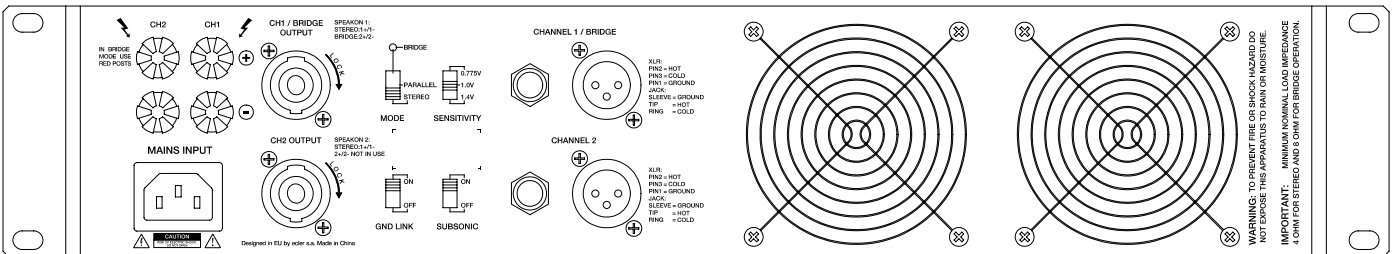
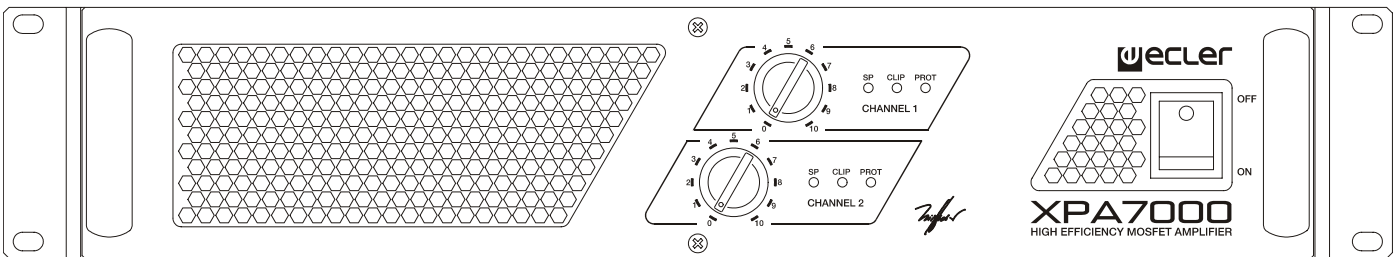


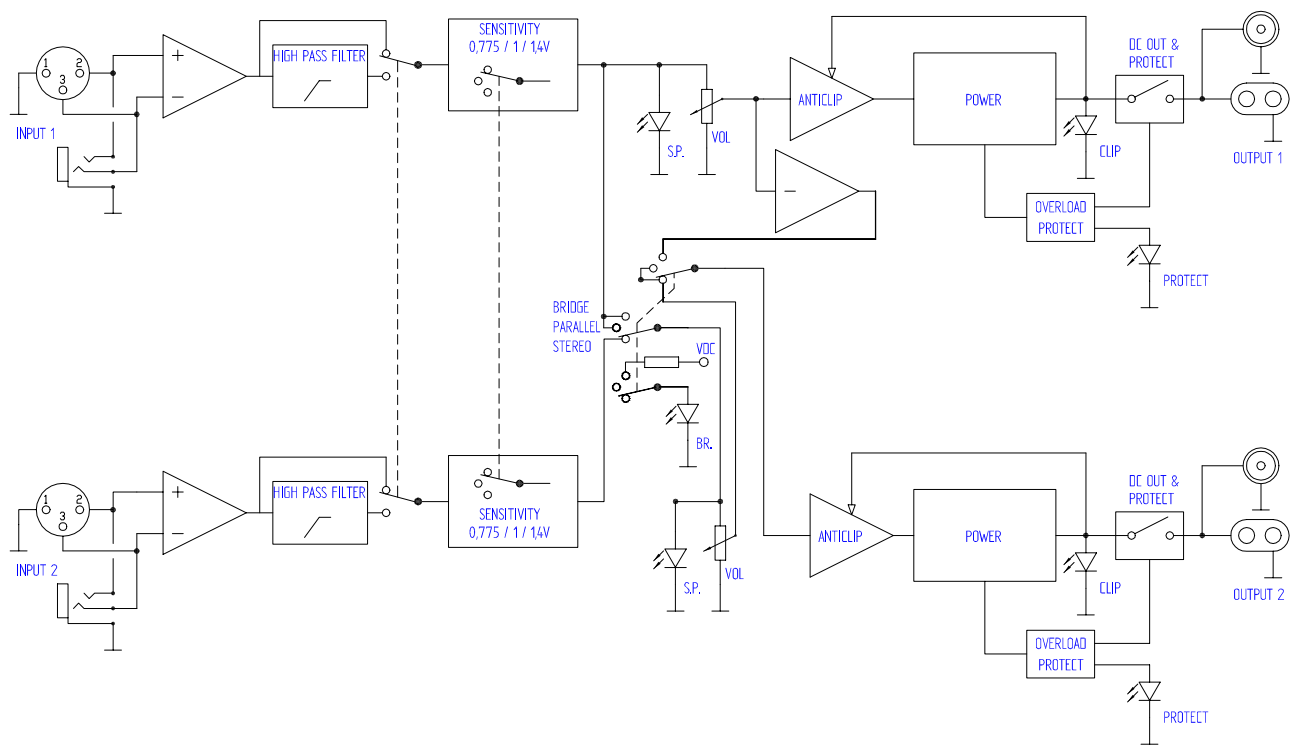
XPA7000 XPA5000 XPA3000 SERVICE MANUAL

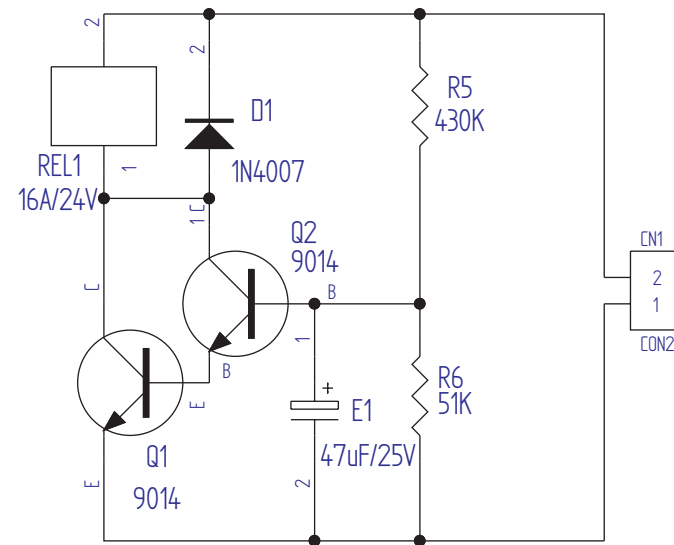
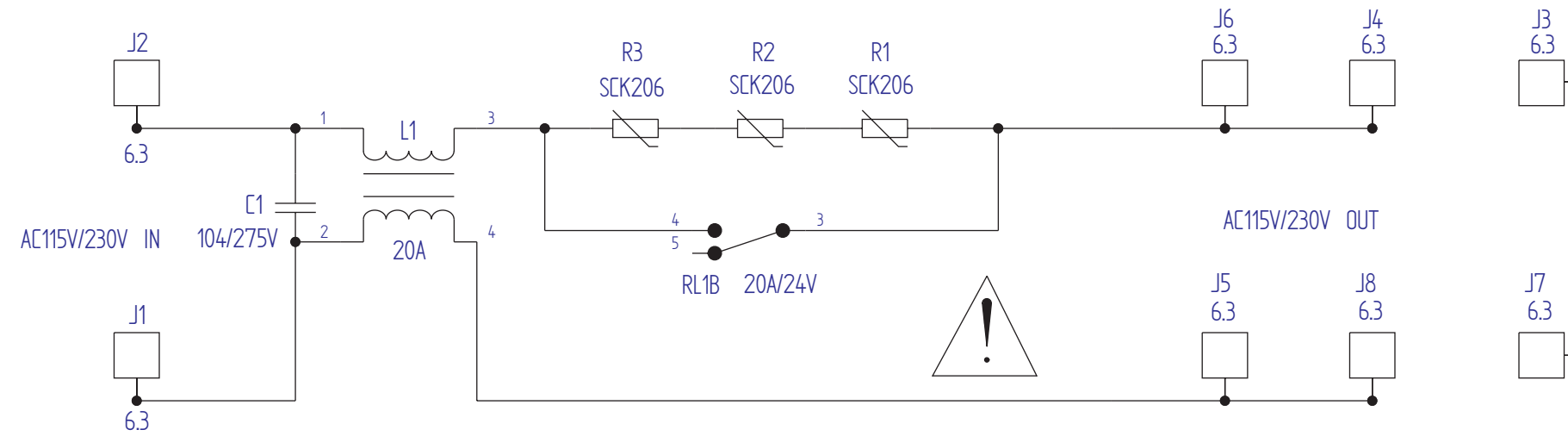


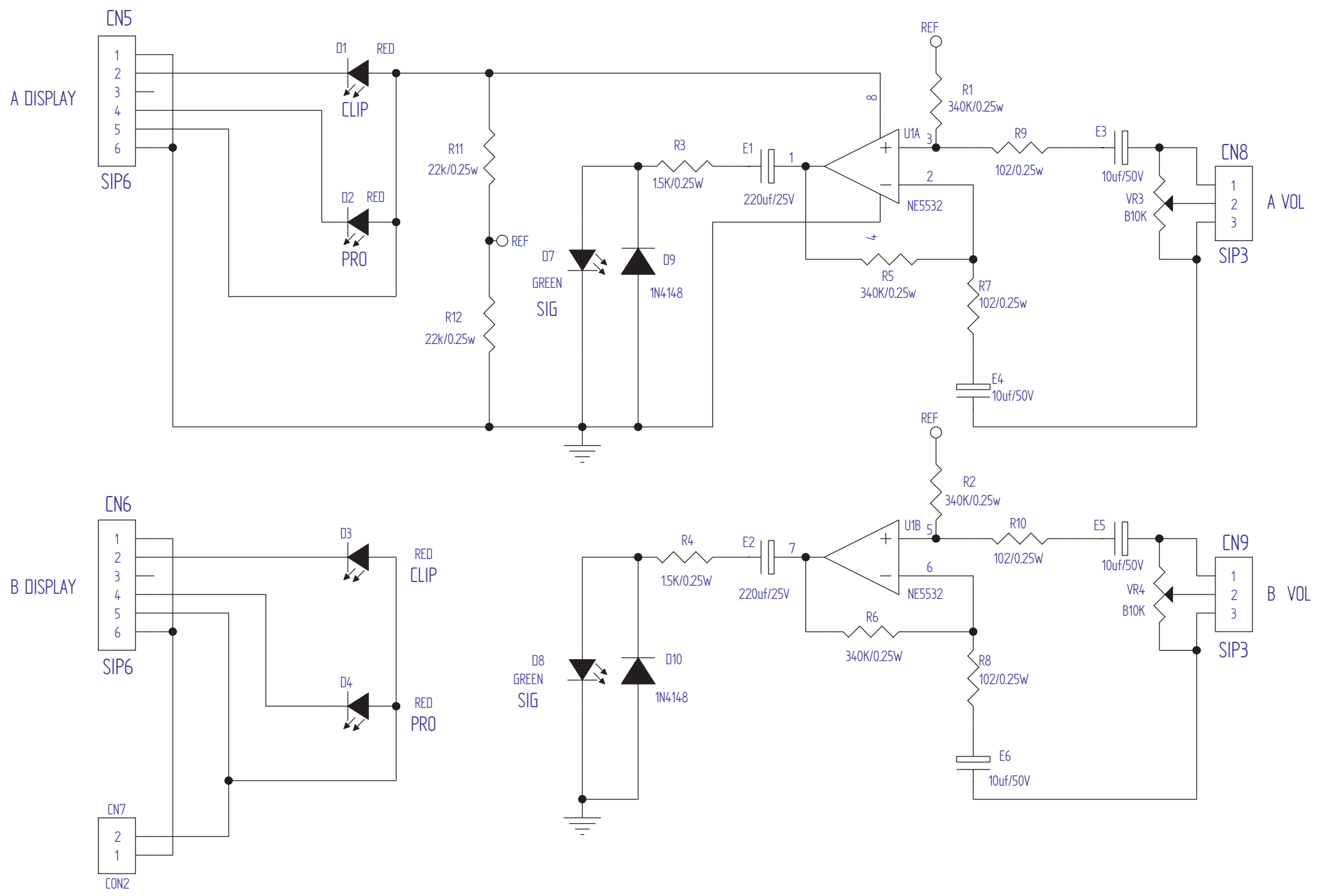
SERVICE MANUAL XPA

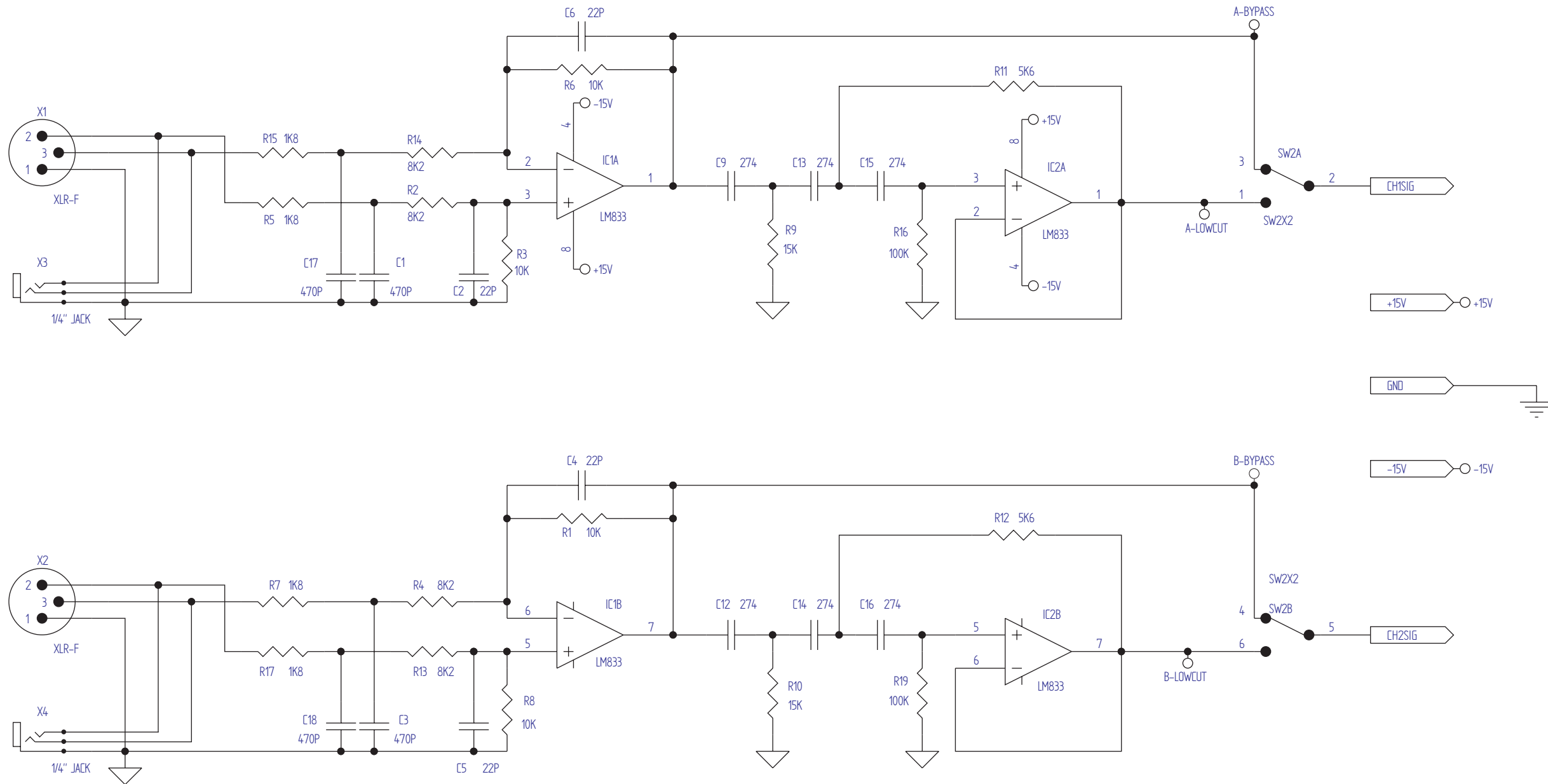
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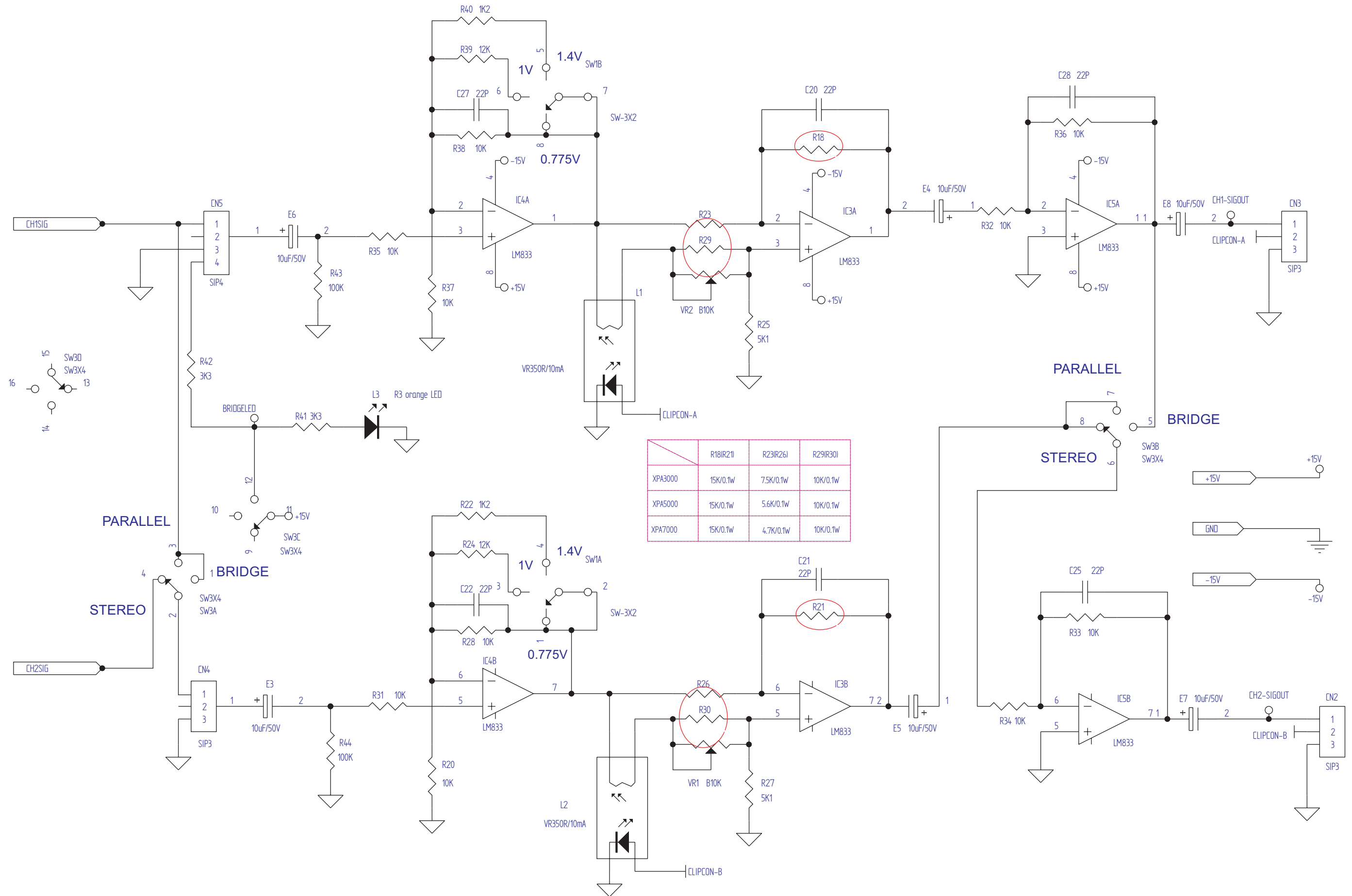
- BLOCK DIAGRAM
- SCHEMATICS
- COMPONENTS LOCATION SCHEMA
- TESTING AND QUALITY CONTROL
- TECHNICAL CHARACTERISTICS
- WIRING DIAGRAM

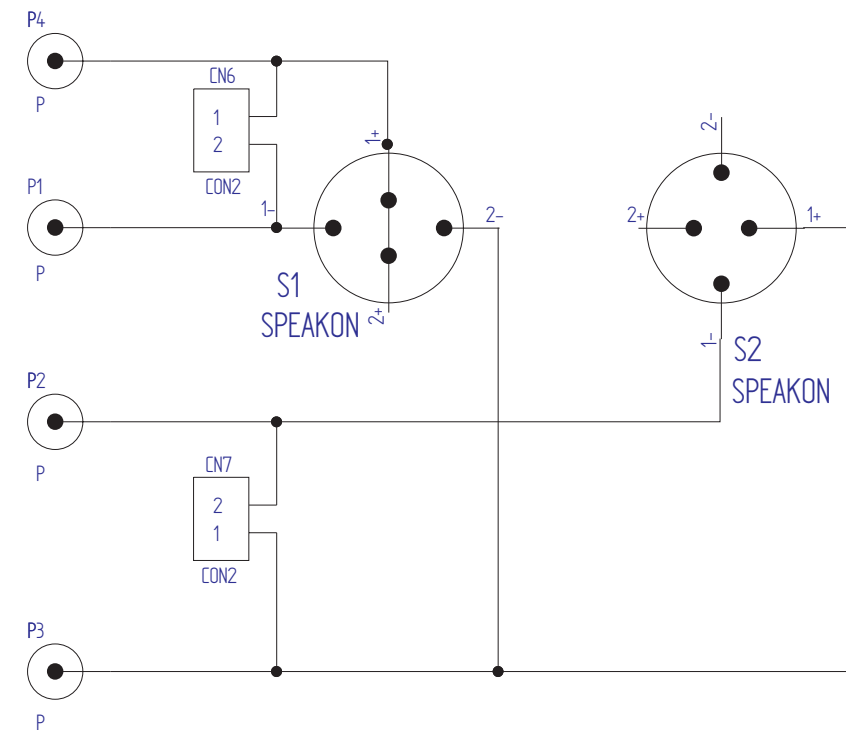
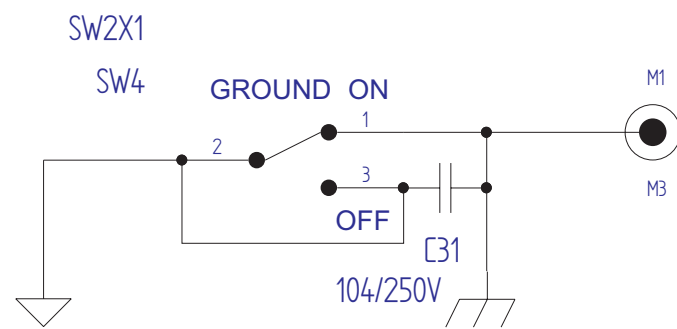
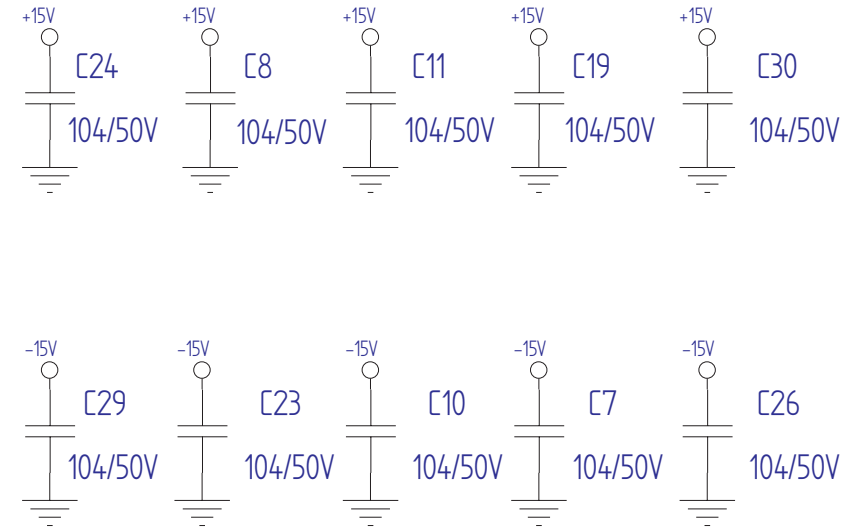
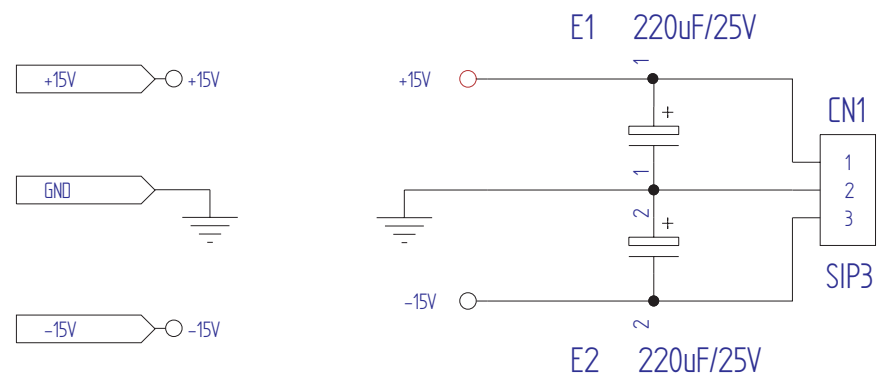


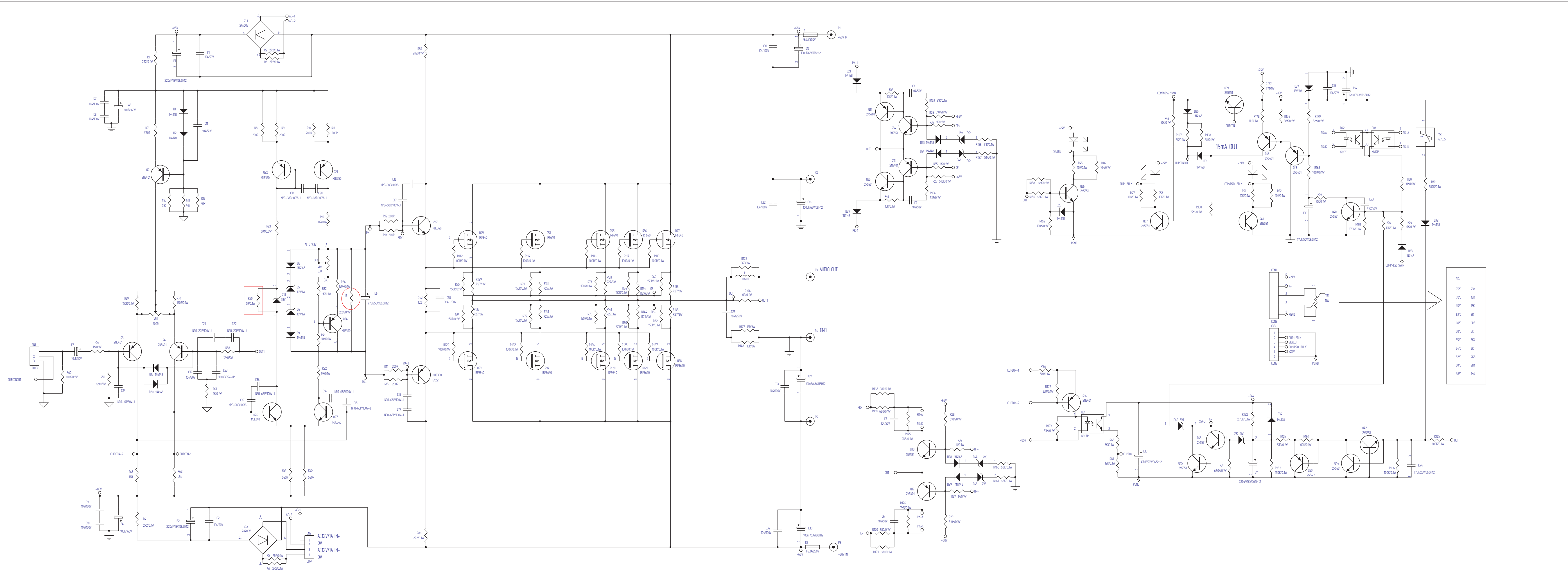




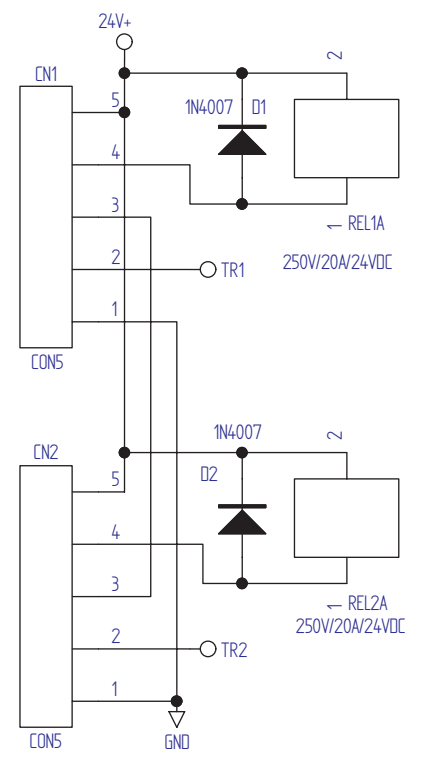
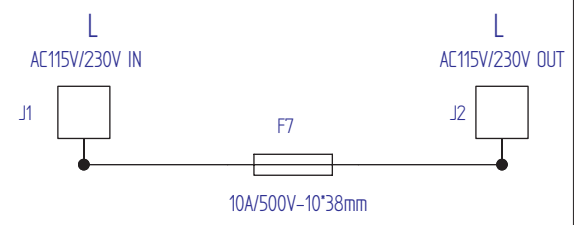
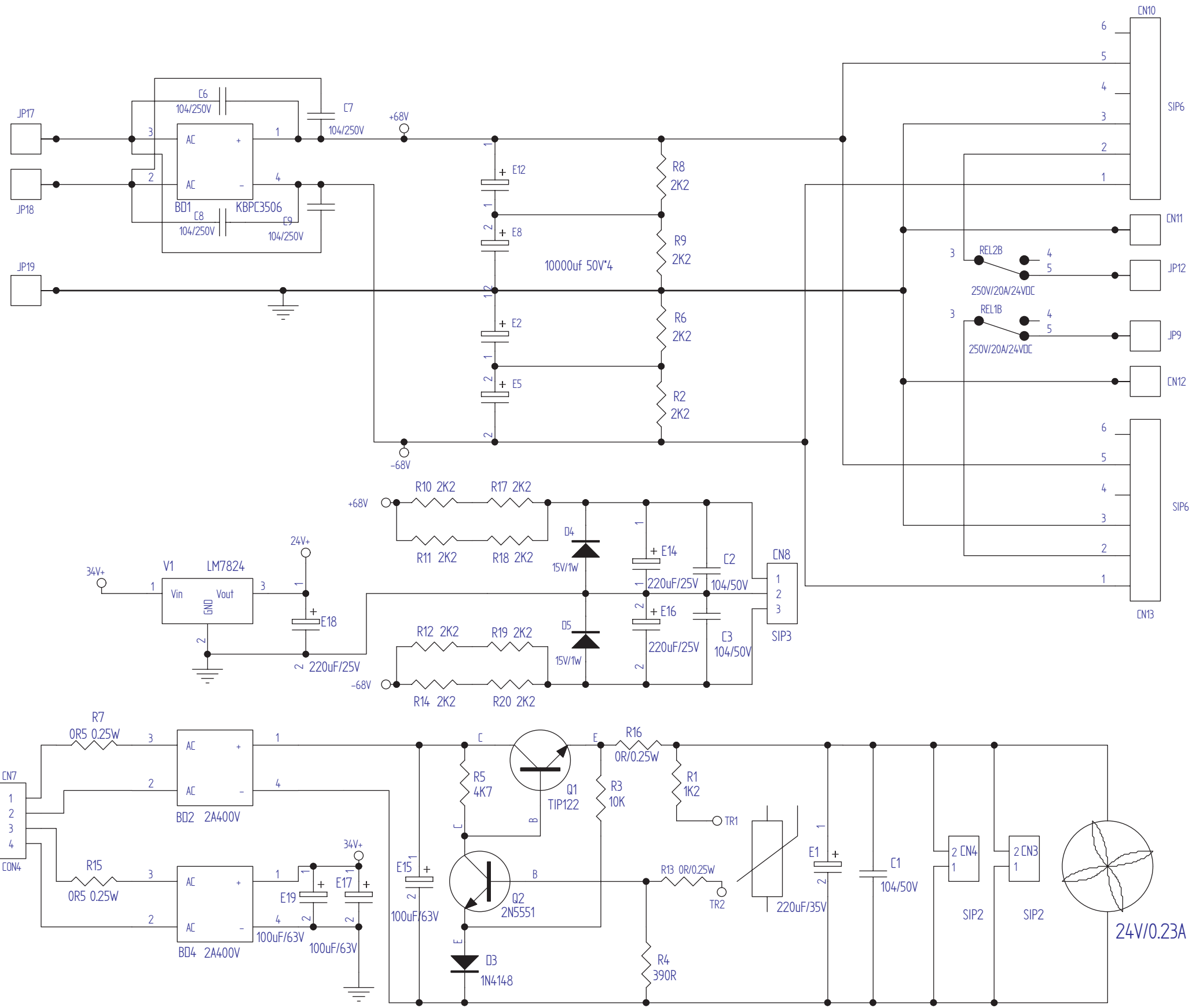


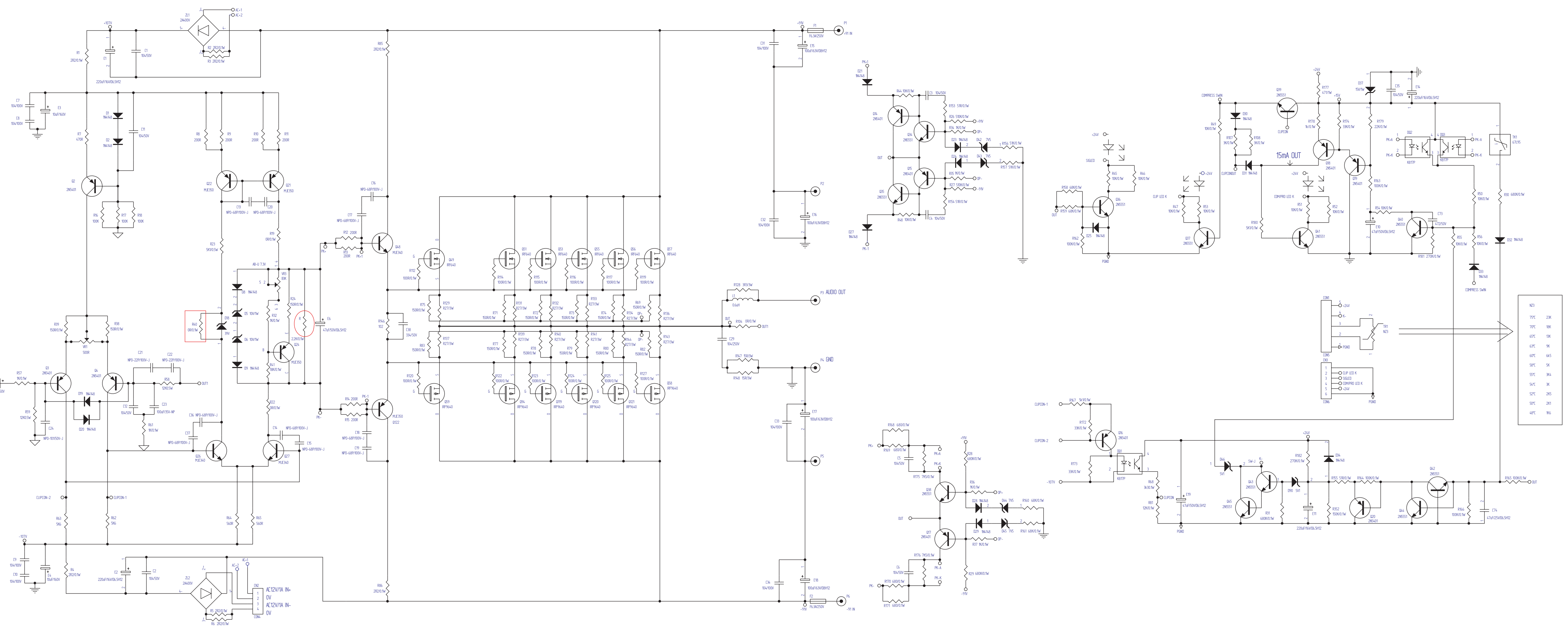




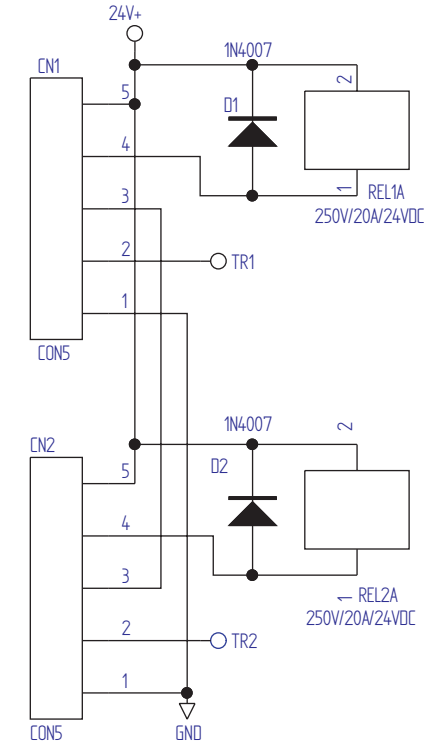
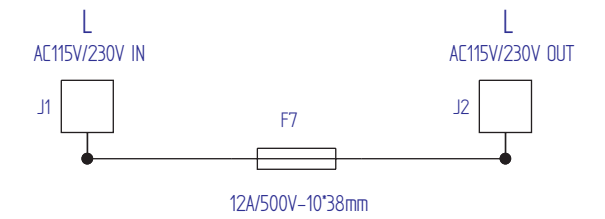
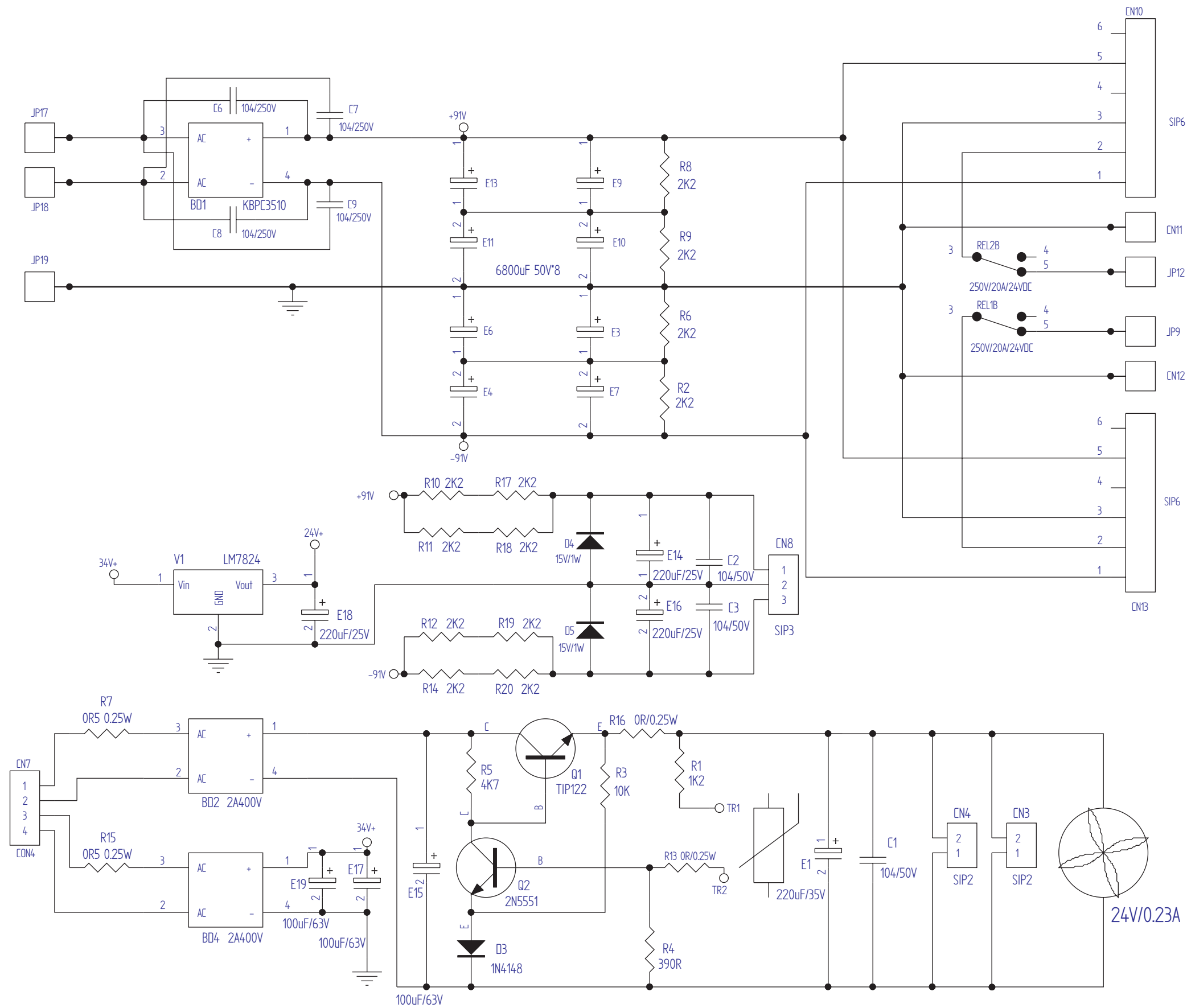


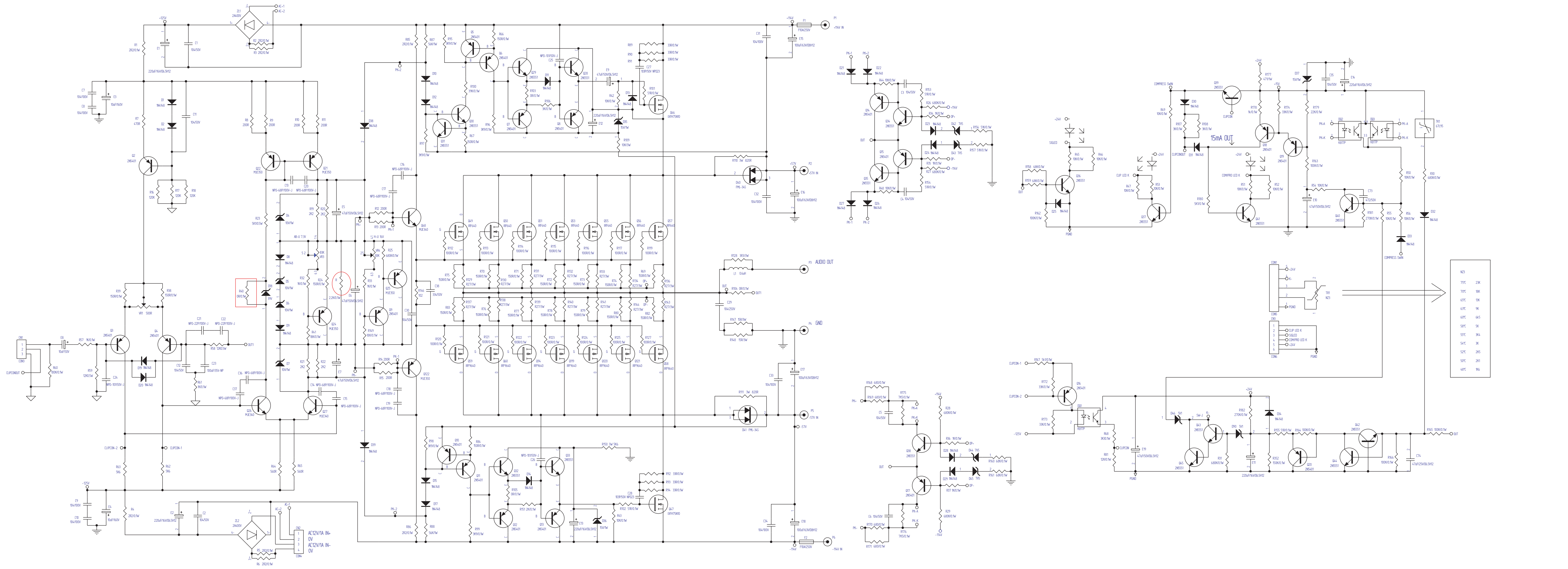
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3	5K
4	2.5K
5	1.2K
6	600Ω

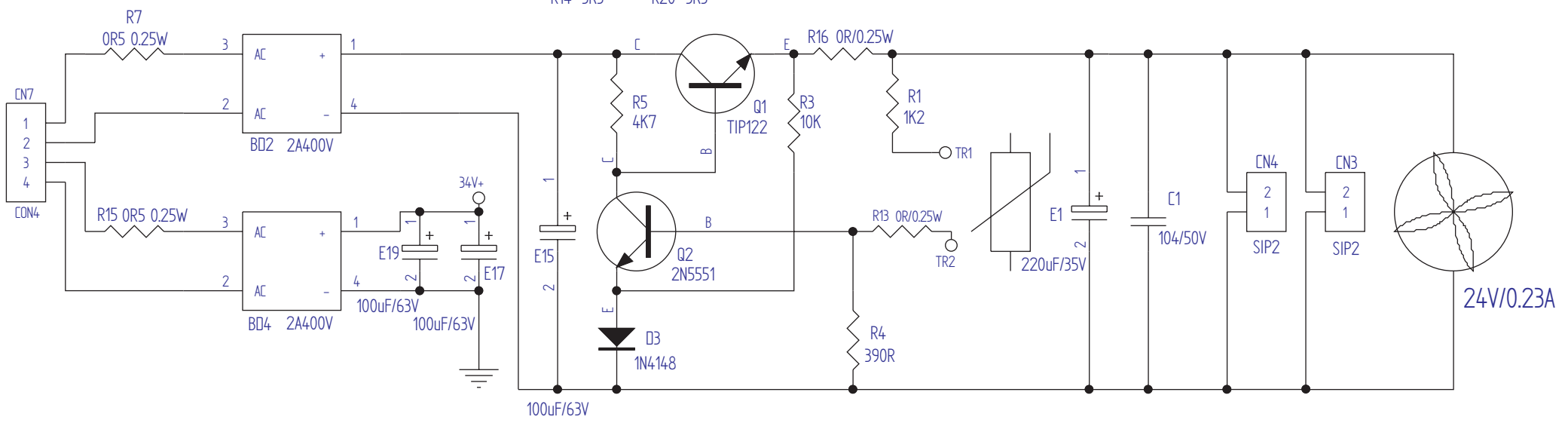
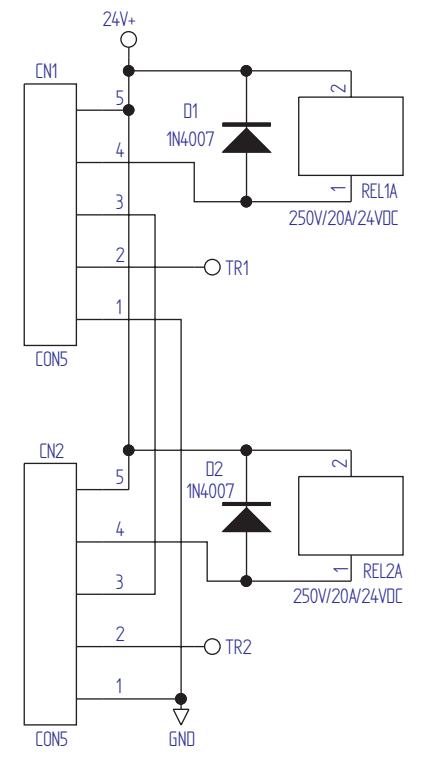
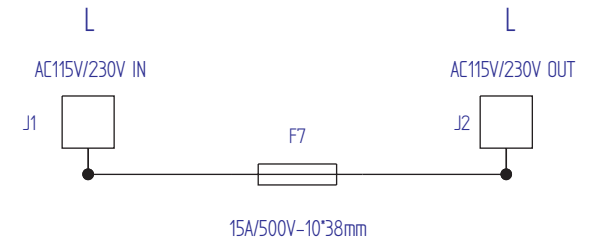
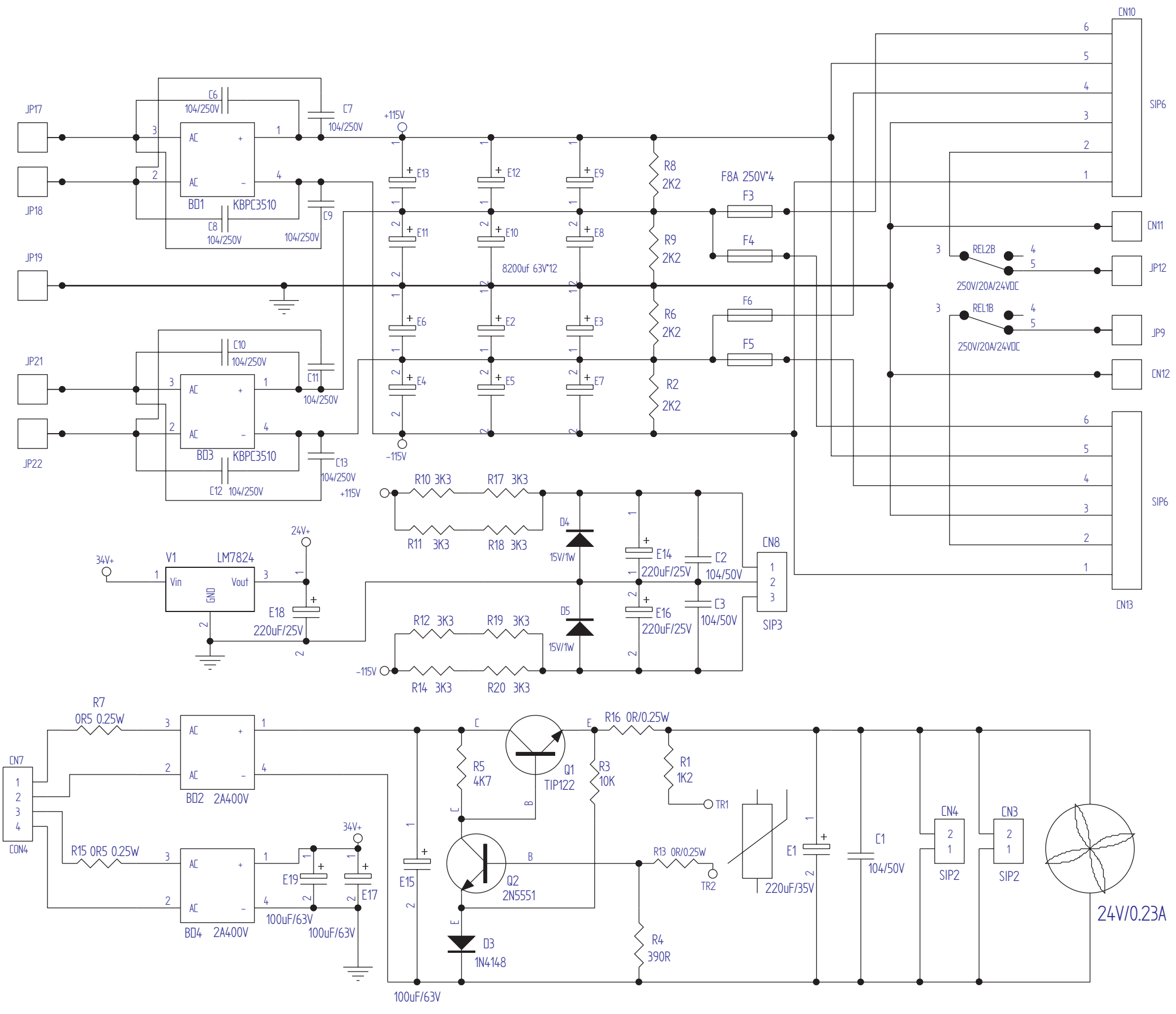


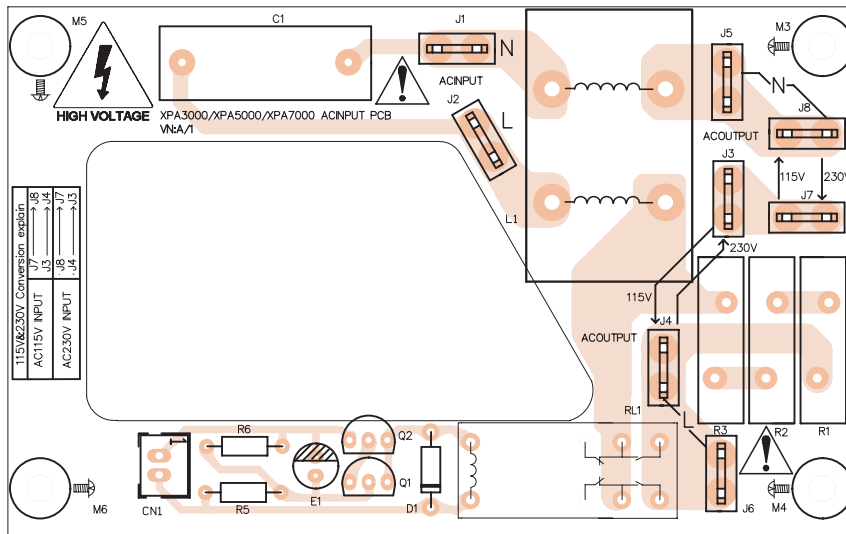
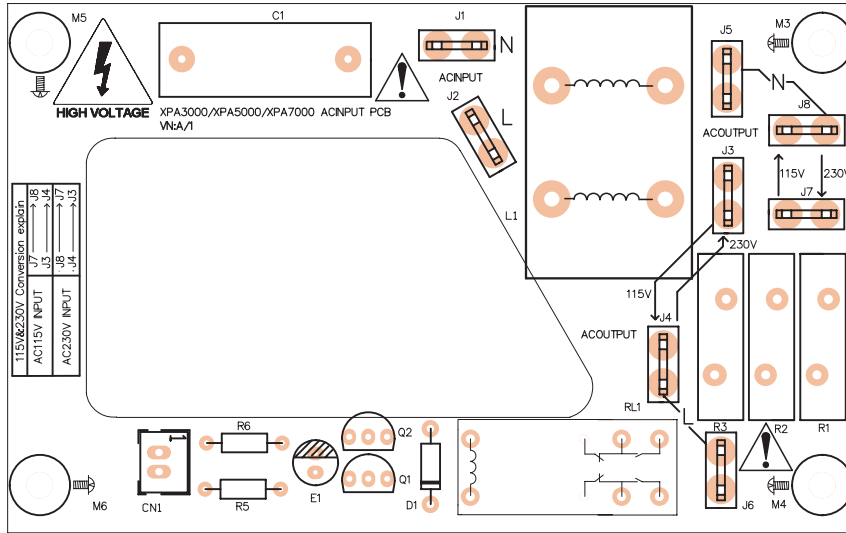


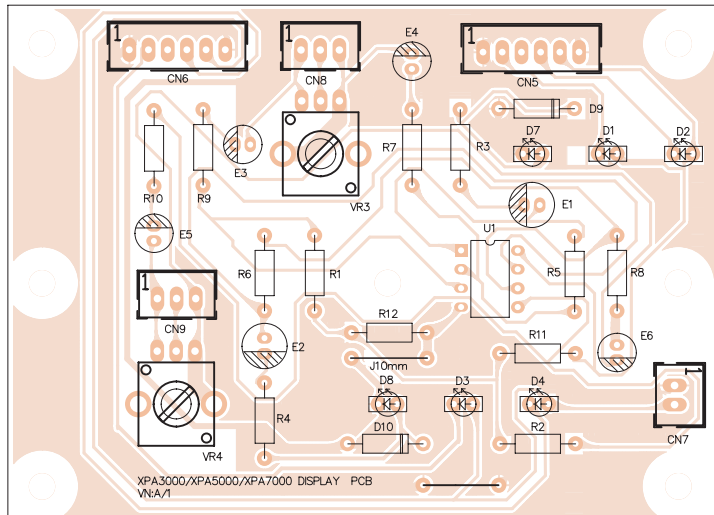
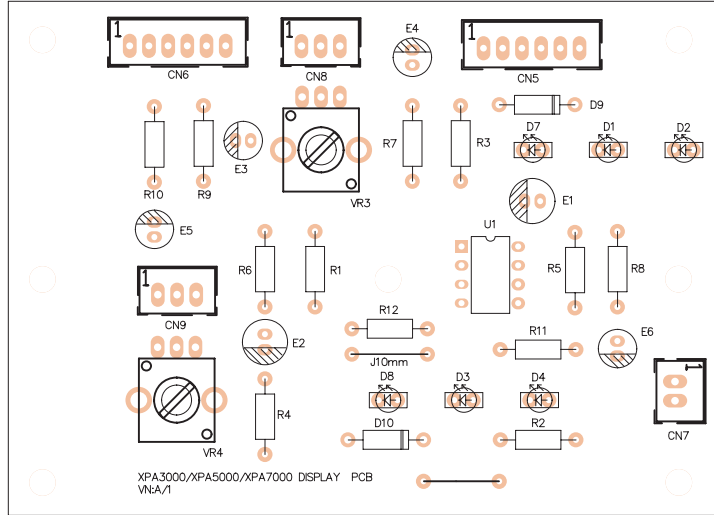
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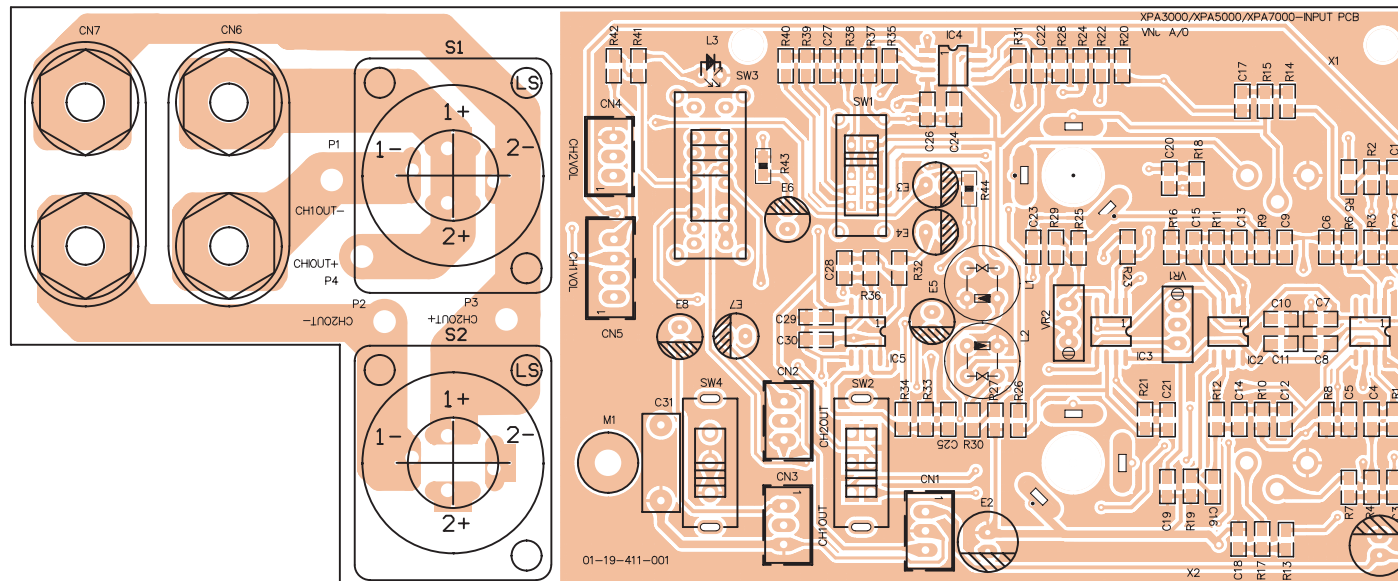
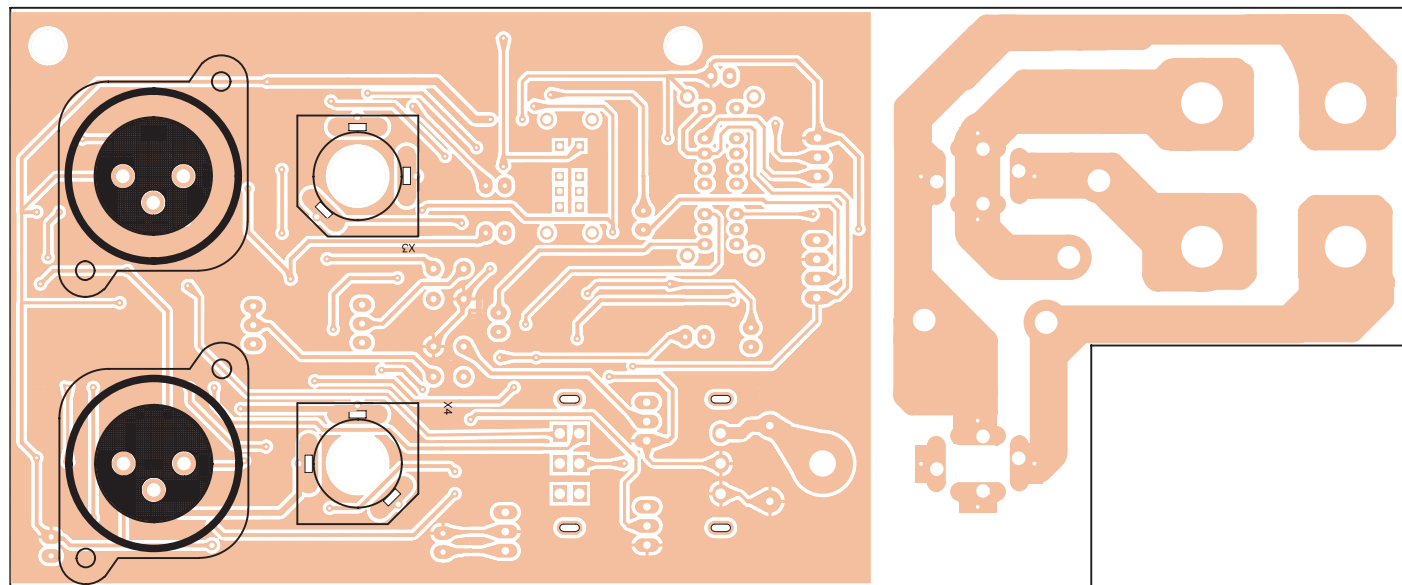


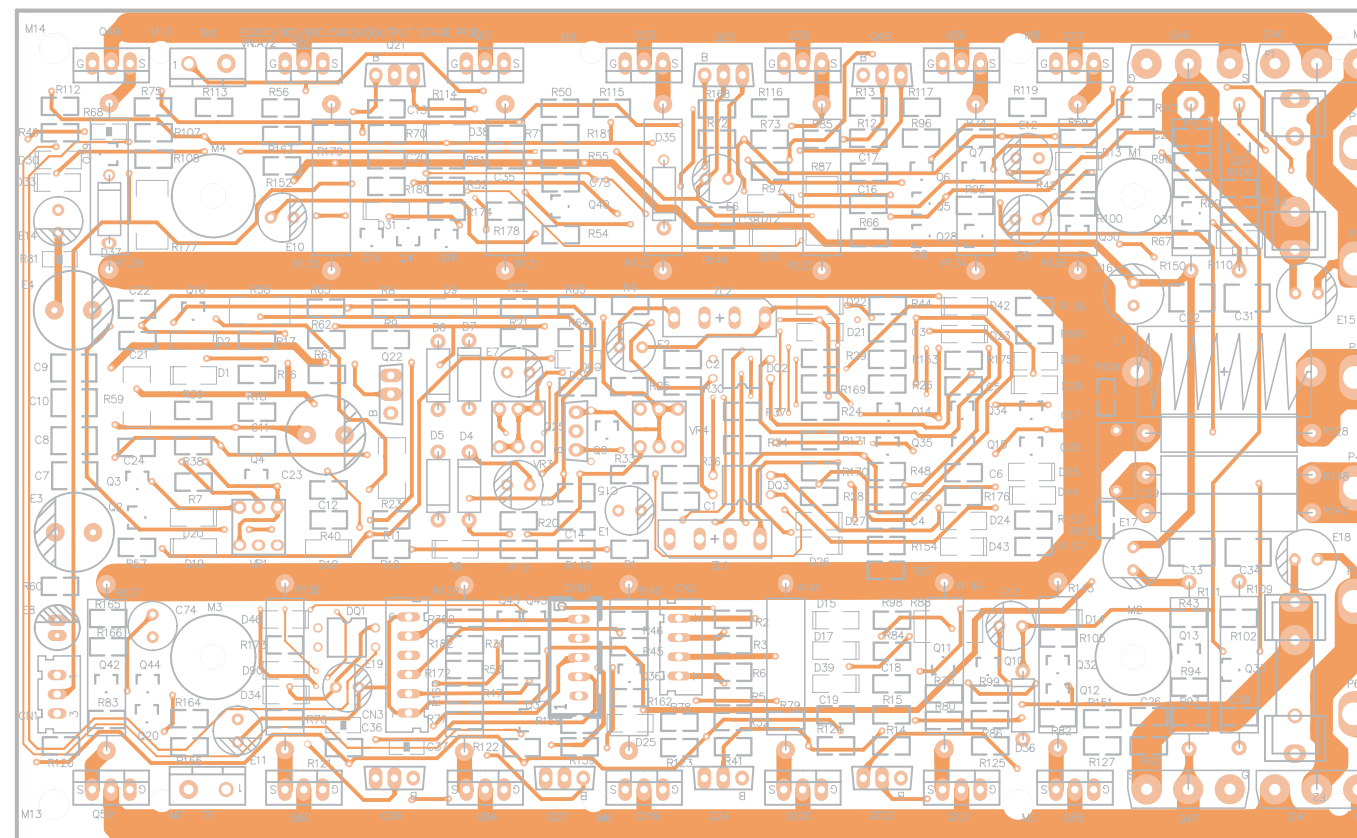
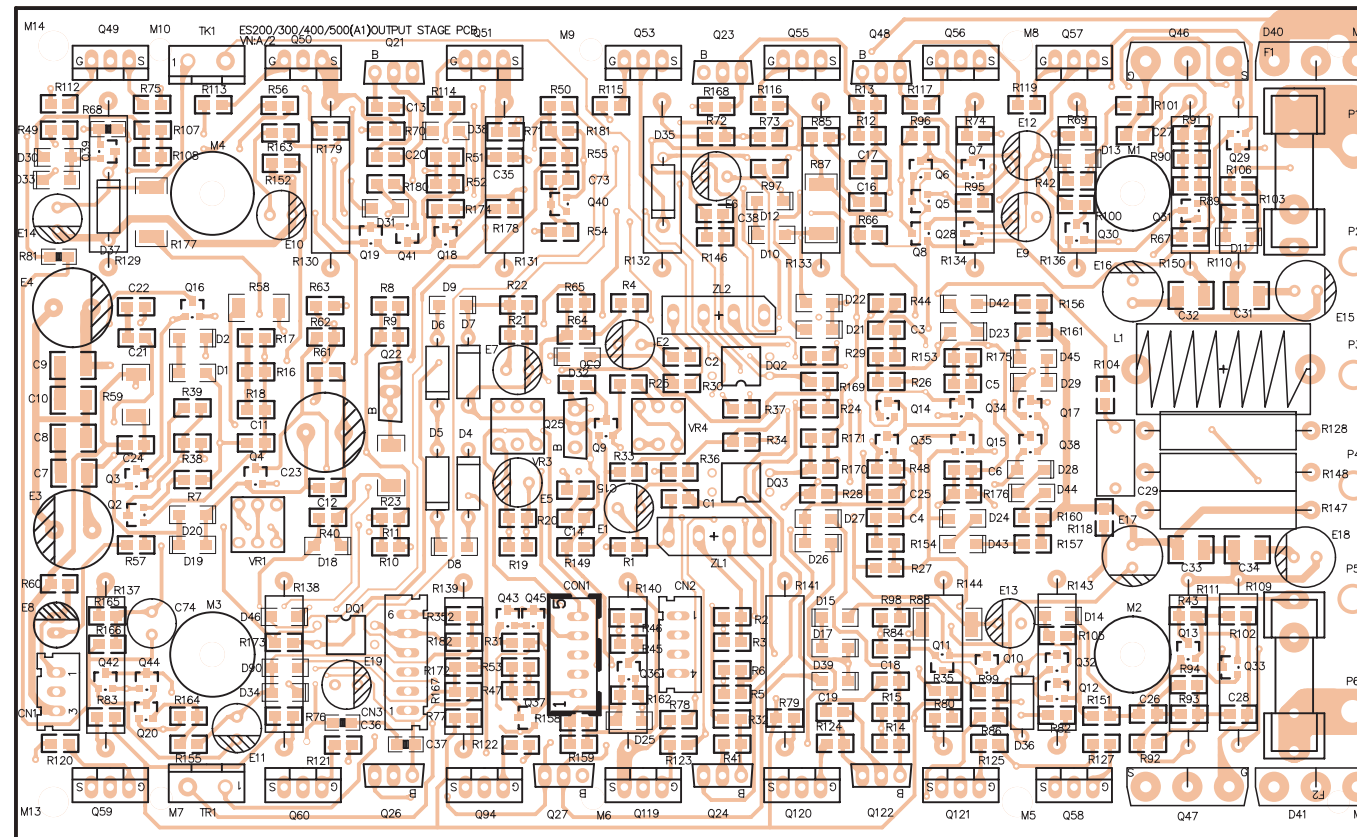


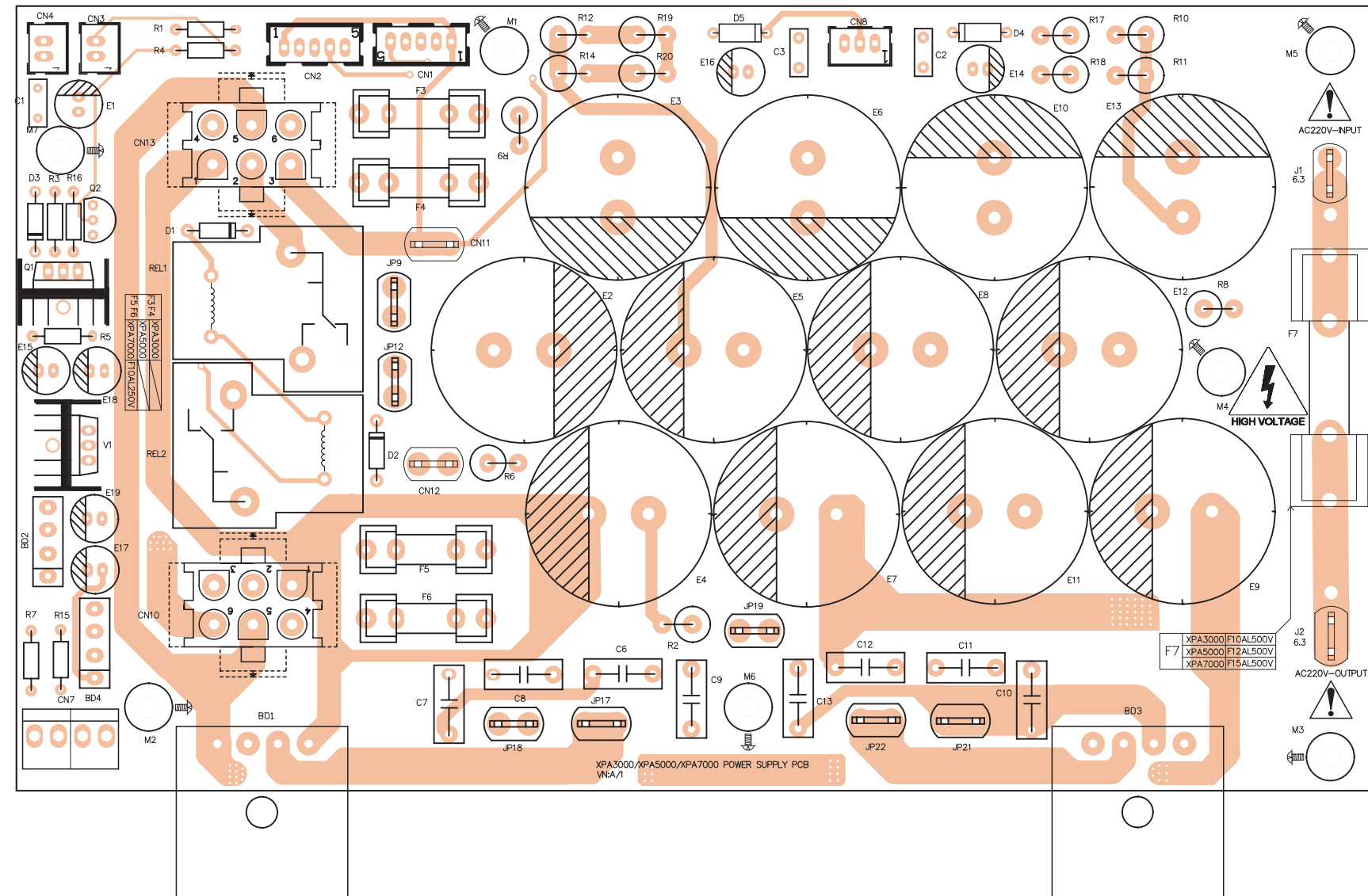






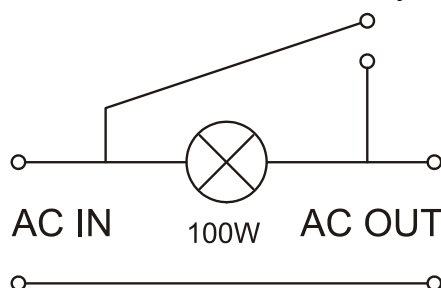






MAKING PROTECT LAMP HOLDER

Protect lamp holder application: series one lamp from the amplifier power cable connector to AC outlet. If the amplifier has no fault, at the instant of switch on, the lamp is very bright because of high current pass through, when inner capacitor change up, amplifier is empty loading, the current is very small, the lamp isn't on or slightly bright. If the amplifier has some short circuit faults that haven't checked out, that will be high current, through in series to lamp, it will be bright all the time, meanwhile, since the in series lamp limited the current, it won't make the damage expanded so as to protect amplifier, that is why it named "protect lamp holder". When amplifier confirm there's no high current pass through, it can be by pass via the switch to make amplifier AC Main power supply connect to the outlet directly.



SAFETY VERIFICATION TESTS.

Preliminary:

- Unplug the unit to be tested from the mains outlet.
- Short all ground terminals from signal inputs, outputs and other external connectors, except the mains plug's ground.
- Turn ON the unit's main power switch.

Ground continuity test:

- Connect the tester's probes between the mains ground contact and the unit's backside main ground test point. When applying a 10A current, verify that the ground impedance is lower than 0'1 Ω .

Electrical insulation test:

- Connect the electrical insulation tester probes between the mains outlet ground contact and both shorted mains input poles.
- Adjust the tester's current limit down to 10mA.
- Apply 1500Vac during 5 seconds.
- The unit's insulation should be able to resist this voltage, without generating spurious sparks or a sparkover effect, and the tester may not detect any malfunction.

CAUTION: Do not disconnect nor touch the test probes until the test has finished completely!

QUALITY CONTROL

All mechanical parts should be visually revised, in order to detect scratches on the unit's painting; all screws should be on their place, correctly tight and unmarked. Check out the unit's general presentation.

VERIFICATION USING MUSIC

Verify the unit's sound quality, which should be distortion and noise free. Also check that all potentiometers can run smoothly their whole sweep, without annoying noises and crisperings. At their minimum position, check that output signal is completely cutted off. To ensure that all electrical junctions are well fixed, hit the tested unit against your working table, obviously without damaging its outer presentation. Verify also all inputs and outputs. At last, short-circuit the output terminals while carrying amplified signal, and verify that once short-circuit is removed, the amplifying stages still are working.

	XPA3000	XPA5000	XPA7000	XPA11000
POWER 20-20kHz 1% THD				
4 Ω Stereo	295 WRMS	498 WRMS	718 WRMS	1180 WRMS
8 Ω Stereo	198 WRMS	314 WRMS	450 WRMS	745 WRMS
8 Ω Bridged	590 WRMS	996 WRMS	1436 WRMS	2360 WRMS
Frequency response (-1dB/-3dB)	10Hz/120kHz	10Hz/120kHz	10Hz/120kHz	10Hz/60kHz
High pass filter (-3dB)		30Hz/18dB oct.		
THD+Noise @ 1kHz Full Pwr.	<0.05%	<0.05%	<0.1%	<0.1%
S+N/N 20Hz-20kHz @ 1W/4 Ω			>78dB	
Damping factor 1kHz @ 8 Ω			>300	
Slew Rate	$\pm 32V/\mu s$	$\pm 40V/\mu s$	$\pm 45V/\mu s$	$\pm 30V/\mu s$
Input connectors			XLR3 & 1/4" Jack balanced	
Input Sensitivity / Impedance			0.775V, 1V, 1.4V/20k Ω Bal. 10k Ω Unbal	
Signal present indicator			-40dB	
Output connectors			Speakon & Binding Posts	
Mains	Depending on your country. See characteristics in the back of the unit.			
Power consumption	575VA	675VA	775VA	1230VA
Dimensions		482.6x88x452mm		
Weight	17kg	19.7kg	21.9kg	23.6kg

	XPA3000	XPA5000	XPA7000
POWER 20-20kHz 1% THD			
4Ω Stereo	295 WRMS	498 WRMS	718 WRMS
8Ω Stereo	198 WRMS	314 WRMS	450 WRMS
8Ω Bridged	590 WRMS	996 WRMS	1436 WRMS
Frequency response (-1dB/-3dB)		10Hz/120kHz	
High pass filter (-3dB)		30Hz/18dB oct.	
THD+Noise @ 1kHz Full Pwr.	<0.05%	<0.05%	<0.1%
S+N/N 20Hz-20kHz @ 1W/4Ω		>78dB	
Damping factor 1kHz @ 8Ω		>300	
Slew Rate	±32V/μs	±40V/μs	±45V/μs
Input connectors	XLR3 & ¼" Jack balanced		
Input Sensitivity / Impedance	0.775V, 1V, 1.4V/20kΩ Bal. 10kΩ Unbal		
Signal present indicator	-40dB		
Output connectors	Speakon & Binding Posts		
Mains	Depending on your country. See characteristics in the back of the unit.		
Power consumption	575VA	675VA	775VA
Dimensions	482.6x88x452mm		
Weight	17Kg	19.7Kg	21.9Kg

OLD VERSION

OLD VERSION

	XPA3000	XPA5000	XPA7000
POWER 20-20kHz 1% THD			
4Ω Stereo	295 WRMS	498 WRMS	718 WRMS
8Ω Stereo	198 WRMS	314 WRMS	450 WRMS
8Ω Bridged	590 WRMS	996 WRMS	1436 WRMS
Frequency response (-1dB/-3dB)		10Hz/120kHz	
High pass filter (-3dB)		30Hz/18dB oct.	
THD+Noise @ 1kHz Full Pwr.	<0,05%	<0,05%	<0,1%
S+N/N 20Hz-20kHz @ 1W/4Ω		>78dB	
Damping factor 1kHz @ 8Ω		>300	
Slew Rate	±32V/μs	±40V/μs	±45V/μs
Input connectors	XLR3 & ¼" Jack balanced		
Input Sensitivity / Impedance	0.775V, 1V, 1.4V/20kΩ Bal. 10kΩ Unbal		
Signal present indicator	-40dB		
Output connectors	Speakon & Binding Posts		
Mains	Depending on your country. See characteristics in the back of the unit.		
Power consumption	575VA	675VA	775VA
Dimensions	482.6x88x452mm		
Weight	15Kg	17Kg	19,5Kg

