

The JBL logo is displayed in white, bold, sans-serif capital letters within a solid orange square.

ATX 100 SUB

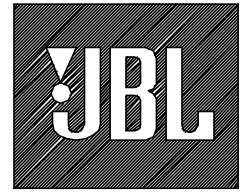
Service manual

Amplifier : SUB 100

21 August 2002

Technical Manual

ATX-100 Sub



SPECIFICATIONS

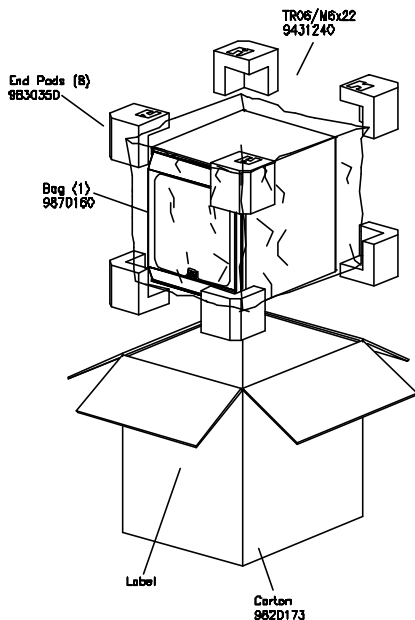
ACOUSTIC & ELECTRICAL SPECIFICATIONS:
* Low-freq. Cut off 50 Hz~Variable
* High-freq. Cut-off Variable (90~130 Hz)
* Built in Power amp. 100 Watt RMS (1% THD)

PHYSICAL SPECIFICATIONS:
* Enclosure Dimensions (H.W.D): 350x295x350mm
(13.8x11.6x13.8 inch.)
* Shipping Weight: 33.07 lbs (15kg)

SYSTEM COMPONENTS:
* Cabinet CATX-100 Sub (Not for sale)
* Grille GATX-100 Sub (2705700)
* Woofer SB2308A 200mm Woofer (8")
Laminated Paper Cone
DC Resistance: 3,1 ohm

WARRANTY INFORMATION:
* Refer to the Warranty Statement packed with each product

PACKAGE



SCHEMATIC

NOTE: CONE/DIAPHRAGM KIT NOT AVAILABLE.

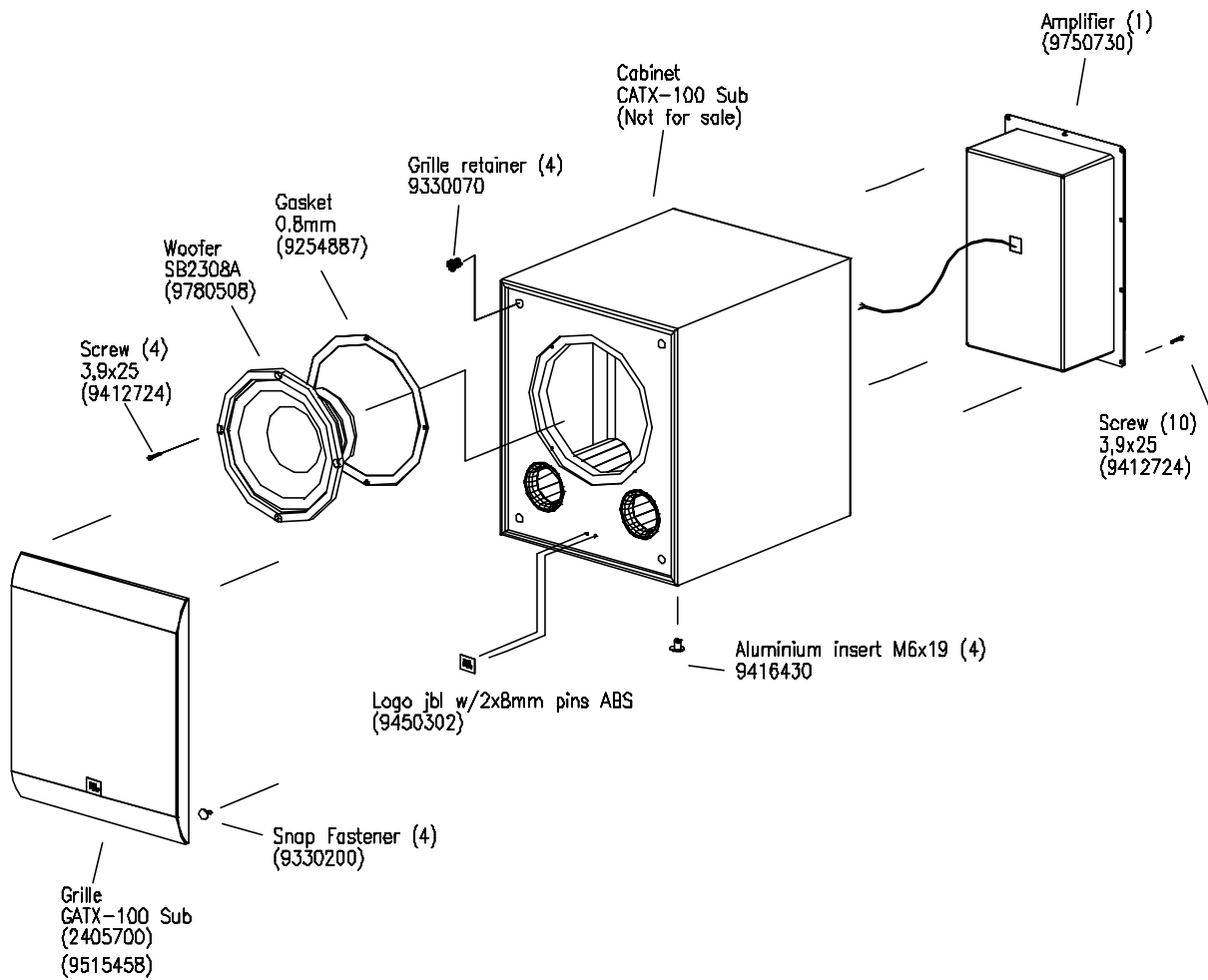
DEFECTIVE DRIVER SHOULD BE REPLACED.

ATX-100 Sub

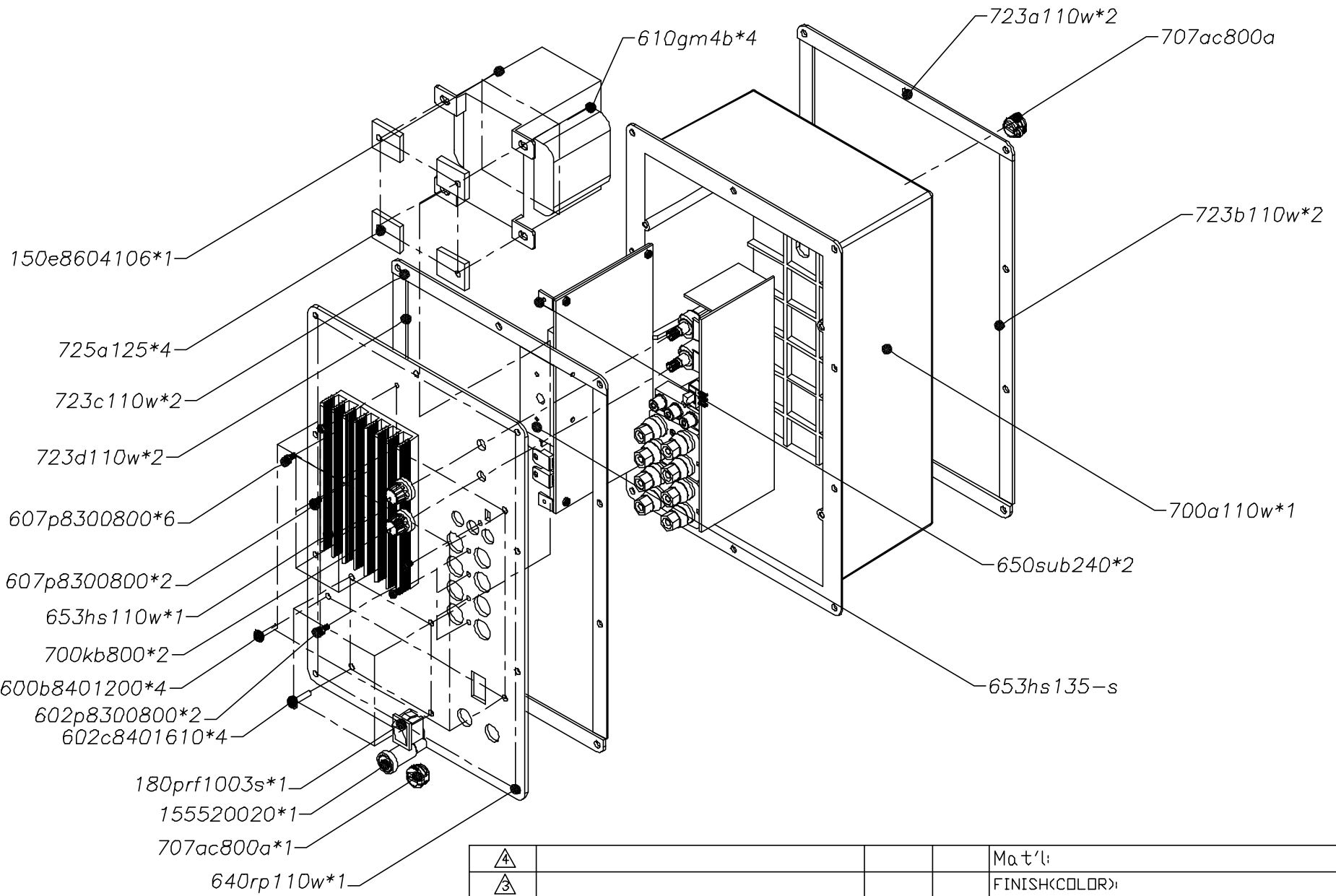
Valid from serial no. 01001
Rev. 26.06.2002

ATX-100 Sub

COMPONENT EXPLODED VIEW



ATX-100 Sub



DSGN. \M+2A9173\M+2B077\M+2A075
 CHK
 APD.
 SCALE PLOT: FREE MAKER:

▲				Mat'l:
▲				FINISH(COLOR):
▲				SCALE: 1:1 UNIT:
ISSUE	REVISIONS	DATE	NAME	DATE: 2001-9-30 M.M. 3rd Angle
TITLE: EXPLODE			PART No.: SUB 100	
MEILON INDUSTRIAL CO., LTD. TEL: 0769 7911366				

SUB 100 Amp

material No	material description	quantity
12314j70d	Ferrite Core J70	1
132104kb70	mylar capacitor 0.1u 275v +10%	1
150e8604106	transformer EI-86 230v/50Hz TT0869803320	1
152v602026	power cable SP-021A 6FT VDE	1
154v12506t0	fuse TSD 1.25a 25.v vde	1
155520020	fuse bracket R3-11	1
16210082007	wire red awg18 80mm#1015	1
16250652002	wire 650mm	1
16311009	plastic binding wire transparent 100mm	2
16311509	nylon binding wire transparent 150mm	1
176wjcel	closed edge terminal CE-1	1
180prf1003s	power sw rock PF-103-bb2-OHA	1
1932m1813	piezo sheet TO-220 18*13mm	2
600b8401200	wood screw 4*12	4
602c8401610	mechanic screw M4*16 type "+"	4
602f8301200	mechanic screw M3*12 type "+"	1
602p8300800	mechanic screw M3*8 type "+"	6
606p8301000	B type self screw 3*10: type "+" black	5
607p8300800	B type self screw 3*8: type "+" black	8
610gm4b	M4 nut	4
640rp110w	aluminum plate	1
644a110w	copper foil 65L*50W	1
650ih125	IC holder	1
650sub240	PCB bracket L TYPE t=1.6mm S.P.C.C	2
653hs110w	heat sink 117.5*71.5*25 anodization silver	1
700kb800	plastic rotary switch 46077-w soft P.V.C	2
700ac800	power cable knob 4K-4 NO-BB	1
700rc110w	rear housing	2
723a110w	EVA gasket width 200*12*2.0mm	2
723b110w	EVA gasket length 276*12*2.0mm	2
723c110w	EVA gasket width 200*12*1.0t	2
723d110w	EVA gasket length 276*12*1.0t	2
725a125	rubber gasket 25*21*4t	4
860a135	sticker " made in China"	1

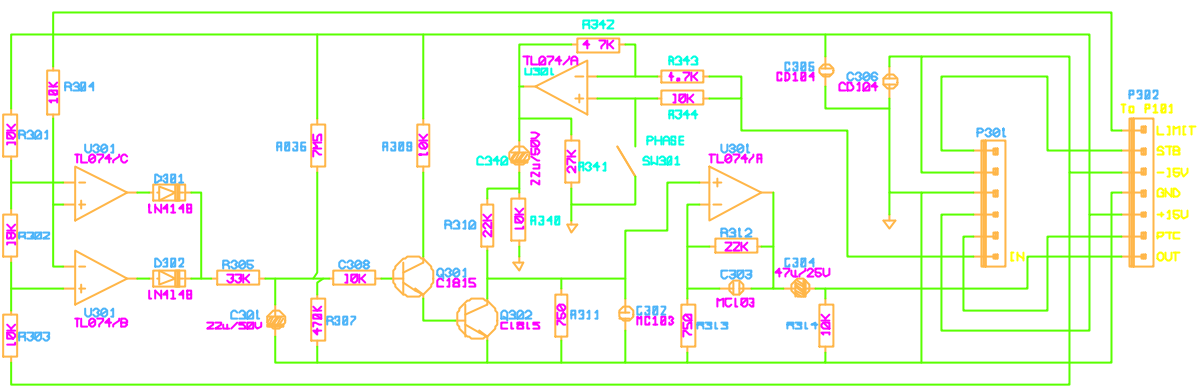
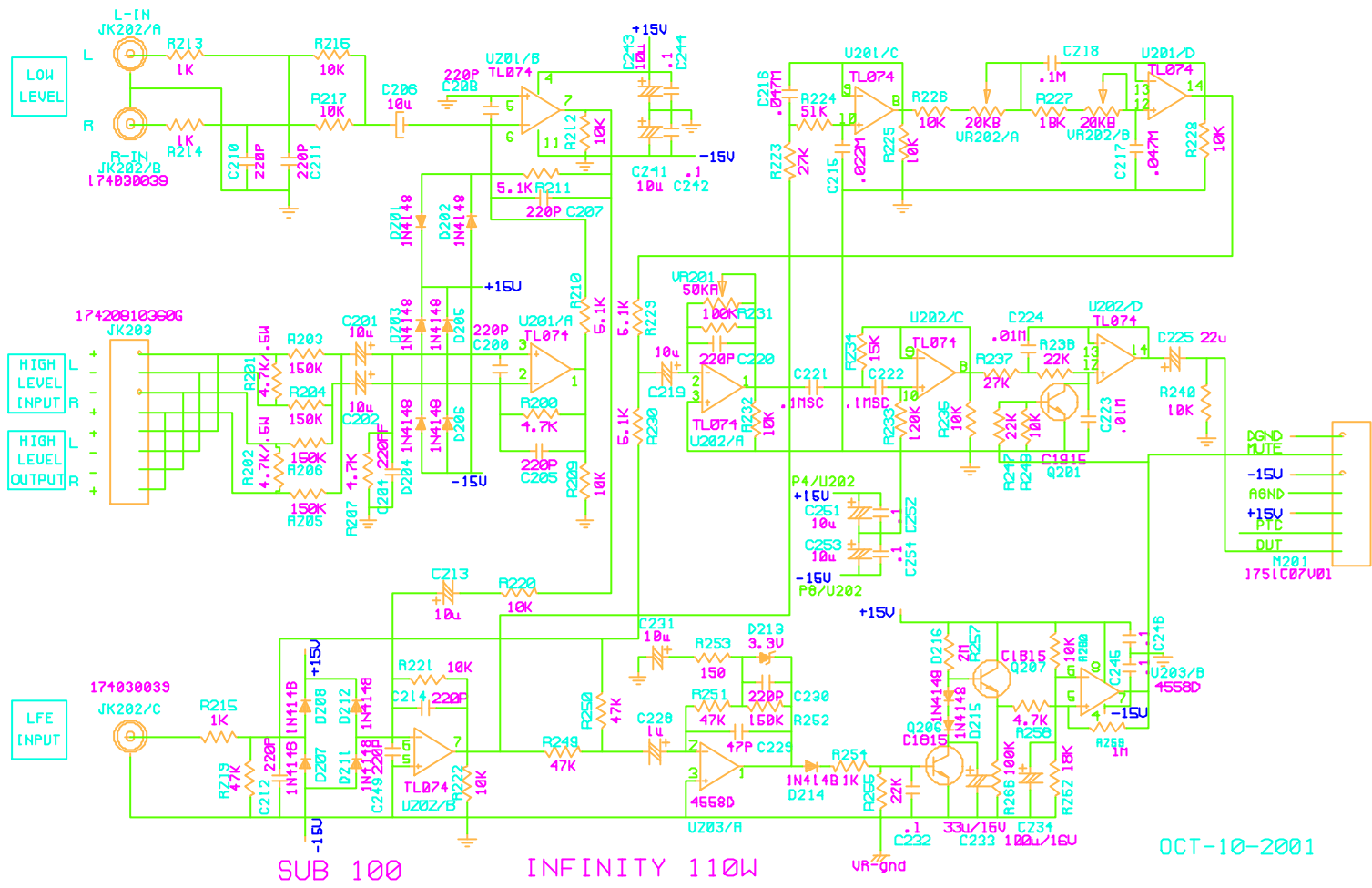
SUB 100 PART LIST

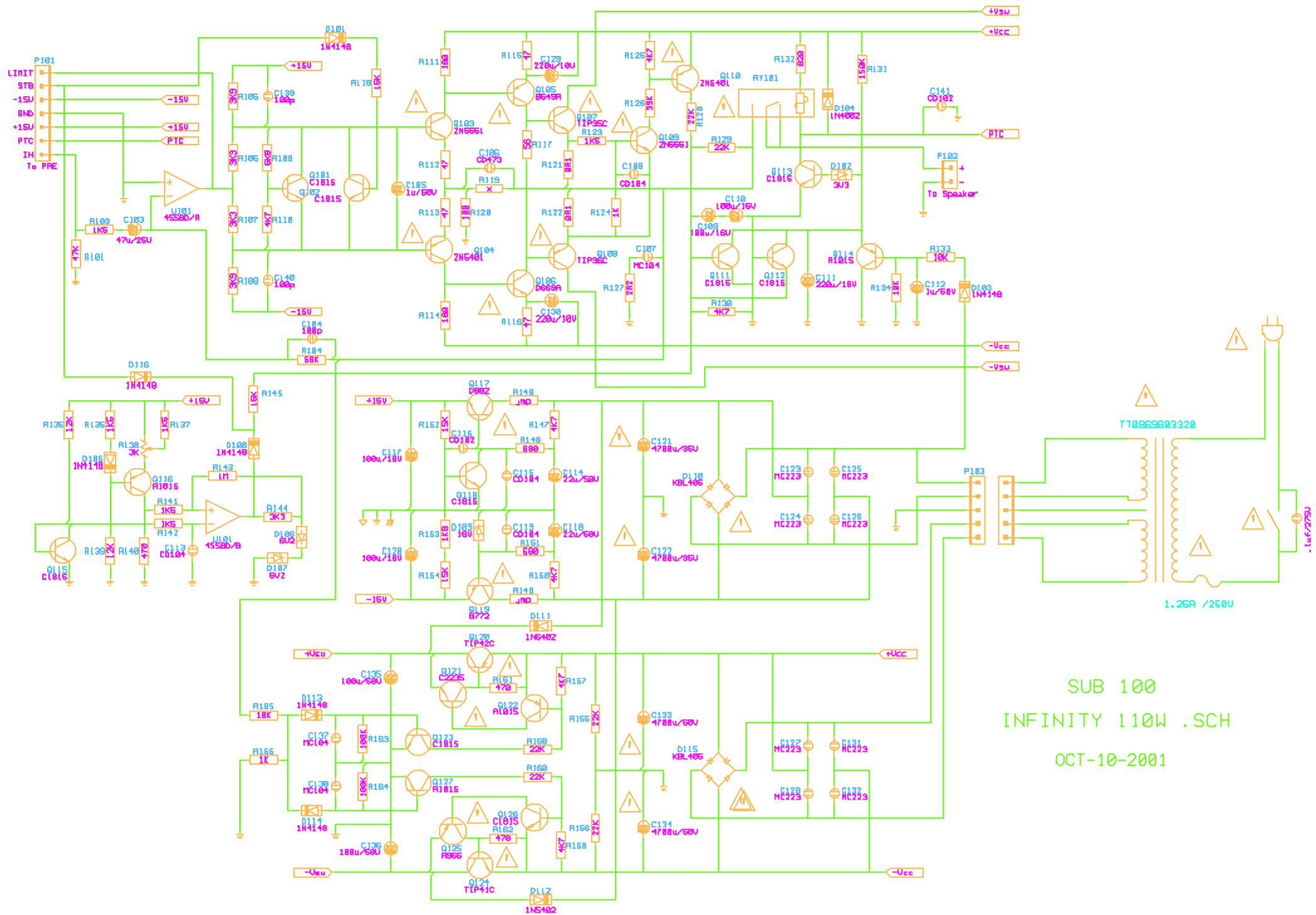
	PART NO.	DESCRIPTION	QTY	REFERENCE
1	97 50 73	Complete AMP 230V 110W	1	
2	101OTLX110W	PCB ASS'Y AMP	1	
3	101ATLX110W	AI PCB ASS'Y	1	
4	104tlx11000	PCB	1	
5	11012472j26	RESISTOR 4.7K 1/2W ±5% CF	2	R201,2
6	11014560j26	RESISTOR 56 1/4W ±5% CF	1	R117
7	11016101j26	RESISTOR 100 1/6W ±5% CF	1	R120
8	11016102j26	RESISTOR 1K 1/6W ±5% CF	6	R124,66,213,4,5,54
9	11016103j26	RESISTOR 10K 1/6W ±5% CF	17	R133,4,209,16,7,20,1,5 .6,8,32,5,48,60,212,22,40
10	11016104j26	RESISTOR 100K 1/6W ±5% CF	4	R163,4,231,66
11	11016105j26	RESISTOR 1M 1/6W ±5% CF	2	R143,259
12	11016123j26	RESISTOR 12K 1/6W ±5% CF	3	R135,9,65
13	11016124j26	RESISTOR 120K 1/6W ±5% CF	1	R233
14	11016151j26	RESISTOR 150 1/6W ±5% CF	1	R253
15	11016152j26	RESISTOR 1.5K 1/6W ±5% CF	7	R103,23,36,7,41,2,53
16	11016153j26	RESISTOR 15K 1/6W ±5% CF	5	R118,45,52,4,234
17	11016154j26	RESISTOR 150K 1/6W ±5% CF	6	R131,203,4,5,6,52
18	11016181j26	RESISTOR 180 1/6W ±5% CF	2	R111,4
19	11016183j26	RESISTOR 18K 1/6W ±5% CF	2	R227,62
20	11016205j26	RESISTOR 2.0M 1/6W ±5% CF	1	R257
21	11016223j26	RESISTOR 22K 1/6W ±5% CF	9	R128,9,55,6,8, 60,238,47,55
22	11016273j26	RESISTOR 27K 1/6W ±5% CF	2	R223,37
23	11016332j26	RESISTOR 3.3K 1/6W ±5% CF	3	R106,7,44
24	11016392j26	RESISTOR 3.9K 1/6W ±5% CF	2	R105,8
25	11016393j26	RESISTOR 39K 1/6W ±5% CF	1	R126
26	11016470j26	RESISTOR 47 1/6W ±5% CF	4	R112,3,5,6
27	11016471j26	RESISTOR 470 1/6W ±5% CF	3	R140,61,2
28	11016472j26	RESISTOR 4.7K 1/6W ±5% CF	10	R110,25,30,47, 50,7,9,200,7,58
29	11016473j26	RESISTOR 47K 1/6W ±5% CF	5	R101,219,49,50,1
30	11016512j26	RESISTOR 5.1K 1/6W ±5% CF	2	R210,1
31	11016513j26	RESISTOR 51K 1/6W ±5% CF	1	R224
32	11016563j26	RESISTOR 56K 1/6W ±5% CF	1	R104

33	11016681j26	RESISTOR 680 1/6W ±5% CF	2	R148,51
34	11016682j26	RESISTOR 6.8K 1/6W ±5% CF	3	R109,229,30
35	1302b101k503	DISC CAPACITOR 100P 50V ±10%	3	C104,39,40
36	1302b102k503	DISC CAPACITOR 1000P 50V ±10%	2	C116,41
37	1302b221k503	DISC CAPACITOR 220P 50V ±10%	12	C204,5,7,8,10,1 ,2,4,20,30,200,49
38	1302f104z503	DISC CAPACITOR 0.1U 50V +80/-20%	13	C108,13,5,9,37,8, 232,42,4,5,6,52,4
39	1303f473m503	DISC CAPACITOR 0.047U 50V ±20%	1	C106
40	130sl470k503	DISC CAPACITOR 47P 50V +350/-1000	1	C229
41	132103j503	MYLAY CAPACITOR 0.01U 50V ±5%	2	C223,4
42	132104j503	MYLAY CAPACITOR 0.1U 50V ±5%	4	C107,218,21,2
43	132223ja03	MYLAY CAPACITOR 0.022uF 100V ±5%	9	C123,4,5,6,7,8,31,2,21:
44	132473j503	MYLAY CAPACITOR 0.047U 50V ±5%	2	C216,7
45	1353105m50	ELECTROLYTIC CAP 1U 50V ±20%	3	C105,12,228
46	1353106m50	ELECTROLYTIC CAP 10U 50V ±20%	10	C201,2,6,13,9, 31,41,3,51,3
47	1353107m16	ELECTROLYTIC CAP 100uF 16V ±20%	5	C109,10,7,20,234
48	1353107m50	ELECTROLYTIC CAP 100U 50V ±20%	2	C135,6
49	1353226m50	ELECTROLYTIC CAP 22U 50V ±20%	3	C114,8,225
50	1353227m10	ELECTROLYTIC CAP 220U 10V ±20%	2	C129,30
51	1353227m16	ELECTROLYTIC CAP 220U 16V ±20%	1	C111
52	1353336m16	ELECTROLYTIC CAP 33U 16V ±20%	1	C233
53	1353476m25	ELECTROLYTIC CAP 47U 25V ±20%	1	C103
54	192027c1815gr	TRANSISTOR 2SC1815GR	10	Q102,11,2,3,8, 23,6,201,6,7
55	192027c2235y	TRANSISTOR 2SC2235Y	1	Q121
56	192028a1015gr	TRANSISTOR 2SA1015GR	4	Q114,6,22,7
57	192028a965y	TRANSISTOR 2SA965Y	1	Q125
58	1921672n5551	TRANSISTOR 2N5551	2	Q103,9
59	1921682n5401	TRANSISTOR 2N5401 AI-PNP 350V 500m	2	Q104,10
60	197131n4148	1N4148	19	D101,3,5,8,13,4,201, 2,3,4,5,6,7,8,11,2,4,5,
61	19915000335	3.3V 1/2W	2	D102,213
62	19915000625	6.2V 1/2W	2	D106,7
63	19915001605	16V 1/2W	1	D109
64	101OTLX110WA	PCB ASS'Y	1	
65	101ATLX110WA	AI ASS'Y	1	

66	104tlx1100a	PCB	1	
67	11016103j26	RESISTOR 10K 1/6W $\pm 5\%$ CF	9	R301,2,3,4,8,9,14,40,4
68	11016223j26	RESISTOR 22K 1/6W $\pm 5\%$ CF	2	R310,2
69	11016273j26	RESISTOR 27K 1/6W $\pm 5\%$ CF	1	R341
70	11016333j26	RESISTOR 33K 1/6W $\pm 5\%$ CF	1	R305
71	11016472j26	RESISTOR 4.7K 1/6W $\pm 5\%$ CF	2	R342,3
72	11016474j26	RESISTOR 470K 1/6W $\pm 5\%$ CF	1	R307
73	11016751j26	RESISTOR 750 1/6W $\pm 5\%$ CF	2	R311,3
74	11016755j26	RESISTOR 7.5M 1/6W $\pm 5\%$ CF	1	R306
75	1302f104z503	DISC CAPACITOR 0.1U 50V +80/-20%	2	C305,6
76	132103j503	MYLAY CAPACITOR 0.01U 50V $\pm 5\%$	2	C302,3
77	1353226m50	ELECTROLYTIC CAP 22U 50V $\pm 20\%$	2	C301,40
78	1353476m25	ELECTROLYTIC CAP 47U 25V $\pm 20\%$	1	C304
79	192027c1815gr	TRANSISTOR 2SC1815GR	2	Q301,2
80	197131n4148	1N4148	2	D301,2
81	1759f40hr2	40PIN PITCH=2.54mm HR2*40	0.13	P301
82	19016tl074cn	I.C. TL074CN ST	1	U301
83	11010821jk1	RESISTOR 820 1W $\pm 5\%$	1	R132
84	110122r2j15	RESISTOR 2.2 1/2W $\pm 5\%$	1	R127
85	113500r1j10	CEMENT RESISTOR 0.1 5W	2	R121,2
86	11403302m0	SEMI-FIXED RESISTOR 3K 0.3W $\pm 20\%$	1	R138
87	115h203b208	VARIABLE RESISTOR B20K	1	VR202
88	115h503a104	VARIABLE RESISTOR D16 50K/1 A	1	VR201
89	1354478m35	ELECTROLYTIC CAP 4700U 35V $\pm 20\%$	2	C121,2
90	1354478m50	ELECTROLYTIC CAP 4700U 50V $\pm 20\%$	2	C133,4
91	171udhss124d	RELAY 5A 24V UDH-SS124D	1	RY101
92	1740300390g	JACK	1	JK202
93	1742psz406g1	JACK S-8071	1	JK203
94	1742psz406g2	SPK JK 4PIN S-8072	1	JK203
95	180tms7210v	SWITCH SLIDE 6PIN MS7210V	1	SW201
96	19006m4558d	I.C. OPA 4558D	2	U101,203
97	19016tl074cn	I.C. TL074CN ST	2	U201,2
98	192011d669a	TRANSISTOR 2SD669A	1	Q106
99	192012b649a	TRANSISTOR 2SB649A	1	Q105
100	192021c1815gr	TRANSISTOR 2SC1815GR	2	Q101,15
101	192021tip35c	TRANSISTOR TIP35C	1	Q107

102	192022tip36c	TRANSISTOR TIP36C	1	Q108
103	192161tip41c	TRANSISTOR TIP41C NPN SGS	1	Q124
104	192162tip42c	TRANSISTOR TIP42C PNP SGS	1	Q120
105	192201d882y	TRANSISTOR KSD882Y	1	Q117
106	192202b772y	TRANSISTOR KSB772Y	1	Q119
107	19700kbl405	4A 500V KBL405	2	D110,5
108	197101n4002	1N4002	1	D104
109	197101n5402	1N5402	2	D111,2
110	197131n4148	1N4148	1	D115
111	150e8604106	TRANSFORMER TT0869803320	1	
112	152v602026	LINE CORD SP-021A 6FT VDE	1	
113	154v12506t0	FUSE TSD 1.25A 250V VDE	1	
114	155520020	FUSE HOLDER R3-11	1	
115	180prf1003s	POWER SW ROCK RF-1003-BB2-OHA	1	





SUB 100
 INFINITY 110W .SCH
 OCT-10-2001