



rd122 / rd122fx mixing consoles

SERVICE MANUAL



code 270295

Index

2	Block Diagram.
3	Supply Board.
4	Channels In/Out Board Part 1/2.
5	Channels In/Out Board Part 2/2.
6	Main Board Part 1/7.
7	Main Board Part 2/7.
8	Main Board Part 3/7.
9	Main Board Part 4/7.
10	Main Board Part 5/7.
11	Main Board Part 6/7.
12	Main Board Part 7/7.
13	Digital Effect CHEF High-Efx Board.
14	Rear In/Out Board.
15	Spare Part List.



Notice

- Service must be carried out by qualified personnel only. Any tampering carried out by unqualified personnel during the guarantee period will forfeit the right to guarantee.
- For a correct operation of the instrument, after having switched off, be careful to wait at least 3 seconds before switching on again.
- To improve the device's specifications, the schematic diagrams may be subject to change without prior notice.
- All components marked by this symbol have special safety characteristics, when replacing any of these components use only manufacturer's specified parts.
- The (μ) micro symbol of capacitance value is substituted by U.
- The (Ω) omega symbol of resistance value is substituted by E.
- The electrolytic capacitors are 25Vdc rated voltage unless otherwise specified.
- All resistors are 1/8W unless otherwise specified.
- All switches shown in the "OFF" position. All DC voltages measured to ground with a voltmeter 20KOhm/V.
- ← Soldering point.
- Male connector.
- ⌋ Female connector.
- ⌋ M/F faston connector.
- ↑ Supply voltage.
- ▣ Test point.
- ⬭ Flag joined with one or more flags with the same signal name inscribed.
- ⌋ Logic supply ground.
- ⌋ Analog supply ground.
- ⌋ Chassis ground.
- ⌋ Earth ground.

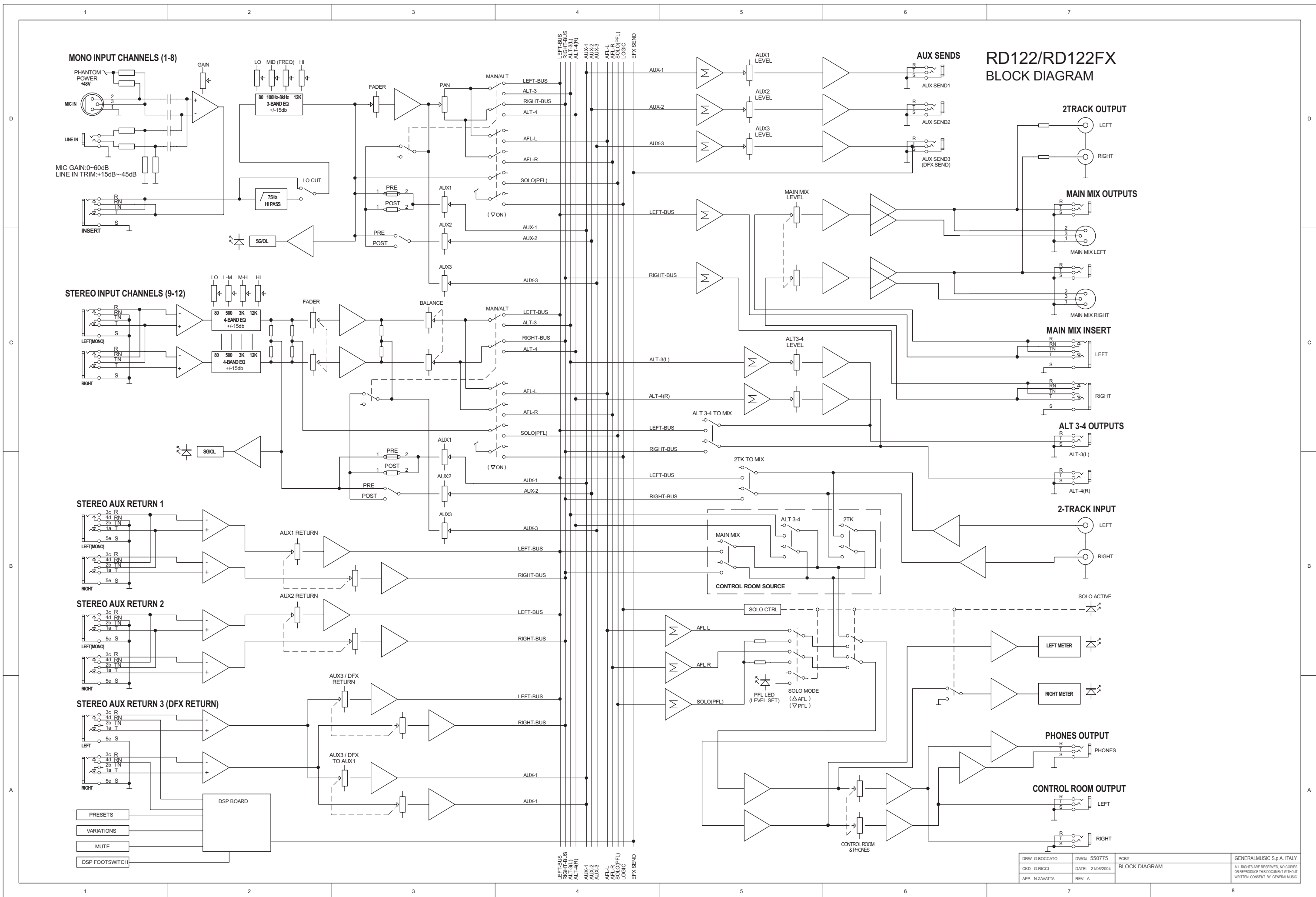


ATTENTION

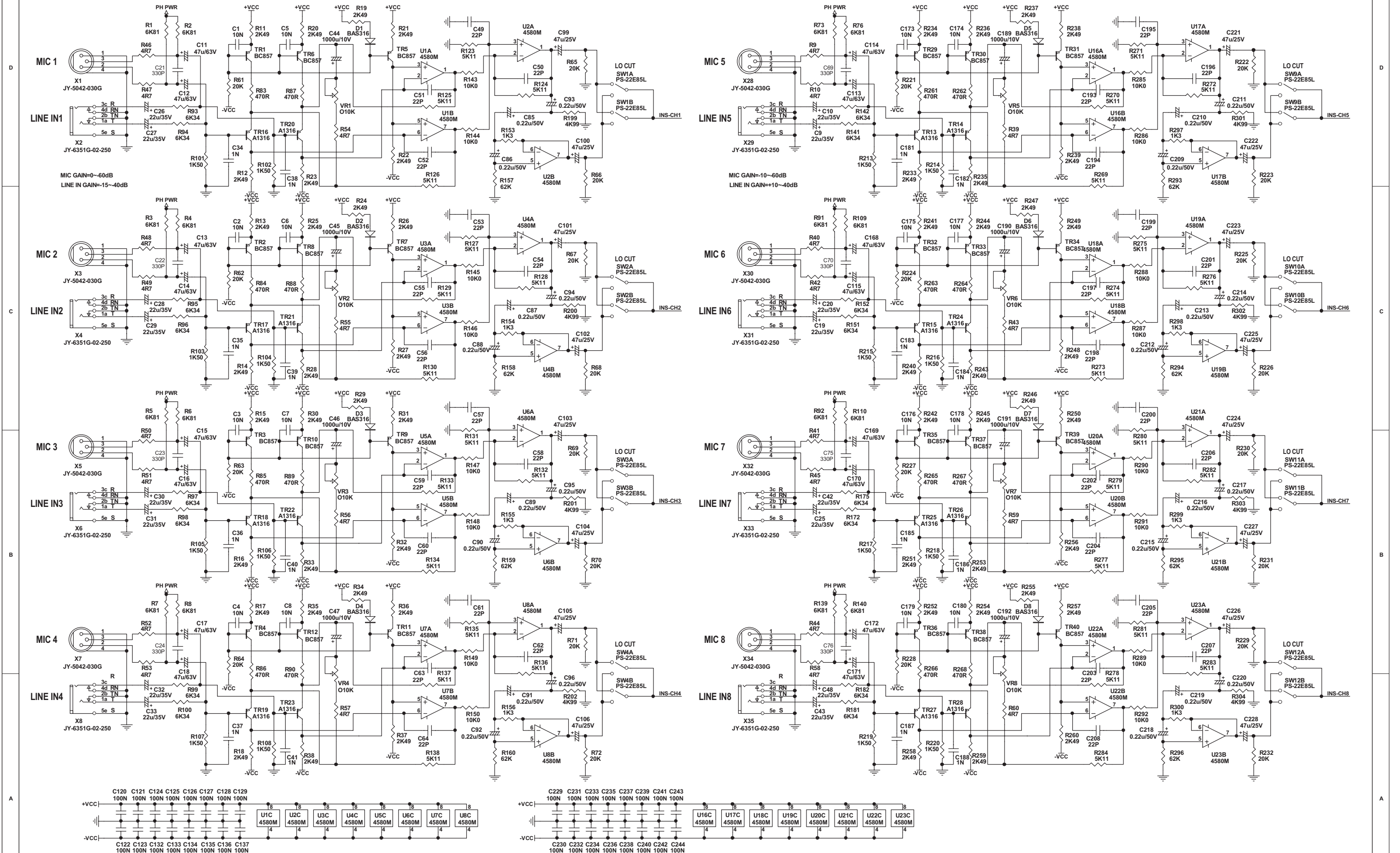
Observe precautions when handling electrostatic sensitive devices.



GENERALMUSIC S.p.A. Sales Division: 47842 S.Giovanni in Marignano (RN) ITALY - Via delle Rose, 12
Phone +39(0)541/959511 - Fax +39(0)541/957404 - Internet: www.generalmusic.com

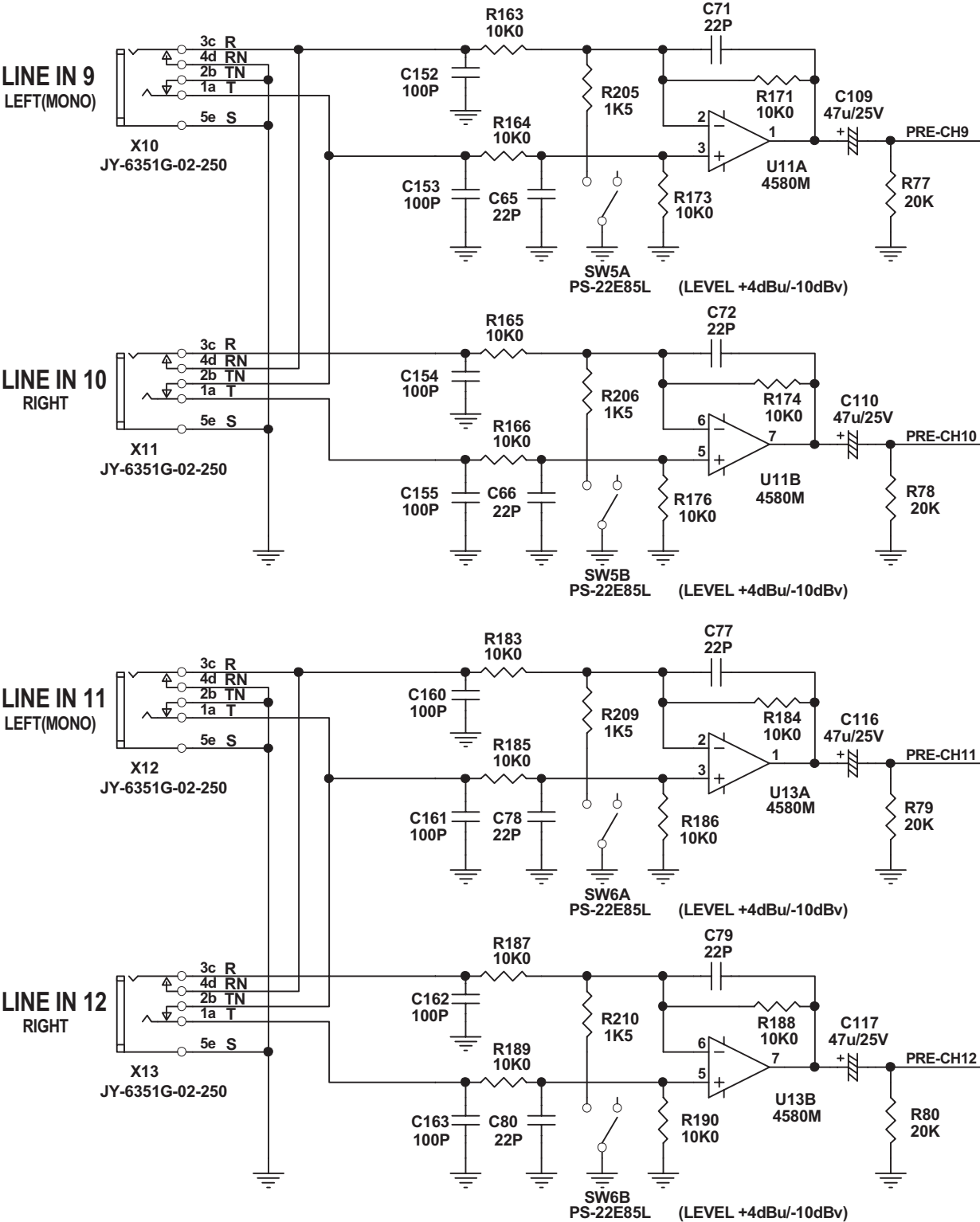


SKK768194 - RD122/RD122FX CHANNELS IN/OUT BOARD ASSEMBLY (part 1 of 2)



DRW: G. BOCCATO	DWG#: 550777	PCB#: RD122PU2	GENERALMUSIC S.p.A. ITALY
CKD: G. RICCI	DATE: 22/06/2004	CHANNELS IN/OUT BOARD	ALL RIGHTS ARE RESERVED. NO COPIES
APP: N. ZAVATTA	REV: A	(part 1 of 2)	OR REPRODUCE THIS DOCUMENT WITHOUT
			WRITTEN CONSENT BY GENERALMUSIC

SKK768194 - RD122/RD122FX CHANNELS IN/OUT BOARD ASSEMBLY (part 2 of 2)



STEREO AUX RETURN1

LEFT 1 (MONO / MASTER)

STEREO AUX RETURN2

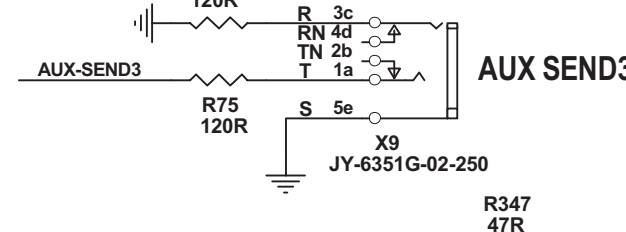
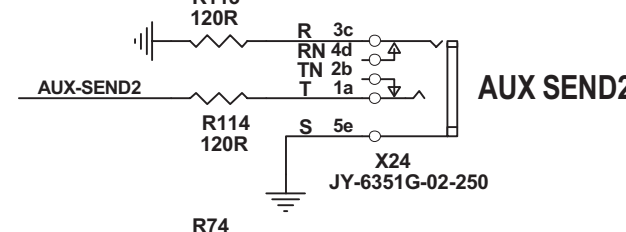
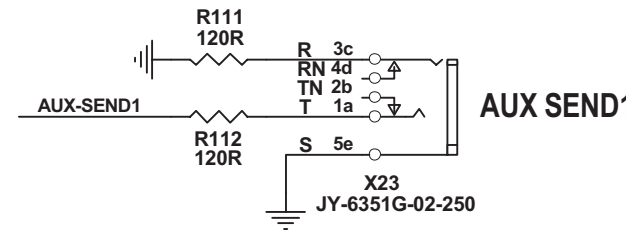
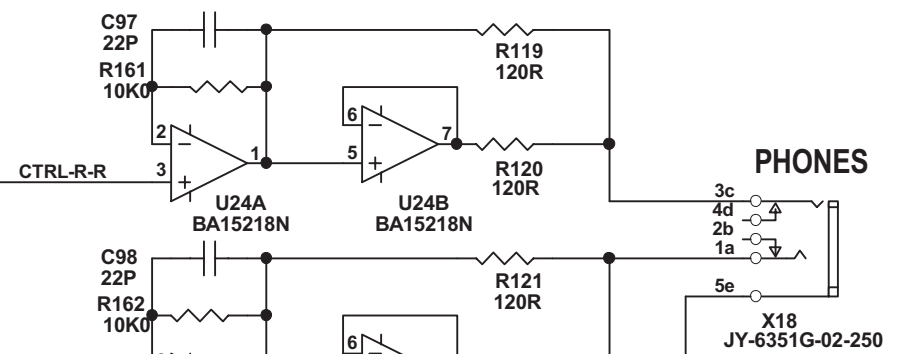
LEFT 2

STEREO AUX RETURN3

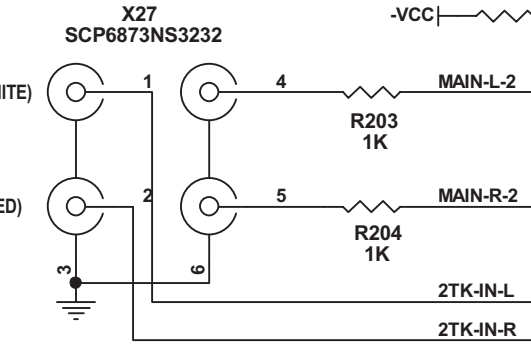
LEFT 2

STEREO AUX RETURN4

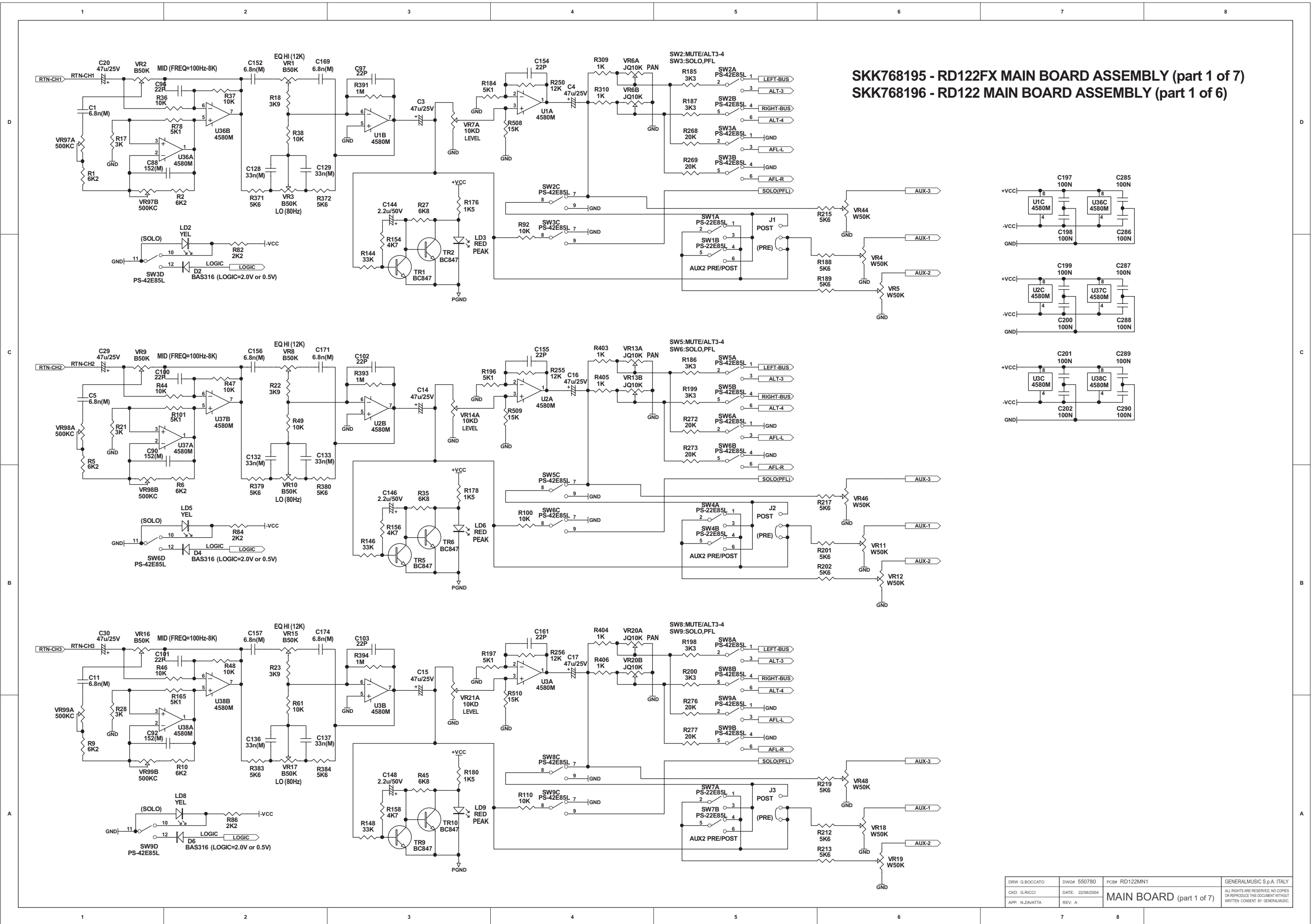
RIGHT 2



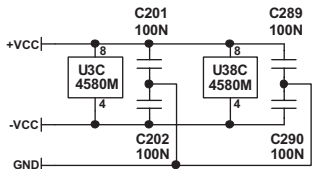
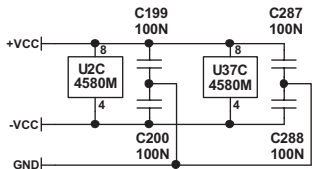
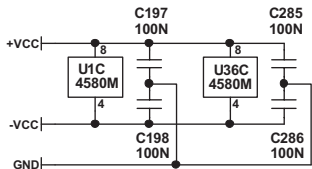
2-TRACK IN 2-TRACK OUT

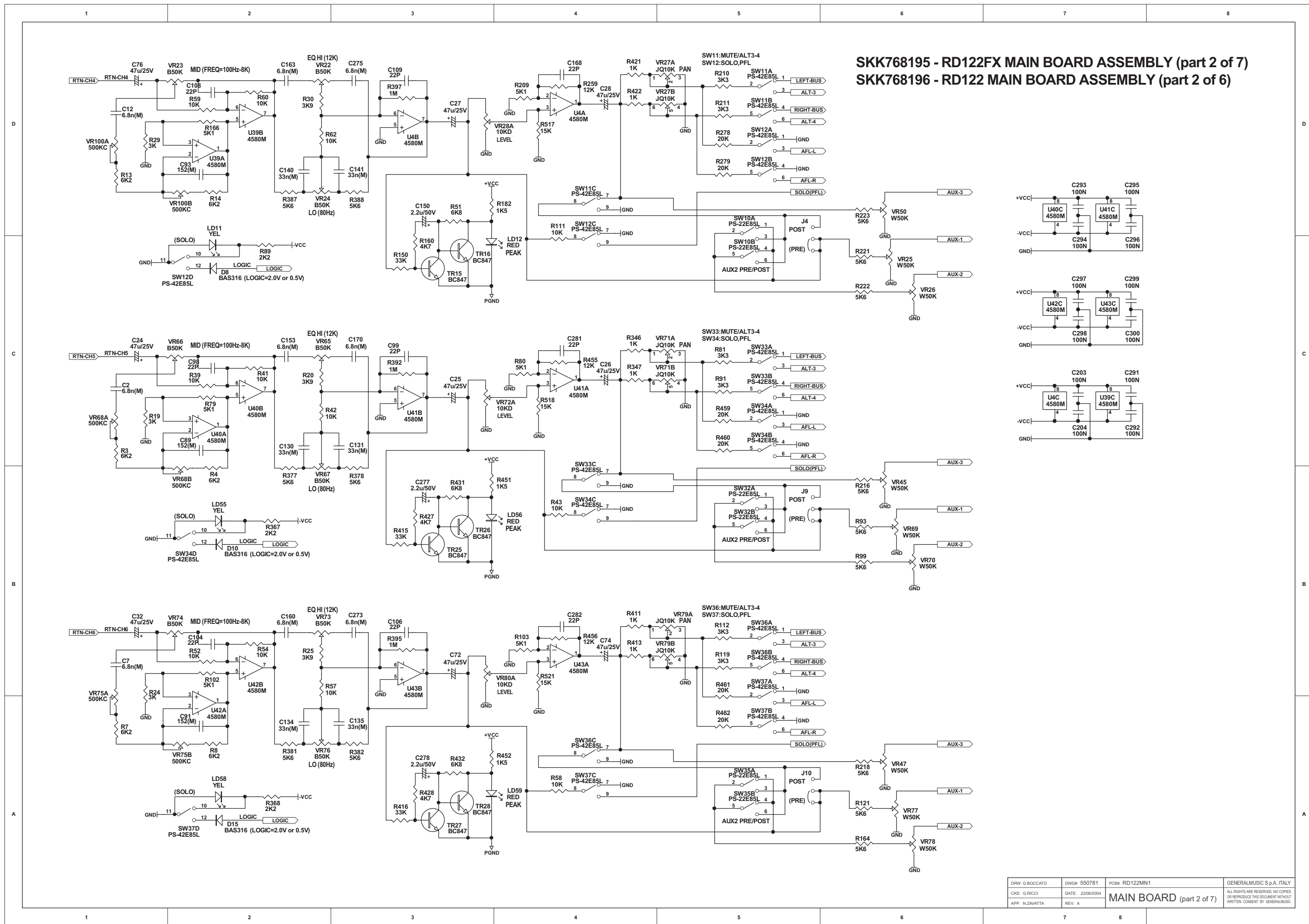


DRW: G. BOCCATO	DWG#: 550778	PCB#: RD122PU2	GENERALMUSIC S.p.A. ITALY
CKD: G. RICCI	DATE: 22/06/2004	CHANNELS IN/OUT BOARD	ALL RIGHTS ARE RESERVED. NO COPIES OR REPRODUCE THIS DOCUMENT WITHOUT WRITTEN CONSENT BY GENERALMUSIC.
APP: N. ZAVATTA	REV: A	(part 2 of 2)	



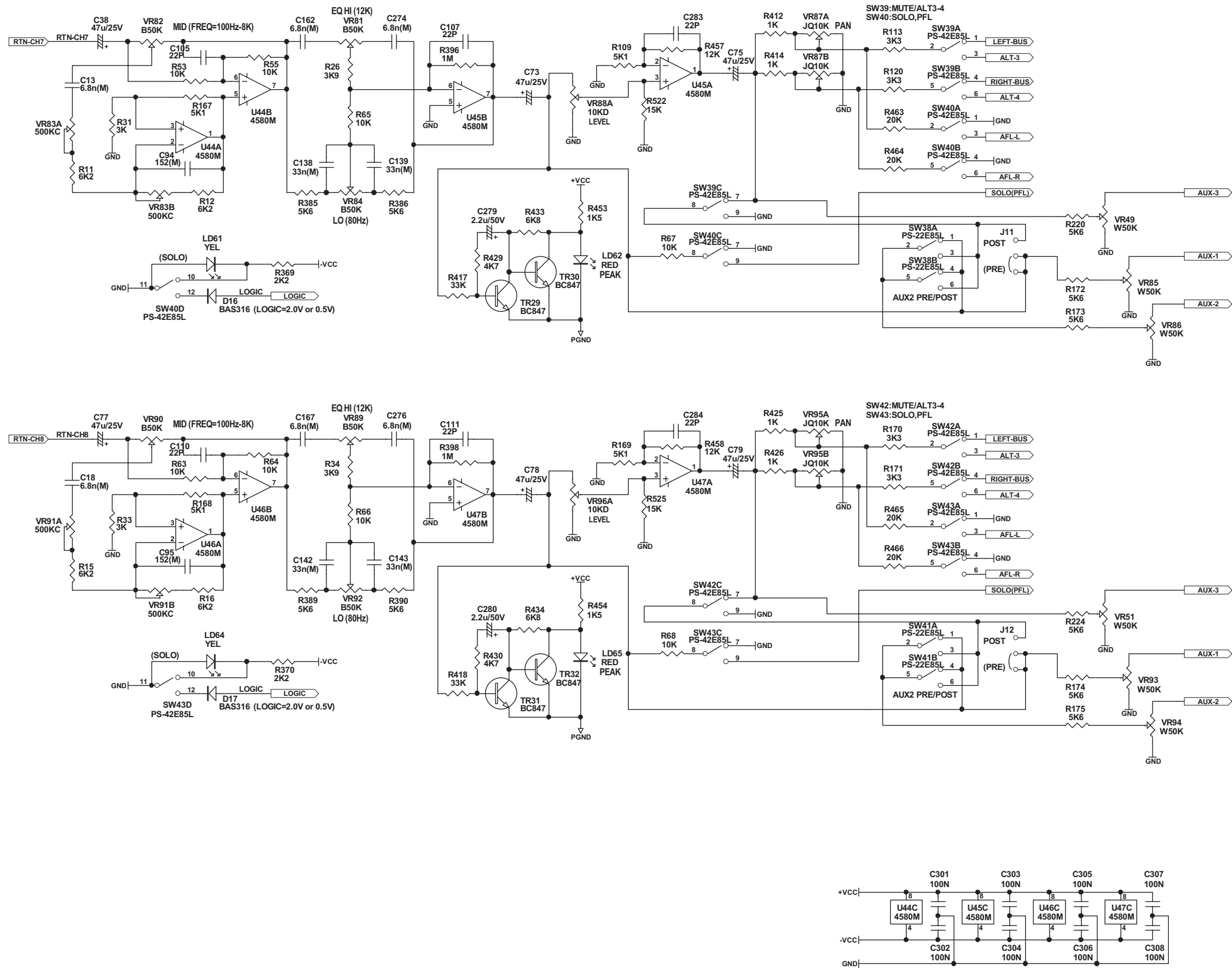
SKK768195 - RD122FX MAIN BOARD ASSEMBLY (part 1 of 7)
SKK768196 - RD122 MAIN BOARD ASSEMBLY (part 1 of 6)





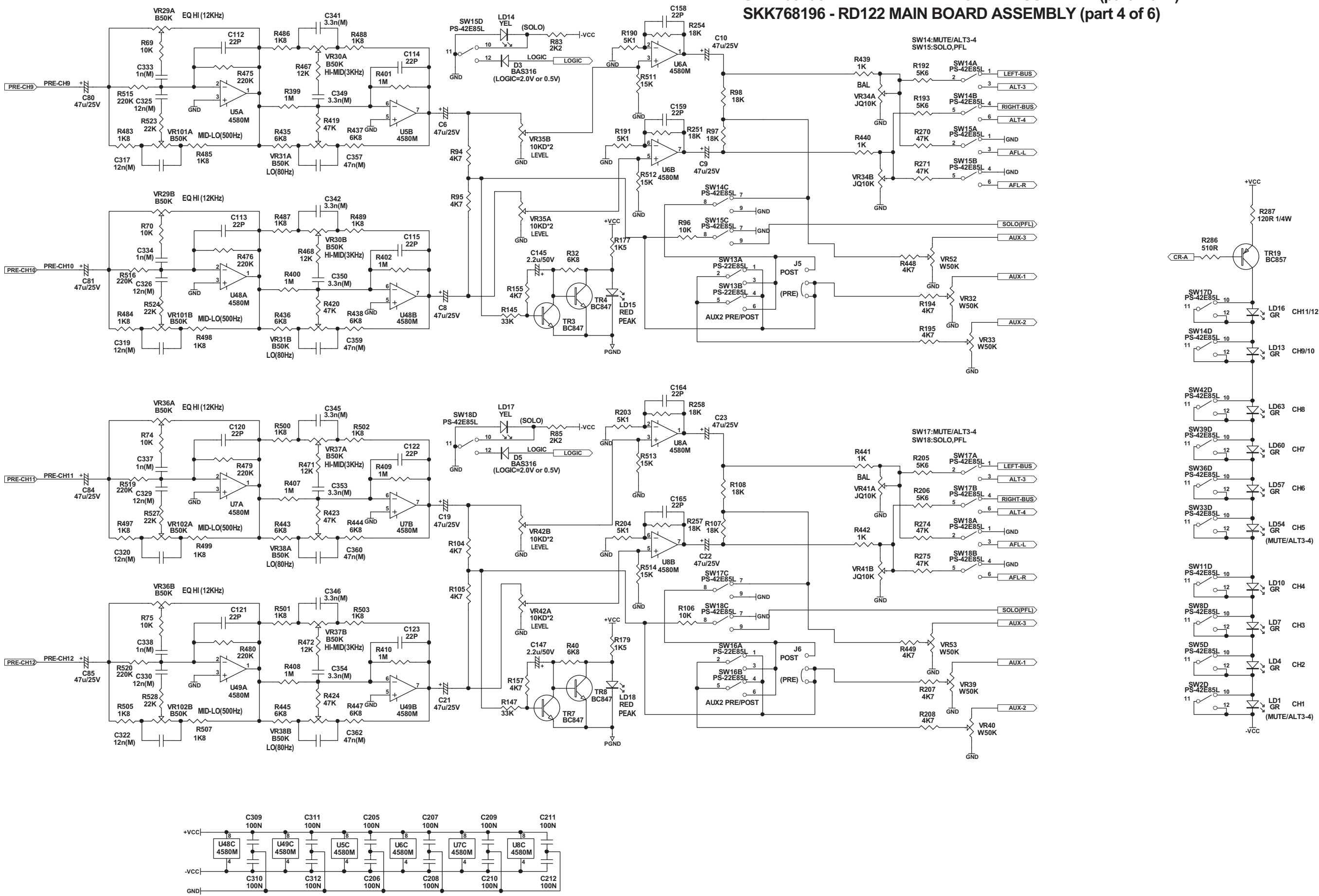
DRW: G. BOCCATO	DWG#: 550781	PCB#: RD122MN1	GENERALMUSIC S.p.A. ITALY
CHK: G. RICCI	DATE: 22/06/2004		ALL RIGHTS ARE RESERVED. NO COPIES OR REPRODUCE THIS DOCUMENT WITHOUT WRITTEN CONSENT BY GENERALMUSIC.
APP: N. ZAVATTA	REV: A	MAIN BOARD (part 2 of 7)	

SKK768195 - RD122FX MAIN BOARD ASSEMBLY (part 3 of 7)
SKK768196 - RD122 MAIN BOARD ASSEMBLY (part 3 of 6)

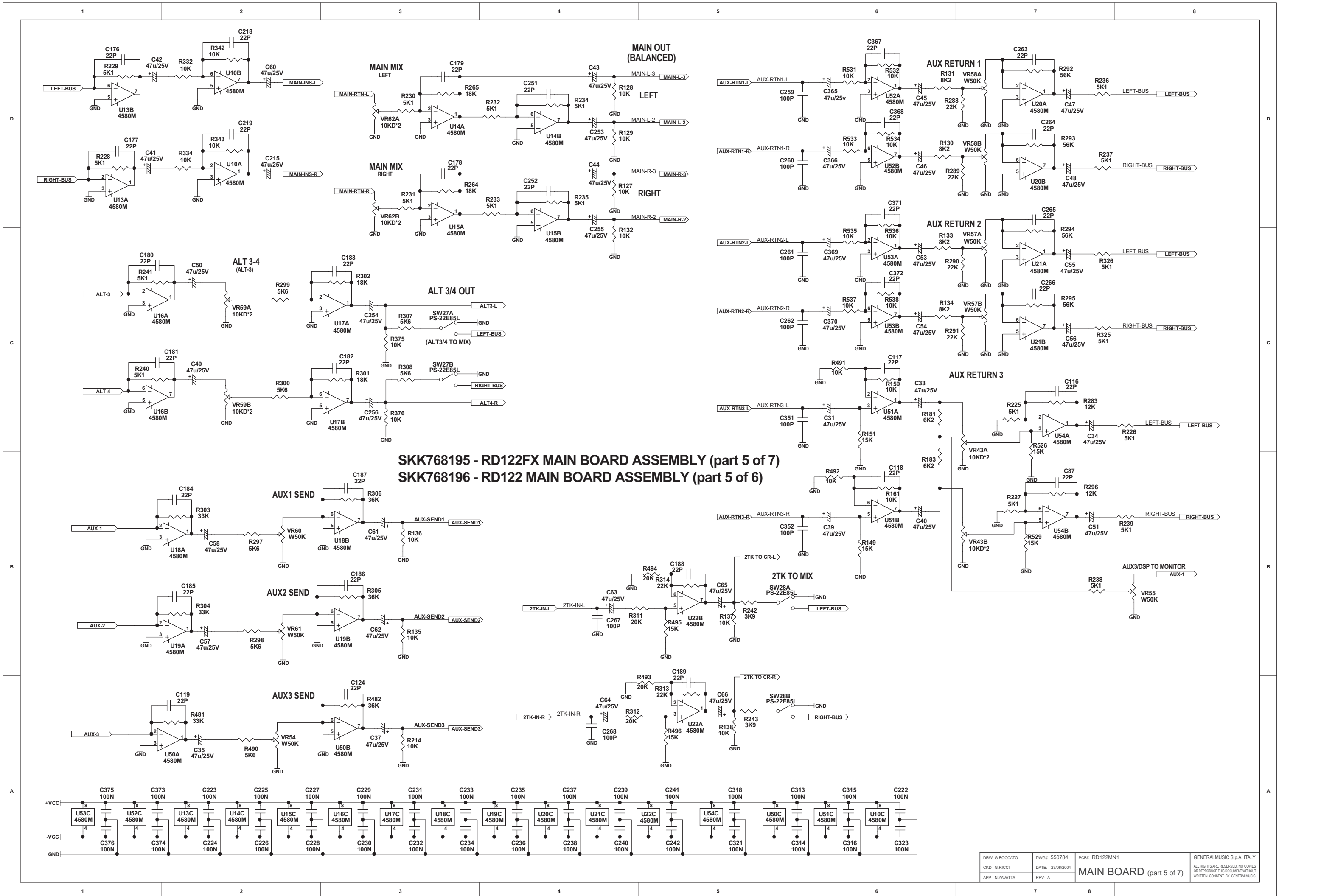


DRW: G. BOCCATO	DWG#: 550782	PCB#: RD122MN1	GENERALMUSIC S.p.A. ITALY
CKD: G. RICCI	DATE: 23/06/2004	MAIN BOARD (part 3 of 7)	
APP: N. ZAVATTA	REV: A		

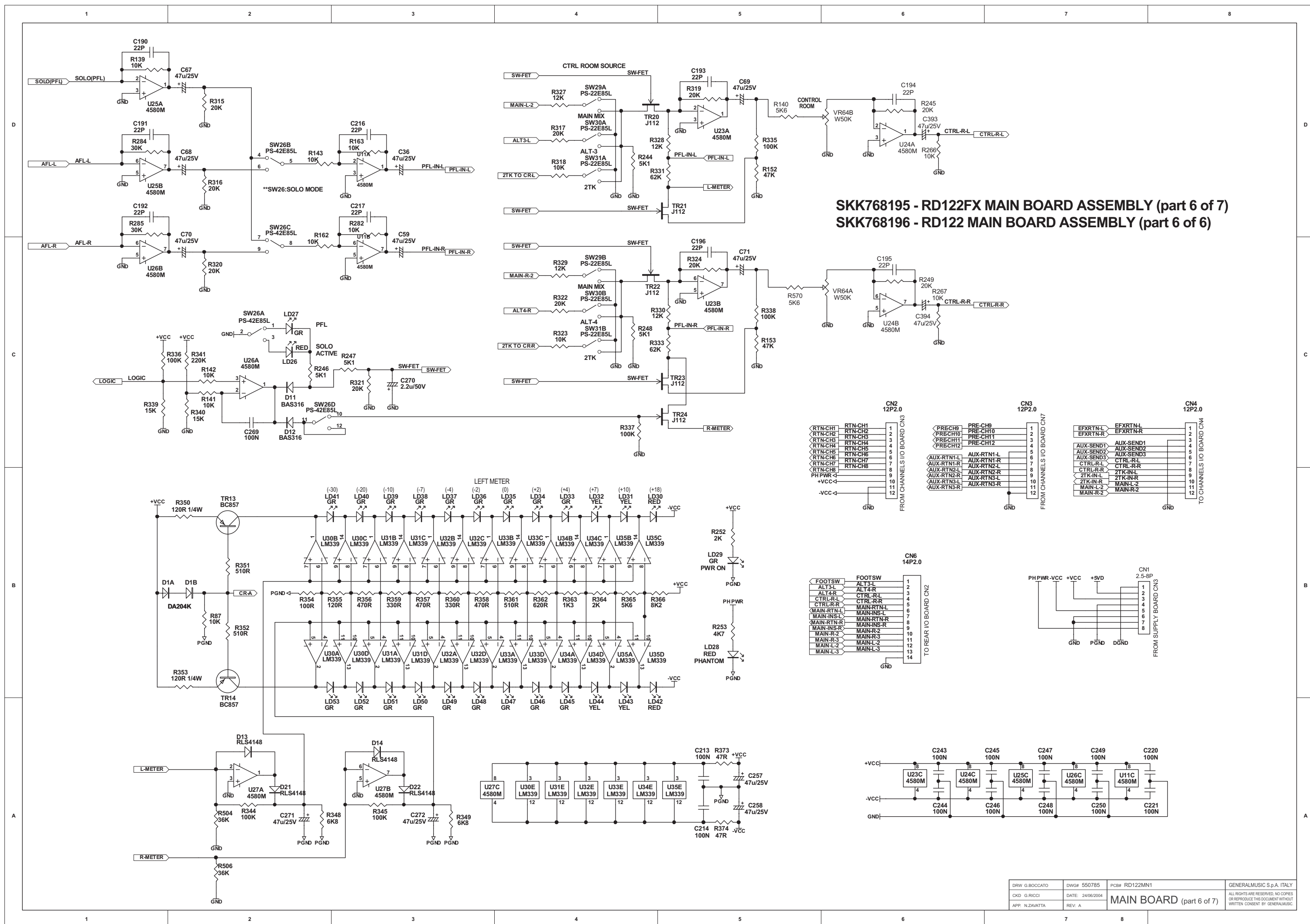
SKK768195 - RD122FX MAIN BOARD ASSEMBLY (part 4 of 7)
SKK768196 - RD122 MAIN BOARD ASSEMBLY (part 4 of 6)

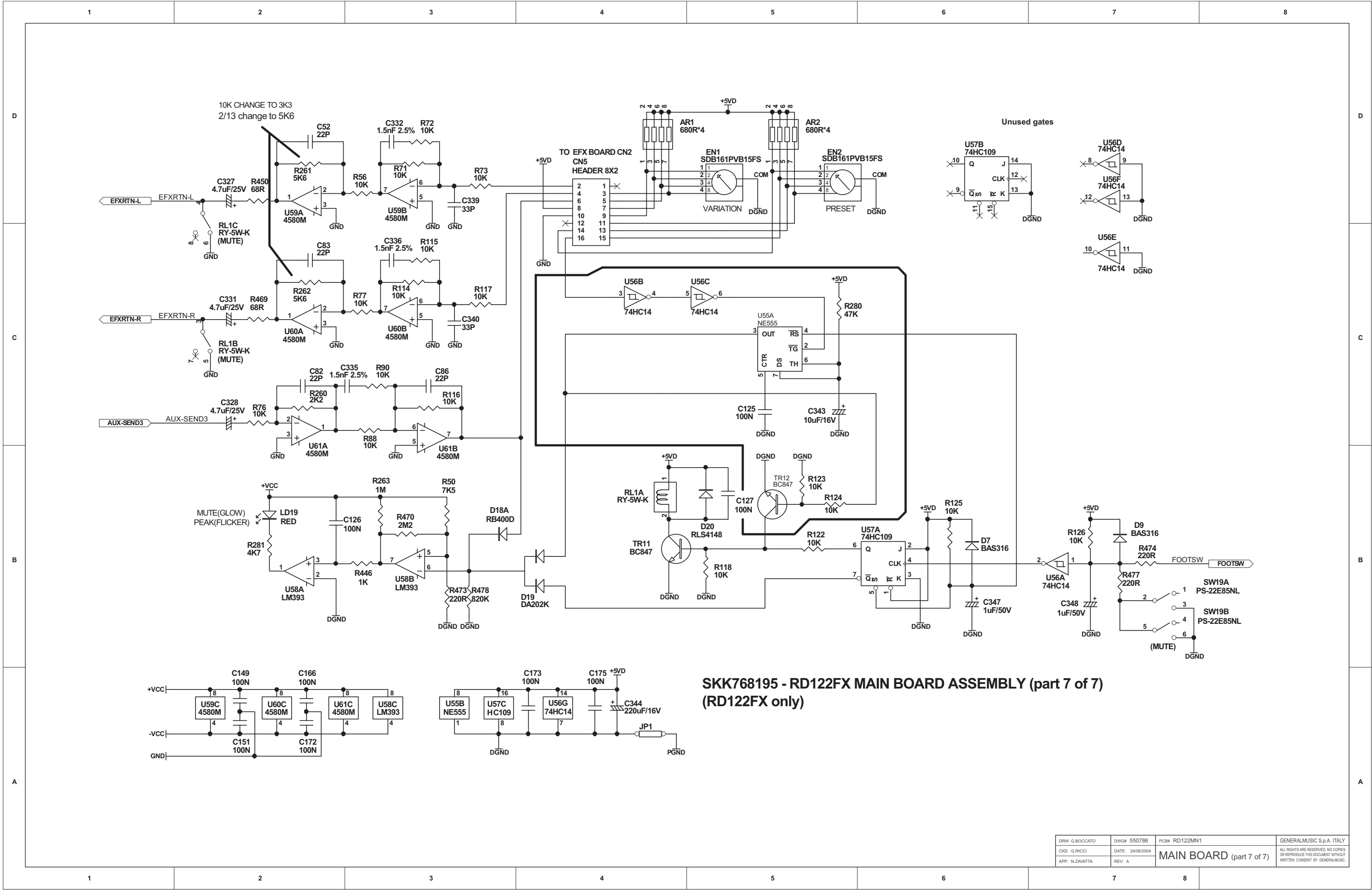


DRW: G. BOCCATO	DWG#: 550783	PCB#: RD122MN1	GENERALMUSIC S.p.A. ITALY
CKD: G. RICCI	DATE: 23/06/2004	MAIN BOARD (part 4 of 7)	
APP: N. ZAVATTA	REV: A	ALL RIGHTS ARE RESERVED. NO COPIES OR REPRODUCE THIS DOCUMENT WITHOUT WRITTEN CONSENT BY GENERALMUSIC.	



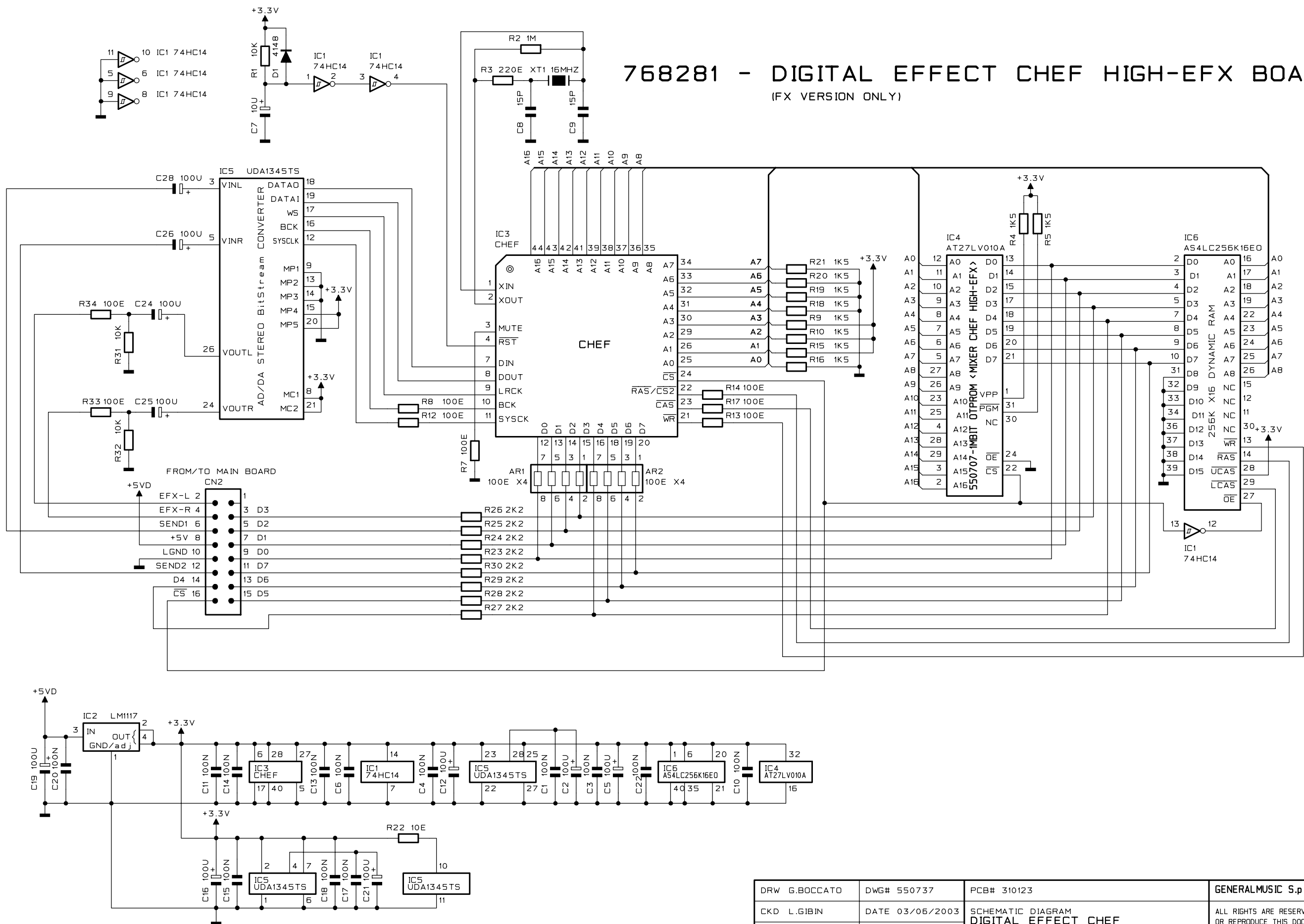
SKK768195 - RD122FX MAIN BOARD ASSEMBLY (part 5 of 7)
SKK768196 - RD122 MAIN BOARD ASSEMBLY (part 5 of 6)





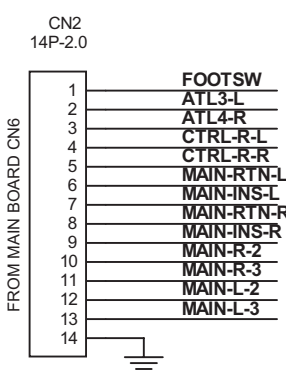
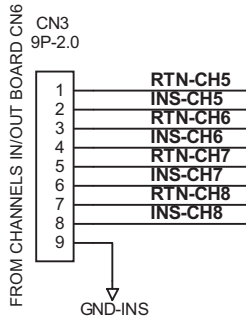
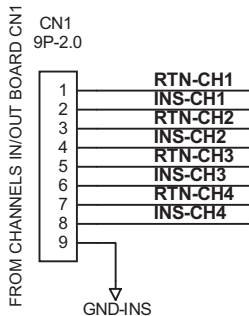
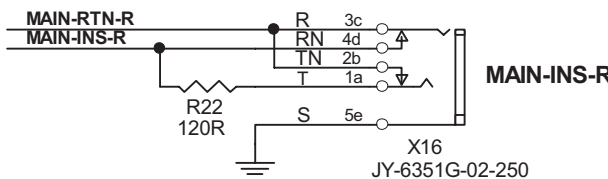
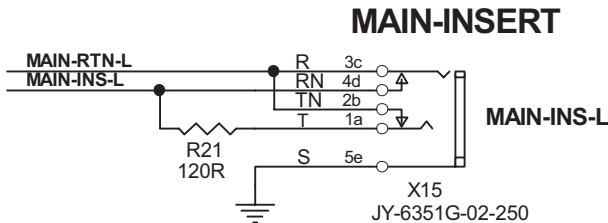
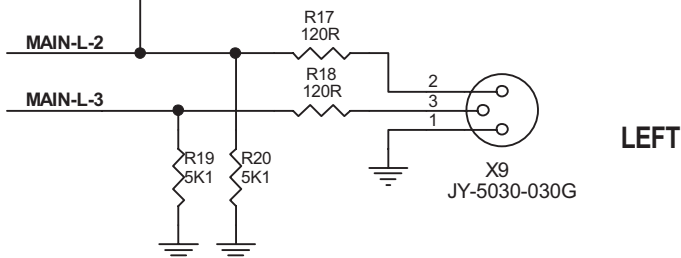
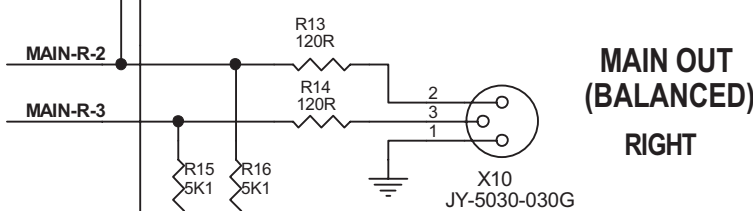
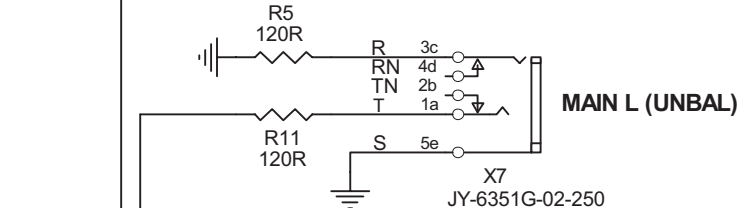
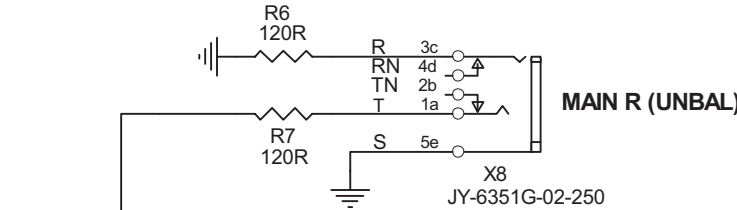
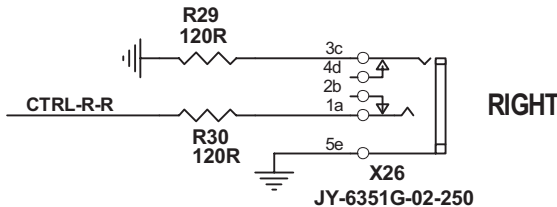
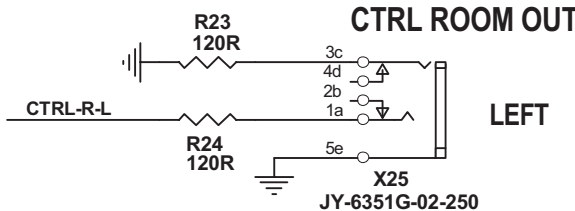
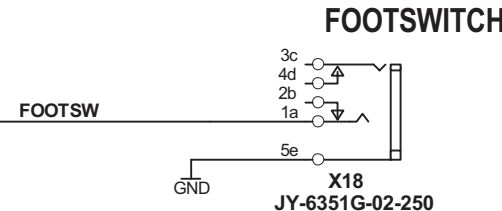
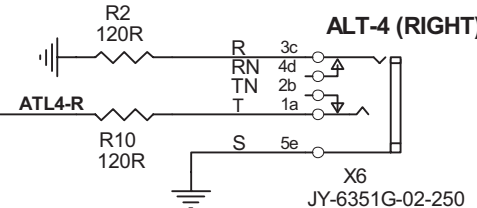
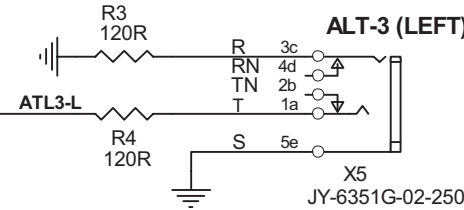
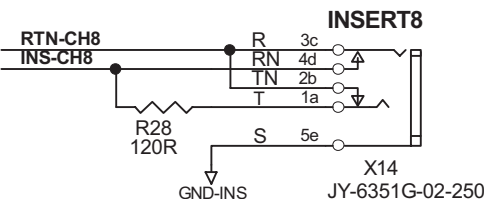
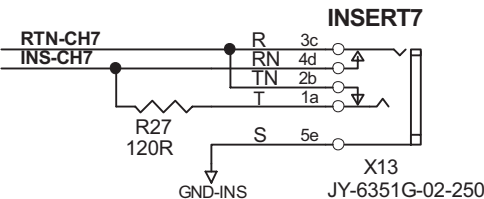
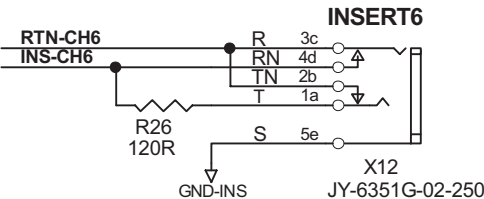
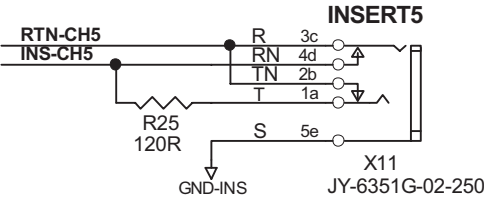
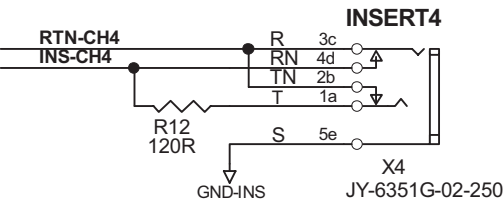
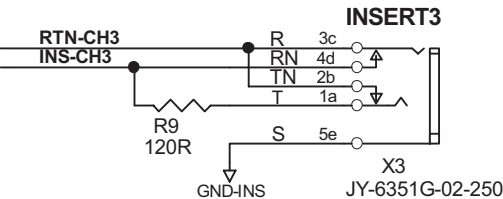
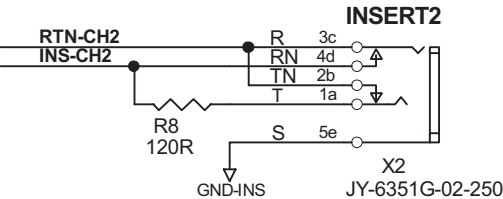
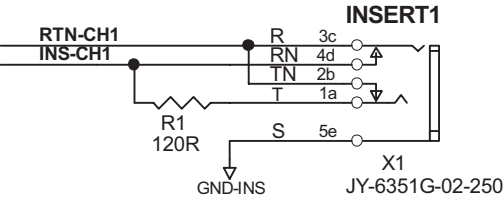
768281 - DIGITAL EFFECT CHEF HIGH-EFX BOARD

(FX VERSION ONLY)



DRW G. BOCCATO	DWG# 550737	PCB# 310123	GENERALMUSIC S.p.A. ITALY
CKD L. GIBIN	DATE 03/06/2003	SCHEMATIC DIAGRAM	ALL RIGHTS ARE RESERVED. NO COPIES
APP. F. GAZZILLI	REV: A	DIGITAL EFFECT CHEF	OR REPRODUCE THIS DOCUMENT WITHOUT
		HIGH-EFX BOARD	WRITTEN CONSENT BY GENERALMUSIC.

SKK768192 - RD122FX REAR IN/OUT BOARD ASSEMBLY
SKK768193 - RD122 REAR IN/OUT BOARD ASSEMBLY



Spare Part List

Legend	
EU	= Europe Version 230Vac
US	= United States Version 115Vac
Code	Description

Accessories

SKK887001	45X42X9Cm LEM Bag
SKK667000	Left Rack Bracket
SKK667001	Right Rack Bracket
277408	Owner's Manual (English/Italian)
130297	Mains Cable 10A (EU)
130283	Mains Cable 10A (US)

Assembly

SKK347029	Extension For Button
SKK347028	Circular Gray Button
SKK347027	Red/White Slider Knob
SKK347026	Gray/White Slider Knob
SKK347025	11mm Red/Gray Rotary Knob
SKK347024	11mm Blue/Gray Rotary Knob
SKK347023	11mm Black/Gray Rotary Knob
SKK347022	10mm Gray/White Rotary Knob
SKK347017	Elliptical Gray Button
SKK347016	14mm Gray/White Rotary Knob
SKK667008	Bottom Chassis
SKK667009	Rd122 Top Chassis
SKK667010	Rd122Fx Top Chassis

Mains Assembly

SKK235012	Transformer 230Vac 35W (EU)
SKK235013	Transformer 115Vac 35W (US)
SKK110009	Power Switch (Single Pole)
SKK110620	Mains Inlet with Fuse 5x20mm 10A max
110007	T250mA Fuse 5x20mm (EU)

Supply Board Assembly

SKK110010	Slim Power Switch (Single Pole)
SKK768190	RD122FX Supply Board Ass'y (Pcb# RD122PWR)
SKK768191	RD122 Supply Board Ass'y (Pcb# RD122PWR)
SKK080201	* 1N4756A 47V 1W 5% Zener Diode
SKK030002	* 220u 100V 20% Vert Electrolytic Capacitor
SKK030001	* 100u 100V 20% Vert Electrolytic Capacitor
100060	* 7815 +15V 1A Voltage Regulator
100059	* 7805 +5V 1A Voltage Regulator
100049	* 7915 -15V 1A Voltage Regulator
090559	* TIP122 TO220 Npn Darlington Transistor
080156	* 1N4002 1A 100V Rectifier Diode
030805	* 2200u 25V 20% Vert Electrolytic Capacitor
030413	* 47u 100V 20% Vert Electrolytic Capacitor

Rear In/Out Board Assembly

SKK768192	RD122FX Rear In/Out Board Ass'y (Pcb# RD122PU1)
SKK768193	RD122 Rear In/Out Board Ass'y (Pcb# RD122PU1)
SKK140006	* Vert Female Stereo JACK Socket
SKK140009	* Vert Male XLR Socket

Channels In/Out Board Assembly

SKK768194	RD122/122FX Channels In/Out Board Ass'y (Pcb# RD122PU2)
SKK140006	* Vert Female Stereo JACK Socket
SKK140008	* Quad Vertical Female RCA Socket
SKK140007	* Vert Female XLR Socket
SKK110007	* 2 Pole Vert Latching Push Switch
SKK106015	* NJM4580M DMP8 Smd Dual Low Noise Op. Amp.
SKK100001	* BA15218N SIP8 900mW Dual Op Amp
091001	* BC857B/C TO236 Smd Pnp Transistor (9BB/C-3F/G) (3H)
091000	* BC847B/C TO236 Smd Npn Transistor (8BB/C-1F/G) (1H)
SKK090008	* 2SA1316GR TO92 Pnp Low Noise Transistor
SKK081055	* BAS316 0.25A 75V SOD323 High Speed Rect.Diode
SKK075000	* 10Kc Vert Rotary Potentiometer
042585	* 6K81 1/4W 1% Metalized Film Resistor

Main Board Assembly

SKK768195	RD122FX Main Board Ass'y (Pcb# RD122MN1)
SKK768196	RD122 Main Board Ass'y (Pcb# RD122MN1)
SKK110300	* Relay 5V / 2 Switch 1A 120Vac
SKK110008	* 4 Pole Vert Latching Push Switch
SKK110007	* 2 Pole Vert Latching Push Switch
SKK110006	* 2 Pole Vert Momentary Push Switch
SKK110005	* Hex Binary Encoder
SKK106015	* NJM4580M DMP8 Smd Dual Low Noise Op. Amp.
SKK106010	* LM339 SOIC Quad Voltage Comparator
SKK106006	* BA10393F SOIC Dual Voltage Comparator
SKK091105	* MMBFJ112 SOT-23 N-Channel JFet (6R)
SKK081055	* BAS316 0.25A 75V SOD323 Smd High Speed Diode (A6)
SKK081054	* RB400D 0.5A 40V SOT346 Smd Schottky Diode (D3A)

SKK081053	*	DA204K 0.1A 20V SOT346 Smd Dual Switch. Diode (K)
SKK081052	*	DAN202K 0.1A 80V SOT346 Smd Dual Switch.Diode (N)
SKK075001	*	2x500KC Vert Rotary Potentiometer
SKK074008	*	2x10KJQ Vert Rotary Potentiometer
SKK074011	*	2x50KW Vert Rotary Potentiometer
SKK074007	*	2x50KB Vert Rotary Potentiometer
SKK074006	*	50KW Vert Rotary Potentiometer
SKK074005	*	50KB Vert Rotary Potentiometer
SKK073001	*	10KD 60mm Vertical Slim Slider Pot. Shaft H=15mm
SKK073002	*	2x10KD 60mm Vertical Slim Slider Pot. Shaft H=15mm
106002	*	NE555 SOIC Timer
103014	*	74HC109D SOIC Dual J-/K F-F
103000	*	74HC14D Soic Hex Inverter Schmitt Trigger
091001	*	BC857B/C TO236 Smd Pnp Transistor (9BB/C-3F/G) (3H)
091000	*	BC847B/C TO236 Smd Npn Transistor (8BB/C-1F/G) (1H)
SKK080706	*	3mm 60deg Diffused Green Led
SKK080707	*	3mm 60deg Diffused Red Led
SKK080708	*	3mm 60deg Diffused Yellow Led

Digital Effect Chef-High Efx Board Assembly

SKK768281	Digital Effect Chef-High Efx Codec (pcb#313123)
SSK103068	* UDA1345TS SSOP28 20Bit Codec w/Volume
550707	* AT27LV010A-70JC 1MBit OtpRom <RD2FX-1800h>
SKK104076	** AT27LV010A-70JC 1MBIT OTPROM SMD (SG00138)
106008	* LM1117 Voltage Reg. 3,3V 0,8A TO252
105022	* CHEF Audio Effect Speaker Dsp.3,3v QFP44
104075	* AS4LC256K16EO-60JC 256Kx16 DRam (EDO) 3,3V
103000	* 74HC14D Soic Hex Inverter Schmitt Trigger
081000	* PMLL4148 Smd 100mA 75V Signal Diode
010704	* 16MHz Quartz Resonator

Note:

- | | |
|---|---|
| - | All dimensions are in mm unless otherwise specified. |
| - | Each spare part is single quantity unless otherwise specified. |
| - | Asterisk prefix explanation: |
| | Omitted = First level spare part. |
| | One asterisk = Second level, part of previous listed first level part. |
| | Two asterisk = Third level, part of previous listed second level part. |
| | Three asterisk = |
| - | Any request for not above mentioned part must encompass specific description including: |
| | 1) Model name, |
| | 2) Section name, |
| | 3) Module code, |
| | 4) Reference name, |
| | 5) Quantity number. |

