

audison

- SERVICE MANUAL -

SRx4

Issued in February 2008

audison

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PART 1

ELECTRONIC PART

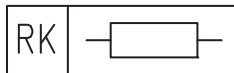
MAINBOARD IDENTIFICATION

There is a key resistor called "Rk" on the amplifiers mainboard; it allows you to identify which PCB it is and to find the proper electric diagrams and components layouts for it.

How to find the right diagrams to refer to

- 1) Find "**Rk**" resistor on the mainboard and determine its value.
- 2) Please check the item "**Rev/Rk**" in the cataloguing information table; then select the diagrams where "Rk" value corresponds to the pre-determined one.

Example:



"Rk" resistor assembled onto mainboard, its value is 10 Ohms.

Consult the diagrams where you can find 10 Ohms value in item "Rev/ Rk"



Type:	MAINBOARD	Rev/Rk:	10 ohm
Date:	28/oct/06	Sheet:	

Caution

When "Rk" resistor is not onto the PCB, you will find " - " in the diagrams instead of its value.

PART 1: ELECTRONIC PART

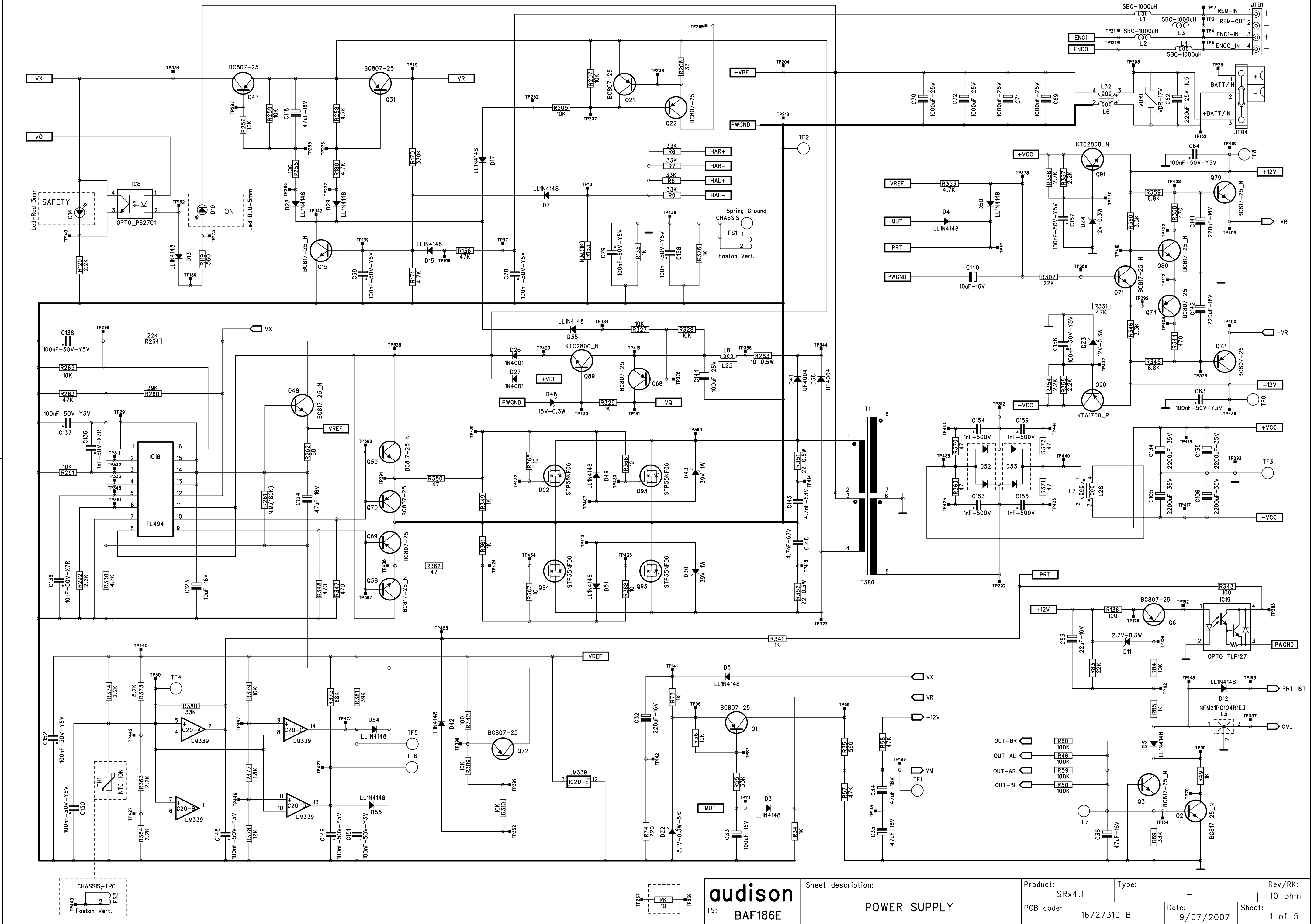
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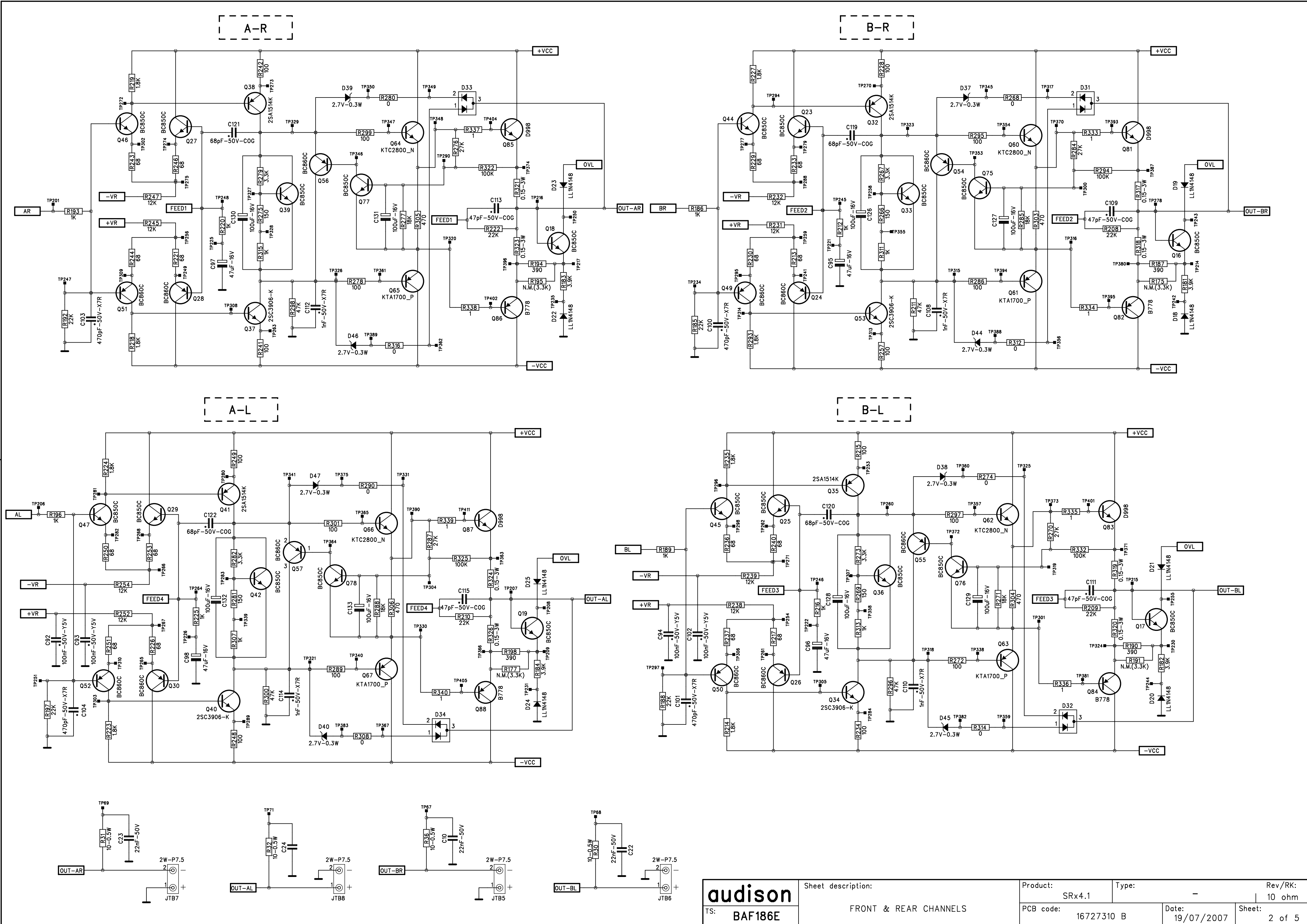
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SECT. A Identification system	SECT. B Mainboard	SECT. C SRx Series Components Pin-out	SECT. A - Exploded views and parts list	SECT. B - Amplifier opening instructions
Rev. A	Rk = 10 Ohm	Rev. A	Rev. A	Rev. A



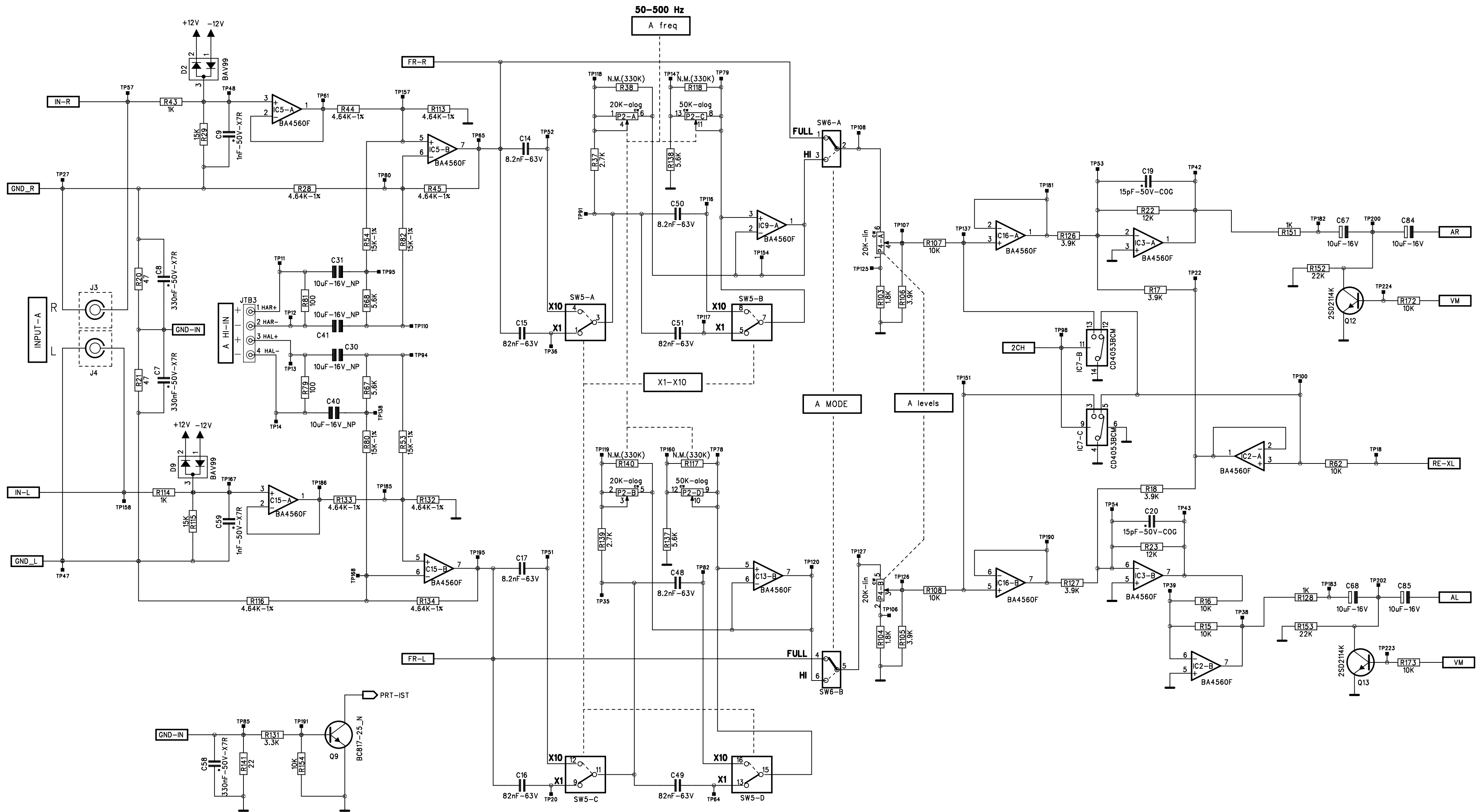
audison
TS: BAF186E

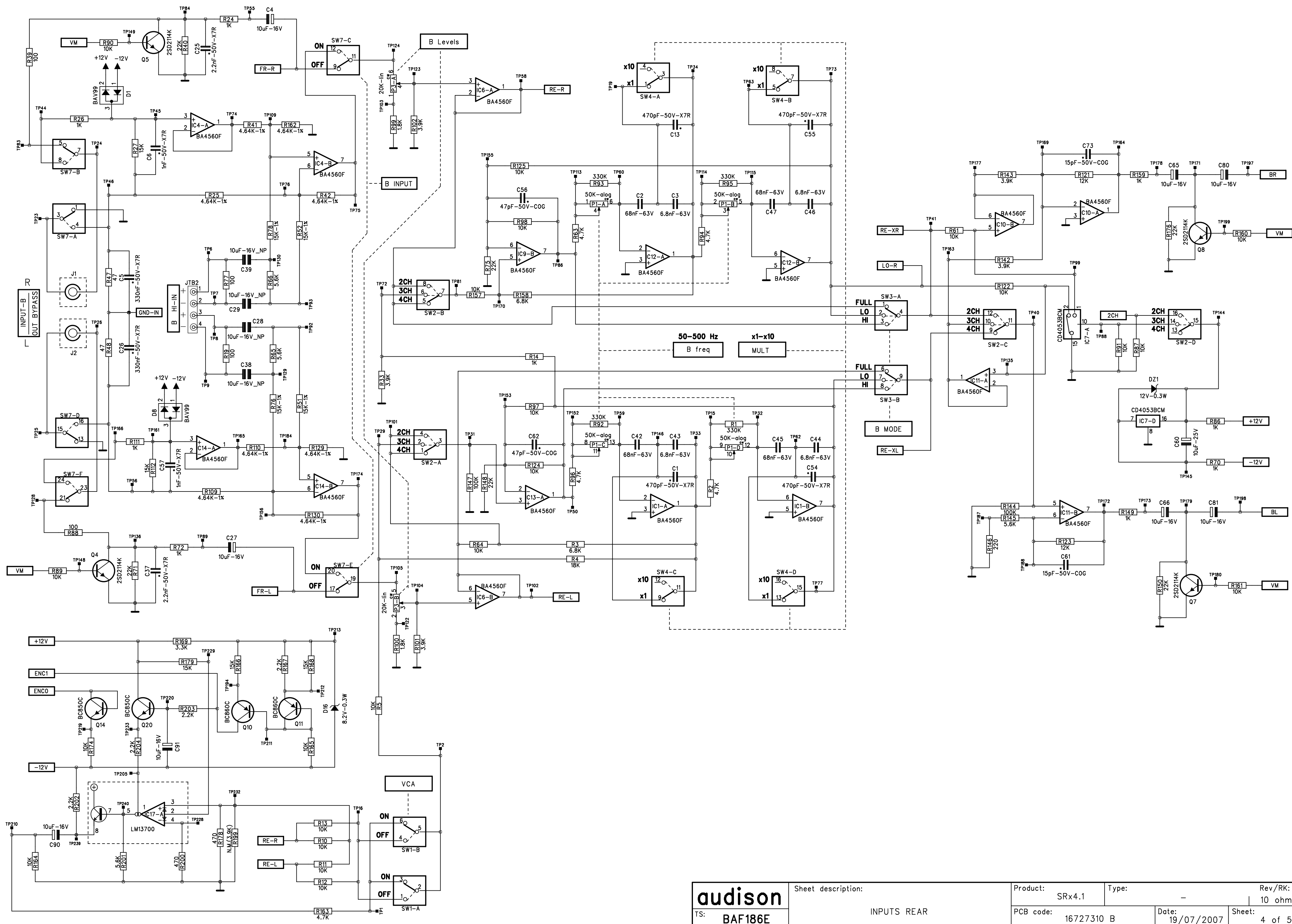
Sheet description:
POWER SUPPLY

Product: SRx4.1	Type: -	Rev/RK: 10 ohm
PCB code: 16727310 B	Date: 19/07/2007	Sheet: 1 of 5

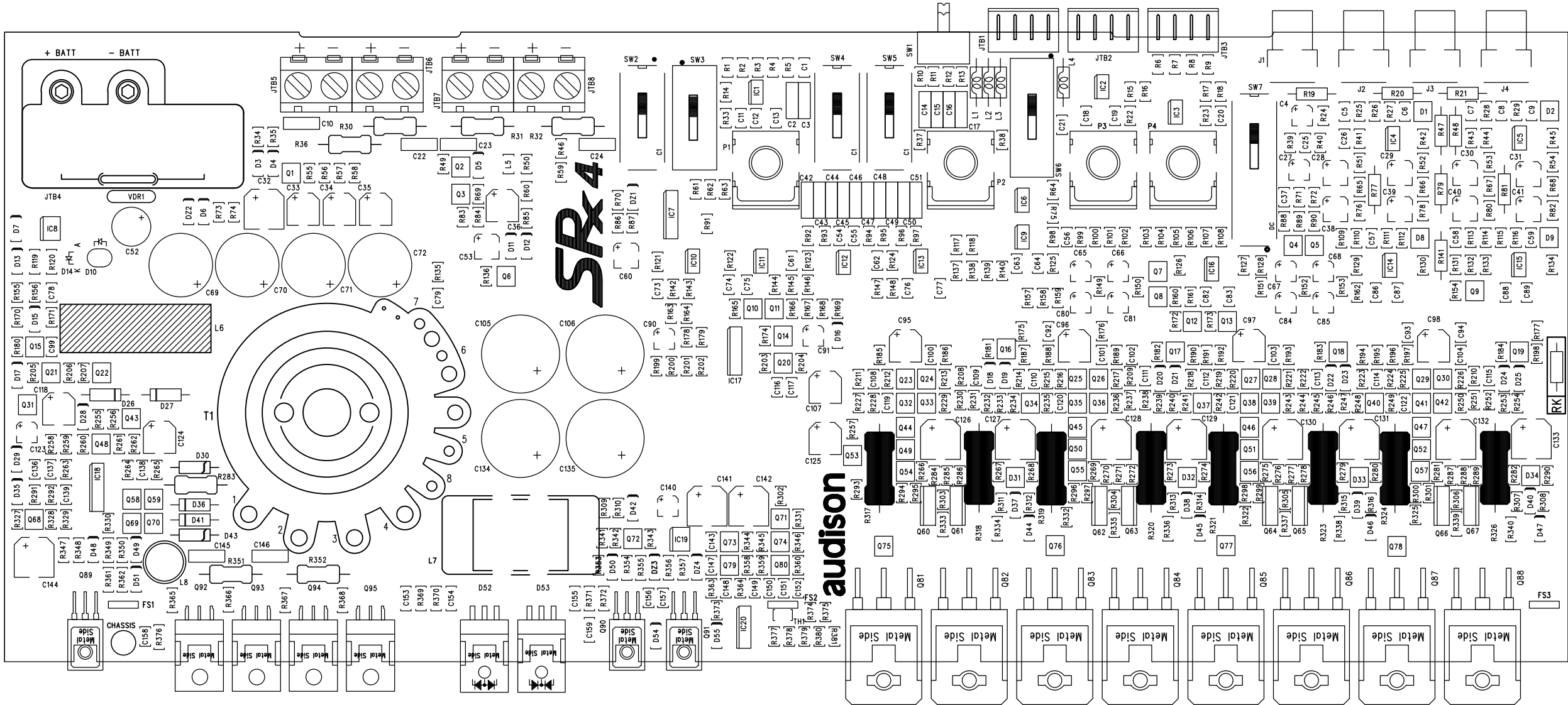


audison TS: BAF186E	Sheet description: FRONT & REAR CHANNELS	Product: SRx4.1	Type: -	Rev/RK: 10 ohm
		PCB code: 16727310 B	Date: 19/07/2007	Sheet: 2 of 5





audison TS: BAF186E	Sheet description: INPUTS REAR	Product:	SRx4.1	Type:	-	Rev/RK:	10 ohm
		PCB code:	16727310 B	Date:	19/07/2007	Sheet:	4 of 5



audison		Sheet description: COMPONENTS LAYOUT	Product: SRx4	Type: —	Rev/RK: 10ohm
TS: BAC189B			PCB code: 16727310 B	Date: 03/ 04/ 2007	Sheet: 1 of 1

SRx 4 PCB PARTS LIST

Rk = 10 Ohm

REF. NO	PART NO	DESCRIPTION	Q.TY
LEADED MECHANICAL PARTS			
	10023510	SPACER for LED h. 9.5mm	2
FS1 FS2 FS3	15241940	4.8mm VERT. FASTON for PCB	3
LEADED CONNECTION WIRE AND CONNECTORS			
CHASSIS	12500590	SRx.1 GROUND SPRING	1
JTB1 JTB2 JTB3	15211722	4W MALE TERMINAL BLOCK for PCB	3
JTB5 JTB6 JTB7 JTB8	15211800	2W SPEAKERS TERMINAL BLOCK P.7.5	4
J1 J2 J3 J4	15230460	RIGHT ANGLE RCA for PCB - NICKEL	4
SW1	15310230	SLIDE SWITCH O. 2 WAY - 2 POSITIONS	1
SW6	15310411	SLIDE SWITCH V. 2 WAY - 2 POSITIONS	1
SW4 SW5	15310421	SLIDE SWITCH V. 4 WAY - 2 POSITIONS	2
SW7	15310431	SLIDE SWITCH V. 6 WAY - 2 POSITIONS	1
SW3	15310440	SLIDE SWITCH V. 2 WAY - 3 POSITIONS	1
SW2	15310450	SLIDE SWITCH V. 4 WAY - 3 POSITIONS	1
SMT MAGNETIC WIREWOUND			
L5	15725520	EMI FILTER RF SMD 0805	1
LEADED MAGNETIC WIREWOUND			
L8	15721250	47uH INDUCTOR	1
L7	15721281	L35 INDUCTOR	1
L6	15721320	L32 INDUCTOR	1
L1 L2 L3 L4	15725050	SBC 1000uH d. 3x6.8 mm INDUCTOR	4
T1	35754950	TOROIDAL TRANSFORMER T380 for SRx 4.1	1
LEADED POTENTIOMETERS			
P3 P4	16310100	14mm 2x22K LIN L15x6 VER	2
P1	16310200	14mm 4xC50K ALOG L20x6 VER.	1
P2	16310210	14mm 2xC50K+2xC20K ALOG L20x6 VER.	1
SMT RESISTORS			
R333 R334 R335 R336 R337 R338 R339 R340	16331000	1206 1/4 W 5% 1 Ohm	8
R365 R366 R367 R368	16332200	1206 1/4 W 5% 10 Ohm	4
R350 R362 R369 R370 R371 R372	16332900	1206 1/4 W 5% 47 Ohm	6
R347 R348	16334200	1206 1/4 W 5% 470 Ohm	2
R119	16334300	1206 1/4 W 5% 560 Ohm	1
R349 R361 R376	16334600	1206 1/4 W 5% 1 kOhm	3
R120 R354 R355 R356 R357	16335000	1206 1/4 W 5% 2.2 kOhm	5
R268 R274 R280 R290 R308 R312 R314 R316	16341000	0805 1/10 W 5% 0 Ohm	8
R206	16343000	0805 1/10 W 5% 33 Ohm	1
R213 R217 R221 R226 R229 R230 R233 R236 R237 R240 R243	16343400	0805 1/10 W 5% 68 Ohm	17
R244 R246 R250 R251 R253 R262			
R39 R88 R136 R215 R228 R234 R241 R242 R248 R249 R255	16343600	0805 1/10 W 5% 100 Ohm	22
R257 R272 R278 R286 R289 R295 R297 R299 R301 R342 R343			
R266 R269 R275 R281	16343800	0805 1/10 W 5% 150 Ohm	4
R74 R146	16344000	0805 1/10 W 5% 220 Ohm	2
R187 R190 R194 R198	16344300	0805 1/10 W 5% 390 Ohm	4
R178 R200 R303 R304 R305 R306 R344 R358	16344400	0805 1/10 W 5% 470 Ohm	8
R35	16344500	0805 1/10 W 5% 560 Ohm	1
R14 R24 R26 R34 R43 R49 R70 R72 R73 R85 R86 R111 R114	16344800	0805 1/10 W 5% 1 kOhm	32
R128 R135 R149 R151 R159 R186 R189 R193 R196 R212 R216			
R220 R225 R307 R311 R313 R315 R329 R341			
R99 R100 R103 R104 R214 R218 R219 R223 R224 R227 R235	16345100	0805 1/10 W 5% 1.8 kOhm	13
R293 R377			
R167 R202 R203 R204 R292 R363 R364 R374	16345200	0805 1/10 W 5% 2.2 kOhm	8
R37 R139	16345300	0805 1/10 W 5% 2.7 kOhm	2
R131 R169 R267 R273 R279 R282 R346 R360	16345400	0805 1/10 W 5% 3.3 kOhm	8
R17 R18 R33 R101 R102 R105 R106 R126 R127 R142 R143	16345500	0805 1/10 W 5% 3.9 kOhm	15
R181 R182 R183 R184			
R2 R63 R94 R96 R163 R171 R180 R258 R330 R353	16345600	0805 1/10 W 5% 4.7 kOhm	10
R65 R66 R67 R68 R137 R138 R145 R201	16345700	0805 1/10 W 5% 5.6 kOhm	8
R3 R158 R345 R359	16345800	0805 1/10 W 5% 6.8 kOhm	4
R373	16345900	0805 1/10 W 5% 8.2 kOhm	1
R5 R10 R11 R12 R13 R15 R16 R56 R61 R62 R64 R84 R87 R89	16346000	0805 1/10 W 5% 10 kOhm	43
R90 R91 R97 R98 R107 R108 R122 R124 R125 R154 R157			
R160 R161 R164 R165 R172 R173 R174 R205 R207 R256			
R259 R265 R291 R309 R310 R327 R328 R379			

SRx 4 PCB PARTS LIST

Rk = 10 Ohm

REF. NO	PART NO	DESCRIPTION	Q.TY
R22 R23 R121 R123 R231 R232 R238 R239 R245 R247 R252	16346100.	0805 1/10 W 5% 12 kOhm	13
R254 R378			
R27 R29 R112 R115 R166 R168 R179	16346200.	0805 1/10 W 5% 15 kOhm	7
R4 R271 R277 R285 R288.	16346300.	0805 1/10 W 5% 18 kOhm	5
R40 R71 R75 R83 R148 R150 R152 R153 R176 R185 R188	16346400.	0805 1/10 W 5% 22 kOhm	19
R192 R197 R208 R209 R210 R222 R264 R302			
R270 R276 R284 R287	16346500.	0805 1/10 W 5% 27 kOhm	4
R6 R7 R8 R9 R55 R69 R380	16346600.	0805 1/10 W 5% 33 kOhm	7
R260 R381	16346700.	0805 1/10 W 5% 39 kOhm	2
R57 R58 R156 R211 R263 R296 R298 R300 R331	16346800.	0805 1/10 W 5% 47 kOhm	9
R375.	16346950.	0805 1/10 W 5% 68 kOhm	1
R46 R50 R59 R60 R144 R147 R294 R322 R325 R332.	16347100.	0805 1/10 W 5% 100 kOhm	10
R1 R92 R93 R95 R170.	16347700.	0805 1/10 W 5% 330 kOhm	5
R25 R28 R41 R42 R44 R45 R109 R110 R113 R116 R129 R130	16353770.	0805 1/10 W 1% 4.64 kOhm.	16
R132 R133 R134 R162			
R51 R52 R53 R54 R76 R78 R80 R82	16353868.	0805 1/10 W 1% 15 kOhm	8
LEADED RESISTORS			
RK.	16120300.	1/4 W 5% 10 Ohm.	1
R141.	16120700.	1/4 W 5% 22 Ohm.	1
R20 R21 R47 R48	16121100.	1/4 W 5% 47 Ohm.	4
R19 R77 R79 R81	16121500.	1/4 W 5% 100 Ohm.	4
R30 R31 R32 R36 R283.	16141000.	1/2 W 10 Ohm	5
R351 R352	16141300.	1/2 W 5% 22 Ohm.	2
R317 R318 R319 R320 R321 R323 R324 R326	16184980.	WIRE - 3 W 5% 0.15 Ohm 12.5x5mm.	8
SMT CAPACITORS			
C53.	16520201.	ELECTROLYTIC 22uF 50V 5x11 P.5mm	1
C33 C126 C127 C128 C129 C130 C131 C132 C133 C144	16530801.	ELECTROLYTIC 100uF 25V 5x11 P.5mm	10
C153 C154 C155 C159	16567336.	CERAMIC X7R 1206 1nF 500V 10%	4
C19 C20 C61 C73	16570028.	CERAMIC 0805 15pF 50V 5%	4
C56 C62 C109 C111 C113 C115	16570040.	CERAMIC 0805 47pF 50V 5%	6
C119 C120 C121 C122	16570044.	CERAMIC 0805 68pF 50V 5%	4
C1 C13 C54 C55 C100 C101 C103 C104	16570070.	CERAMIC X7R 0805 470pF 50V 10%	8
C6 C9 C57 C59 C108 C110 C112 C114 C136.	16570072.	CERAMIC X7R 0805 1nF 50V 10%	9
C25 C37.	16570080.	CERAMIC X7R 0805 2.2nF 50V 10%.	2
C139.	16570096.	CERAMIC X7R 0805 10nF 50V 10%	1
C5 C7 C8 C26 C58.	16570132.	CERAMIC X7R 0805 330nF 50V 10%	5
C11 C12 C18 C21 C63 C64 C74 C75 C76 C77 C78 C79 C82 C83	16570224.	CERAMIC Y5V 0805 100nF 50V	38
C86 C87 C88 C89 C92 C93 C94 C99 C102 C116 C117 C137 C138			
C143 C147 C148 C149 C150 C151 C152 C156 C157 C158			
C4 C27 C65 C66 C67 C68 C80 C81 C84 C85 C90 C91 C123 C140	16570540.	ELECTROLYTIC 10uF 16V 4x5.3.	14
C60.	16570541.	ELECTROLYTIC 10uF 25V 5x5.5.	1
C34 C35 C36 C95 C96 C97 C98 C107 C118 C124 C125.	16570560.	ELECTROLYTIC 47uF 16V 6.3x5.3	11
C28 C29 C30 C31 C38 C39 C40 C41	16571000.	ELECTROLYTIC 10uF 16V 85g 5x5.3	8
LEADED CAPACITORS			
C145 C146	16430600.	POLYESTER 4.7nF 63Vdc/40Vac P.5mm.	2
C3 C43 C44 C46	16430800.	POLYESTER 6.8nF 63Vdc/40Vac P.5mm.	4
C14 C17 C48 C50	16430900.	POLYESTER 8.2nF 63Vdc/40Vac P.5mm.	4
C2 C42 C45 C47	16431900.	POLYESTER 68nF 63Vdc/40Vac P.5mm	4
C15 C16 C49 C51	16431950.	POLYESTER 82nF 63Vdc/40Vac P.5mm	4
C10 C22 C23 C24	16441601.	POLYESTER 22nF 50Vdc/30Vac P.5mm	4
C32 C141 C142	16530831.	ELECTROLYTIC 220uF 25V 8x11.5.	3
C52.	16530841.	ELECTROLYTIC 105° 220uF 25V 8x15.	1
C69 C70 C71 C72	16531001.	ELECTROLYTIC 105° 1000uF 25V 12x25 Low imp.	4
C105 C106 C134 C135	16541001.	ELECTROLYTIC 2200uF 35V 16x25	4
SMT TRANSISTORS			
Q1 Q6 Q21 Q22 Q31 Q43 Q68 Q69 Q70 Q72 Q73 Q74.	16615000.	PNP SOT23 BC807-25	12
Q2 Q3 Q9 Q15 Q48 Q58 Q59 Q71 Q79 Q80	16615200.	NPN SOT23 BC817-25.	10
Q4 Q5 Q7 Q8 Q12 Q13	16615300.	NPN SOT23 2SD2114K	6
Q14 Q16 Q17 Q18 Q19 Q20 Q23 Q25 Q27 Q29 Q33 Q36 Q39	16615800.	NPN SOT23 BC850C	22
Q42 Q44 Q45 Q46 Q47 Q75 Q76 Q77 Q78			
Q10 Q11 Q24 Q26 Q28 Q30 Q49 Q50 Q51 Q52 Q54 Q55 Q56 Q57	16616000.	PNP SOT23 BC860C	14
Q32 Q35 Q38 Q41.	16616050.	PNP SOT23 2SA1514K-R.	4
Q34 Q37 Q40 Q53.	16616070.	NPN SOT23 2SC3906K-R	4

SRx 4 PCB PARTS LIST

Rk = 10 Ohm

REF. NO	PART NO	DESCRIPTION	Q.TY
LEADED TRANSISTORS			
Q92 Q93 Q94 Q95	16606021	MOSFET TO220 HUF75333P3	4
Q60 Q62 Q64 Q66 Q89 Q91	16613010	NPN INS. TO126 KTC2800-Y	6
Q61 Q63 Q65 Q67 Q90	16613110	PNP INS. TO126 KTA1700-Y	5
Q81 Q83 Q85 Q87	16614640	NPN INS. TO3P 10A 120V	4
Q82 Q84 Q86 Q88	16614740	PNP INS. TO3P 10A 120V	4
SMT DIODES			
D3 D4 D5 D6 D7 D12 D13 D15 D17 D18 D19 D20 D21 D22 D23	16637000	SIGNAL SOD80 150mA 75V /4148	26
D24 D25 D28 D29 D35 D42 D49 D50 D51 D54 D55			
D1 D2 D8 D9 D31 D32 D33 D34	16637030	DUAL SIGNAL SOT23 70V	8
D11 D37 D38 D39 D40 D44 D45 D46 D47	16637910	ZENER MMELF 2.7V 5% 0.5W	9
D22	16637945	ZENER MMELF 5.1V 5% 0.5W	1
D16	16637970	ZENER MMELF 8.2V 5% 0.5W	1
DZ1 DZ3 DZ4	16638000	ZENER MMELF 12V 5% 0.5W	3
D48	16638020	ZENER MMELF 15V 5% 0.5W	1
LEADED DIODES			
D26 D27	16620100	1A 50V 1N4001 DIODE	2
D36 D41	16621100	U-FAST 1A 400V UF4004	2
D30 D43	16621700	ZENER 1W 39V 5%	2
D52	16631460	UF ITO220 2x10A 200V A-C	1
D53	16631480	UF ITO220 2x10A 200V K-C	1
D14	16635020	CLEAR RED LED 3mm	1
D10	16635540	DIFFUSED BLUE OVAL LED 5mm	1
SMT ICs			
IC20	16691010	SMD S014 LM339	1
IC18	16691030	SMD SO16 TL494ID	1
IC1 IC2 IC3 IC4 IC5 IC6 IC9 IC10 IC11 IC12 IC13 IC14 IC15 IC16	16691560	SMD NJM 4580E-TE 1	14
IC17	16691580	SMD SO16 LM13700M	1
IC7	16693110	SMD SOIC16 CD4053BCM	1
SMT PHOTOCOUPERS			
IC8	16692800	PHOTOTRANSISTOR SO8 (4 pin)	1
IC19	16692850	PHOTOTRANSISTOR SO8 (4 pin) PC452TE	1
SMT THERMISTORS			
TH1	16831200	NTC SMD 0805 10 Kohm	1
LEADED VARISTORS			
VDR1	16832700	VDR 17V 0.01W p.5.08	1

PART 1: ELECTRONIC PART

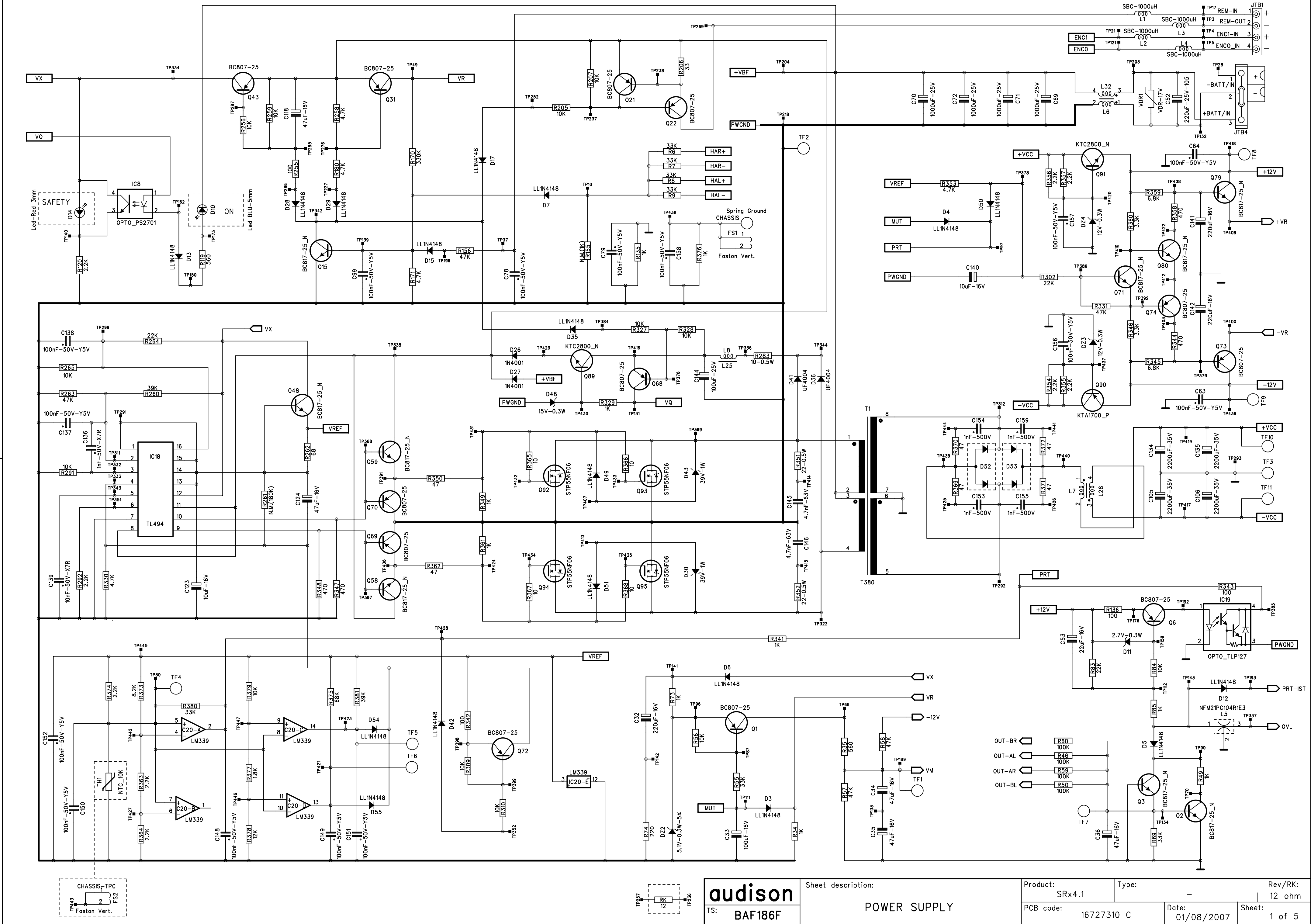
Section B: Mainboard revisions

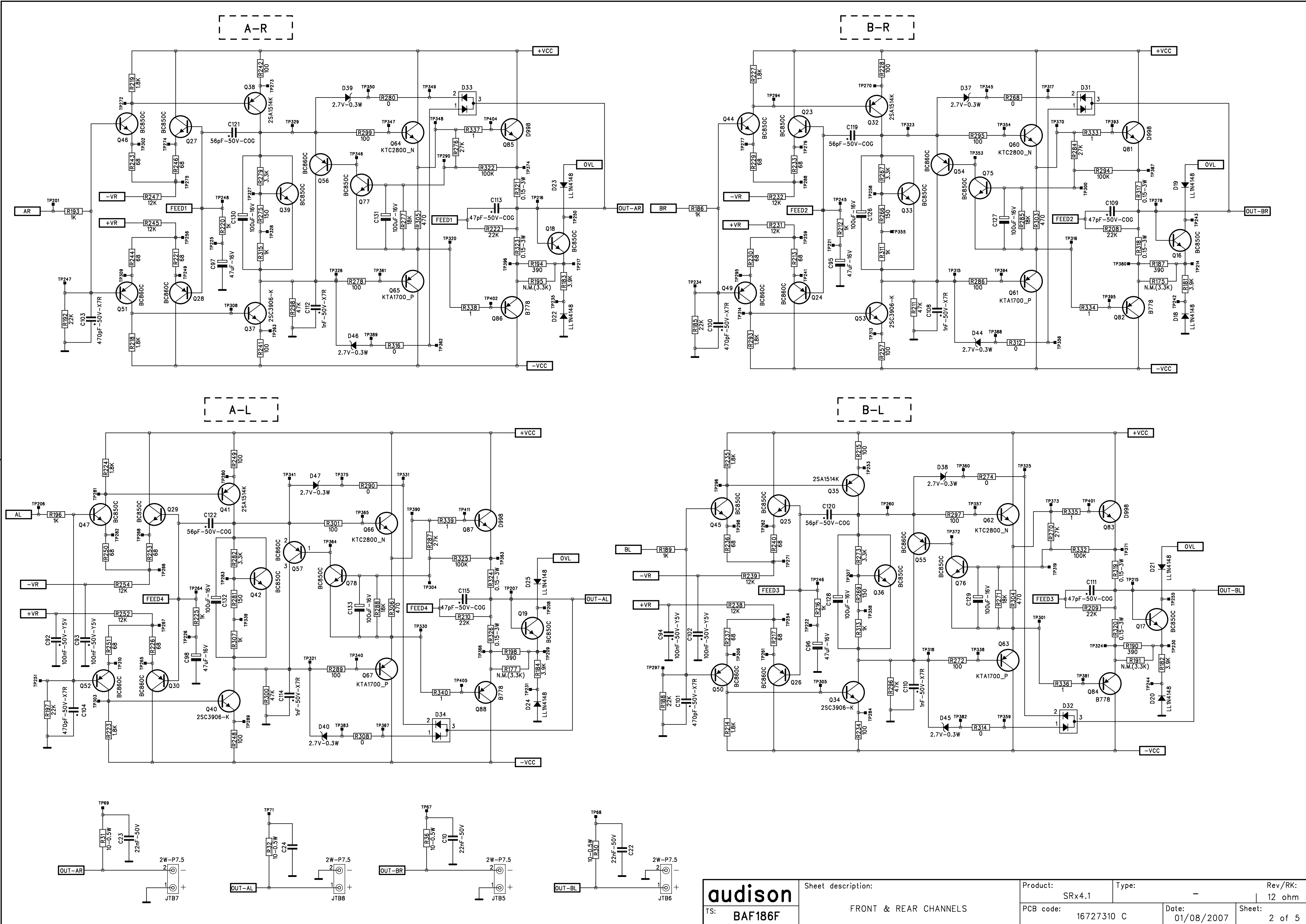
Upgrading Version - Rk = 12 Ohm

- | | |
|------------------------|-------------------|
| 1. Electrical diagrams | sheet from 1 to 5 |
| 2. Components layout | sheet from 1 to 1 |
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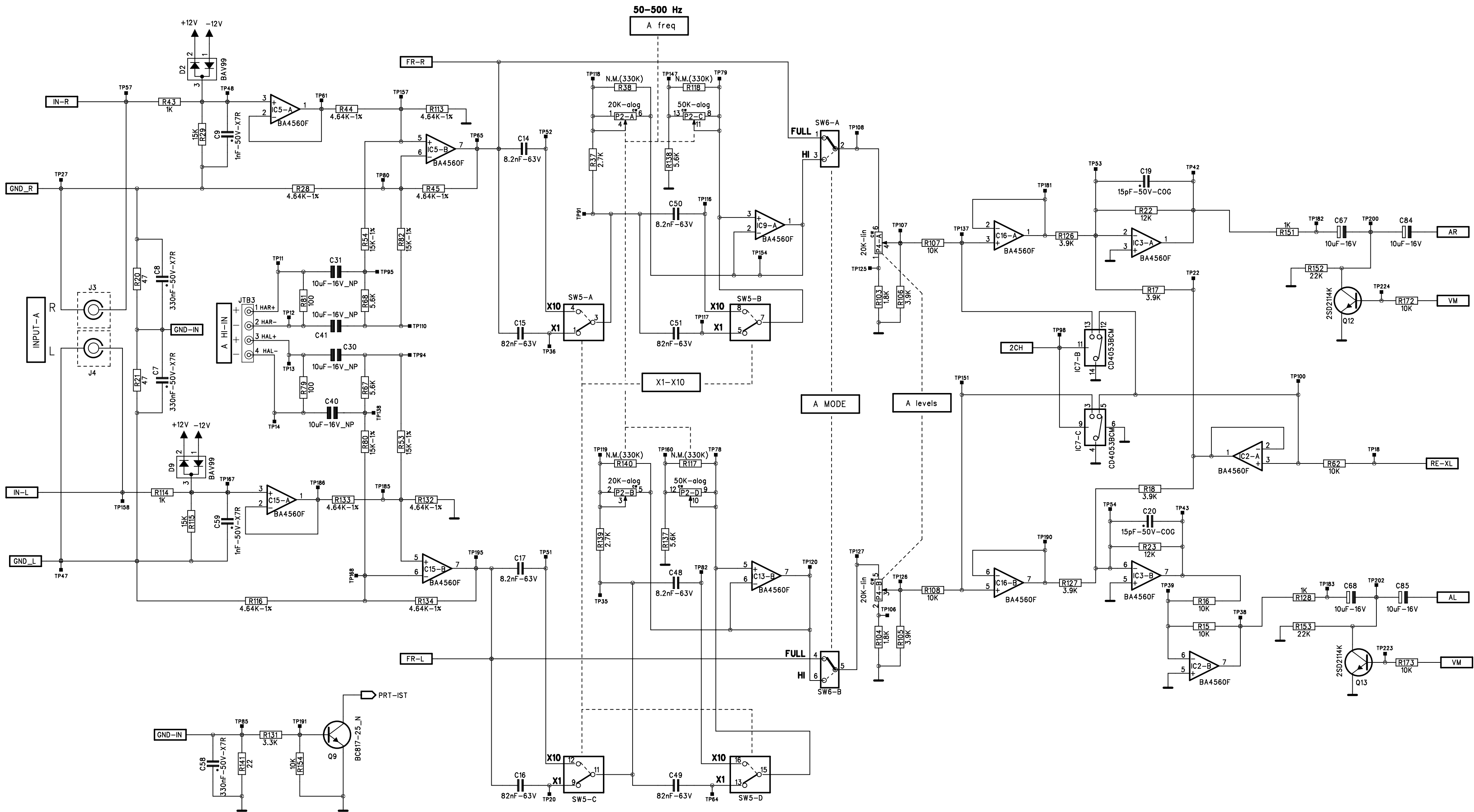
Table of the last upgrading revisions

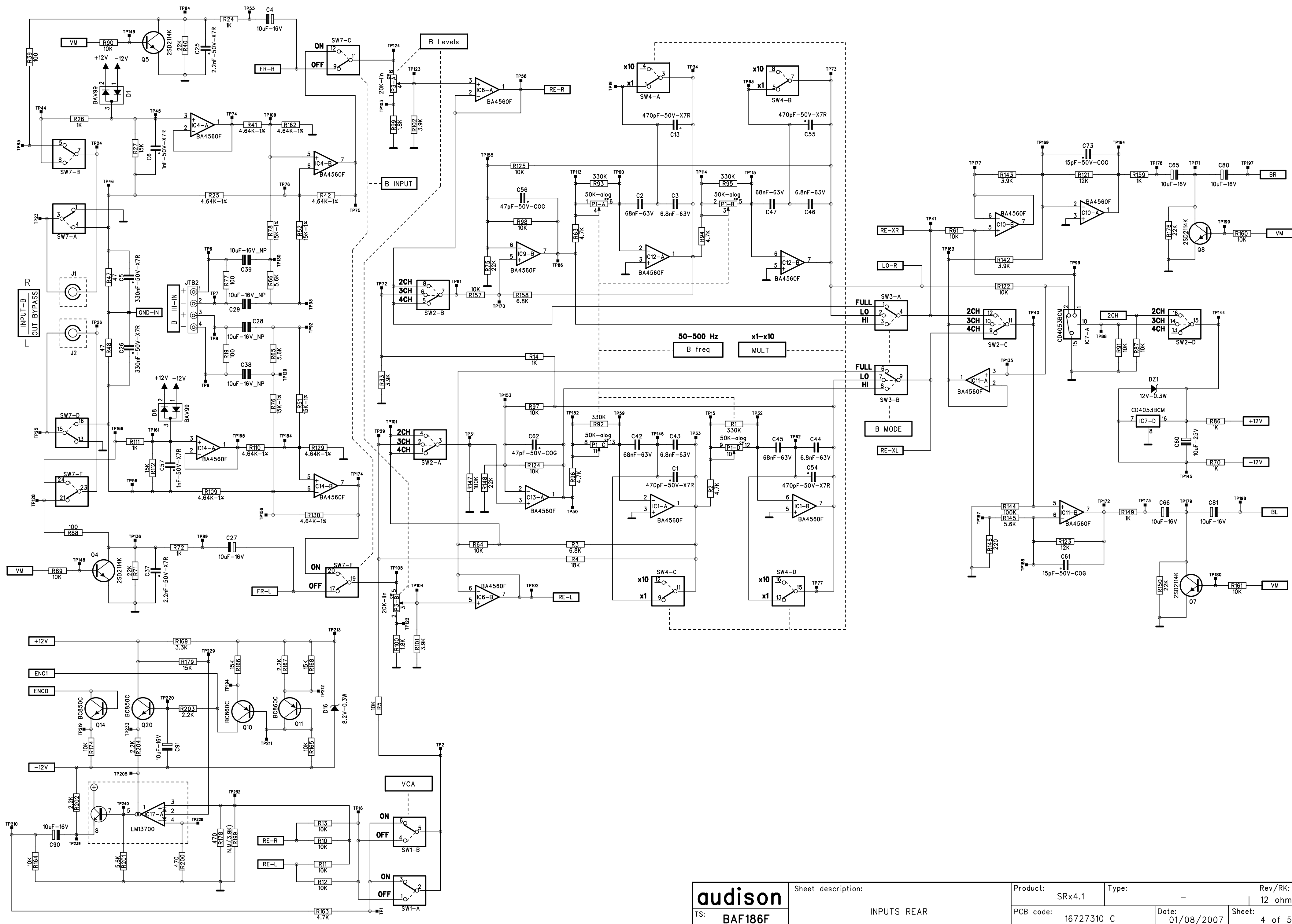
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Rev. A	Rk = 12 Ohm	Rev. A	Rev. A	Rev. A



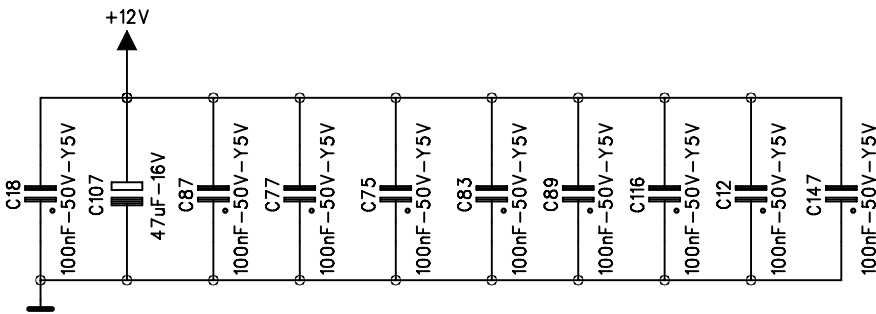
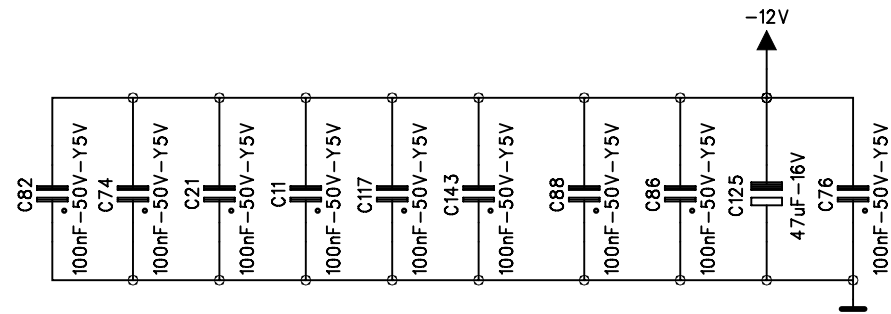
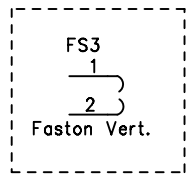
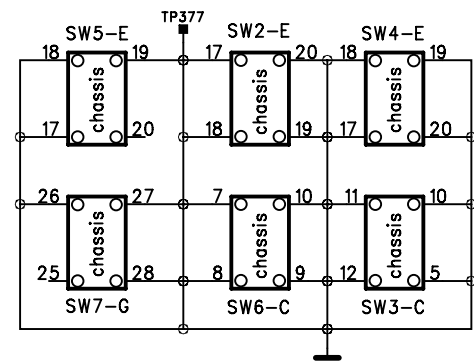
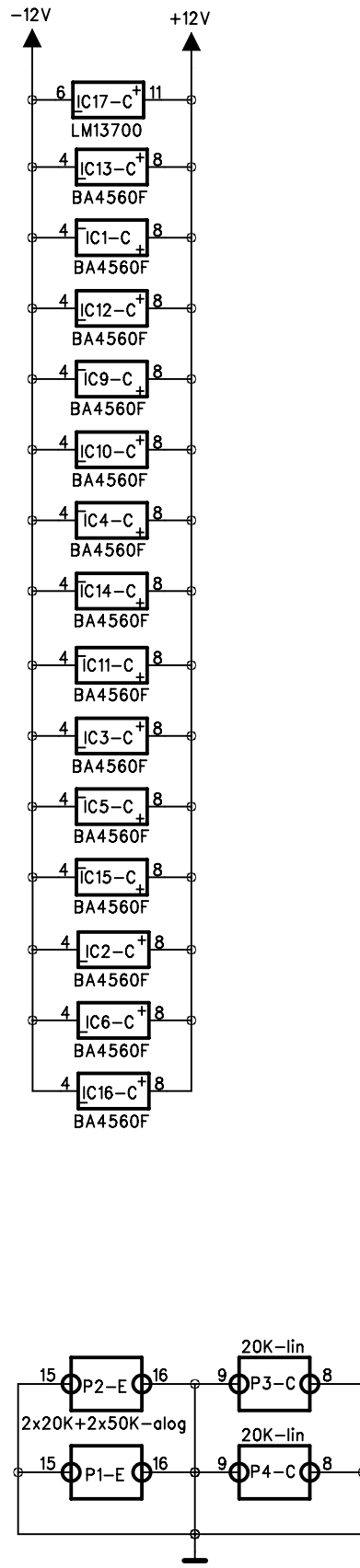
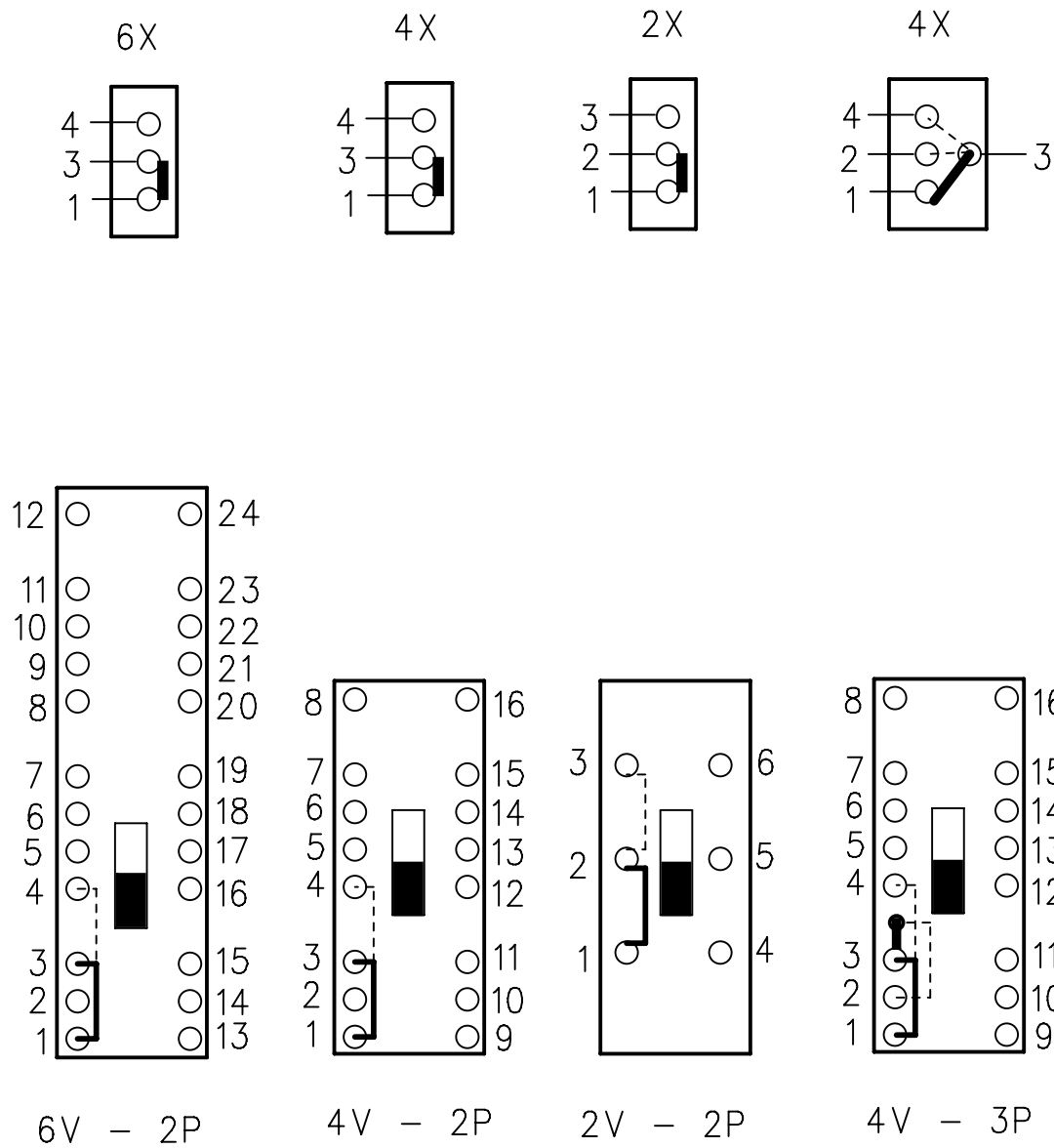


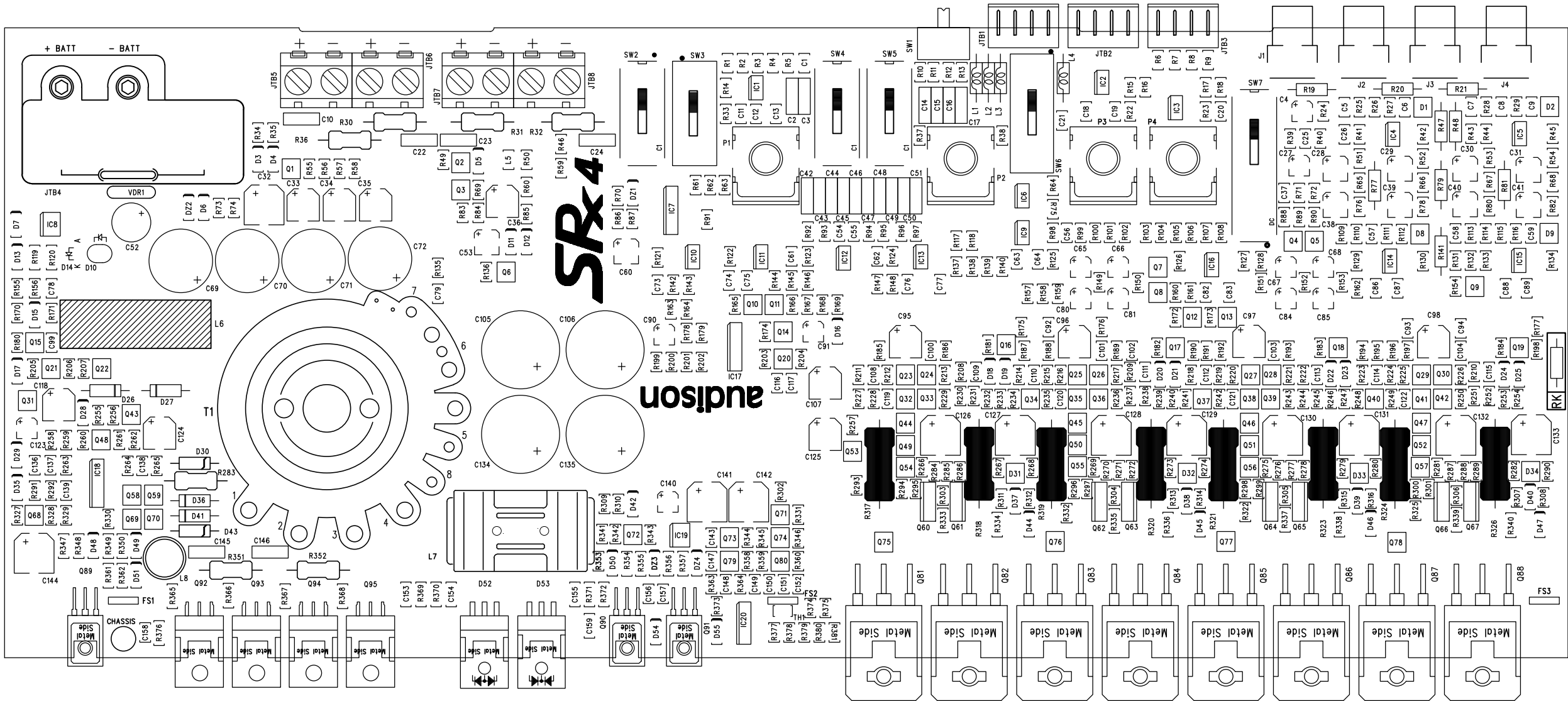
audison TS: BAF186F	Sheet description: FRONT & REAR CHANNELS	Product: SRx4.1	Type: -	Rev/RK: 12 ohm
		PCB code: 16727310 C	Date: 01/08/2007	Sheet: 2 of 5





audison TS: BAF186F	Sheet description: INPUTS REAR	Product: SRx4.1	Type: -	Rev/RK: 12 ohm
		PCB code: 16727310 C	Date: 01/08/2007	Sheet: 4 of 5





audison		Sheet description: COMPONENTS LAYOUT	Product: SRx4	Type: —	Rev/RK: 12ohm
TS: BAC189C			PCB code: 16727310 C	Date: 03/08/2007	Sheet: 1 of 1

SRx 4 PCB PARTS LIST

Rk = 12 Ohm

REF. NO	PART NO	DESCRIPTION	Q.TY
LEADED MECHANICAL PARTS			
	10023510	SPACER for LED h. 9.5mm	2
FS1 FS2 FS3	15241940	4.8mm VERT. FASTON for PCB	3
LEADED CONNECTION WIRE AND CONNECTORS			
CHASSIS	12500590	SRx.1 GROUND SPRING	1
JTB1 JTB2 JTB3	15211722	4W MALE TERMINAL BLOCK for PCB	3
JTB5 JTB6 JTB7 JTB8	15211800	2W SPEAKERS TERMINAL BLOCK P.7.5	4
J1 J2 J3 J4	15230460	RIGHT ANGLE RCA for PCB - NICKEL	4
SW1	15310231	SLIDE SWITCH O. 2 WAY - 2 POSITIONS	1
SW6	15310411	SLIDE SWITCH V. 2 WAY - 2 POSITIONS	1
SW4 SW5	15310421	SLIDE SWITCH V. 4 WAY - 2 POSITIONS	2
SW7	15310431	SLIDE SWITCH V. 6 WAY - 2 POSITIONS	1
SW3	15310440	SLIDE SWITCH V. 2 WAY - 3 POSITIONS	1
SW2	15310450	SLIDE SWITCH V. 4 WAY - 3 POSITIONS	1
SMT MAGNETIC WIREWOUND			
L5	15725520	EMI FILTER RF SMD 0805	1
LEADED MAGNETIC WIREWOUND			
L8	15721250	47uH INDUCTOR	1
L7	15721281	L35 INDUCTOR	1
L6	15721320	L32 INDUCTOR	1
L1 L2 L3 L4	15725050	SBC 1000uH d. 3x6.8 mm INDUCTOR	4
T1	35754950	TOROIDAL TRANSFORMER T380 for SRx 4.1	1
LEADED POTENTIOMETERS			
P3 P4	16310100	14mm 2x22K LIN L15x6 VER	2
P1	16310200	14mm 4xC50K ALOG L20x6 VER.	1
P2	16310210	14mm 2xC50K+2xC20K ALOG L20x6 VER.	1
SMT RESISTORS			
R333 R334 R335 R336 R337 R338 R339 R340	16331000	1206 1/4 W 5% 1 Ohm	8
R365 R366 R367 R368	16332200	1206 1/4 W 5% 10 Ohm	4
R350 R362 R369 R370 R371 R372	16332900	1206 1/4 W 5% 47 Ohm	6
R347 R348	16334200	1206 1/4 W 5% 470 Ohm	2
R119	16334300	1206 1/4 W 5% 560 Ohm	1
R349 R361 R376	16334600	1206 1/4 W 5% 1 kOhm	3
R120 R354 R355 R356 R357	16335000	1206 1/4 W 5% 2.2 kOhm	5
R268 R274 R280 R290 R308 R312 R314 R316	16341000	0805 1/10 W 5% 0 Ohm	8
R206	16343000	0805 1/10 W 5% 33 Ohm	1
R213 R217 R221 R226 R229 R230 R233 R236 R237 R240 R243	16343400	0805 1/10 W 5% 68 Ohm	17
R244 R246 R250 R251 R253 R262			
R39 R88 R136 R215 R228 R234 R241 R242 R248 R249 R255	16343600	0805 1/10 W 5% 100 Ohm	22
R257 R272 R278 R286 R289 R295 R297 R299 R301 R342 R343			
R266 R269 R275 R281	16343800	0805 1/10 W 5% 150 Ohm	4
R74 R146	16344000	0805 1/10 W 5% 220 Ohm	2
R187 R190 R194 R198	16344300	0805 1/10 W 5% 390 Ohm	4
R178 R200 R303 R304 R305 R306 R344 R358	16344400	0805 1/10 W 5% 470 Ohm	8
R35	16344500	0805 1/10 W 5% 560 Ohm	1
R14 R24 R26 R34 R43 R49 R70 R72 R73 R85 R86 R111 R114	16344800	0805 1/10 W 5% 1 kOhm	32
R128 R135 R149 R151 R159 R186 R189 R193 R196 R212			
R216 R220 R225 R307 R311 R313 R315 R329 R341			
R99 R100 R103 R104 R214 R218 R219 R223 R224 R227 R235	16345100	0805 1/10 W 5% 1.8 kOhm	13
R293 R377			
R167 R202 R203 R204 R292 R363 R364 R374	16345200	0805 1/10 W 5% 2.2 kOhm	8
R37 R139	16345300	0805 1/10 W 5% 2.7 kOhm	2
R131 R169 R267 R273 R279 R282 R346 R360	16345400	0805 1/10 W 5% 3.3 kOhm	8
R17 R18 R33 R101 R102 R105 R106 R126 R127 R142 R143	16345500	0805 1/10 W 5% 3.9 kOhm	15
R181 R182 R183 R184			
R2 R63 R94 R96 R163 R171 R180 R258 R330 R353	16345600	0805 1/10 W 5% 4.7 kOhm	10
R65 R66 R67 R68 R137 R138 R145 R201	16345700	0805 1/10 W 5% 5.6 kOhm	8
R3 R158 R345 R359	16345800	0805 1/10 W 5% 6.8 kOhm	4
R373	16345900	0805 1/10 W 5% 8.2 kOhm	1
R5 R10 R11 R12 R13 R15 R16 R56 R61 R62 R64 R84 R87 R89	16346000	0805 1/10 W 5% 10 kOhm	43
R90 R91 R97 R98 R107 R108 R122 R124 R125 R154 R157			
R160 R161 R164 R165 R172 R173 R174 R205 R207 R256			
R259 R265 R291 R309 R310 R327 R328 R379			

SRx 4 PCB PARTS LIST

Rk = 12 Ohm

REF. NO	PART NO	DESCRIPTION	Q.TY
R22 R23 R121 R123 R231 R232 R238 R239 R245 R247 R252	16346100.	0805 1/10 W 5% 12 kOhm	13
R254 R378			
R27 R29 R112 R115 R166 R168 R179	16346200.	0805 1/10 W 5% 15 kOhm	7
R4 R271 R277 R285 R288.	16346300.	0805 1/10 W 5% 18 kOhm	5
R40 R71 R75 R83 R148 R150 R152 R153 R176 R185 R188	16346400.	0805 1/10 W 5% 22 kOhm	19
R192 R197 R208 R209 R210 R222 R264 R302			
R270 R276 R284 R287	16346500.	0805 1/10 W 5% 27 kOhm	4
R6 R7 R8 R9 R55 R69 R380.	16346600.	0805 1/10 W 5% 33 kOhm	7
R260 R381	16346700.	0805 1/10 W 5% 39 kOhm	2
R57 R58 R156 R211 R263 R296 R298 R300 R331	16346800.	0805 1/10 W 5% 47 kOhm	9
R375.	16346950.	0805 1/10 W 5% 68 kOhm	1
R46 R50 R59 R60 R144 R147 R294 R322 R325 R332.	16347100.	0805 1/10 W 5% 100 kOhm	10
R1 R92 R93 R95 R170.	16347700.	0805 1/10 W 5% 330 kOhm	5
R25 R28 R41 R42 R44 R45 R109 R110 R113 R116 R129 R130	16353770.	0805 1/10 W 1% 4.64 kOhm.	16
R132 R133 R134 R162			
R51 R52 R53 R54 R76 R78 R80 R82	16353868.	0805 1/10 W 1% 15 kOhm	8
LEADED RESISTORS			
RK.	16120400.	1/4 W 5% 12 Ohm.	1
R141.	16120700.	1/4 W 5% 22 Ohm.	1
R20 R21 R47 R48	16121100.	1/4 W 5% 47 Ohm.	4
R19 R77 R79 R81	16121500.	1/4 W 5% 100 Ohm.	4
R30 R31 R32 R36 R283.	16141000.	1/2 W 10 Ohm	5
R351 R352	16141300.	1/2 W 5% 22 Ohm.	2
R317 R318 R319 R320 R321 R323 R324 R326	16184980.	WIRE - 3 W 5% 0.15 Ohm 12.5x5mm.	8
SMT CAPACITORS			
C53.	16520201.	ELECTROLYTIC 22uF 50V 5x11 P.5mm	1
C33 C126 C127 C128 C129 C130 C131 C132 C133 C144	16530801.	ELECTROLYTIC 100uF 25V 5x11 P.5mm	10
C153 C154 C155 C159	16567336.	CERAMIC X7R 1206 1nF 500V 10%	4
C19 C20 C61 C73	16570028.	CERAMIC 0805 15pF 50V 5%	4
C56 C62 C109 C111 C113 C115	16570040.	CERAMIC 0805 47pF 50V 5%	6
C119 C120 C121 C122	16570042.	CERAMIC 0805 56pF 50V 5%	4
C1 C13 C54 C55 C100 C101 C103 C104	16570070.	CERAMIC X7R 0805 470pF 50V 10%	8
C6 C9 C57 C59 C108 C110 C112 C114 C136.	16570072.	CERAMIC X7R 0805 1nF 50V 10%	9
C25 C37.	16570080.	CERAMIC X7R 0805 2.2nF 50V 10%.	2
C139.	16570096.	CERAMIC X7R 0805 10nF 50V 10%	1
C5 C7 C8 C26 C58.	16570132.	CERAMIC X7R 0805 330nF 50V 10%	5
C11 C12 C18 C21 C63 C64 C74 C75 C76 C77 C78 C79 C82 C83	16570224.	CERAMIC Y5V 0805 100nF 50V	38
C86 C87 C88 C89 C92 C93 C94 C99 C102 C116 C117 C137 C138			
C143 C147 C148 C149 C150 C151 C152 C156 C157 C158			
C4 C27 C65 C66 C67 C68 C80 C81 C84 C85 C90 C91 C123 C140	16570540.	ELECTROLYTIC 10uF 16V 4x5.3.	14
C60.	16570541.	ELECTROLYTIC 10uF 25V 5x5.5.	1
C34 C35 C36 C95 C96 C97 C98 C107 C118 C124 C125.	16570560.	ELECTROLYTIC 47uF 16V 6.3x5.3	11
C28 C29 C30 C31 C38 C39 C40 C41	16571000.	ELECTROLYTIC 10uF 16V 85g 5x5.3	8
LEADED CAPACITORS			
C145 C146	16430600.	POLYESTER 4.7nF 63Vdc/40Vac P.5mm.	2
C3 C43 C44 C46	16430800.	POLYESTER 6.8nF 63Vdc/40Vac P.5mm.	4
C14 C17 C48 C50	16430900.	POLYESTER 8.2nF 63Vdc/40Vac P.5mm.	4
C2 C42 C45 C47	16431900.	POLYESTER 68nF 63Vdc/40Vac P.5mm	4
C15 C16 C49 C51	16431950.	POLYESTER 82nF 63Vdc/40Vac P.5mm	4
C10 C22 C23 C24	16441601.	POLYESTER 22nF 50Vdc/30Vac P.5mm	4
C32 C141 C142	16530831.	ELECTROLYTIC 220uF 25V 8x11.5.	3
C52.	16530841.	ELECTROLYTIC 105° 220uF 25V 8x15.	1
C69 C70 C71 C72	16531001.	ELECTROLYTIC 105° 1000uF 25V 12x25 Low imp.	4
C105 C106 C134 C135	16541001.	ELECTROLYTIC 2200uF 35V 16x25	4
SMT TRANSISTORS			
Q1 Q6 Q21 Q22 Q31 Q43 Q68 Q69 Q70 Q72 Q73 Q74.	16615000.	PNP SOT23 BC807-25	12
Q2 Q3 Q9 Q15 Q48 Q58 Q59 Q71 Q79 Q80	16615200.	NPN SOT23 BC817-25.	10
Q4 Q5 Q7 Q8 Q12 Q13	16615300.	NPN SOT23 2SD2114K	6
Q14 Q16 Q17 Q18 Q19 Q20 Q23 Q25 Q27 Q29 Q33 Q36 Q39	16615800.	NPN SOT23 BC850C	22
Q42 Q44 Q45 Q46 Q47 Q75 Q76 Q77 Q78			
Q10 Q11 Q24 Q26 Q28 Q30 Q49 Q50 Q51 Q52 Q54 Q55 Q56 Q57	16616000.	PNP SOT23 BC860C	14
Q32 Q35 Q38 Q41.	16616050.	PNP SOT23 2SA1514K-R.	4
Q34 Q37 Q40 Q53.	16616070.	NPN SOT23 2SC3906K-R	4

SRx 4 PCB PARTS LIST

Rk = 12 Ohm

REF. NO	PART NO	DESCRIPTION	Q.TY
LEADED TRANSISTORS			
Q92 Q93 Q94 Q95	16606021	MOSFET TO220 HUF75333P3	4
Q60 Q62 Q64 Q66 Q89 Q91	16613010	NPN INS. TO126 KTC2800-Y	6
Q61 Q63 Q65 Q67 Q90	16613110	PNP INS. TO126 KTA1700-Y	5
Q81 Q83 Q85 Q87	16614640	NPN INS. TO3P 10A 120V	4
Q82 Q84 Q86 Q88	16614740	PNP INS. TO3P 10A 120V	4
SMT DIODES			
D3 D4 D5 D6 D7 D12 D13 D15 D17 D18 D19 D20 D21 D22 D23	16637000	SIGNAL SOD80 150mA 75V /4148	26
D24 D25 D28 D29 D35 D42 D49 D50 D51 D54 D55			
D1 D2 D8 D9 D31 D32 D33 D34	16637030	DUAL SIGNAL SOT23 70V	8
D11 D37 D38 D39 D40 D44 D45 D46 D47	16637910	ZENER MMELF 2.7V 5% 0.5W	9
D22	16637945	ZENER MMELF 5.1V 5% 0.5W	1
D16	16637970	ZENER MMELF 8.2V 5% 0.5W	1
DZ1 DZ3 DZ4	16638000	ZENER MMELF 12V 5% 0.5W	3
D48	16638020	ZENER MMELF 15V 5% 0.5W	1
LEADED DIODES			
D26 D27	16620100	1A 50V 1N4001 DIODE	2
D36 D41	16621100	U-FAST 1A 400V UF4004	2
D30 D43	16621700	ZENER 1W 39V 5%	2
D52	16631460	UF ITO220 2x10A 200V A-C	1
D53	16631480	UF ITO220 2x10A 200V K-C	1
D14	16635020	CLEAR RED LED 3mm	1
D10	16635540	DIFFUSED BLUE OVAL LED 5mm	1
SMT ICs			
IC20	16691010	SMD S014 LM339	1
IC18	16691030	SMD SO16 TL494ID	1
IC1 IC2 IC3 IC4 IC5 IC6 IC9 IC10 IC11 IC12 IC13 IC14 IC15 IC16	16691560	SMD NJM 4580E-TE 1	14
IC17	16691580	SMD SO16 LM13700M	1
IC7	16693110	SMD SOIC16 CD4053BCM	1
SMT PHOTOCOUPERS			
IC8	16692800	PHOTOTRANSISTOR SO8 (4 pin)	1
IC19	16692850	PHOTOTRANSISTOR SO8 (4 pin) PC452TE	1
SMT THERMISTORS			
TH1	16831200	NTC SMD 0805 10 Kohm	1
LEADED VARISTORS			
VDR1	16832700	VDR 17V 0.01W p.5.08	1

PART 1: ELECTRONIC PART

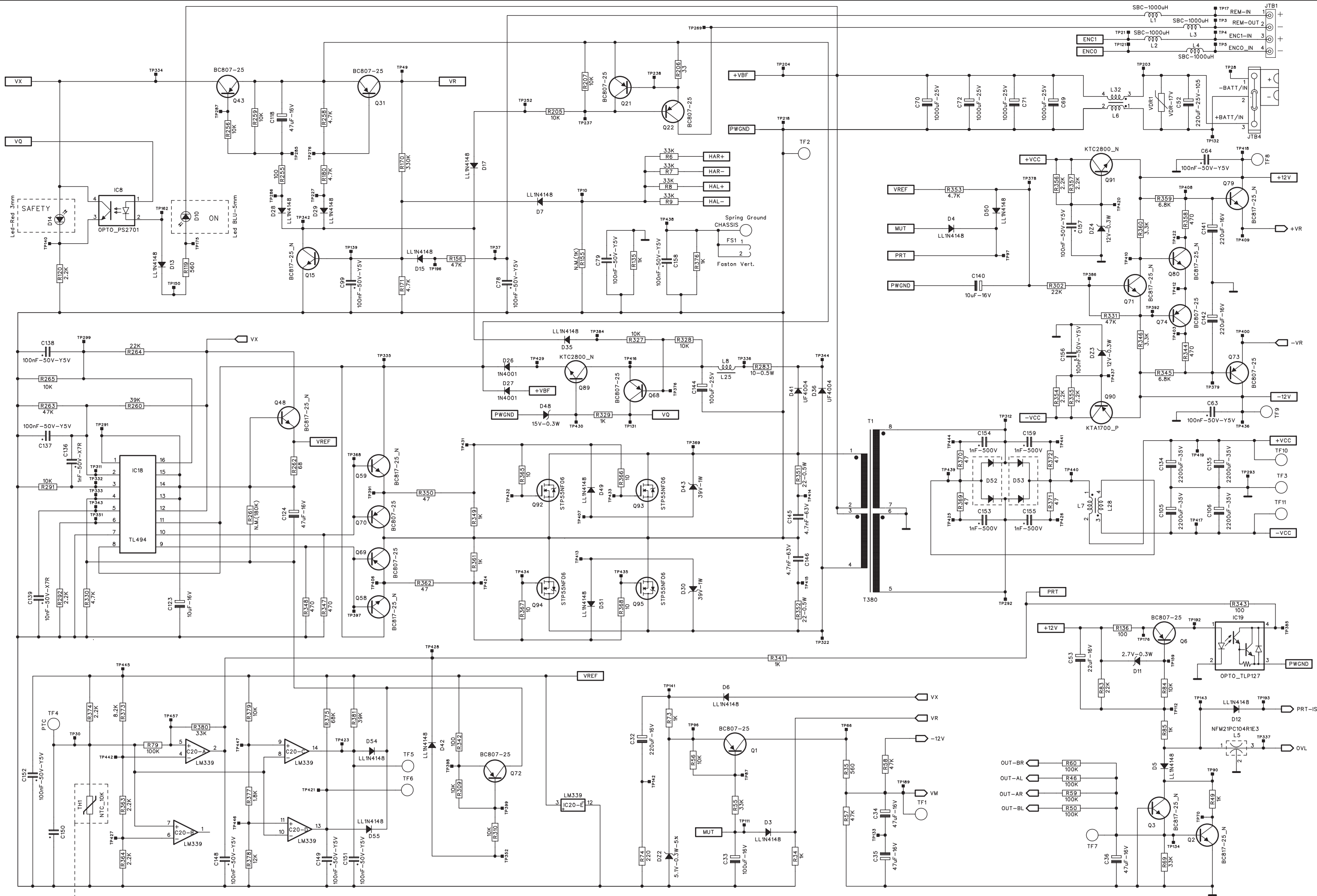
Section B: Mainboard revisions

Upgrading Version - Rk = 15 Ohm

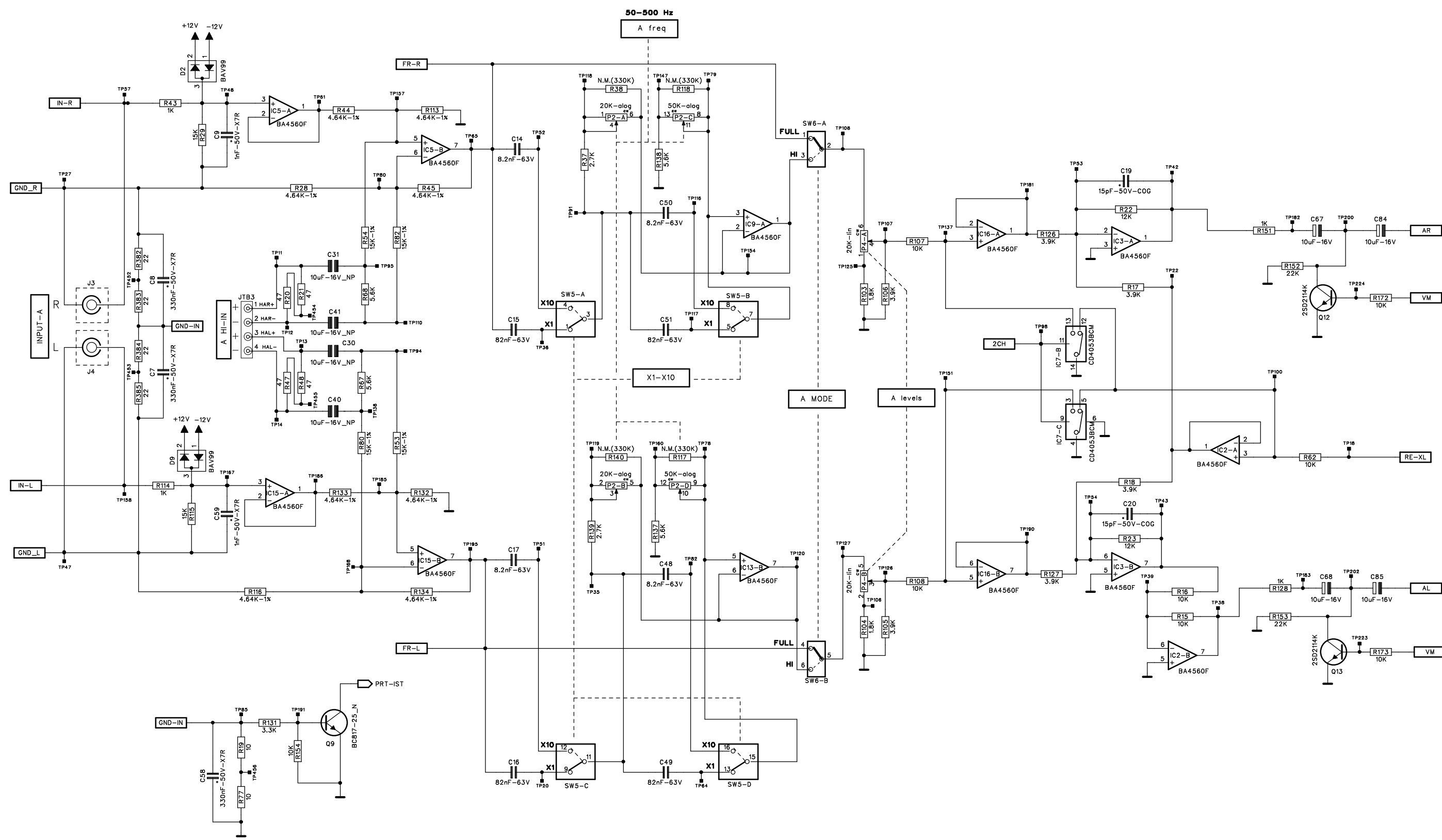
- | | |
|------------------------|-------------------|
| 1. Electrical diagrams | sheet from 1 to 5 |
| 2. Components layout | sheet from 1 to 1 |
| 3. PCB parts list | page from 1 to 3 |

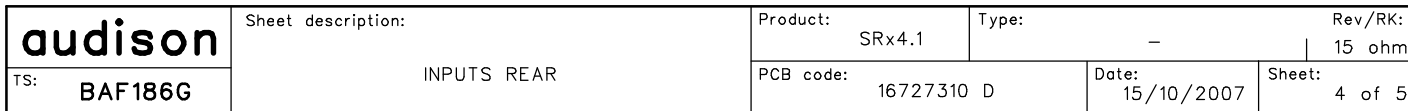
Table of the last upgrading revisions

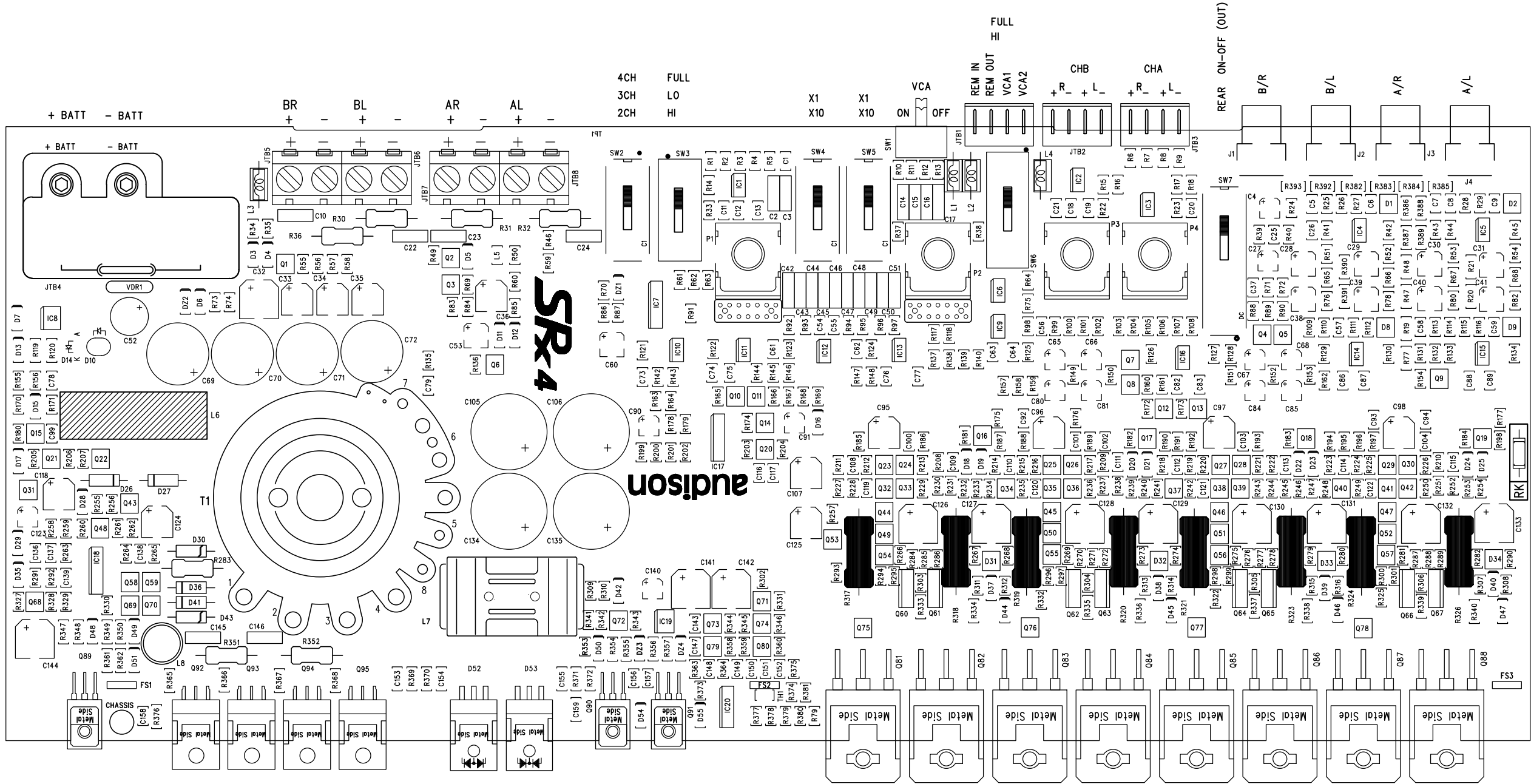
UPGRADING REVISIONS				
PART 1 ELECTRONIC PART			PART 2 MECHANICAL PART	
SECT. A Identification system	SECT. B Mainboard	SECT. C SRx Series Components Pin-out	SECT. A - Exploded views and parts list	SECT. B - Amplifier opening instructions
Rev. A	Rk = 10 Ohm	Rev. A	Rev. A	Rev. A
Rev. A	Rk = 12 Ohm	Rev. A	Rev. A	Rev. A
Rev. A	Rk = 15 Ohm	Rev. A	Rev. A	Rev. A











TS: BAC189D	Sheet description: COMPONENTS LAYOUT	Product: SRx4	Type: -	Rev/RK: 15 ohm
		PCB code: 16727310 D	Date: 16/10/2007	Sheet: 1 of 1

SRx 4 PCB PARTS LIST

Rk = 15 Ohm

REF. NO	PART NO	DESCRIPTION	Q.TY
LEADED MECHANICAL PARTS			
	10023510.	SPACER for LED h. 9.5mm.	2
FS1 FS2 FS3	15241940.	4.8mm VERT. FASTON for PCB	3
LEADED CONNECTION WIRE AND CONNECTORS			
CHASSIS	12500590.	SRx.1 GROUND SPRING	1
JTB1 JTB2 JTB3	15211722.	4W MALE TERMINAL BLOCK for PCB	3
JTB5 JTB6 JTB7 JTB8	15211800.	2W SPEAKERS TERMINAL BLOCK P.7.5	4
J1 J2 J3 J4	15230460.	RIGHT ANGLE RCA for PCB - NICKEL	4
SW1	15310231.	SLIDE SWITCH O. 2 WAY - 2 POSITIONS	1
SW6	15310411.	SLIDE SWITCH V. 2 WAY - 2 POSITIONS	1
SW4 SW5	15310421.	SLIDE SWITCH V. 4 WAY - 2 POSITIONS	2
SW7	15310431.	SLIDE SWITCH V. 6 WAY - 2 POSITIONS	1
SW3	15310440.	SLIDE SWITCH V. 2 WAY - 3 POSITIONS	1
SW2	15310450.	SLIDE SWITCH V. 4 WAY - 3 POSITIONS	1
SMT MAGNETIC WIREWOUND			
L5	15725520.	EMI FILTER RF SMD 0805	1
LEADED MAGNETIC WIREWOUND			
L8	15721250.	47uH INDUCTOR	1
L7	15721281.	L35 INDUCTOR	1
L6	15721320.	L32 INDUCTOR	1
L1 L2 L3 L4	15725050.	SBC 1000uH d. 3x6.8 mm INDUCTOR	4
T1	35754950.	TOROIDAL TRANSFORMER T380 for SRx 4.1	1
LEADED POTENTIOMETERS			
P3 P4	16310100.	14mm 2x22K LIN L15x6 VER	2
P1	16310200.	14mm 4xC50K ALOG L20x6 VER.	1
P2	16310210.	14mm 2xC50K+2xC20K ALOG L20x6 VER.	1
SMT RESISTORS			
R333 R334 R335 R336 R337 R338 R339 R340	16331000.	1206 1/4 W 5% 1 Ohm	8
R365 R366 R367 R368	16332200.	1206 1/4 W 5% 10 Ohm	4
R350 R362 R369 R370 R371 R372	16332900.	1206 1/4 W 5% 47 Ohm	6
R347 R348	16334200.	1206 1/4 W 5% 470 Ohm	2
R119	16334300.	1206 1/4 W 5% 560 Ohm	1
R349 R361 R376	16334600.	1206 1/4 W 5% 1 kOhm	3
R120 R354 R355 R356 R357	16335000.	1206 1/4 W 5% 2.2 kOhm	5
R268 R274 R280 R290 R308 R312 R314 R316	16341000.	0805 1/10 W 5% 0 Ohm	8
R206	16343000.	0805 1/10 W 5% 33 Ohm	1
R213 R217 R221 R226 R229 R230 R233 R236 R237 R240 R243	16343400.	0805 1/10 W 5% 68 Ohm	17
R244 R246 R250 R251 R253 R262			
R39 R88 R136 R215 R228 R234 R241 R242 R248 R249 R255	16343600.	0805 1/10 W 5% 100 Ohm	22
R257 R272 R278 R286 R289 R295 R297 R299 R301 R342 R343			
R266 R269 R275 R281	16343800.	0805 1/10 W 5% 150 Ohm	4
R74 R146	16344000.	0805 1/10 W 5% 220 Ohm	2
R187 R190 R194 R198	16344300.	0805 1/10 W 5% 390 Ohm	4
R178 R200 R303 R304 R305 R306 R344 R358	16344400.	0805 1/10 W 5% 470 Ohm	8
R35	16344500.	0805 1/10 W 5% 560 Ohm	1
R14 R24 R26 R34 R43 R49 R70 R72 R73 R85 R86 R111 R114	16344800.	0805 1/10 W 5% 1 kOhm	32
R128 R135 R149 R151 R159 R186 R189 R193 R196 R212			
R216 R220 R225 R307 R311 R313 R315 R329 R341			
R99 R100 R103 R104 R214 R218 R219 R223 R224 R227 R235	16345100.	0805 1/10 W 5% 1.8 kOhm	13
R293 R377			
R167 R202 R203 R204 R292 R363 R364 R374	16345200.	0805 1/10 W 5% 2.2 kOhm	8
R37 R139	16345300.	0805 1/10 W 5% 2.7 kOhm	2
R131 R169 R267 R273 R279 R282 R346 R360	16345400.	0805 1/10 W 5% 3.3 kOhm	8
R17 R18 R33 R101 R102 R105 R106 R126 R127 R142 R143	16345500.	0805 1/10 W 5% 3.9 kOhm	15
R181 R182 R183 R184			
R2 R63 R94 R96 R163 R171 R180 R258 R330 R353	16345600.	0805 1/10 W 5% 4.7 kOhm	10
R65 R66 R67 R68 R137 R138 R145 R201	16345700.	0805 1/10 W 5% 5.6 kOhm	8
R3 R158 R345 R359	16345800.	0805 1/10 W 5% 6.8 kOhm	4
R373	16345900.	0805 1/10 W 5% 8.2 kOhm	1
R5 R10 R11 R12 R13 R15 R16 R56 R61 R62 R64 R84 R87 R89	16346000.	0805 1/10 W 5% 10 kOhm	43
R90 R91 R97 R98 R107 R108 R122 R124 R125 R154 R157			
R160 R161 R164 R165 R172 R173 R174 R205 R207 R256			
R259 R265 R291 R309 R310 R327 R328 R379			

SRx 4 PCB PARTS LIST

Rk = 15 Ohm

REF. NO	PART NO	DESCRIPTION	Q.TY
R22 R23 R121 R123 R231 R232 R238 R239 R245 R247 R252	16346100.	0805 1/10 W 5% 12 kOhm	13
R254 R378			
R27 R29 R112 R115 R166 R168 R179	16346200.	0805 1/10 W 5% 15 kOhm	7
R4 R271 R277 R285 R288.	16346300.	0805 1/10 W 5% 18 kOhm	5
R40 R71 R75 R83 R148 R150 R152 R153 R176 R185 R188	16346400.	0805 1/10 W 5% 22 kOhm	19
R192 R197 R208 R209 R210 R222 R264 R302			
R270 R276 R284 R287	16346500.	0805 1/10 W 5% 27 kOhm	4
R6 R7 R8 R9 R55 R69 R380.	16346600.	0805 1/10 W 5% 33 kOhm	7
R260 R381	16346700.	0805 1/10 W 5% 39 kOhm	2
R57 R58 R156 R211 R263 R296 R298 R300 R331	16346800.	0805 1/10 W 5% 47 kOhm	9
R375.	16346950.	0805 1/10 W 5% 68 kOhm	1
R46 R50 R59 R60 R144 R147 R294 R322 R325 R332.	16347100.	0805 1/10 W 5% 100 kOhm	10
R1 R92 R93 R95 R170.	16347700.	0805 1/10 W 5% 330 kOhm	5
R25 R28 R41 R42 R44 R45 R109 R110 R113 R116 R129 R130	16353770.	0805 1/10 W 1% 4.64 kOhm.	16
R132 R133 R134 R162			
R51 R52 R53 R54 R76 R78 R80 R82	16353868.	0805 1/10 W 1% 15 kOhm	8
LEADED RESISTORS			
RK.	16120500.	1/4 W 5% 15 Ohm.	1
R141.	16120700.	1/4 W 5% 22 Ohm.	1
R20 R21 R47 R48	16121100.	1/4 W 5% 47 Ohm.	4
R19 R77 R79 R81	16121500.	1/4 W 5% 100 Ohm.	4
R30 R31 R32 R36 R283.	16141000.	1/2 W 10 Ohm	5
R351 R352	16141300.	1/2 W 5% 22 Ohm.	2
R317 R318 R319 R320 R321 R323 R324 R326	16184980.	WIRE - 3 W 5% 0.15 Ohm 12.5x5mm.	8
SMT CAPACITORS			
C53.	16520201.	ELECTROLYTIC 22uF 50V 5x11 P.5mm	1
C33 C126 C127 C128 C129 C130 C131 C132 C133 C144	16530801.	ELECTROLYTIC 100uF 25V 5x11 P.5mm	10
C153 C154 C155 C159	16567336.	CERAMIC X7R 1206 1nF 500V 10%	4
C19 C20 C61 C73	16570028.	CERAMIC 0805 15pF 50V 5%	4
C56 C62 C109 C111 C113 C115	16570040.	CERAMIC 0805 47pF 50V 5%	6
C119 C120 C121 C122	16570042.	CERAMIC 0805 56pF 50V 5%	4
C1 C13 C54 C55 C100 C101 C103 C104	16570070.	CERAMIC X7R 0805 470pF 50V 10%	8
C6 C9 C57 C59 C108 C110 C112 C114 C136.	16570072.	CERAMIC X7R 0805 1nF 50V 10%	9
C25 C37.	16570080.	CERAMIC X7R 0805 2.2nF 50V 10%.	2
C139.	16570096.	CERAMIC X7R 0805 10nF 50V 10%	1
C5 C7 C8 C26 C58.	16570132.	CERAMIC X7R 0805 330nF 50V 10%	5
C11 C12 C18 C21 C63 C64 C74 C75 C76 C77 C78 C79 C82 C83	16570224.	CERAMIC Y5V 0805 100nF 50V	37
C86 C87 C88 C89 C92 C93 C94 C99 C102 C116 C117 C137 C138			
C143 C147 C148 C149 C151 C152 C156 C157 C158			
C4 C27 C65 C66 C67 C68 C80 C81 C84 C85 C90 C91 C123 C140	16570540.	ELECTROLYTIC 10uF 16V 4x5.3.	14
C60.	16570541.	ELECTROLYTIC 10uF 25V 5x5.5.	1
C34 C35 C36 C95 C96 C97 C98 C107 C118 C124 C125.	16570560.	ELECTROLYTIC 47uF 16V 6.3x5.3	11
C28 C29 C30 C31 C38 C39 C40 C41	16571000.	ELECTROLYTIC 10uF 16V 85g 5x5.3	8
LEADED CAPACITORS			
C145 C146	16430600.	POLYESTER 4.7nF 63Vdc/40Vac P.5mm.	2
C3 C43 C44 C46	16430800.	POLYESTER 6.8nF 63Vdc/40Vac P.5mm.	4
C14 C17 C48 C50	16430900.	POLYESTER 8.2nF 63Vdc/40Vac P.5mm.	4
C2 C42 C45 C47	16431900.	POLYESTER 68nF 63Vdc/40Vac P.5mm	4
C15 C16 C49 C51	16431950.	POLYESTER 82nF 63Vdc/40Vac P.5mm	4
C10 C22 C23 C24	16441601.	POLYESTER 22nF 50Vdc/30Vac P.5mm	4
C32 C141 C142	16530831.	ELECTROLYTIC 220uF 25V 8x11.5.	3
C52.	16530841.	ELECTROLYTIC 105° 220uF 25V 8x15.	1
C69 C70 C71 C72	16531001.	ELECTROLYTIC 105° 1000uF 25V 12x25 Low imp.	4
C105 C106 C134 C135	16541001.	ELECTROLYTIC 2200uF 35V 16x25	4
SMT TRANSISTORS			
Q1 Q6 Q21 Q22 Q31 Q43 Q68 Q69 Q70 Q72 Q73 Q74.	16615000.	PNP SOT23 BC807-25	12
Q2 Q3 Q9 Q15 Q48 Q58 Q59 Q71 Q79 Q80	16615200.	NPN SOT23 BC817-25.	10
Q4 Q5 Q7 Q8 Q12 Q13	16615300.	NPN SOT23 2SD2114K	6
Q14 Q16 Q17 Q18 Q19 Q20 Q23 Q25 Q27 Q29 Q33 Q36 Q39	16615800.	NPN SOT23 BC850C	22
Q42 Q44 Q45 Q46 Q47 Q75 Q76 Q77 Q78			
Q10 Q11 Q24 Q26 Q28 Q30 Q49 Q50 Q51 Q52 Q54 Q55 Q56 Q57	16616000.	PNP SOT23 BC860C	14
Q32 Q35 Q38 Q41.	16616050.	PNP SOT23 2SA1514K-R.	4
Q34 Q37 Q40 Q53.	16616070.	NPN SOT23 2SC3906K-R	4

SRx 4 PCB PARTS LIST

Rk = 15 Ohm

REF. NO	PART NO	DESCRIPTION	Q.TY
LEADED TRANSISTORS			
Q92 Q93 Q94 Q95	16606021	MOSFET TO220 HUF75333P3	4
Q60 Q62 Q64 Q66 Q89 Q91	16613010	NPN INS. TO126 KTC2800-Y	6
Q61 Q63 Q65 Q67 Q90	16613110	PNP INS. TO126 KTA1700-Y	5
Q81 Q83 Q85 Q87	16614640	NPN INS. TO3P 10A 120V	4
Q82 Q84 Q86 Q88	16614740	PNP INS. TO3P 10A 120V	4
SMT DIODES			
D3 D4 D5 D6 D7 D12 D13 D15 D17 D18 D19 D20 D21 D22 D23	16637000	SIGNAL SOD80 150mA 75V /4148	26
D24 D25 D28 D29 D35 D42 D49 D50 D51 D54 D55			
D1 D2 D8 D9 D31 D32 D33 D34	16637030	DUAL SIGNAL SOT23 70V	8
D11 D37 D38 D39 D40 D44 D45 D46 D47	16637910	ZENER MMELF 2.7V 5% 0.5W	9
D22	16637945	ZENER MMELF 5.1V 5% 0.5W	1
D16	16637970	ZENER MMELF 8.2V 5% 0.5W	1
DZ1 DZ3 DZ4	16638000	ZENER MMELF 12V 5% 0.5W	3
D48	16638020	ZENER MMELF 15V 5% 0.5W	1
LEADED DIODES			
D26 D27	16620100	1A 50V 1N4001 DIODE	2
D36 D41	16621100	U-FAST 1A 400V UF4004	2
D30 D43	16621700	ZENER 1W 39V 5%	2
D52	16631460	UF ITO220 2x10A 200V A-C	1
D53	16631480	UF ITO220 2x10A 200V K-C	1
D14	16635020	CLEAR RED LED 3mm	1
D10	16635540	DIFFUSED BLUE OVAL LED 5mm	1
SMT ICs			
IC20	16691010	SMD S014 LM339	1
IC18	16691030	SMD SO16 TL494ID	1
IC1 IC2 IC3 IC4 IC5 IC6 IC9 IC10 IC11 IC12 IC13 IC14 IC15 IC16	16691560	SMD NJM 4580E-TE 1	14
IC17	16691580	SMD SO16 LM13700M	1
IC7	16693110	SMD SOIC16 CD4053BCM	1
SMT PHOTOCOUPERS			
IC8	16692800	PHOTOTRANSISTOR SO8 (4 pin)	1
IC19	16692850	PHOTOTRANSISTOR SO8 (4 pin) PC452TE	1
SMT THERMISTORS			
TH1	16831200	NTC SMD 0805 10 Kohm	1
LEADED VARISTORS			
VDR1	16832700	VDR 17V 0.01W p.5.08	1

PART 1: ELECTRONIC PART

Section C: SRx Series components pin-out

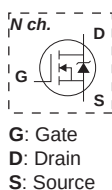
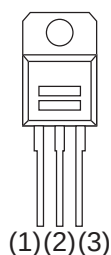
First Version - Rev. A

Leaded components	page from 1 to 2
SMT components	page from 3 to 5
Pre-moulding of components to dissipate	page from 6 to 6

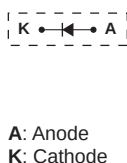
Table of the last upgrading revisions

UPGRADING REVISIONS				
PART 1 ELECTRONIC PART			PART 2 MECHANICAL PART	
SECT. A Identification system	SECT. B Mainboard	SECT. C SRx Series Components Pin-out	SECT. A - Exploded views and parts list	SECT. B - Amplifier opening instructions
Rev. A	Rk = 10 Ohm	Rev. A	Rev. A	Rev. A

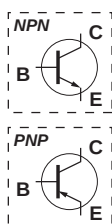
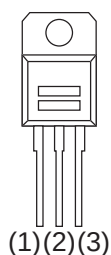
Case TO220

*N channel mosfet transistor*

Ref.	Type	Product name	Marking code	PIN OUT		
				(1)	(2)	(3)
	Switching power	HUF75333P3	75333P	G	D	S
	Switching power	IPP80N06S2-05	2N0605	G	D	S
	Switching power	IRFB16N50KPbf	16N50K	G	D	S

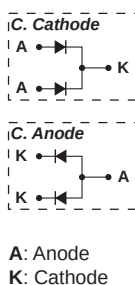
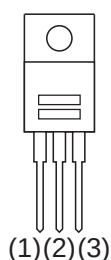
*Single ultra fast power diodes*

Ref.	Type	Product name	Marking code	PIN OUT	
				(1)	(2)
	Power rectifier	MUR1540	MUR1540	K	A

*NPN bipolar transistor*

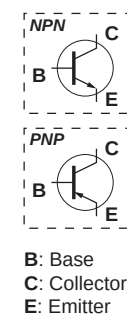
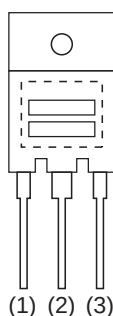
Ref.	Type	Product name	Marking code	PIN OUT		
				(1)	(2)	(3)
	Darlington	BDW93C	BDW93	B	C	E

Case TO220F (to insulate with thermo-conductive grease)

*Dual ultra fast power diodes*

Ref.	Type	Product name	Marking code	PIN OUT		
				(1)	(2)	(3)
	Common Cathode	FFPF10U20DN	F10U20DN	A	K	A
	Common Anode	FFPF10U20DP	F10U20DP	K	A	K

Case TO3PF

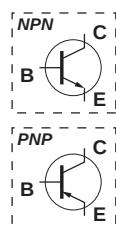
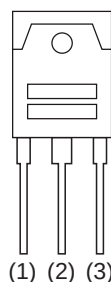
*NPN bipolar transistor*

Ref.	Type	Product name	Marking code	PIN OUT		
				(1)	(2)	(3)
	Audio power	FJAF4310-Y	J4310F-Y	B	C	E

PNP bipolar transistor

Ref.	Type	Product name	Marking code	PIN OUT		
				(1)	(2)	(3)
	Audio power	FJAF4210-Y	J4210F-Y	B	C	E

Case TO3P



B: Base
C: Collector
E: Emitter

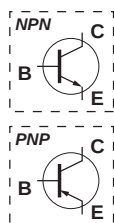
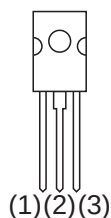
NPN bipolar transistor

Ref.	Type	Product name	Marking code	PIN OUT		
				(1)	(2)	(3)
	Audio power	KTD998-O	D998-O	B	C	E

PNP bipolar transistor

Ref.	Type	Product name	Marking code	PIN OUT		
				(1)	(2)	(3)
	Audio power	KTB778-O	B778-O	B	C	E

Case TO126



B: Base
C: Collector
E: Emitter

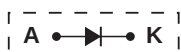
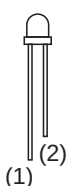
NPN bipolar transistor

Ref.	Type	Product name	Marking code	PIN OUT		
				(1)	(2)	(3)
	Audio driver	KTC2800-Y	C2800	E	C	B

PNP bipolar transistor

Ref.	Type	Product name	Marking code	PIN OUT		
				(1)	(2)	(3)
	Audio driver	KTA1700-Y	A1700	E	C	B

3mm cylinder type leds

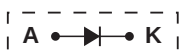
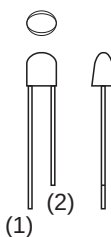


A: Anode
K: Cathode

Leds

Ref.	Type	Product name	Marking code	PIN OUT	
				(1)	(2)
	Red led	SLR-342VC3F GL3PR8	-	A	K

5mm oval type leds

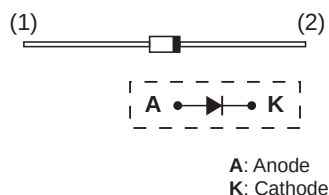


A: Anode
K: Cathode

Leds

Ref.	Type	Product name	Marking code	PIN OUT	
				(1)	(2)
	Blue led	LTL-5H3CBDS5-01	-	A	K

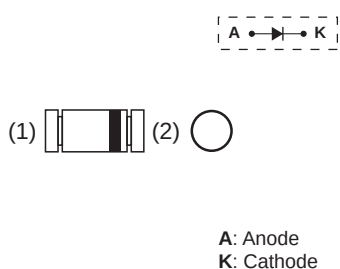
Case DO-41 / DO-204AL



Diodes

Ref.	Type	Product name	Marking code	PIN OUT	
				(1)	(2)
	Ultra fast	UF4004	UF4004	A	K
	Zener 1W 39V	1N4754A	-	A	K
	Rectifier	1N4001	1N4001	A	K
	Transient Voltage Suppressor	P6KE400A	P6KE400A	A	K

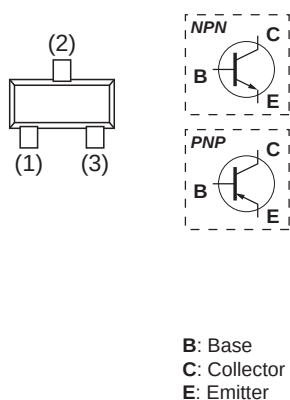
Case SOD-80 / MiniMELF



Diodes

Ref.	Type	Product name	Marking code	PIN OUT	
				(1)	(2)
	General purpose 150mA 75V	LL4148	-	A	K
	Zener - 2V7 5%	BZV55C2V7 TZM5223B	-	A	K
	Zener - 3V3 5%	BZV55C3V3 TZM5226B	-	A	K
	Zener - 5V1 5%	BZV55C5V1	-	A	K
	Zener - 8V2 5%	BZV55C8V2 TZM5237B	-	A	K
	Zener - 12V 5%	BZV55C12 TZM5242B	-	A	K
	Zener - 15V 5%	BZV55C15	-	A	K

Case SOT23



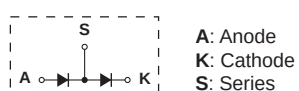
NPN bipolar transistor

Ref.	Type	Product name	Marking code	PIN OUT		
				(1)	(2)	(3)
	Signal	BC817-25	6B	B	C	E
	Signal	BC850C	-	B	C	E
	Muting	2SD2114K	BBV	B	C	E
	Audio preamplifier	2SC3906K	TR	B	C	E
	Audio preamplifier	2SA1514K-R	RR	B	C	E

PNP bipolar transistor

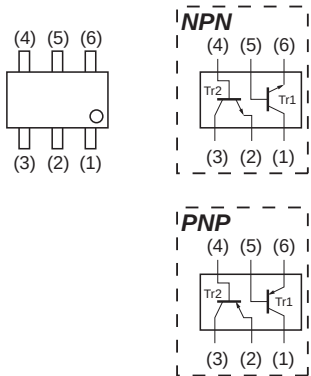
Ref.	Type	Product name	Marking code	PIN OUT		
				(1)	(2)	(3)
	Signal	BC807-25	5B	B	C	E
	Signal	BC860C	-	B	C	E

Signal diodes



Ref.	Application	Product name	Marking code	PIN OUT		
				(1)	(2)	(3)
	Signal	BAV99	A7	A	S	K

Case SMT6



NPN bipolar dual transistor

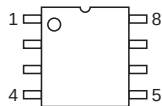
Ref.	Type	Product name	Marking code	PIN OUT
	Dual audio preamplifier	IMX8	X8	See DWG.

PNP bipolar dual transistor

Ref.	Type	Product name	Marking code	PIN OUT
	Dual audio preamplifier	IMT4	T4	See DWG.

(1): Tr1 collector (2): Tr2 emitter (3): Tr2 collector
(4): Tr2 base (5): Tr1 base (6): Tr1 emitter

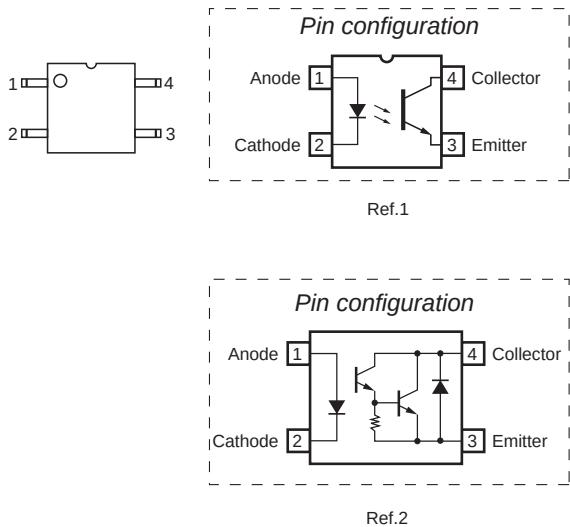
Case SO8



Linear ICS

Ref.	Type	Product name	Marking code
	Dual op amp	NJM4580	4580

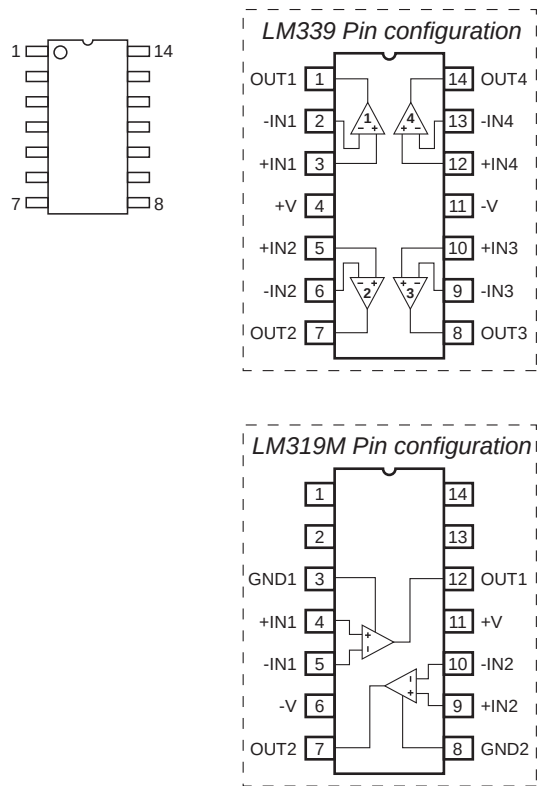
Case SO8 (4 pins)



Optoelectronics component

Ref.	Type	Product name	Marking code
1	Optocoupler	PS2701-1 PC357NT TLP181	PS2701-1 PC357NT P181
2	Photocoupler	PC452TE	PC452

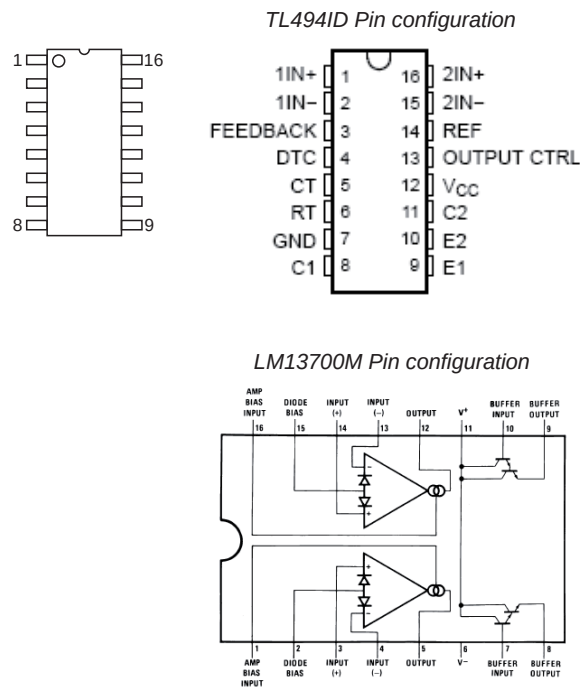
Case SO14



ICS

Ref.	Type	Product name	Marking code
1N	Quad op amps	LM339	339
1N	Quad op amps	LM319M	LM319M

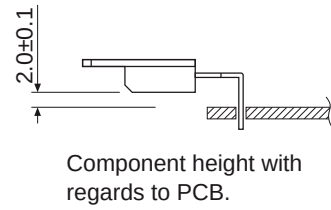
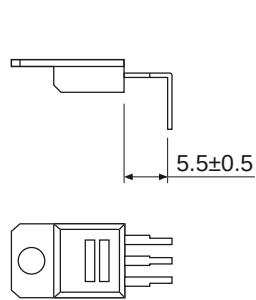
Case SO16



ICS

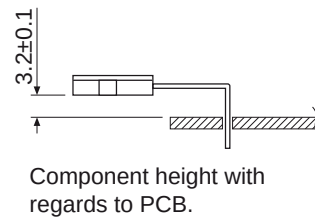
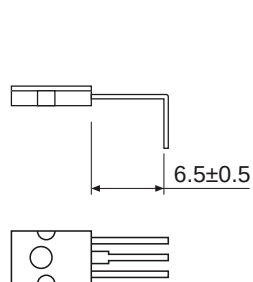
Ref.	Type	Product name	Marking code
	PWM driver	TL494ID	TL494ID
	Dual operational transconductance amplifier	LM13700M	LM13700M

Case TO220 / TO220F



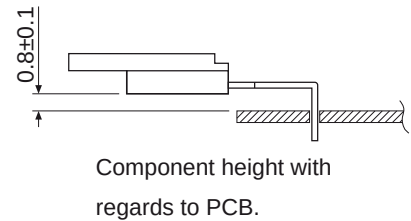
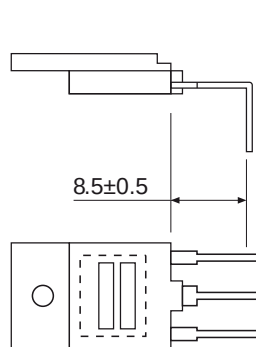
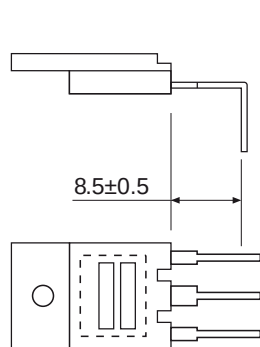
Size in mm

Case TO126



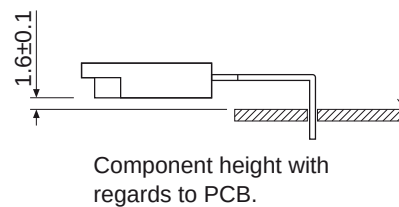
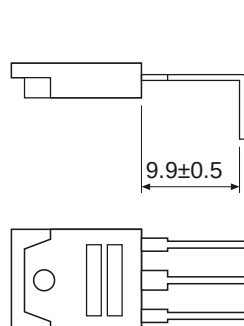
Size in mm

Case TO3PF



Size in mm

Case TO3P



Size in mm

PART 2

MECHANICAL PART

PART 2: MECHANICAL PART

Section A - Exploded views and parts list

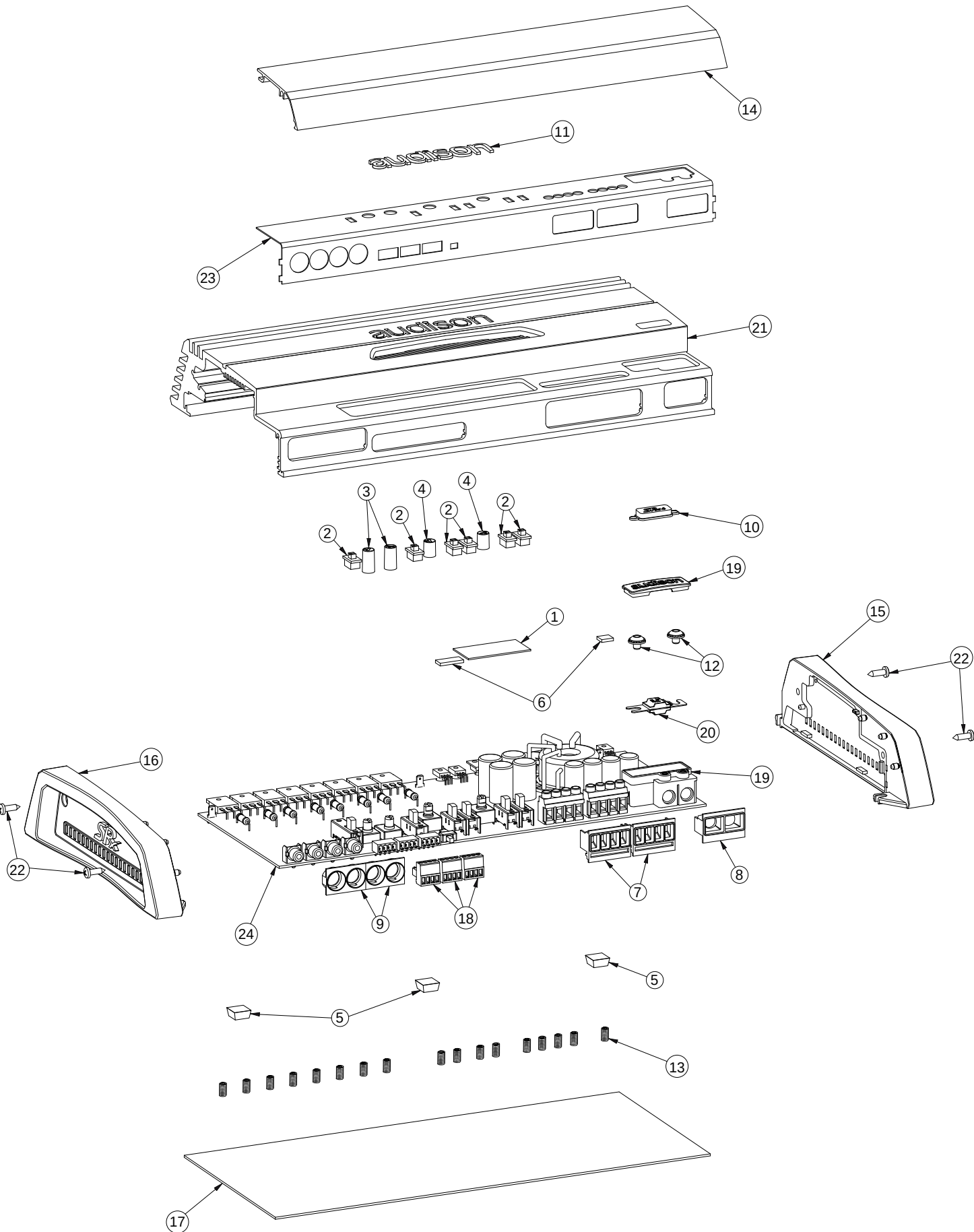
First Version - Rev. A

- | | |
|-----------------------------|-------------------|
| 1. Mechanical exploded view | sheet from 1 to 1 |
| 2. Package exploded view | sheet from 1 to 1 |
| 3. Amplifier parts list | page from 1 to 1 |

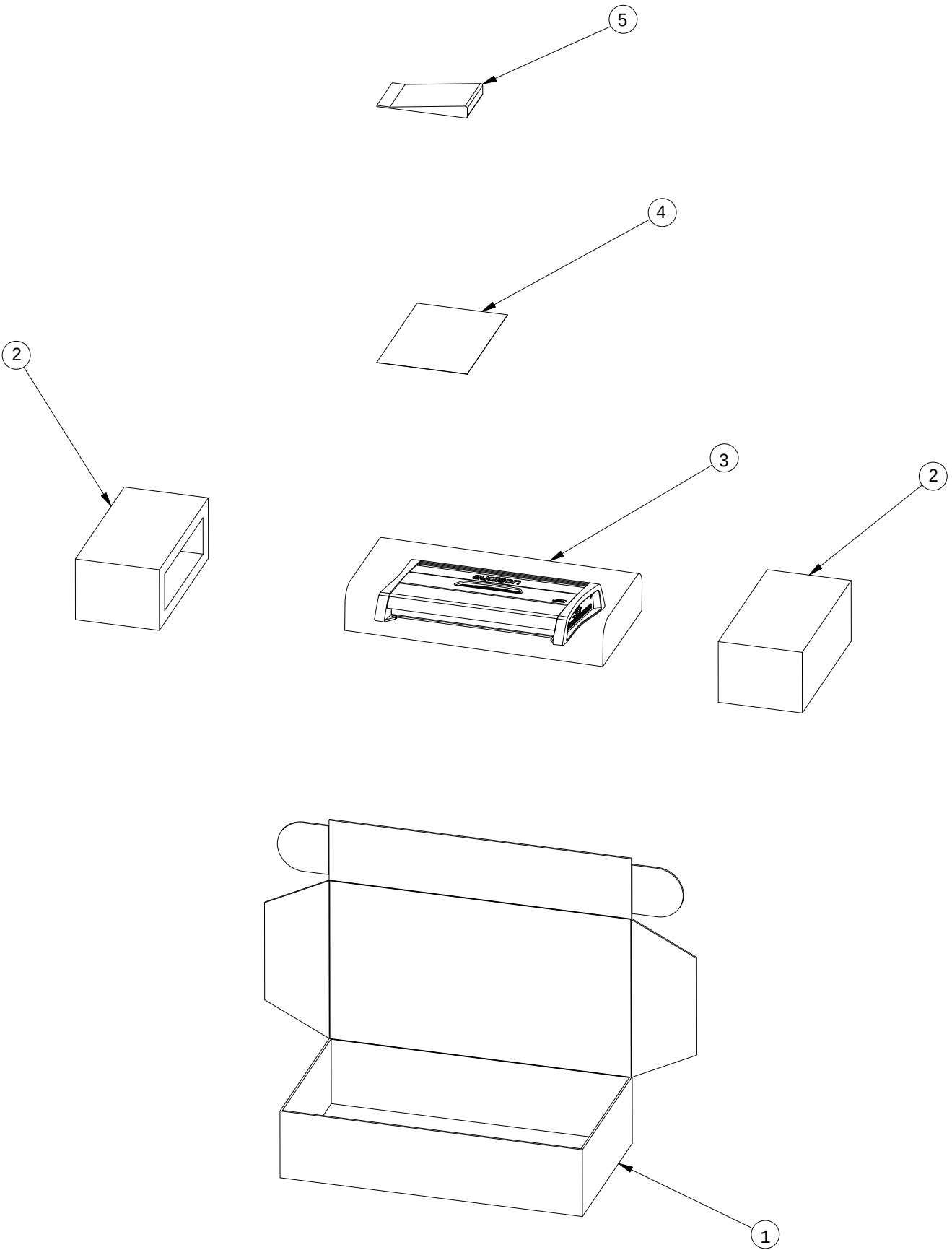
Table of the last upgrading revisions

UPGRADING REVISIONS				
PART 1 ELECTRONIC PART			PART 2 MECHANICAL PART	
SECT. A Identification system	SECT. B Mainboard	SECT. C SRx Series Components Pin-out	SECT. A - Exploded views and parts list	SECT. B - Amplifier opening instructions
Rev. A	Rk = 10 Ohm	Rev. A	Rev. A	Rev. A

1. Mechanical Exploded View



2. Package Exploded View



SRx 4 ASSEMBLED AMPLIFIER PARTS LIST

Rev. A

REF. NO	PART NO	DESCRIPTION	Q.TY
1	10019700	25mm INSULATOR FILM for TRANSISTOR	0.048 m
2	10020510	SLIDE SWITCH KNOB	6
3	10020520	POTENTIOMETER KNOB Lg	2
4	10020530	POTENTIOMETER KNOB Sh	2
5	10029610	ADHESIVE RUBBER 12.7x12.7 h.5.8mm	3
6	10071190	BLACK ADHESIVE FELT sp.2 8x18mm	1.5
7	10081270	SRx.1 4W ATP OUTPUT	2
8	10081280	SRx.1 POWER SUPPLY INPUT	1
9	10081290	SRx.1 RCA 2W COVER	2
10	10081330	SRx 4 POWER LED	1
11	10202981	AUDISON LOGO STICKER for SRx - TITANIUM	1
12	12112920	M5x6 SCREW TB EI (4) + WASHER Nickel Plated	5
13	12500580	SRx.1 SPRING	17
14	13100190	SRx.1 L330mm ALUMINIUM COVER	1
15	13540150	SRx.1 LEFT END CAP	1
16	13540160	SRx.1 RIGHT END CAP	1
17	14403130	SRx.1 L333mm BOTTOM	1
18	15211723	4W FEMALE TERMINAL BLOCK	3
19	15213030	SRx.1 POWER SUPPLY TERMINAL BLOCK	1
20	15289844	FUSE 20A (SFA TYPE)	1
21	23824220	SRx 1D.1 / SRx 4.1 HEAT-SINK (painted)	1
22	32150500	3.9x13 SCREW (AFcp TC C ZN)	4
23	34500020	SRx 4.1 CONTROL COVER	1
24	36727310	SRx 4.1 ASSEMBLED PCB	1

SRx 4 PACKAGE PARTS LIST

REF. NO	PART NO	DESCRIPTION	Q.TY
1	11117210	SRx 4.1 CARTON BOX	1
2	11501560	SRx.1 INNER CARTON	2
3	10039800	HIGH DENSITY POLIETHILENE BAG 27x56	1
4	35270170	SRx 4.1 MANUAL KIT	1
5	35270130	SRx.1 ACCESSORY KIT	1

SRx 4 EXPENDABLE MATERIALS

PART NO	DESCRIPTION	Q.TY
07000400	THERMO COND. GREASE (50g.)	1
07000600	1-2577 SILICONE RESIN	1

PART 2: MECHANICAL PART

Section B - Amplifier opening instructions

First Version - Rev. A

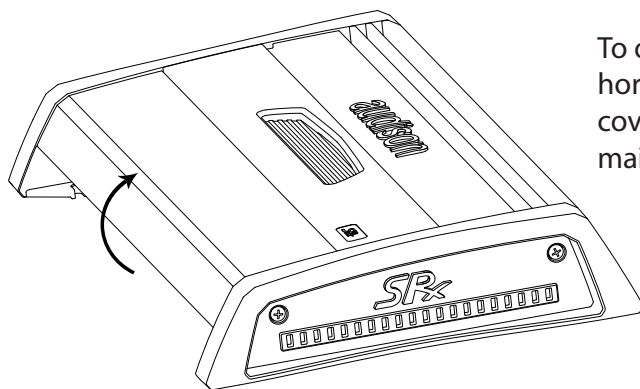
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|--------------------------|-------------------|
| 1. Amplifier disassembly | sheet from 1 to 1 |
| 2. Amplifier assembly | sheet from 1 to 1 |

Table of the last upgrading revisions

UPGRADING REVISIONS				
PART 1 ELECTRONIC PART			PART 2 MECHANICAL PART	
SECT. A Identification system	SECT. B Mainboard	SECT. C SRx Series Components Pin-out	SECT. A - Exploded views and parts list	SECT. B - Amplifier opening instructions
Rev. A	Rk = 10 Ohm	Rev. A	Rev. A	Rev. A

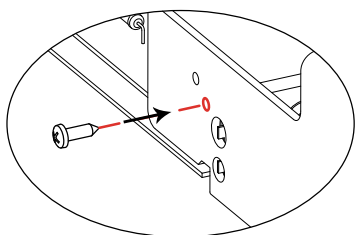
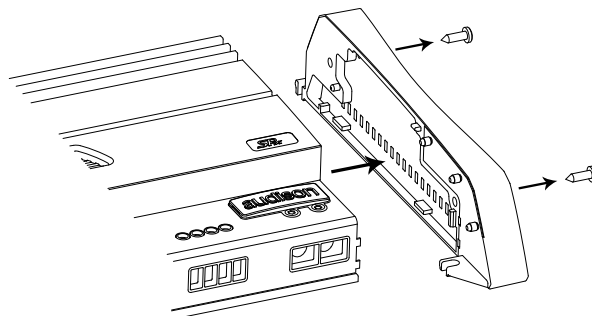
1.SRx Amplifier disassembly

Rev. A

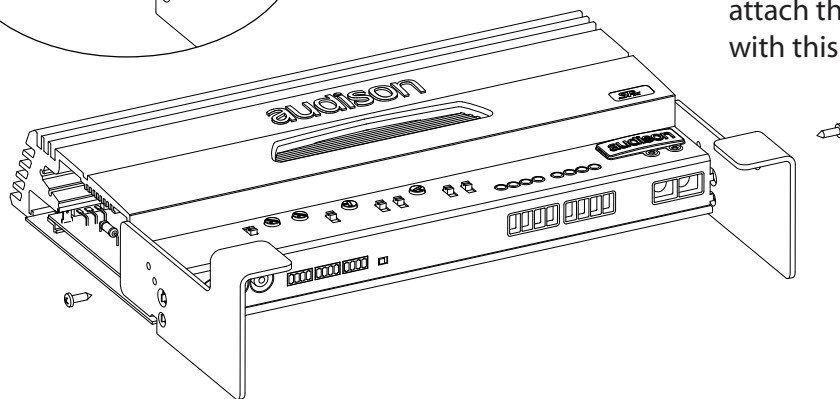


To open the amplifier, place the amplifier in horizontal position, open the aluminium control cover, then lift the cover up, removing it from the main chassis.

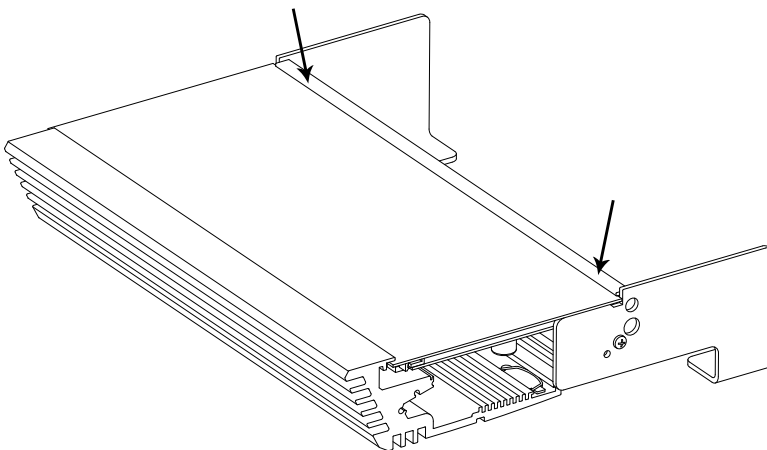
After removing the cover, remove the two amplifier end caps by removing the two screws on each end cap.

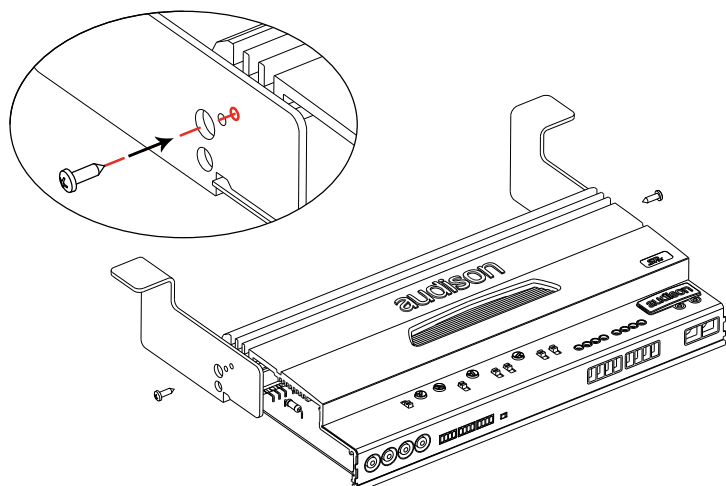


Using two of the four screws removed in the previous step, attach the service plates supplied with this service kit as indicated.



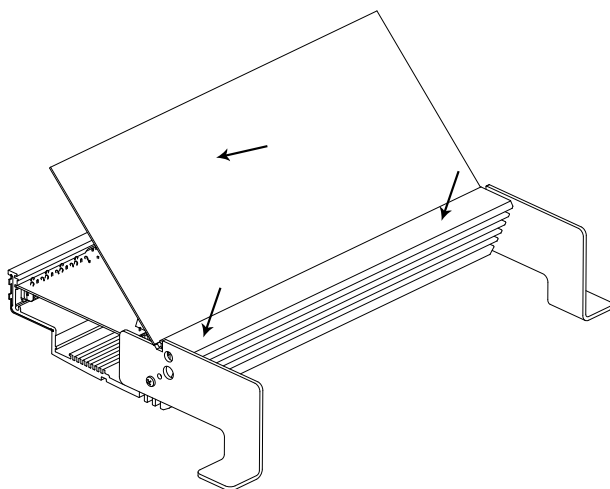
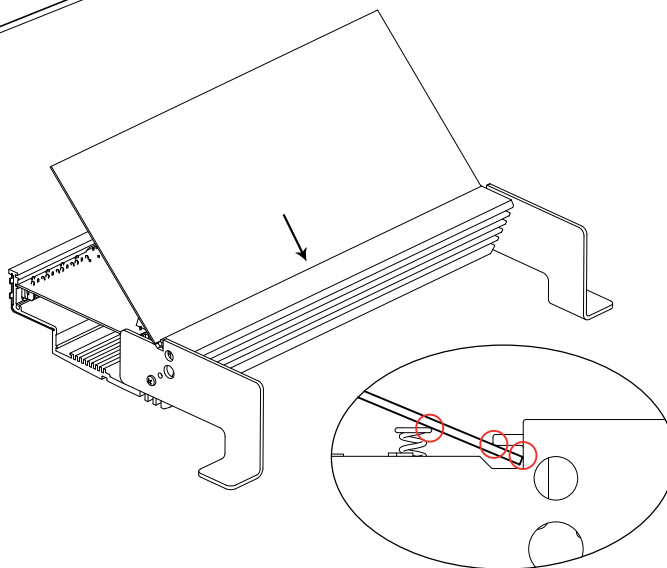
To remove the bottom cover, turn the amplifier upside down, then press on the areas indicated by the arrows until the cover is removed from its seated position. Remove the cover and perform the service procedures required.





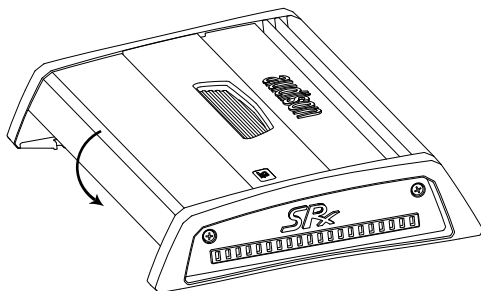
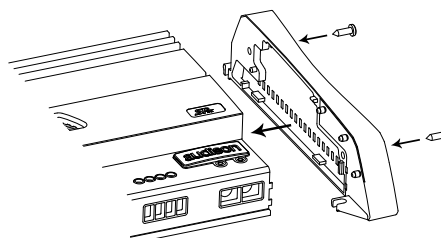
To close the amplifier, the service plates must be removed from their disassembly position and attached to the opposite side of the amplifier, by positioning the screws through the indicated holes.

Turn the amplifier upside down and place the bottom cover into the recess of the heatsink. Push the cover downwards towards the service plates, ensuring the cover is properly seated into aforementioned recess as indicated.



Press on the points indicated by the arrows until the bottom cover is seated into its original position. The service plates can now be removed.

Re-attach the amplifier end caps to their original position using the four screws previously removed.



Place the aluminium control cover back in its seat and close.