

Service Manual

Model: **OEX-400**



www.altoproaudio.com

Version: 1.2

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1. Introduction

- Trolley appearance
- 2 (two-SPEAKER) + 1 (7-channel mixer super combination)
- One-way full-range speaker system
- 4 XLR MIC input with ultra low noise microphone pre-amplifiers and +48V PHANTOM power
- 1 stereo LINE input
- Warm, natural 2-band EQ for each channel
- Precision level control
- 24-bit DSP effects with powerful algorithms (16 presets)
- Extremely high headroom offering excellent dynamic range
- Plastic reinforced cabinet (polypropilene)
- 350W (EIAJ) of Power
- Two 10m speaker cables
- Two folding speaker
- Compartment for store following accessories:

Accessory List:

Folding speaker	2 × 10"
Power cord	1 × IEC power cord
Customized Speaker Cable	2 × 10m
MIC	2 × 5m

2. Technical Specification

- **Mixer Section**

Mono input channels (CH1~3)	Microphone input	Electronically balanced, discrete input configuration
	Frequency response	10Hz to 50KHZ, +/- 3dB
	Distortion (THD&N)	0.04% at 0dBu, 1KHz
	Input level	-15dBu
	SNR(Signal to Noise Ratio)	> 94dB
	Line input	Electronically balanced/unbalanced
	Frequency response	10Hz to 50KHZ, +/- 3dB
	Distortion (THD&N)	0.015% at 0dBu, 1KHz(DSP EFFECT OFF, TAPE OUT)
	Input level	0dBu
Stereo input channels (CH4~7)	Line input	Balanced/Unbalanced
	TAPE input	Unbalanced, RCA phone
	Input level	0dBu
	Frequency response	10Hz to 50KHZ, +/- 3dB
	Distortion (THD&N)	0.015% at 0dBu, 1KHz(DSP EFFECT OFF, TAPE OUT)
Impedances	Microphone input	3.9K Ω
	All other inputs	10K Ω or greater
	Tape out	2.2K Ω
	All other outputs	120 Ω
Equalization	Hi shelving	+/- 15dB@12KHz
	Low shelving	+/- 15dB@80KHz
	7-band graphic (Main Mix)	+/- 15dB@63Hz, 160Hz, 400Hz, 1KHz, 2.5KHz, 6.3KHz, 16KHz
DSP Section	A/D and D/A converters	24bit
	DSP resolution	24bit
	Type of effects	HALL, ROOM, VOCAL, PLATE, STEREO DELAY REV+DELAY, and REV+CHORUS combinations
	Presets	16
	Controls	16-position PRESET selector
		CLIP LED MUTE SWITCH with LED indicator
Main Mix Section	Noise (Bus noise)	Fader 0 dB, channels muted: -85dBr (ref.: +4dBu)
		Fader 0 dB, all input channels assigned and set to UNITY gain: -81dBr(ref.: +4dBu)
	MONITOR out	Output level:0dB
		Max out +22dBu unbalanced, 1/4" stereo jacks
		4 element LED display:-30/-10/0/+10dB
	MASTER	Output level:0dB (AMP INPUT LEVEL)
		4 element LED display:-30/-10/0/+10dB
	FX Sends output	Output level:0dB
		Max out +22dBu unbalanced, 1/4" jacks
	Aux return	Input level:0dBu, 1/4" stereo jacks
	Tape out	Output level:0dBu
	Headphones output	Min impedance:32 Ω
		Output level:2 \times 150mW

- **Speaker Section**

Passive System Type	2-way Coax vented box
Continuous Power	150Watt AES Standard
Peak Power	300Watt Peak
Max SPL at 1M	117.5dB SPL calculated
Frequency Response	65Hz / 20kHz at -10dB
Impedance	8Ω nominal
Crossover Frequency	2.3kHz / 12dB/Oct
Protection	Electronic on the Driver
Coaxial Type Low Frequency Device	10" Woofer / 2" Voice Coil
High Frequency Device	1" Neodymium Driver / 1" Voice Coil
Coverage H×V	70° H×70° V Spherical horn
Connectors	Power Input with mono Jack

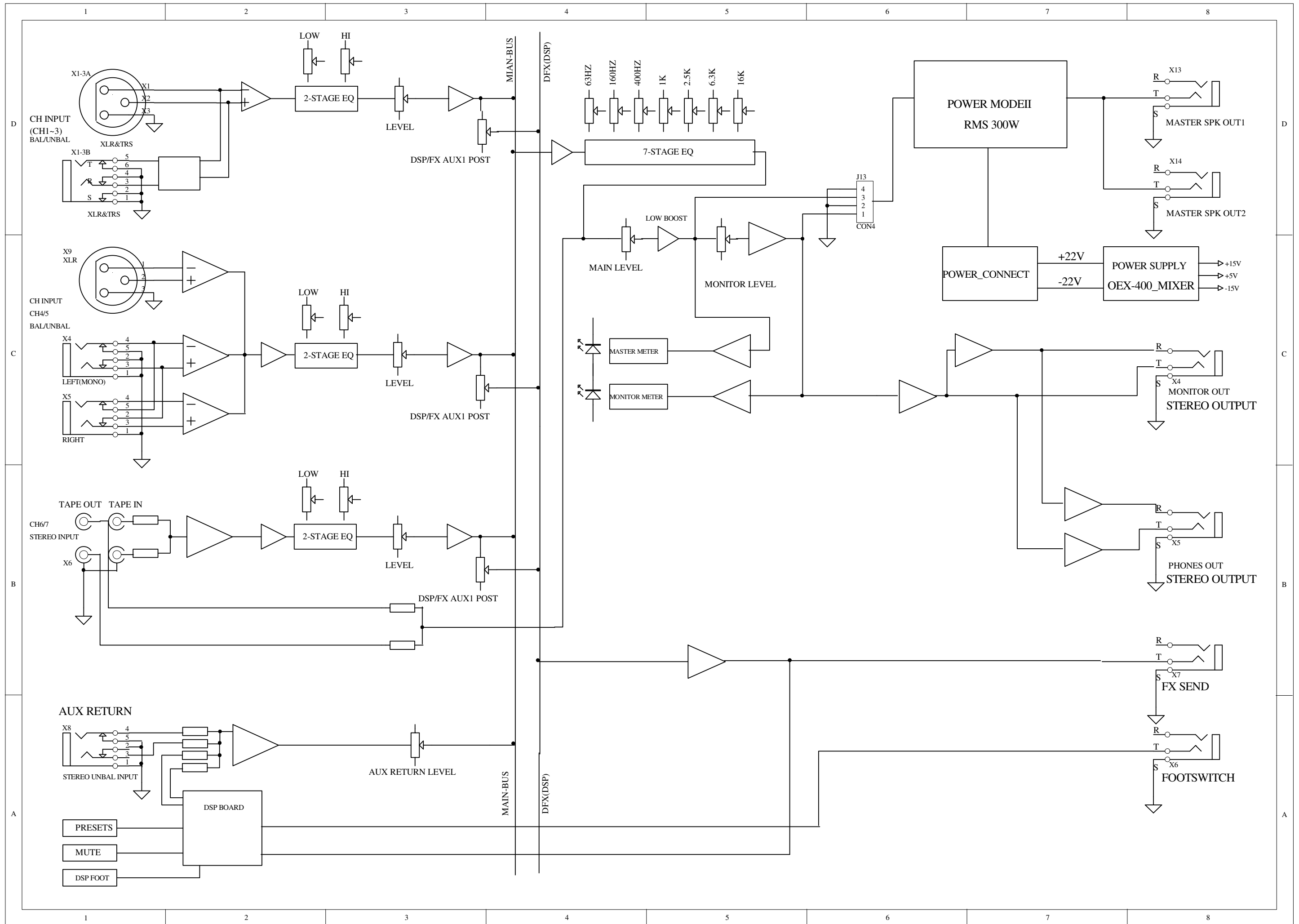
- **Power Section**

Cabinet	Plastic Reinforced Polypropylene /Metal Grille/Integrated Handle
Output Power	350WATT EIAJ (300WATT RMS)
Impedance	4Ω Load
S/N ratio	>110 dB/A
Distortion	<0.05%(THD, DIM, SMPTE)
Gain	32dB
Bandwidth	10Hz to 50kHz
Protections	Overload / Short Circuit / Soft Clip Limiter / Thermal Protection Fan Cooling

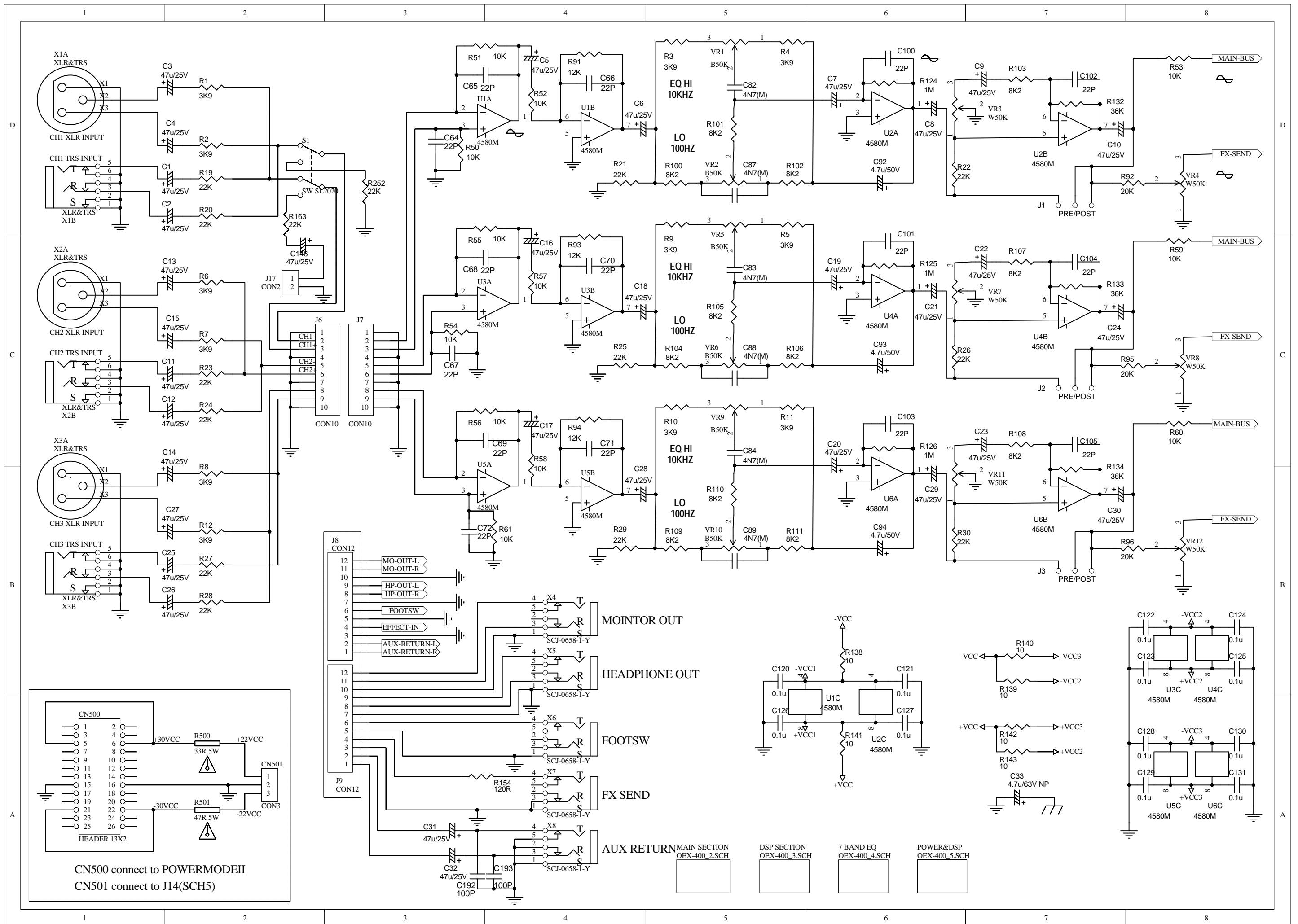
- **Physical**

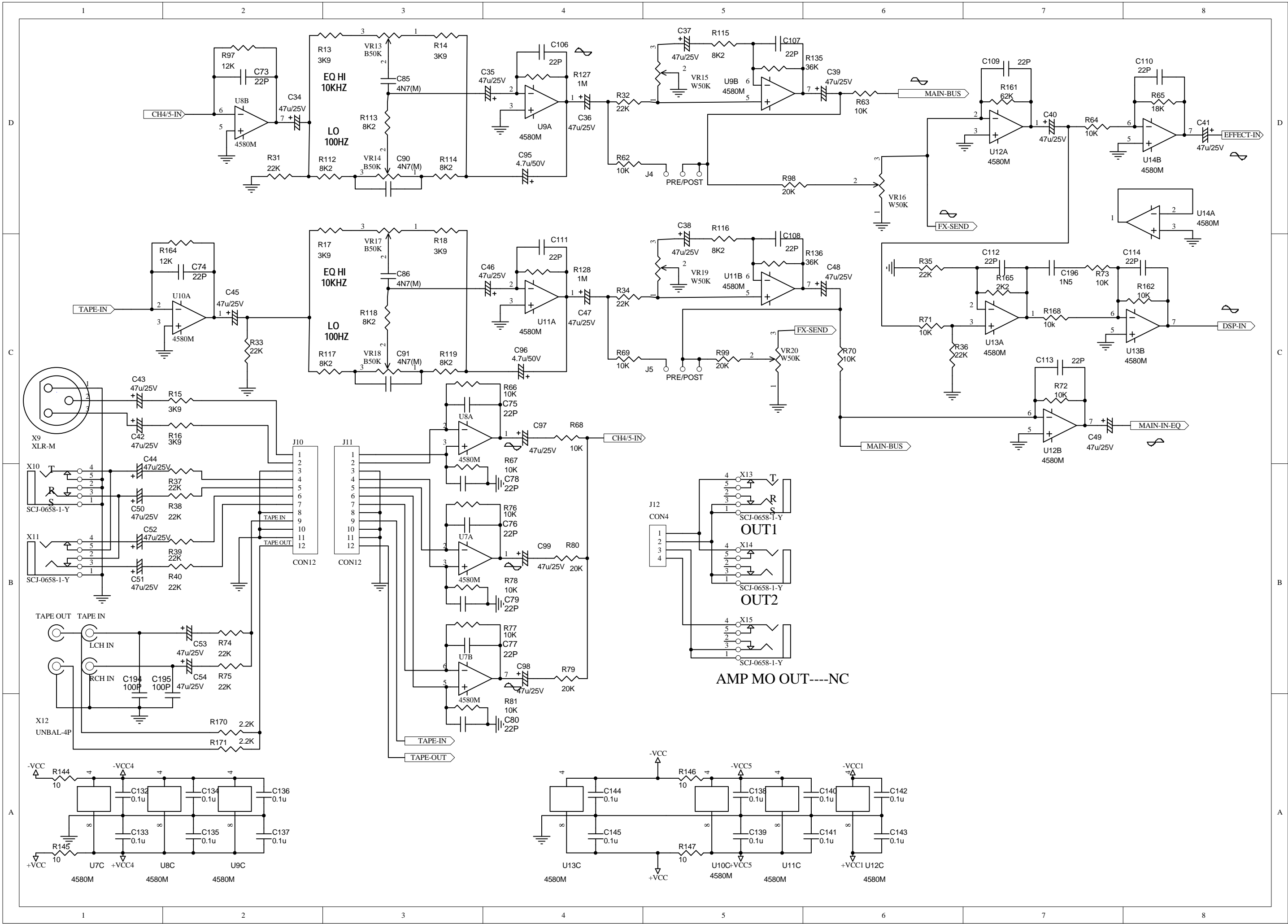
Dimensions H×W×D	984*440*460mm(38.7"×17.3"×18.1")
Net Weight (lbs/kg)	17.0kg
Cross Weight	27.0Kg

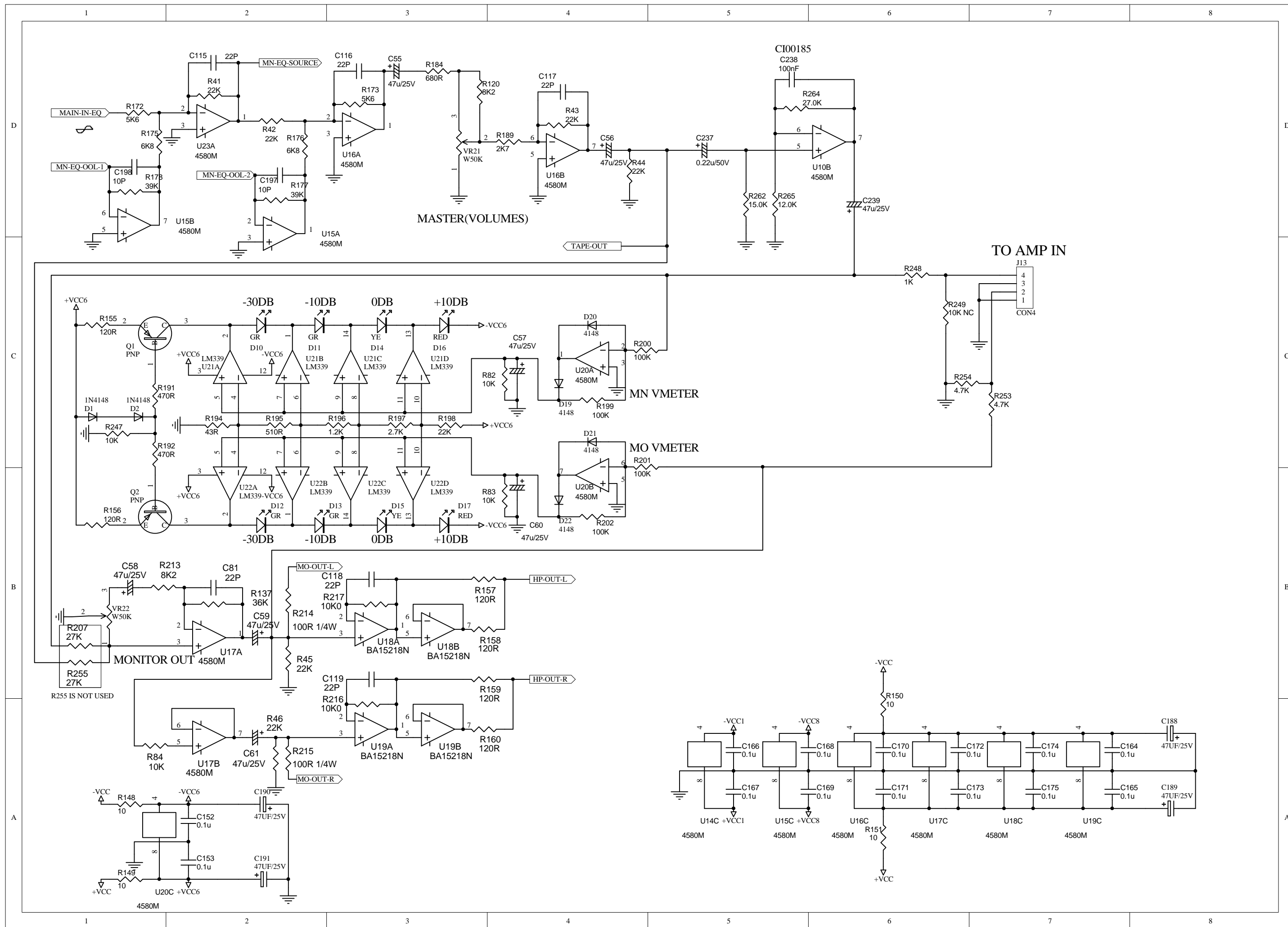
3. Block Diagram

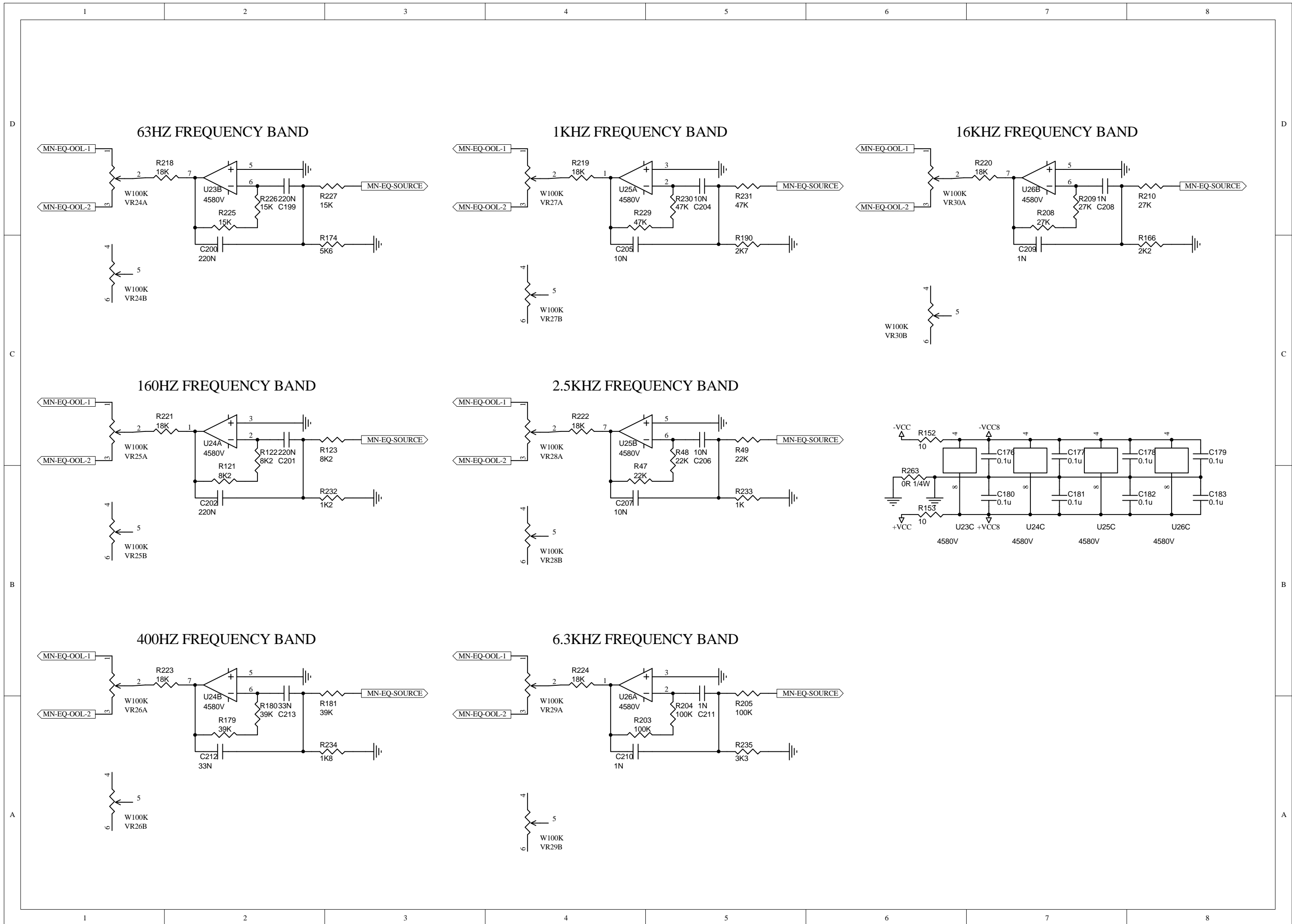


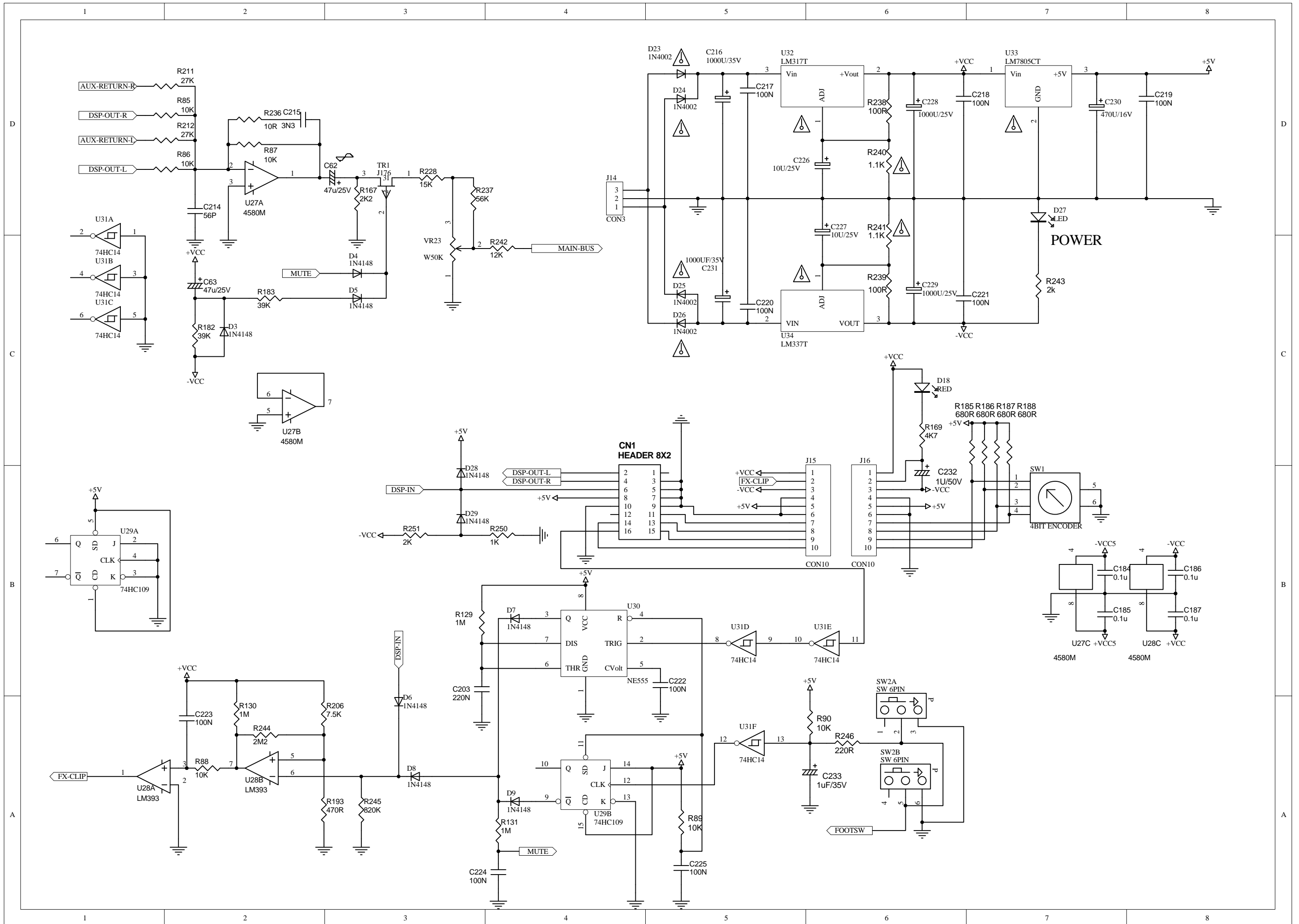
4. Schematic Diagram



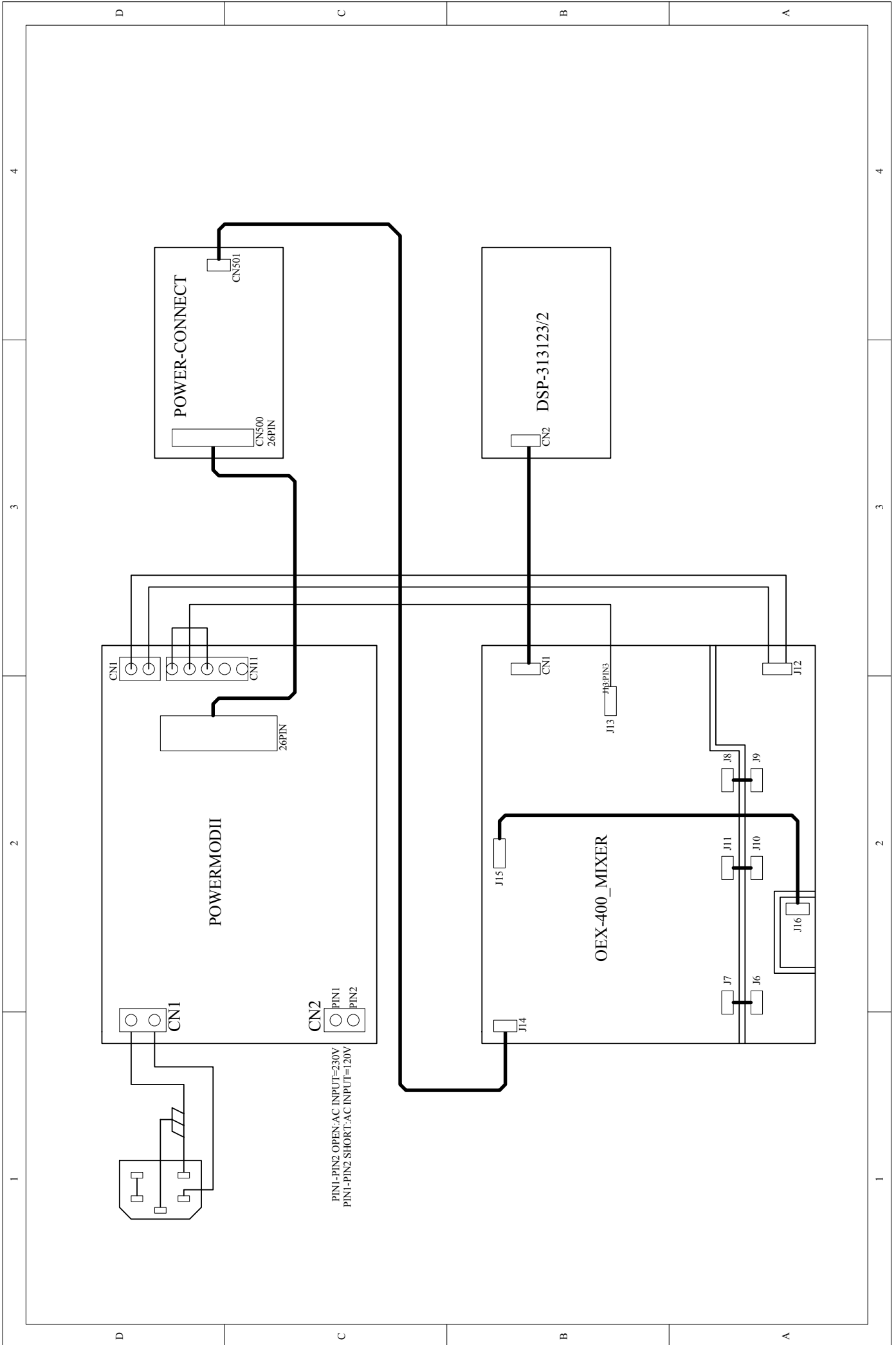




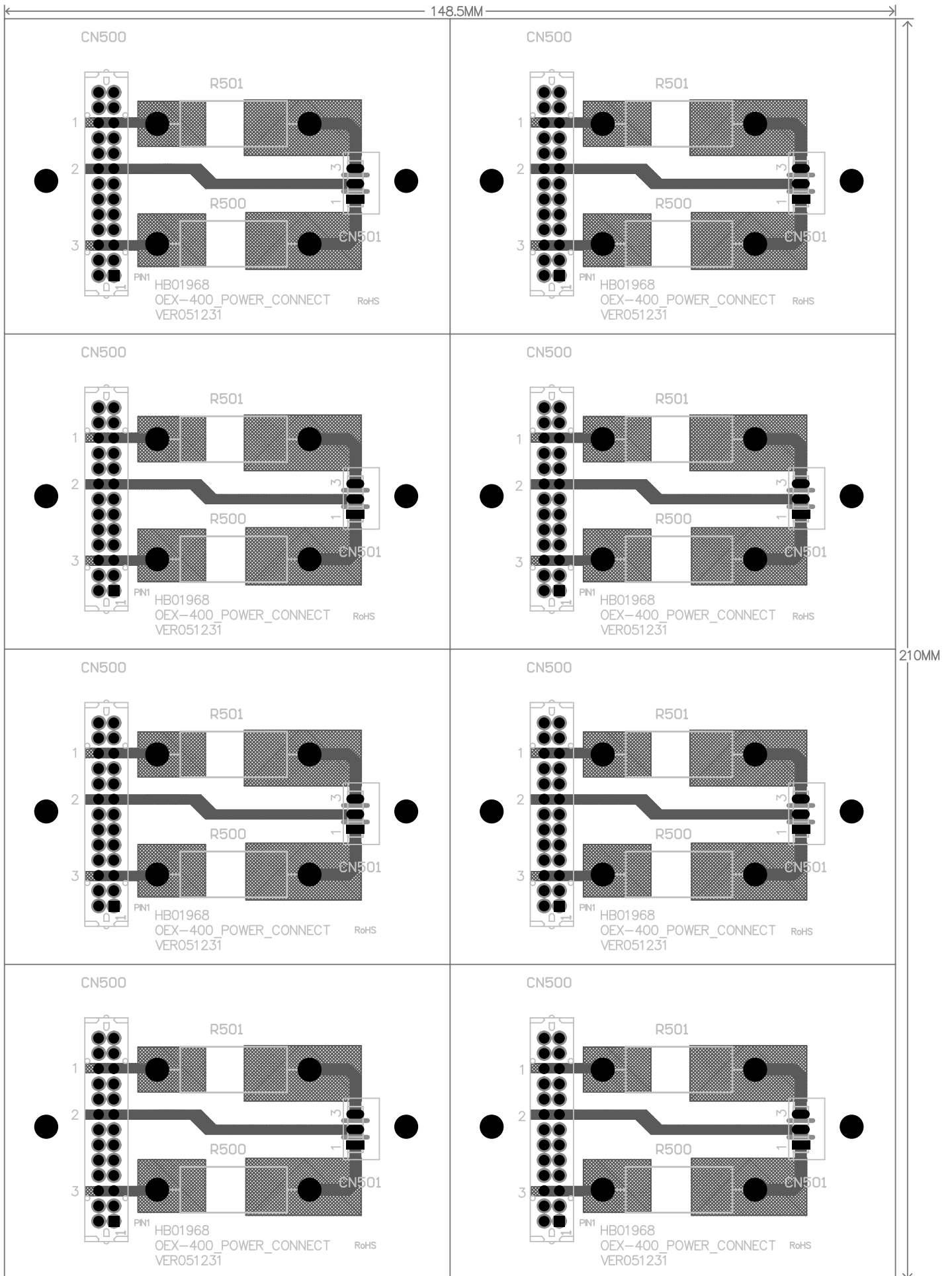


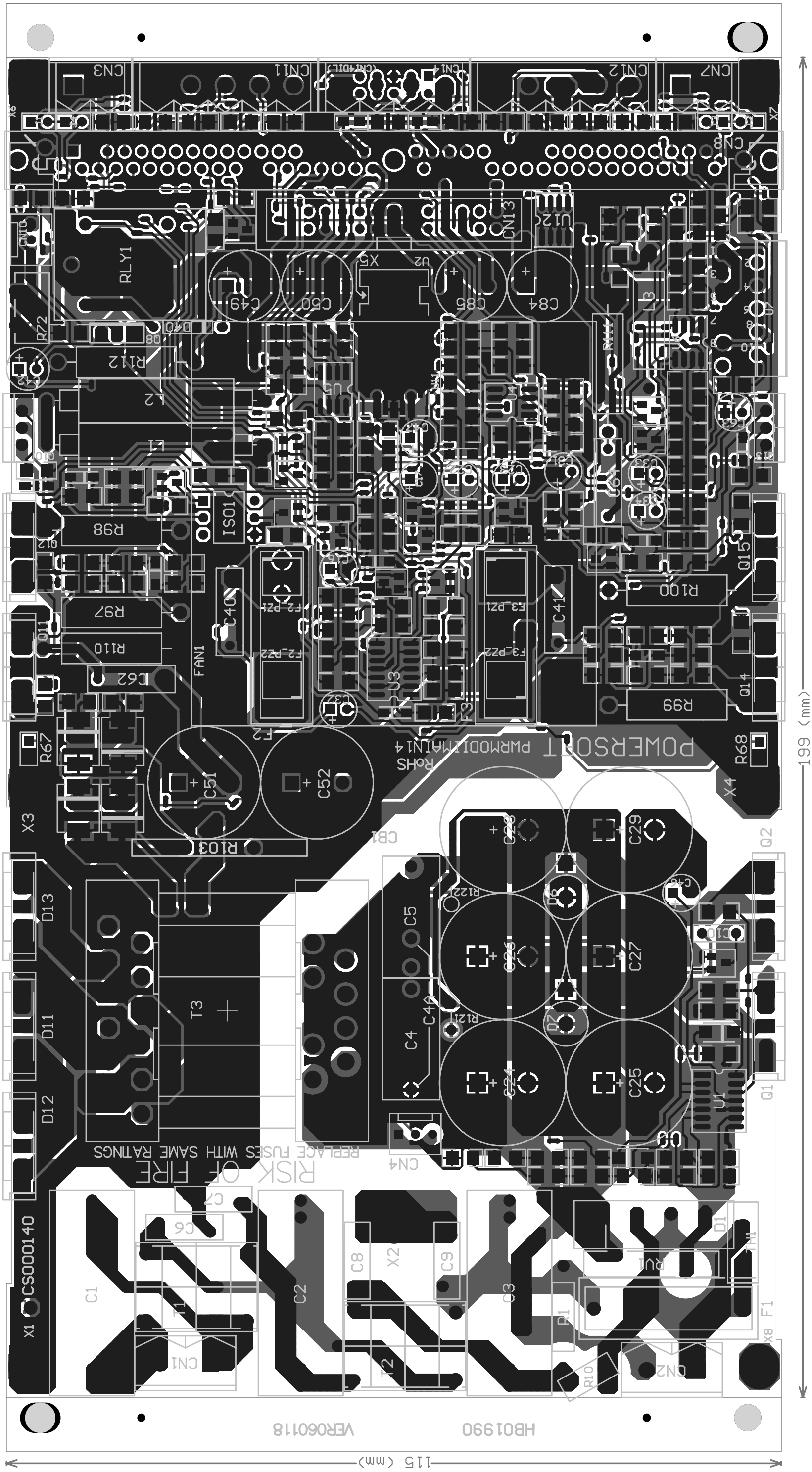


5. Wiring Diagram

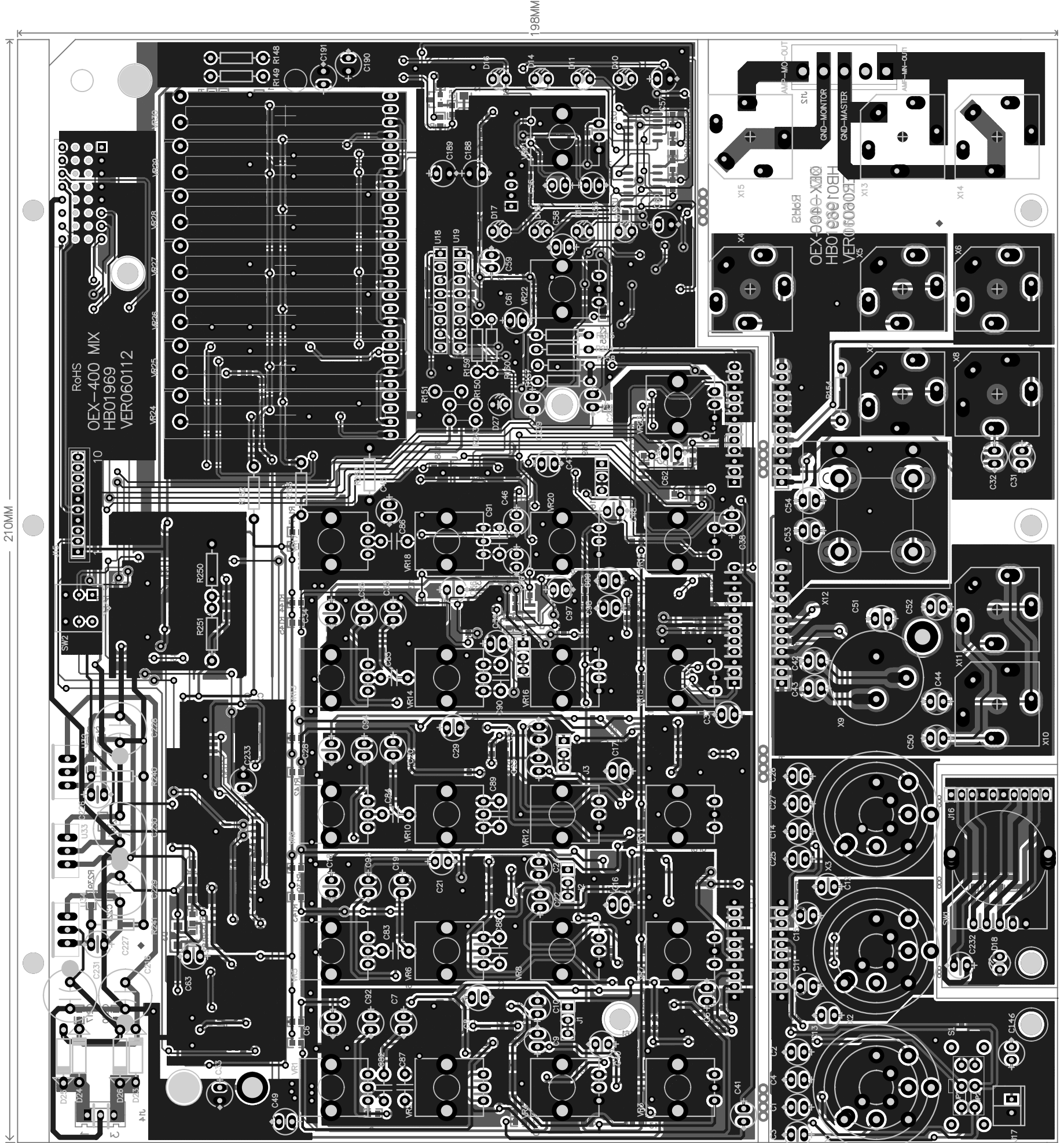


6. Printed Circuit Board



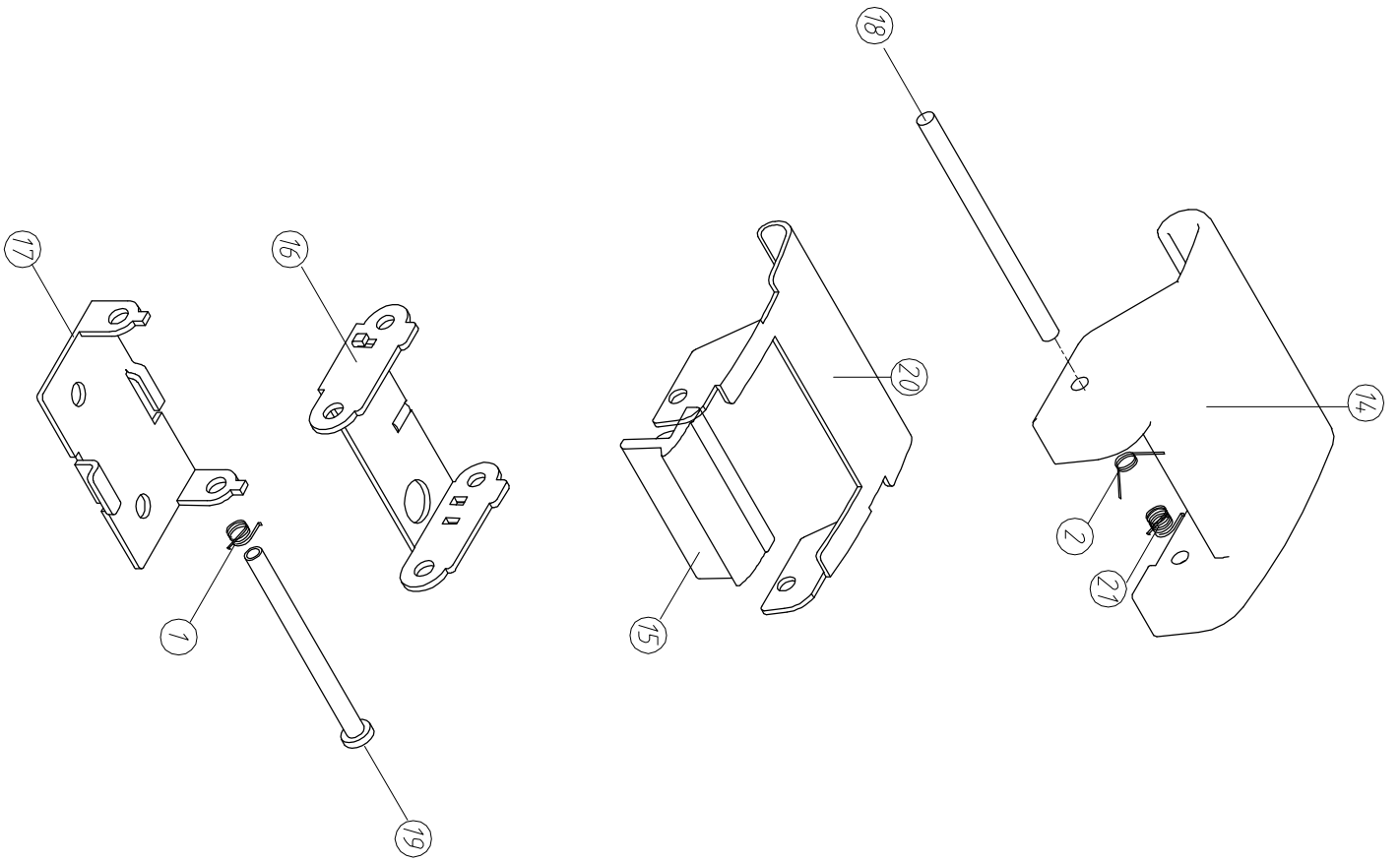


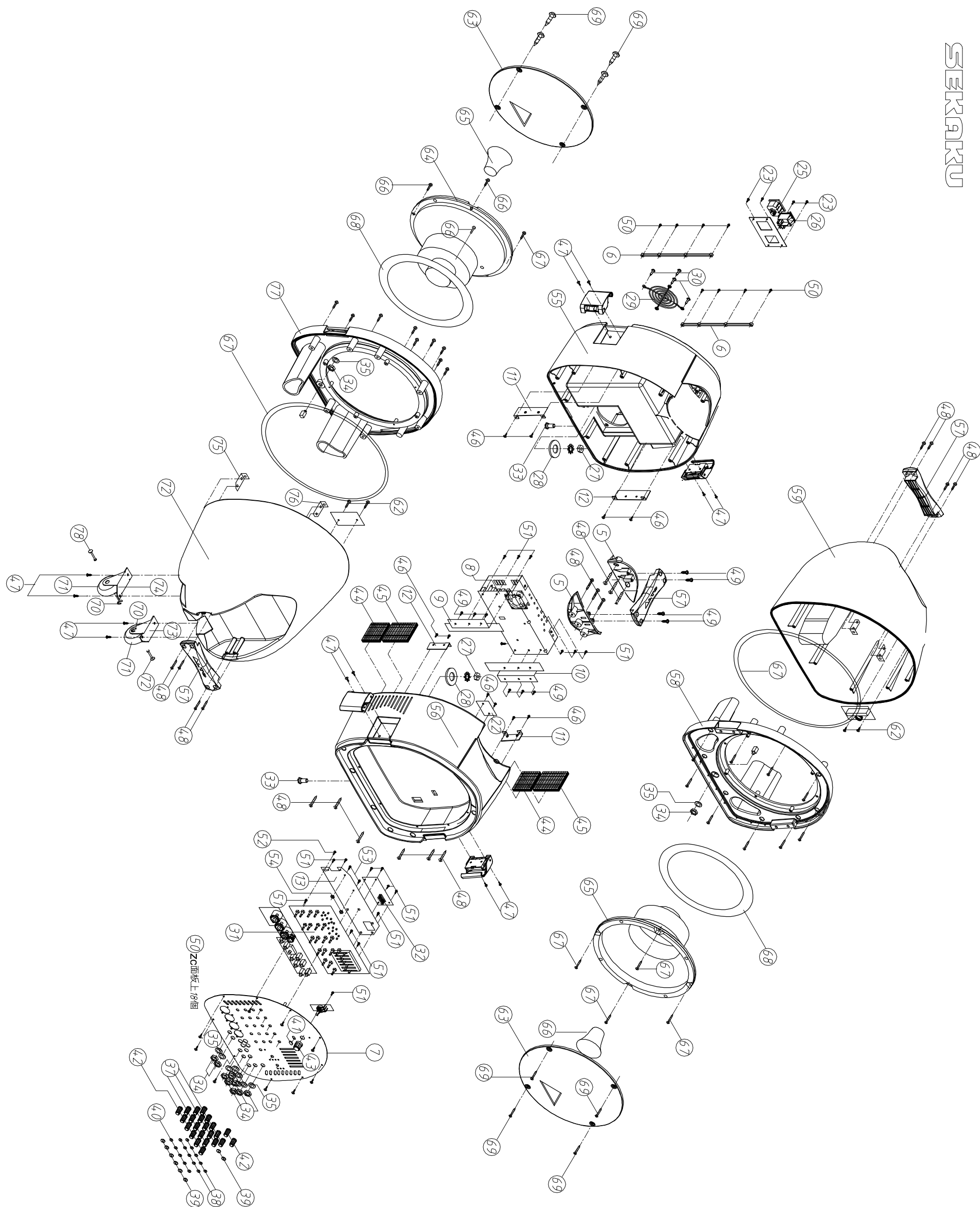
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7. Exploded Views & Mechanical Parts List

SEERGRU





Part List

Mechanical Parts List				
No.	Item NO.	Item Description	Specification	pcs
1	MK00109	spring	FAS10-09	4
2	MK00108	spring	FAS10-10	4
3	MF00021	washer	8*φ23*2t	2
4	MG00079	screw	M4*16*0.7PH	2
5	NI04007	fixed board	OEX-400-12	2
6	NI04012	fixed board	OEX-400-13	2
7	MA05828	ZC-panel-SR#2000 5204 silver gray	OEX-400 ALTO_V1.0	1
8	MI03373	ZC-fixed board	OEX400 230V~50Hz_V1.0	1
9	MI03193	fixed bracket-left	OEX-400-14	1
10	MI03192	fixed bracket-right	OEX-400-18	1
11	MI03198	fixed bracket	OEX-400-19	2
12	MI03197	fixed bracket	OEX-400-20	2
13	MI03196	fixed bracket	OEX-400-21	1
14	NI04013	top cover	FAS10-01	4
15	NI04014	button	FAS10-02	4
16	MI03201	fixed bracket	FAS10-03	4
17	MI03202	fixed bracket	FAS10-04	4
18	MK00107	fixed bolt	FAS10-05	4
19	MG00647	fixed shaft	FAS10-06	4
20	MI03203	fixed bracket	FAS10-07	4
21	MK00110	spring	FAS10-08	4
22	HK06527	K-PC board	P-OEX-400-POWER_CONNECT	1
23	MG00073	black-plated screw-pan head-iron board	M3*14	4
24	MF00038	spring washer-Zn plated	4*φ7*1t	1
25	HC00331	AC socket-RS	RF-2004	1
26	HI00022	power supply switch	4P R13-69A	1
27	ME00094	nut	M8*1.25PH(shake-proof washer enclosed)	2
28	MF00079	ZE-washer-Zn	32*φ9*2t PAM-5	2
29	MD00444	fans protective cover	80*80mm(K-G08A05-4HA)	1
30	MG00031	black-plated screw	M4*12	4
31	HK06477	K-PC board	P-OEX-400-MIX-DIP	1
32	HK05010	K-PC board	P-31323-DIP(PBM4)	1
33	MG00370	black-plated screw	M8*14.2*1.25PH	2

34	ME00060	MIC socket-HC00125 accessory	hexagon JY-6351G-02-250	11
35	MF00061	T-MIC socket washer-HC00125	circularity JY-6351G-02-250	9
36	NI02957	button-ABS	9.8*5.5*11.2mm black_V1.0	1
37	NI00359	plastic knob	10*16.5 COOL GRAY 8C	15
38	NI02252	knob cap	7*3.5 072C blue	10
39	NI02677	knob cap	8.5*4 534C blue	8
40	NI02867	knob cap	red	5
41	NI01863	button-RS	φ 5.5*W10*7.5 black	1
42	NI00399	plastic knob	φ 11*19mm COOL GRAY 8C	8
43	NI02386	plastic knob	φ 14*13mm	1
44	ND00682	foam-RS	70*25*4t black	2
45	ND00683	foam-RS	100*70*4t black	2
46	MG00063	black plated screw-flat-iron board	M3*12	10
47	MG00503	black plated screw-pill	M4*12*0.7PH_V1.0	8
48	MG00352	black plated screw-pill-iron board	M4*25	29
49	MG00351	black plated screw-pill-iron board	M4*16	10
50	MG00061	black plated screw-pill-iron board	M3*10	26
51	MG00041	black plated screw-pill	M3*6	17
52	MG00160	Ni screw-pill	M3*6	1
53	MG00166	Ni screw-pill	M3*10	2
54	ME00015	Nut-RS	3mm	2
55	NI04005	panel BOX	OEX-400-01	1
56	NI04006	panel MIX	OEX-400-02	1
57	NI04008	handle	OEX-400-10	3
58	NI04011	speaker front panel	OEX-400 135*336.2*342.63_V1.0	1
59	NI04010	speaker rear panel	OEX-400 285.77*333.35*344.6_V1.0	1
60	HC00125	MIC socket-RS	JY-6351G-02-250	2
61	HK06258	K-PC board	P-OEX400_XOVER	2
62	MG00582	black-plated screw	M3*12	4
63	MD00747	ZB-grill	OEX-400_V1.0	2
64	HK06401	K-speaker	10" 120W 6Ω (10" COAXIAL OEX400)	2
65	HG00213	Tweeter speaker head-RS	10" 120W 6Ω (10" COAXIAL OEX400)	2
66	MG00675	black-plated screw-RS	M4*15mm_V1.0	8
67	NI04027	O shape loop-black rubber	OEX-400 φ1.7*1105_V1.0	2
68	ND00706	EV foam-RS	760*12*1.5mm black_V1.0	2
69	MG00488	screw		8
70	MF00120	E shape latch-RS	M5(φ11*φ5*0.6t)_V1.0	2

71	MI03162	wheel	WDA-250 ϕ 59*18_V1.0	2
72	MG00640	fixed shaft	ϕ 10*31.5_V1.0	1
73	MI03189	ZB-fixed bracket	OEX-400 right_V1.0	1
74	MI03187	ZB-fixed bracket	OEX-400 left_V1.0	1
75	MI03184	ZD-fixed bracket-OEX400-09	OEX-400 1.5t*93*28*20 right_V1.0	1
76	MI03185	ZD-fixed bracket-OEX400-08	OEX-400 1.5t*93*28*20 left_V1.0	1
77	NI04011	speaker panel	OEX-400 135*336.2*342.63_V1.0	1
78	NI04009	speaker rear panel	OEX-400 285.75*332.97*344.66 rear_V1.0	1

8. Electrical Parts List

No.	Part No.	Description	Specification	Remark
1	AD00012	twin adhesive-RS	90*120mm_V1.0	
2	HA00861	power cord Europe 3P	LT-312+LT-501	
3	HA04459	wire-RS	6.3- 6.3*7M MONO	
4	HJ00006	dessicant	30g	
5	HK06851	faceplate-RS	OEX-400-MIXER_220-240V(MIXER+AMP)	
6	HK06527	PC board	P-OEX-400_POWER_CONNECT	
7	HBO1968	PCB-RS	OEX-400-POWER-CONNECT_VER051231	
8	RA00076	chassis bracket 5W	33 SQPM	R500
9	RA00077	chassis bracket 5W	47 SQPM	R501
10	HCO0077	connector(male)	3P 2.5mm 180 °	CN501
11	HCO0246	connector(male)	26P 2.54mm 180 °	CN500
12	AC00179	tin without lead-RS	M705E Sn 3Ag-0.5Cu	
13	HCO0876	terminal block-RS	7ESDP-02P	
14	HCO0873	terminal block-RS	5ESDP-02P	
15	HCO0875	terminal block-RS	5ESDP-05P	
16	HA04470	wire-RS	450 UL1015 18AWG green/yellow	
17	HA04492	wire-RS	26P-26P 250mm UL2651 28AWG PH1.27	
18	HA04469	wire-RS	3P 300mm UL1015 18AWG	
19	HA04468	wire-RS	2P 275mm UL1185 28AWG	
20	HA00375	wire-RS	100mm black L5R5	
21	HA00401	wire	400mm black L5R5	
22	HA01391	row-wire connector wiring	3P-3P 200	
23	HA00049	wire-RS	54mm black L3R3	
24	NI04005	panel-RS	OEX-400 350.22*153*355.8 1578g_V1.2	
25	NI04006	panel	OEX-400 350.05*156.25*355.75 1566g_V1.0	
26	NI04008	handle	OEX-400 155.5*39.94*23.49_V 1.1	
27	NI04007	fixed board	OEX-400 135.04*41.66*59.46_V1.0	
28	NI04012	fixed board-RS	OEX-400 202*8*5_V1.1	
29	MI03373	fixed board-RS-ACT	OEX400 100~120V 60Hz/220-240V 50/60Hz_V1	
30	MI03200	fixed bracket-RS	OEX-400	
31	AE00055	solvent	solvent	
32	AE00056	paint-RS	2745	
33	MI03199	fixed bracket-RS	OEX-400 1.0t*95*59(POWER)_V1.3	
34	MJ00058	single light board	1*2135*1220 20.45kg	
35	MI03193	fixed bracket	OEX-400 1.2t*150*13*30.2_V1.1;	
36	MJ00063	iron board	1.2*2135*1220 24.54kg	
37	MI03192	fixed bracket-RS-ACT	OEX-400 1.2t*150*13*30.2 right_V1.2	
38	MJ00063	iron board	1.2*2135*1220 24.54kg	

39	MI03198	fixed bracket	OEX-400 1.2t*88.5*10*28.5_V1.1	
40	MJ00063	iron board	1.2*2135*1220 24.54kg	
41	MI03197	fixed bracket-RS	OEX-400 1.2t*53*11.2*20_V1.2	
42	MJ00063	iron board	1.2*2135*1220 24.54kg	
43	NI04013	bottom cover	FAS-10 55.706*56*17.241_V1.0	
44	NI04014	plastic key-RS-POM	FAS-10 33.6*14*12.67_V1.2	
45	MG00647	fixing shaft	FAS-10 6*47.5_V1.0	
46	MK00110	spring-RS	FAS-10 0.7*4_V1.1	
47	MK00109	spring	FAS-10 0.8*3.2_V1.0	
48	MK00108	spring	FAS-10 0.8*2.4_V1.0	
49	ND00682	filter sponge-RS	70*25*4t black	
50	ND00683	filter sponge-RS	100*70*4t black	
51	MG00063	screw	M3*12	
52	MG00503	screw-RS	M4*12*0.7PH_V1.0	
53	MG00352	screw-RS	M4*25	
54	MG00351	screw-RS	M4*16	
55	MG00061	screw-RS	M3*10(加硬處理)	
56	MG00073	screw	M3*14	
57	MF00038	washer-RS	4* 7*1t	
58	HCO0331	AC socket	RF-2004	
59	ME00094	nut	M8*1.25PH	
60	MG00370	screw-RS	M8*14.2*1.25PH_V1.7	
61	MF00079	washer-RS-ACT	32* 9*2t PAM-5	
62	MF00078	washer-RS	32* 9*2t PAM-5_V1.2	
63	MJ01154	single light board	2.0t*1850*950mm 27.6kg	
64	HD00071	ceramic tube fuse	3.15A 250V 5.2*20mm CSA/S/T/UL/VDE	
65	ND00547	silicone sleeve	4*150mm	
66	ND00196	silicone sleeve	4*1000mm	
67	NI00261	sleeve	5*20mm	
68	NI00258	sleeve	5*1000mm	
69	MD00444	protective cover	80*80mm(K-G08A05-4HA)	
70	MG00031	screw	M4*12	
71	NI00218	cable tie	ALT-102SB	
72	NI04343	elastic-RS	3.0mm*1.8m_V1.1	
73	MG00060	screw	M3*6	
74	HK07152	PC board	P-PWRMOD350(OEX400)-DIP	
75	NE16112	lable	K-SERIES_V1.0	
76	NI00020	membrane	0.07*1M	
77	NH00015	bond paper	0.075*1M	
78	CB00188	electrolytic capacitor	10uF/63V 5*11mm 2.5mm	C16
79	CB00127	electrolytic capacitor	47uF/63V 6*11mm	C42
80	CB00038	electrolytic capacitor	47uF/16V 5*7mm	C17, C22, C23, C31, C32, C33, C34, C47
81	CB00322	electrolytic capacitor-RS	820uF/35V 105 WL 10*30mm(JAMICON)	C49, C50, C85, C84
82	CF00141	metal-film capacitor MSC	0.0068uF/100V 5% CASE01	C10
83	HC00246	connector(male)	26P 2.54mm 180 °	CN13
84	HC00276	connector(male)	3P 2.54mm 180 °	CN4, CN10
85	HC00859	terminal block-RS	2P 7EHDV-02P male	CN1, CN2

86	HC00858	terminal block-RS	2P 2EHDV-02P male	CN3
87	HC00856	terminal block-RS	5P 2EHDV-05P male	CN11
88	SA00113	zener diode	1/2W 2.4V 2C2	D40
89	SA00309	high speed diode-RS	BYW51FP-200(T0220AB)/(ST)	D13,D12,D11
90	SA00316	bridge rectifier-RS	8A GBU-8K/(PANJIT)	D1
91	HC00063	FUSE holder	JEF-501 (5.2mm)	F3_PZ1,F3_PZ2,F2_PZ2,F2_PZ1
92	HD00071	ceramic tube fuse	3.15A 250V 5.2*20mm CSA/S/T/UL/VDE	F3A,F2A
93	HD00114	ceramic tube fuse-RS	6.3A 250V 5.2*20mm CSA/PSE/UL/VDE	F1A
94	SB00223	transistor-RS-CT	HGTG7N60A4D(T0247)/(FAIRCHLD)	Q2,Q1
95	NC00958	insulator-RS	0.3t*40*55mm	SPAD1
96	HC00134	connector	2.54 180 ° 2P(gold-plated) 6/11.6mm	J4,J3,J1,J2
97	HC00034	short circuit connector	NO.2700 2.54mm/6mm OPEN	JR2,JR4,JR3,JR1
98	MC00802	top cover	PowerMod 0.8t*116*179.2 ME000093_V1.0	MEC2
99	MJ01324	hot gradual zinc	0.8t*2135*1220 16.35kg_V1.0	
100	MB04575	chassis	DigiMod 3.0t*51*122*216(ME000155)_V1.1	MEC1
101	MB04577	chassis	DigiMod	
102	MB04654	chassis	DigiMod 3.0t*51*122*216(ME000155)_V1.1	
103	MJ00057	AL plate-RS	3.0t*2000*1000mm 16.32kg	
104	ME00220	iron pillar	M4*8*0.7PH_V1.0	
105	ME00221	iron pillar	M3*4*0.8PH_V1.0	
106	MK00115	spring-RS	1.0T*7.6*13*34.2(ML00004)_V1.3	ML1,ML2
107	SB00224	transistor-RS-CT	IRFI640GPBF(T0220)/(IR)	Q10
108	SB00225	transistor-RS-CT	IRFI9640GPBF(T0220)/(IR)	Q13
109	SB00055	transistor-RS-ACT	IRFP240 (TO-247AC)/(IR)	Q15,Q14
110	SB00090	transistor-RS-ACT	IRFP9240(TO-220AB)/(IR)	Q11,Q12
111	RC00618	resistor-RS	47K ±10%(EA06-CA9PH2.5-47K-K)	R72
112	RA00298	fixed resistor 1/4W	330K F type	R122,R121
113	RH00032	thermistor-RS-NTC	10K ±5%(NTCLE100E3103JB0)	R67,R68
114	RA01613	metal-oxide-film resistor-RS	0.22R ±5% P type	R99,R97,R98,R100
115	RA00031	metal-oxide-film resistor 2W	10 P type	R111,R112,R110
116	HI00366	relay-RS-C	DC12V G5LE-1/(OMRON)	RLY1
117	TC00329	transformer-RS	ETD34(T0000056)	T3
118	NI04470	creel stand-RS-ACT	90695-017(NORWE)	
119	NI04469	creel stand-RS-ACT	90696-017(NORWE)	
120	TC00388	transformer-RS	ETD34(T0000056)	
121	SB00221	transistor-RS-CT	BD237(SOT32)/(ST)	Q8
122	MG00692	screw-RS	M3*12*0.5PH	VT8,VT4,VT15,VT16,VT28,VT24,VT20,VT7,VT3,VT14,VT13,VT19

123	ME00226	screw-RS	M3*0.5PH	DD3, DD8, DD10, DD12, DD2, DD4, DD6, DD9, DD11, DD5, DD7, DD13
124	MG00694	screw-RS	M2.9*9.5	VT6, VT2, VT11, VT26, VT22, VT18, VT27, VT23
125	MG00693	screw-RS	M3*6*0.5PH	VT12, VT5, VT1, VT10, VT9, VT25, VT21, VT17
126	AC00179	tin without lead-RS	M705E Sn 3Ag-0.5Cu	
127	HK07154	PC board	P-PWRMOD350/65(PowerSoft)-SMD	
128	CI00046	SMD ceramic capacitor 1206	1uF/16V Y5V-1206(3216)	C39, C38, C45, C30
129	CI00044	SMD ceramic capacitor 1206	0.0047uF/50V NPO	C48, C55
130	CI00212	SMD ceramic capacitor1206	0.047uF/50V X7R $\pm 5\%$	C44
131	CI00095	SMD ceramic capacitor 1206	0.1uF/50V X7R	C88, C35, C37, C65, C89, C67, C36, C86, C87, C68, C66, C69, C70
132	CI00103	SMD ceramic capacitor 1206	100PF/50V NPO $\pm 5\%$	C58, C60, C59
133	CI00127	SMD ceramic capacitor 1206	220PF/-50V NPO	C56
134	CI00262	SMD ceramic capacitor-RS 1206	18PF/50V NPO $\pm 5\%$	C57
135	HB01990	PCB-RS	PWRMOD MAIN14 _VER070507	CS1
136	SE00095	SMD diode-RS-CT	ES3D(D0214AB)/(VISHAY)	D38, D39, D8, D9
137	SE00025	SMD diode-RS-ACT	0.45A/85V BAV99	D25, D15, D24, D19, D4, D22, D23
138	SE00026	SMD diode-RS-ACT	0.45A/85V BAV70	D18, D20
139	SE00089	SMD zener diode-RS	1/2W 5.1V(MMSZ5231B)(SOD-123)/(PANJIT)	D27, D26, D28, D10
140	SE00092	SMD zener diode-RS	1/2W 9.1V(MMSZ5239B)(SOD-123)/(PANJIT)	D36, D35
141	SE00094	SMD zener diode-RS	1/2W 15V(MMSZ5245B)(SOD-123)/(PANJIT)	D29, D31
142	SE00093	SMD zener diode-RS	1/2W 10V(MMSZ5240B)(SOD-123)/(PANJIT)	D32, D30
143	SE00091	SMD zener diode-RS	1/2W 8.2V(MMSZ5237B)(SOD-123)/(PANJIT)	D33, D34
144	SE00084	SMD zener diode-RS	1W 13V(ISMA4743)D0214AC/(PANJIT)	D2
145	SG00502	SMD integrated circuit-RS	NE5532DR(S08)/(TI)	U5, U4, U6
146	SG00495	SMD integrated circuit-RS-CT	IR2156SPBF(S014)/(IR)	U1
147	SG00464	SMD integrated circuit-RS-ACT	LM324DT(S014)/(ST)	U3
148	SG00465	SMD integrated circuit-RS	M24C16WMN6TP(S08)/(ST)	U12
149	RD00245	SMD precise resistor 1/4W	1.00K $\pm 1\%$ 1206	R92, R93, R91, R9, R38, R88, R8, R96, R4, R87, R42
150	RD00602	SMD precise resistor-RS 1/4W	1.50K $\pm 1\%$ 1206	R29, R31, R3
151	RD00247	SMD precise resistor 1/4W	2.20K $\pm 1\%$ 1206	R106, R107, R27
152	RD00248	SMD precise resistor 1/4W	3.30K $\pm 1\%$ 1206	R71, R70
153	RD00140	SMD fixed resistor 1/4W	4.7K $\pm 5\%$ 1206	R12, R118
154	RD00601	SMD precise resistor-RS 1/4W	8.20K $\pm 1\%$ 1206	R6

155	RD00399	SMD precise resistor 1/4W	10.0K $\pm 1\%$ 1206	R64, R61, R46, R45, R43, R44, R7, R47, R28, R11, R48, R41, R40, R102, R30, R52, R49, R50, R51, R32, R36, R39, R101, R35, R33, R34, R37, R58
156	RD00603	SMD precise resistor-RS 1/4W	22.1K $\pm 1\%$ 1206	R115
157	RD00463	SMD precise resistor 1/4W	22.0 $\pm 1\%$ 1206	R21, R20
158	RD00600	SMD precise resistor-RS 1/4W	68.0 $\pm 1\%$ 1206	R85, R86, R83, R65, R66, R84
159	RD00255	SMD precise resistor 1/4W	100K $\pm 1\%$ 1206	R62, R18, R17, R63, R59, R19, R16, R14, R15
160	RD00516	SMD precise resistor 1/4W	150 $\pm 1\%$ 1206	R80, R76, R108, R109
161	RD00599	SMD precise resistor-RS 1/4W	270 $\pm 1\%$ 1206	R82, R81, R75, R79, R77, R78
162	RD00598	SMD precise resistor-RS 1/4W	390 $\pm 1\%$ 1206	R2
163	RD00244	SMD precise resistor 1/4W	560 $\pm 1\%$ 1206	R69, R57, R54, R74, R55, R56, R73, R53
164	RD00597	SMD precise resistor-RS 1/4W	100 $\pm 1\%$ 1206	R5, R22
165	RD00596	SMD precise resistor-RS 1/4W	10.0 $\pm 1\%$ 1206	R114, R113
166	RD00608	SMD precise resistor-RS 1/4W	33.0K $\pm 1\%$ 1206	R13
167	RD00595	SMD precise resistor-RS 1/4W	330K $\pm 1\%$ 1206	R60
168	RD00594	SMD precise resistor-RS 1/4W	2.70K $\pm 1\%$ 1206	R116, R24, R117, R23
169	RD00615	SMD precise resistor-RS 1/8W	1.50 $\pm 5\%$ 0805	R26, R25
170	SF00029	SMD transistor-RS-ACT	BC807(SOT23)/(PHI)	Q5, Q3, Q6, Q4
171	SF00030	SMD transistor-RS-ACT	BC817(SOT23)/(PHI)	Q9, Q7
172	AE00449	solder material without lead	9308/Sn Ag Cu	
173	SE00097	SMD diode-RS-CT	1A/400V US1G(D0214AC)/(VISHAY)	D3
174	SF00103	voltage stabilized transistor-	MC78M05CDT (DPAK3)/(ON)	U11
175	CI00136	SMD ceramic capacitor 1206	560PF/50V NPO $\pm 5\%$	C43
176	SB00227	Photodiode-RS	CNY17F2M(DIP6)/(FAIRCHILD)	IS01
177	RA01659	metal-oxide-film resistor-RS 1	240K $\pm 5\%$ VR37(VR37000002403JA100)	R1
178	HCO0857	terminal block-RS	4P 2EHDV-04P male	CN14
179	CG00081	Y-type capacitor-RS-ACT	S20- K300(B72220301K101)/(EPCOS)	RV1
180	CN00206	common inductance-RS-C	2*0.4mH/3.6A (B82721-K2362-N1)/(EPCOS)	T1, T2
181	HCO0941	fuse drawer-RS-ACT	520101(5.2mm) PCB式 LITTLEFUSE	F1
182	HA01925	jump	10mm	R103
183	HA02249	wire	0.6_鍍錫	
184	NI03761	wire sleeve	5.3*1000mm	
185	NI00280	sleeve	15*25mm	
186	NI00278	sleeve	15*1000mm	
187	CN00210	fixed inductance-RS-T	1uH/4A B82131-A5402-M/(EPCOS)	L3
188	CN00209	fixed inductance-RS-CT	12uH/4A B82111E-0000-C021/(EPCOS)	L1, L2

189	RH00033	thermistor-RS-CT	5 B57235S-0509M000/(EPCOS)	R10
190	NE16887	lable-RS	POWERMOD_V1.0	
191	NI00015	membrane	0.04*1M	
192	NH00013	bond paper	0.045*1M	
193	MF00018	washer	4* 10*1t_V1.0	
194	MF00105	washer	4* 10*1t_V1.0	
195	MJ00058	single light board	1*2135*1220 20.45kg	
196	MH02230	rivet-RS	4*12	
197	HA01919	jump	5mm	TH1
198	HA02249	wire	0.6 鍍錫	
199	HE00132	fan-RS	DC24V/2000RPM 80*80*25mm 125mm JST2.5	
200	ME00016	color nut	4m/m	
201	MF00038	washer-RS	4* 7*1t	
202	MJ00344	solder plate	AMP	
203	CB00378	electrolytic capacitor-RS	220uF/200V 105 ℃ 18*30mm (SAMXON)	C25, C29, C28, C26, C27, C24
204	CB00379	electrolytic capacitor-RS	390uF/100V 105 ℃ 16*30mm (SAMXON)	C52, C51
205	NE17900	label-RS	OWERMOD_V1.0	
206	NI00017	membrane	0.055*1M	
207	NI00039	adhesive label	0.06*1M	
208	CG00094	X2 capacitor-RS	1.0uF/275V PX105K31F0H150D	C1, C2, C3
209	CG00052	X1/Y2 capacitor AY2	4700PF VDE/UL ±20% X1:400V~ Y2: 250V~	C8, C9, C6, C7
210	CF00262	metal-film capacitor-RS	0.068uF/630V ± 5%(PB683J2JD3H150D)	C5, C4
211	CF00261	metal-film capacitor-RS	0.1uF/100V ± 5%(AC104J2AC1H120D)	C62, C64, C40, C41
212	NI03205	protective cover	0.5*44*15_V1.0	
213	HI00120	slide switch	L21-22A	
214	HI00031	power switch-RS	R415KKETOF	
215	MG00451	screw	M3*6*0.5PH	
216	MI03759	fixed bracket-RS	FAS-10 1.2t*42*32.3*13.4_V1.0	
217	MI03201	fixed bracket	FAS-10 42*32.3*13.4_V1.2	
218	MJ00063	iron board	1.2*2135*1220 24.54kg	
219	AE00055	solvent	solvent	
220	AE00069	paint-RS	3157	
221	MI03760	fixed bracket-RS	FAS-10 1.2t*45*28.5*14_V1.0	
222	MI03202	fixed bracket-RS-ACT	FAS-10 45*28.5*14_V1.3	
223	MJ00063	iron board	1.2*2135*1220 24.54kg	
224	AE00055	solvent	solvent	
225	AE00069	paint-RS	3157	
226	MI03758	fixed bracket-RS	FAS-10 1.0t*54_V1.0	
227	MI03203	fixed bracket-RS-ACT	FAS-10 1t*54_V1.5	
228	MJ00061	iron board	1*2135*1220 20.45kg	
229	AE00055	solvent	solvent	
230	AE00069	paint-RS	3157	
231	NE01684	label	SCL-2020 black/white	

232	NH00021	bond paper	0.11*1M	
233	NI00027	membrane	0.105*1M	
234	HA00475	wire	400mm brown L5R5	
235	ND00206	silicone sleeve	6*140mm	
236	ND00202	silicone sleeve	6*1000mm	
237	MH02354	fixed bolt-RS-CT	FAS-10 3.4*55.5_V1.2	
238	HK06935	speaker module	OEX400 front	
239	NI04011	speaker panel-RS	OEX-400 135*336.2*342.63 590g+-15G_V1.1	
240	MI04169	fixed bracket-RS	OEX-400_V1.0	
241	AE00055	solvent	solvent	
242	AE00239	paint-RS	5252 black	
243	MI04168	fixed bracket-RS	OEX-400 1.0t*11.5*66.2*12.2_V1.2	
244	MJ00061	iron board	1*2135*1220 20.45kg	
245	NI04819	panel-RS-CT	OEX-400 135*336.2*342.63_V1.0	
246	NI04010	speaker rear cover	OEX-400 285.77*333.35*344.6 front_V1.0	
247	HC00125	MIC jack-RS	JY-6351G-02-250	
248	ME00060	MIC jack	JY-6351G-02-250	
249	MF00061	MIC jack	9.6* 13*0.5t	
250	HA03236	wire	350mm UL1015 18AWG	
251	HA02319	single terminal wiring	600mm UL1015 18AWG brown/black	
252	HA02320	single terminal wiring	800mm UL1015 18AWG	
253	HK06258	PC board-RS	P-OEX400_XOVER	
254	RA00998	chassis bracket 20W	1.5 SQY type	R1
255	RG00012	over current protector	0.5A 60V MF-R050	PTC
256	NI00218	cable tie	ALT-102SB	
257	HBO1915	PCB-RS	OEX400_VER060421	
258	HC00324	connect terminal	6.5m/m (PC250)	LOW+,LOW-,IN+,IN- ,HIGH+,HIGH-
259	CN00049	crossover inductance	0.35mH(0.8mm 0.34-0.36mH)	L1
260	CF00090	metal-film capacitor MEF	3.3uF/250V 5%	C1
261	AC00179	tin without lead-RS	M705E Sn 3Ag-0.5Cu	
262	MG00582	screw	M3*12	
263	MG00352	screw-RS	M4*25	
264	NI04008	handle	OEX-400 155.5*39.94*23.49_V 1.1	
265	MD00747	grille	OEX-400_V1.0	
266	AE00055	solvent	solvent	
267	AE00228	paint-RS	5204	
268	MD00746	grille	OEX-400 0.8t* 262*5_V1.0	
269	MD00752	grille	0.8t*300*300(3.0*4.0PH*60 °)_V1.0	
270	HK06401	speaker-RS	10 inch 120W 6 (10 inch COAXIAL OEX400)	
271	MH02055	T-shape middle pillar-RS	129* 50*29.5*8 P:55.5_V1.0	
272	MH01568	WASHER-RS	129* 52.5*8 P:76_V1.2	

273	MH02056	magnet-RS	135* 57*19 Y30_V1.0	
274	HC00761	terminal-RS	5.2#+5.2#3.5*3.5_V1.0	
275	MI03168	bracket-RS	253*107*69.5 P:76_V1.1	
276	ND00623	spider-RS	132* 50.5*3.1 CY-1048 0.4/50g_V1.0	
277	HA02492	strand	TA4X4YKA42W*100mm	
278	HA02079	strand	TA4X4YKA42W*1M	
279	HG00204	voice coil-RS	BSV 2L 50.5*29*5.25 12.9mm_V1.0	
280	NH00392	cone-RS	245* 51.2*53_V1.0	
281	NI04048	high pitch horn	80*58.4 black_V1.0	
282	NE16265	gift carton	HK06401_V1.0	
283	NI00014	membrane	0.035*1M	
284	NH00012	bond paper	0.04*1M	
285	NH00461	cushion-RS	210*11*6 8hole	
286	HG00213	Driver-RS	PA-D588NH 8 15W	
287	MG00675	screw-RS	M4*15mm_V1.0	
288	NI04207	0-shape loop	OEX-400 1.5*1105_V1.1	
289	NI04222	label	OEX 400 ALTO_V1.0	
290	NE15987	lable	OEX 400 ALTO_V1.0	
291	ND00706	EV foam-RS	1.5t*760*12mm black_V1.0	
292	MG00488	screw-RS	M3.5*15	
293	NI00218	cable tie	ALT-102SB	
294	HK06936	speaker module	OEX400 after	
295	NI04011	speaker panel-RS	OEX-400 135*336.2*342.63 590g+-15G_V1.1	
296	MI04169	fixed bracket-RS	OEX-400_V1.0	
297	AE00055	solvent	solvent	
298	AE00239	paint-RS	5252 black	
299	MI04168	fixed bracket-RS	OEX-400 1.0t*11.5*66.2*12.2_V1.2	
300	MJ00061	iron board	1*2135*1220 20.45kg	
301	NI04819	panel-RS-CT	OEX-400 135*336.2*342.63_V1.0	
302	NI04009	speaker rear cover	OEX-400 285.75*332.97*344.66 behind_V1.0	
303	HC00125	MIC jack-RS	JY-6351G-02-250	
304	ME00060	MIC jack	JY-6351G-02-250	
305	MF00061	MIC jack	9.6* 13*0.5t	
306	HA03236	wire	350mm UL1015 18AWG	
307	HA02319	signle terminal wiring	600mm UL1015 18AWG brown/black	
308	HA02320	signle terminal wiring	800mm UL1015 18AWG	
309	HK06258	PC board-RS	P-OEX400_XOVER	
310	RA00998	chassis bracket 20W	1.5 SQY type	R1
311	RG00012	over current protector	0.5A 60V MF-R050	PTC
312	NI00218	cable tie	ALT-102SB	
313	HB01915	PCB-RS	OEX400_VER060421	
314	HC00324	connect terminal	6.5m/m (PC250)	LOW+,LOW-,IN+,IN- ,HIGH+,HIGH-
315	CN00049	crossover inductance	0.35mH(0.8mm 0.34-0.36mH)	L1

316	CF00090	metal-film capacitor MEF	3.3uF/250V 5%	C1
317	AC00179	tin without lead-RS	M705E Sn 3Ag-0.5Cu	
318	MG00582	screw	M3*12	
319	MG00352	screw-RS	M4*25	
320	NI04008	handle	OEX-400 155.5*39.94*23.49_V 1.1	
321	MD00747	grille	OEX-400_V1.0	
322	AE00055	solvent	solvent	
323	AE00228	paint-RS	5204	
324	MD00746	grille	OEX-400 0.8t* 262*5_V1.0	
325	MD00752	grille	0.8t*300*300(3.0*4.0PH*60 °)_V1.0	
326	HK06401	speaker-RS	10 inch 120W 6 (10 inch COAXIAL OEX400)	
327	MH02055	T-shape middle pillar-RS	129* 50*29.5*8 P:55.5_V1.0	
328	MH01568	WASHER-RS	129* 52.5*8 P:76_V1.2	
329	MH02056	magnet-RS	135* 57*19 Y30_V1.0	
330	HC00761	terminal-RS	5.2#+5.2#3.5*3.5_V1.0	
331	MI03168	bracket-RS	253*107*69.5 P:76_V1.1	
332	ND00623	spider-RS	132* 50.5*3.1 CY-1048 0.4/50g_V1.0	
333	HA02492	strand	TA4X4YKA42W*100mm	
334	HA02079	strand	TA4X4YKA42W*1M	
335	HG00204	voice coil-RS	BSV 2L 50.5*29*5.25 12.9mm_V1.0	
336	NH00392	cone-RS	245* 51.2*53_V1.0	
337	NI04048	high pitch horn	80*58.4 black_V1.0	
338	NE16265	gift carton	HK06401_V1.0	
339	NI00014	membrane	0.035*1M	
340	NH00012	bond paper	0.04*1M	
341	NH00461	cushion-RS	210*11*6 8hole	
342	HG00213	Driver-RS	PA-D588NH 8 15W	
343	MG00675	screw-RS	M4*15mm_V1.0	
344	NI04207	O-shape loop	OEX-400 1.5*1105_V1.1	
345	NI04222	label	OEX 400 ALTO_V1.0	
346	NE15987	lable	OEX 400 ALTO_V1.0	
347	MF00120	washer	M5(11* 5*0.6t)_V1.0	
348	MI03162	wheel	WDA-250 59*18_V1.0	
349	MI03189	fixed bracket-RS-ACT	OEX-400 right_V1.1	
350	MI03188	fixed bracket-RS-ACT	OEX-400 2t*74*45*30.5 right_V1.1	
351	MJ01154	single light board	2.0t*1850*950mm 27.6kg	
352	AE00343	solvent	NO. 330	
353	AE00060	paint-RS	4534	
354	MI03187	fixed bracket-RS-ACT	OEX-400 left_V1.1	
355	MI03186	fixed bracket-RS-ACT	OEX-400 2t*74*45*30.5 left_V1.2	
356	MJ01154	single light board	2.0t*1850*950mm 27.6kg	
357	AE00343	solvent	NO. 330	
358	AE00060	paint-RS	4534	
359	MI03184	fixed bracket-RS	OEX-400 1.5t*89.5*35.5*20 right_V1.1	

360	MJ00069	iron board	1.5*2135*1220 30.67kg	
361	MI03185	fixed bracket-RS	OEX-400 1.5t*89.5*35.5*20 left_V1.1	
362	MJ00069	iron board	1.5*2135*1220 30.67kg	
363	MG00503	screw-RS	M4*12*0.7PH_V1.0	
364	ND00706	EV foam-RS	1.5t*760*12mm black_V1.0	
365	MG00488	screw-RS	M3.5*15	
366	NI00218	cable tie	ALT-102SB	
367	NI04419	cushion-RS	OEX400 0.5t* 6.5* 9.5_V1.0	
368	NI04418	PVC-RS-CT	0.5t*38mm*1M<R/50M>-20# white_V1.0	
369	MHO2280	fixing shaft-RS	15* 6*32.8_V1.1	
370	MI04089	fixed board-RS	OEX400 1.5t* 22*5.6_V1.0	
371	MI04088	fixed board-RS	OEX400 1.5t* 22*5.6_V1.1	
372	MJ00088	single light board	1.5*2135*1220 30.67kg	
373	MI04091	fixed board-RS	OEX400 1.5t* 28*45*8 right_V1.0	
374	MI04090	fixed board-RS	OEX400 1.5t* 28*45*8 right_V1.2	
375	MJ00088	single light board	1.5*2135*1220 30.67kg	
376	MI04093	fixed board-RS	OEX400 1.5t* 28*45*8 left_V1.0	
377	MI04092	fixed board-RS	OEX400 1.5t* 28*45*8 left_V1.2	
378	MJ00088	single light board	1.5*2135*1220 30.67kg	
379	MFO0021	washer	8* 23*2t	
380	MG00079	color screw-RS	M4*16*0.7PH	
381	NA00137	clip-chain bag	5*7	
382	NA00192	bag-RS	0.03t*1200*800mm 12	
383	NA00279	clip-chain bag	0.04t*100*150mm_V1.0	
384	NB04661	carboard-RS-T	OEX-400 410*410mm_V1.0	
385	NB04663	paper defend horn-RS-T	OEX-400 425*48mm_V1.1	
386	NB04664	carboard-RS-T	OEX-400 down 425*213mm_V1.0	
387	NB04665	carboard-RS-T	OEX-400 up 425*195mm_V1.0	
388	NB04666	carton-RS	OEX-400 ALTO_V1.2	
389	NE11750	label	ALTO PC	
390	NH00334	cone paper	0.040*1m	
391	NE16007	lable-RS	OEX-400_V1.0	
392	NI00014	membrane	0.035*1M	
393	NH00012	bond paper	0.04*1M	
394	NF00061	assurance card-RS-C	ALTO_V1.0	
395	NF02565	user manual English-RS-ACT	OEX-400 ALTO_V1.3	
396	NH00149	paper	889*640mm	
397	PH00510	MICROPHONE-RS	AM6_ALTO	
398	MD00246	up steel net	UDM-2088 0.9m/m	
399	MD00006	down steel net	UDM-2088 0.9m/m	
400	NI01693	net socket	KUD-626	
401	NI01602	net socket	KUD-626	
402	ND00077	sponge	80*3	
403	ND00078	sponge	96*75*3	
404	NE13478	label	AM6 ALTO_V1.1	

405	MH01457	body	UDM-525	
406	HI00096	slide switch	2 stage 6P L-5m/m	
407	MI01272	label	UDM-808	
408	MG00151	screw	M2*4	
409	MG00023	screw	M2.6*7	
410	HC00024	quick connector	SVP-555B male adoptor taiwan made	
411	HC00025	quick connector	SVP-556MC female plug taiwan made	
412	HA01710	MIC wire-RS-T	6*1C*20/0.12+30/0.12*15FT	
413	HA01762	P.V.C wire	160 red 7/0.12	
414	HA01751	P.V.C wire	160 black 7/0.12	
415	NA00138	bubble bag	9.5*19.5+22.5	
416	HK00032	magnetic head	S-81	
417	NI01558	protective cover	S-81 27.5*5.5	
418	ND00136	vibration film	25.85*0.019t	
419	HA01860	covered enamel wire-RS-ACT	0.02m/m 0.0327g 600	
420	HA02053	covered enamel wire	0.02mm 1g	
421	NI01612	middle socket	27.2*32.2(S-81)	
422	NI01208	inner sleeve	16.4*7 S-90	
423	HB00031	connection frame	S-80(7.9*7.5*0.5/1*10)	
424	HA01751	P.V.C wire	160 black 7/0.12	
425	HA01762	P.V.C wire	160 red 7/0.12	
426	MF00033	washer	14* 21.15*1.75t	
427	MH00030	magnet combination-RS	13* 12 *8.2 N 35 _V1.0	
428	MH01618	iron	13*1.8	
429	MH01617	magnet-RS	12*3 N35_V1.0	
430	MH02026	iron	S-80B 13*8.2_V1.0	
431	MH00070	iron coil	16.6xH10.4x12.6 4	
432	NI00488	cushion	30*22.5B S-81	
433	ND00010	wool sheet	18*4H	
434	ND00020	dustproof cloth	24 2016	
435	NH00049	ventilation paper	86*18.5 #3	
436	AC00179	tin without lead-RS	M705E Sn 3Ag-0.5Cu	
437	HC00033	quick male jack	89M-101	
438	HK07796	faceplate-RS	OEX-400-MIXER	
439	HK04833	PC board	P-313123-DIP(OEX600)	
440	SC00004	crystal oscillator	16.00MHZ	XT1
441	HC00484	connector	2.54 180 ° 2*8P(gold-plated) 13.5/19mm	CN2
442	SG00325	SMD integrated circuit	SST39VF010-70n/OEX600 CS:E880	
443	SG00601	SMD integrated circuit-RS-ACT	SST39VF010(PLCC32)/(SST)	
444	HK03894	PC board-RS-ACT	P-313123-SMD(L-8)	
445	HB00895	PCB	313123/2(1*6)	
446	CI00075	SMD ceramic capacitor 0603	0.1uF/50V Y5V +80, -20%	C17, C15, C18, C6, C10, C22, C20, C13, C14, C1, C3, C4, C11
447	RD00061	SMD fixed resistor 1/10W	10 ±5% 0603	R22

448	RD00068	SMD fixed resistor 1/10W	100 $\pm 5\%$ 0603	R12, R14, R7, R8, R34, R17, R13, R33
449	RD00073	SMD fixed resistor 1/10W	220 $\pm 5\%$ 0603	R3
450	RD00085	SMD fixed resistor 1/10W	1.5K $\pm 5\%$ 0603	R16, R15, R21, R20, R4, R19, R10, R18, R9, R5
451	RD00088	SMD fixed resistor 1/10W	2.2K $\pm 5\%$ 0603	R28, R27, R23, R24, R29, R30, R25, R26
452	RD00101	SMD fixed resistor 1/10W	10K $\pm 5\%$ 0603	R32, R31, R1
453	RD00125	SMD fixed resistor 1/10W	1.0M $\pm 5\%$ 0603	R2
454	RE00006	SMD resistor networks 1/16W	100 *4 $\pm 5\%$ 8P 0603	AR1, AR2
455	SE00011	SMD rectifier diode	RLS4148 0.5A (LL-34)	D1
456	SG00068	SMD integrated circuit	74HC14DT(S014)/(PHI)	IC1
457	SG00410	SMD integrated circuit-RS-ACT	IC41LV16256-35KG(S0J40)/(ICS1)	IC6
458	SG00166	SMD integrated circuit	TY-2 ALTO(GMCODE:105022)	IC3
459	SG00147	SMD integrated circuit	CHEF DSP(GMCODE:105022)	
460	SG00037	SMD integrated circuit	LD1117DT33C(T0252)/(ST)	IC2
461	HC00611	IC socket (SMD)	PLCC32 (AMP S/N:822516-7)	IC4
462	SG00016	SMD integrated circuit	UDA1345TS(SSOP28)/(PHI)	IC5
463	AE00449	solder material without lead	9308/Sn Ag Cu	
464	CI00264	SMD ceramic capacitor-RS 0603	15PF/50V NPO $\pm 5\%$	C8, C9
465	NE04154	label	OEX600_V1.0	
466	NH00035	bond paper	0.06*1M	
467	NI00017	membrane	0.055*1M	
468	AC00179	tin without lead-RS	M705E Sn 3Ag-0.5Cu	
469	CB00166	electrolytic capacitor	100uF/16V 6*5mm	C19, C12, C5, C2, C24, C16, C21, C25, C26, C28, C7
470	HK06477	PC board	P-OEX-400-MIX-DIP	
471	HC00126	balance MIC jack-RS	JY-5042-030G female plug 180 °	X9
472	RA00221	fixed resistor 1/4W	2.2K F type	R243
473	RA00623	fixed resistor 1/4W	10 F type	R150, R151
474	CF00008	metal-film capacitor MSC	0.0047uF/100V 5% CASE01	C82, C83, C84, C85, C86, C87, C88, C89, C90, C91
475	HI00238	push-button switch-RS	2 6P KFC-D85-D(NON-LOCK)	SW2
476	HCO0253	connector(male)	2P 2.0mm 180 °	J13
477	HC00077	connector(male)	3P 2.5mm 180 °	J14
478	HC00172	connector(male)	3P 3.96mm 180 °	J12
479	HCO0261	connector(male)	12P 2.0mm 180 °	J8, J11
480	HCO0397	connector(male)	10P 2.0mm 180 °	J7, J15
481	HA03756	wire	12P-12P 40mm UL1007 28AW	J9, J10
482	HA03098	wire	10P(male)-10P(female) 40mm UL1007 28AWG	J6, J16
483	SA00052	L.E.D	3 round(green) long foot 26	D10, D11, D12, D13, D27
484	SA00053	L.E.D	3 round(red) long foot 26mm	D16, D17, D18
485	SA00054	L.E.D	3m/m round(yellow) long foot 26	D14, D15
486	NI01782	LED spacer support	LEDS-11 11mm	
487	RC00552	sliding potentiometer-RS	W100K RA3044F-20-15EB-W100K-C	VR24, VR25, VR26, VR27, VR28, VR29, VR30

488	RC00677	potentiometer-RS	W50K RD09F113A232-50K4BT(SAS)	VR3, VR4, VR7, VR8, VR11, VR12, VR15, VR16, VR19, VR20, VR21, VR22, VR23
489				
490	SD00007	integrated circuit	BA15218N(M5218L代用)(SIP8)/(ROHM)	U18, U19
491	SD00032	integrated circuit	LM317T(TO220)/(ST)	U32
492	SD00033	integrated circuit	LM337SP(1.5A)(TO220)/(ST)	U34
493	SD00074	integrated circuit	L7805CV(TO220)/(ST)	U33
494	NC00022	mica	S-8 18*45*0.1t_V1.1	
495	MJ01027	heat-sink-RS-ACT	S-8	
496	MJ01030	heat-sink-RS	S-8_V1.1	
497	MJ00070	AL plate	4*2440*1220 32.40kg	
498	HC00836	balance MIC jack-RS	CXLF-07/(BELTON) NO PUSH	X1, X2, X3
499	HC00371	MIC jack	SCJ-0658-1-Y	X4, X5, X6, X7, X8, X10, X11, X13, X14
500	HC00403	RCA jack	SCP6873NS3232T2 4P	X12
501	AC00179	tin without lead-RS	M705E Sn 3Ag-0.5Cu	
502	HC00473	connector-RS-ACT	2.45mm 180 ° 2*8P B25-2*8BG1(B)H=5mm	CN1
503	HA00378	wire	130mm black L5R5	
504	CB00194	electrolytic capacitor	47uF/25V 5*11mm	C42, C43
505	CB00256	electrolytic capacitor	1000uF/25V 10*20mm 5mm	C229, C230, C228
506	CB00019	electrolytic capacitor	10uF/50V NP 5*11mm	C33
507	HI00317	rotary switch	RE2001-40E2-155F-4B	SW1
508	MF00037	washer	3.2* 5.5*1t	
509	MG00162	screw	M3*8	
510	NI02249	plastic washer	TW-1(TO-220)	U32, U33, U34
511	RC00678	potentiometer-RS	B50K RD09F113A231-50K2BT(SAS)	VR1, VR2, VR5, VR6, VR9, VR10, VR13, VR14, VR17, VR18
512	HK06479	PC board	P-OEX-400-MIX-SMD	
513	RD00061	SMD fixed resistor 1/10W	10 ±5% 0603	R138, R139, R140, R141, R142, R143, R144, R145, R146, R147, R236
514	RD00064	SMD fixed resistor 1/10W	43 ±5% 0603	R194
515	RD00069	SMD fixed resistor 1/10W	120 ±5% 0603	R155, R156
516	RD00073	SMD fixed resistor 1/10W	220 ±5% 0603	R246
517	RD00078	SMD fixed resistor 1/10W	470 ±5% 0603	R191, R192, R193
518	RD00080	SMD fixed resistor 1/10W	680 ±5% 0603	R184, R185, R186, R187, R188
519	RD00095	SMD fixed resistor 1/10W	5.6K ±5% 0603	R172, R173, R174
520	RD00102	SMD fixed resistor 1/10W	12K ±5% 0603	R91, R93, R94, R97, R164, R242, R265, R85, R86
521	RD00105	SMD fixed resistor 1/10W	22K ±5% 0603	R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R44, R45, R46, R47, R48, R49, R74, R75, R163, R198, R252
522	RD00329	SMD precise resistor 1/10W	30.0K ±1% 0603	R264
523	RD00112	SMD fixed resistor 1/10W	56K ±5% 0603	R237
524	RD00113	SMD fixed resistor 1/10W	62K ±5% 0603	R161

525	RD00124	SMD fixed resistor 1/10W	820K $\pm 5\%$ 0603	R245
526	RD00125	SMD fixed resistor 1/10W	1.0M $\pm 5\%$ 0603	R124, R125, R126, R127, R128, R129, R130, R131
527	RD00126	SMD fixed resistor 1/10W	2.2M $\pm 5\%$ 0603	R244
528	RD00347	SMD fixed resistor 1/10W	510 $\pm 5\%$ 0603	R195
529	CI00047	SMD ceramic capacitor 0603	10PF/50V COG \pm 0.25PF (C1608COG1H100CT) TDK	C197, C198
530	CI00056	SMD ceramic capacitor 0603	56PF/50V NPO $\pm 5\%$	C214
531	CI00059	SMD ceramic capacitor 0603	100PF/50V NPO $\pm 5\%$	C192, C193, C194, C195
532	CI00065	SMD ceramic capacitor 0603	0.001uF/50V X7R $\pm 0\%$	C208, C209, C210, C211
533	CI00071	SMD ceramic capacitor 0603	0.01uF/50V X7R $\pm 0\%$	C204, C205, C206, C207
534	CI00073	SMD ceramic capacitor 0603	0.033uF/50V X7R $\pm 0\%$	C212, C213
535	CI00075	SMD ceramic capacitor 0603	0.1uF/50V Y5V +80, -20%	C120, C121, C122, C123, C124, C125, C126, C127, C128, C129, C130, C131, C132, C133, C134, C135, C136, C137, C138, C139, C140, C141, C142, C143, C144, C145, C152, C153, C164, C165, C166, C167, C168, C169, C170, C171, C172, C173, C174, C175, C176, C177, C178, C179, C180, C181, C182, C183, C184, C185, C186, C187, C217, C218, C219, C220, C221, C222, C223, C224, C225
536	CI00129	SMD ceramic capacitor 0603	0.0015uF/50V X7R $\pm 0\%$	C196
537	CI00179	SMD ceramic capacitor 0603	0.22uF/25V X7R \pm 10% (C1608X7R1E224KT) / TDK	C199, C200, C201, C202, C203
538	CI00185	SMD ceramic capacitor 0603	0.1uF/50V X7R \pm 10% (C1608X7R1H104KT) / TDK	C238
539	SF00052	transistor-RS-ACT	MMBFJ176 (SOT23) / (FAIRCHILD)	TR1
540	SF00004	SMD transistor-RS-ACT	2SA1036K (SC59) / (ROHM)	Q1, Q2
541	RD00213	SMD precise resistor 1/10W	7.50K $\pm 1\%$ 0603	R206
542	RD00214	SMD precise resistor 1/10W	10.0K $\pm 1\%$ 0603	R50, R51, R52, R53, R54, R55, R56, R57, R58, R59, R60, R61, R62, R63, R64, R66, R67, R68, R69, R70, R71, R72, R73, R76, R77, R78, R81, R82, R83, R84, R87, R88, R89, R90, R168, R216, R217, R247
543	RD00218	SMD precise resistor 1/10W	15.0K $\pm 1\%$ 0603	R225, R226, R227, R262
544	RD00219	SMD precise resistor 1/10W	20.0K $\pm 1\%$ 0603	R79, R80, R92, R95, R96, R98, R99
545	RD00224	SMD precise resistor 1/10W	100K $\pm 1\%$ 0603	R199, R200, R201, R202, R203, R204, R205
546	RD00274	SMD precise resistor 1/10W	100 $\pm 1\%$ 0603	R238, R239
547	RD00282	SMD precise resistor 1/10W	1.00K $\pm 1\%$ 0603	R233, R248
548	RD00321	SMD precise resistor 1/10W	1.20K $\pm 1\%$ 0603	R196, R232
549	RD00322	SMD precise resistor 1/10W	2.70K $\pm 1\%$ 0603	R189, R190, R197

550	RD00326	SMD precise resistor 1/10W	6.80K \pm 0.5% 0603	R175,R176
551	RD00327	SMD precise resistor 1/10W	8.20K \pm 0.5% 0603	R100,R101,R102,R103,R104, R105,R106,R107,R108,R109, R110,R111,R112,R113,R114, R115,R116,R117,R118,R119, R120,R121,R122,R123,R213
552	RD00330	SMD precise resistor 1/10W	39.0K \pm 0.5% 0603	R177,R178,R179,R180,R181, R182,R183
553	RD00339	SMD precise resistor 1/10W	47.0K \pm 0.5% 0603	R229,R230,R231
554	RD00392	SMD precise resistor 1/10W	2.20K \pm 0.5% 0603	R165,R166,R167,R170,R171
555	RD00407	SMD precise resistor 1/10W	36.0K \pm 0.5% 0603	R132,R133,R134,R135,R136, R137
556	RD00414	SMD precise resistor 1/10W	3.90K \pm 0.5% 0603	R1,R2,R3,R4,R5,R6,R7,R8,R 9,R10,R11,R12,R13,R14,R15 ,
557	RD00419	SMD precise resistor 1/10W	1.80K \pm 0.5% 0603	R234
558	RD00106	SMD fixed resistor 1/10W	27K \pm 5% 0603	R208,R209,R210,R211,R212, R207
559	RD00473	SMD precise resistor 1/10W	18.0K \pm 0.5% 0603	R65,R218,R219,R220,R221,R 222,R223,R224,R43
560	RD00506	SMD precise resistor 1/10W	3.30K \pm 0.5% 0603	R235
561	SE00011	SMD rectifier diode	RLS4148 0.5A (LL-34)	D1,D2,D3,D4,D5,D6,D7,D8,D 9,D19,D20,D21,D22,D28,D29
562	SG00032	SMD integrated circuit	LM339DR(S014)/(TI/ST)	U21,U22
563	SG00068	SMD integrated circuit	74HC14DT(S014)/(PHI)	U31
564	SG00558	integrated circuit-RS	UTC4580M(4580M)(SOP8)/(YW)	U1,U2,U3,U4,U5,U6,U7,U8,U 9,U10,U11,U12,U13,U14,U15 ,U16,U17,U20,U23,U24,U25, U26,U27
565	SG00469	SMD integrated circuit-RS	SN74HC109DR(S016)/(TI)	U29
566	AE00449	solder material without lead	9308/Sn Ag Cu	
567	CI00266	SMD ceramic capacitor-RS 0603	22PF/50V NPO \pm 5%	C64,C65,C66,C67,C68,C69,C 70,C71,C72,C73,C74,C75,C7 6,C77,C78,C79,C80,C81,C10 0,C101,C102,C103,C104,C10 5,C106,C107,C108,C109,C11 0,C111,C112,C113,C114,C11 5,C116,C117,C118,C119
568	SG00306	SMD integrated circuit	LM393DR(TI)/(MEXICO)	U28
569	RD00094	SMD fixed resistor 1/10W	5.1K \pm 5% 0603	R162
570	CI00069	SMD ceramic capacitor 0603	0.0033uF/50V X7R \pm 0%	C215
571	RD00059	SMD fixed resistor 1/10W	0.0 \pm 5% 0603	R228
572	SG00243	SMD integrated circuit	NE555DR(S08)/(TI)	U30
573	RD00415	SMD precise resistor 1/10W	4.70K \pm 0.5% 0603	R169
574	HK06478	PC board	P-OEX-400-MIX-AI	
575	HA01918	jump	4mm	JP1,JP2
576	RA00157	fixed resistor 1/4W	0	R263
577	RA01109	fixed resistor 1/4W	1K	R250
578	RA01112	fixed resistor 1/4W	100	R214,R215

579	RA01258	fixed resistor 1/4W	10	R148,R149,R152,R153
580	RA01260	fixed resistor 1/4W	120	R154,R157,R158,R159,R160
581	RA01268	fixed resistor 1/4W	2K	R251
582	CB00189	electrolytic capacitor	1.0uF/50V 4*5mm	C232,C233
583	CB00194	electrolytic capacitor	47uF/25V 5*11mm	C1,C2,C3,C4,C5,C6,C7,C8,C9,C10,C11,C12,C13,C14,C15,C16,C17,C18,C19,C20,C21,C22,C23,C24,C25,C26,C27,C28,C29,C30,C31,C32,C34,C35,C36,C37,C38,C39,C40,C41,C44,C45,C46,C47,C48,C49,C50,C51,C52,C53,C54,C55,C56,C57,C58,C59,C60,C61,C62,C63,C97,C98,C99,C146,C188,C189,C190,C191,C239
584	CB00238	electrolytic capacitor	0.22uF/50V 5*11mm	C237
585	CB00245	electrolytic capacitor	4.7uF/50V SLL 5*11mm	C92,C93,C94,C95,C96
586	CB00263	electrolytic capacitor	10uF /25V 4*7mm	C226,C227
587	SA00094	rectifier diode	1N4002/100V	D23,D24,D25,D26
588	CB00236	electrolytic capacitor	220uF/35V 10*12mm	C231,C216
589	RA01129	precise resistor 1/4W	1.1K ±1%	R240,R241
590	HB01969	PCB-RS	OEX-400-MIX_VER060930	
591	MA05828	panel	OEX-400 ALTO_V1.0	
592	MA05656	panel	OEX-400	
593	AE00055	solvent	solvent	
594	AE00228	paint-RS	5204	
595	MA05655	panel	OEX-400_V1.0	
596	ME00113	iron pillar	M3*13.8*0.5PH_V1.1	
597	ME00165	iron pillar	M3*21*0.5PH_V1.0	
598	MJ00058	single light board	1*2135*1220 20.45kg	
599	MD00748	grille	OEX-400 0.5t*19*108_V1.1	
600	MD00343	iron net	1M*134mm	
601	ME00015	color nut	3m/m	
602	ME00060	MIC jack	JY-6351G-02-250	
603	MF00037	washer	3.2* 5.5*1t	
604	MF00061	MIC jack	9.6* 13*0.5t	
605	MG00041	screw	M3*6	
606	MG00061	screw-RS	M3*10(加硬處理)	
607	MG00160	screw	M3*6 P0.5	
608	MG00166	screw	M3*10	
609	MI03196	fixed bracket	OEX-400 1.0t*207.5*74.5_V1.1	
610	ME00035	iron pillar	hexagon6.35*M3*6	
611	MJ00061	iron board	1*2135*1220 20.45kg	
612	NI00359	knob-RS	10*16.5	
613	NI00399	knob-RS	11*19mm COOL GRAY 8C_V1.3	
614	NI01863	key-RS	5.5*W10*7.5	
615	NI02252	knob cover	7*3.5 072C	
616	NI02386	konb-RS	14*13mm	

617	NI02677	knob cover	8.5*4 534C blue	
618	NI02867	knob cover	7*3.5 221U_V1.0	
619	NF02775	user manual-RS	OEX400 ALTO_V1.0	
620	NH00149	paper	889*640mm	
621	NA00671	silk wadding-RS-CT	OEX 400_V1.0	