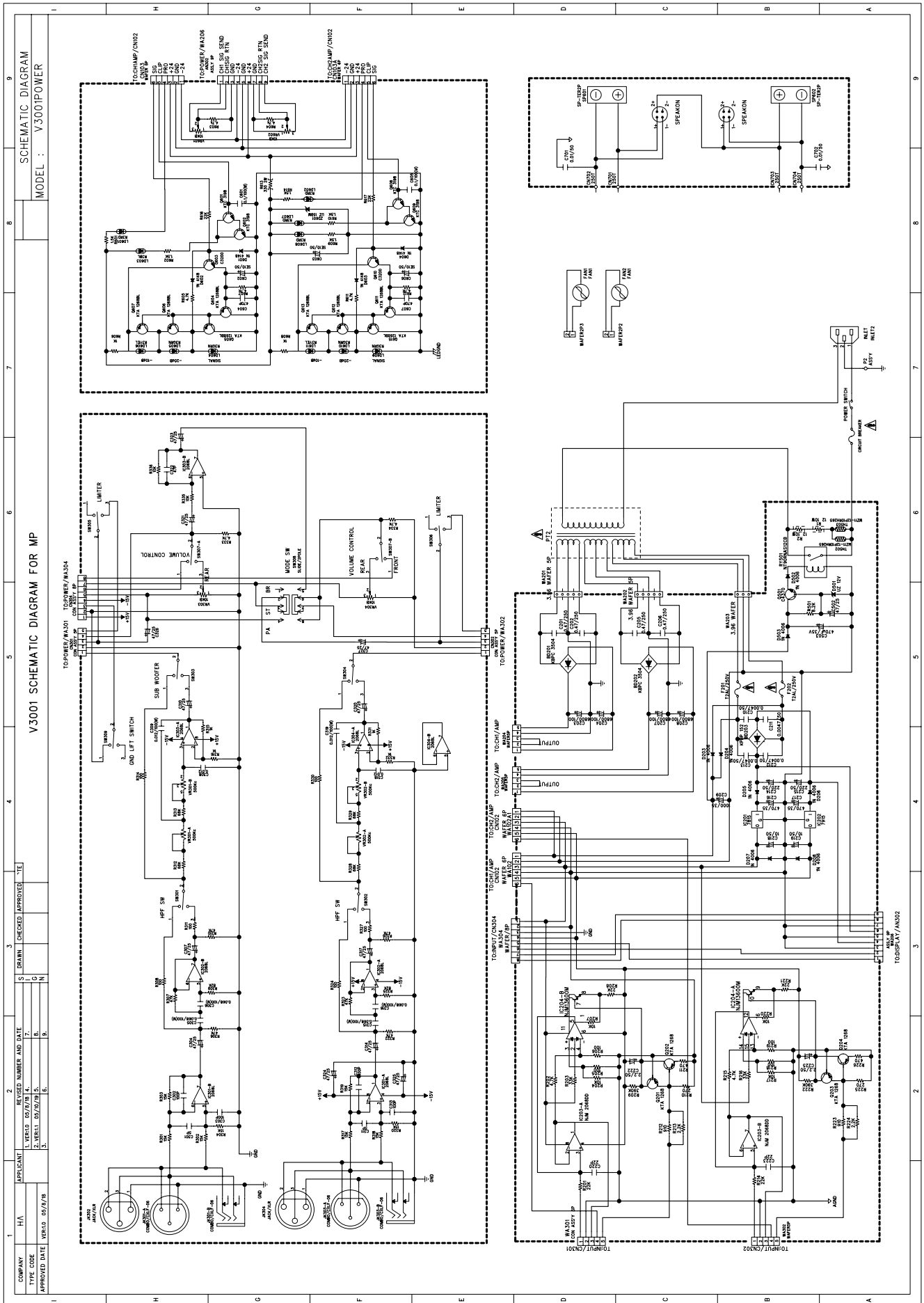


Power Amp PCB Ass'y

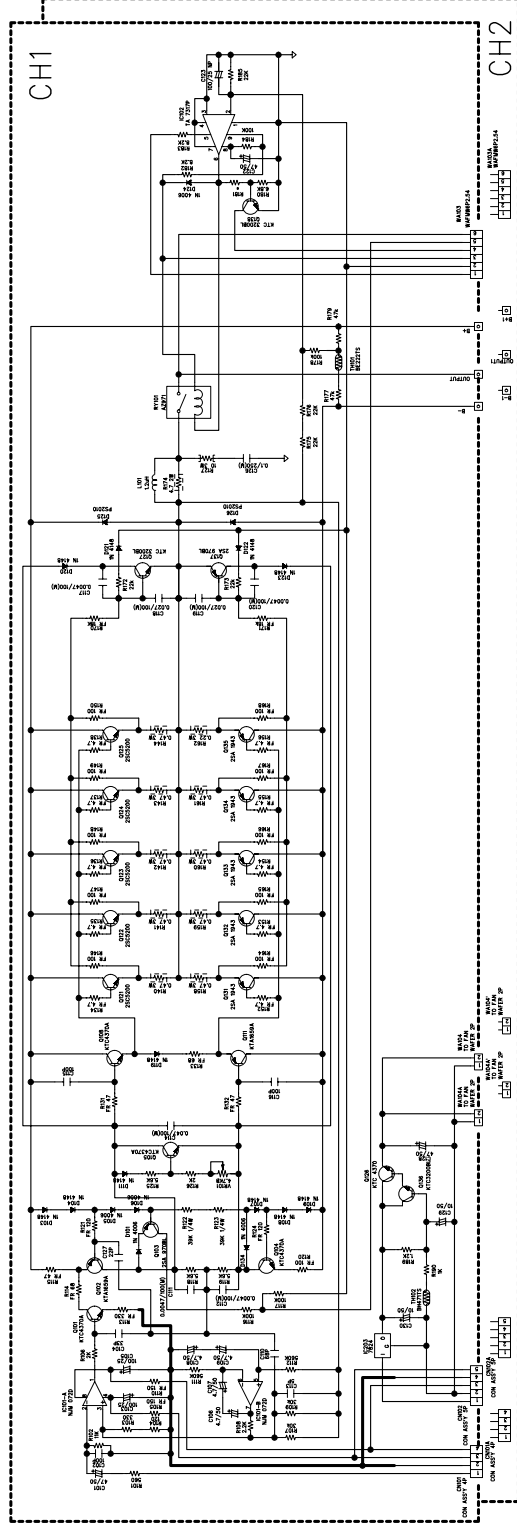
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	POWER AMP PCB ASS'Y	704-V3001-5887	2	
	HEATSINK BRACKET(SECC 1.0t)	300-SX-1184	2	
WA103	6P SOCKET(JST P=2.5mm WHITE)	404-3113-056	1	
GND,B+B -OUTPUT	5P CONNECTOR WIRE(P=3.96mm,L=150mm,UL1015#18)	404-SX1800-1923	1	
CN102	6P CON ASS'Y(6P P=2.5mm L=200mm UL2468#26 CKM2501 SCREEN)	404-V2001-2176	1	
WA104,WA104A	2P BASE(P=2.54mm,CKM2503WV-2P-2.54mm)	404-XM910-1833	2	
VR101	RESISTOR(4.7KB OHM, $\frac{1}{4}$ W, RH0615CS3J)	412-KC220-127	1	
R128	CARBON FILM RESISTOR(10 OHM, 1/6W, J, T-26)	412-KC220-132	1	
R124	FUSE.RES(120 OHM, 1/4W J RADIAL TAPING)	412-SX1800-891	1	
TH102	NTC THERMISTOR(TKINKING:PTMS2331RP416B)	412-SX1800-897	1	
TH101	PTC THERMISTOR(TKINKING:PTMS2331RP716B)	412-XM910-859	1	
R174	METAL OXIDE RESISTOR(4.7 OHM, J 2W RADIAL)	412-XM910-877	1	
R127	M.O.RES(10 OHM, J 3W AXIAL 74mm)	412-XM910-879	1	
R140,R141,R142,R143,R144,R158,R159,R160,R161,R162	CEMENT.RES(0.47 ohm, J 5W AXIAL)	412-XM910-880	10	
D101,D105,D106,D124,D134	RECTIFYING DIODE(RECTIFIER LTIN4006)	414-MX1824-155	5	
D125,D126	DIODE(PS2010 2A TAPING 52mm TYPE:DO-15)	414-XM910-178	2	
RY101	RELAY(832A-1A-S24V)	415-SX1800-263	1	
L101	SPRING COIL 1.2UH +/-15%(CS8F-514149)	415-XM910-253	1	
Q102	TRANSISTOR(KTA1659A-Y)	416-LAC62C-159	1	
Q101,Q104,Q126,Q105	TRANSISTOR(KTC4370A-Y TO 220IS)	416-MX1436-235	4	
Q108	TRANSISTOR(MJE15032)	416-SX2800-279	1	
Q111	TRANSISTOR(MJE15033)	416-SX2800-280	1	
Q121,Q122,Q123,Q124,Q125	TRANSISTOR(NPN 2SC5200-O TO-3 TOSHIBA)	416-XM910-267	5	
Q131,Q132,Q133,Q134,Q135	TRANSISTOR(PNP 2SA1943 TO-3 TOSHIBA)	416-XM910-268	5	
IC203	IC(NJM7824)	417-DJ2500-268	1	
IC101	IC(NJM072D DIP8)	417-SX1800-718	1	
IC102	IC(AMP+SPK PROTECTION IC TA7317P SIP9)	417-XM910-701	1	
	HEAT SINK	425-V3001-082	1	
	PCB SPACER SUPPORT(NYLON66/101F/94V-2)(Cd,Pb,Hg,Cr)	504-SX1200-166	4	
	SCREW(M3*6)	602-XM610-511	4	
	SCREW(M3*14)	602-XM610-512	6	
	SCREW(M3*14)	602-XM610-535	10	
	TRANSISTOR WASHER(NYLON)	606-HPA1800-214	2	
		612-HPA1800-217	2	
R121	FUSE.RES(120 OHM, 1/4W J RADIAL TAPING)	412-SX1800-891	1	
R105,R110	FUSE.RES(150 OHM, 1/4W J RADIAL TAPING)	412-SX1800-892	2	
R113	FUSE.RES(330 OHM, 1/4W J RADIAL TAPING)	412-SX1800-894	1	
R114	FUSE.RES(68 OHM, 1/4W J RADIAL TAPING)	412-SX1800-895	1	
R120,R146,R147,R148,R149,R150,R164,R165,R166,R167,R168	FUSE RESISTOR (100 OHM 1/4W J RADIAL TAPING)	412-XM910-872	11	
R115,R131,R132	FUSE RESISTOR (47 OHM 1/4W J RADIAL TAPING)	412-XM910-873	3	

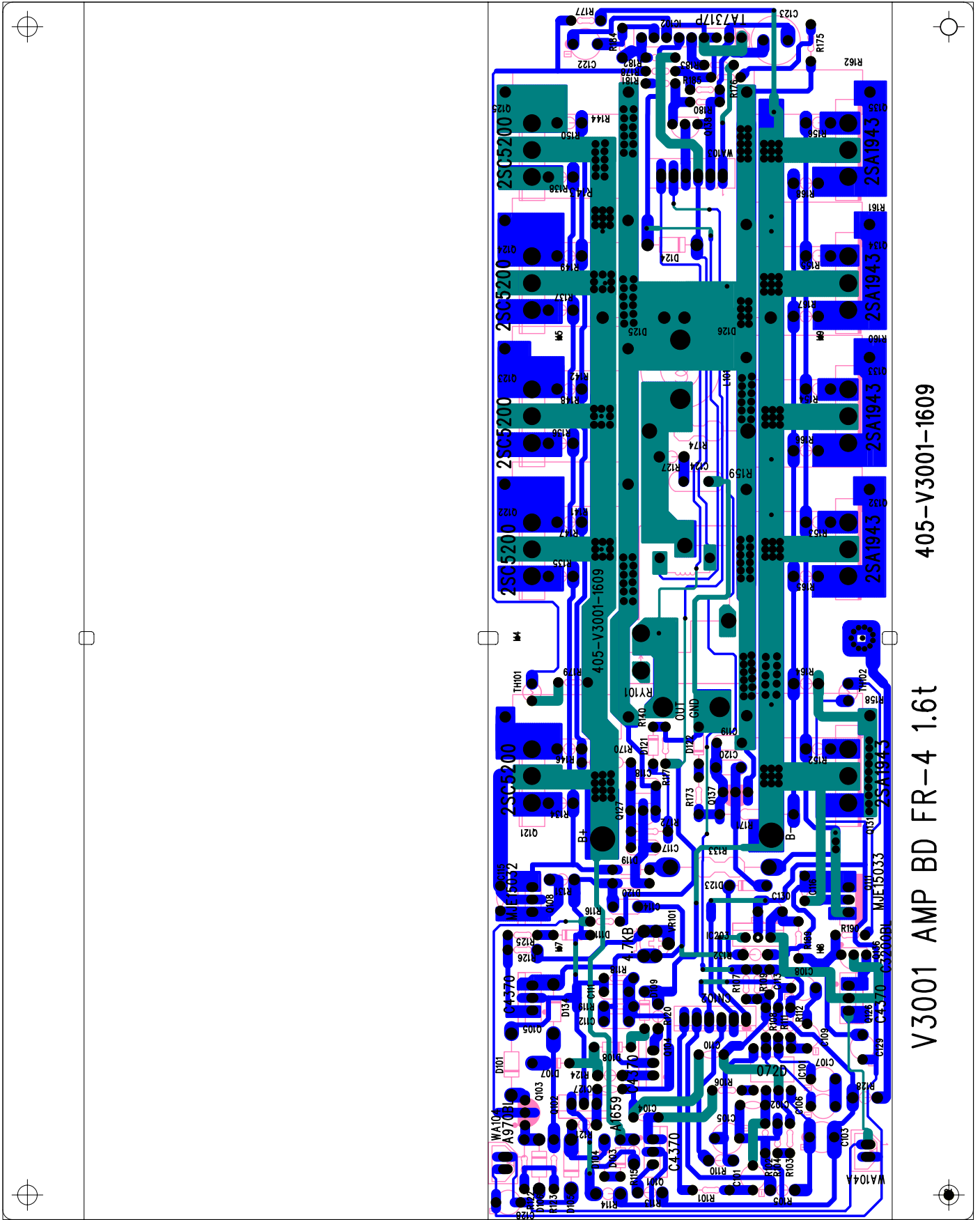
Power Amp PCB Ass'y

REF NO.	DESCRIPTION	PART NO.	Q'TY	REMARK
R134,R135,R136,R137,R138,R152,R153,R154,R155,R156	FUSE RESISTOR (4.7 OHM 1/4W J RADIAL TAPING)	412-XM910-874	10	
C113	C.C(5P/50V,+/-5%,TAPING)	413-2595AV-624	1	
C104	CERAMIC CAPACITOR(33pF/50V,J,TAPING,NPO)	413-3113-029	1	
C110	CERAMIC CAPACITOR(68pF/50V,K,TAPING,SL)	413-3113-031	1	
C106,C107,C108,C109	ELEC. CAPACITOR(4.7uF/50V,M,105°C,TAPING 5*11)(Cd,Pb,Hg,Cr)	413-3113-050	4	
C129,C130	ELEC. CAPACITOR(10uF/50V,M,105°C,TAPING 5*11)(Cd,Pb,Hg,Cr)	413-DM1000-352	2	
C101,C122,C128	ELEC. CAPACITOR(47uF/50V,M,105°C,TAPING 6.3*11)(Cd,Pb,Hg,Cr)	413-DV300-5143	3	
C127	CERAMIC CAPACITOR(22pF/50V,J,TAPING,NPO)	413-HP1010K-199	1	
C103,C105	ELEC. CAPACITOR(100uF/25V,M,105°C,TAPING 6.3*11)(Cd,Pb,Hg,C	413-HS100-180	2	
C111,C112,C117,C120	POLYESTER CAPACITOR(0.0047uF/100V,J,TAPING)	413-HT8015-159	4	
C102,C115,C116	CERAMIC CAPACITOR((100pF/50V,J,TAPING,SL)	413-PXE90-107	3	
C123	E.C(100uF/25V,NP M,105°C,TAPING 8*12)(Cd,Pb,Hg,Cr)	413-XM910-857	1	
C124	MYLAR CAP(0.1uF/250V M TAPING)	413-XM910-865	1	
C118,C119	MYLAR CAPACITOR(0.027uF/100V J TAPING)	413-XM910-877	2	
C114	MYLAR CAPACITOR(0.047uF/100V J TAPING)	413-XM910-878	1	
Q103,Q137	TRANSISTOR(2SA970 BL)	416-HMA2200-069	2	
Q127,Q136,Q138	TRANSISTOR(NPN KTC3200BL TO-92 TAPING KEC)	416-XM910-261	3	
	AMP PCB(FR-1 T=1.6mm,197*247mm)	405-V3001-1609	1	
R122,R123	CARBON FILM RESISTOR((39K OHM,1/4W,J,T-52)	412-2030-036	2	
R118,R119,R125	CARBON FILM RESISTOR(5.6K OHM,1/6W,J,T-26)	412-3113-044	3	
R116,R117,R184,R178	CARBON FILM RESISTOR(100K OHM,1/6W,J,T-26)	412-3113-047	4	
R108	CARBON FILM RESISTOR(2.2K OHM,1/6W,J,T-26)	412-3113-048	1	
R172,R173,R175,R176,R185	CARBON FILM RESISTOR(22K OHM,1/6W,J,T-26)	412-3113-059	5	
R177,R179,R181	CARBON FILM RESISTOR((47K OHM,1/6W,J,T-26)	412-3113-063	3	
R189	CARBON FILM RESISTOR(1.2K OHM,1/6W,J,T-26)	412-3113-067	1	
R180	CARBON FILM RESISTOR(6.8K OHM,1/6W,J,T-26)	412-3113-069	1	
R111,R112	CARBON FILM RESISTOR(560K OHM,1/6W,J,T-26)	412-3113-072	2	
R190	CARBON FILM RESISTOR(1K OHM,1/6W,J,T-26)	412-3113-078	1	
R102	CARBON FILM RSISTOR(11K OHM,1/6W,J,T-26)	412-DCM370E3-436	1	
R107,R109	CARBON FILM RESISTOR(30K OHM,1/6W,J,T-26)	412-DV300-291	2	
R106,R126	CARBON FILM RESISTOR(2K OHM,1/6W,J,T-26)	412-HC1421FR-246	2	
R104	CARBON FILM RESISTOR(120 OHM,1/6W,J,T-26)	412-HP1010K-250	1	
R103	CARBON FILM RESISTOR(330 OHM,1/6W,J,T-26)	412-KM300-118	1	
R182,R183	CARBON FILM RESISTOR(8.2K OHM,1/6W,J,T-26)	412-KM500-123	2	
R101	CARBON FILM RESISTOR((560 OHM,1/6W,J,T-26)	412-KT346-112	1	
R133	FUSE RES.(68 OHM 1/4W J TAPING)	412-SX1800-1003	1	
R170,R171	NICETY RES(1.8K OHM,F,1/4W,T-52)	412-SX1800-963	2	
D103,D104,D107,D108,D109,D111,D119,D120,D121,D122,D123	SWITCHING DIODE(1N4148,1/2W,150mA/100V,T-77)	414-2002-002	11	



8  
SHEET NO. 9  
SCHEMATIC DIAGRAM  
MODEL : V3001



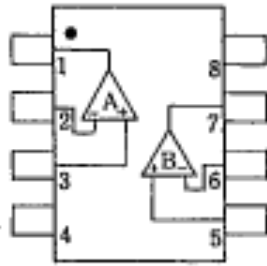




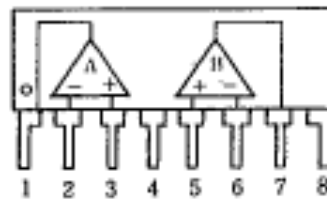


■ PIN CONFIGURATION

417-XM910-697/698(NJM2068D/NJM2068L)



NJM2068D  
NJM2068M  
NJM2068V



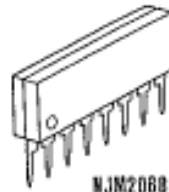
NJM2068L

PIN FUNCTION

- 1. A OUTPUT
- 2. A-INPUT
- 3. A+INPUT
- 4. V-
- 5. B+INPUT
- 6. B-INPUT
- 7. B OUTPUT
- 8. V+

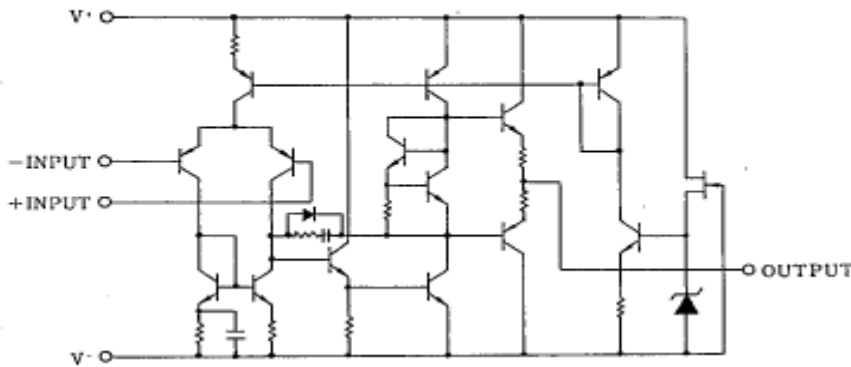


NJM2068D



NJM2068L

■ EQUIVALENT CIRCUIT (1/2 Shown)

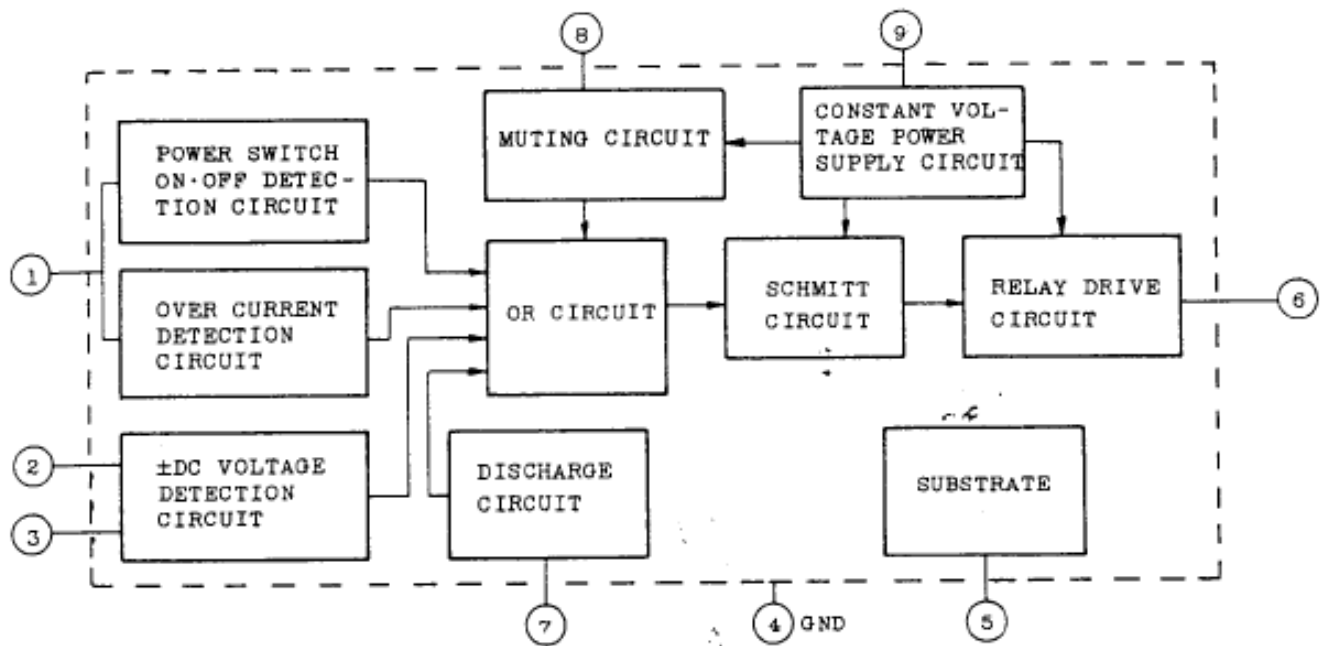


**417-DV330-216**  
**NJM7815FA**

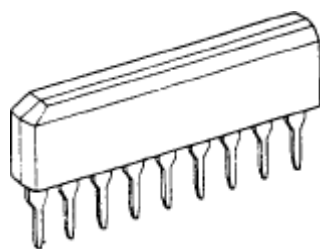
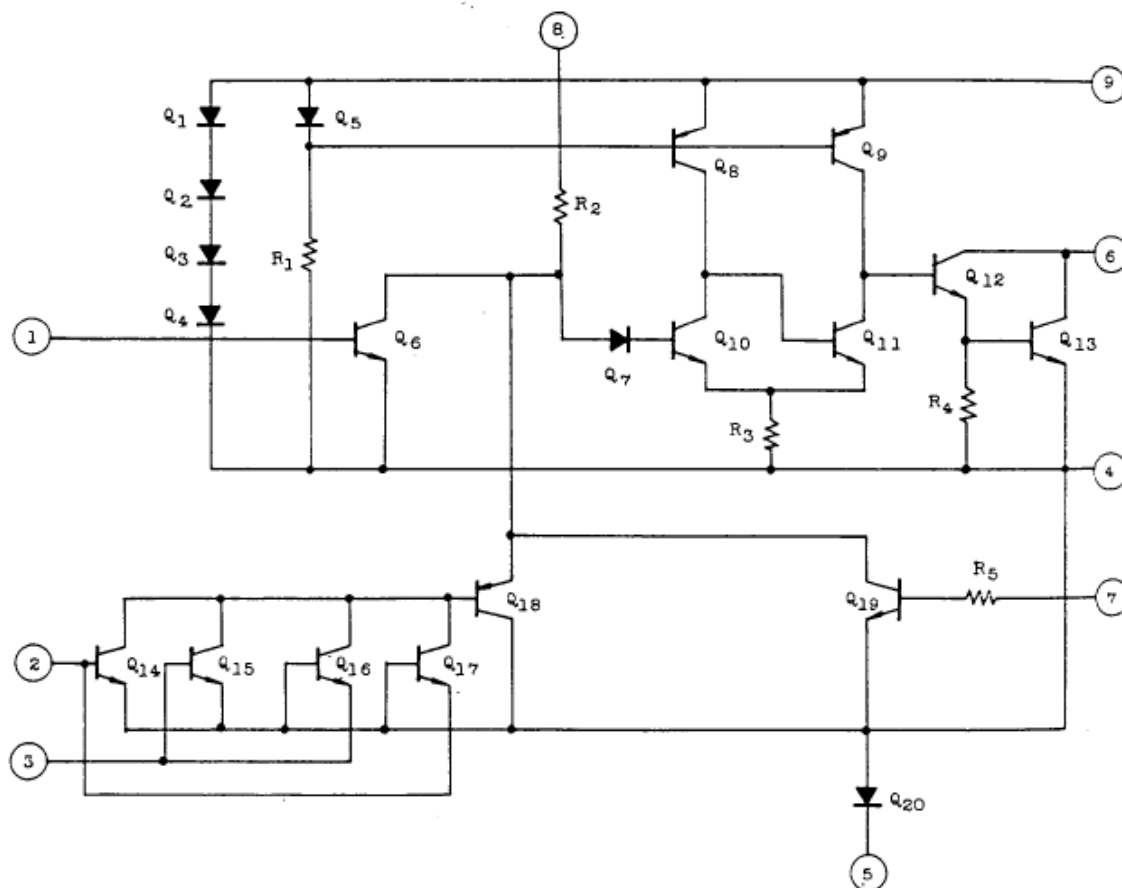
- 1. OUTPUT
- 2. COMMON
- 3. INPUT

**417-RCC955A-291**  
**7915FA**

- 1. OUTPUT
- 2. INPUT
- 3. COMMON



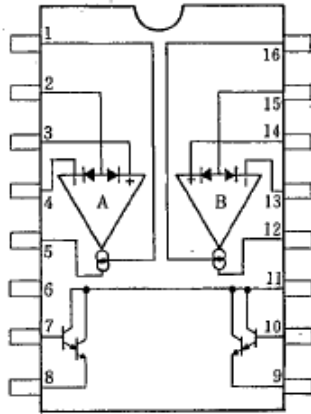
EQUIVALENT CIRCUIT



SIP9-P-A

417-V4001-745 NJM13600M

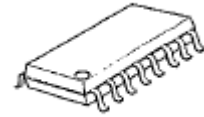
■ PIN CONFIGURATION



NJM13600D, NJM13600M, NJM13600V  
 NJM13700D, NJM13700M,

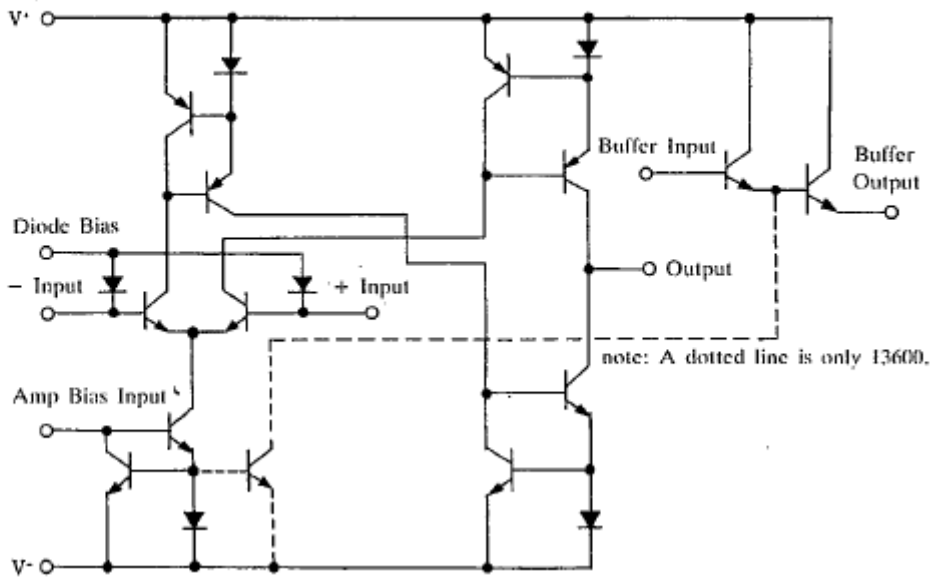
PIN FUNCTION

- |                     |                      |
|---------------------|----------------------|
| 1. Amp Bias Input A | 9. Buffer Output B   |
| 2. Diode Bias A     | 10. Buffer Input B   |
| 3. + Input          | 11. V <sup>+</sup>   |
| 4. - Input          | 12. Output B         |
| 5. Output A         | 13. - Input B        |
| 6. V <sup>-</sup>   | 14. + Input B        |
| 7. Buffer Input A   | 15. Diode Bias B     |
| 8. Buffer Output A  | 16. Amp Bias Input B |



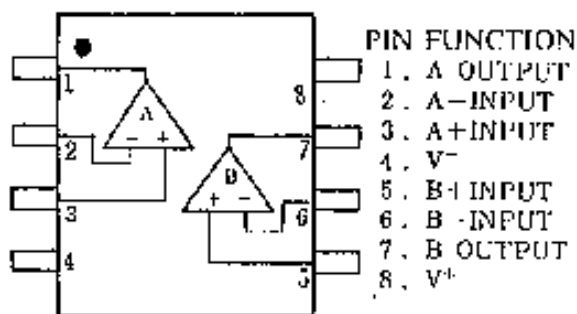
NJM13600M

■ EQUIVALENT CIRCUIT



417-SX1800-718 NJM072D

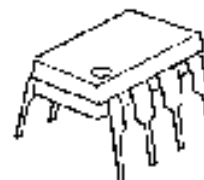
■ PIN CONFIGURATION



PIN FUNCTION

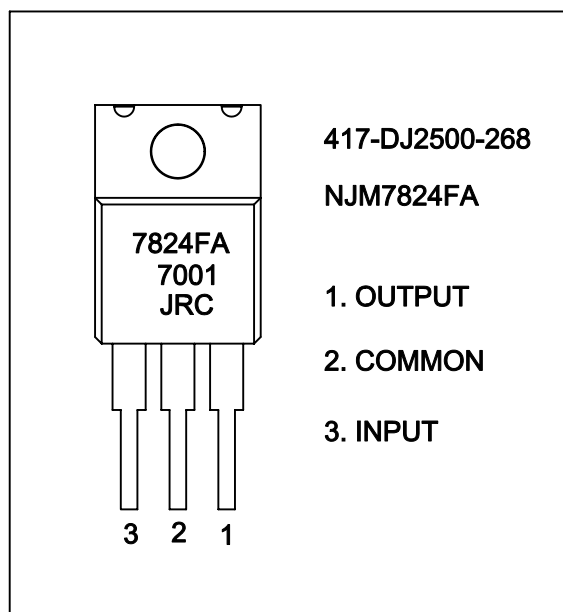
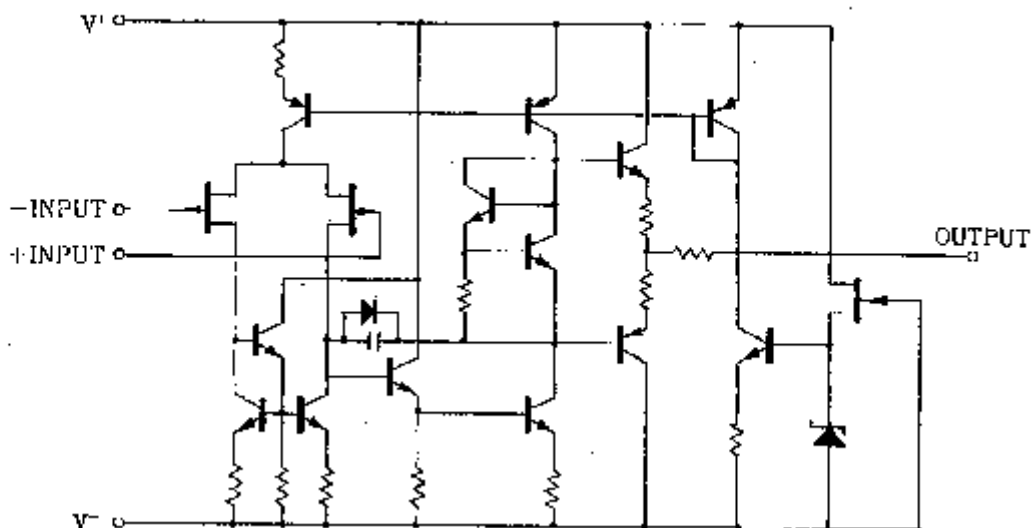
- 1. A OUTPUT
- 2. A-INVERTING INPUT
- 3. A+NON-INVERTING INPUT
- 4. V<sup>-</sup>
- 5. B+NON-INVERTING INPUT
- 6. B-INVERTING INPUT
- 7. B OUTPUT
- 8. V<sup>+</sup>

NJM072BD/DB2BD  
 NJM072D/DB2D  
 NJM072M/DB2M  
 NJM072BE/DB2BE  
 NJM072BV/DB2BV



NJM072BD/DB2BD  
 NJM072D/DB2D

■ EQUIVALENT CIRCUIT



## *Trouble Shooting*

<i>SYMPTOM</i>	<i>POSSIBLE CAUSE</i>	<i>CORRECTIVE ACTION</i>
1. Device does not react when switching on	Connection to main disrupted	Check AC plug and AC connection
2. Pop noise	MIXER or CD and amplifier connections intermittent	Check cable and plug continuity
3. Power LED is dim	The improper position of AC voltage fuse sled	Reconfirm the voltage position.
4. No sound	Improper set of input cable and switch.	Correct the position of input cable and switch.