

Service Manual

Model: S12(12-CHANNEL MIXING CONSOLE)



www.altoproaudio.com

Version: 1.2

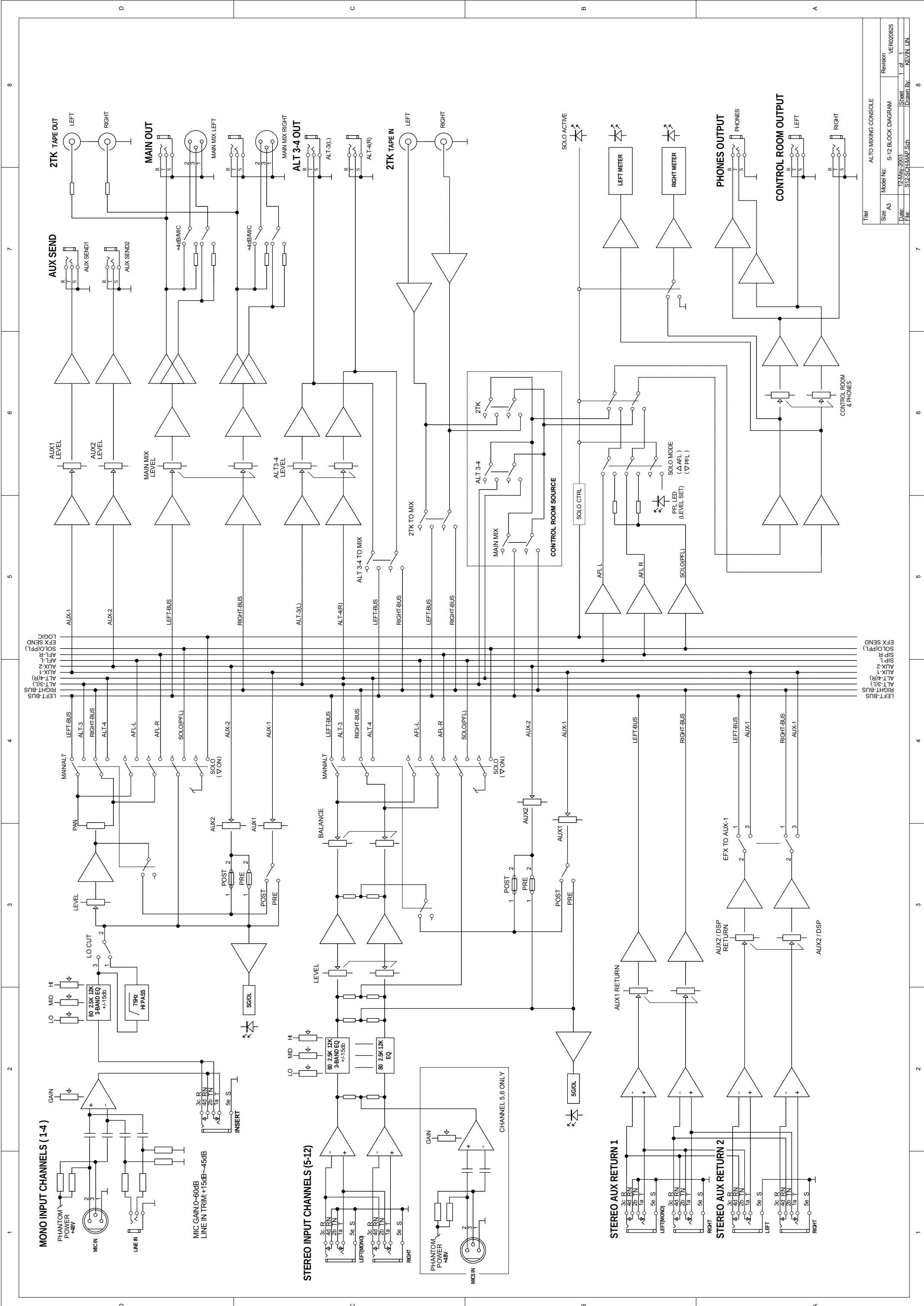
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1. SPECIFICATION (S12)

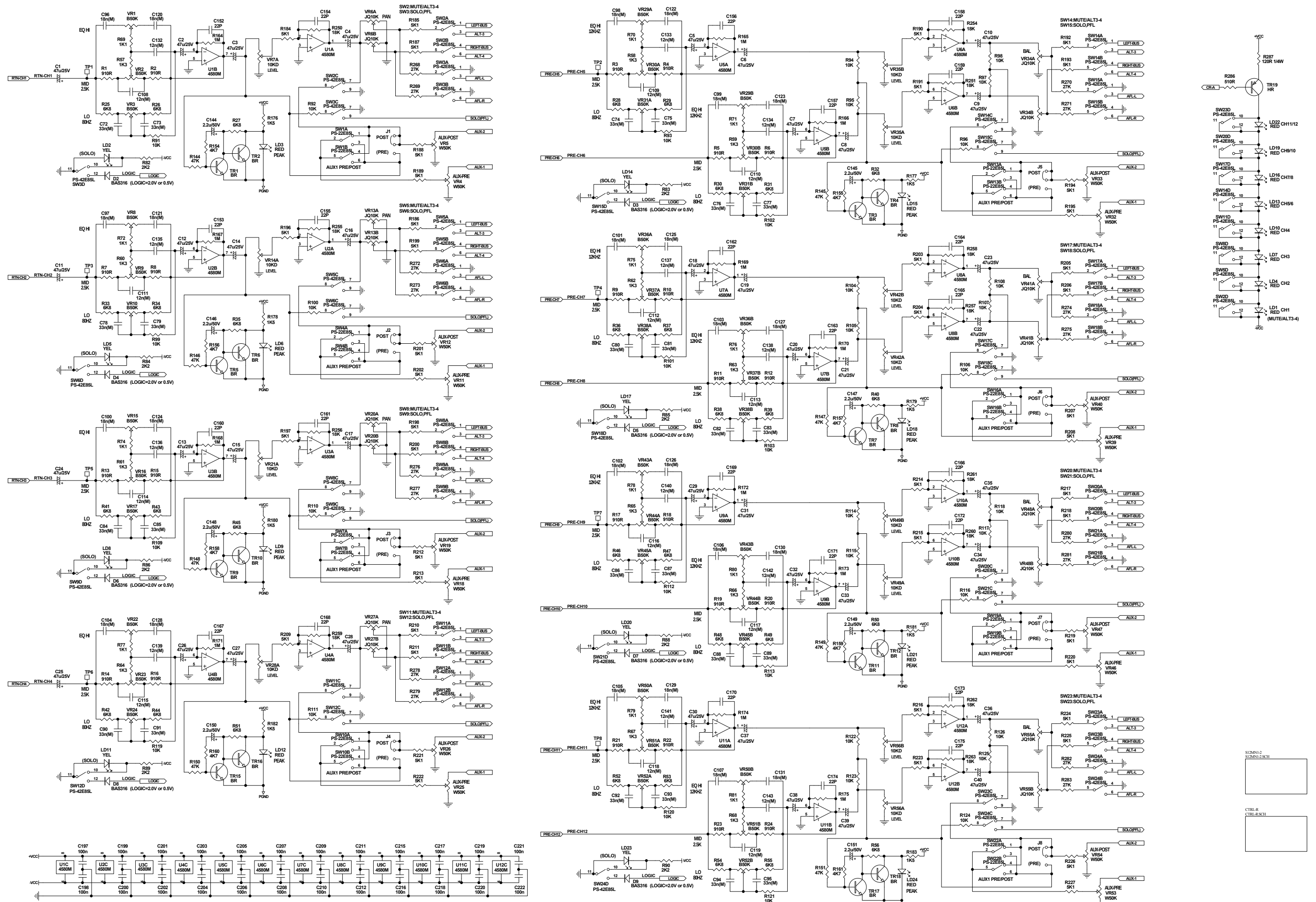
Mono input channels	
Microphone input	electronically balanced, discrete input configuration
Frequency response	10Hz to 55kHz, +/-3dB
Distortion (THD&N)	0.005% at +4dBu, 1kHz
Gain range	0dB to 60dB(MIC),
SNR (Signal Noise Rated)	115dB
Line input	electronically balanced
Frequency response	10Hz to 55kHz, +/-3dB
Distortion (THD&N)	0.005% at +4dBu, 1kHz
Sensitivity range	+15dBu to -45dBu
Stereo input channels	
Line input	unbalanced
Frequency response	10Hz to 55kHz, +/-3dB
Distortion (THD&N)	0.005% at +4dBu, 1kHz
Impedances	
Microphone input	1.4Kohm.
Channel Insert return	2.5Kohm.
All other inputs	10Kohm or greater.
Tape out	1Kohm.
All other output	120ohm.
Equalization	
Hi shelving	+/-15dB @12kHz
Mid bell	+/-12dB @2.5kHz
Low shelving	+/-15dB @80Hz
Low Cut filter	75Hz, 18dB/oct.
Main Mix Section	
Noise (Bus noise)	Fader 0 dB, channels muted:-100.0dBr (ref.:+4dBu) Fader 0dB, all input channels assigned and set to UNITY gain:-90dBr(ref.:+4dBu)
Max output	+22dBu balanced XLR, +22dBu unbalanced, 1/4" jacks
AUX Return gain range	OFF to +20dB
AUX Sends max out	+22dBu
Power supply	
Main voltage	USA/Canada100-120V~, 60Hz Europe210-240V~, 50Hz U.K./Australia240V~, 50Hz
Power Consumption	23watts
Fuse	100-120V~ : T500mAL 200-240V~ : T250mAL
Main connection	Standard IEC receptacle
Physical	
Dimension (WXDXH)	300mmX355mmX28/80mm (11.8"x14.0"x0.8"/3.1")
Net weight	4.04Kg (8.908lb)

2.Block Diagram

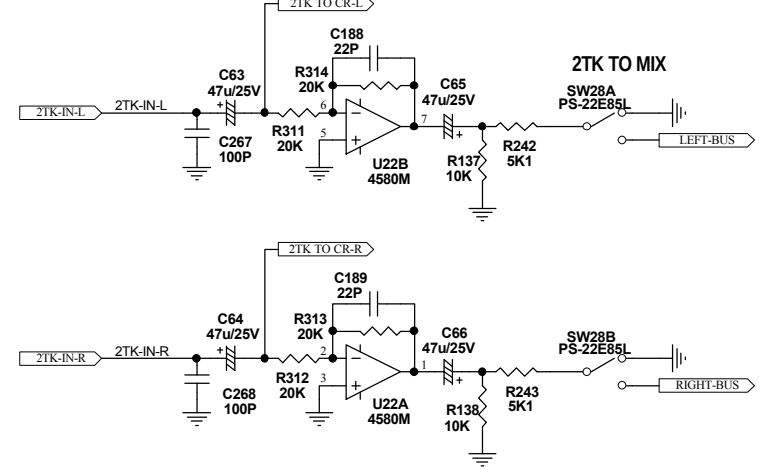
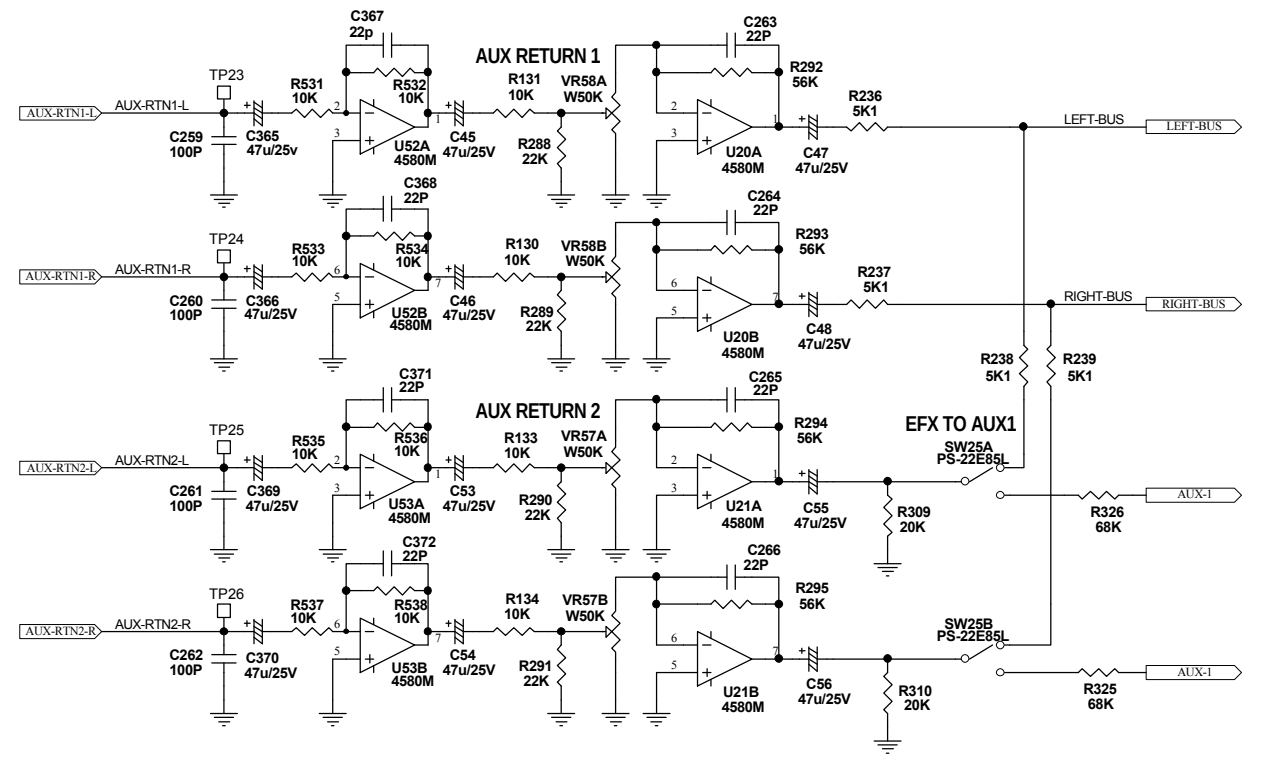
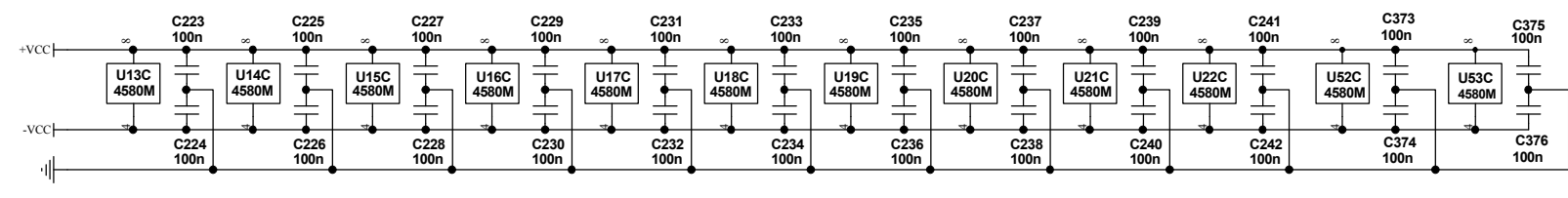
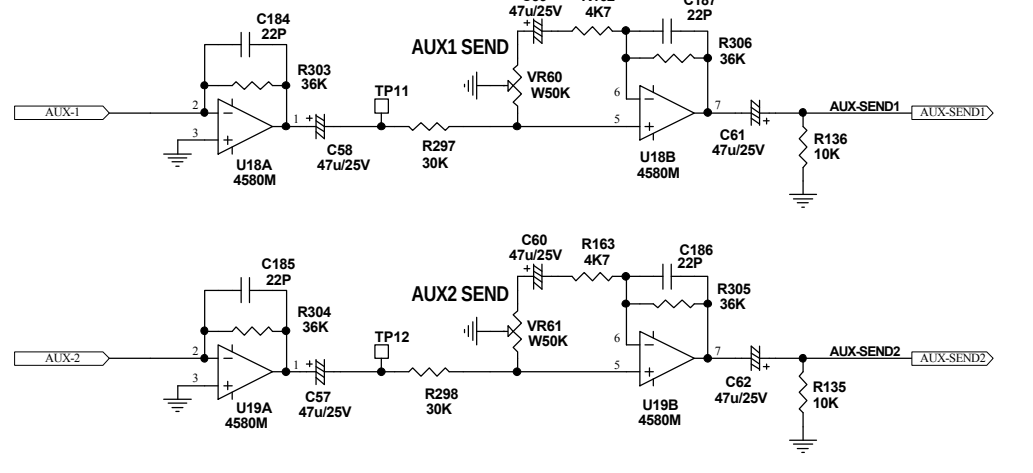
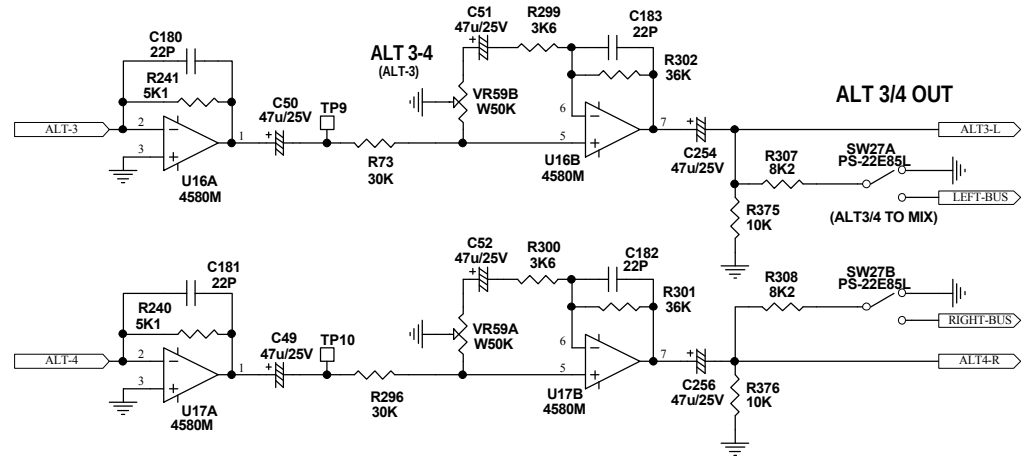
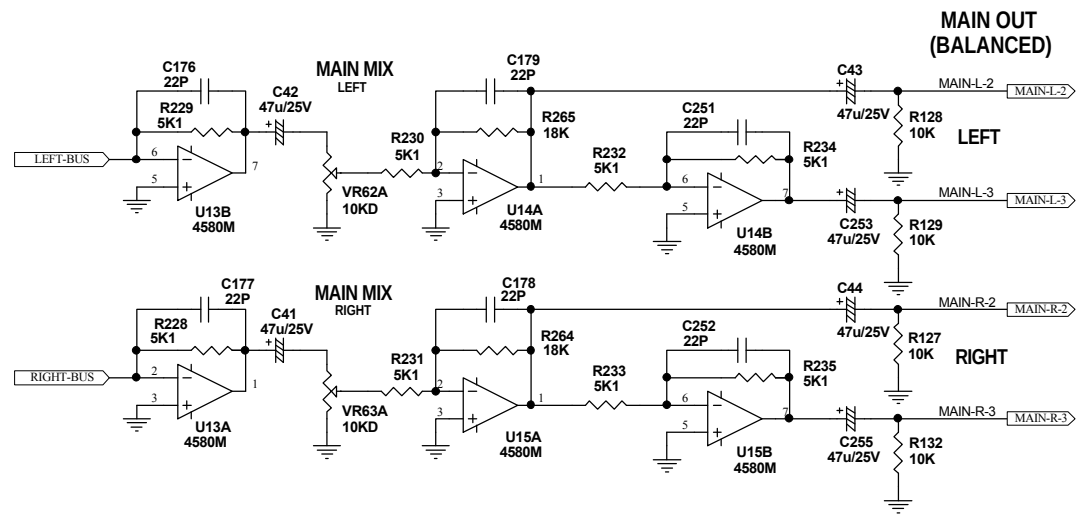


Title		ALTO MIXING CONSOLE	
Size	Model No.	Revision	Revision
A3	S-12 BLOCK DIAGRAM	1	VER020625
Date:	Drawn By:	Sheet	1 of 1
12 May 2003	STP-SCHMAP Sch.	Drawn	KEVIN LIN

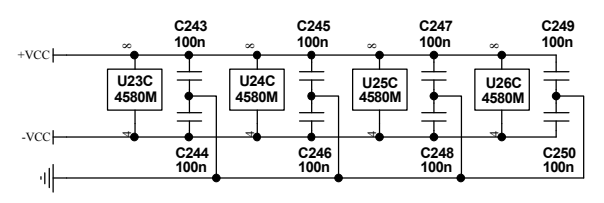
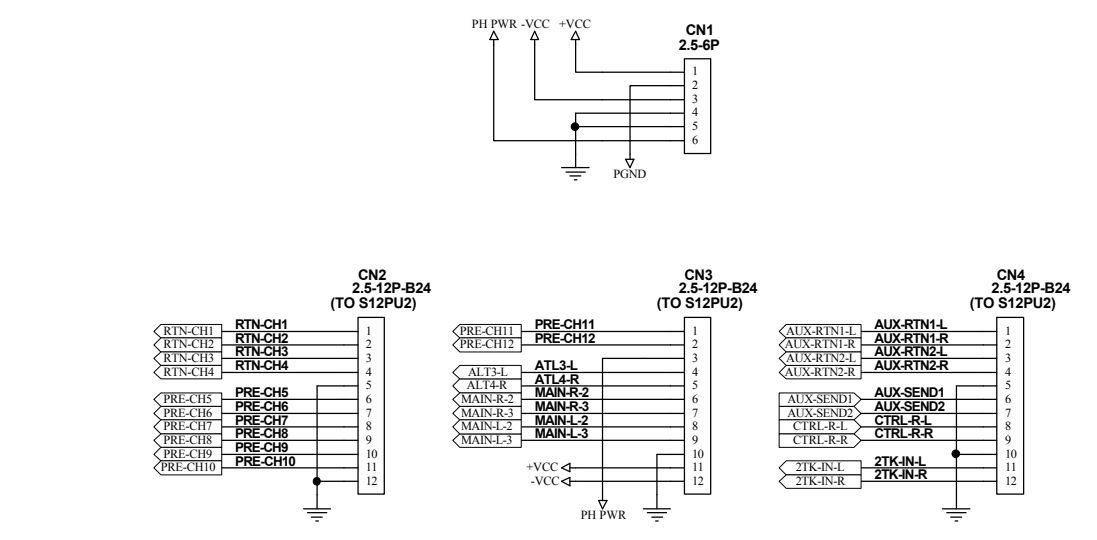
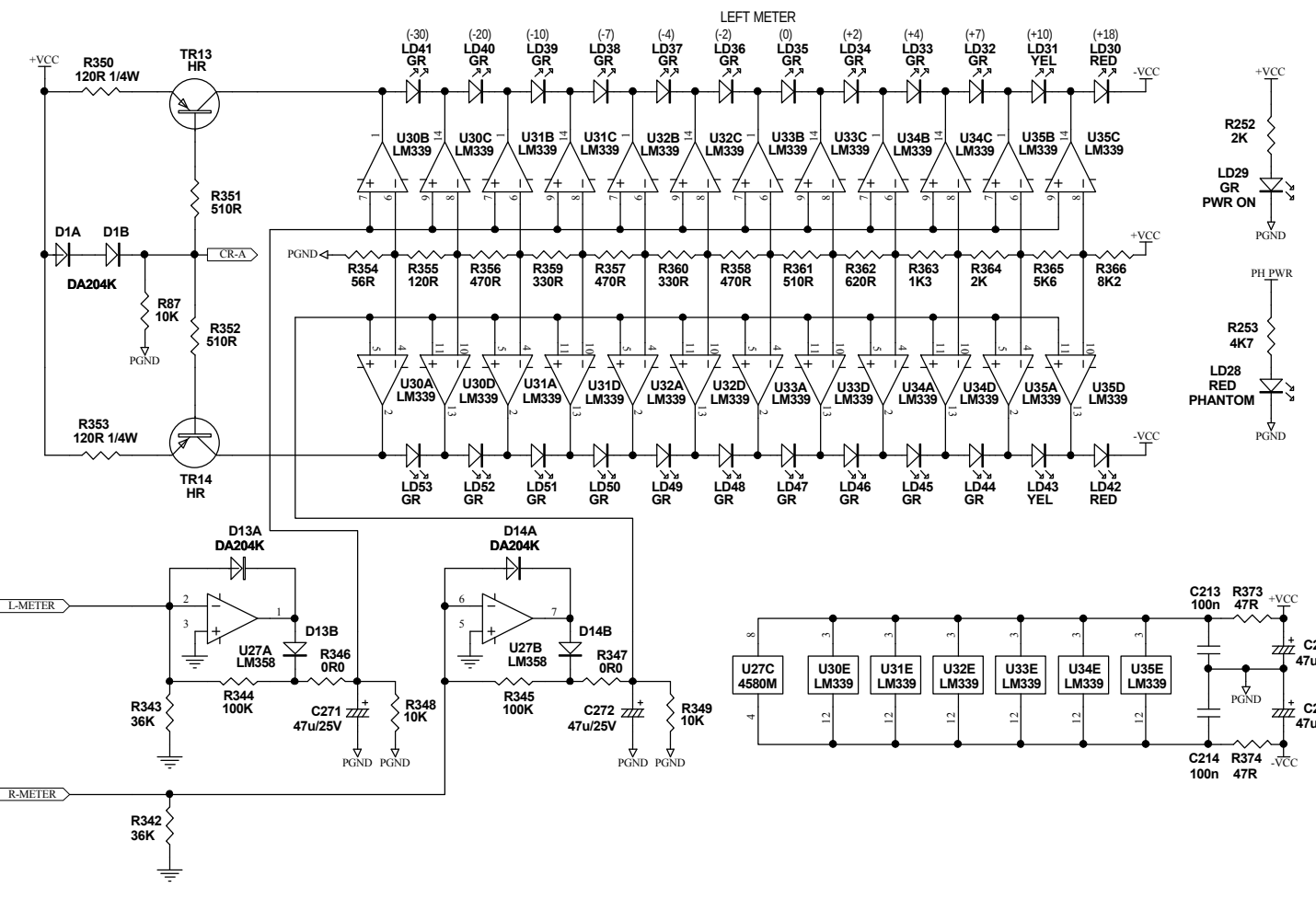
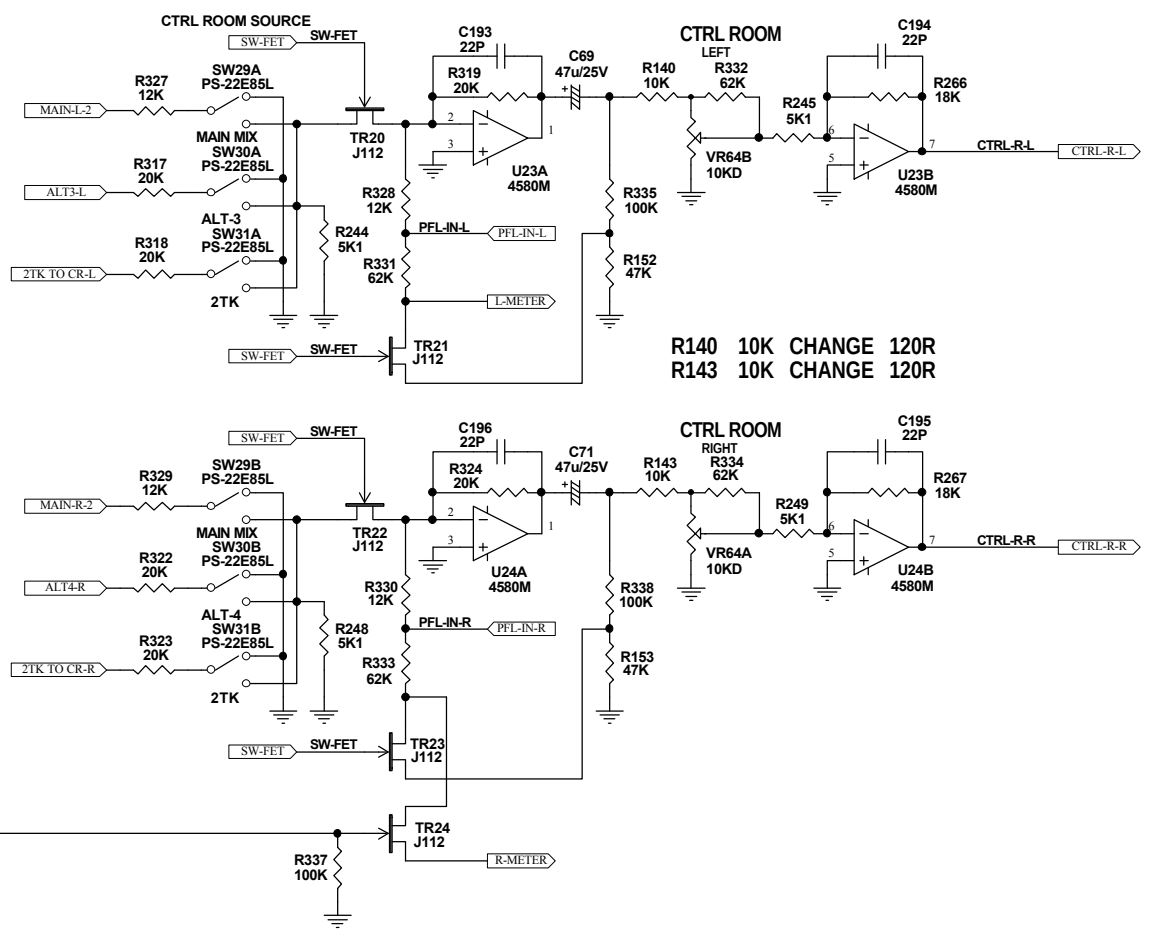
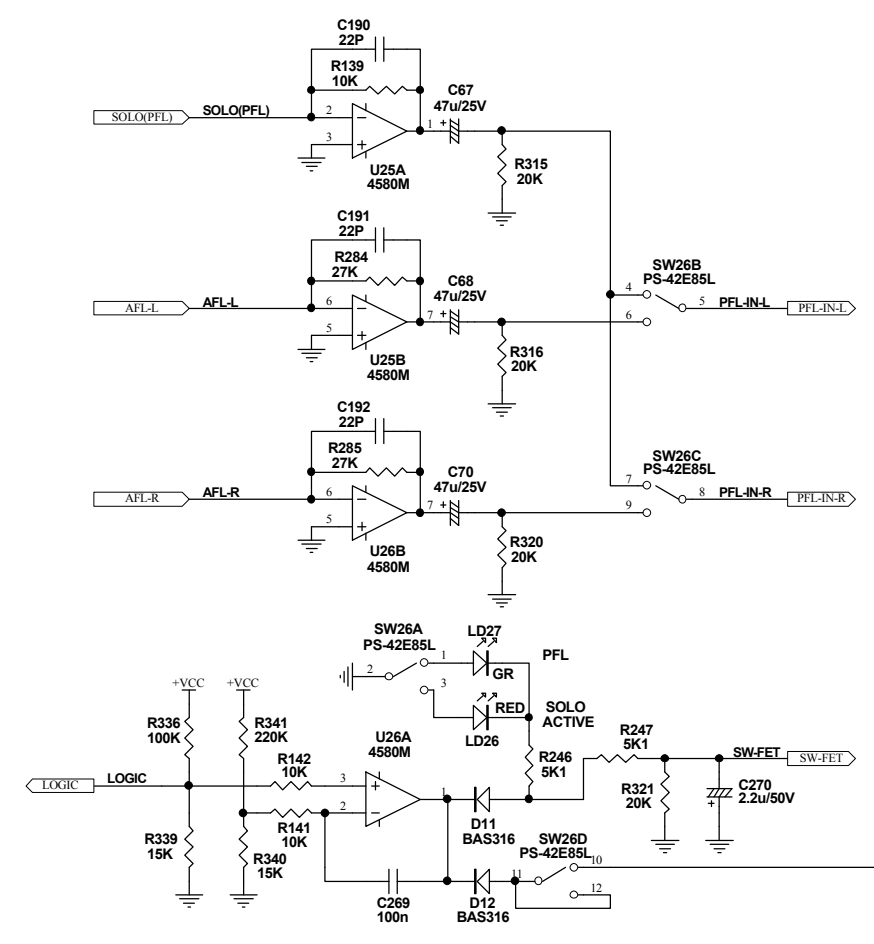
3. Schematic Diagram



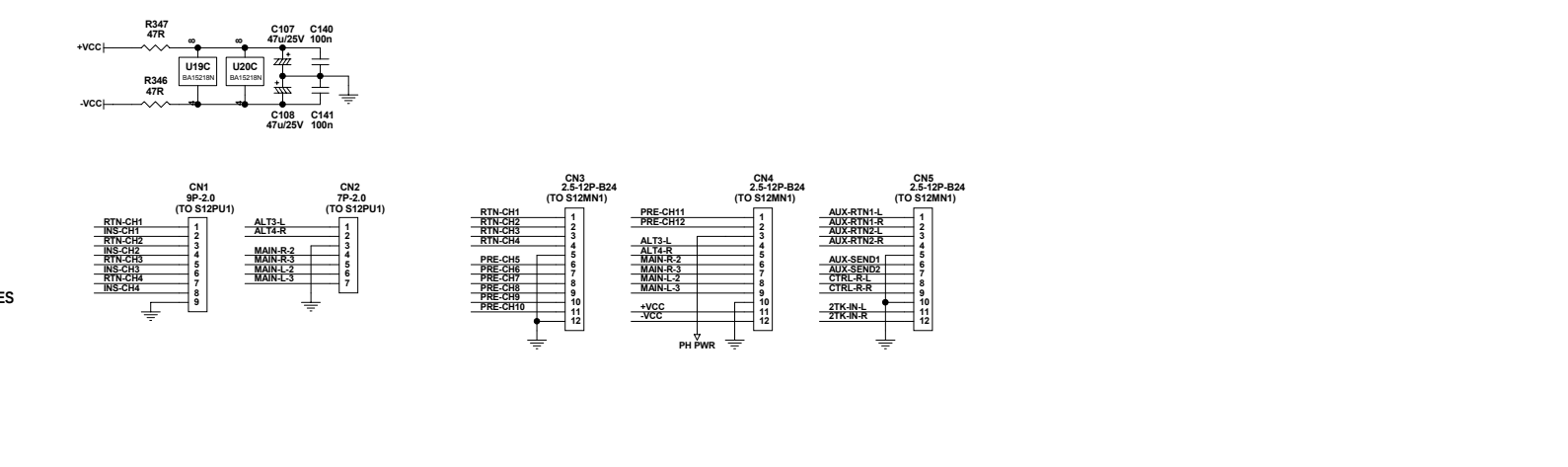
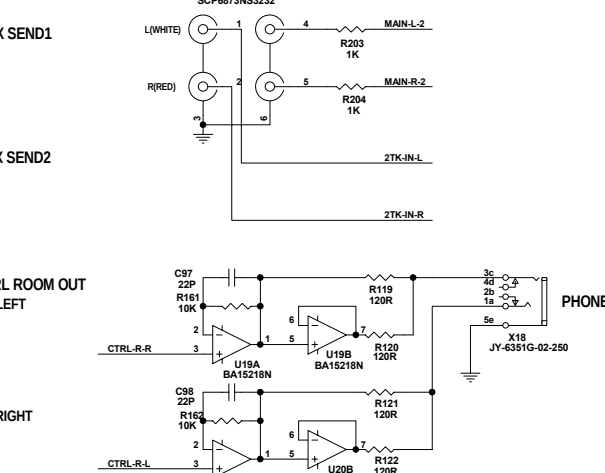
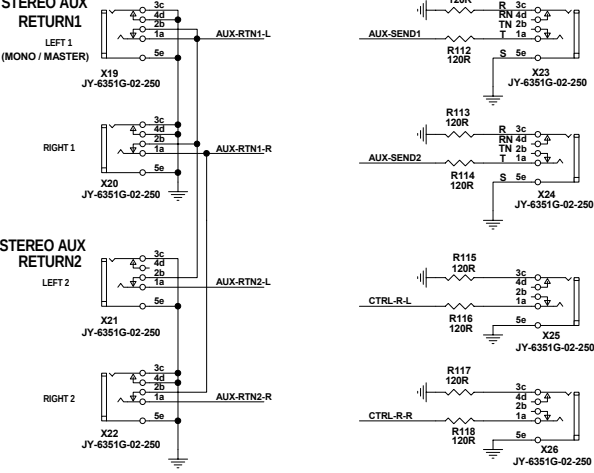
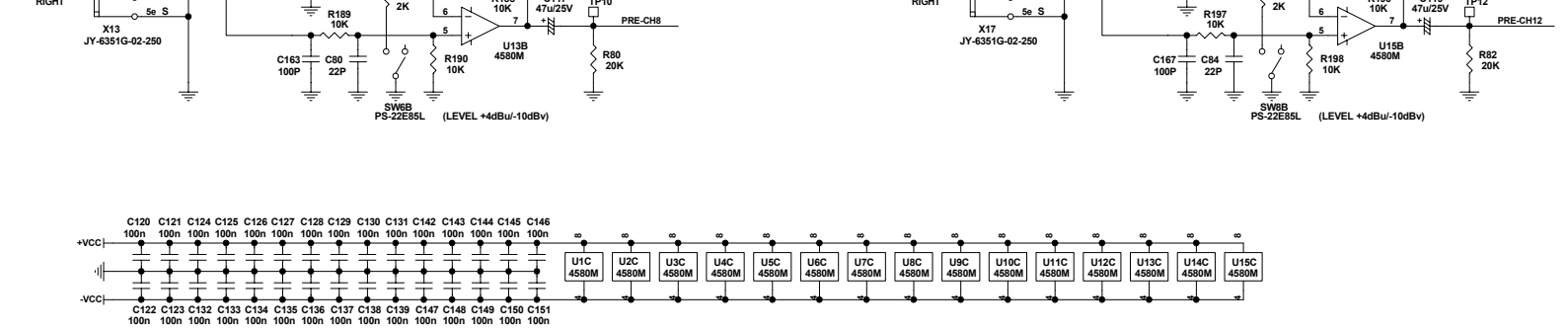
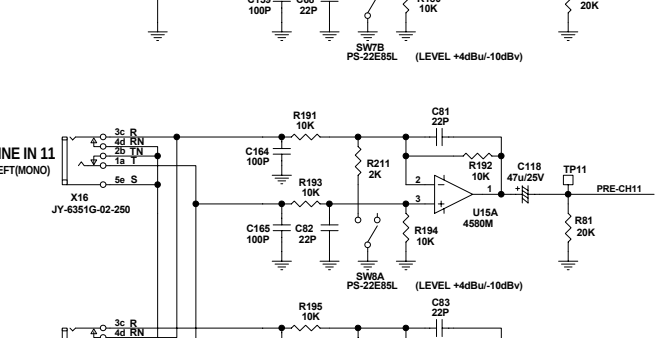
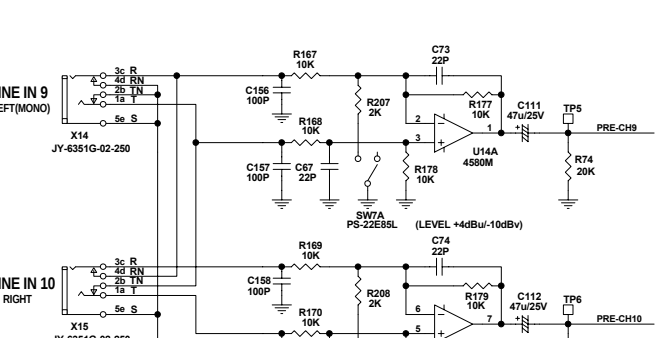
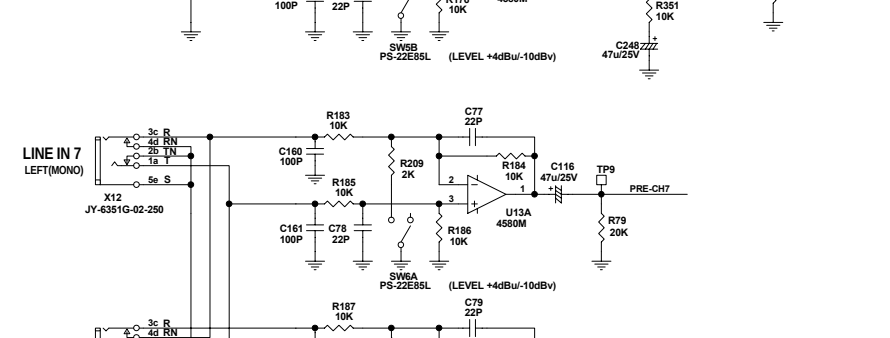
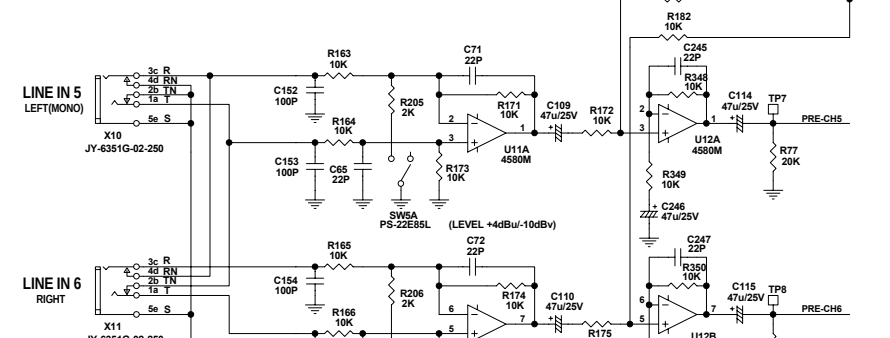
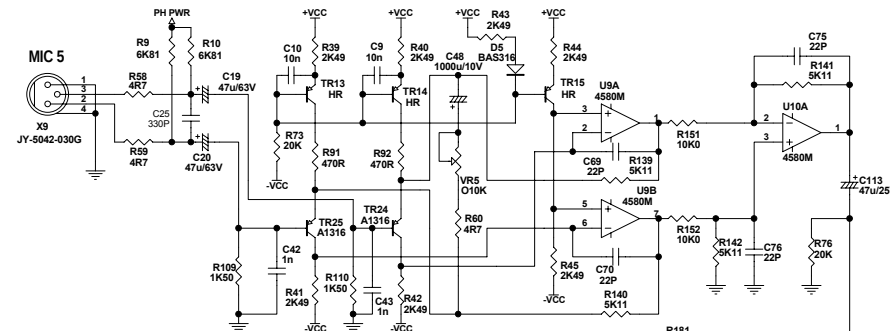
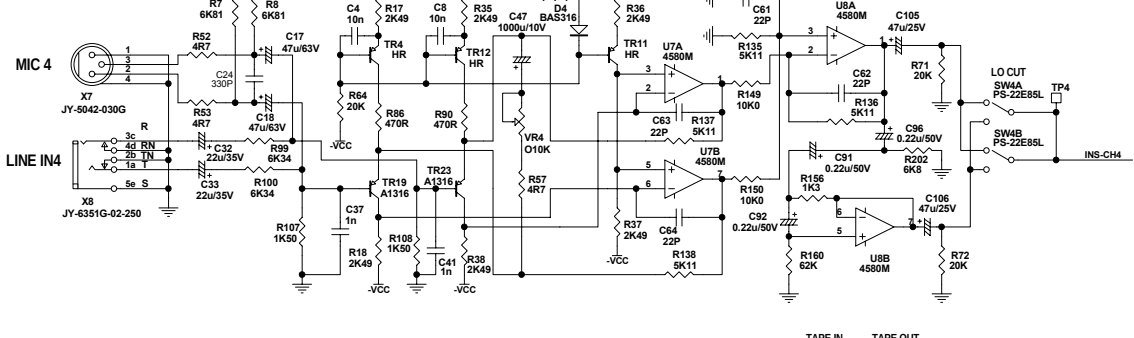
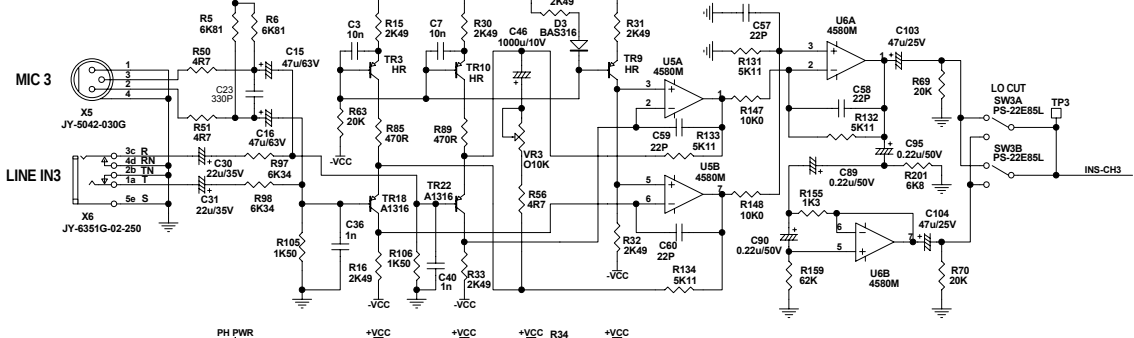
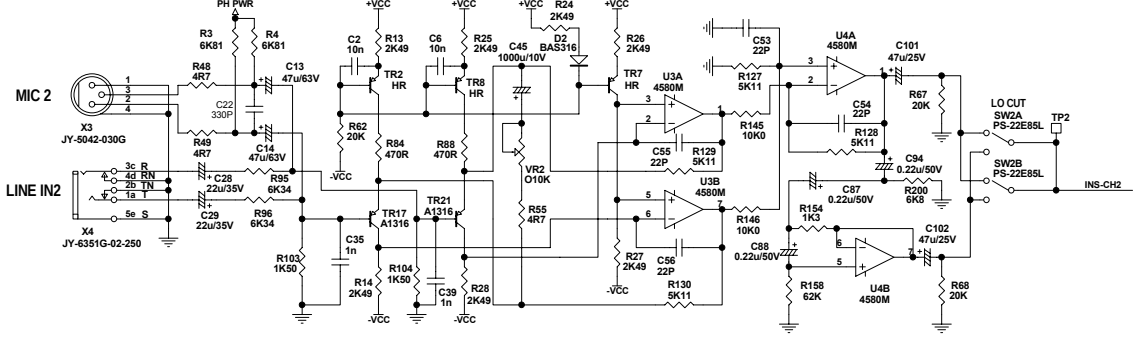
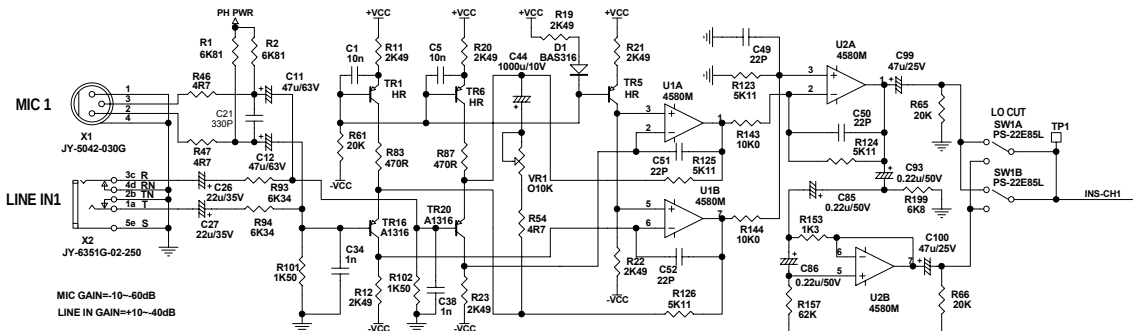
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Model No.:	ALTO S-12	Revision:	VER021115
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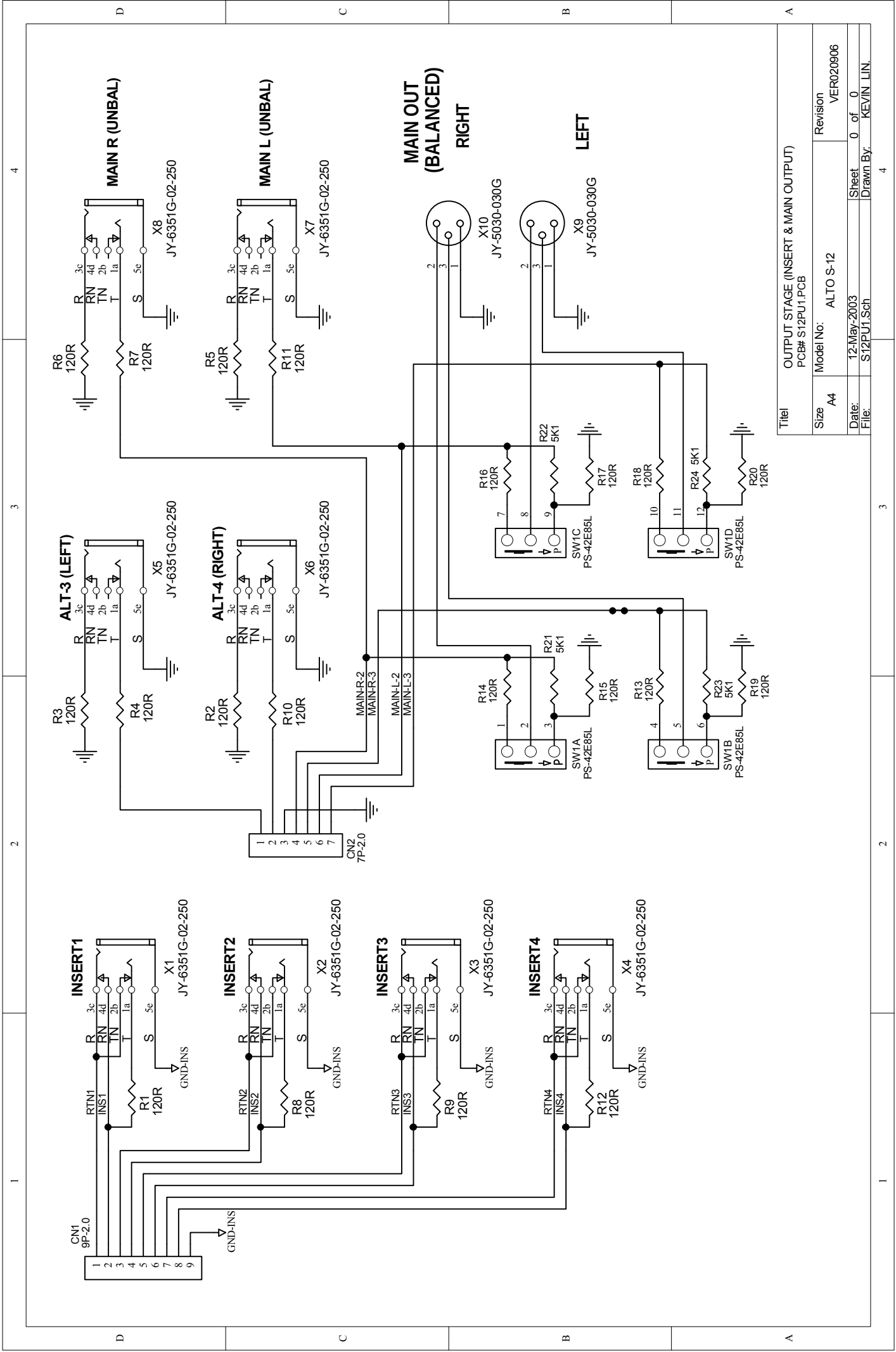


Title: PCB#S12MN1.PCB		
Size: A2	Model No: ALTO S-12	Revision: VER021115
Date: 12-May-2003	Sheet: 2 of 3	Drawn By: KEVIN LIN
File: S12MN1-2.SCH		



Title PCB#S12MN1.PCB		
Size A2	Model No. ALTO S-12	Revision VER021115
Date: 12-May-2003	Sheet 3 of 3	Drawn By: KEVIN LIN
File: CTRL-R.SCH		





Title		OUTPUT STAGE (INSERT & MAIN OUTPUT)	
Size	A4	Model No.	ALTO S-12
Date:	12-May-2003	Revision	VER020906
File:	S12PU1.Sch	Sheet	0 of 0
		Drawn By:	KEVIN LIN

1

2

3

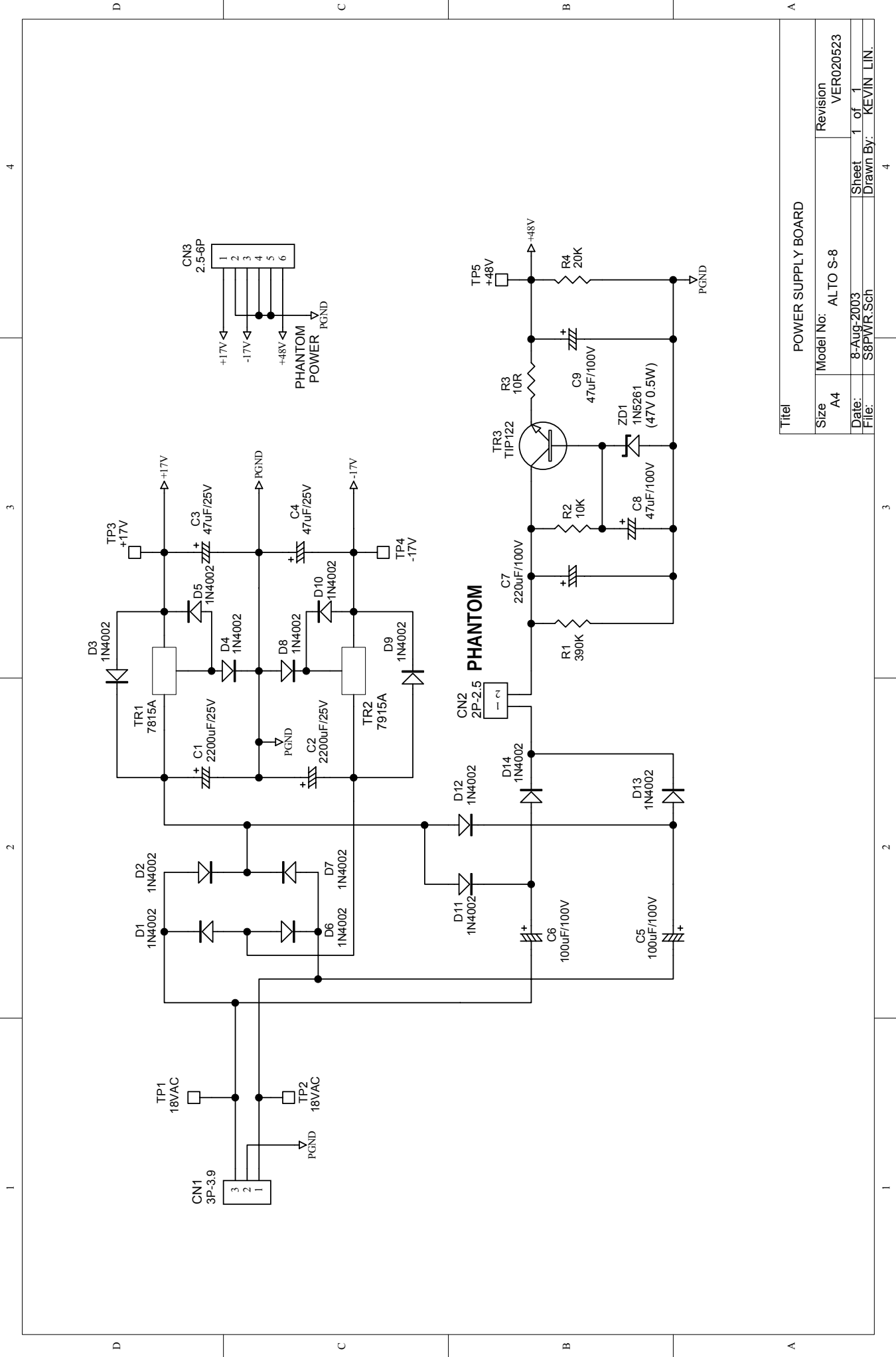
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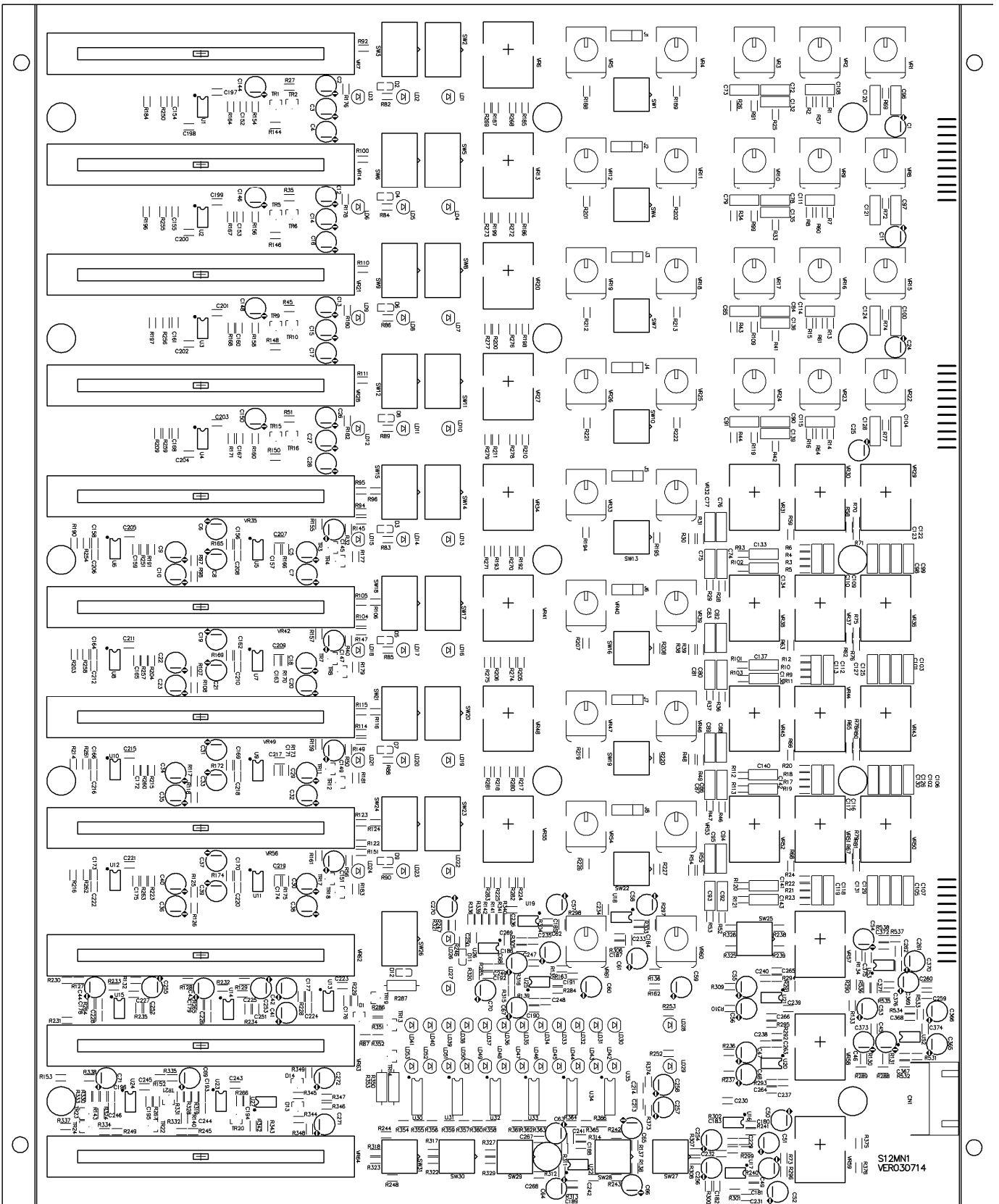
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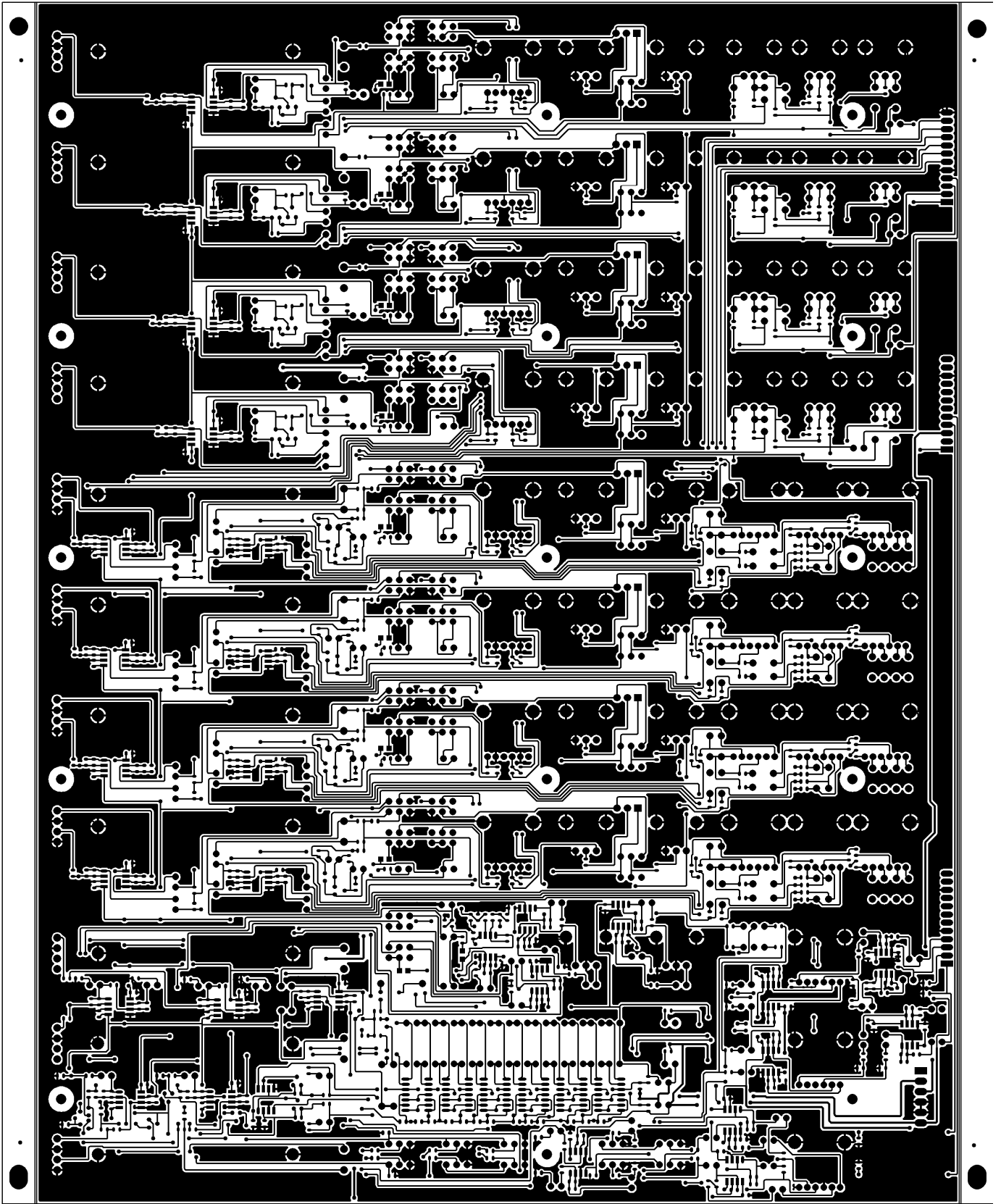


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Size	Model No:	Revision	
A4	ALTO S-8	VER020523	
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File:	S8PWR.Sch	Drawn By:	KEVIN LIN.

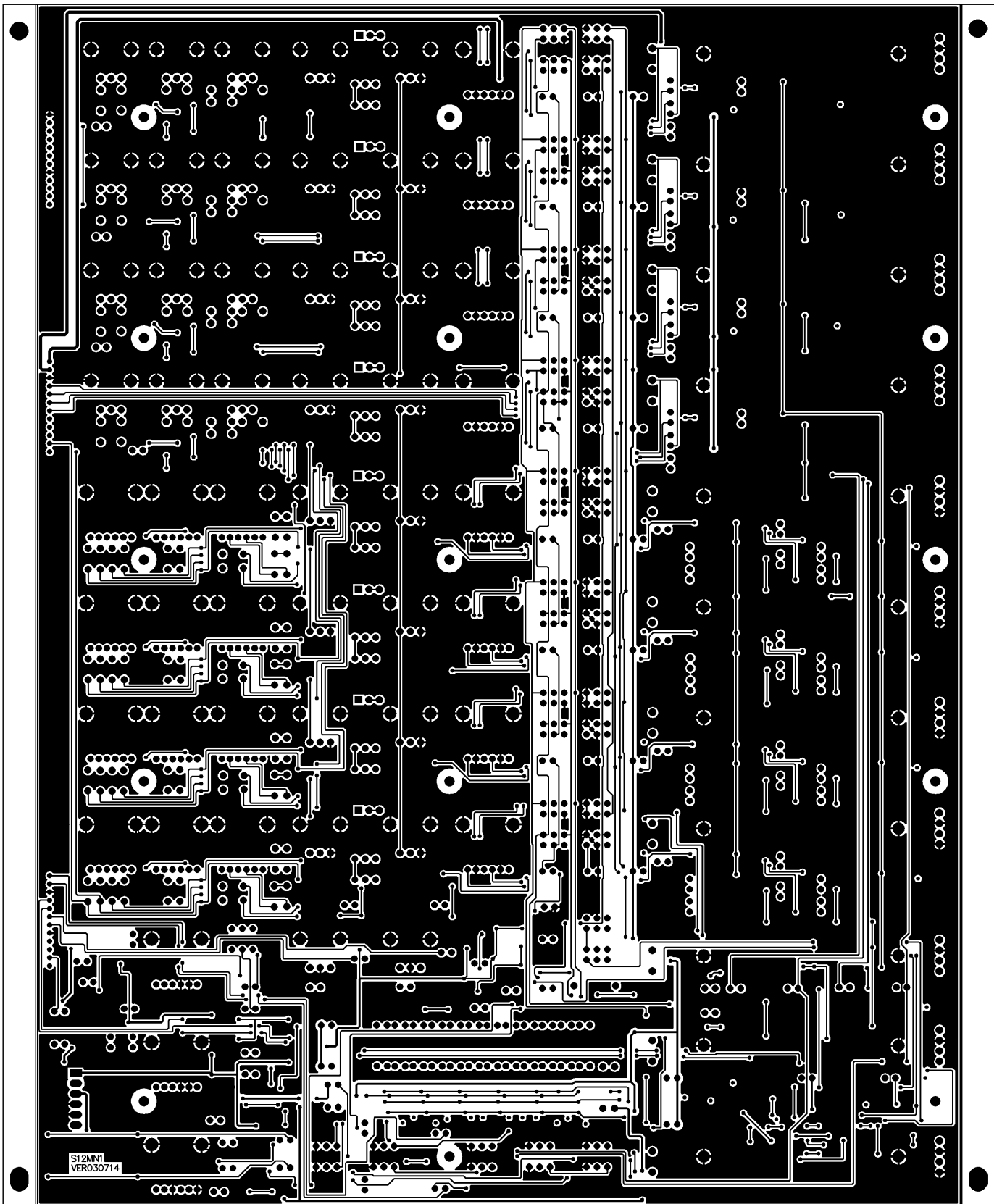
4. PRINTED CIRCUIT DIAGRAM



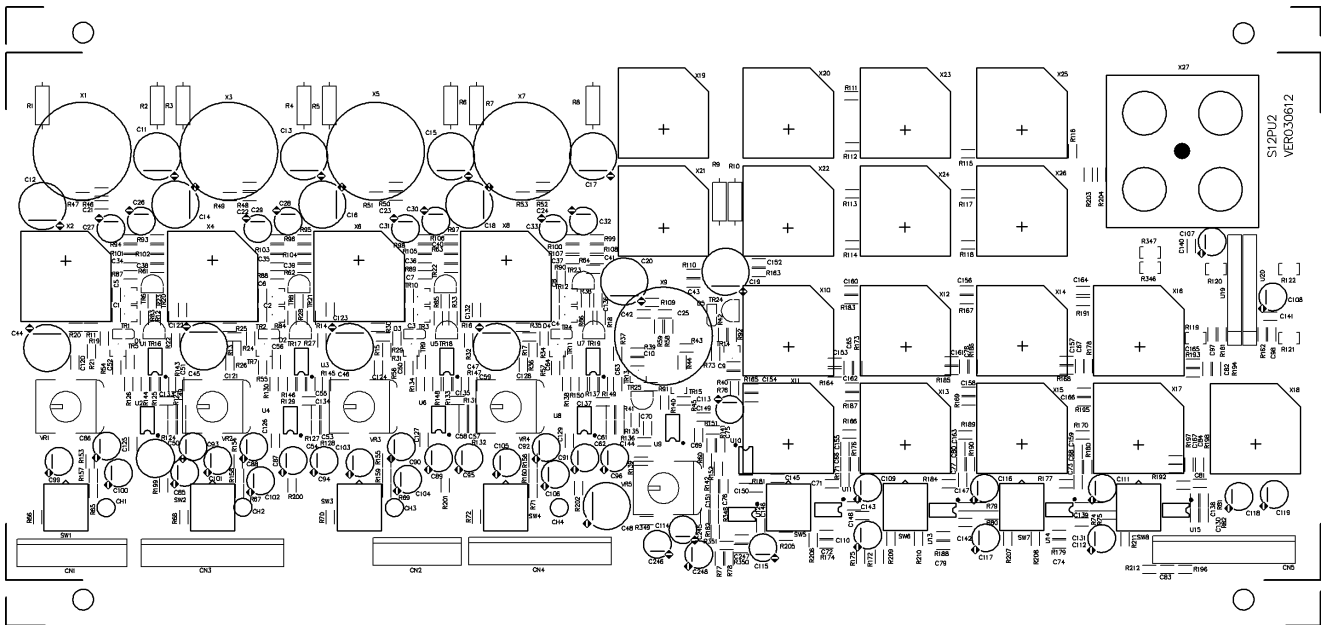
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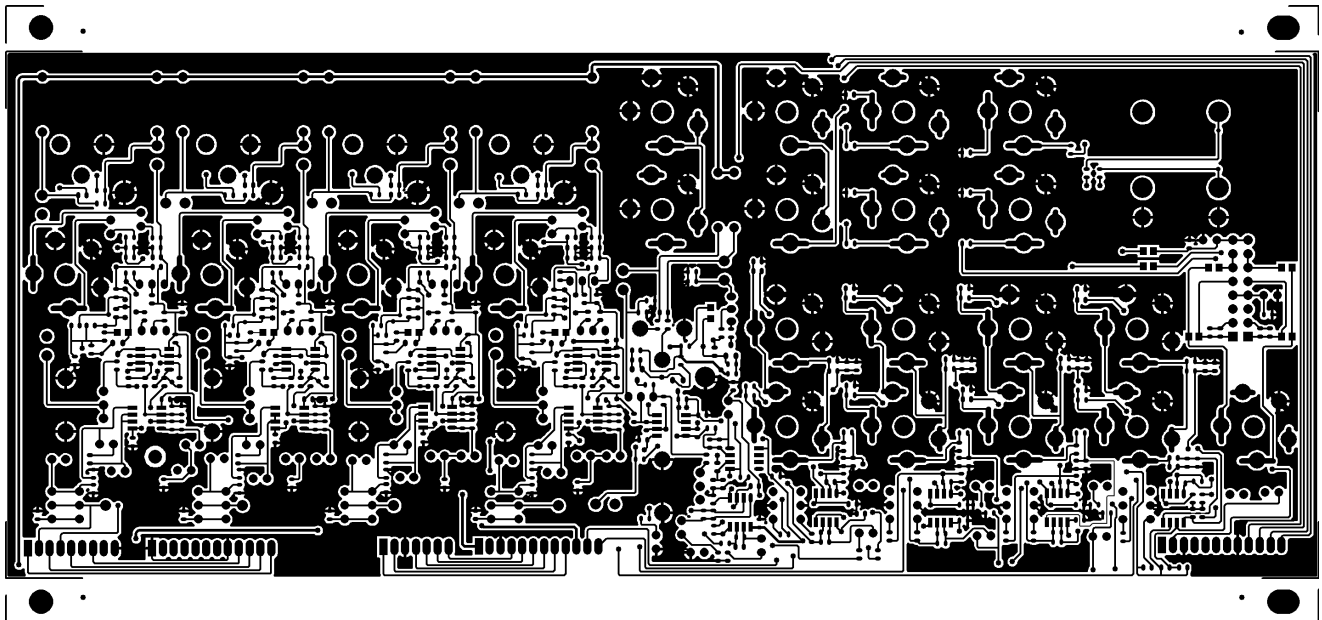
PCB : S12MN1 Top Layer



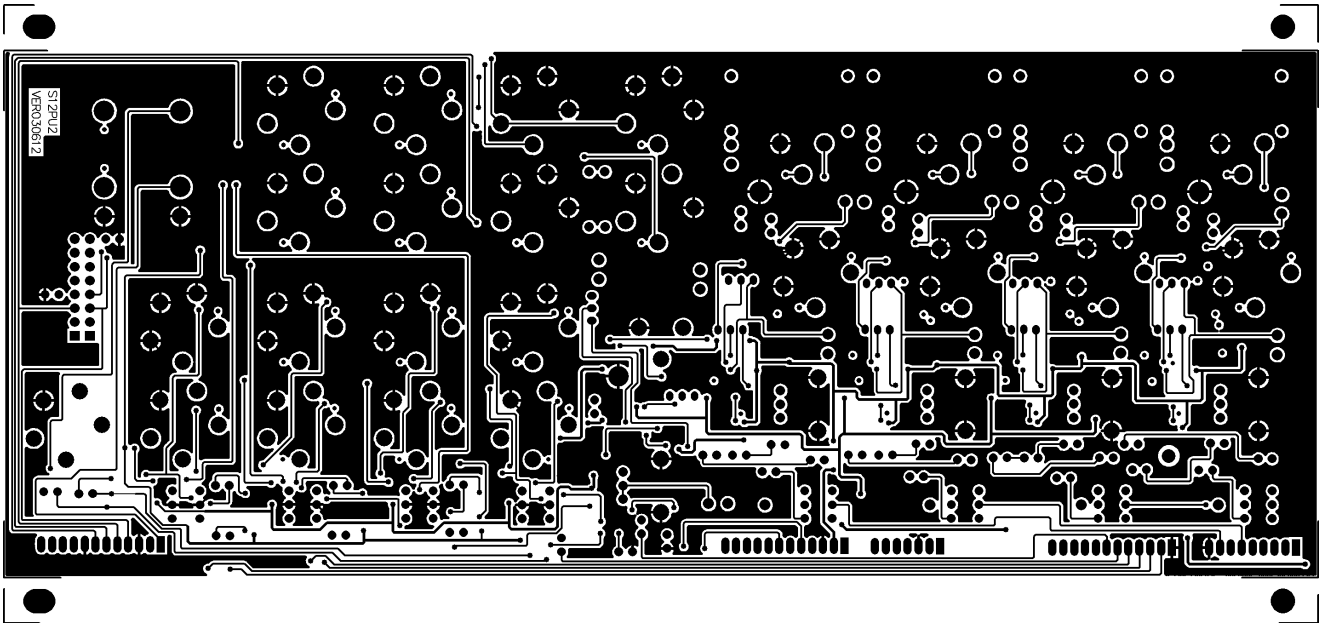
PCB : S12MN1 Bottom Layer



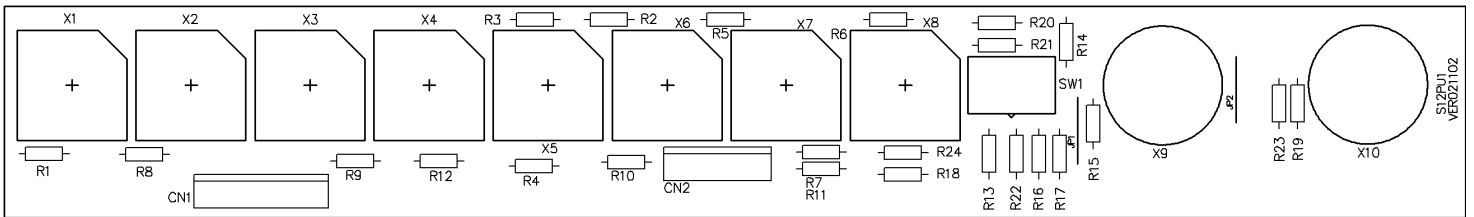
PCB : S12PU2 Top Overlay



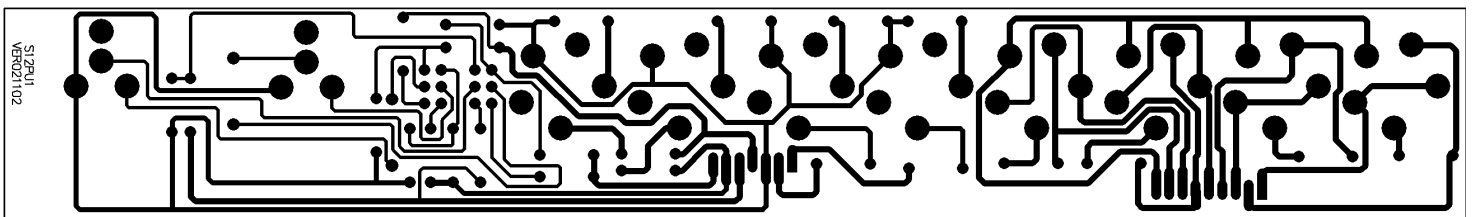
PCB : S12PU2 Top Layer



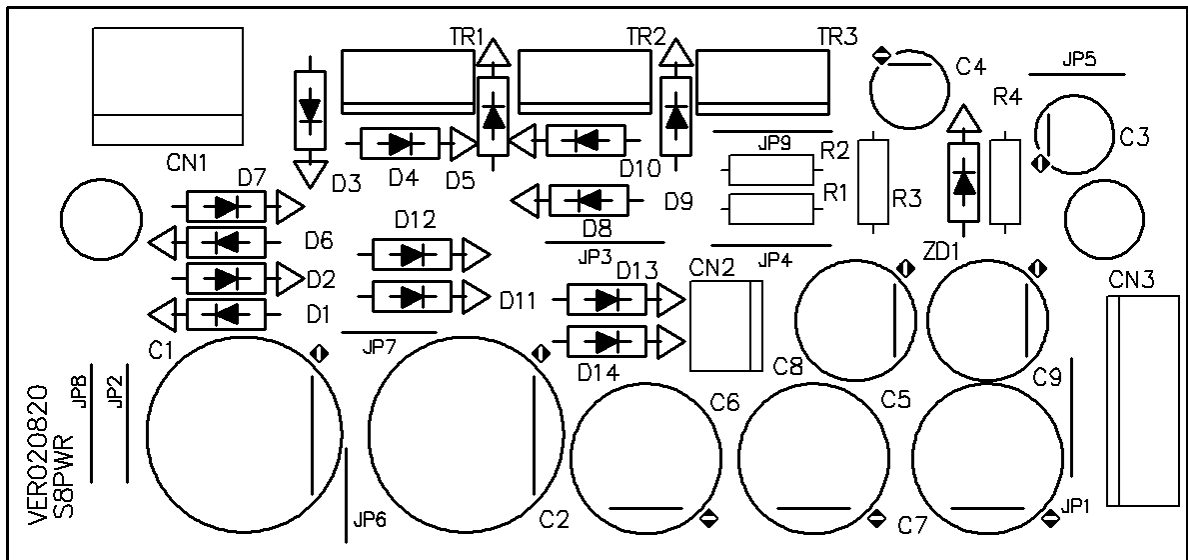
PCB : S12PU2 Bottom Layer



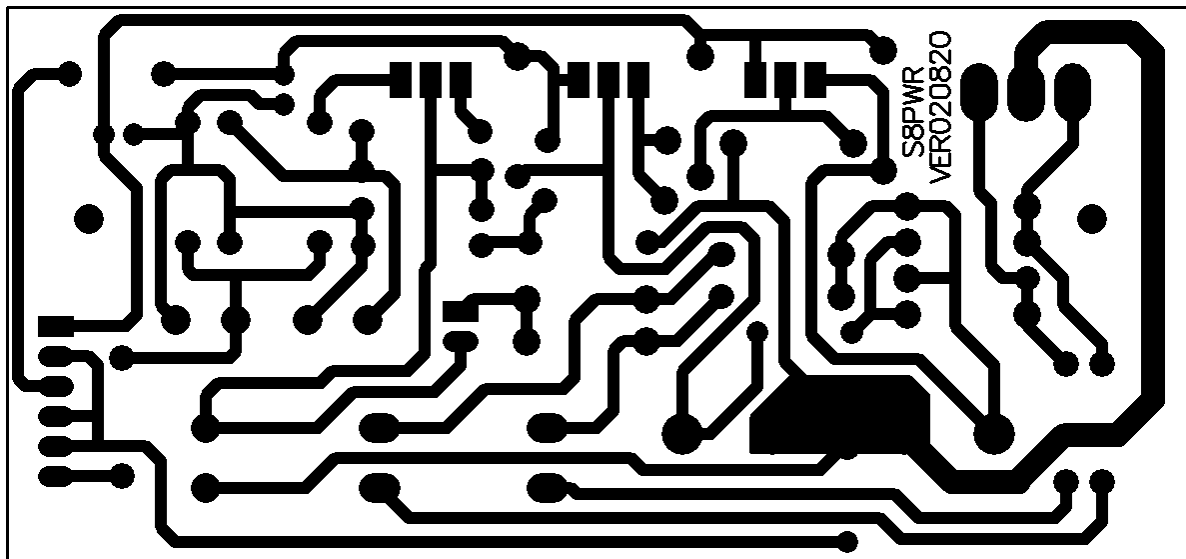
PCB : S12-PU1 Top Overlay



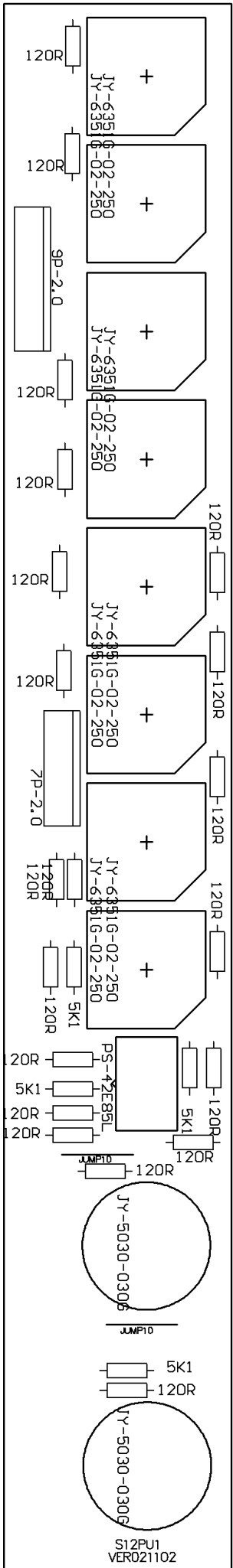
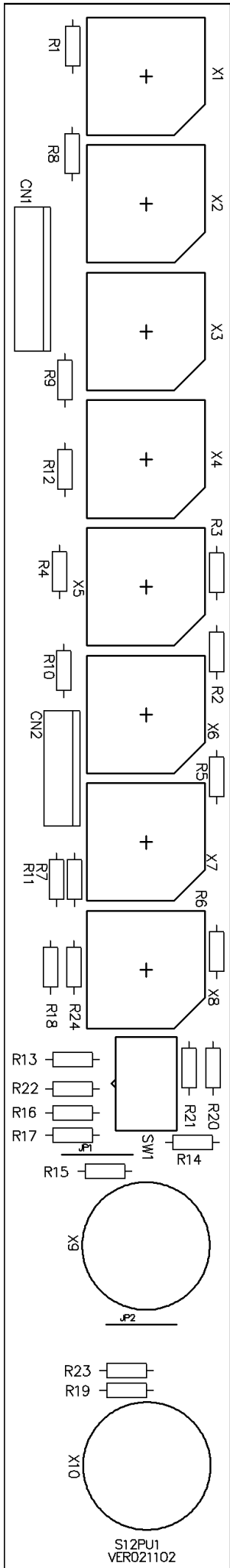
PCB : S12-PU1 Bottom Layer

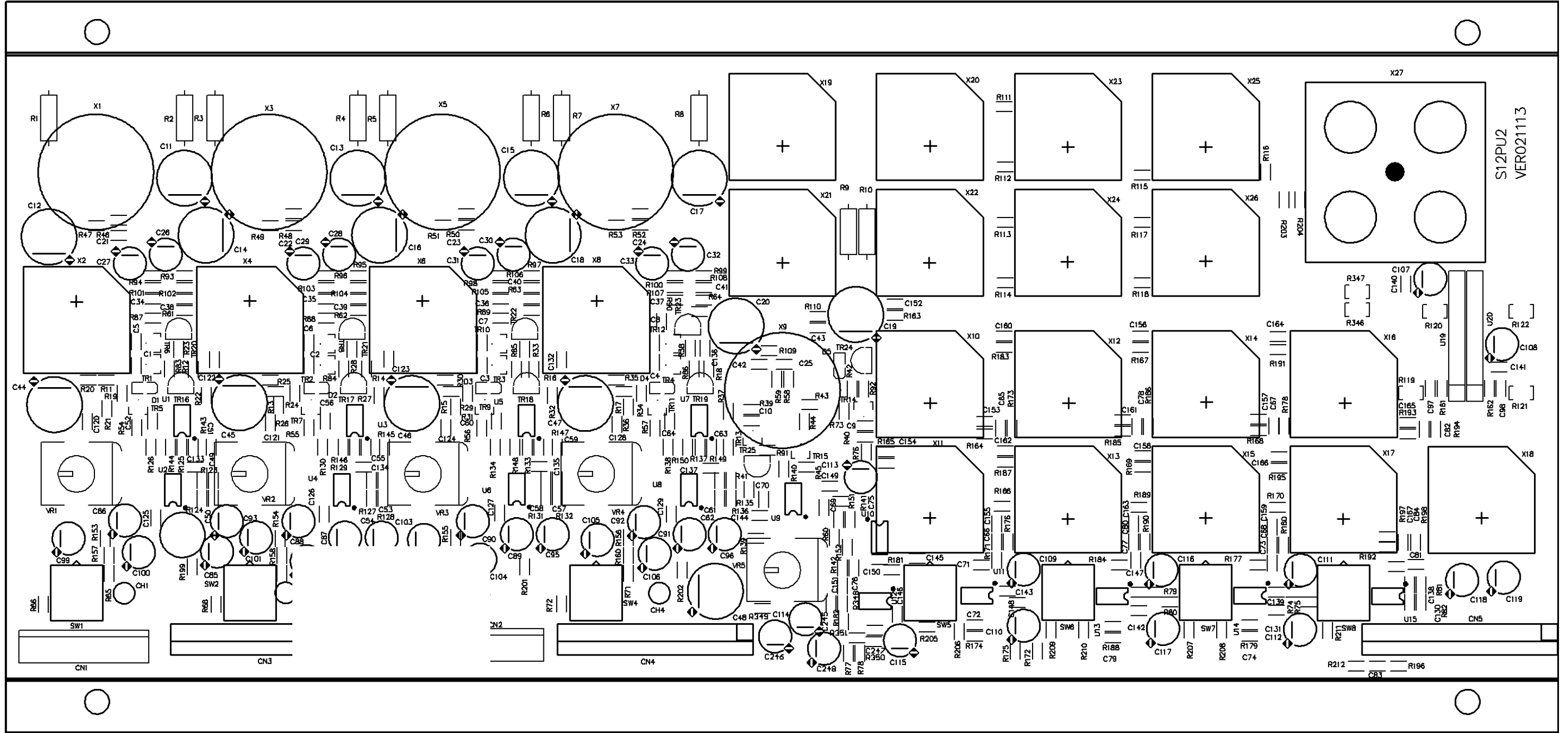


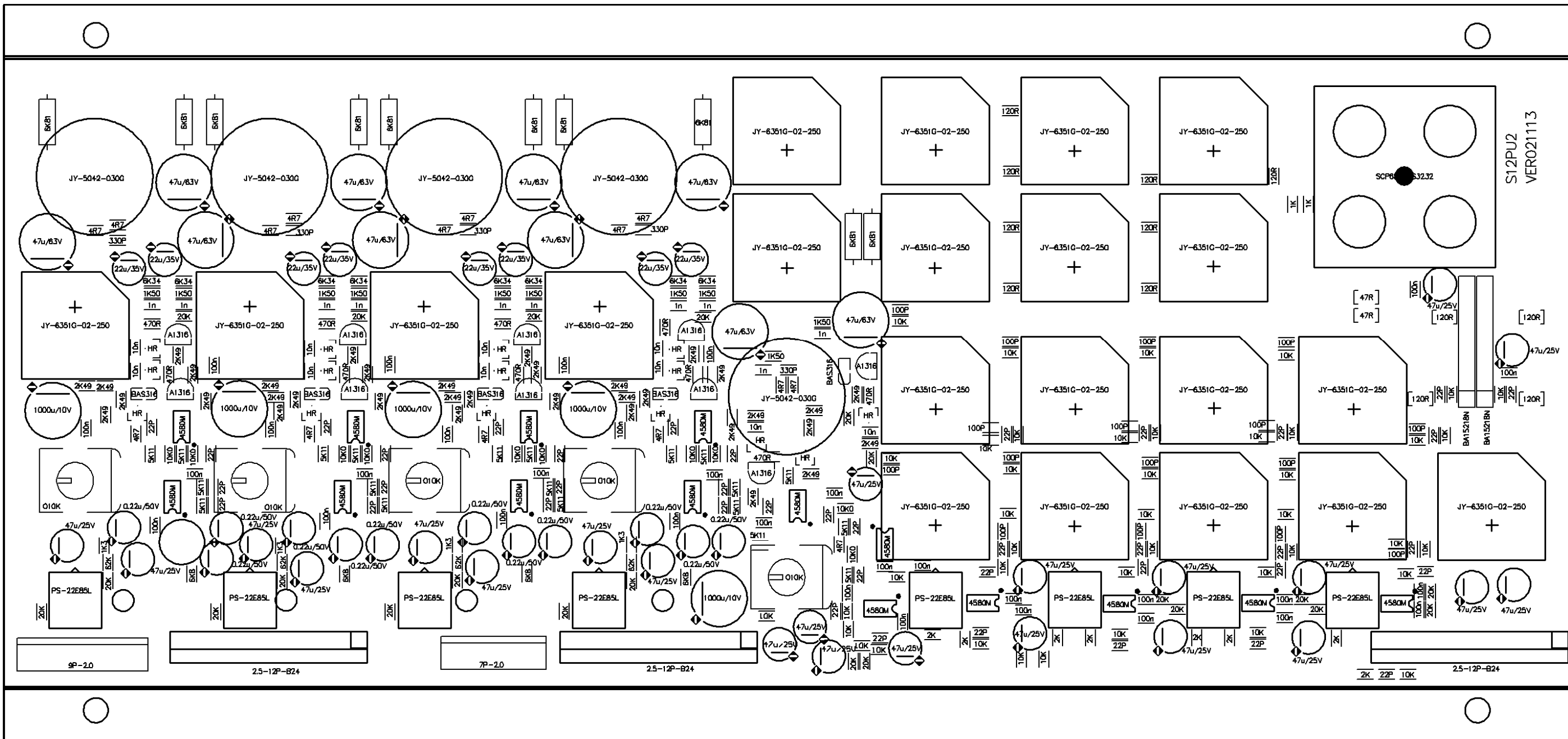
PCB : S8PWR Top Overlay

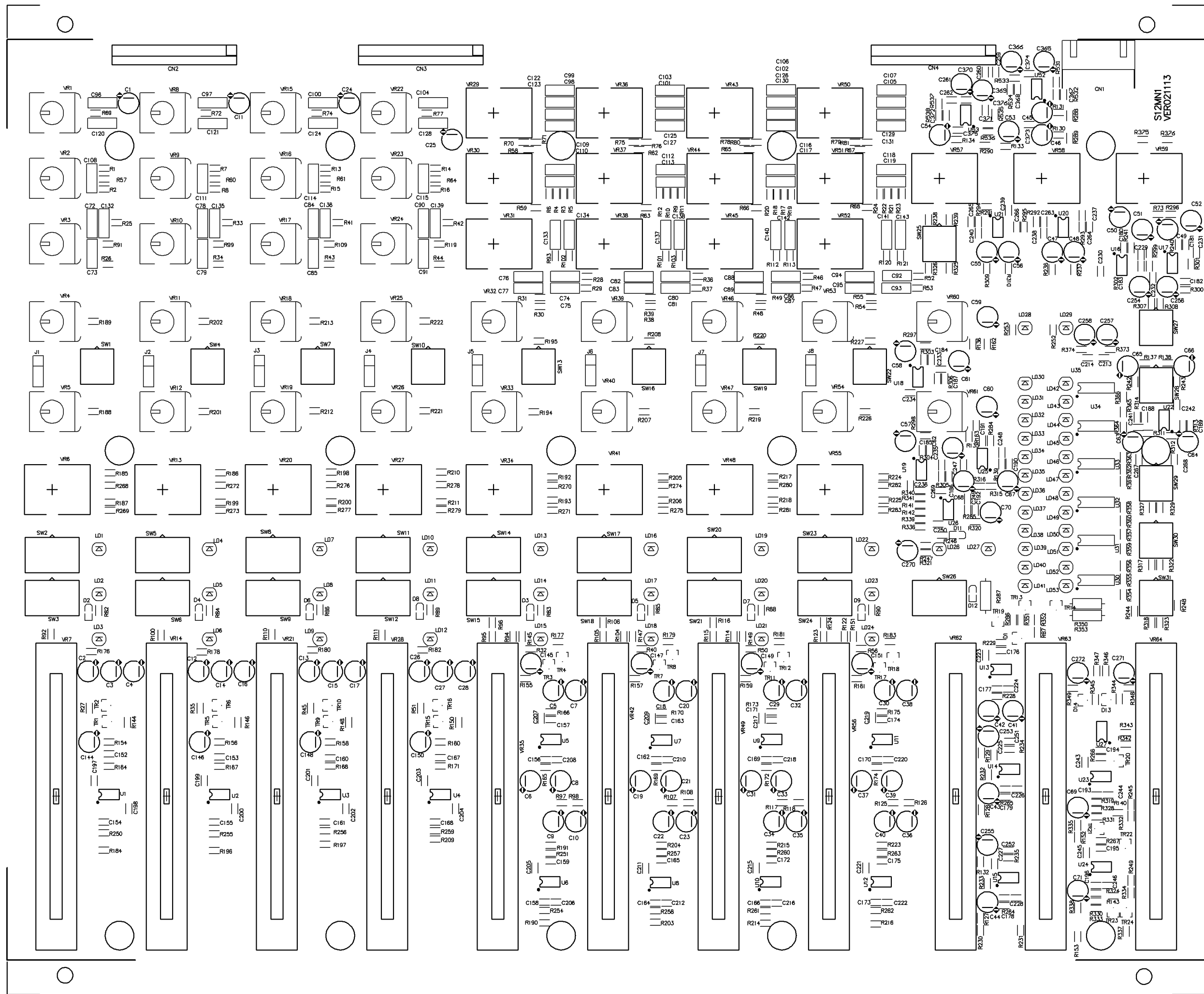


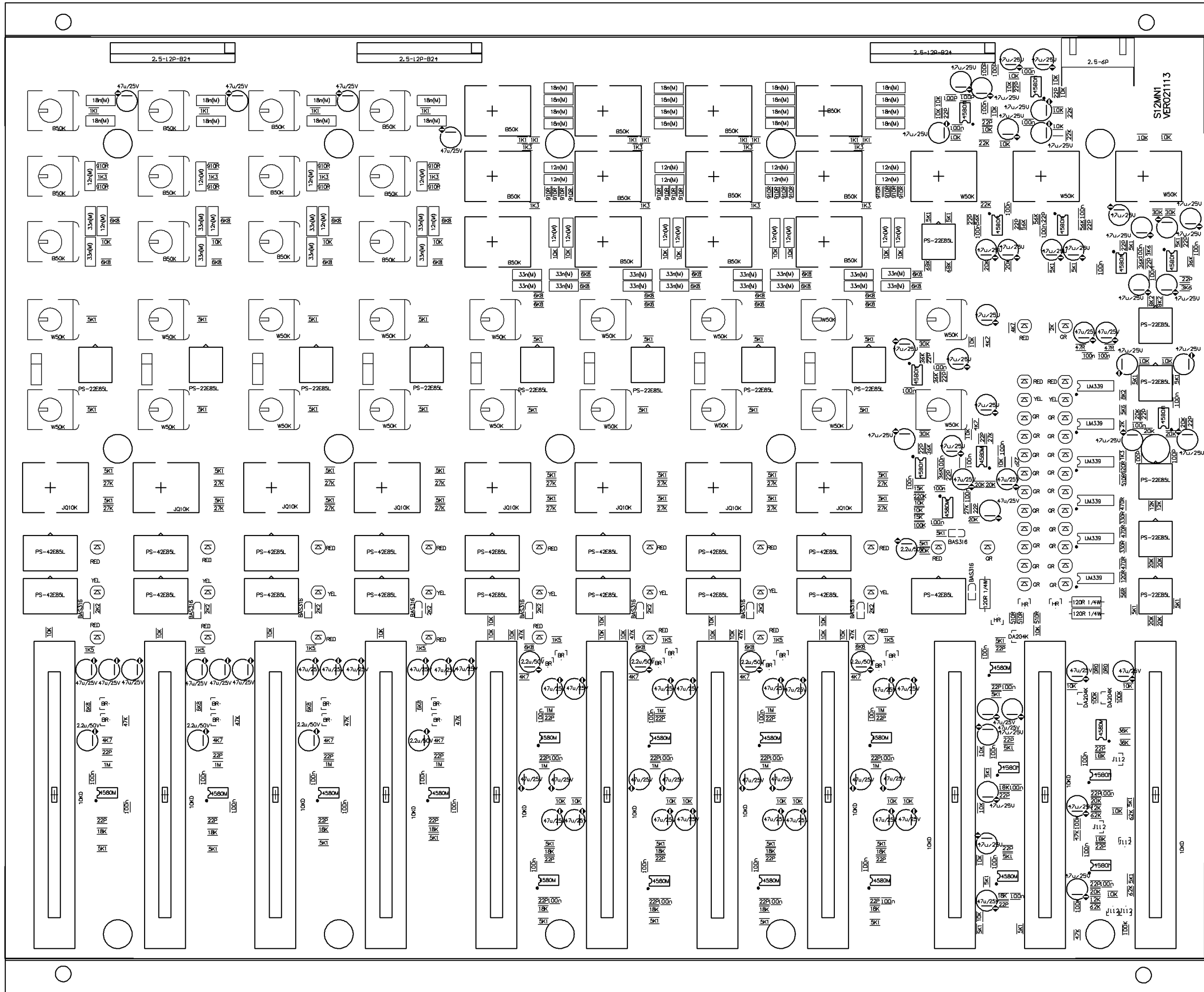
PCB : S8PWR Bottom Layer

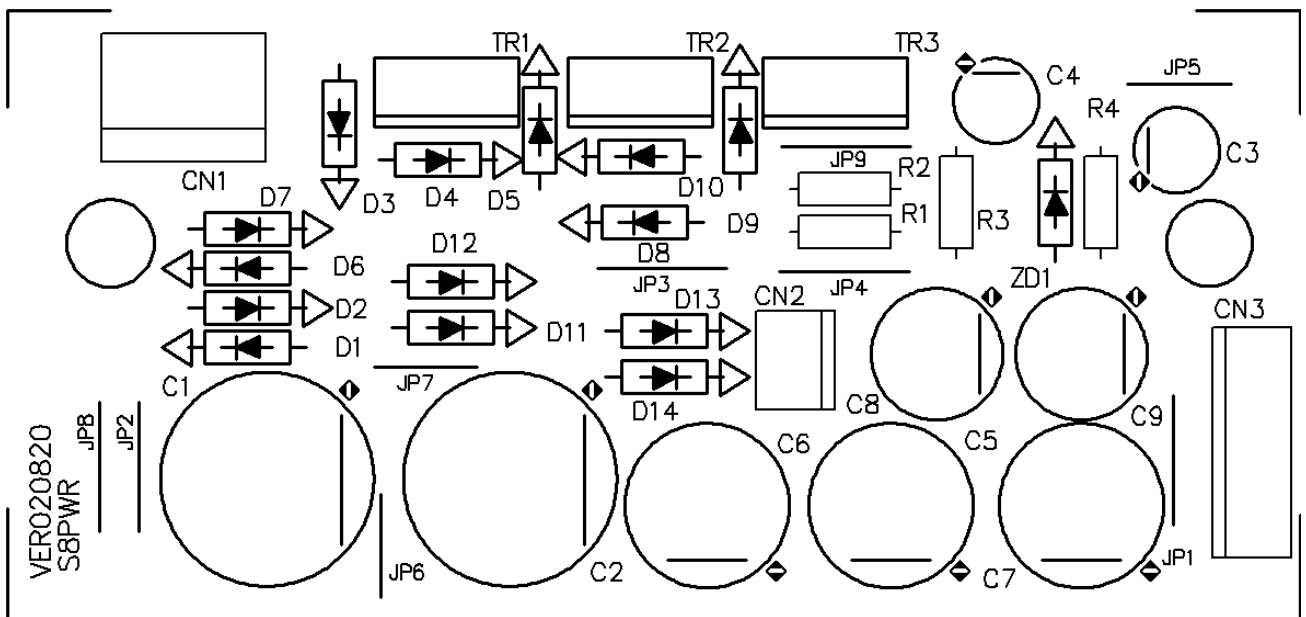
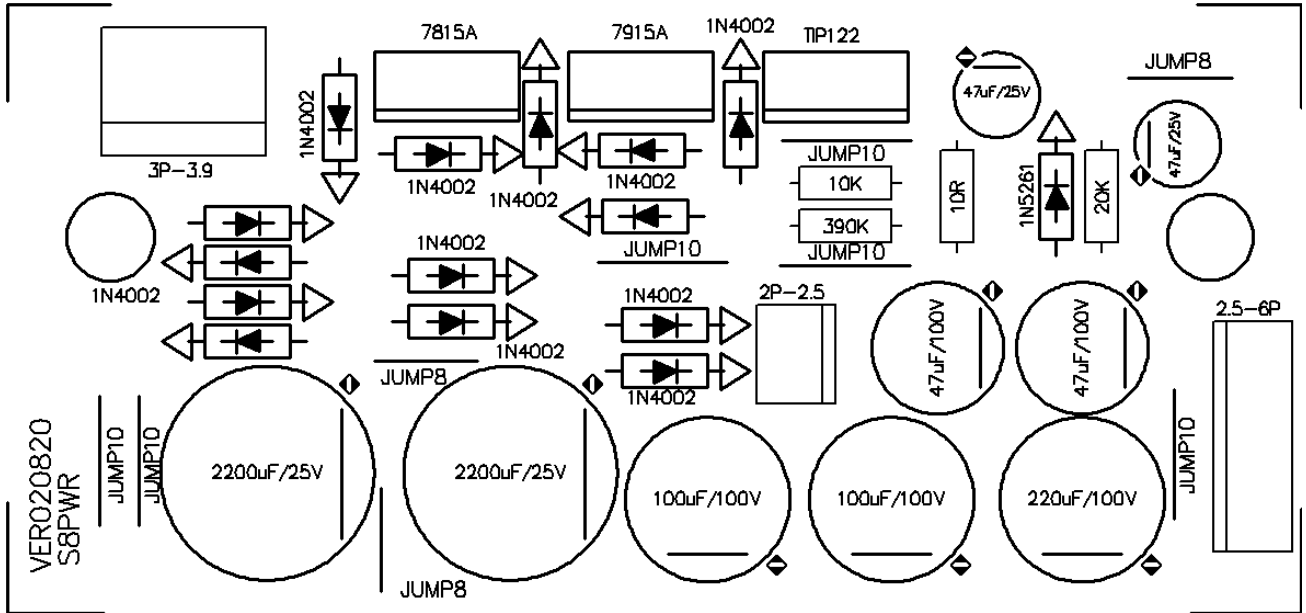




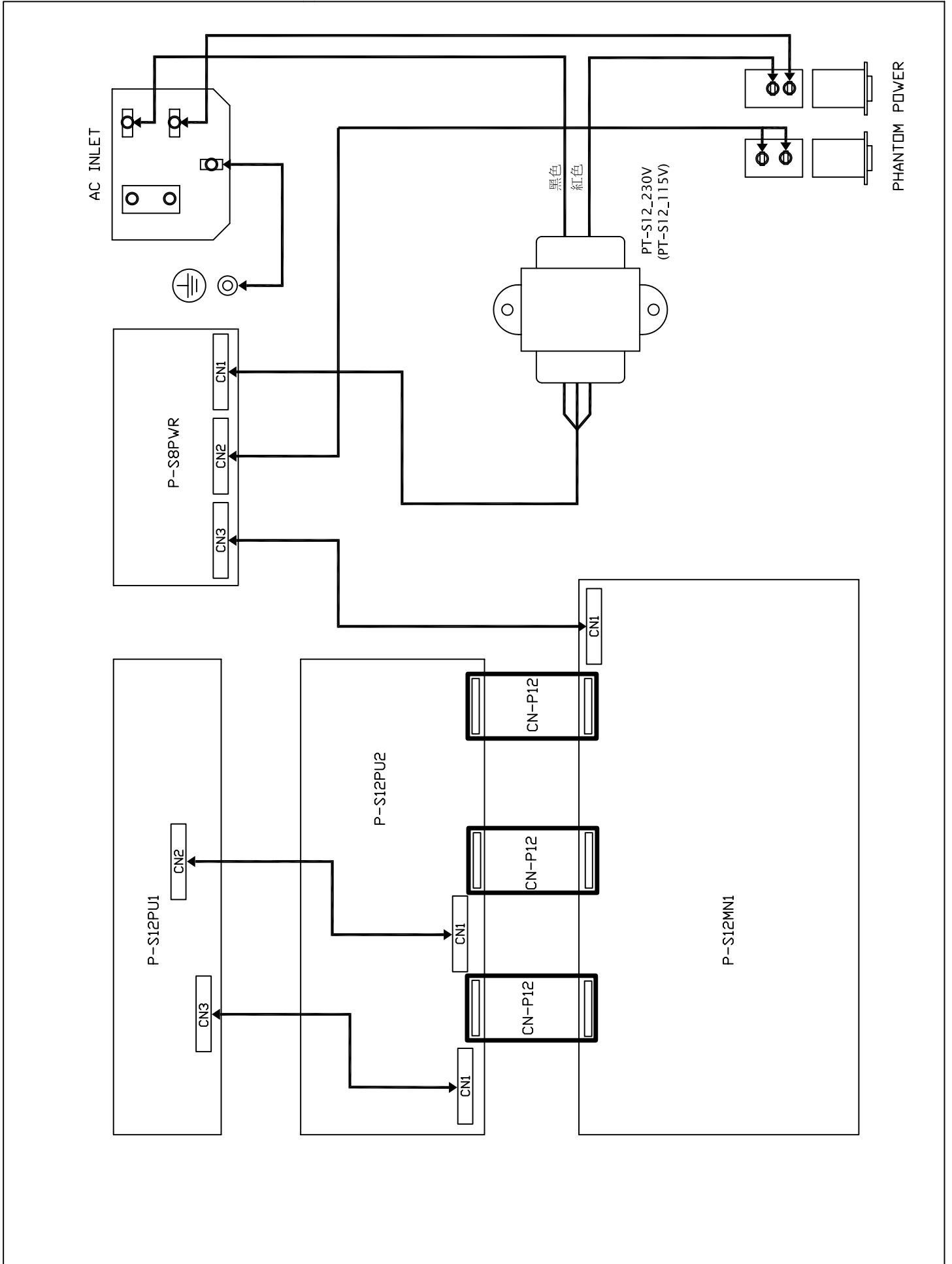




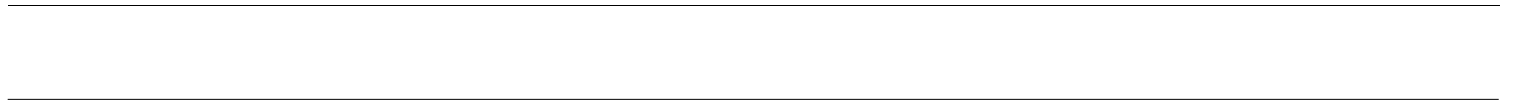




5. Wiring Diagram

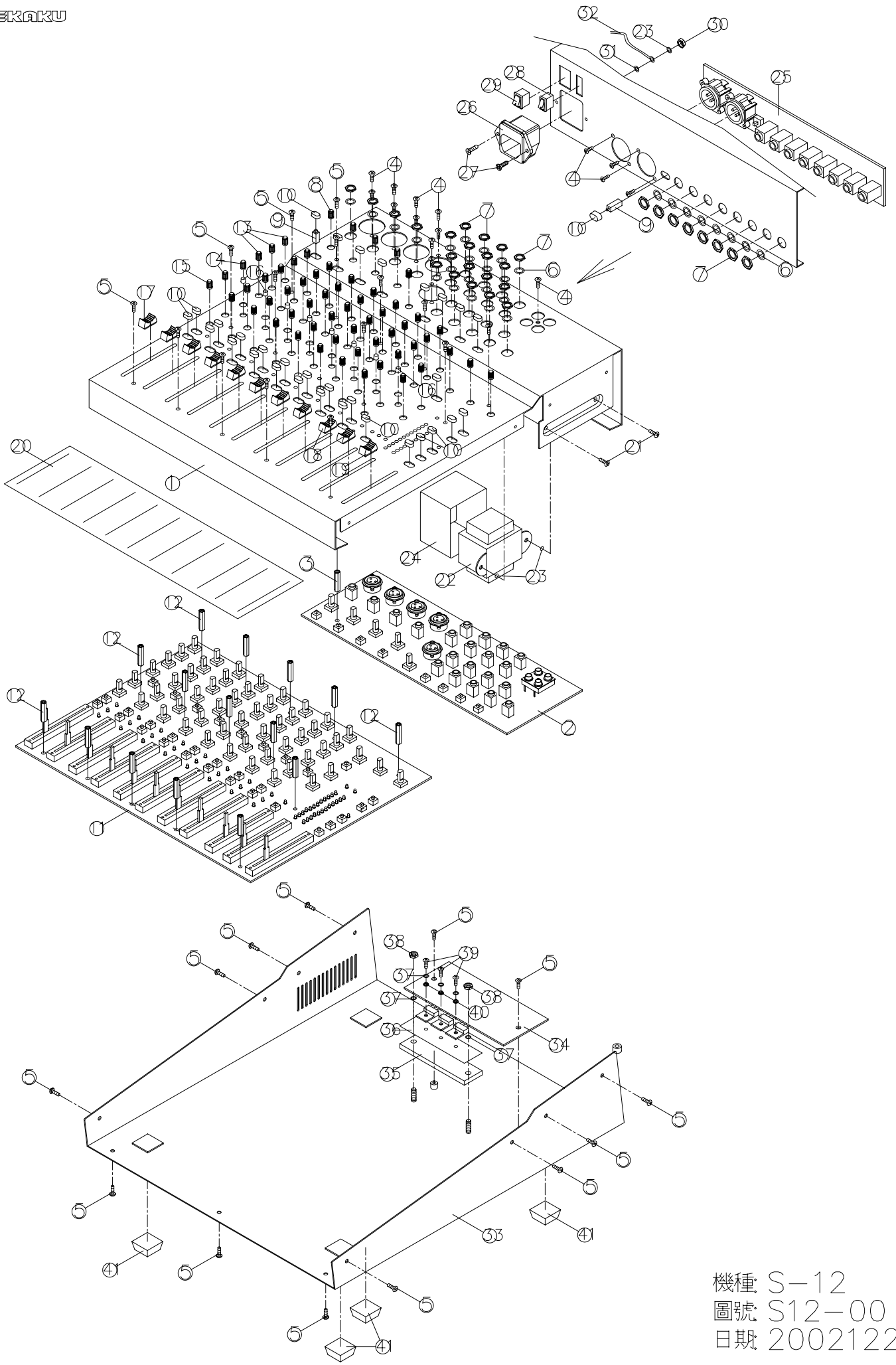


7. Electrical Parts List



8. Exploded Views

SEKAKU



機種: S-12
圖號: S12-00
日期: 20021221

