



RD82 / 82FX mixing consoles

SERVICE MANUAL

Index

2	Block Diagram.
3	Supply Board.
4	In/Out Board.
5	Main Board Part 1/4.
6	Main Board Part 2/4.
7	Main Board Part 3/4.
8	Main Board Part 4/4.
9	Main Out Board and Digital Effect CHEF High-Efx Board.
10	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.	↑ Supply voltage.	⏏ Logic supply ground.
• Male connector.	▣ Test point.	⏏ Analog supply ground.
⌋ Female connector.	⏏ Flag joined with one or more flags with the same signal name inscribed.	⏏ Chassis ground.
⏏ M/F faston connector.		⏏ Earth ground.



ATTENTION

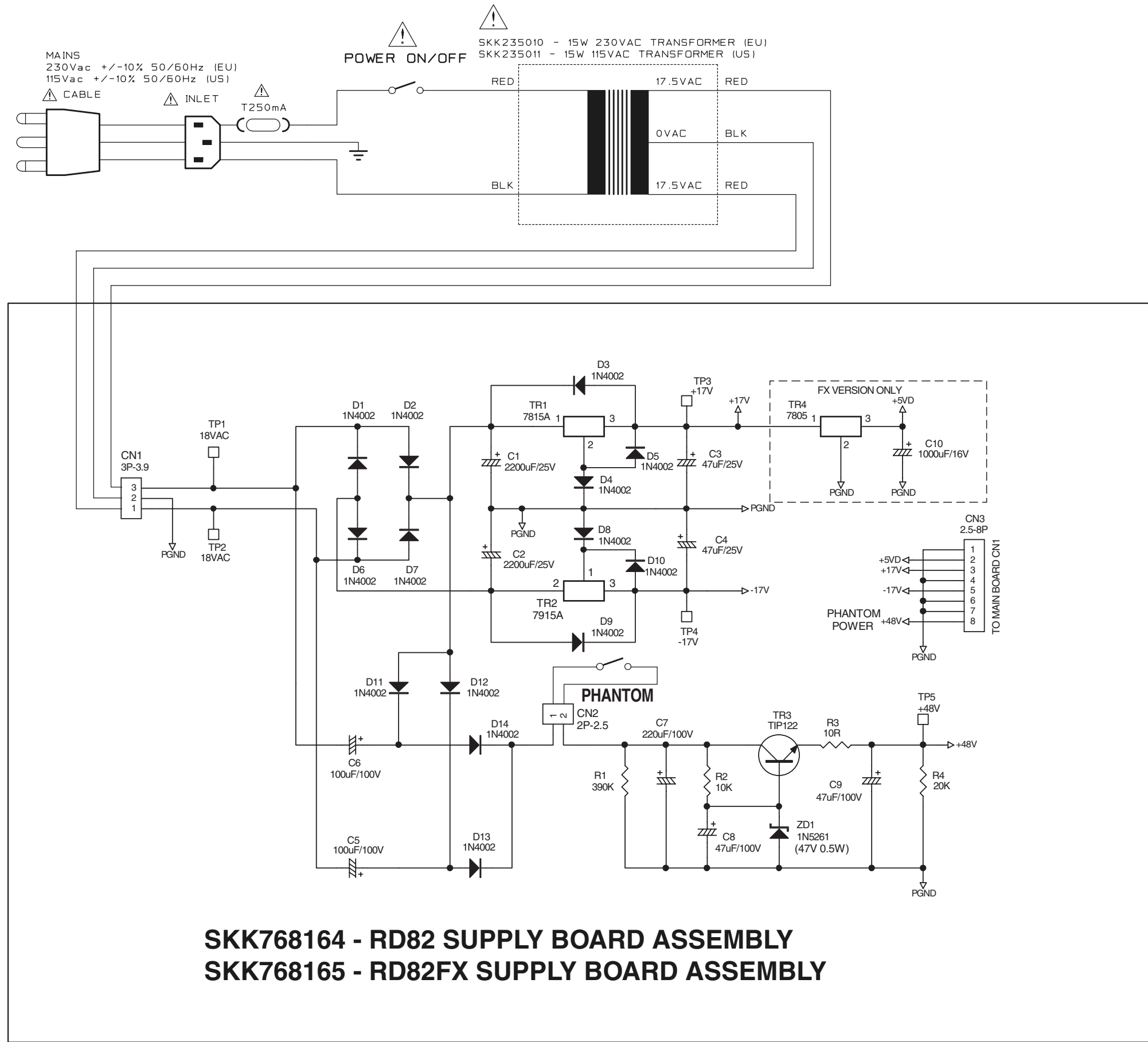
Observe precautions when handling electrostatic sensitive devices.



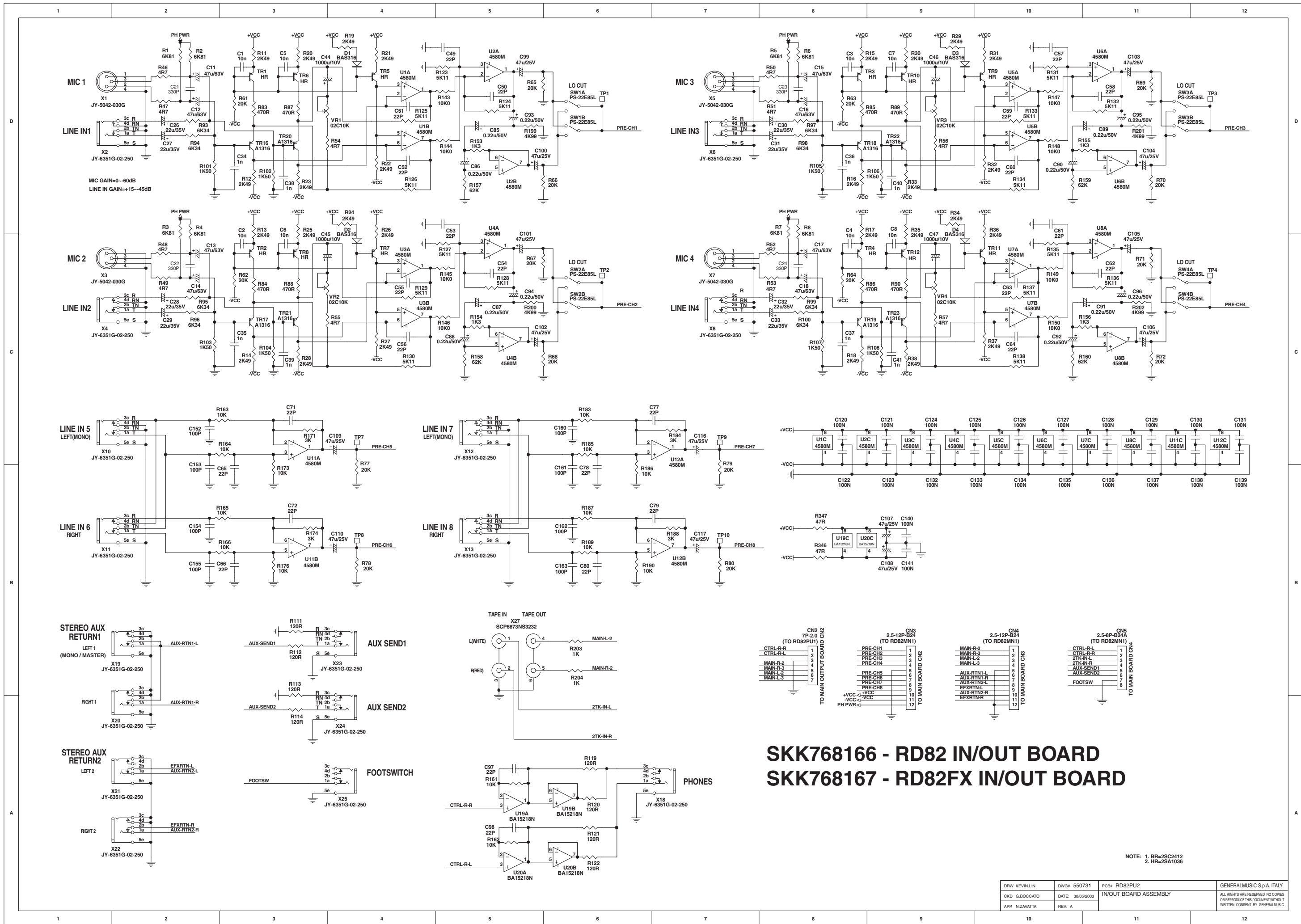
code 270288

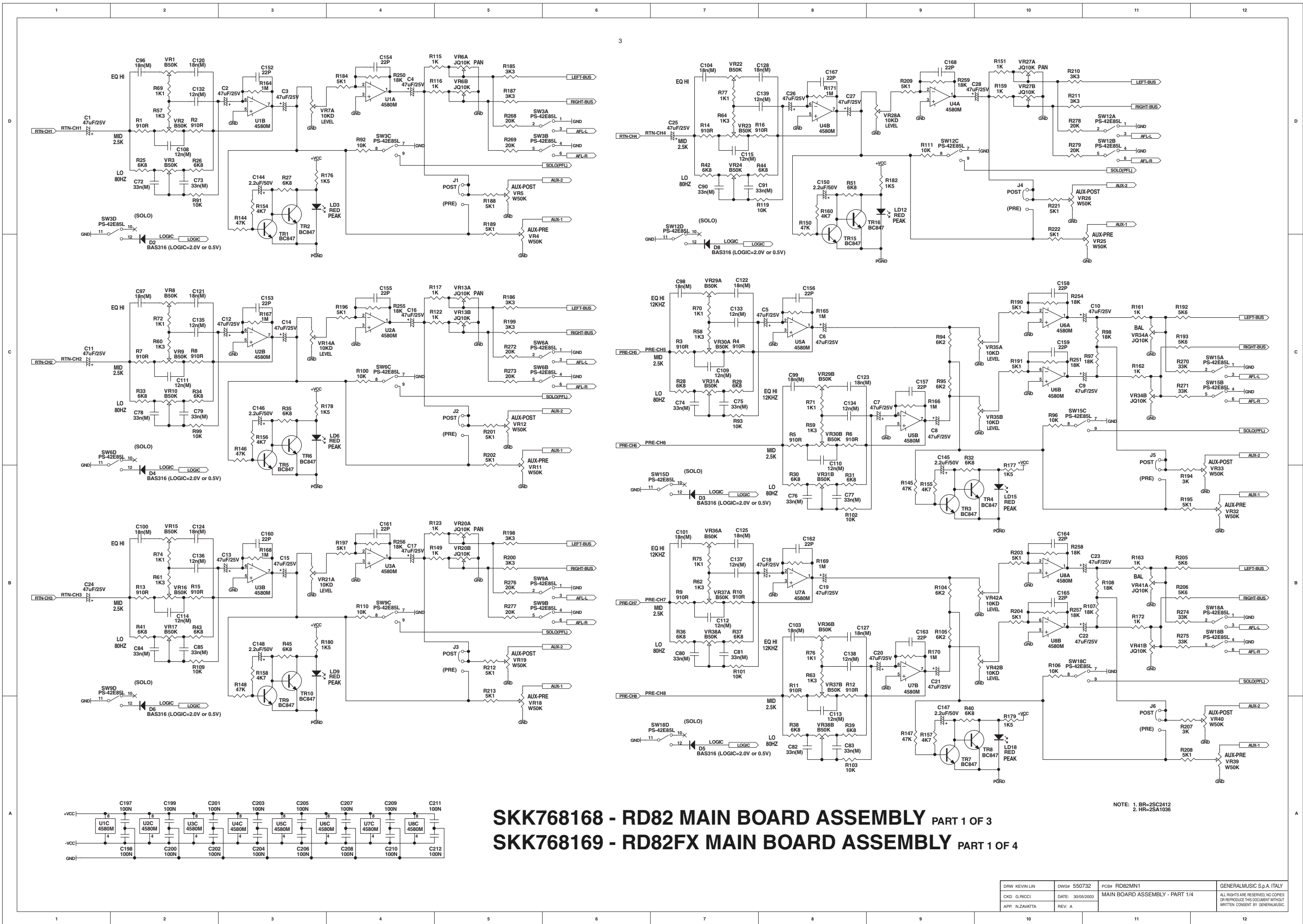


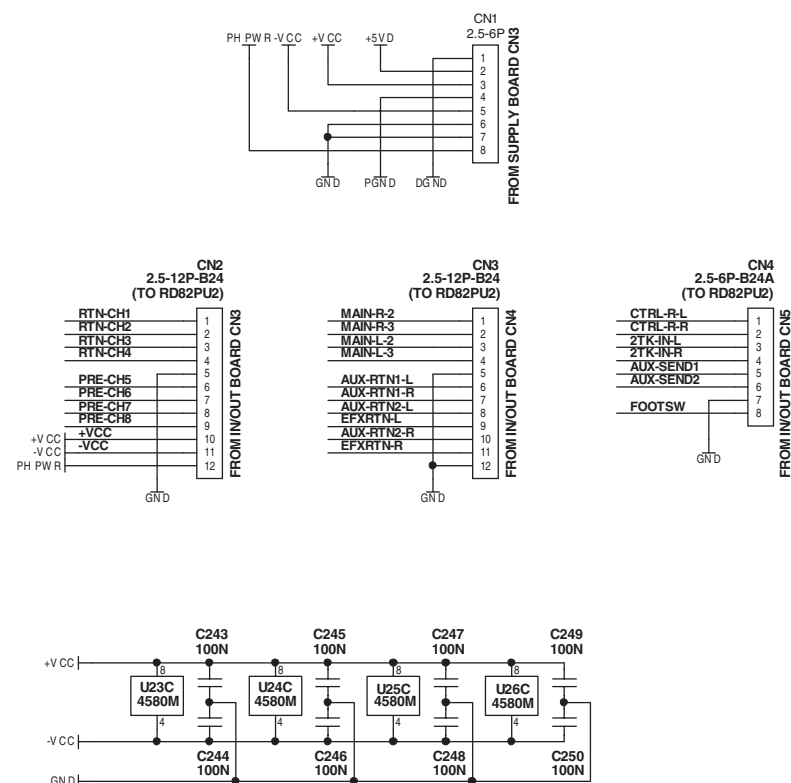
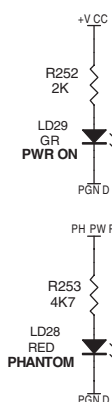
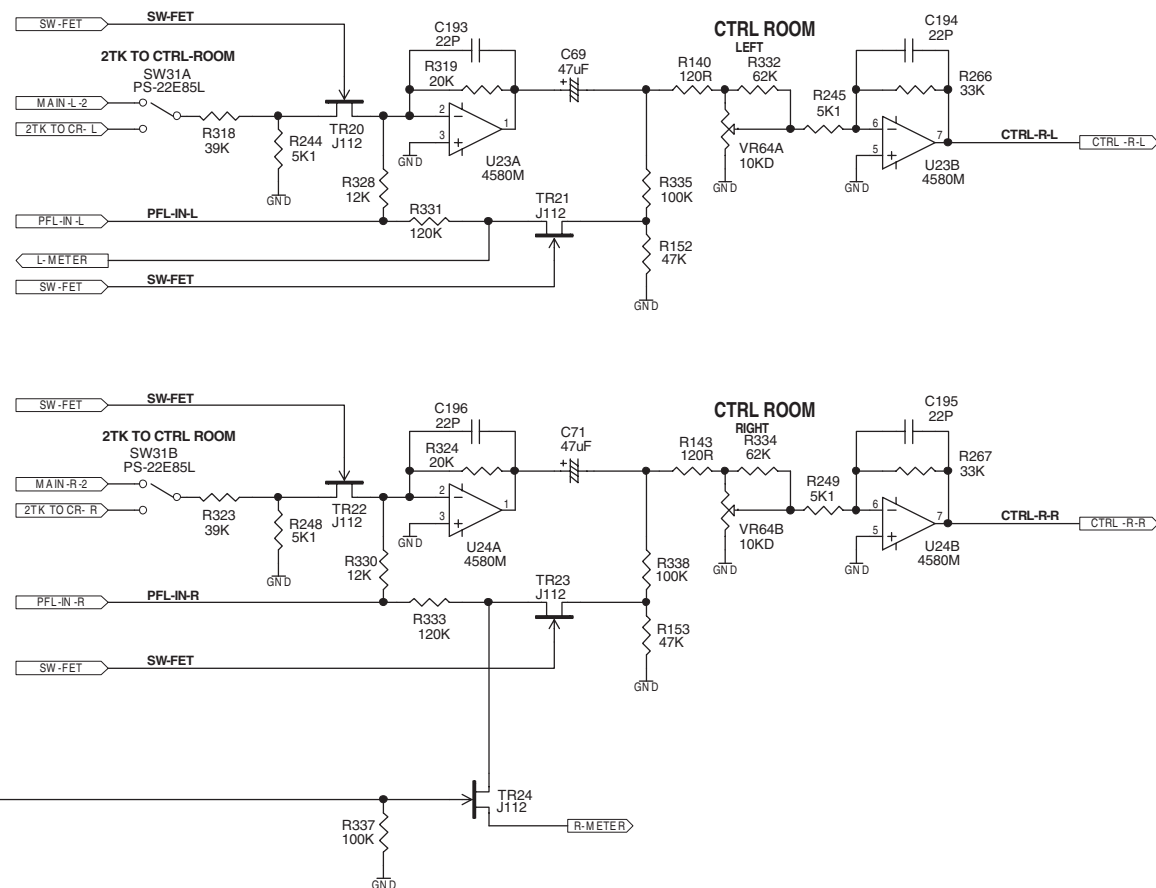
GENERALMUSIC S.p.A. Sales Division: 47842 S.Giovanni in Marignano (RN) ITALY - Via delle Rose, 12
Phone +39(0)541/959511 - Fax +39(0)541/957404 - Internet: www.generalmusic.com



DRW KEVIN LIN	DWG# 550730	PCB# RD82PWR	GENERALMUSIC S.p.A. ITALY
CKD G.BOCATO	DATE: 30/05/2003	SUPPLY BOARD ASSEMBLY	ALL RIGHTS ARE RESERVED. NO COPIES OR REPRODUCE THIS DOCUMENT WITHOUT WRITTEN CONSENT BY GENERALMUSIC.
APP: N.ZAVATTA	REV: A		

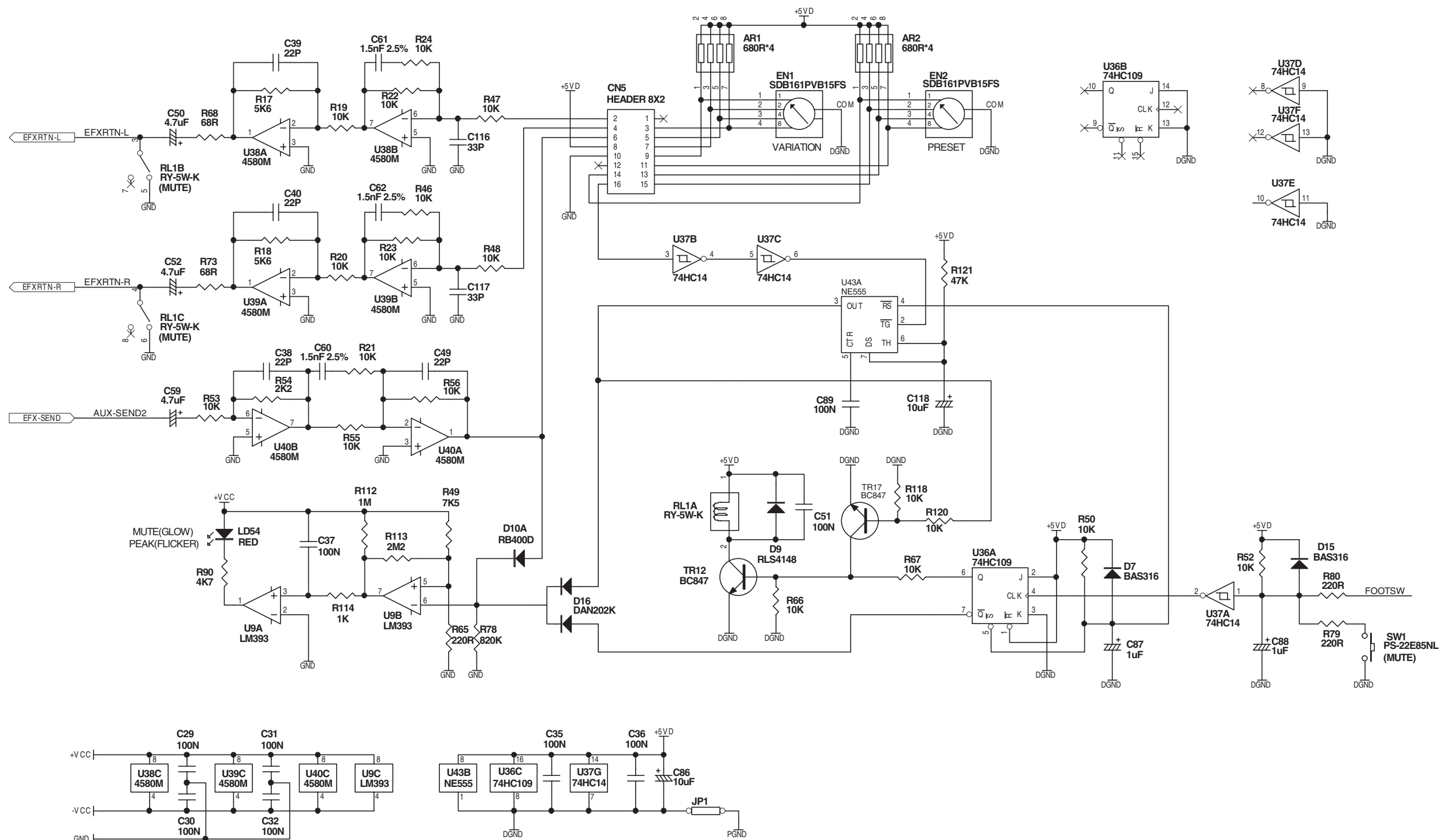






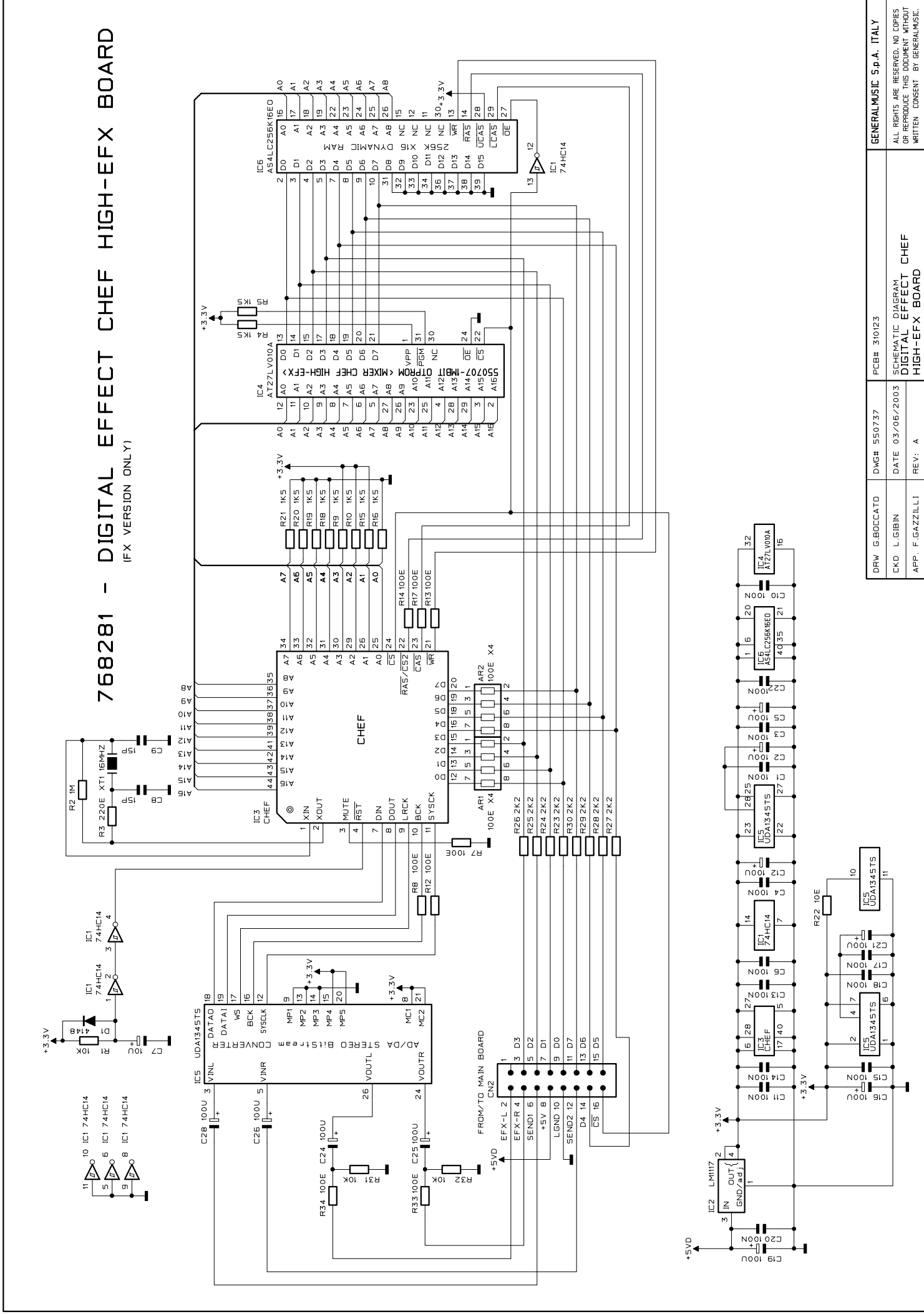
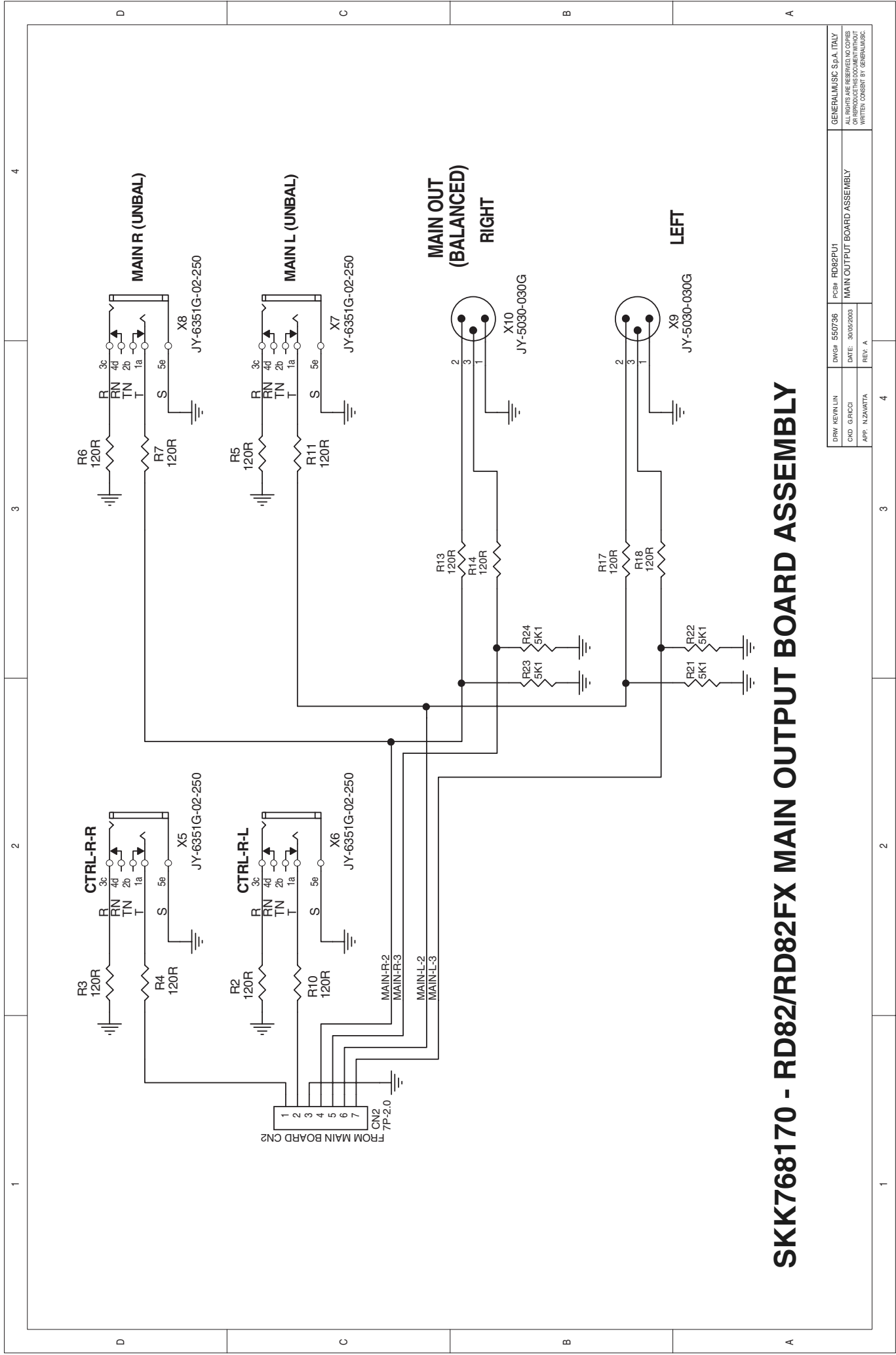
DRW KEVIN LIN	DWG# 550734	PCB# RD82MN1	GENERALMUSIC S.p.A. ITALY
CKD G.RICCI	DATE: 30/05/2003	MAIN BOARD ASSEMBLY - PART 3/4	ALL RIGHTS ARE RESERVED. NO COPIES OR REPRODUCE THIS DOCUMENT WITHOUT WRITTEN CONSENT BY GENERALMUSIC.
APP. N.ZAVATTA	REV: A		

1 2 3 4 5 6 7 8



SKK768169 - RD82FX MAIN BOARD ASSEMBLY PART 4 OF 4 (RD82FX ONLY)

DRW KEVIN LIN	DWG# 550735	PCB# RD82MN1	GENERALMUSIC S.p.A. ITALY
CKD G. RICCI	DATE: 30/05/2003	MAIN BOARD ASSEMBLY - PART 4/4 (FX VERSION ONLY)	ALL RIGHTS ARE RESERVED. NO COPIES OR REPRODUCE THIS DOCUMENT WITHOUT WRITTEN CONSENT BY GENERALMUSIC.
APP. N. ZAVATTA	REV: A		



Spare Part List

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

Accessories

SKK887000	30x34cm LEM Bag
277397	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

Mains Assembly

SKK235011	Transformer 115Vac 15W (US)
SKK235010	Transformer 230Vac 15W (EU)
SKK110620	Mains Inlet with Fuse 5x20mm 10A max
110007	T250mA Fuse 5x20mm (EU)

Supply Board Assembly

SKK768165	RD82FX Supply Board Ass'y (Pcb# RD82PWR)			
SKK768164	RD82 Supply Board Ass'y (Pcb# RD82PWR)			
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

In/Out Board Assembly

SKK768167	RD82FX In/Out Board Ass'y (Pcb# RD82PU2)
SKK768166	RD82 In/Out Board Ass'y (Pcb# RD82PU2)
SKK140008	* Quad Vertical Female RCA Socket
SKK140007	* Vert Female XLR Socket
SKK140006	* Vert Female Stereo JACK Socket
SKK110007	* 2 Pole Vert Latching Push Switch
SKK100001	* BA15218N SIP8 900mW Dual Op Amp
SKK091104	* 2SC2412KR SOT346 Smd Npn Transistor (BR)
SKK091103	* 2SA1036KR SOT346 Smd Pnp Transistor (HR)
SKK090008	* 2SA1316GR TO92 Pnp Low Noise Transistor
SKK075000	* 10KC Vert Rotary Potentiometer
106001	* MC33078P SOIC Dual Low Noise Op. Amp. (NJM4580 Equivalent)
042585	* 6K81 1/4W 1% Metalized Film Resistor

Main Board Assembly

SKK768169	RD82FX Main Board Assy (Pcb# RD82M2N1)	
SKK768168	RD82 Main Board Assy (Pcb# RD82M2N1)	
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
SKK106010	*	LM339 SOIC Quad Voltage Comparator
SKK090009	*	J112 TO92 N-Channel J-Fet
SKK081055	*	BA5316 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)
SKK074008	*	10KJQ Vert Rotary Potentiometer
SKK074007	*	2x50KB Vert Rotary Potentiometer
SKK074006	*	50KW Vert Rotary Potentiometer
SKK074005	*	50KB Vert Rotary Potentiometer
SKK073000	*	2x10KD 45mm Vertical Slim Slider Pot. Shaft H=15mm
106004	*	LM393 SOIC Dual Voltage Comparator
106002	*	NE555 SOIC Timer
106001	*	MC33078P SOIC Dual Low Noise Op. Amp. (NJM4580 Equivalent)
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)
--------	---

Main Output Board Assembly

SKK768170	RD82/82FX Main Output Board Ass'y (Pcb# RD82PU1)
SKK140009	* Vert Male XLR Socket
SKK140006	* Vert Female Stereo JACK Socket

Digital Effect Chef-High Efx Assembly

SKK768281	Digital Effect Chef-High Efx Board (pcb#313123)	
142001	*	32Pin PLCC SMD Socket
140922	*	32 Contacts P=2mm Vert Male Strip
106008	*	LM1117 Voltage Reg. 3,3V 0,8A TO252
105022	*	CHEF Audio Effect Speaker Dsp.3,3v QFP44
550707	*	1MBit OtpRom <Mixer Chef High-Efx>
104075	*	AS4LC256K16EO-60JC 256KX16 DRam (EDO) 3,3V
103068	*	UDA134T5S SSOP28 20Bit Codec w/Volume
103000	*	74HC14D Soic Hex Inverter Schmitt Trigger
081000	*	PMLL4148 Smd 100mA 75V Signal Diode
055100	*	100E X4 1/16w 5% Smd Resistor Array
055072	*	1M 1/16w 5% Smd Resistor 0603
055048	*	10K 1/16w 5% Smd Resistor 0603
055040	*	2K2 1/16w 5% Smd Resistor 0603
055038	*	1K5 1/16w 5% Smd Resistor 0603
055028	*	220E 1/16w 5% Smd Resistor 0603
055024	*	100E 1/16w 5% Smd Resistor 0603
055012	*	10E 1/16w 5% Smd Resistor 0603
030487	*	100u 25V 20% Low Pro Vert Electrolytic Capacitor
030246	*	10u 25V 20% Low Prof Vert Electrolytic Capacitor
011260	*	100n 16V 10% Cer. Cap. Smd CL2 X7R 0603
011214	*	15p 16V 10% Cer. Cap. Smd CL2 X7R 0603
010704	*	16MHz Quartz Resonator

Connections

SKK768172	RD82/82FX 8pin Jumper Board Ass'y (Pcb# CN-P8)
SKK768171	RD82/82FX 12pin Jumper Board Ass'y (Pcb# CN-P12)

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. |