

Service *Manual*

MODEL: ELVIS 15M/15MA

CONTENT

1. Introduction.....	1
2. Specification.....	2
3. Block Diagram.....	3
4. Schematic Diagram.....	4
5. PCB Layout.....	9
6. Exploded View & Mechanical Parts List.....	12
7. BOM.....	16

1. Introduction

These cabinets is designed for professional stage performance .Using density Particle Board and high quality carpet for the body of the cabinet made it more durable .The special handle shows unique Italy style. With the accurate crossover point made the timbre very clean.

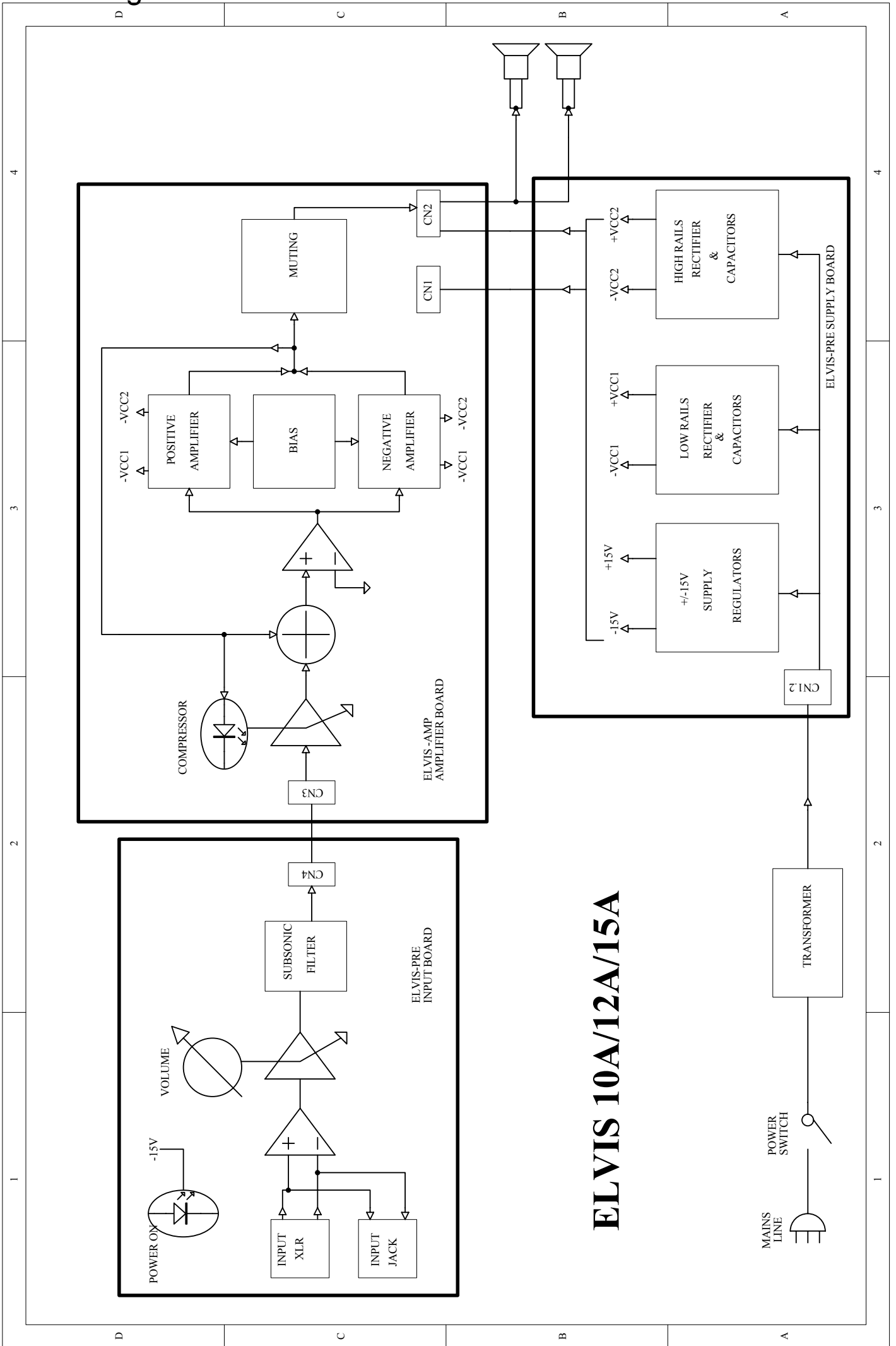
ES12M adopt special horn in polypropylene reinforced. With wide directional angle $80^{\circ} \pm 10^{\circ}$ (1KHZ-16KHZ)and 180W AES/360W Peak power. Matching the ELVIS 12S/15S(SUB WOOFER) with ELVIS 12/15 made the acoustics of the cabinet clean and the bass strong. All these characters made it very suitable for any place.

2.Speciation

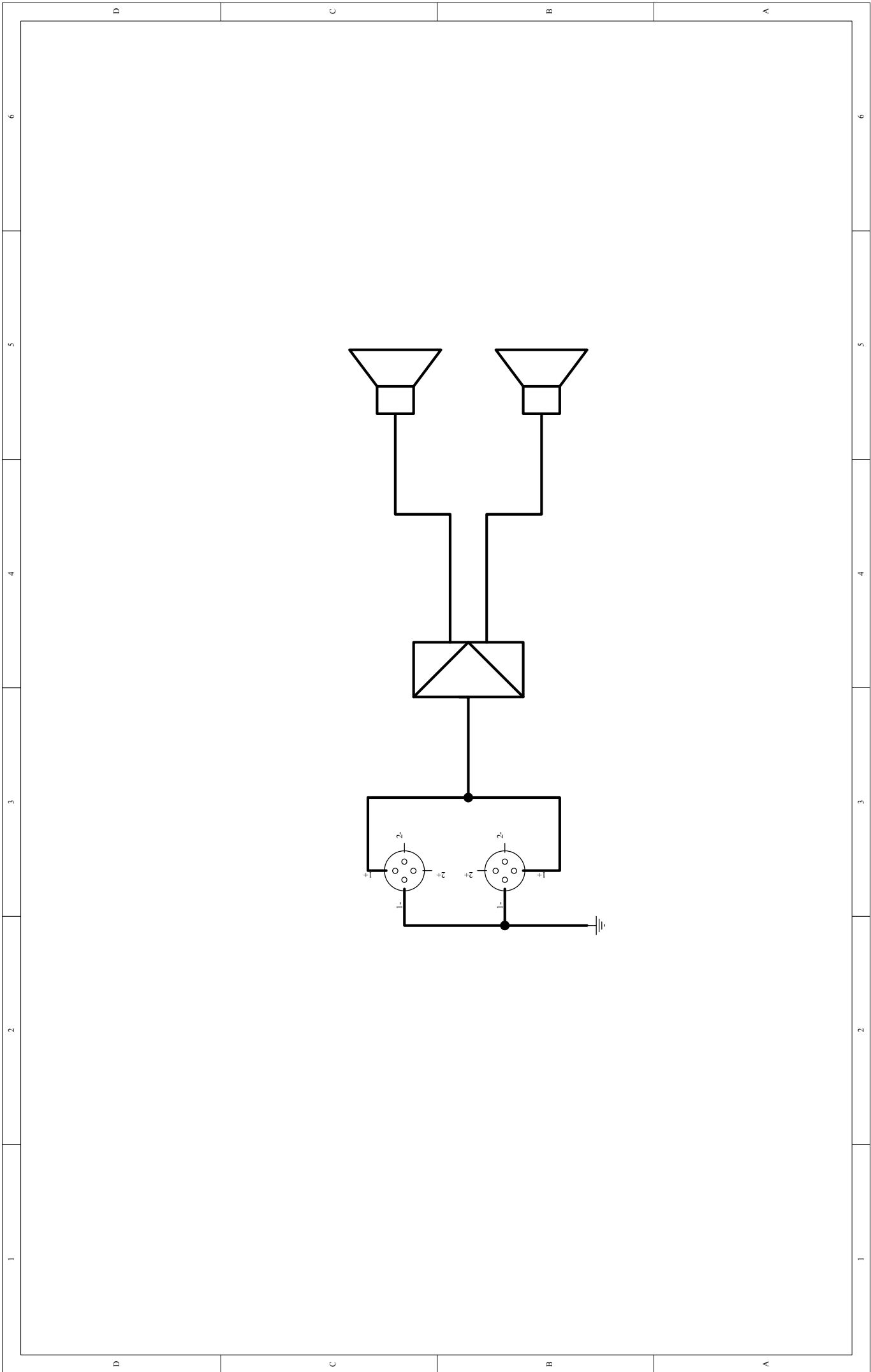
Technical Specification	ELVIS15MA
Output Power IHF Output Power RMS	350Watt IHF 250Watt RMS
Max SPL at 1W,1m	123dB(IHF Power)
Input Sensitivity	Line 0dB/0.775V/Mic-10at -45dB
Impedance	30kOhms Balanced -15kOhms Unbalanced
Connectors	Mic on XLR/Line Input on Combo/Line-Mix Output on XLR
Subsonic Filter	30Hz-24dB/oct
Protections	Soft -Start DC voltage protect - compressor
External Control	Mic Gain-EQ-High-Mid-Low-Volume-Ground Switch
LOW-Frequency High-Frequency	15"/385mm Woofer 1" Compression Driver
Horn Coverage H -V	80°H X 80°V (1kHz - 16kHz)
Power Supply	230Volt/115Volt 50/60Hz
Dimensions	H: 680 mm(26.77") W: 450 mm(17.72") D: 370 mm(14.57")
Weight	65.15 lbs / 29.55 kg
Shipping Weight	71.52lbs / 32.44kg
Volume	7.35CFT

Technical Specification	ELVIS15(2-way)
Power Handling	250W AES/500W Peak
SPL 1W,1m	98,5dB / 122,5 Max
Frequency Response	55Hz ~ 20kHz +/- 6dB
Impedance	8 Ω
Crossover Frequency	2200Hz
High-Frequency Crossover Type	12dB/octave
Low-frequency Crossover Type	12dB/octave
Horn Coverage H -V	80° ± 10° (1kHz - 16kHz)
Input Connectors	Pin1+ ;Pin1-
Dimensions	H: 680 mm(26.77") W: 450 mm(17.72")D: 370 mm(14.57")
Weight	50.95 lbs / 23.11 kg
Shipping Weright	62.17 lbs/ 28.2 kg
Volume	5.58 CFT

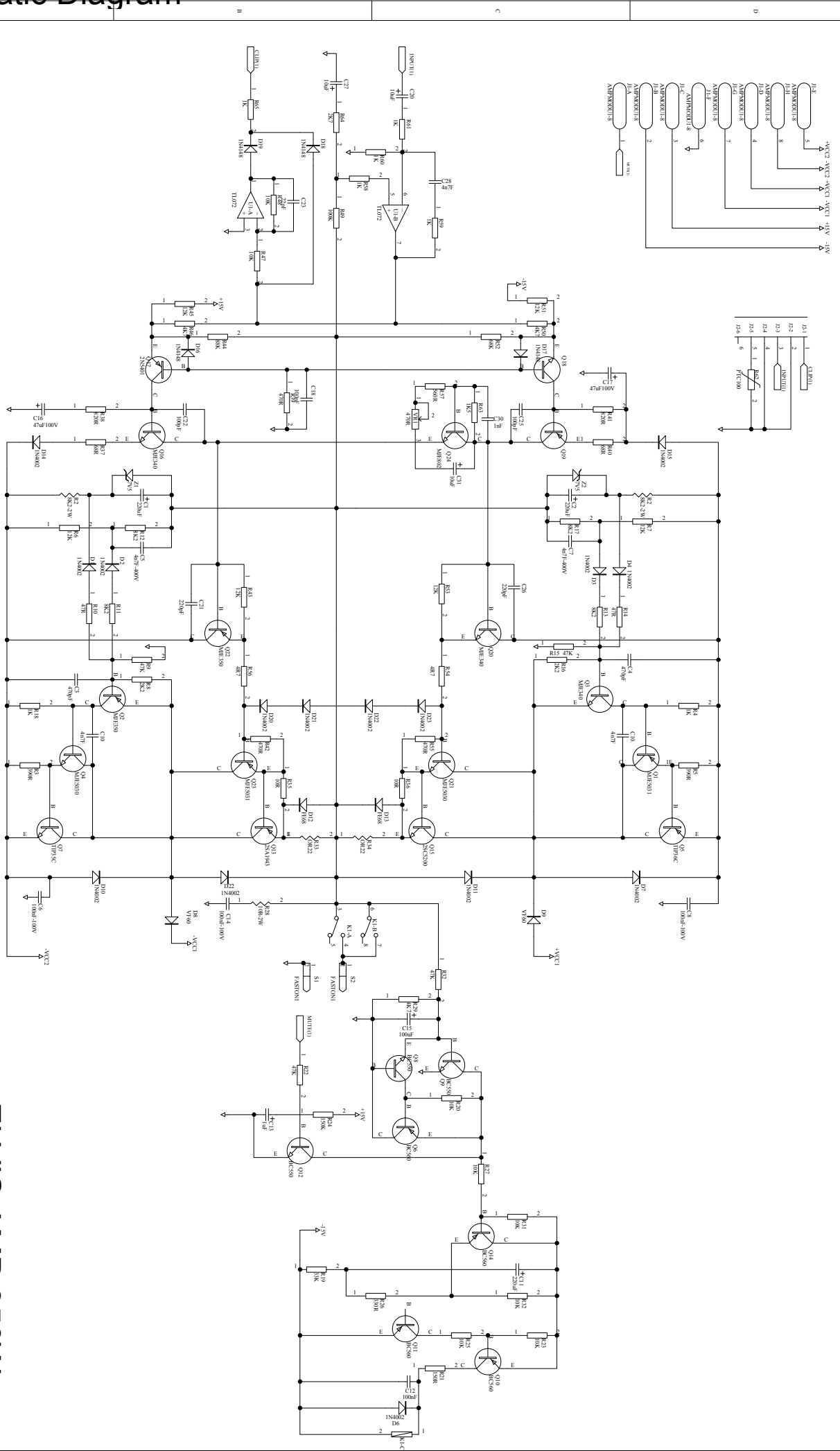
3. Block Diagram



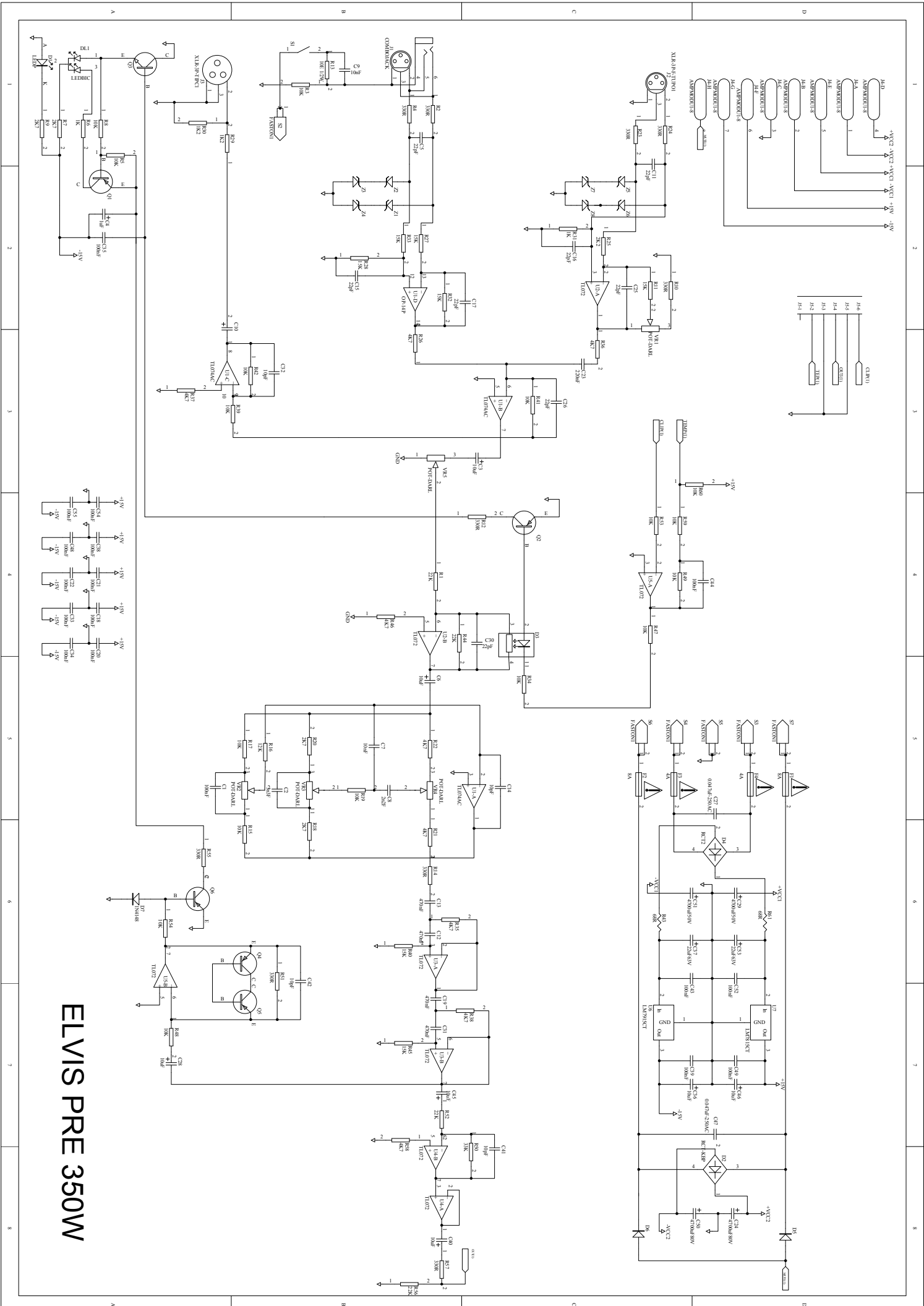
ELVIS 10A/12A/15A



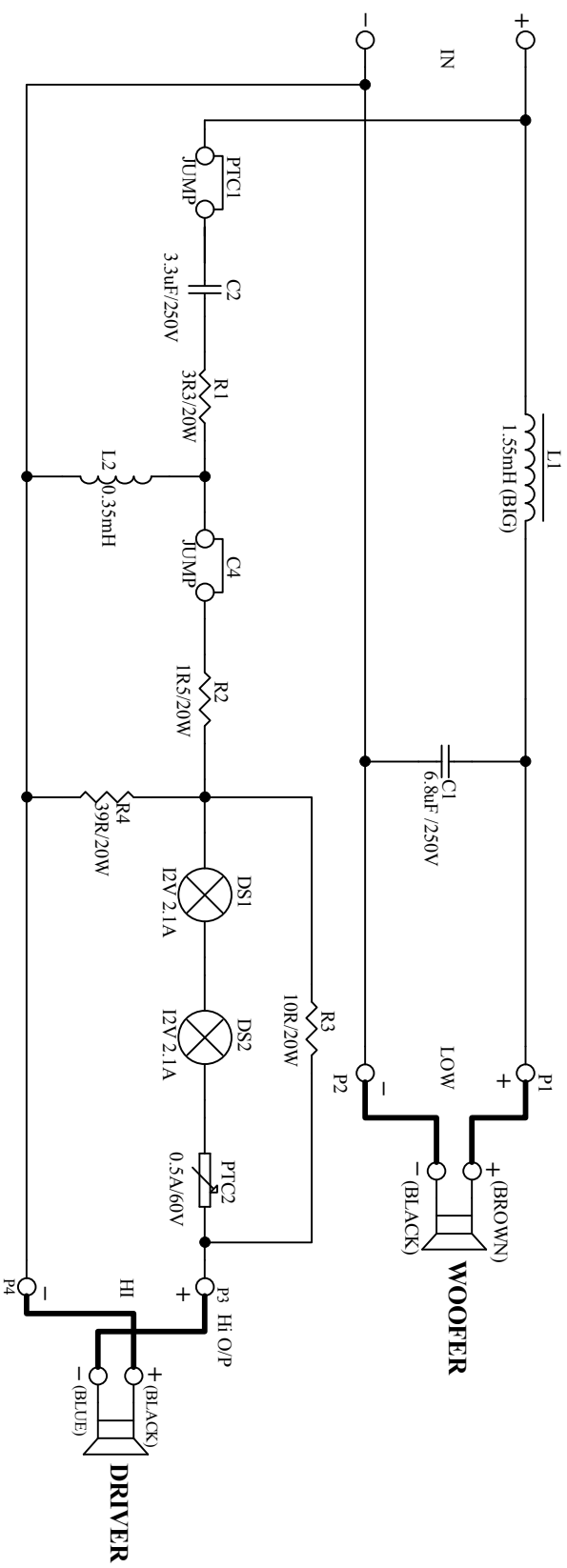
4. Schematic Diagram



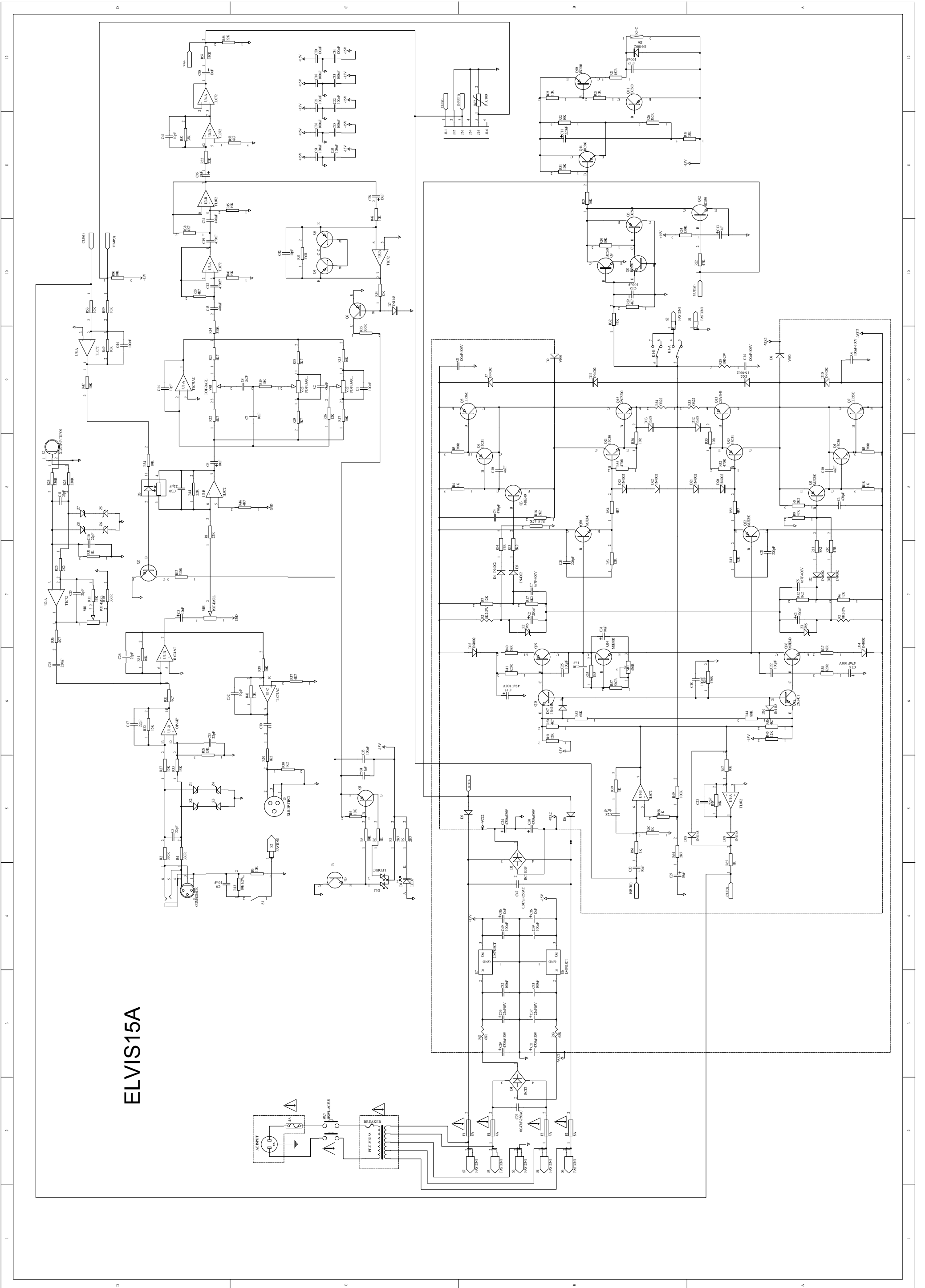
ELVIS AMP 350W



ELVIS PRE 350W

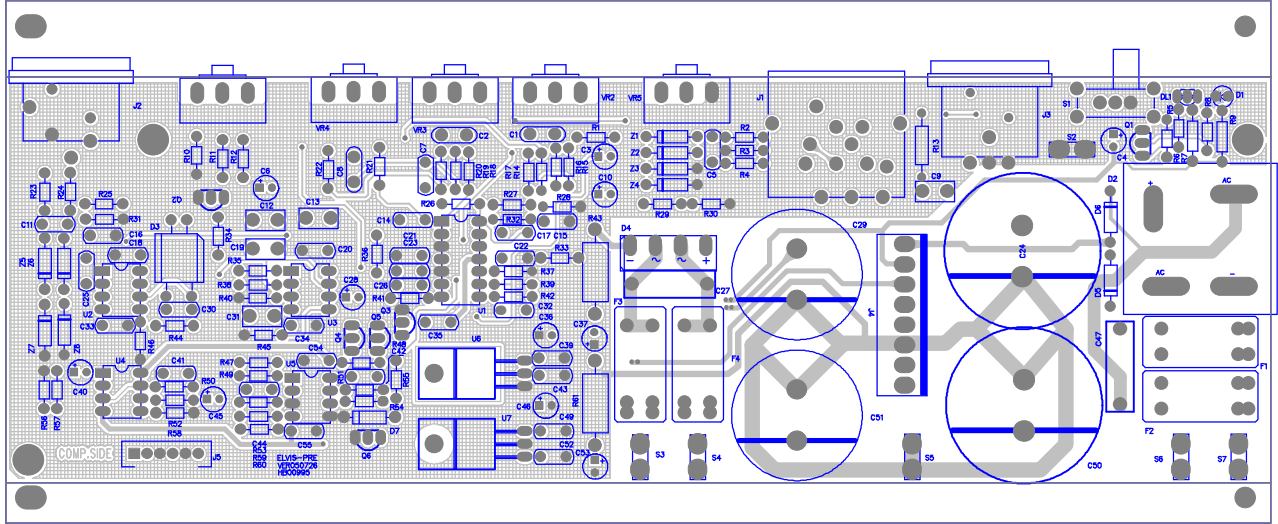


ELVIS 15M NEW CROSSOVER

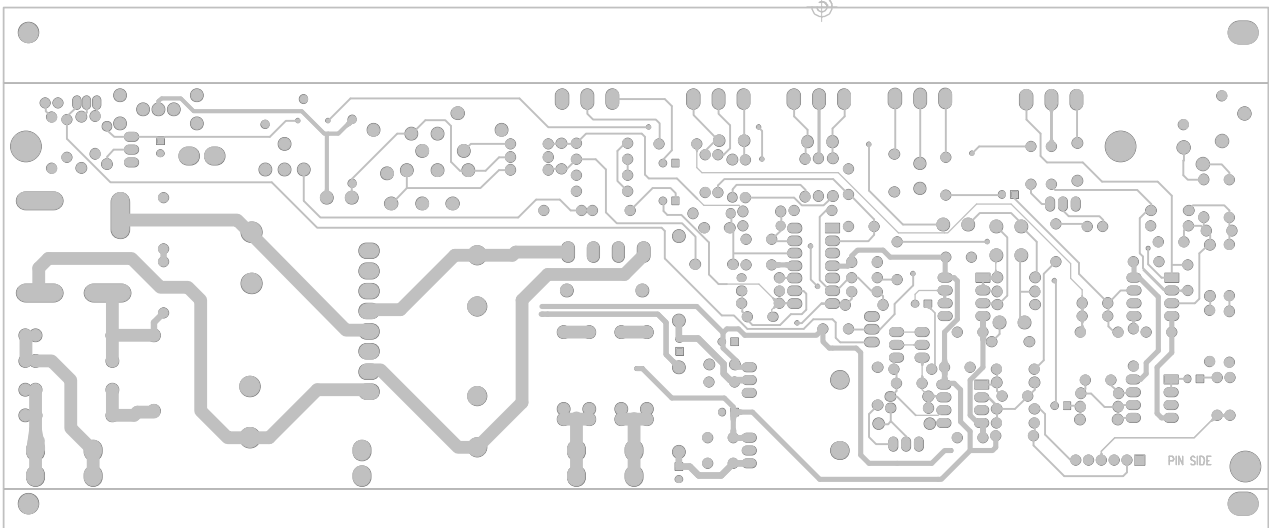


ELVIS15A

5. PCB Layout

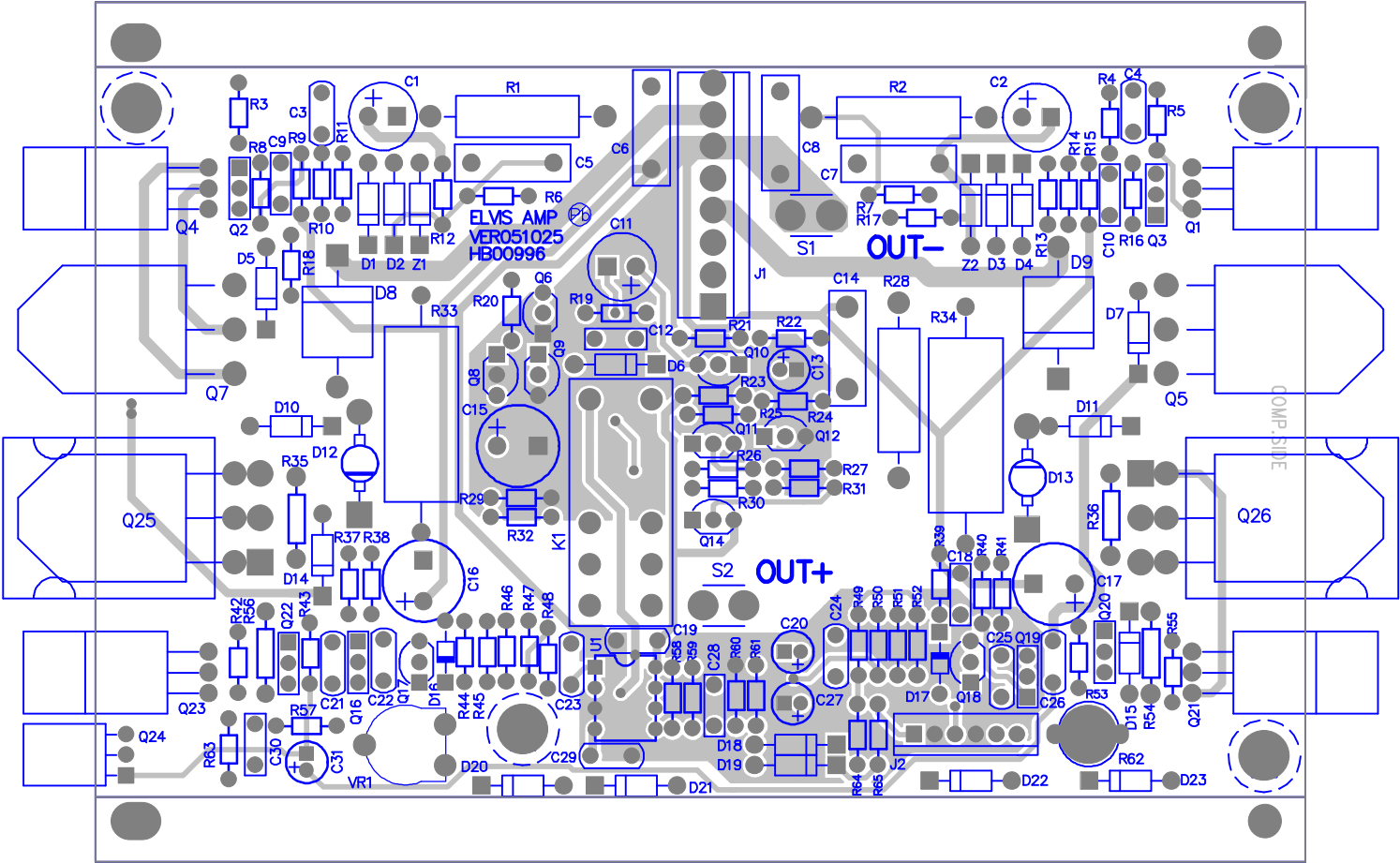
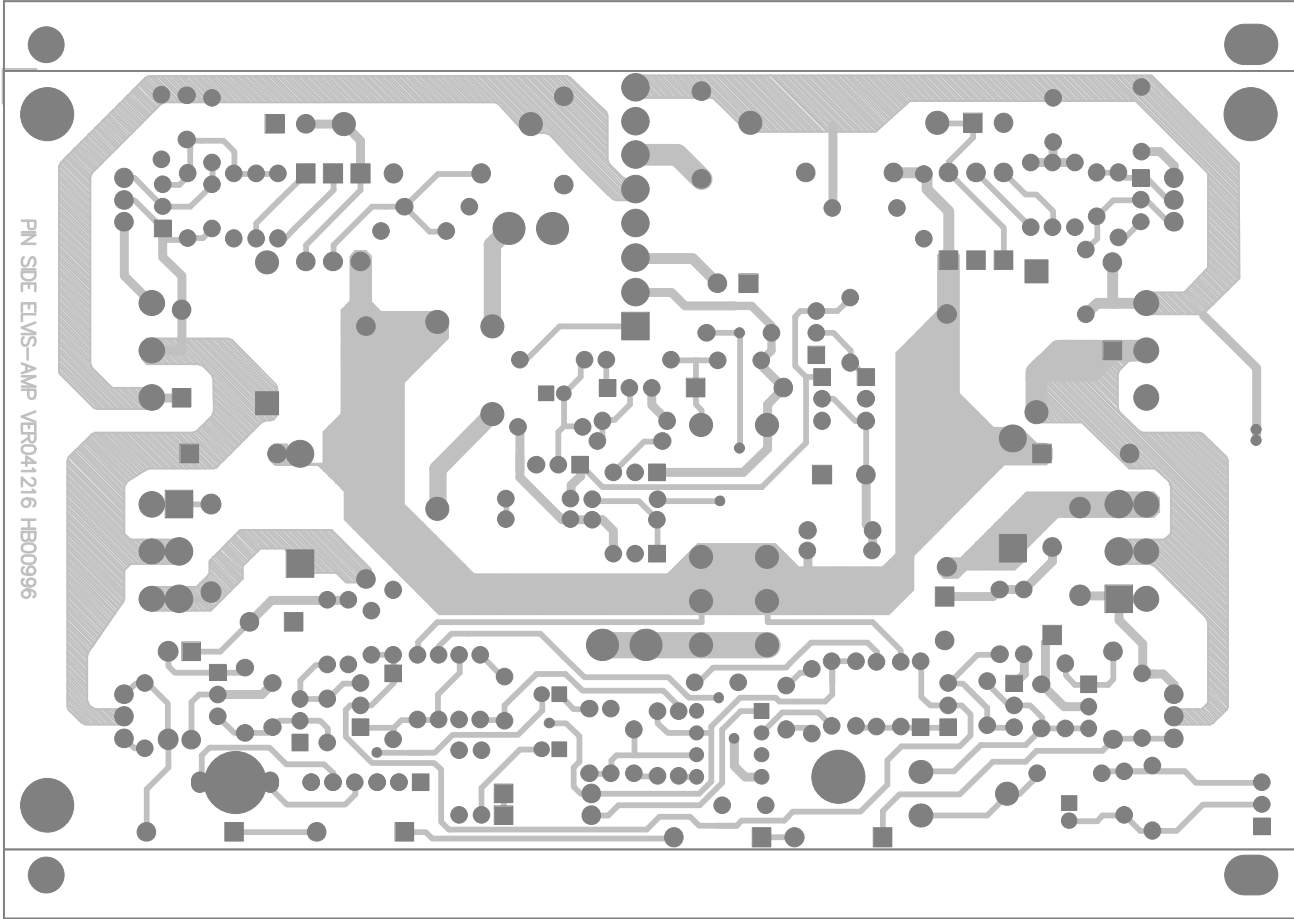


BOARD NAME			
PART NO: XXXXXXXXXXXXXXXXX	REV: 0	DATE: 29-09-2003	
0325QT02		GERBER: TOP.GBR	

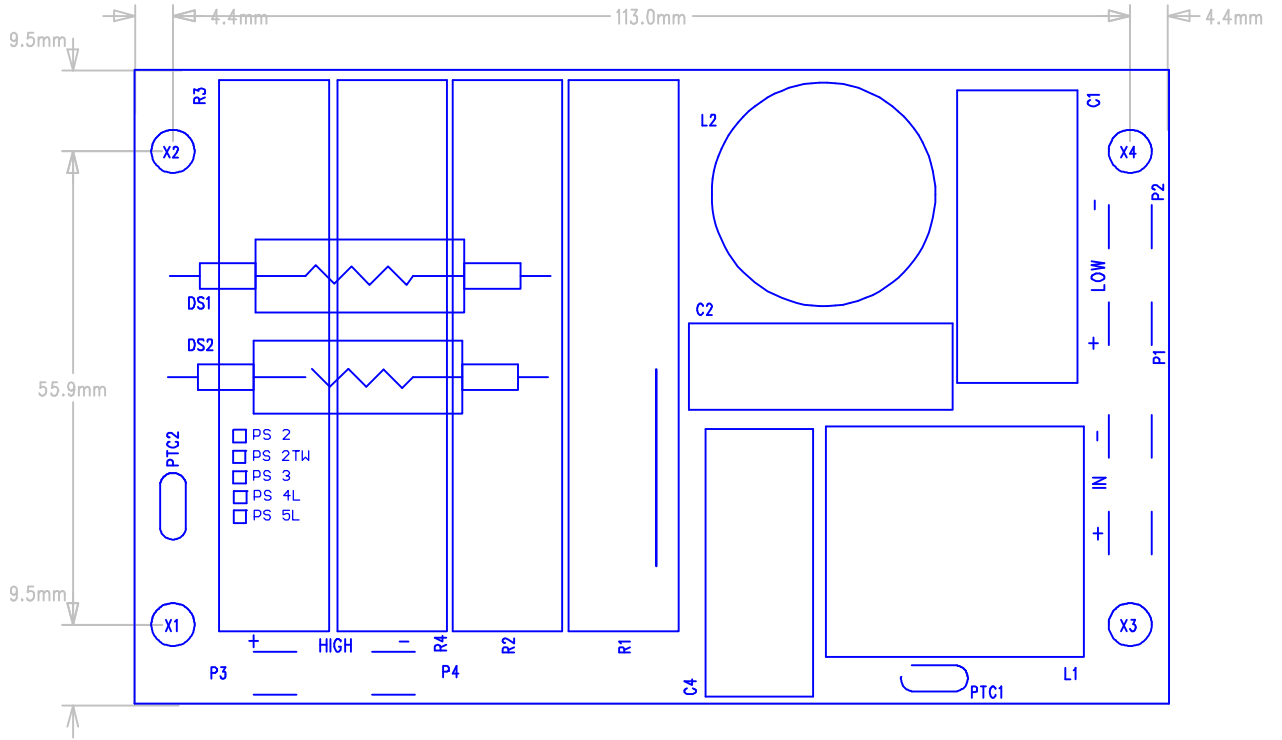


BOARD NAME			
PART NO: XXXXXXXXXXXXXXXXX	REV: 0	DATE: 29-09-2003	
0325QT02		GERBER: BOT.GBR	

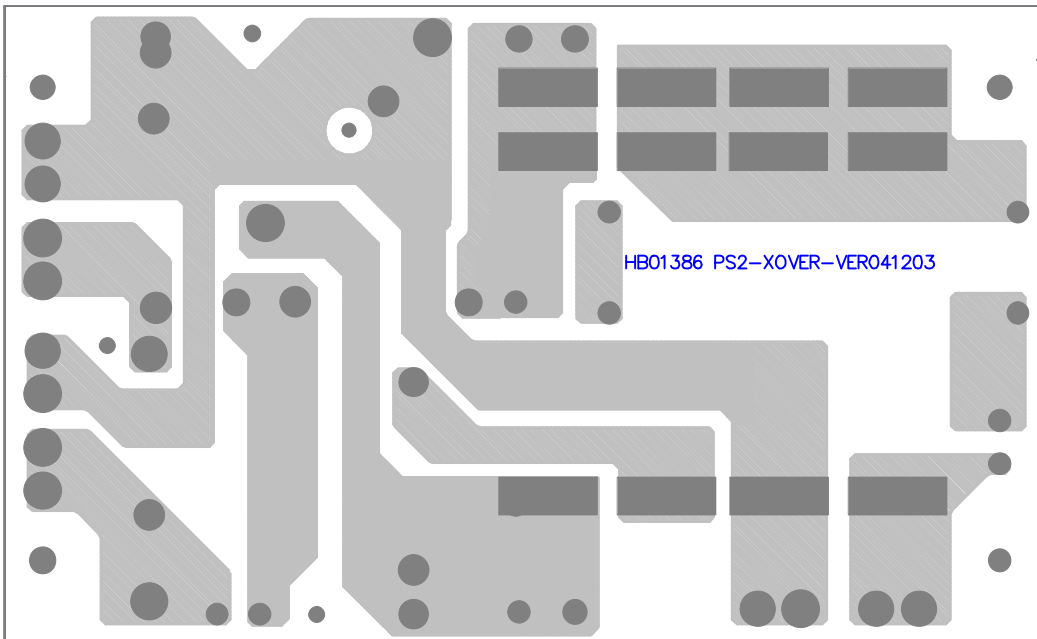
PIN SIDE ELVS-AMP VER041216 HB00996

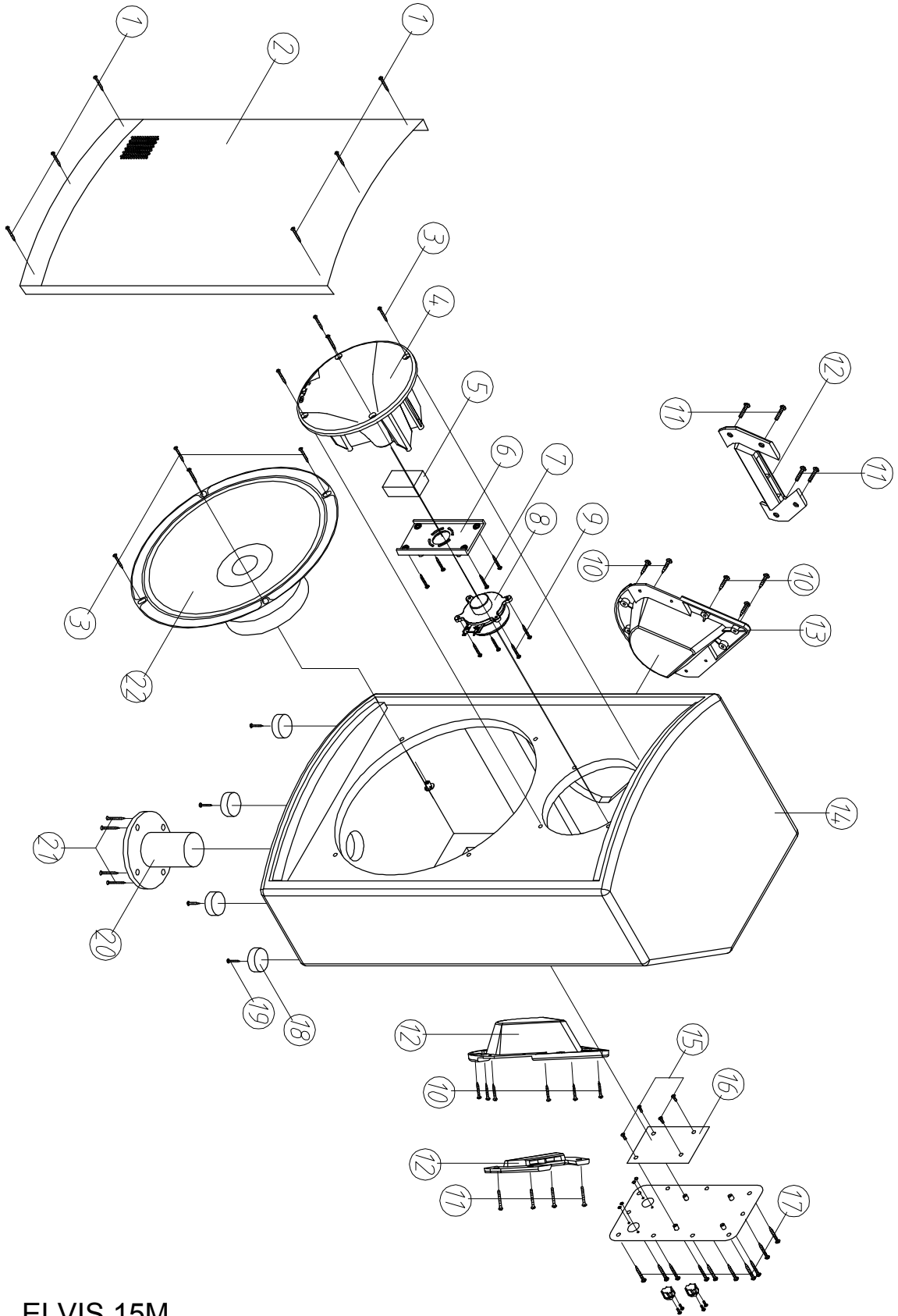


ELVIS-XOVER			
PART NO.: XXXXXXXXXXXXXXXX	REV:	DATE: 07-04-2004	
0403QT01		GERBER:	SERTOP.GBR

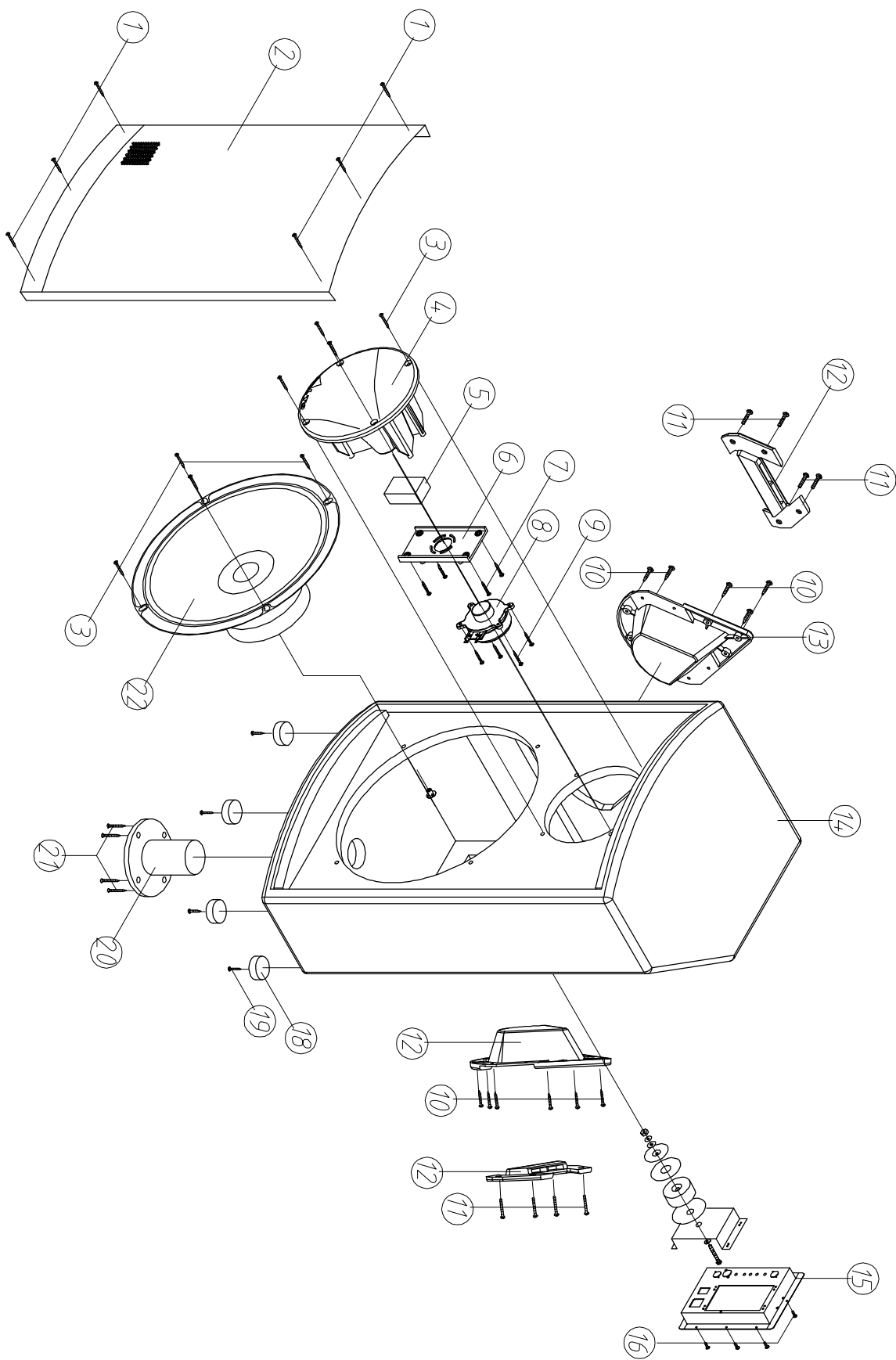


ELVIS-XOVER			
DATE: 07-04-2004	REV:	PART NO.: XXXXXXXXXXXXXXXX	
0403QT01		GERBER:	BOT.GBR





ELVIS 15M



ELVIS 15MA

Part List

ELVIS15M

No.	Item No.	Item Description	Specification	PCS
1	MG00349	black-plated screw-T head ϕ 8	M3*16	6
2	MD00623	ZC-grille-spray black paint	ELVIS15M ALTO_V1.0	1
3	MG00350	black-plated screw-T head ϕ 10	M5*30	8
4	NI02242	horn	ELVIS 10;12;15 432C	1
5	ND00231	foam	10*50*50mm	8
6	NI02374	fixed board-ABS	70*135*10 432C	1
7	MG00352	black-plated screw-pill-iron plate	M4*25	4
8	HG00081	driver	PA-D597 P-AUDIO 8 Ω	1
9	MG00351	black-plated screw-pill-iron plate	M4*16	4
10	MG00536	black-plated screw-pill-iron plate	M4*20_V1.0	12
11	MG00338	black-plated screw-T head ϕ 8	M4*30mm	8
12	NI02376	handle-ABS	85.6*207*7 432C	2
13	NI02375	handle cover-ABS	ELVIS 10;12;15 432C	2
14	NC00404	K-cabinet	ELVIS 15M 15 inch carpet YB-153_V1.0	1
15	MG00060	black-plated screw-self tapping	M3*6	4
16	HK05004	K-PC board	P-ELVIS-NEW XOVER (ELVIS 15)	1
17	MG00351	black-plated screw-pill-iron plate	M4*16	10
18	NI02426	rubber foot cushion	ϕ 37*15.5mm	4
19	MG00360	black-plated screw-flat-iron plate	M4*25mm	4
20	MH01704	ZB-bracket-spray black-paint	ELVIS ϕ 110*96_V1.0	1
21	MG00353	black-plated screw	M6*30	4
22	HK03077	K-woofer	15 inch 150W 6 Ω ELVIS 15	1

ELVIS 15MA

No.	Item No.	Item Description	Specification	PCS
1	MG00349	black-plated screw-T head $\phi 8$	M3*16	6
2	MD00624	ZC-grille-spray black paint	ELVIS15MA ALTO_V1.0	1
3	MG00350	black-plated screw-T head $\phi 10$	M5*30	8
4	NI02242	horn	ELVIS 10;12;15 432C	1
5	ND00231	foam	10*50*50mm	8
6	NI02374	fixed board-ABS	70*135*10 432C	1
7	MG00352	black-plated screw-pill-iron plate	M4*25	4
8	HG00081	driver	PA-D597 P-AUDIO 8 Ω	1
9	MG00351	black-plated screw-pill-iron plate	M4*16	4
10	MG00536	black-plated screw-pill-iron plate	M4*20_V1.0	12
11	MG00338	black-plated screw-T head $\phi 8$	M4*30mm	8
12	NI02376	handle-ABS	85.6*207*7 432C	2
13	NI02375	handle cover-ABS	ELVIS 10;12;15 432C	2
14	NC00403	K-cabinet	ELVIS 15MA 15 inch carpet YB-153_V1.0	1
15	HK00659	K-pannel	ELVIS 15A_ALTO_230V	1
16	MG00403	black-plated screw-pill-iron plate	M4*23	8
17	NI02426	rubber foot cushion	$\phi 37$ *15.5mm	4
18	MG00360	black-plated screw-flat-iron plate	M4*25mm	4
19	MH01704	ZB-bracket-spray black-paint	ELVIS $\phi 110$ *96_V1.0	1
20	MG00353	black-plated screw	M6*30	4
21	HK03077	K-woofer	15 inch 150W 6 Ω ELVIS 15	1

7.BOM

ELVIS 15M

No.	Part No.	Description	Specification	Remark
1	NC00404	panel	ELVIS 15M 15 inch YB-153_V1.0	
2	NI02375	handle cover	ELVIS 10;12;15 432C	
3	NI02376	handle	85.6*207*7 432C	
4	MJ01146	pillor	2t*201*79.6mm ELVIS	
5	MJ01166	iron board	2t*201*79.6mm ELVIS10	
6	MJ01154	single light board	2.0t*1850*950mm 27.6kg	
7	NC00431	side cover board	ELVIS 15M 655*172*18t right_V1.0	
8	NC00236	Shaving board	2440*1220*18t_V1.0	
9	NC00432	side cover board	ELVIS 15M 655*323*18t left_V1.0	
10	NC00236	Shaving board	2440*1220*18t_V1.0	
11	NC00433	rear board	ELVIS 15M 454*368*18t_V1.0	
12	NC00236	Shaving board	2440*1220*18t_V1.0	
13	NC00434	front board	ELVIS 15M 655*427*18t_V1.0	
14	NC00236	Shaving board	2440*1220*18t_V1.0	
15	NC00435	rear board	ELVIS 15M 655*261*18t_V1.0	
16	NC00236	Shaving board	2440*1220*18t_V1.0	
17	NC00436	side cover board	ELVIS 15M 655*234.7*18t_V1.0	
18	NC00236	Shaving board	2440*1220*18t_V1.0	
19	NC00437	front faceplate	ELVIS 15M 454*368*18t_V1.0	
20	NC00236	Shaving board	2440*1220*18t_V1.0	
21	ND00441	Carpet cloth	2.5t*2M*0.66M YB-153_V1.0	
22	ND00415	Carpet cloth	2m*50m*2.5t*310g/ YB-153_V1.0	
23	ME00085	nut-T type	M4	
24	ME00082	nut-T type	M5	
25	ME00083	nut-T type	M6	
26	MG00353	black-plated screw-RS	M6*30	
27	MH01704	handle-RS	ELVIS φ110*96_V1.0	
28	MH00801	bracket	φ110*96_V1.1	
29	ND00239	fillter sponge	4t*100*100mm	
30	NI02426	foot cushion	φ37*15.5mm	
31	MG00360	black-plated screw-RS	M4*25mm	
32	MG00338	black-plated screw-RS	M4*30mm	
33	MG00536	black-plated screw-RS	M4*20_V1.0	
34	ND00311	absorb sound sponge	40*3030*250mm	
35	ND00454	Carpet cloth	25m*1m*40t white_V1.0	
36	MD00623	grille	ELVIS15M ALTO_V1.0	
37	MD00619	grille	ELVIS 15MA	
38	MD00620	grille	ELVIS 15MA 1.2t*638*411.3_V1.1	
39	MD00406	grille	ELVIS 15 1.2t*638*445_V1.0	
40	MG00349	screw-RS-T	M3*16	
41	HK03077	woofer	15" 150W 6Ω ELVIS 15(Z00823_LP385.65)	
42	NH00235	cone	B0822B_CN 385.65T3 Z2 40HZ	
43	NH00237	cushion	C0910A_GR 385/6+2	
44	ND00223	spider-RS	C0830A_CT 65-145/12 C3	
45	NH00241	dust cap	E0533A_CP 98/C	
46	HK03051	magnet circuit	F0809B_CM 65/1445.8 F30 J	
47	MH01648	washer	I0811A_PS 65/1450.8 J	
48	MH01647	magnet	G0450A_D154*73*19mm	
49	MH01649	T type middle pillar	H0811A_PN 65/1450.10 D30	

No.	Part No.	Description	Specification	Remark
50	MI01613	bracket	L0810B_CR 385/J N_V1.1	
51	HC00426	terminal	M0021B_PT2.1	
52	HC00496	connect terminal	0.8*13*16.3mm	
53	HC00495	connect terminal	0.8*13*16.3mm	
54	NI02583	terminal block	3.5*24.5*3t	
55	MH01110	rivet	M0500A_OU-30	
56	HA02494	strand	TA4X4YKA42W*120mm	
57	HA02079	strand	TA4X4YKA42W*1M	
58	ND00228	sponge	S0720B_NYLON NET D45	
59	NE16118	lable	HK03077_V1.0	
60	NI00014	membrane	0.035*1M	
61	NH00012	bond paper	0.04*1M	
62	HG00201	voice coil	BSV64.47*35*5.25Ω	
63	MG00350	screw-RS-T	M5*30	
64	HG00081	driver	PA-D597 P-AUDIO 8Ω	
65	MG00351	screw-RS	M4*16	
66	NI02242	horn	ELVIS 10;12;15 432C	
67	NI02374	fixed board	70*135*10 432C	
68	MG00352	screw-RS	M4*25	
69	ND00231	sponge	15*50*50mm	
70	HA02319	signle terminal wiring	600mm UL1015 18AWG brown/black	
71	HA02320	signle terminal wiring	800mm UL1015 18AWG	
72	NF01105	instructions	ELVIS ALTO_V1.4	
73	NH00149	paper	889*640mm	
74	NF00061	assurance card	ALTO	
75	NE13657	label	ELVIS 15M_V1.0	
76	NH00012	bond paper	0.04*1M	
77	NI00014	membrane	0.035*1M	
78	NA00192	bag	0.05t*1200*800mm	
79	NB02212	barrier	ELVIS	
80	NB02213	barrier	ELVIS	
81	NB02214	barrier	ELVIS	
82	NB02215	barrier	ELVIS	
83	NB03412	cushion	ELVIS 15M down_V1.0	
84	NB03413	cushion	ELVIS 15M up_V1.0	
85	NB03696	carton	ELVIS 15M ALTO_V1.3	
86	NE11345	label	ALTO PG	
87	NH00334	cone paper	0.040*1m	
88	HK05100	fixed board	ELVIS 15M ALTO	
89	MJ00488	fixed board	ELVIS15M ALTO_V1.0	
90	MJ01163	fixed board	ELVIS 10	
91	MJ01162	fixed board	ELVIS 10	
92	MJ00088	single light board	1.5*2135*1220 30.67kg	
93	ME00105	iron pillar	M3*7.2*0.5PH_V1.1	
94	MG00060	screw	M3*6	
95	HC00218	speakon	SKCB201-4P	
96	MG00042	screw	M3*10	
97	ME00015	color nut	3m/m	
98	HA03757	wire	100mm UL1015 18AWG red/black	

No.	Part No.	Description	Specification	Remark
99	HB00858	PCB	ELVIS-IN_VER050930	
100	HK05004	PC board	P-ELVIS-NEW XOVER (ELVIS 15)	
101	HB01386	PCB	PS 2-XOVER(1*2)_VER041203	
102	CN00056	crossover inductance	1.55mH(1.0mm ϕ 1.50~1.60Mh)	L1
103	CN00049	crossover inductance	0.35mH(0.8mm ϕ 0.34-0.36mH)	L2
104	CF00091	metal-film capacitor MEF	6.8uF/250V 5%	C1
105	CF00090	metal-film capacitor MEF	3.3uF/250V 5%	C2
106	HA02087	jumper	23mm	C4
107	HA02249	wire	ϕ 0.6_Sn-plated	
108	RA00993	chassis bracket 20W	3.3 Ω SQY type	R1
109	RA00827	chassis bracket 20W	1.5 Ω SQZ	R2
110	RA00988	cement resistor 20W	10 Ω SQY type	R3
111	RA00839	chassis bracket 20W	39 Ω SQZ	R4
112	HH00036	lamp	SK3/CWT 12.8V 2.1A	DS1,DS2
113	HA01919	jumper	5mm	PTC1
114	HA02249	wire	ϕ 0.6_Sn-plated	
115	RG00012	over current protector	0.5A 60V MF-R050	PTC2
116	HC00324	connect terminal	6.5m/m (PC250)	
117	NI02590	cable tie	YJ-203V0 UL94V-0	
118	AC00179	tin without lead-RS	M705E Sn 3Ag-0.5Cu	
119	AC00179	tin without lead-RS	M705E Sn 3Ag-0.5Cu	
120	NA00279	clip-chain bag	0.04t*100*150mm_V1.0	
121	AD00012	twin adhesive	90*120mm_V1.0	
122	NE04307	label	ELVIS 15M ALTO_V1.1	
123	NE11168	label	HK 15 ALTO	
124	NH00012	bond paper	0.04*1M	
125	NI00014	membrane	0.035*1M	
126	NA00122	PE bag	0.04t*350*230mm	

ELVIS 15MA

No.	Part No.	Description	Specification	Remark
1	NC00403	panel	ELVIS 15MA15 inch YB-153_V1.0	
2	NI02375	handle cover	ELVIS 10;12;15 432C	
3	NI02376	handle	85.6*207*7 432C	
4	MJ01146	pillor	2t*201*79.6mm ELVIS	
5	MJ01166	iron board	2t*201*79.6mm ELVIS10	
6	MJ01154	single light board	2.0t*1850*950mm 27.6kg	
7	NC00431	side cover board	ELVIS 15M 655*172*18t right_V1.0	
8	NC00236	Shaving board	2440*1220*18t_V1.0	
9	NC00432	side cover board	ELVIS 15M 655*323*18t left_V1.0	
10	NC00236	Shaving board	2440*1220*18t_V1.0	
11	NC00433	rear board	ELVIS 15M 454*368*18t_V1.0	
12	NC00236	Shaving board	2440*1220*18t_V1.0	
13	NC00434	front board	ELVIS 15M 655*427*18t_V1.0	
14	NC00236	Shaving board	2440*1220*18t_V1.0	
15	NC00439	rear board	ELVIS 15MA 655*261*18t_V1.0	
16	NC00236	Shaving board	2440*1220*18t_V1.0	
17	NC00436	side cover board	ELVIS 15M 655*234.7*18t_V1.0	
18	NC00236	Shaving board	2440*1220*18t_V1.0	
19	NC00437	front faceplate	ELVIS 15M 454*368*18t_V1.0	
20	NC00236	Shaving board	2440*1220*18t_V1.0	
21	ND00441	Carpet cloth	2.5t*2M*0.66M YB-153_V1.0	
22	ND00415	Carpet cloth	2m*50m*2.5t*310g/ YB-153_V1.0	
23	ME00085	nut	M4	
24	ME00082	nut	M5	
25	ME00083	nut	M6	
26	MG00353	screw-RS	M6*30	
27	MH01704	handle-RS	ELVIS ϕ 110*96_V1.0	
28	MH00801	bracket	ϕ 110*96_V1.1	
29	ND00239	fillter sponge	4t*100*100mm	
30	NI02426	foot cushion	ϕ 37*15.5mm	
31	MG00360	screw-RS	M4*25mm	
32	MG00338	screw-RS-T	M4*30mm	
33	MG00536	screw-RS	M4*20_V1.0	
34	ND00311	absorb sound sponge	40*3030*250mm	
35	ND00454	Carpet cloth	25m*1m*40t white_V1.0	
36	MD00624	grille	ELVIS15MA ALTO_V1.0	
37	MD00619	grille	ELVIS 15MA	
38	MD00620	grille	ELVIS 15MA 1.2t*638*411.3_V1.1	
39	MD00406	grille	ELVIS 15 1.2t*638*445_V1.0	
40	MG00349	screw-RS-T	M3*16	
41	HK03077	woofer	15" 150W 6 Ω ELVIS 15(Z00823_LP385.65)	
42	NH00235	cone	B0822B_CN 385.65T3 Z2 40HZ	
43	NH00237	cushion	C0910A_GR 385/6+2	

No.	Part No.	Description	Specification	Remark
44	ND00223	spider-RS	C0830A_CT 65-145/12 C3	
45	NH00241	cover	E0533A_CP 98/C	
46	HK03051	magnet circuit	F0809B_CM 65/1445.8 F30 J	
47	MH01648	washer	I0811A_PS 65/1450.8 J	
48	MH01647	magnet	G0450A_D154*73*19mm	
49	MH01649	T type middle pillar	H0811A_PN 65/1450.10 D30	
50	MI01613	bracket	L0810B_CR 385/J N_V1.1	
51	HC00426	terminal	M0021B_PT2.1	
52	HC00496	connect terminal	0.8*13*16.3mm	
53	HC00495	connect terminal	0.8*13*16.3mm	
54	NI02583	terminal block	3.5*24.5*3t	
55	MH01110	rivet	M0500A_OU-30	
56	HA02494	strand	TA4X4YKA42W*120mm	
57	HA02079	strand	TA4X4YKA42W*1M	
58	ND00228	sponge	S0720B_NYLON NET D45	
59	NE16118	lable	HK03077_V1.0	
60	NI00014	membrane	0.035*1M	
61	NH00012	bond paper	0.04*1M	
62	HG00201	voice coil	BSV64.47*35*5.25Ω	
63	MG00350	screw-RS-T	M5*30	
64	MG00403	screw	M4*23	
65	HG00081	driver	PA-D597 P-AUDIO 8Ω	
66	MG00351	screw-RS	M4*16	
67	NI02242	horn	ELVIS 10;12;15 432C	
68	MG00352	screw-RS	M4*25	
69	ND00231	sponge	15*50*50mm	
70	HA02319	signle terminal wiring	600mm UL1015 18AWG brown/black	
71	HA02320	signle terminal wiring	800mm UL1015 18AWG	
72	MG00429	screw-RS-T	M3*19	
73	ND00280	EV foam	5t*75*50 type black	
74	NA00192	bag	0.05t*1200*800mm	
75	NI02374	fixed board	70*135*10 432C	
76	NF01105	instructions	ELVIS ALTO_V1.4	
77	NH00149	paper	889*640mm	
78	NF00061	assurance card	ALTO	
79	NE13923	label	ELVIS 15MA_V1.0	
80	NH00012	bond paper	0.04*1M	
81	NI00014	membrane	0.035*1M	
82	NE11750	label	ALTO PC	
83	NH00334	cone paper	0.040*1m	
84	NB02212	barrier	ELVIS	
85	NB02213	barrier	ELVIS	
86	NB02214	barrier	ELVIS	

No.	Part No.	Description	Specification	Remark
87	NB02215	barrier	ELVIS	
88	NB03412	cushion	ELVIS 15M down_V1.0	
89	NB03413	cushion	ELVIS 15M up_V1.0	
90	HK05004	PC board	P-ELVIS-NEW XOVER (ELVIS 15)	
91	HB01386	PCB	PS 2-XOVER(1*2)_VER041203	
92	CN00056	crossover inductance	1.55mH(1.0mm ϕ 1.50~1.60Mh)	L1
93	CN00049	crossover inductance	0.35mH(0.8mm ϕ 0.34-0.36mH)	L2
94	CF00091	metal-film capacitor MEF	6.8uF/250V 5%	C1
95	CF00090	metal-film capacitor MEF	3.3uF/250V 5%	C2
96	HA02087	jumper	23mm	C4
97	HA02249	wire	ϕ 0.6_Sn-plated	
98	RA00993	chassis bracket 20W	3.3 Ω SQY type	R1
99	RA00827	chassis bracket 20W	1.5 Ω SQZ	R2
100	RA00988	cement resistor 20W	10 Ω SQY type	R3
101	RA00839	chassis bracket 20W	39 Ω SQZ	R4
102	HH00036	lamp	SK3/CWT 12.8V 2.1A	DS1,DS2
103	HA01919	jumper	5mm	PTC1
104	HA02249	wire	ϕ 0.6_Sn-plated	
105	RG00012	over current protector	0.5A 60V MF-R050	PTC2
106	HC00324	connect terminal	6.5m/m (PC250)	
107	NI02590	cable tie	YJ-203V0 UL94V-0	
108	AC00179	tin without lead-RS	M705E Sn 3Ag-0.5Cu	
109	HK00659	faceplate	ELVIS 15A_ALTO_230V	
110	MA04350	panel	ELVIS 10A/12A/15A ALTO 220-240V	
111	MA04351	panel	ELVIS 10A;12A;15A	
112	MA04352	panel	ELVIS 10A;12A;15A 1.5t*300*205*42.5_V1.3	
113	MJ00088	single light board	1.5*2135*1220 30.67kg	
114	ME00107	screw pillar	M4*15.5*0.7PH	
115	AE00060	paint	4534	
116	AE00055	solvent	solvent	
117	MI01805	fixed bracket	ELVIS 10A;12A;15A	
118	MI01806	fixed bracket	ELVIS 10A;12A;15A 1.5t*200*92*36.5_V1.1	
119	MJ00088	single light board	1.5*2135*1220 30.67kg	
120	HC00423	FUSE holder	4A (EMI-power filter)	
121	HD00019	glass tube fuse	4A 250V ϕ 5.2*20mm CSA/S/UL/VDE	
122	HI00022	power switch-RS	4p black frame red key	
123	TD00272	transformer	PT-ELVIS 15A_230V	
124	NI00441	rubber coil	ϕ 20* ϕ 90*2tB	
125	MH00774	iron piece	ϕ 8* ϕ 80*1.2_V1.2	
126	MJ00059	single light board	1.2*2135*1220 24.54kg	
127	MG00469	screw	M6*75*1.0PH	
128	ME00014	color nut	6*1.0	
129	MF00130	MIC jack	ϕ 6.3* ϕ 19*1t_v1.0	

No.	Part No.	Description	Specification	Remark
130	MF00051	washer-RS-ACT	φ6.3*φ19*1t_V1.0	
131	MJ00058	single light board	1*2135*1220 20.45kg	
132	MF00040	washer	φ6*φ10*1.5t	
133	MF00038	washer	φ4*φ7*1t	
134	ME00016	color nut	4m/m	
135	ME00015	color nut	3m/m	
136	MF00048	washer	φ4*φ8*0.5t	
137	MF00037	washer	φ3.2*φ5.5*1t	
138	MG00042	screw	M3*10	
139	MG00061	screw-RS	M3*10	
140	MG00044	screw	M4*10	
141	ME00052	nut	φ7	
142	MF00060	washer	φ7*φ12*0.5t	
143	NI00218	cable tie	ALT-102SB	
144	ND00056	EV foam	16*10*5	
145	NI00840	knob	P-15-23	
146	NI02086	knob	P-15-23	
147	NE01789	label	PFM 15SA LEM_V1.0	
148	NI00042	adhesive label	0.075*1M	
149	NI00020	membrane	0.07*1M	
150	HA02549	wire	8P-8P 180mm UL1015 18AWG	
151	HA02996	wire	5P-5P 250mm UL1185/1007 26/22AWG	
152	HA03818	wire	520mm UL1015 18AWG red/black	
153	HA01167	single terminal wiring CF:W133	100 black	
154	HA01325	wire	140 green/yellow	
155	HK01618	PC board	P-ELVIS-PRE-350W	
156	RA00099	fixed resistor 1/2W	10Ω M type	R13
157	RA00929	metal-oxide-film resistor 1W	68Ω P type	R43,R61
158	CA00003	ceramic capacitor	10PF NPO	C14,C32, C41,C42
159	CA00009	ceramic capacitor	22PF/50V NPO	C5,C11,C15,C16, C17,C25,C26,C30
160	CH00017	laminated capacitor	0.1uF/50V Y5V PH5	C18,C20,C21,C22, C33,C34, C39,C43,C44,C49, C52,C54,C55
161	CF00039	metal-film capacitor MEF	0.22uF/250V	C27,C47
162	CF00015	metal-film capacitor MSC	0.01uF/63V 5% CASE01	C7,C9
163	CF00030	metal-film capacitor MSC	0.1uF/63V 5% CASE01	C35
164	CF00038	metal-film capacitor MSC	0.22uF/63V 5% CASE02	C1
165	CF00044	metal-film capacitor MSC	0.68uF/63V 5% CASE06	C12,C13,C19,C31
166	CB00009	electrolytic capacitor	1uF/50V φ4*7mm	C4
167	CB00025	electrolytic capacitor	10uF/50V φ6*7mm	C3,C6,C10,C28, C36,C40,C45,C46

No.	Part No.	Description	Specification	Remark
168	CB00177	electrolytic capacitor	22uF/50V ϕ 5*11mm	C37,C53
169	CB00089	electrolytic capacitor	4700uF/50V ϕ 25*30mm	C29,C51
170	CB00094	electrolytic capacitor	4700uF/80V ϕ 35*40mm	C24,C50
171	SA00051	L.E.D	ϕ 3 orange,green BOG303b	DL1
172	SA00194	L.E.D	ϕ 3	D1
173	SB00071	transistor	BC550C 236(TO92)(PHI)	Q3
174	SB00072	transistor	BC559C,126	Q1,Q2,Q4,Q5,Q6
175	SD00002	integrated circuit	TL072CN	U2,U3,U4,U5
176	SD00001	integrated circuit	TL074CN(S&T)	U1
177	SD00079	integrated circuit	L7915CV(TO-220)(ST)	U6
178	SD00077	integrated circuit-RS	L7815CV(TO-220)(ST)(MOROCCO)	U7
179	SB00014	Photodiode	VTL5C4	D3
180	RC00089	potentiometer	C10K Ω RV16A-20-15K-C14-3F1	VR1
181	RC00076	potentiometer	B10K Ω RV16A-20-15K-B14-3C1	VR2,VR3,VR4
182	RC00088	potentiometer	B5K Ω RV16A-20-15K-B53-3F1	VR5
183	HC00111	balance MIC jack	99M-108SP1	J3
184	HC00112	balance MIC jack	99M-107SP-1-2 90° PUSH	J2
185	HD00019	glass tube fuse	4A 250V ϕ 5.2*20mm CSA/S/UL/VDE	F3,F4
186	HD00024	glass tube fuse	8A 250V ϕ 5.2*20mm CSA/UL	F1,F2
187	HC00079	connector(male)	5P 2.5mm 180°	J5
188	HC00537	connector(male)	8P 3.96mm 180°	J4
189	HC00324	connect terminal	6.5m/m (PC250)	S2,S5,S6,S7
190	HI00131	slide switch	2p handle 3P SS004-P012BFJ-PA8	
191	HC00381	FUSE holder	JEF-501I	
192	SA00011	bridge rectifier	25A/200V	D2
193	SA00007	bridge rectifier	8A KBU-806 comb type	D4
194	MI00267	heat-sink	3*30*15*36	
195	MG00110	color screw	M4*20	
196	MF00018	washer	ϕ 4* ϕ 10*1t_V1.0	
197	MF00105	washer	ϕ 4* ϕ 10*1t_V1.0	
198	MJ00058	single light board	1*2135*1220 20.45kg	
199	MF00038	washer	ϕ 4* ϕ 7*1t	
200	CC00009	mylar capacitor	0.0033uF/100V 10%	C2,C8
201	MG00163	screw	M3*8	
202	ME00015	color nut	3m/m	
203	MF00037	washer	ϕ 3.2* ϕ 5.5*1t	
204	NI01813	coil	GH-1-UL	
205	HC00339	connect terminal	6.5m/m (PCF250)	S3,S4
206	CF00036	metal-film capacitor MSC	0.15uF/63V	C23
207	HK04787	PC board	P-ELVIS-PRE-AI	
208	HB00995	PCB	ELVIS-PRE_VER050726	
209	RA00959	fixed resistor 1/8W	330 Ω	R2,R4,R12,R23, R24,R14,R55,R57

No.	Part No.	Description	Specification	Remark
210	RA00962	fixed resistor 1/8W	1.0KΩ	R6,R31,R10
211	RA00963	fixed resistor 1/8W	1.2KΩ	R29,R30
212	RA01337	fixed resistor 1/8W	2.2KΩ	R25
213	RA01011	fixed resistor 1/8W	2.7KΩ	R18,R20
214	RA00965	fixed resistor 1/8W	4.7KΩ	R26,R35,R37, R38,R46,R58
215	RA00967	fixed resistor 1/8W	10KΩ	R3,R5,R8,R19,R34, R39,R41,R42,R47, R48,R49,R53,R54, R59,R60,R36
216	RA00968	fixed resistor 1/8W	12KΩ	R16
217	RA00969	fixed resistor 1/8W	15KΩ	R11,R27,R28,R32, R33,R40,R45
218	RA01324	fixed resistor 1/8W	22KΩ	R1,R44,R52,R56
219	RA01356	fixed resistor 1/8W	330KΩ	R51
220	SA00256	zener diode	1W 15V IN4744	Z1,Z2,Z3,Z4,Z5, Z6,Z7,Z8
221	RA01335	fixed resistor 1/8W	3.3KΩ	R21,R22
222	RA00966	fixed resistor 1/8W	5.6KΩ	R15,R17
223	RA00970	fixed resistor 1/8W	33KΩ	R50
224	SA00093	rectifier diode	1N4148 0.5A	D7
225	SA00094	rectifier diode	1N4002/100V	D5,D6
226	RA01413	fixed resistor 1/4W	2.7KΩ	R7,R9
227	AC00179	tin without lead-RS	M705E Sn 3Ag-0.5Cu	
228	HC00424	balance MIC jack	NCJ6FI-H NEUTRIK	J1
229	HK01615	PC board	P-ELVIS-AMP-350W	
230	RA00090	chassis bracket 5W	0.2Ω SQPM	R33,R34
231	RA00047	metal-oxide-film resistor 2W	8.2KΩ P type	R1,R2
232	RA00031	metal-oxide-film resistor 2W	10Ω P type	R28
233	RC00164	resistor	500Ω φ8 RB	VR1
234	RH00007	thermistor	330Ω (PTH9L04BD222TS2F330)	R62
235	CA00008	ceramic capacitor	22PF NPO	C23
236	CA00012	ceramic capacitor	33PF NPO	C24
237	CA00023	ceramic capacitor	100PF SL	C22,C25
238	CA00028	ceramic capacitor	220PF Y5E	C21,C26
239	CA00033	ceramic capacitor	470PF Y5E	C3,C4
240	CA00052	ceramic capacitor	0.1uF SL	C19,C29
241	CF00002	metal-film capacitor MSC	0.001uF/100V 5% CASE01	C30
242	CF00008	metal-film capacitor MSC	0.0047uF/100V 5% CASE01	C9,C10,C28
243	CF00032	metal-film capacitor MSC	0.1uF/100V 5% CASE01	C12,C18
244	CF00009	metal-film capacitor MPF	0.0047uF/400V 10%	C5,C7
245	CF00031	metal-film capacitor	0.1uF/100V	C6,C8,C14
246	CB00009	electrolytic capacitor	1uF/50V φ4*7mm	C13
247	CB00025	electrolytic capacitor	10uF/50V φ6*7mm	C20,C27,C31
248	CB00043	electrolytic capacitor	47uF/100V φ10*12mm	C16,C17

No.	Part No.	Description	Specification	Remark
249	CB00056	electrolytic capacitor	220uF/25V ϕ 8*11mm	C1,C2,C11
250	CB00072	electrolytic capacitor	1000uF/25V ϕ 10*20mm	C15
251	SB00071	transistor	BC550C 236(TO92)(PHI)	Q8,Q9,Q12
252	SB00072	transistor	BC559C,126	Q6,Q10,Q11,Q14
253	SB00073	transistor	2N5550/2N5551	Q18
254	SB00074	transistor	2N5401	Q17
255	SB00060	transistor	MJE340 (ST)	Q3,Q16,Q20
256	SB00061	transistor	MJE350 (ST)	Q2,Q19,Q22
257	SB00040	transistor	MJE15030	Q4,Q21
258	SB00041	transistor	MJE15031	Q1,Q23
259	SB00086	transistor	MJE802P	Q24
260	SB00057	transistor	TIP35C	Q7
261	SB00058	transistor	TIP36C	Q5
262	SB00023	power transistor	2SA1943-O	Q13
263	SB00021	power transistor	2SC5200	Q15
264	SD00002	integrated circuit	TL072CN	U1
265	HC00537	connector(male)	8P 3.96mm 180°	J1
266	HC00079	connector(male)	5P 2.5mm 180°	J2
267	HC00324	connect terminal	6.5m/m (PC250)	S1,S2
268	HI00211	raley	8P 24VDC/16A 881H-1CC-C	
269	NI00863	plastic washer	TO220B	
270	MG00161	screw	M3*6	
271	MG00027	screw	M3*12	
272	MF00136	washer	ϕ 3* ϕ 5.5*0.7t_V1.0	
273	MF00034	washer	ϕ 3* ϕ 5.5*0.7t_V1.0	
274	MJ00060	single light board	0.7*2135*1220 14.31kg	
275	MF00037	washer	ϕ 3.2* ϕ 5.5*1t	
276	MG00252	copper pole	M3*6.2*0.5PHsingle,length12	
277	NC00005	mica	SB-9500DSP 18*13*0.1t_V1.0	
278	NC00004	mica	SA-8121ART 22*28*0.1square(big)_V1.1	
279	MI02650	heat-sink	8.0t*200*40*100 ELVIS_V1.0	
280	MI01804	heat-sink	8.0t*200*40*100 ELVIS	
281	MI03109	heat-sink	8.0t*100*40*1M/+5(1M/4.72kg)_V1.0	
282	HK04788	PC board	P-ELVIS-AMP-AI	
283	HB00996	PCB	ELVIS-AMP_VER041216	
284	RA01403	fixed resistor 1/8W	47 Ω	R10,R14
285	RA01336	fixed resistor 1/8W	68 Ω	R37,R40
286	RA01360	fixed resistor 1/8W	150 Ω	R21
287	RA00959	fixed resistor 1/8W	330 Ω	R26
288	RA01384	fixed resistor 1/8W	390 Ω	R3,R5
289	RA00960	fixed resistor 1/8W	470 Ω	R39,R42,R55
290	RA00961	fixed resistor 1/8W	560 Ω	R57
291	RA01385	fixed resistor 1/8W	820 Ω	R38,R41

No.	Part No.	Description	Specification	Remark
292	RA00962	fixed resistor 1/8W	1.0KΩ	R4,R18,R58,R60, R61,R65
293	RA01342	fixed resistor 1/8W	1.5KΩ	R63
294	RA01337	fixed resistor 1/8W	2.2KΩ	R8,R16
295	RA01011	fixed resistor 1/8W	2.7KΩ	R64
296	RA00965	fixed resistor 1/8W	4.7KΩ	R29,R46,R50
297	RA01370	fixed resistor 1/8W	8.2KΩ	R11,R12,R13,R17
298	RA00967	fixed resistor 1/8W	10KΩ	R20,R23,R25,R27, R30,R31,R47,R48
299	RA00968	fixed resistor 1/8W	12KΩ	R6,R7,R43,R45, R51,R53
300	RA00970	fixed resistor 1/8W	33KΩ	R19
301	RA00971	fixed resistor 1/8W	47KΩ	R9,R15,R22,R32, R59
302	RA01354	fixed resistor 1/8W	68KΩ	R44,R52
303	RA00973	fixed resistor 1/8W	100KΩ	R49
304	RA00974	fixed resistor 1/8W	150KΩ	R24
305	RA01325	fixed resistor 1/8W	4.7Ω	R54,R56
306	RA01258	fixed resistor 1/4W	10Ω	R35,R36
307	SA00093	rectifier diode	1N4148 0.5A	D16,D17,D18,D19
308	SA00094	rectifier diode	1N4002/100V	D1,D2,D3,D4,D5,D6,D7, D10,D11,D14,D15D20, D21,D22,D23
309	SA00102	zener diode	1W 7.5V 1N4737	Z1,Z2
310	AC00179	tin without lead-RS	M705E Sn 3Ag-0.5Cu	
311	SA00134	diode	6A/200V/35ns FE6D	D12,D13
312	SA00097	rectifier diode	6A2 6A	D8,D9
313	NI01627	fixed bracket	CM-19S	
314	MG00327	screw	M3*10*0.5PH	
315	NB03697	box	ELVIS15MA ALTO_V1.4	
316	NE04372	label	red	
317	NI02598	membrane	125mm	
318	NH00252	paper	130mm	
319	HA00861	power cord Europe 3P	LT-312+LT-501	
320	NI02250	MIC jack	φ17*φ23.5*9	
321	NI02251	MIC jack	φ19.5*φ23.5*7	
322	NA00279	clip-chain bag	0.04t*100*150mm_V1.0	
323	AD00012	twin adhesive	90*120mm_V1.0	
324	NE04317	label	ELVIS 15MA ALTO_V1.1	
325	NE11168	label	HK 15 ALTO	
326	NH00012	bond paper	0.04*1M	
327	NI00014	membrane	0.035*1M	
328	NA00122	PE bag	0.04t*350*230mm	