



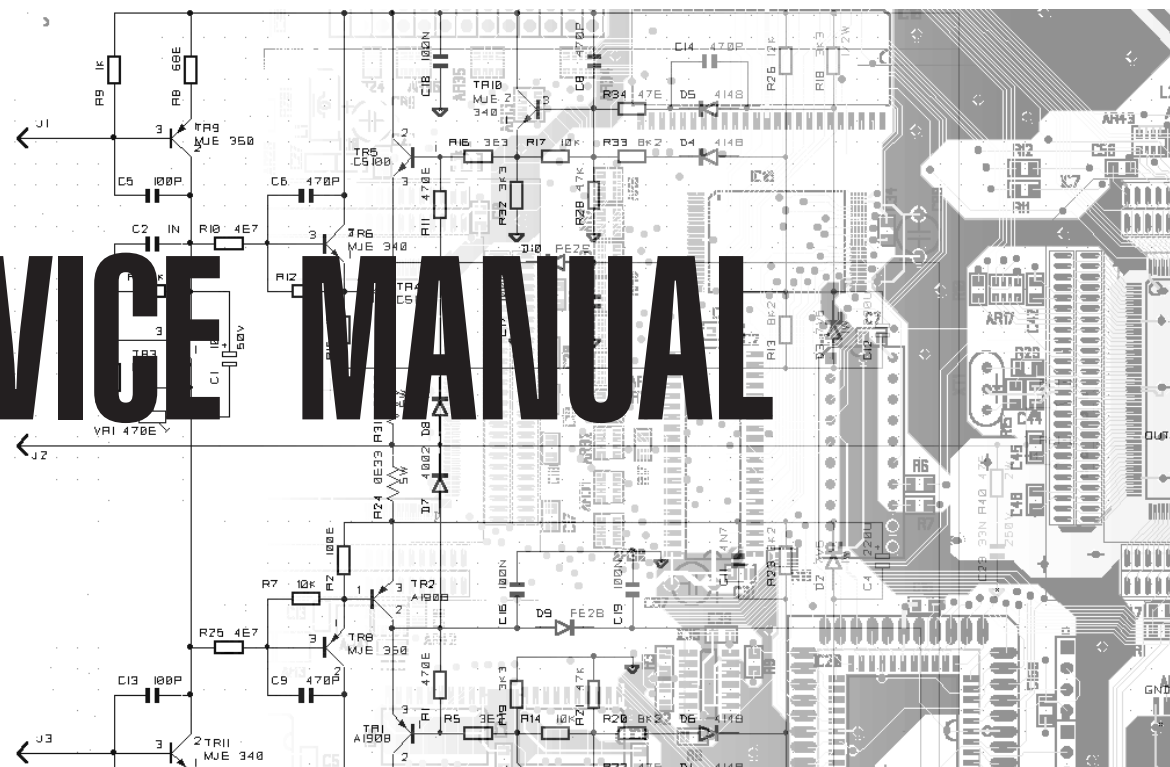
GPS2600

GPS3600

Pianovelle

Baldwin

SERVICE MANUAL



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Warnings



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.

Address



GENERALMUSIC S.p.A. Sales Division: 47842 S.Giovanni in Marignano (RN) ITALY - Via delle Rose, 12



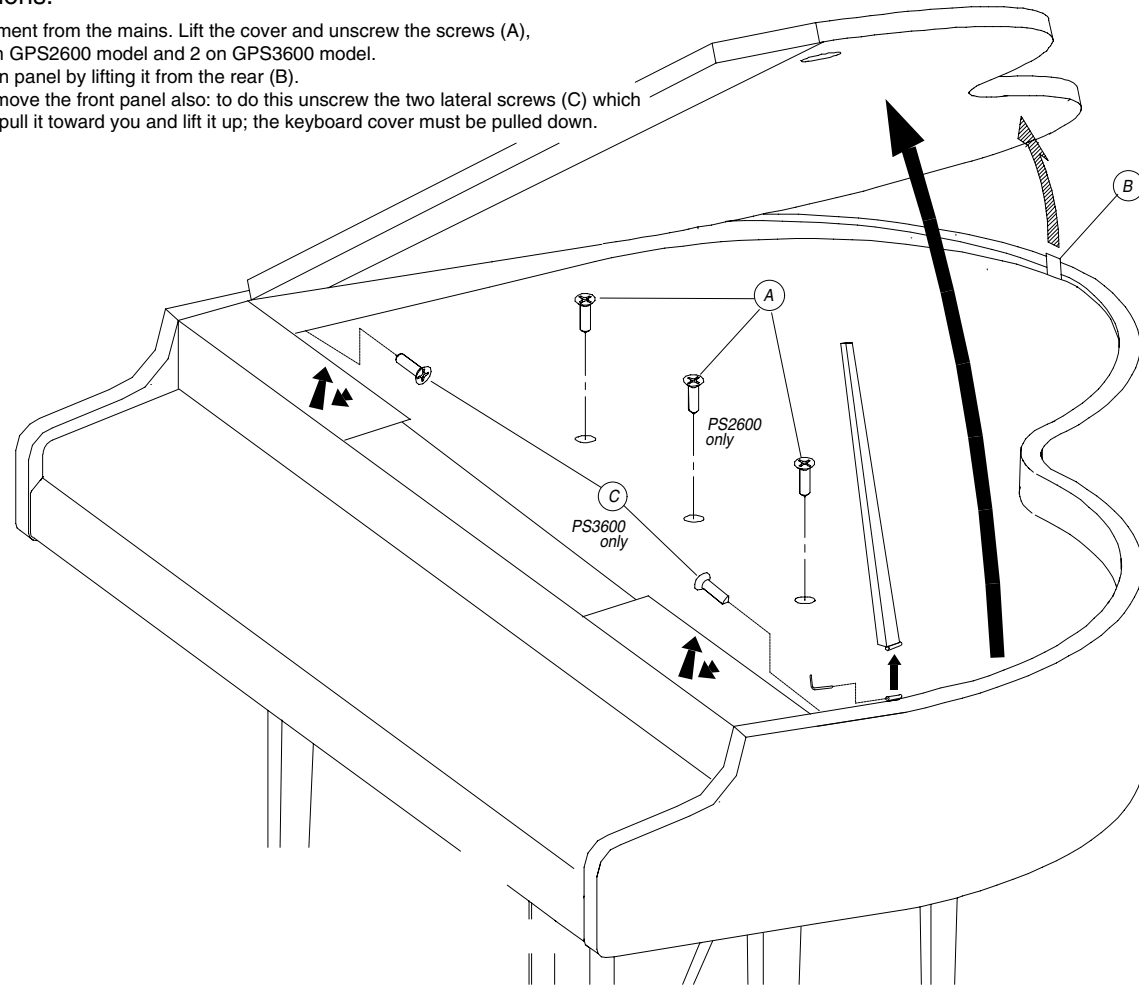
Phone + 39(0)541/959511 - Fax + 39(0)541/957404 - GENERALMUSIC on the NET: <http://www.generalmusic.com>



CODE: 270236

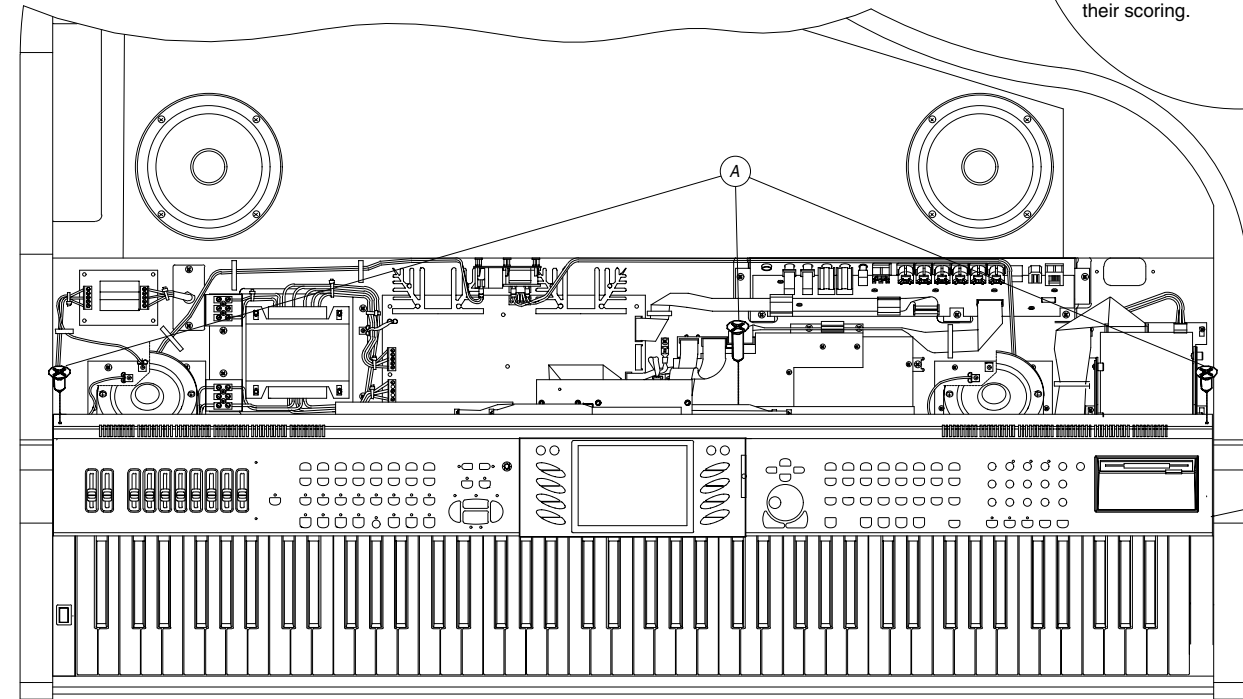
1) Opening Instructions:

Disconnect the instrument from the mains. Lift the cover and unscrew the screws (A), these are 3 screws on GPS2600 model and 2 on GPS3600 model. Remove the protection panel by lifting it from the rear (B). On GPS3600 only remove the front panel also: to do this unscrew the two lateral screws (C) which lock it to the chassis, pull it toward you and lift it up; the keyboard cover must be pulled down.



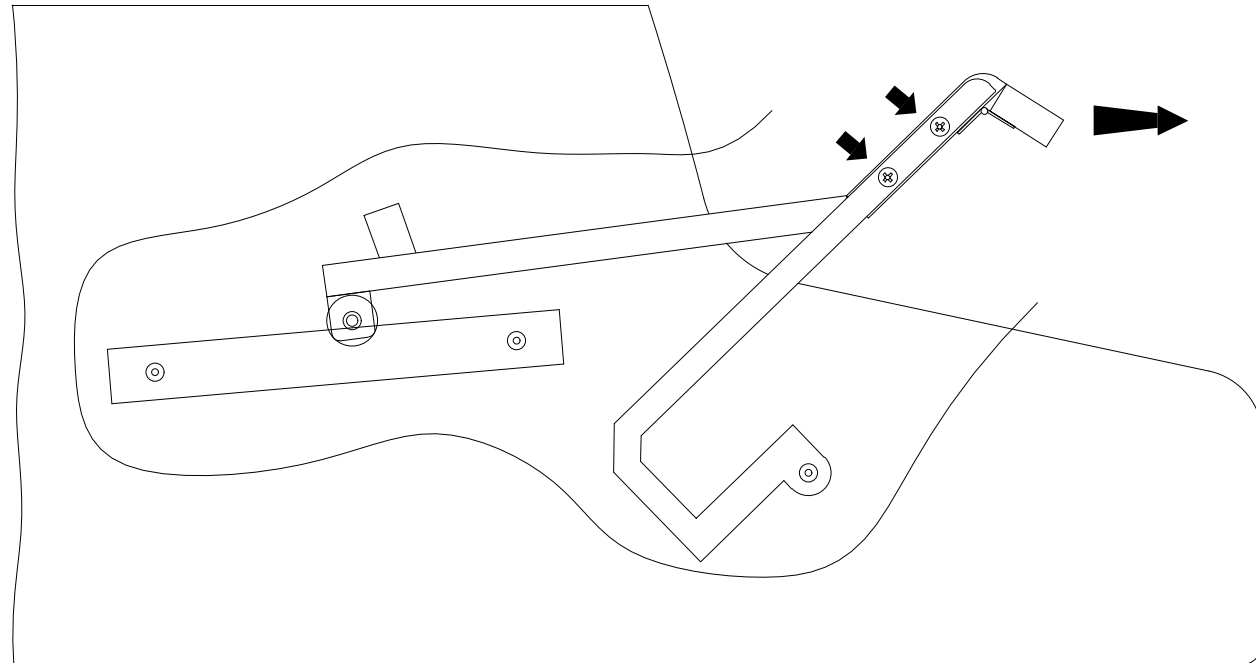
1) Opening Instructions:

To easy access to the internal circuitry, you must remove the controls panel. Unscrew the three screws (A), disconnect all the jumpers, pull the controls panel toward you and raise it.



Note: Place two sheets of paper between controls panel and the flanks to avoid their scoring.

3) Only on GPS3600 to remove the keyboard cover unscrew the four screws on the arms (two for each side), then pull out the cover.

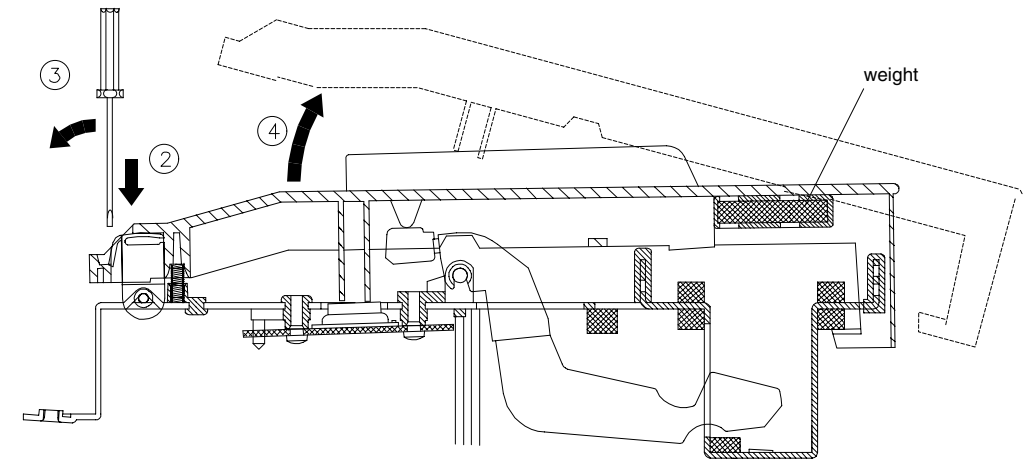


IMPORTANT NOTICE:

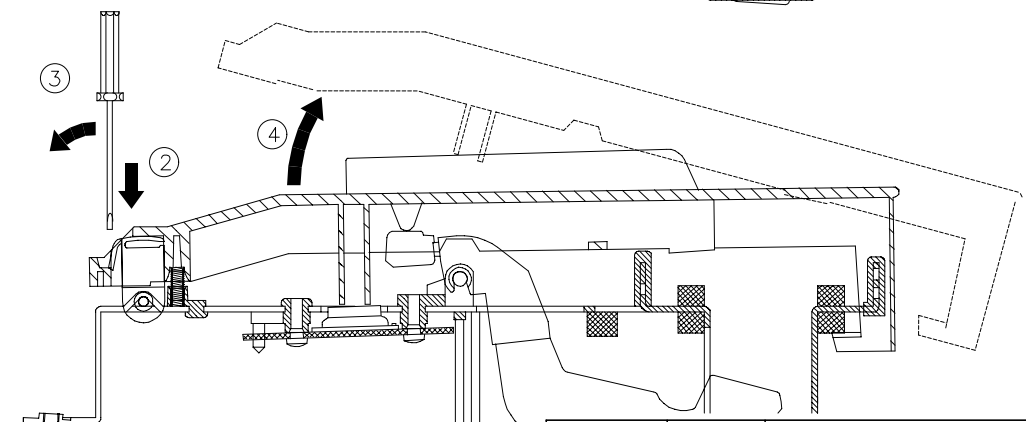
Starts from July 2000 the GPS2600 and GPS3600 models are manufactured with a new type of keyboard (TP23), it may be recognizable from first versions (TP21) by means the weight applied at the key front end in the first type (TP21) only. Also the first type of piano are recognizable from the second by the code imprinted on the product label: 991207, 991208, 991223, 991224, 991225, 991226, 991227, 991228, 991229, 991230, 991231, 991232 identify the first versions (TP21 keyboard), while: 991279, 991280, 991281, 991282, 991283, 991284, 991285, 991286, 991287, 991289, 991290 identify the second versions (TP23 keyboard).

4) To remove a key insert a screwdriver or similar tool in the split at the key back, apply a light pressure and push in the direction shown. Before removing a natural key you must remove the keyboard, removing a sharp key this operation is not necessary.

TP21

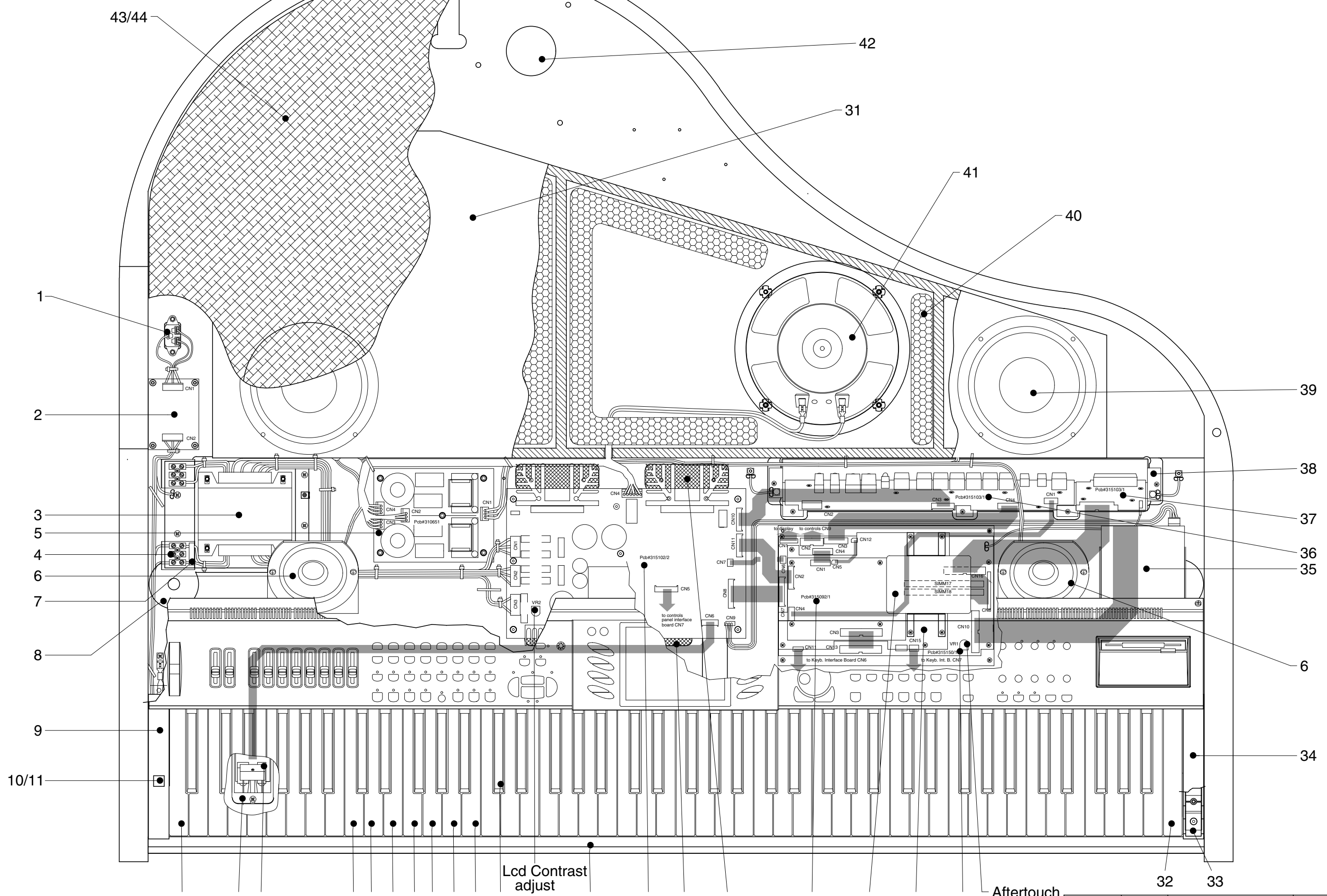


TP23



DRW/BOCCATO	DWG: 550201	PCB#	GENERALMUSIC S.p.A. ITALY
CKD/BATELLI	DSK: 6 PRT: 1/1	GPS2600-3600	ALL RIGHTS ARE RESERVED. NO COPIES OR REPRODUCE THIS DOCUMENT WITHOUT WRITTEN CONSENT BY GENERALMUSIC
APP./PANNELLI	REV: 10/07/00	Opening Instructions & Keyboard disassembly	

This drawing reproduce GPS2600 assembly only. Most part of GPS3600 model are the same or similar.

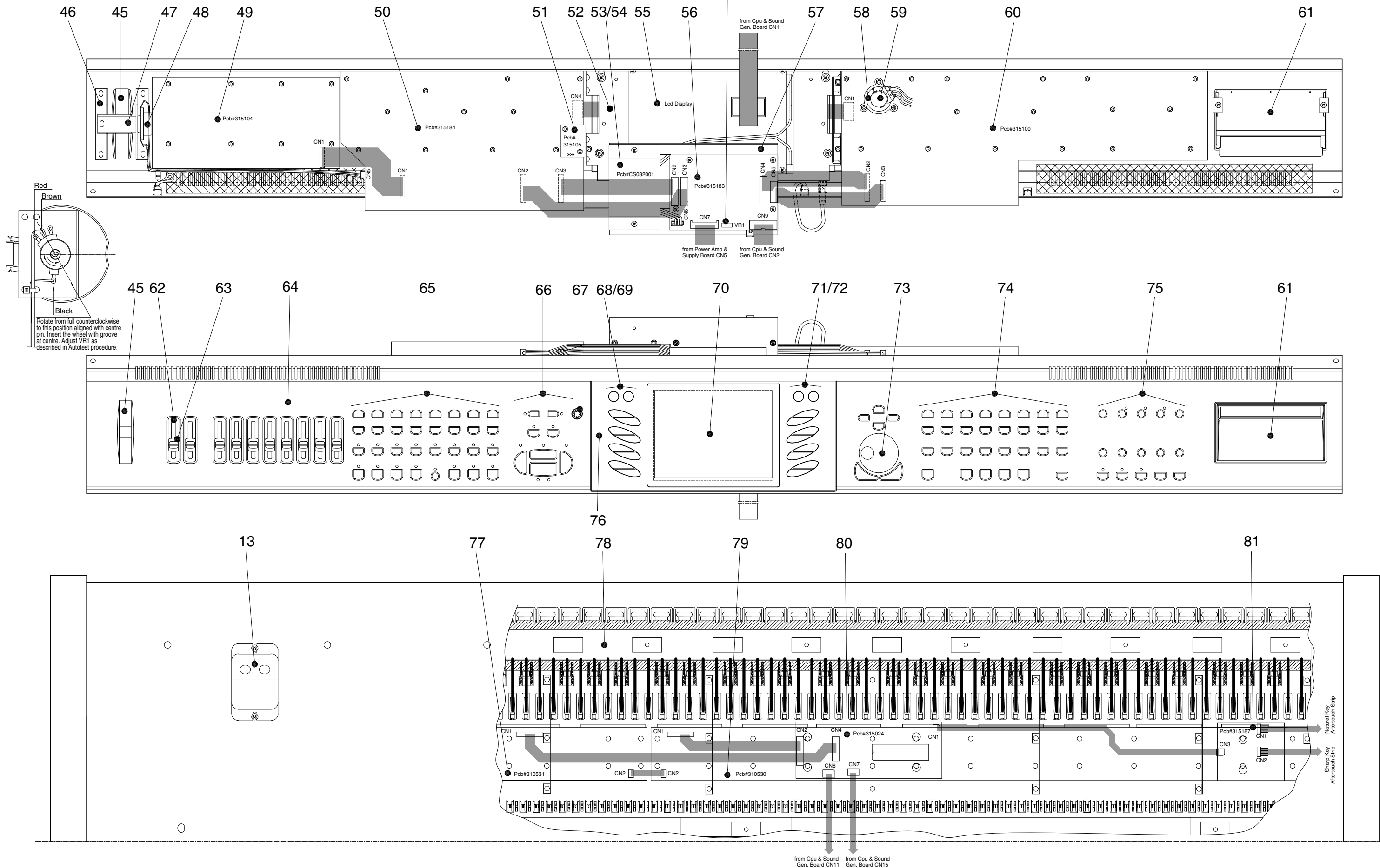


Lcd Contrast adjust

Aftertouch adjust

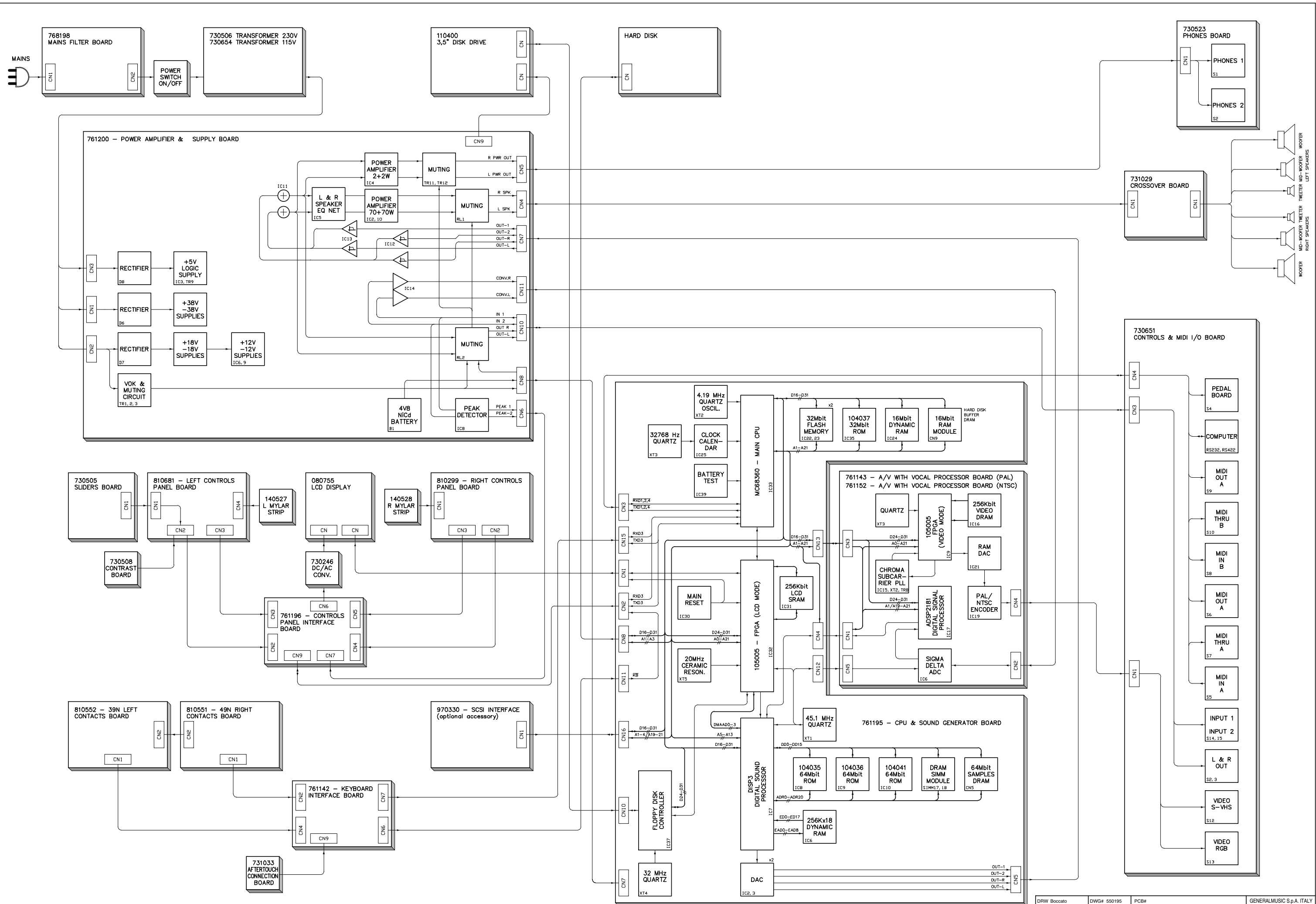
DRW: G.Boccatto	DWG#: 550199	PCB#	GENERALMUSIC S.p.A. ITALY
CKD: I.Battelli	DISK: 6 PRT: 1/2	PS2600 Internal Assembly	ALL RIGHTS ARE RESERVED. NO COPIES OR REPRODUCE THIS DOCUMENT WITHOUT WRITTEN CONSENT BY GENERALMUSIC.
APP: M.Galanti	REV: 04/07/00	for descriptions and codes see REF column on Spare Part List further on this manual.	

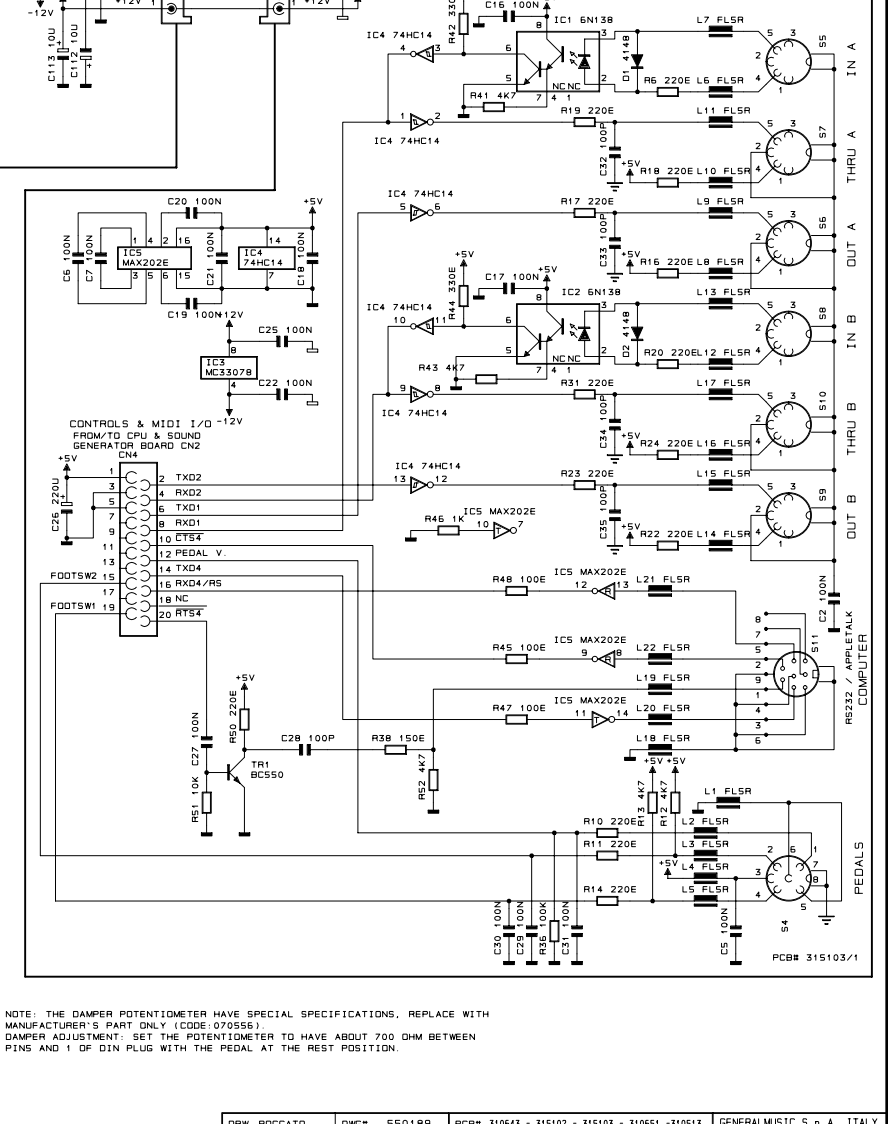
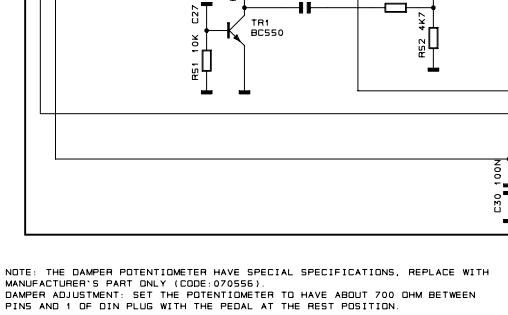
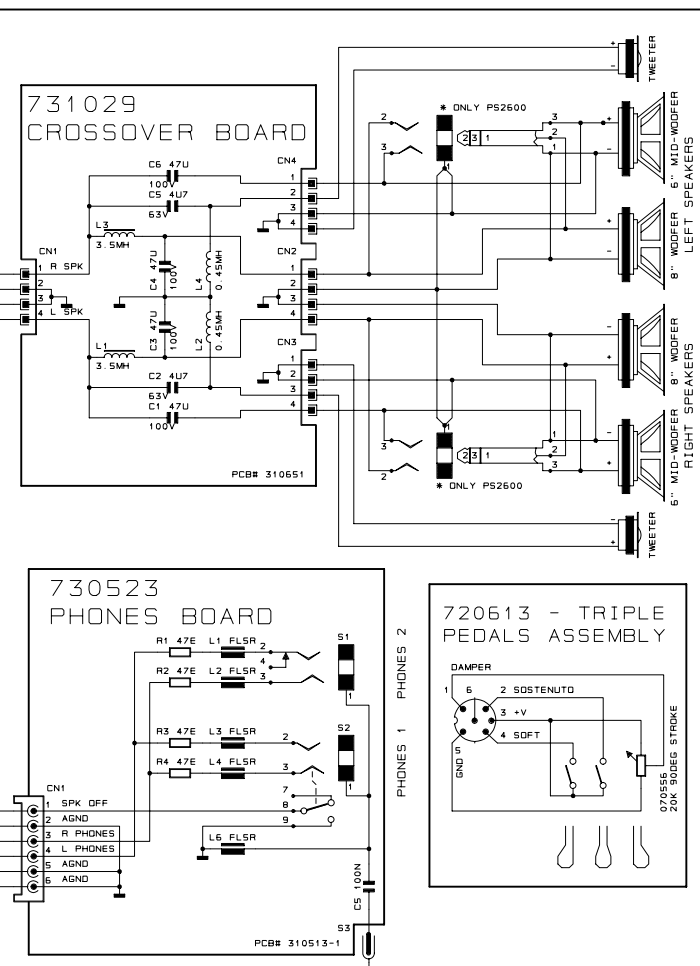
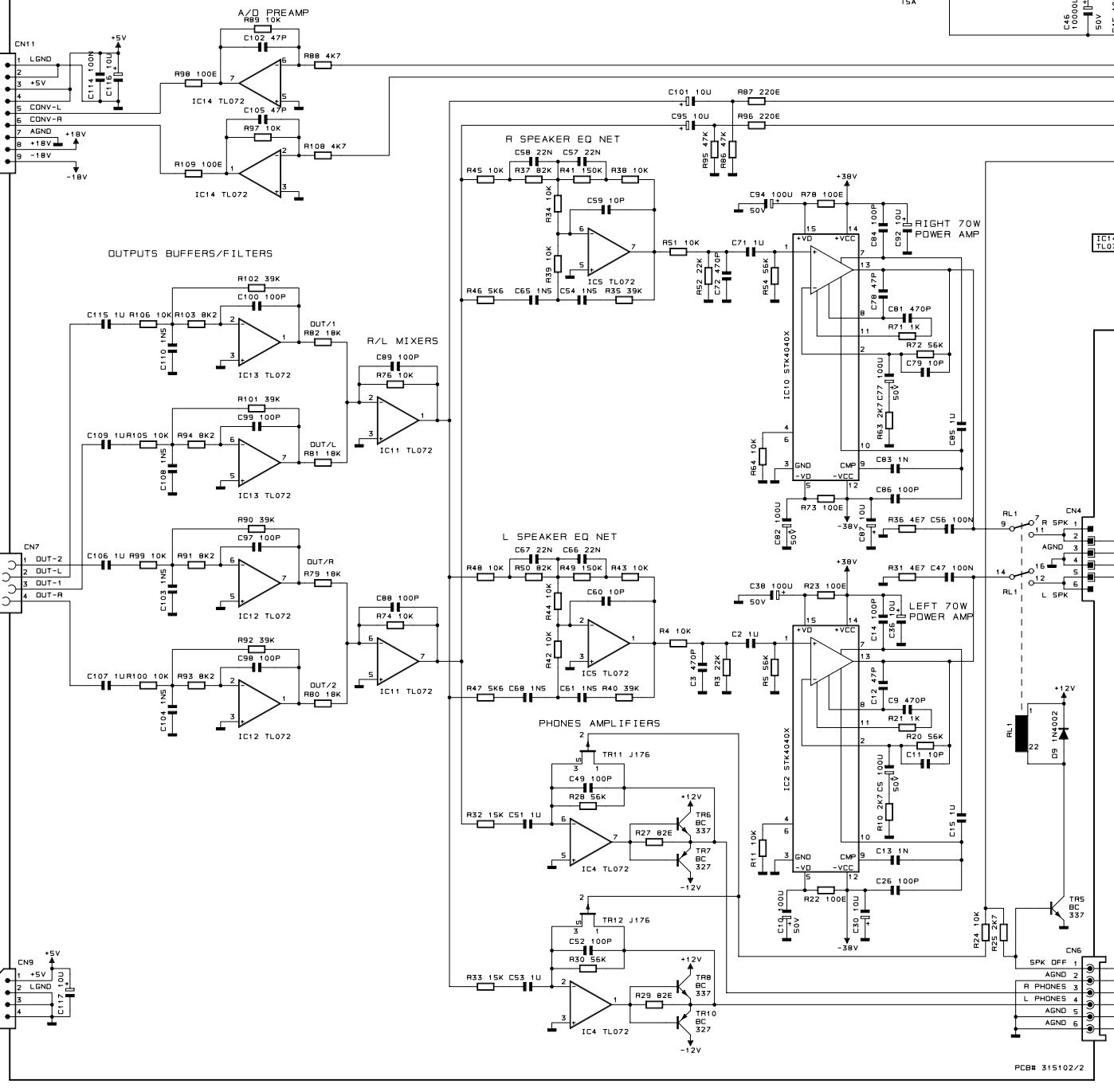
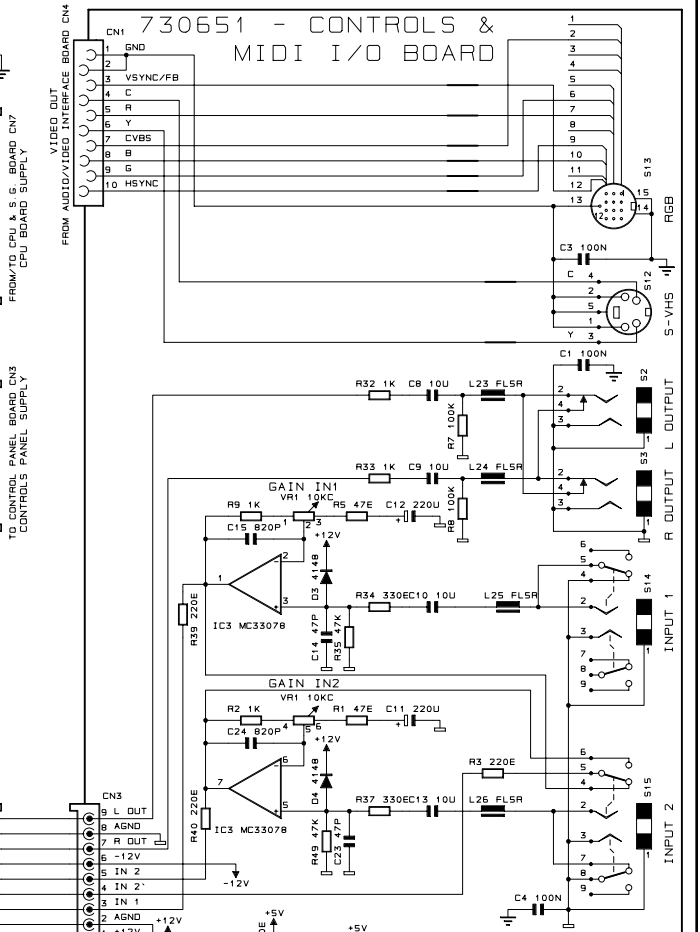
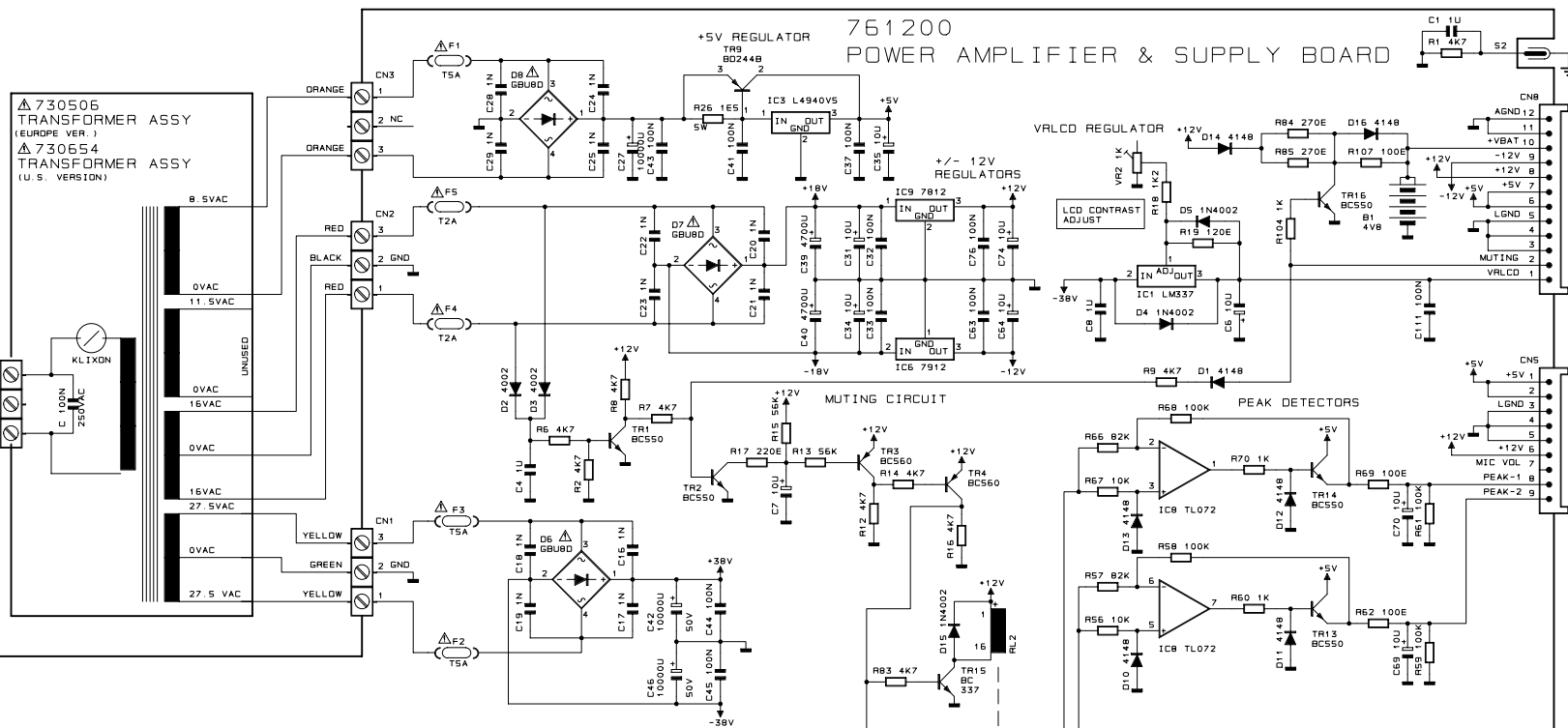
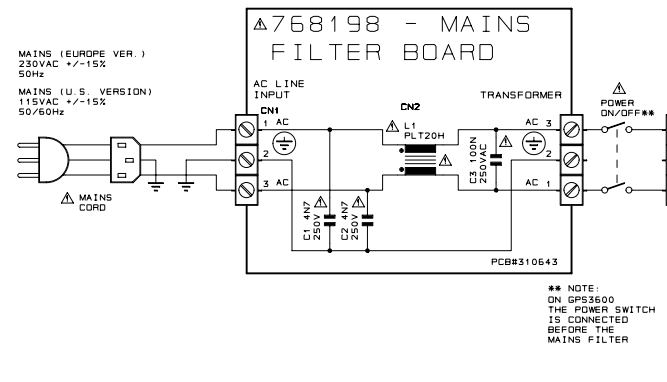
Pitch Bender adjustment



This drawing reproduce GPS2600 assembly only. Most part of GPS3600 model are the same or similar.

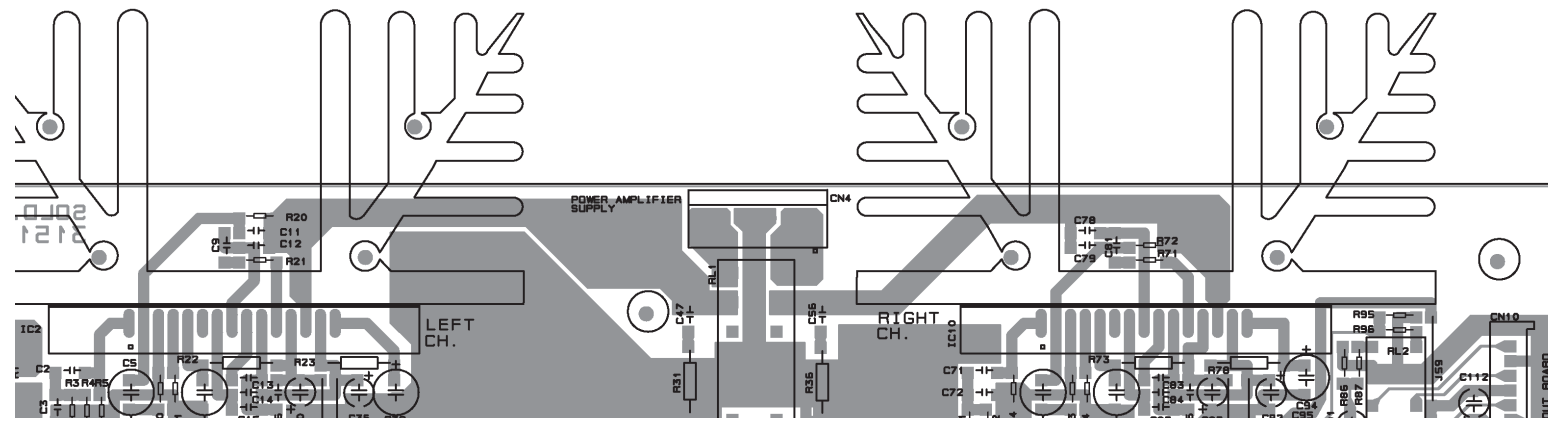
DRW.G. Boccato	DWG: 550200	PCB#	GENERALMUSIC S.p.A. ITALY
CKD I.Batelli	DSK: 6 PRT: 1/1	GPS2600 Controls Panel & Keyboard Assembly	ALL RIGHTS ARE RESERVED. NO COPIES OR REPRODUCE THIS DOCUMENT WITHOUT WRITTEN CONSENT BY GENERALMUSIC
APP.R.MORBIDI	REV: 07/07/00	for descriptions see REF column on Spare Part List further on this manual.	





NOTE: THE DAMPER POTENTIOMETER HAVE SPECIAL SPECIFICATIONS. REPLACE WITH MANUFACTURER'S PART ONLY (CODE: 070551)
DAMPER ADJUSTMENT: SET THE POTENTIOMETER TO HAVE ABOUT 700 OHM BETWEEN PINS AND 1 OF DIN PLUG WITH THE PEDAL AT THE REST POSITION.

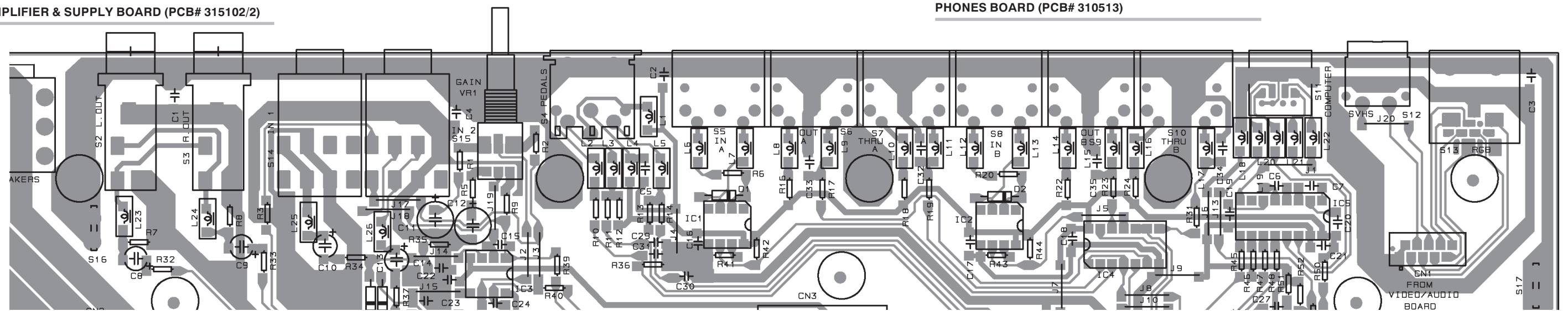
DRW BOCCATO	DWG# 550189	PCB# 310643 - 315102 - 315103 - 310651 - 310513	GENERALMUSIC S.p.A. ITALY
CKD BATELLI	DSK# 6 PART:1/1	SCHEMATIC DIAGRAM PS2600-GP35600-GP35600	ALL RIGHTS ARE RESERVED. NO COPIES OR REPRODUCTIONS WITHOUT WRITTEN CONSENT BY GENERALMUSIC
APP GALANTI	REV: 1B/02/00	I/O BOARD - CROSSOVER - PHONES BOARD	



CROSSOVER BOARD (PCB# 310651)

POWER AMPLIFIER & SUPPLY BOARD (PCB# 315102/2)

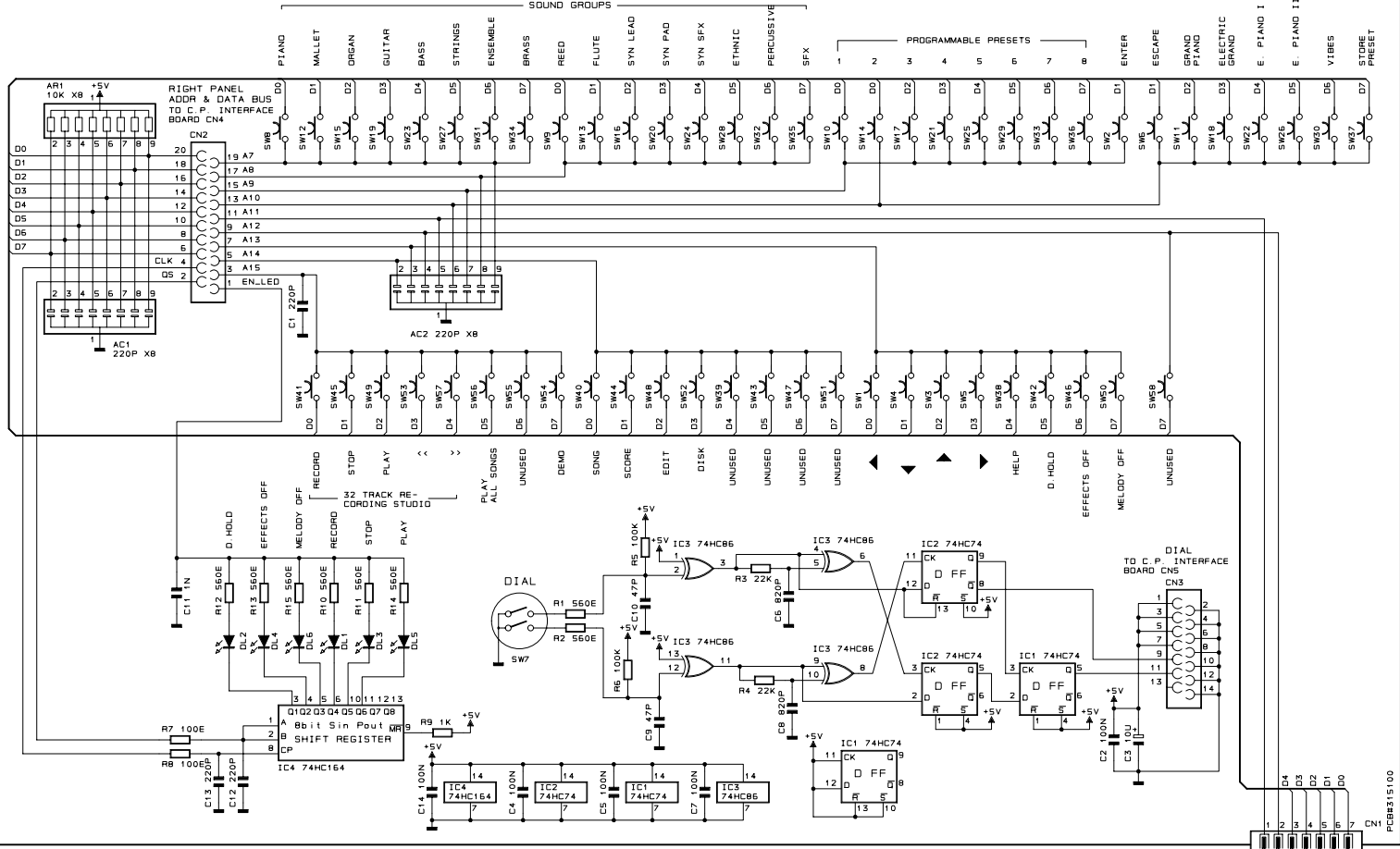
PHONES BOARD (PCB# 310513)



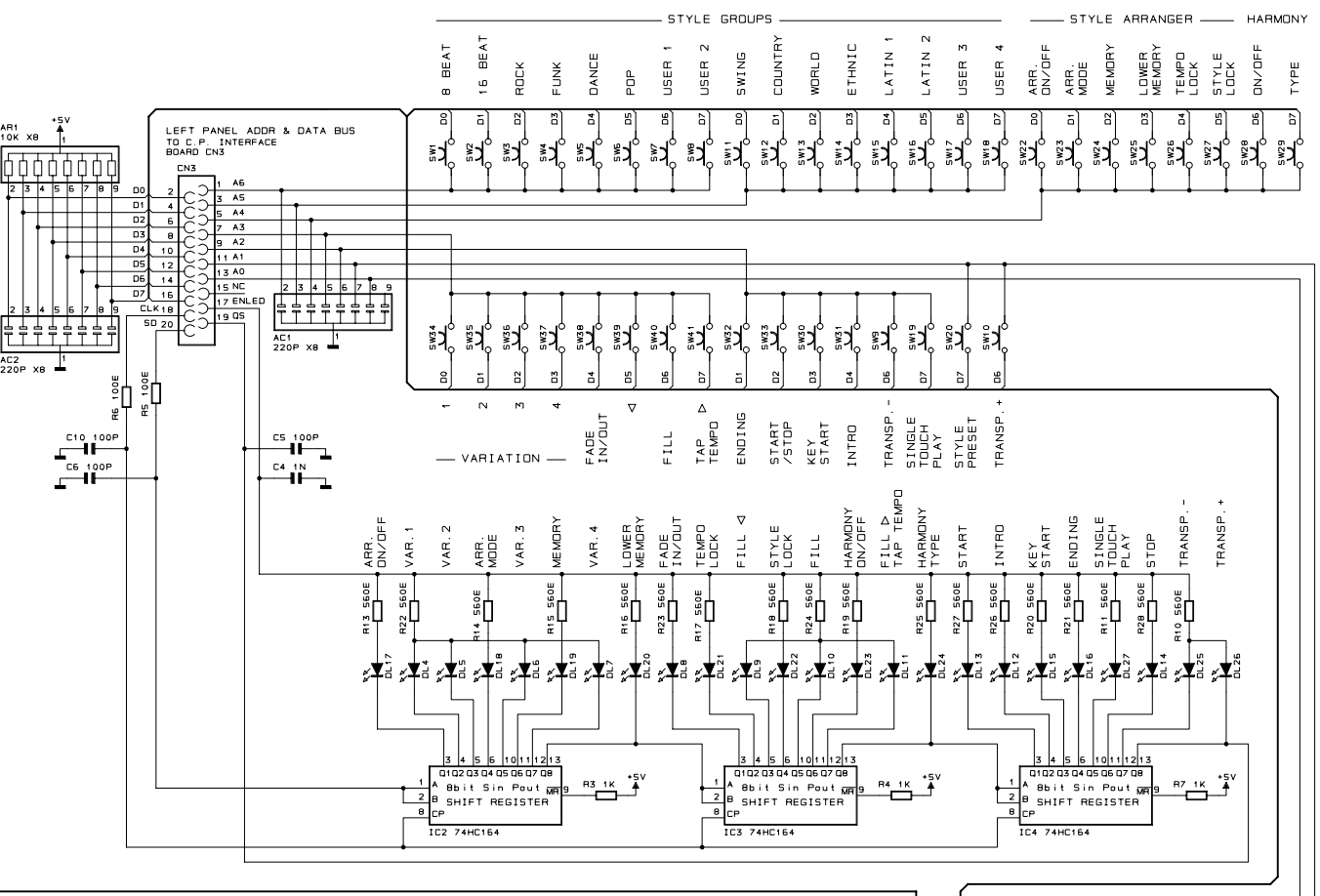
CONTROLS & MIDI I/O BOARD (PCB# 315103/1)

DRW: BOCCATO	DWG: 315102,315103 310651,310513	SCHEMATIC DIAGRAM PS2600 GPS2600-3600	GENERALMUSIC S.p.A. Italy
CKD: BATELLI	DISK 6 PART: 1/1	Power Amplifier & Supply, Crossover, Controls & MIDI I/O and Phones Boards	ALL RIGHTS ARE RESERVED. NO COPIES OR REPRODUCE THIS DOCUMENT WITHOUT WRITTEN CONSENT BY GENERALMUSIC.
APP: PANNELLI	REV: 08-03-00		

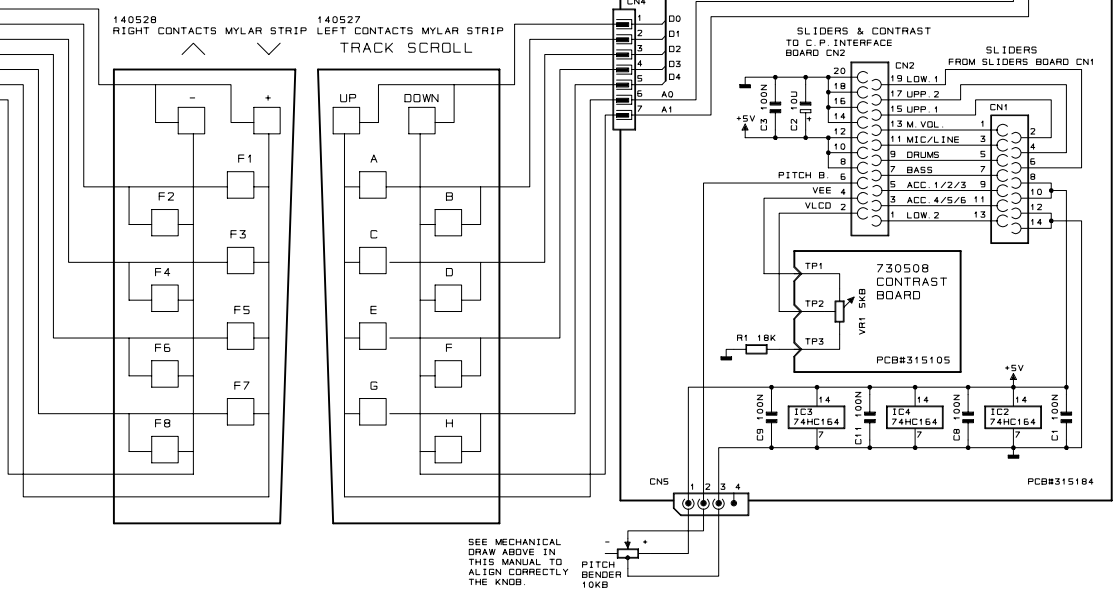
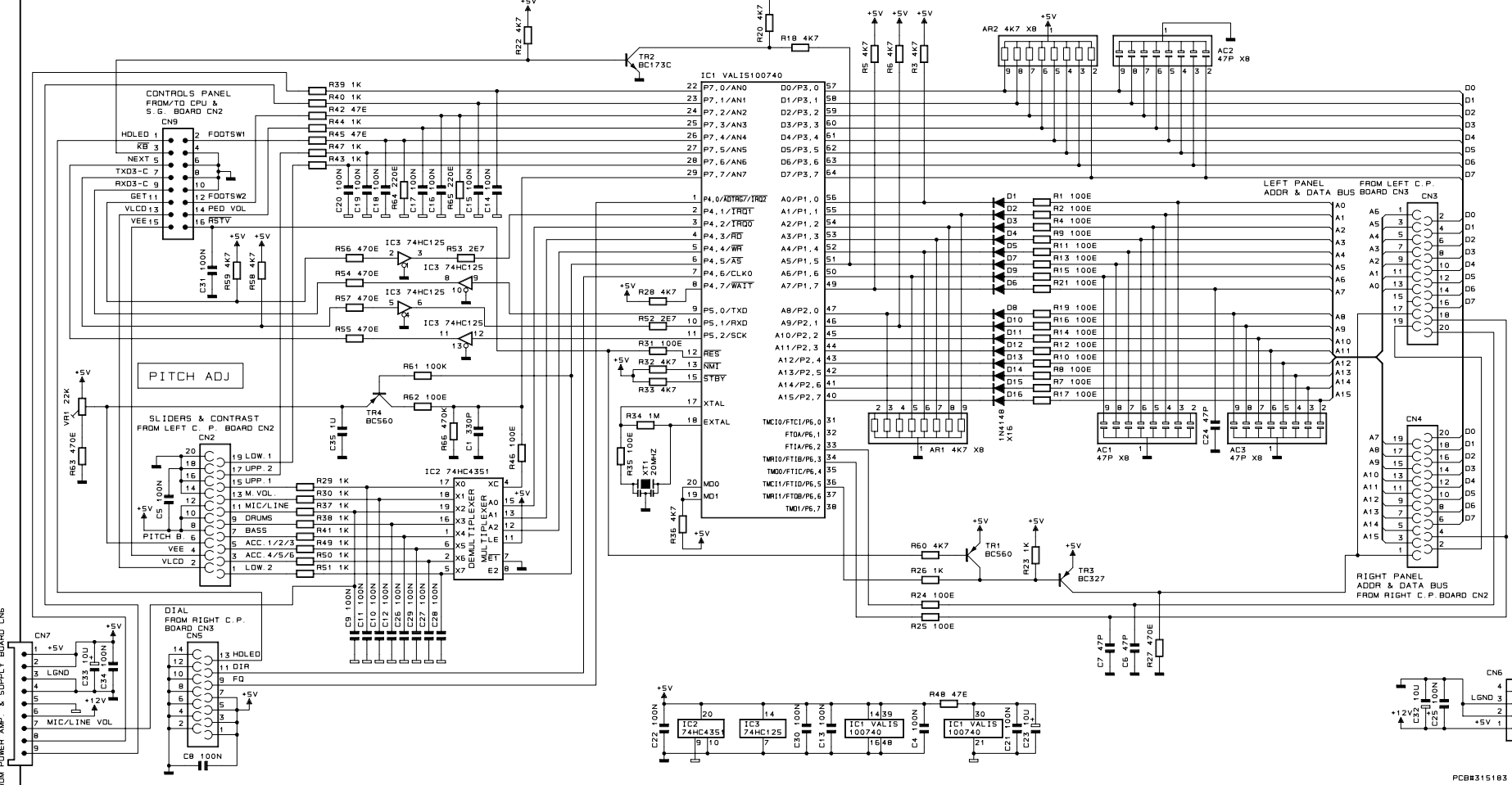
810299 - RIGHT CONTROLS PANEL BOARD



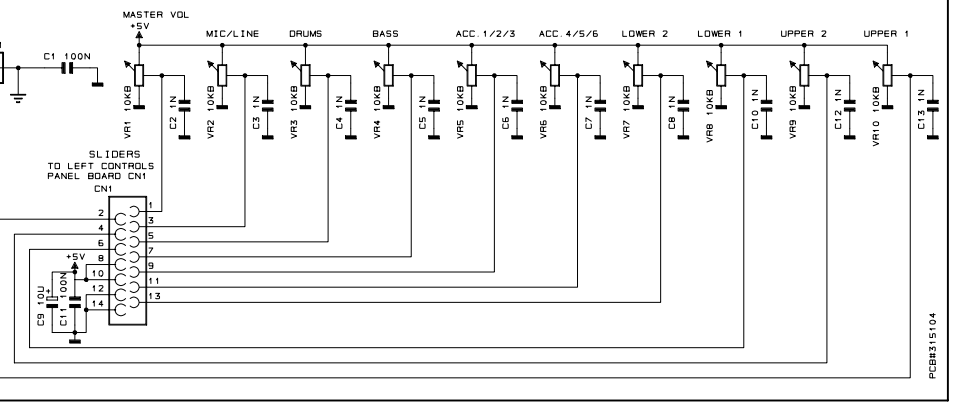
810681 - LEFT CONTROLS PANEL BOARD



761196 - CONTROLS PANEL INTERFACE BOARD



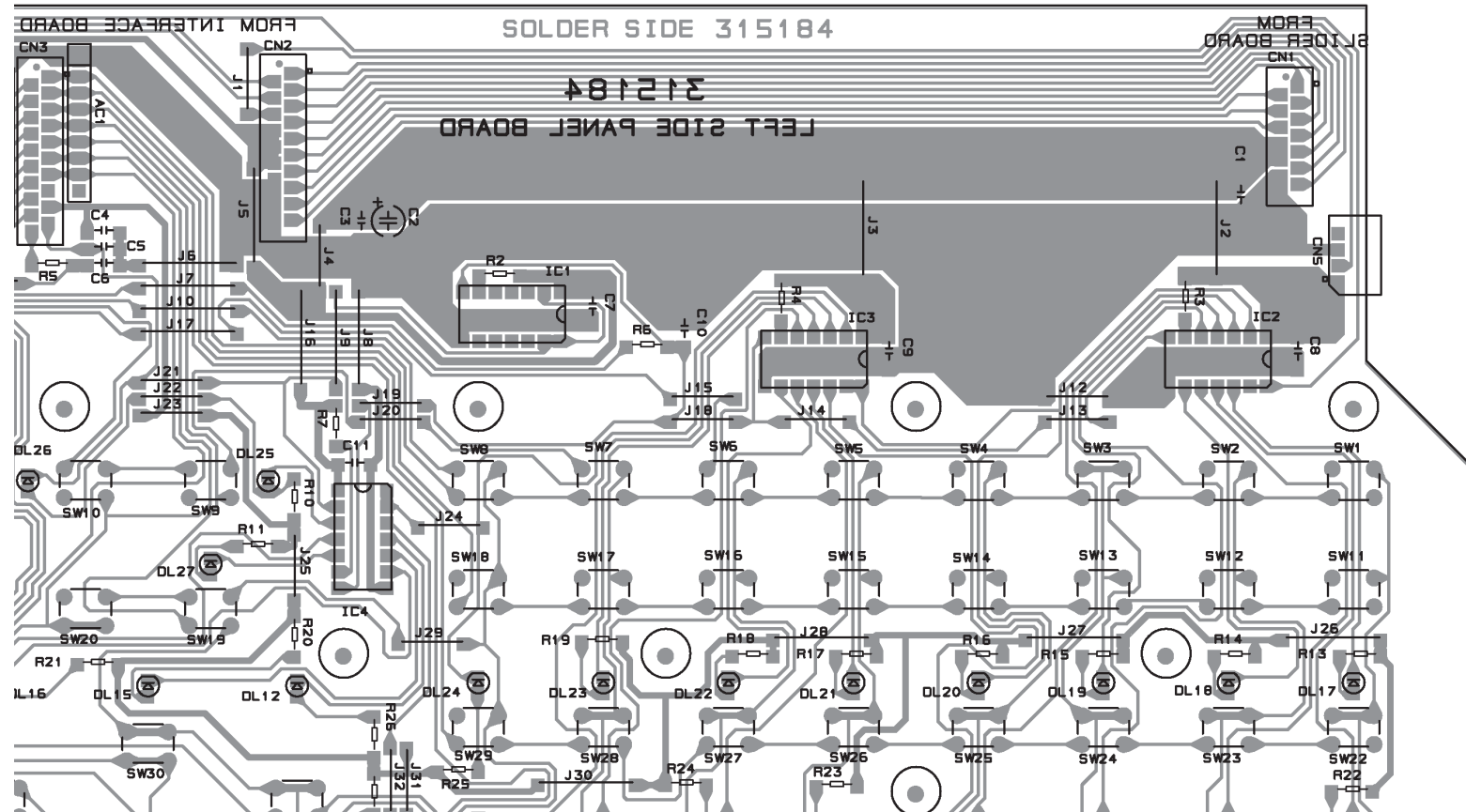
730505 - SLIDERS BOARD



DRW BOCCATO	DWG# 550190	PCB# 315100 - 315104 - 315183 - 315184	GENERALMUSIC S.p.A.
CKD BATELLI	DATE 24/02/00	DESCRIPTION PS2600-GPS2600-GPS3600	ALL RIGHTS ARE RESERVED. NO COPIES OR REPRODUCE THIS DOCUMENT WITHOUT WRITTEN CONSENT BY GENERALMUSIC
APP GALANTI	REV# A	CONTROL PANEL BOARDS	

CONTROLS PANEL INTERFACE BOARD (PCB# 315183)

RIGHT CONTROLS PANEL BOARD (PCB# 315100) reverse layout

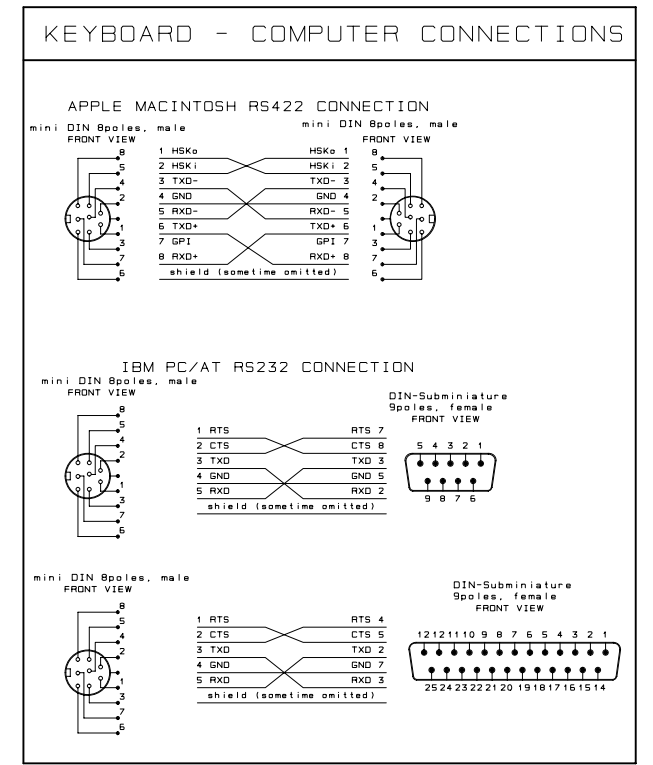
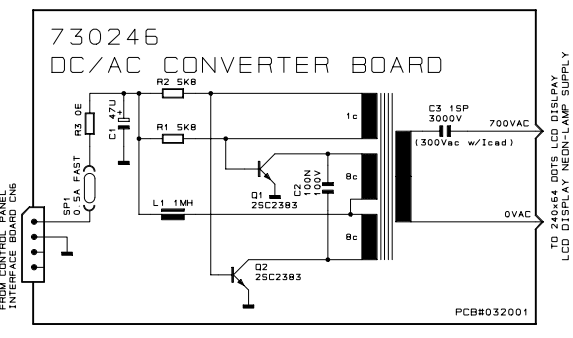
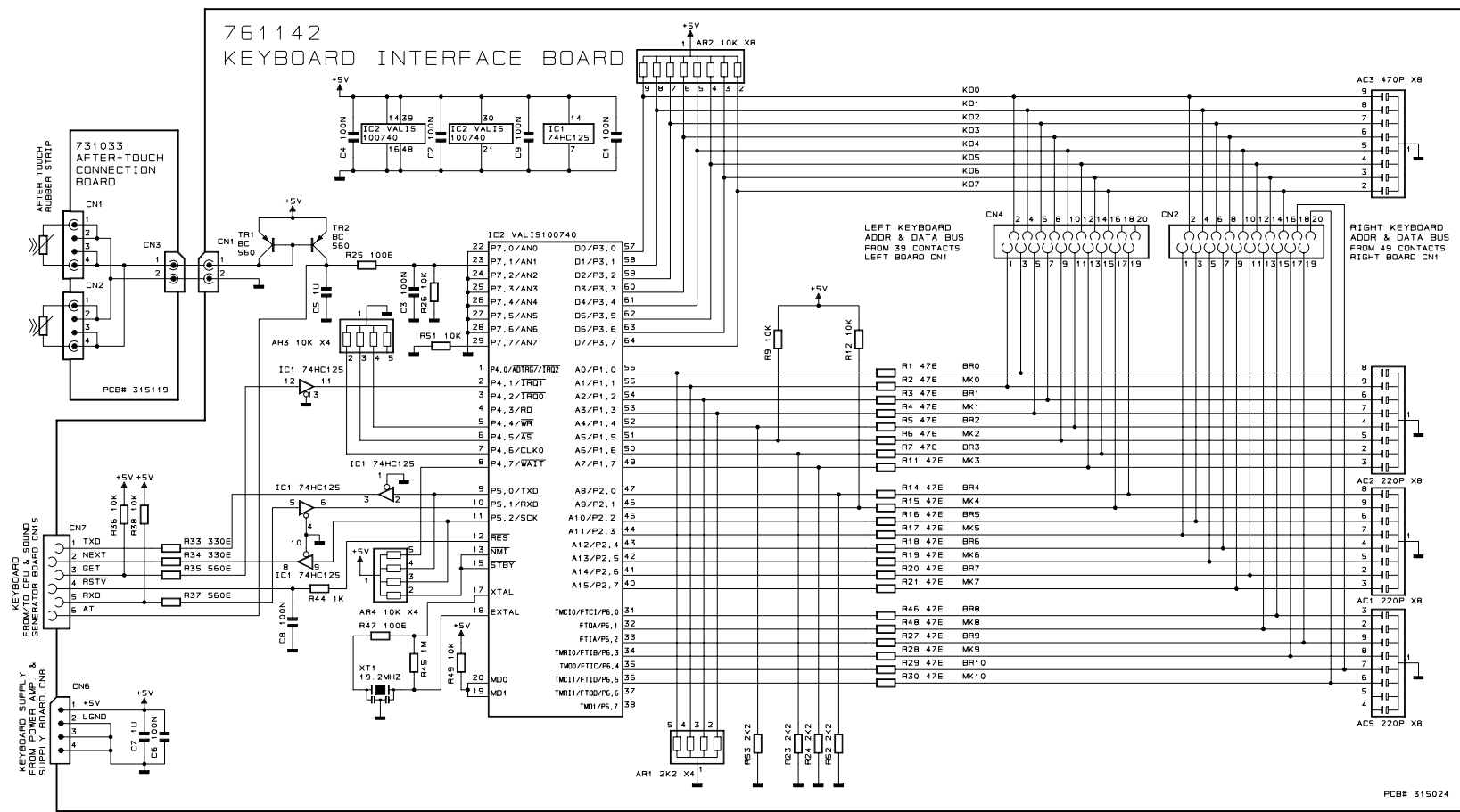
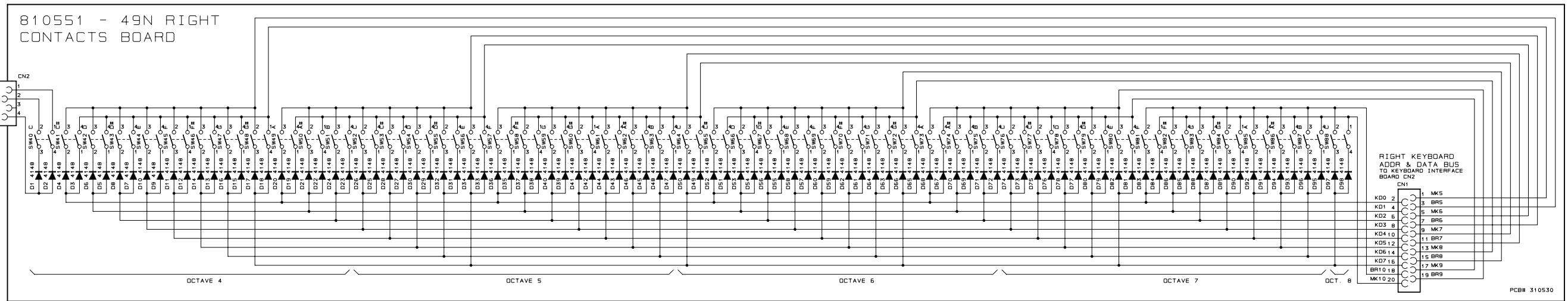
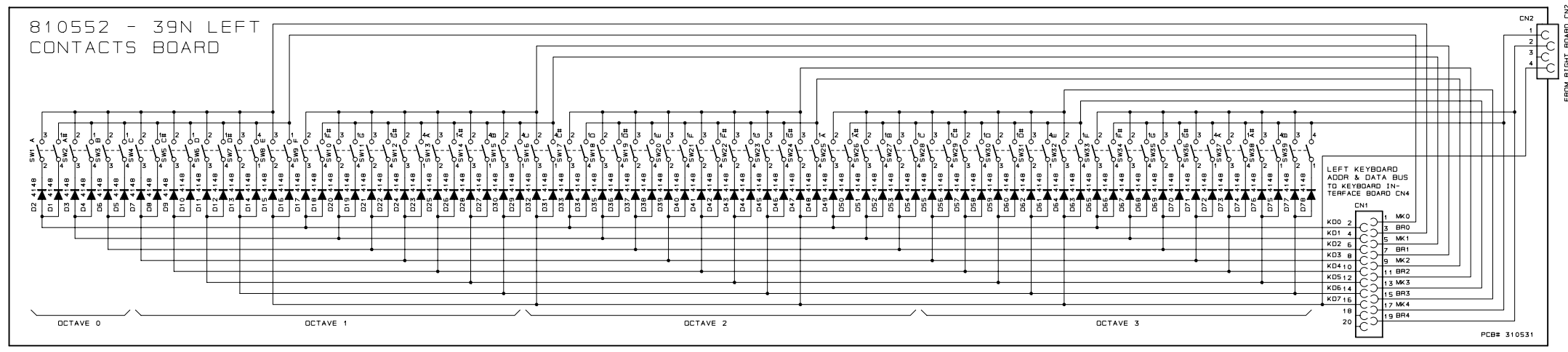


KEYBOARD INTERFACE BOARD (PCB# 315024)

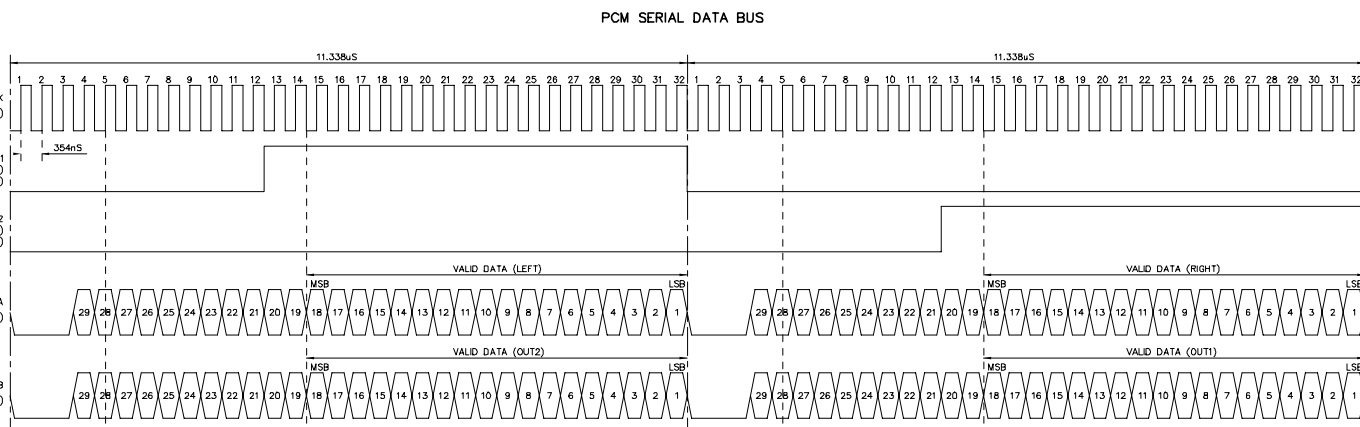
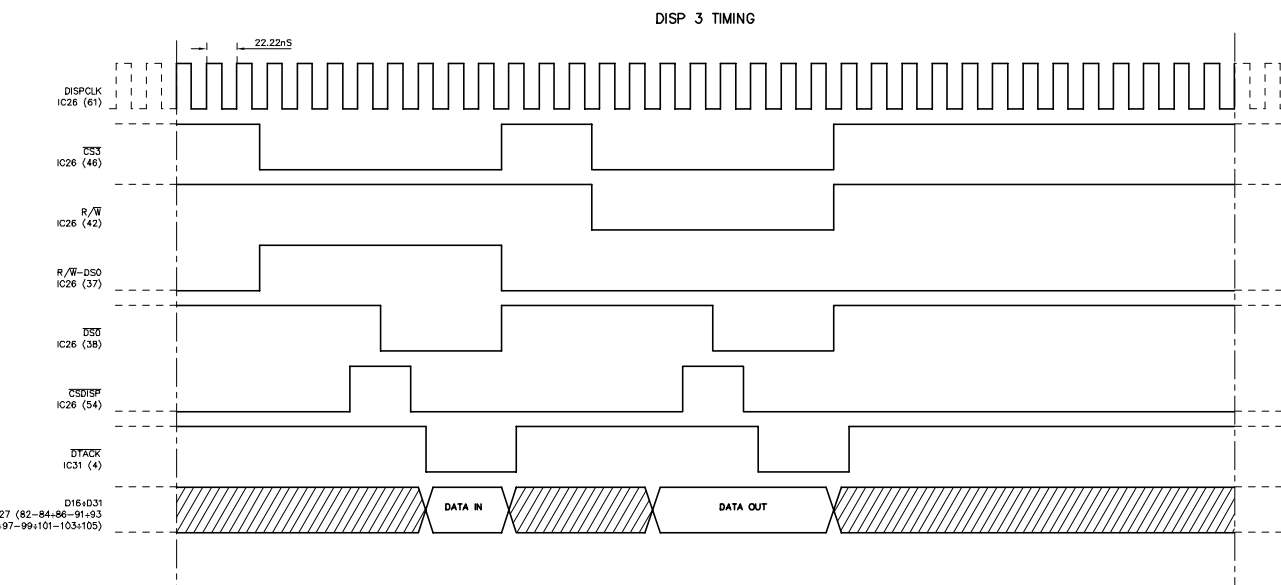
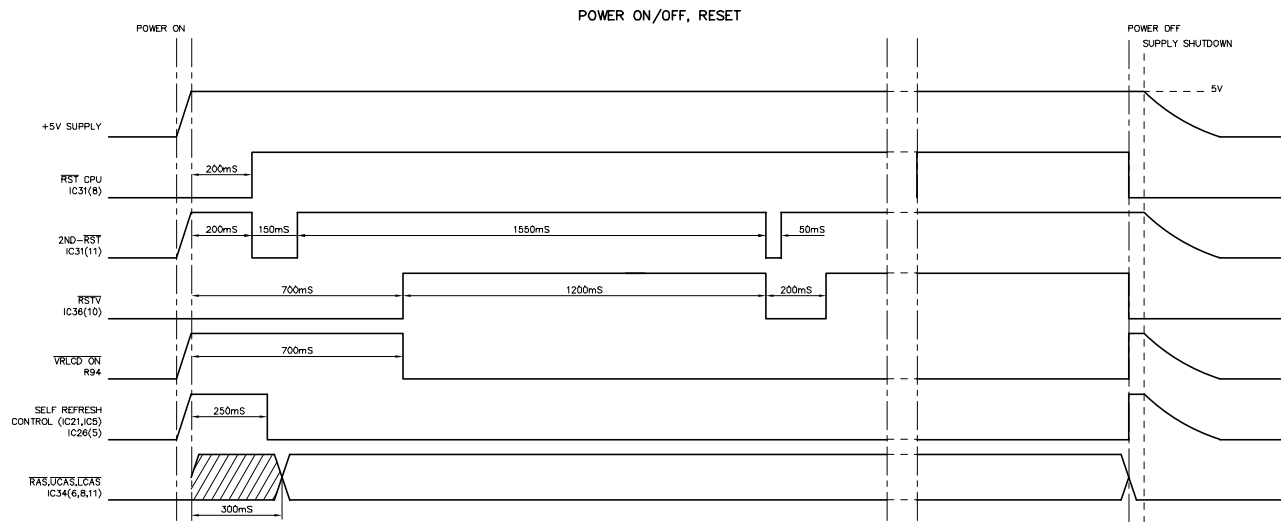
LEFT CONTROLS PANEL BOARD (PCB# 315184) reverse layout

SLIDERS BOARD (PCB# 315104)
reverse layout

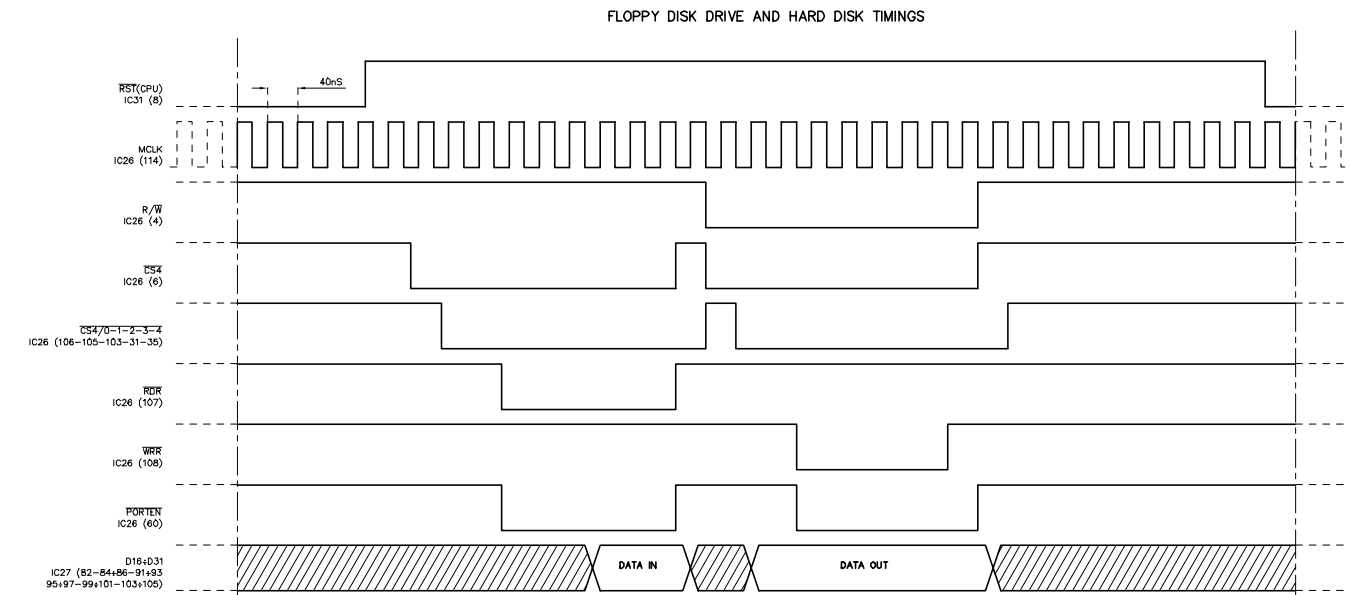
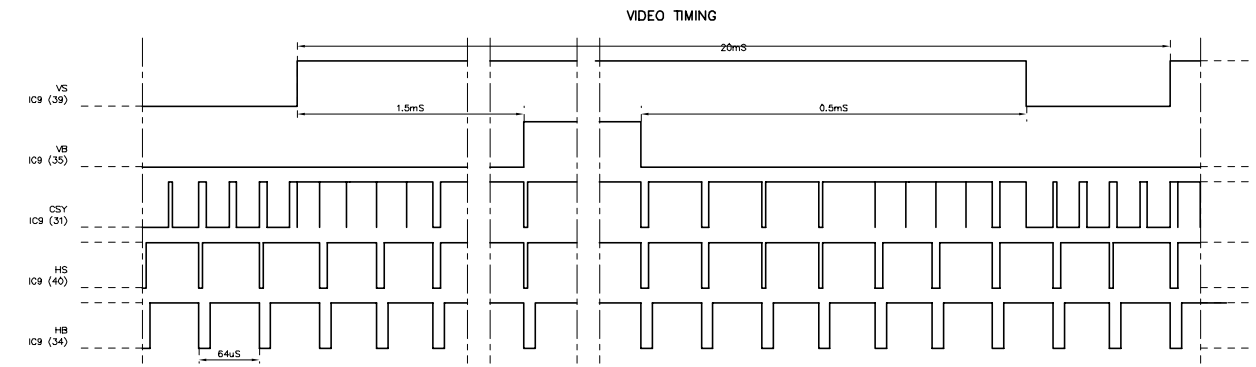
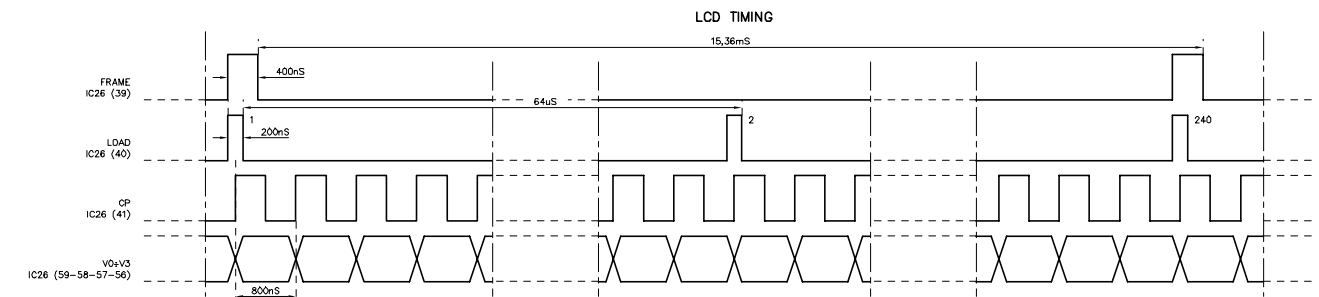
DRW: BOCCATO	DWG: 315100,315104 315183,315184	SCHEMATIC DIAGRAM PS2600 GPS2600-3600	GENERALMUSIC S.p.A. Italy
CKD: BATTELLI	DISK 6 PART: 1/1	L & R Controls Panel, Sliders, Interface & Keyboard Interface Boards	ALL RIGHTS ARE RESERVED. NO COPIES OR REPRODUCE THIS DOCUMENT WITHOUT WRITTEN CONSENT BY GENERALMUSIC
APP: PANNELLI	REV: 08-03-00		



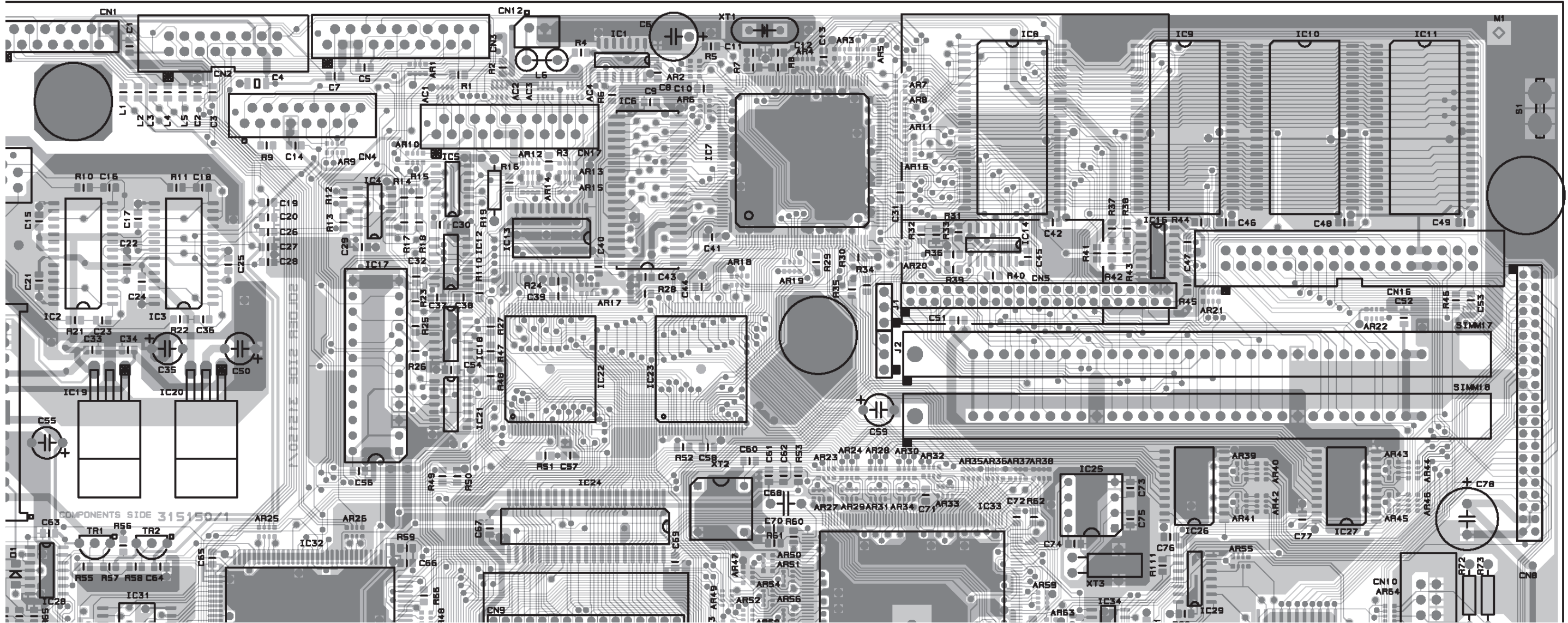
DRW BOCCATO	DWG# 550191	PCB# 310531 310530 315024	MUSIC MEDIA SOFT s.r.l.
DEPT BIODIBELLI	DATE 5	1/1 DESCRIPTION CONTACTS BOARD & KEYBOARD INTERFACE BOARD	ALL RIGHTS ARE RESERVED. NO COPIES OR REPRODUCE THIS DOCUMENT WITHOUT WRITTEN CONSENT BY MM s.r.l.
PART BIODIBELLI	REV# 22/02/99		



NOTE: ALL COMPONENTS PIN REFERENCE ARE LOCATED ON "CPU & SOUND GENERATOR BOARD" UNLESS OTHERWISE SPECIFIED.

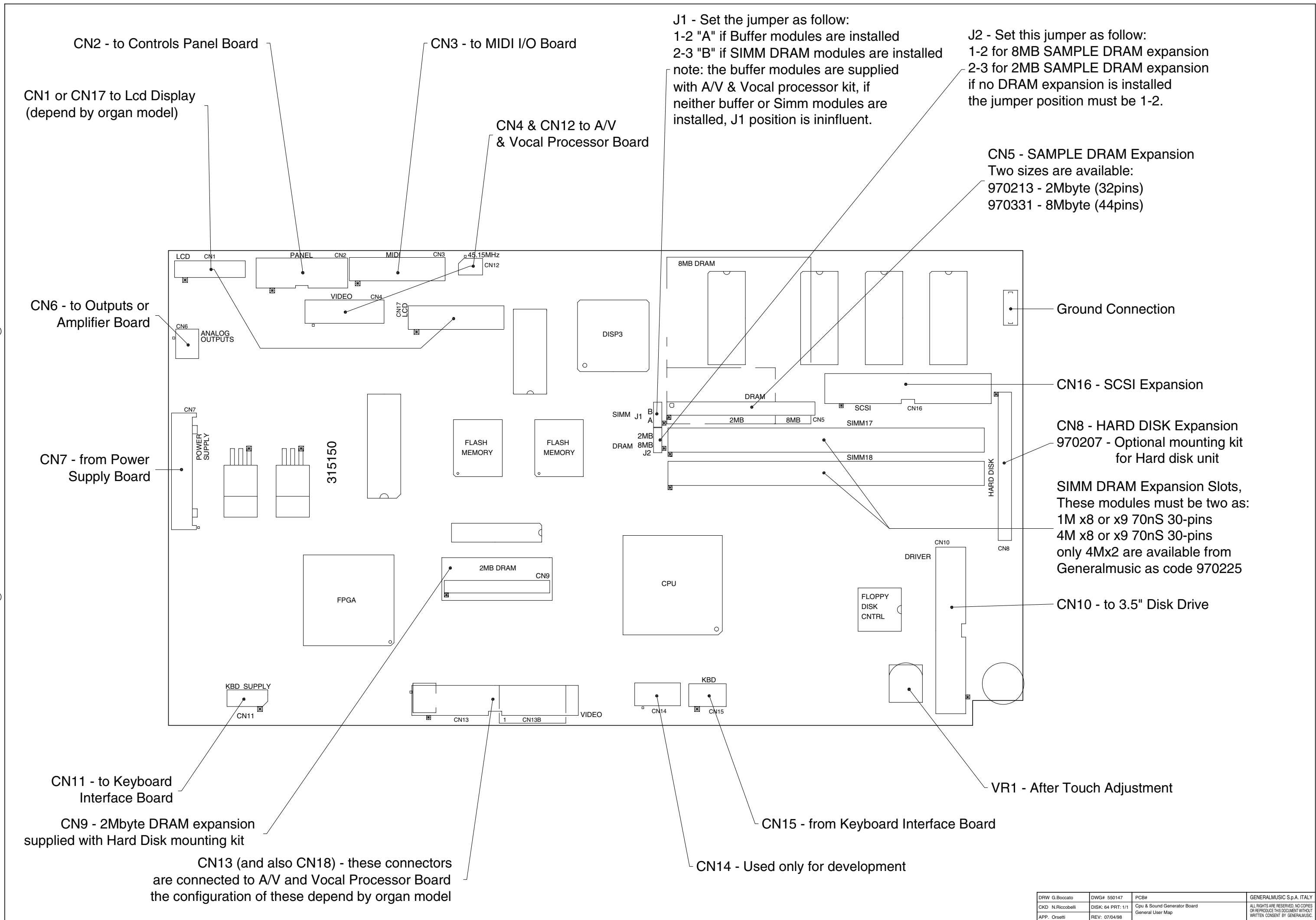


ADJUSTMENTS TABLE						
N.	ADJUSTMENT TYPE	TEST POINT	KEY PRESSED	OPERATION POINT	READING VALUE	NOTE:
1	LCD CONTRAST ADJ.	SEE NOTE	NONE	VR2 POWER AMPLIFIER & SUPPLY BOARD	SEE NOTE	PUT THE CONTRAST POTENTIOMETER ON THE CONTROLS PANEL AT HALF STROKE. TURN THE TRIMMER TO OBTAIN THE BEST CONTRAST. VERIFY THE ADJUSTMENT MOVING THE POTENTIOMETER.
2	AFTERTOUCH ADJ.	VR1 SIDE CN15	ONE KEY NOTE	VR1	~2Vcc	APPLY A 1.350 grams WEIGHT ON THE KEY FRONT END, TO OBTAIN A VALID MEASURE PRESS THE KEY NOTE TWO OR THREE TIMES WITH MORE PRESSURE, TURN THE TRIMMER TO HAVE THE VALUE SPECIFIED.
3	PITCH CENTRE ADJ.	DISPLAY	WHEEL AT CENTRE	VR1 CONTROLS PANEL INTERFACE BOARD	64	PRESS "EDIT", SELECT "1-GENERAL", PRESS "F1-SYSTEM INFO", "F8", THE DISPLAY SHOW A WARNING MESSAGE: PRESS "ENTER", "A-PANEL TEST", MOVE THE PITCH BENDER, ADJUST VR1 TO READ "64" WITH PITCH AT CENTRE.



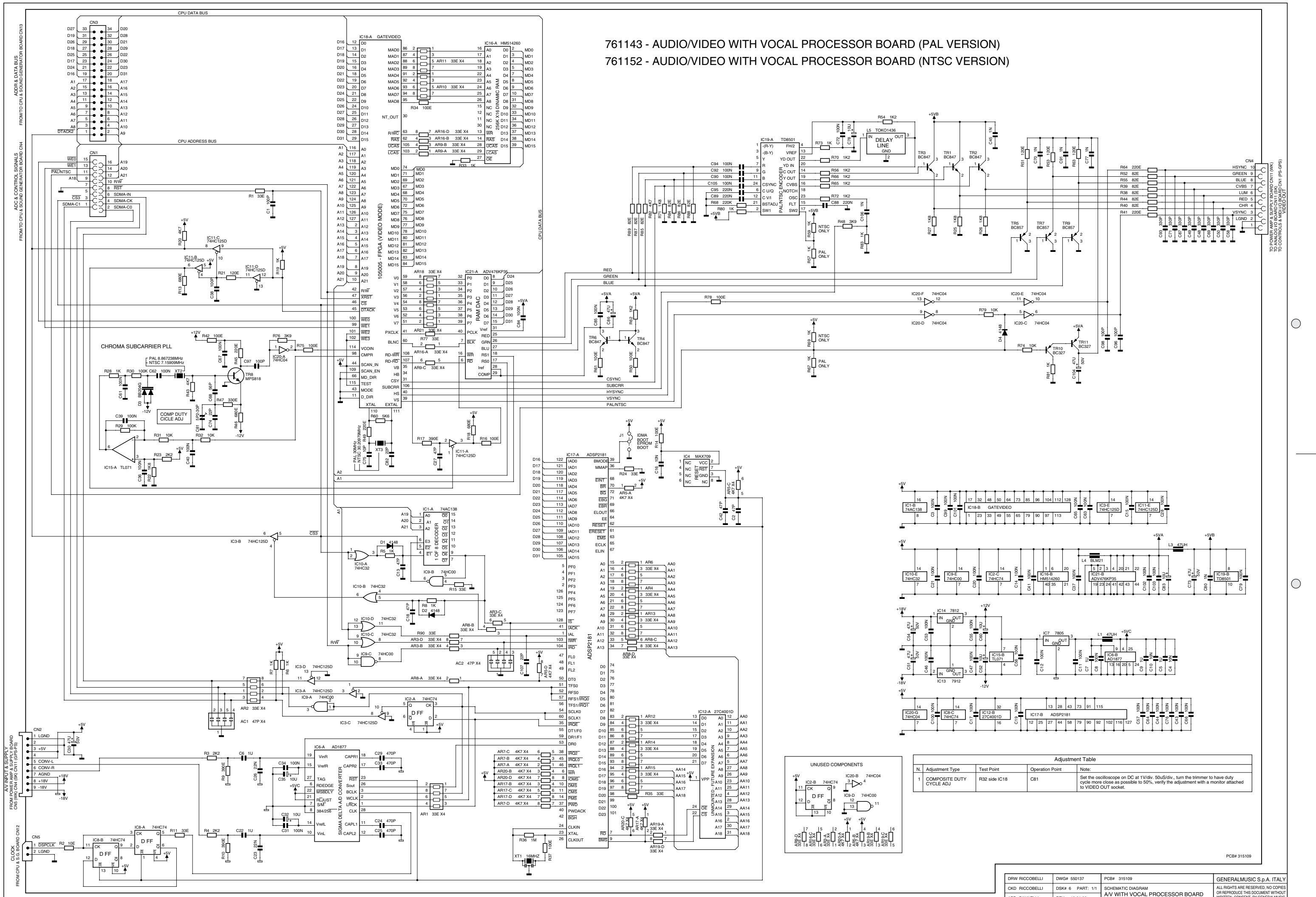
CPU & SOUND GENERATOR BOARD (PCB# 315150/1)

DRW: BOCCATO	DWG: 315150/1	SCHEMATIC DIAGRAM PS2600 GPS2600-3600	GENERALMUSIC S.p.A. Italy
CKD: BATELLI	DISK: 6 PART: 1/1	Cpu & Sound Generator Board	ALL RIGHTS ARE RESERVED. NO COPIES OR REPRODUCE THIS DOCUMENT WITHOUT WRITTEN CONSENT BY GENERALMUSIC
APP: PANNELLI	REV: 08-03-00		



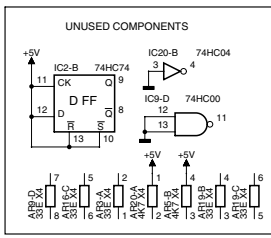
DRW G. Boccato	DWG# 550147	PCB#	GENERALMUSIC S.p.A. ITALY
CKD N. Riccobelli	DISK: 64 PRT: 1/1	Cpu & Sound Generator Board	ALL RIGHTS ARE RESERVED. NO COPIES OR REPRODUCE THIS DOCUMENT WITHOUT WRITTEN CONSENT BY GENERALMUSIC.
APP. Orsetti	REV: 07/04/98	General User Map	

761143 - AUDIO/VIDEO WITH VOCAL PROCESSOR BOARD (PAL VERSION)
 761152 - AUDIO/VIDEO WITH VOCAL PROCESSOR BOARD (NTSC VERSION)



Adjustment Table

N.	Adjustment Type	Test Point	Operation Point	Note:
1	COMPOSITE DUTY CYCLE ADJ.	R32 side IC18	C81	Set the oscilloscope on DC at 1V/div, 50µs/div., turn the trimmer to have duty cycle more close as possible to 50%, verify the adjustment with a monitor attached to VIDEO OUT socket.



Test Procedure and Adjustment

The procedures that follow must be executed subsequently in the order specified.

These procedures are not intended to repair a fault but only to check the correct instrument operations after a repairing execution.

Test Instruments

- Dual trace oscilloscope
- Digital Multimeter
- Signal Generator

Accessories

- 2 x 4Mbyte SIMM DRAM modules.
- 1 3.5inch Diskette.
- 1 SCSI Kit.
- Read/write SCSI device (ZIP, JAZ, Hard disk etc...).
- RS232 loopback (terminal 1-2 and 3-5 shorted).
- MIDI Cable.

To check completely the keyboard are necessities all the optional accessories installed.

Setup

Install the optional accessories: the 2 SIMM Volatile DRAM modules and the SCSI kits, insert the diskette into 3.5" disk drive (Not a Operating System Disk).

Set the jumper J1 on CPU board at position B.

Set the JP1 and JP2 jumpers on Supply or Mixer board at position A.

Connect the external SCSI device to the SCSI socket.

Plug the RS232 loopback into the socket.

Checks and Adjustments

Display Contrast adjustment

To adjust the display contrast turn VR2 on POWER AMPLIFIER AND SUPPLY BOARD with the CONTRAST potentiometer (located on controls panel) at half stroke. Verify the excursion of the CONTRAST potentiometer checking the display readability from all position.

Aftertouch adjustment

To adjust the keyboard aftertouch locate the VR1 trimmer on CPU board, connect the scope CH1 probe tip to its center terminal, probe clip connected at ground, adjust VR1 to obtain an excursion from 0 to 5V every time a note key is pressed with different pressure, or to obtain a better adjustment follow the instructions on ADJUSTMENT TABLE (page 11).

RS232 check

Press EDIT and using the DIAL and ENTER/ESCAPE controls select 1-GENERAL, select 3-COMPUTER, press F8 button to select MODE and set PC1 with cursor keys, press ENTER to confirm. Press ESCAPE 2 times, select 2-MIDI, select COMMON/ARRG.(F5) and set "Common Ch." to 1 using the DIAL, press (F7) to set LOCAL OFF, verify that the keyboard plays thru RS232 by unplugging and re-inserting the RS232 loopback into the socket.

RS422 check

Press ESCAPE, select 1-GENERAL, select 3-COMPUTER, select MODE(F8), set MACINTOSH, press ENTER to confirm, check the 1MHz 5Vpp clock appear on pin 1 of COMPUTER socket (use the second probe tip to do that).

MIDI check

Re-select MODE(F8) and re-set it to OFF, press ENTER to confirm and ESCAPE 2 times, select 2-MIDI and then press F7 2 times (LOCAL ON and OFF: this operation maybe necessary to re-set the normal MIDI communication); connect the MIDI cable between MIDI A IN and MIDI A OUT sockets, verify that the keyboard plays thru MIDI I/O by unplugging and re-inserting the MIDI loopback cable into the socket.

DATE and TIME set

Go to page 4 and press SET DATE(F1) button, set the day, month and year using the DIAL or numeric keypad, press ENTER; also set the time pressing SET TIME(F2), finally return to the first

page of GENERAL settings.

Panel Key and Led check

Press EDIT, select 1-GENERAL, press F1 (SYSTEM INFO) and F8 the display shows a warning message: press ENTER to continue, select PANEL TEST(a) and then press all the panel buttons checking their operation on display, at the same time every led of pressed button must light up (note: DISK led and EFFECT OFF are not tested).

Pitch Bender check

Rotate the Pitch Bender verifying the excursion displayed, it ranges from 0 to 127 with 64 on center position.

A slightly difference may be adjusted by VR1 on CONTROLS PANEL INTERFACE BOARD, major differences may be adjusted repositioning the knob (see page 4).

Pedals check

Pressing SOFT (Pedal 1) and SOSTENUTO (Pedal 2) the display shows 0 or 127, pressing DAMPER (Pedal) the display shows a value that ranges from 0 to 127 continuously.

Press ENTER and ESCAPE simultaneously to return at HARDWARE test menu.

Memories and Optional Accessories

Press ALL PART (F1), the instrument self-test check subsequently the following devices: SIMM modules (F2 Volatile DRAM), 8Mbyte sample dram (F3 Backed DRAM), Internal Hard Disk (F4 HardDisk), 3.5" disk drive (F5 Floppy Disk), Video interface (F6 Video) and SCSI interface (F7 SCSI Test) and marking with "Pass" all devices checked successfully, with "Not Present" all devices not attached, with "Fault" all device defective. Theoretically all test must be passed, if you have a mistake on a device re-check its installation.

Pressing G the third Rom Sound (IC10) is checked.

Press ENTER, if necessary, to exit.

Dsp check

Insert a stereo Jack plug into PHONES 1 socket.

Put MASTER fader at max, turn on the 1KHz test tone pressing HARDWARE SET(C) and measure with the oscilloscope a 4Vpp sinusoidal signal on tip and ring (L an R) of the Jack.

Turn off the signal by means HARDWARE SET(C).

Vocal Processor check

Turn off the effects pressing EFFECT OFF.

Insert a 20mVpp 1KHz signal into MIC LINE 1 input socket, put INPUT MIC/LINE fader to maximum position and rotate full clockwise GAIN1 potentiometer located on the back panel.

With the oscilloscope always connected to PHONES 1 measure a signal approximately of 12-13Vpp.

Repeat this test for MIC LINE 2 input.

Data Hold

Turn off the instrument, disconnect the signal cable, wait at least 30 seconds, turn on again and then press EDIT, select 1-GENERAL, press F1 (SYSTEM INFO), press (F8), press ENTER and F8 (DATA HOLD) and then wait until the display show PASS.

Note: this test checks the RAM connected to CN5 only.

Turn off the keyboard and then remove not included SCSI optional kit, replace the SIMM DRAM with the BUFFER modules and finally restore the J1 jumper position to A.

Reliability & Final Check

Before reassembling the instrument and before deliver it to the user, it is a goal verify its reliability:

To do that switch it off, or leaving it switched on but operating with greatest caution, carefully shake the boards and connections inside it using an insulated tool (for example the handle of the screwdriver) to find wrong contacts and so on.

Turn on the instrument and re-check that it operate correctly, leaving it switched on for a long time and occasionally launching the Demo sequence (press DEMO and ENTER) or verifying its functionality.

A/V & VOCAL PROCESSOR BOARD (PCB# 315109)

DRW: BOCCATO	DWG: 315109	SCHEMATIC DIAGRAM PS2600 GPS2600-3600	GENERALMUSIC S.p.A. Italy
CKD: BATELLI	DISK: 6 PART: 1/1	A/V & Vocal Processor Board	ALL RIGHTS ARE RESERVED, NO COPIES OR REPRODUCE THIS DOCUMENT WITHOUT WRITTEN CONSENT BY GENERALMUSIC
APP: PANNELLI	REV: 08-03-00		

PS2600-GPS2600-GPS3600 FAQ

Questions	Answers
<p>1 How can I update the Operating System? Or How can I reload the Operating System?</p>	<p>The instrument is equipped with Flash Rom so that you can update it with the last operating system containing fixes, updates and new features. These updates can be downloaded directly from our web site at http://upgrade.generalmusic.com/cgi-bin/upgrade/upgrade.cgi. Afterwards copy the OS file downloaded in the diskette, using a pre-formatted disk from your instrument prevent possible errors, and follow the instructions below: 1- With the instrument turned off, insert the last Operating System disk then turn the instrument on. 2- The display shows "Loading OS-DISK clears ALL MEMORY!! <Enter to load / Escape to abort>". 3- Press ENTER then wait about 3 minutes for the OS loading. 4- The display shows "Loading successful!! <Enter to continue>", then press ENTER. 5- Turn off the instrument and remove the Operating System disk. 6- As you turn the instrument on, keep rotating the DIAL until the display shows "!!WARNING!! Dial on power-up requests Memory Clear!! <Enter to clear / Escape to abort> 7- Press ENTER, you have now completed the update process.</p>
<p>2 How can I do a complete SYSTEM RESET?</p>	<p>As you turn the instrument on, keep rotating the DIAL until the display shows "!!WARNING!! Dial on power-up requests Memory Clear!! <Enter to clear / Escape to abort> Then press ENTER.</p>
<p>3 What do the pedals make?</p>	<p>On this instrument the pedals are fully programmable by the customer, but if you play with a GRAND PIANO style the three pedals change with the following functions: Vocal On/Off (left pedal): This pedal switch on or off the vocal processor. Sostenuto (centre pedal): This pedal is a switch control pedal (on/off) which sustains the notes of the key currently depressed, all new notes played after having depressed the pedal are not affected, this pedal operates like a grand piano centre pedal. Damper (right pedal): This pedal applies the sustain effect to all notes released. If you release a note after depressing the damper, the note will proceed towards its natural decay according to the type of sound played. The Damper pedal is particularly effective with Piano type sounds, it is controlled by a "Damper Physical Model" patented by Generalmusic.</p>
<p>4 Why do the uppermost keys play always sustained?</p>	<p>For some piano sounds the notes from E6 to C8 are automatically sustained such as in an acoustic piano.</p>
<p>5 Why do all pedals work in reverse mode?</p>	<p>The instrument reads the status of the pedals at the power on and assume this status (normally open or normally closed depends by the type of pedal) as the default status in the rest position. The pedals must be inserted before you switch on the instrument.</p>
<p>6 Why does some pedal work in reverse mode?</p>	<p>For the same reason explained first you have not to press a pedal while the instrument is switched on and until it is ready to use.</p>
<p>7 I have replaced the DAMPER pedal potentiometer, how do I let position it correctly?</p>	<p>Set the potentiometer to have about 700 ohm between pin 5 and 1 of DIN plug with the pedal at the rest position. Note: the Damper potentiometer have a special resistive stroke, when you replace it use the manufacturer's part only (code 070556).</p>
<p>8 Why does not the instrument respond correctly? Or Why the initial screen shows a different model at the start-up? (after CPU Board replacing only)</p>	<p>The CPU board spare part supplied by Generalmusic have the wrong OS stored on its memory. Before re-loading the right operating system you must erase the old, to do this follow the instructions below: 1- Prepare an OS disk with the same OS contained on the CPU Board (the version is insignificant, if you have already one use it). 2- Begin the procedure of re-loading OS and after about half minute and before the end of loading: press the EJECT button and extract the OS disk, now the OS stored in memory is insubstantial and the CPU board is capable to load a new one. 3- Turn off the instrument and proceed to load the right OS as described above.</p>

<p>9 Why does the instrument not respond to any controls while the display shows the regular initial screen?</p>	<p>The communication inside the instrument between the CPU, Controls and Keyboard boards are in ring mode: if the ring is interrupted the instrument doesn't work, check each board and the connections between them.</p>
<p>10 Why do I hear some noise after I have connected the instrument to a MAC computer using the serial port?</p>	<p>The older Controls & Midi I/O board have the pin 8 of S11 socket shorted to GND, this cause a problem with some MAC computers, to solve the problem disconnect this pin (you can also operate this cut on the cable).</p>
<p>11 Why is the battery level (Edit / General / Battery & Rel.) always low? or Why does the display shows this warning message: "Warning!! Battery almost discharged, recharge the battery"?</p>	<p>After a long period of inactivity may be occur that the internal battery backup have not a sufficient time for re-charging during the normal activity, try to leave the instrument switched on for about 12-14 hours.</p>
<p>12 Why does the display shows this warning message: "Battery completely discharged instrument re-initialized"?</p>	<p>After a long period of inactivity may be occur that the internal battery is completely dis-charged, try to leave the instrument switched on for about 12-14 hours. Afterwards if the instrument will lost the data again, replace the battery.</p>
<p>13 Why does the instrument have an excessive noise on its outputs? (Vocal processor installed)</p>	<p>Check the MIC1 and 2 GAIN inputs setting, reduce the gain or mute these inputs in the appropriate screen. Many times the poor quality or the low signal of a microphone affect the S/N ratio.</p>
<p>14 Why does the instrument plays regularly but the display is obscured with the backlight on?</p>	<p>Most probably the fault is in the contrast circuit of the LCD, in this instrument the contrast circuit is complex and pass through many boards, check it path entirely following the schematics.</p>
<p>15 In some live stages the instrument is noisy, Why?</p>	<p>The instrument is manufactured to satisfy all International Safety, EMC and RFI standards. To ensure these the instrument must be connected always to the Earth-Ground (via Mains Socket). An eventual bad connection to the ground, as could be happen in some situation, can get worse S/N ratio and RFI influence: check always to have a good connection to the ground on all stages the instrument plays.</p>

Spare Part List

Legend	
EU =	Specify European Version (230Vac)
US =	Specify United States Version (115Vac)
B =	Gloss Black finish
M =	Mahogany finish
W =	Gloss White finish
Baldwin =	Baldwin version
Gem =	Gem version

Ref Code	Description
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Accessories

970297	Pianist's Bench (B)
970298	Pianist's Bench (W)
970319	Pianist's Bench (M)
955940	Demo Disk (Gem)
955936	Demo Disk (Baldwin)
955941	GPS2600 Operating System Disk (Gem)
955937	GPS2600 Operating System Disk (Baldwin)
955938	GPS3600 Operating System Disk (Baldwin)
271290	Owner's Manual (English,Italian,German,French)(Gem)
271291	Owner's Manual (All Languages) (Baldwin)
300617	Owner's Manual Folder (Gem)
300628	Owner's Manual Folder (Baldwin)
271299	Italian HD Contents Manual
271298	International HD Contents Manual
130317	DIN/SCART Video Cable (Pal)(EU)
130428	DIN/RCA Video Cable (Ntsc)(US)
130274	Mains Cable (EU)
130276	Mains Cable (US)

Optional Accessories

130301	2mt Midi Cable
970107	Volume Pedal
970330	SCSI Interface Kit
271238	* SCSI Installation Instructions
171466	* WK SCSI Support
171453	* SK-Equinox SCSI Support
120521	* 3mm Grower Washer
120255	* B2.9x6.5mm Screw
120029	* M3x6mm Screw
841186	* Ground Connection 22cm Length
841185	* Ground Connection 7.5cm Length
841183	* 34 Wires 25cm Length Flat Cable with Ferrite
841152	* 34 Wires 5cm Length Flat Cable with Ferrite
37 761177	SCSI Interface Board (Pcb#315149)
560022	** 20V8AS-15HB1 Programmed GAL
140940	** 50 Contacts Hor Female SCSI2 Connector
140887	** 34 Contacts Hor Male Connector
110086	** 25V 1,5A Fast Picofuse
103034	** AM53CF94 SCSI-2 Controller
103012	** 74HC125D SOIC Quad Tri-State Buffer
103010	** 74HC04D SOIC Hex Inverter
080173	** 1N5817 1A 20V Schottky Rectifier Diode
010725	** 20MHz Ceramic Resonator With Capacitors
970310	Multimedia Kit for PC-Windows Systems
130429	* 3mt RS232 Cable (MiniDin 8 To D-Sub 9)
970363	Oriental Kit
955921	* Oriental "Styles and Demo" Disk
955920	* Oriental "Sound 2" Disk
955919	* Oriental "Sound 1" Disk
271257	* Owner's Manual Oriental Kit
970225	Volatile SIMM Dram Modules (4MB x2)
271065	* Dram Installation Instructions
100742	* Single 4MByte SIMM Module

Stand & Pedals Assembly

970297	Pianist's Bench (B)
970298	Pianist's Bench (W)
970319	Pianist's Bench (M)
800047	Leg Assembly (B)
800048	Leg Assembly (W)
800049	Leg Assembly (M)
324654	* Brasscd Caster
260248	* Leg (B)
260254	* Leg (W)
262231	* Leg (M)
120331	* WL4x30ts Black Screw
720611	Triple Pedal Assembly (B)
720612	Triple Pedal Assembly (W)
720623	Triple Pedal Assembly (M)
720637	Triple Pedal Assembly (M)(2nd Version)
720613	* Triple Pedal Assembly (replace entirely)
660684	* Pedals Bracket (M)

660121	* Dual Pedals Stand (B)
660122	* Dual Pedals Stand (W)
320443	* 3x16ts Brass Screw
262232	* Single Pedal Column (M)
262316	* Single Pedal Column with Hole (M)(2nd Version)
260249	* Pedals Top Cover (B)
260255	* Pedals Top Cover (W)
262230	* Pedals Top Cover (M)
262317	* Pedals Top Cover (M)(2nd Version)
210021	* 1x15mm Adhesive Red Felt (specify mt)
171751	* Pedals Support (B)(W)
171795	* Pedals Support (M)
170858	* Pedals Brace
170857	* Brass Pedal Plate
120463	* 4.3x12.5x1 Black Washer
120411	* WL3.5x20tt Black Screw
120301	* B3.5x13tc Black Screw
120150	* M10x40tce Black Screw
120078	* M6x40tc Black Screw
271043	Assembling Instructions (All Llanguages)
190193	10mm ALLEN Hexagonal Key
150618	Thumbscrew
120523	M 6 Black Grower Washer
120456	6.5x12.5x1.5 Black Washer
120070	M6x20tc Black Screw

Cabinet Assembly

660692	Woofer Protection Grid
26 660662	50x270mm Heatsink Grid
38 660664	Controls & Midi I/O Panel
660453	SCSI Slot Closer
34 653465	Right Cheek Block for Keyboard (PS2600)
9 653457	Left Cheek Block for Keyboard (PS2600)
25 660405	Heatsink Grid
28 561013	Hard Disk with "PS2600-International" Contents
28 561012	Hard Disk with "PS2600-Italian" Contents
28 561017	Hard Disk with "International-SE" Contents
28 561016	Hard Disk with "Italian-SE" Contents
340921	Speaker Washer
10 340916	Button for Power Switch (PS2600)
340905	Suspension Rubber for HD
61 340522	Disk Drive Frame
340503	Lower Potentiometer Knob for Mic/Line Input Gain
340502	Upper Potentiometer Knob for Mic/Line Input Gain
340115	Adhesive Flat Cable Fixing
340075	PC-Board Spacer
323070	9.5X3.8mm Bumpun Rubber
320563	WL3x15ts Brasscd Screw
320452	Pivot For Cover Stand
320447	WL4.5x45ts Screw
320090	Hinge Between Rev. Cover And Cover
320066	Hinge For Music Stand
320065	Hinge Between Keyb. Front And Top Covers
6 229015	8ohm 1" Dome Tweeter Speaker
39 220120	8ohm 6" Full-range Speaker
41 220118	8ohm 8" Woofer Speaker
219066	Adhesive Black Felt for Music Stand
210261	10x30x1 Felt Washer
44 210074	Speaker Cloth (specify mt)
210054	1x5mm Adhesive Spik (specify mt)
210242	Filler for Speaker Box (Specify m²)
210217	Black Sealer (specify mt)
210054	1x5mm Adhesive Spik (specify mt)
210016	1x10mm Adhesive Black Felt (specify mt)
180781	75x17mm "Pianovelle" Adhesive
180780	210x62mm "Baldwin Pianovelle" Adhesive
180676	82x13.3mm "Baldwin" Logo Adhesive Plate
180674	20x24mm "GM" Logo Adhesive Plate
180779	210x62mm "Gem" Adhesive
180675	40.5x12 "Gem" Adhesive Plate
171790	Front Panel Angular Fixing (GPS3600)
29 171820	HD & Vocal Proc. Support
171808	Disk Drive Support
33 171789	Support for Cheek Block
171788	Left Arm for Keyboard Cover (GPS3600)
171787	Right Arm for Keyboard Cover (GPS3600)
171780	Tweeter Support
171764	Cpu Board Support
171756	Angular Fixing (GPS3600)
171738	Mains Switch Support
171672	Dual Hinge for Cover Sticks (GPS3600)
171636	Angular Fixing for Rear Cover (GPS3600)
171633	Angular Fixing for Music Stand Ass'y (GPS3600)
171628	Angular Guide (GPS3600)
171622	Left Support for Music Stand Ass'y (GPS3600)

171621	Right Support for Music Stand Ass'y (GPS3600)
171471	HD Support
171299	Control Panel Angular Coupling
171756	Angular Fixing for Controls Panel
170868	5x8x10 Bush with Collar for Pivot
170867	Washer for Cover Stand
170866	Hinge For Cover Stand
170864	Hinge Between Keyb. Cover And Front Panel
170863	Hinge Between Cabinet And Cover
8 170859	Fixing Plate for Leg
170389	Angular Fixing for Front Panel
129072	WL4.5x45ts Screw
129066	WL4.5x30ts Screw
129043	WL4.2x16ts Brasscd Screw
129032	WL3.5x16ts Brasscd Screw
129024	WL4.5x60ts Screw
129012	WL3x15ts Brasscd Screw
129007	WL4x25ts Brasscd Screw
129003	WL2.5x10ts Brasscd Screw
120968	Bush for Keyboard Cover
120832	18.8mm Hexagonal Spacer
120684	M4x10 Sleeve
120681	MA6x13 Sleeve
120581	M3 Nut
120553	5x14x9 Black Washer for Cloth Panel Fixing
120522	4mm Grower Washer
120474	12.5x38x3 Washer
120472	6.4x24x2 Black Washer
120463	4.3x12.5x1 Black Washer
120461	5.3X10X1 Black Washer
120459	13.4x25x2.5 Black Washer
120453	4.2x9x0.8 Black Washer
120451	3.2x7x0.5 Black Washer
120416	WL6x60ts Screw
120412	WL4x35tt Burnished Screw
120405	B3.5x9.5tc Black Screw
120374	WL4x15tt Black Screw
120341	WL4x20tt Black Screw
120340	WL4x12tt Black Screw
120336	WL4x25tt Black Screw
120321	WL4x35ts Black Screw
120310	WL3.5x10tt Black Screw
120291	WL3x25ts Black Screw
120287	WL3x30tc Black Screw
120272	WL3x10tc Black Screw
120146	M5x45tc Black Screw
120143	M4x161st Brass Screw
120119	M4x16tc Black Screw
120113	M3x4tc Black Screw
120100	M12x55tc Screw
120094	M3x30tsp Black Screw
120084	M4x35tc Black Screw
120078	M6x40tc Black Screw
120064	M4x30tc Black Screw
120063	M4x20tc Black Screw
120028	M3x6tc Black Screw
1 110614	Mains Socket
35 110400	3.5" FDisk Drive
110083	T2A Fuse 6.3x32mm (US)
110021	T5A Fuse 6.3x32mm (US)
110020	T5A Fuse 5x20mm (EU)
110010	T2A Fuse 5x20mm (EU)
7 020493	100n 250Vac MKP EMI Capacitor "Siemens"
31 710582	Speakers Box (GPS2600)
710585	Mid-Range Speaker Box (GPS3600)
710584	Woofer Speaker Box (GPS3600)
120681	* MA6x13 Sleeve
120661	* M4 Black Collar

GPS2600 Wooden Parts

262092	Front Panel (B)
262206	Front Panel (W)
262207	Front Panel (M)
261941	Music Stand (B)
262227	Music Stand (W)
261944	Music Stand (M)
262091	Revolving Keyboard Cover (B)
262204	Revolving Keyboard Cover (W)
262205	Revolving Keyboard Cover (M)
23 262088	Keyboard Cross-Bar (B)
23 262200	Keyboard Cross-Bar (W)
23 262201	Keyboard Cross-Bar (M)
262086	Keyboard Cover Finishing (B)
262198	Keyboard Cover Finishing (W)
262199	Keyboard Cover Finishing (M)

262085	Keyboard Cover (B)
262196	Keyboard Cover (W)
262197	Keyboard Cover (M)
43 262087	Cloth Panel Support
262084	Cloth Panel
260342	Front Cabinet Cover (B)
260344	Front Cabinet Cover (W)
262234	Front Cabinet Cover (M)
260334	Rear Cabinet Cover (B)
260346	Rear Cabinet Cover (W)
262225	Rear Cabinet Cover (M)
260341	Cabinet Cover Stick (B)
260353	Cabinet Cover Stick (W)
262226	Cabinet Cover Stick (M)

GPS3600 Wooden Parts

262112	Front Panel (B)
262218	Front Panel (W)
262219	Front Panel (M)
261753	Music Stand (B)
262247	Music Stand (W)
262058	Music Stand (M)
261783	Stop Strip for Music Stand (B)
262251	Stop Strip for Music Stand (W)
262078	Stop Strip for Music Stand (M)
261782	Left Shelf for Music Stand (B)
262250	Left Shelf for Music Stand (W)
262076	Left Shelf for Music Stand (M)
261781	Right Shelf for Music Stand (B)
262249	Right Shelf for Music Stand (W)
262074	Right Shelf for Music Stand (M)
261754	Centre Shelf for Music Stand (B)
262248	Centre Shelf for Music Stand (W)
262060	Centre Shelf for Music Stand (M)
261758	Revolving Keyboard Cover (B)
262257	Revolving Keyboard Cover (W)
262064	Revolving Keyboard Cover (M)
261761	Front Keyboard Cover (B)
262314	Front Keyboard Cover (W)
262315	Front Keyboard Cover (M)
262109	Rear Keyboard Cover (B)
262212	Rear Keyboard Cover (W)
262213	Rear Keyboard Cover (M)
262110	Rear Fillet for Keyboard Cover (B)
262214	Rear Fillet for Keyboard Cover (W)
262215	Rear Fillet for Keyboard Cover (M)
262042	Keyboard Cover Guide
262107	Left Keyboard Cheek Block (B)
262208	Left Keyboard Cheek Block (W)
262209	Left Keyboard Cheek Block (M)
262108	Right Keyboard Cheek Block (B)
262210	Right Keyboard Cheek Block (W)
262211	Right Keyboard Cheek Block (M)
261752	Keyboard Cross-Bar (B)
262246	Keyboard Cross-Bar (W)
262056	Keyboard Cross-Bar (M)
261757	Pedals Capital (B)
262255	Pedals Capital (W)
262256	Pedals Capital (M)
262129	Cloth Panel
261750	Front Cabinet Cover (B)
262244	Front Cabinet Cover (W)
262052	Front Cabinet Cover (M)
261751	Rear Cabinet Cover (B)
262245	Rear Cabinet Cover (W)
262054	Rear Cabinet Cover (M)
261816	Cabinet Cover Short Stick (B)
262258	Cabinet Cover Short Stick (W)
262080	Cabinet Cover Short Stick (M)
261755	Cabinet Cover Long Stick (B)
262252	Cabinet Cover Long Stick (W)
262062	Cabinet Cover Long Stick (M)
262275	Cabinet Cover Closer Fillet (B)(M)
262276	Cabinet Cover Closer Fillet (W)

Mains Filter Board

2 768198	Mains Filter Board (Pcb#310643)
230565	* 2.5mH 250V 3A AC Line Filter
140010	* 3 Contacts P=10 Vert Terminal Block
020493	* 100n 250Vac MKP EMI Capacitor "Siemens"
010545	* 4n7 250V Ceramic Capacitor (Iec-UI-Csa)

Transformer Assembly

730654	Transformer Assembly (115Vac) (US)
730506	Transformer Assembly (230Vac) (EU)

3 230120	* Transformer 115Vac 250W (US)
3 230128	* Transformer 230Vac 250W (EU)
190133	* Lateroid Insulator For Screw Block
171303	* Transformer Support
4 140036	* Screw Block (specify contacts)
120600	* M4 Self-Locking Nut
120463	* 4.3x12.5x1 Black Washer
120453	* 4.2x9x0.8 Black Washer
120260	* B2.9x16tc Black Screw
120034	* M4x12tc Black Screw

Power Amplifier & Supply Board

24 761200	Power Amplifier & Supply Board (Pcb#315102)
340079	* TO220 Mica Washer
340078	* TO220 Insulated Bush
171187	* Heatsink (8xTO220)
170717	* Heatsink for STK
141102	* 6 Contacts Vert Male Connector
141010	* 4 Contacts Vert Female Connector
140873	* 4 Contacts Vert Male Connector
140325	* 12 Contacts Vert Male Connector
140324	* 9 Contacts Vert Male Connector
140323	* 6 Contacts Vert Male Connector
140010	* 3 Contacts P=10 Vert Terminal Block
120857	* Vertical Male Faston 6.3mm
120313	* B3.9x13tc Black Screw
120301	* B3.5x13tc Black Screw
120006	* M3x14tc Black Screw
120003	* M3x8tc Black Screw
110305	* Relay 12V / 2 Switch 1A 250Vac
110304	* Relay 12V / 2 Switch 5A 250Vac
110300	* 4.8V 280mAh Nicd Battery
110119	* Fuse Clip 10A max (EU) (US)
100907	* L4940V5 Low Drop +5V 1.3A Regulator
100067	* LM337 1.2-37V 1.5A Adjustable Regulator
100061	* TL072 Dual J-Fet Operational Amplifier
100045	* 7812 +12V 1A Voltage Regulator
100043	* 7912 -12V 1A Voltage Regulator
100040	* STK4040X 70W Hybrid Amplifier
090865	* BD244B TO220 Pnp Transistor
090856	* J176 TO92 P-Channel J-Fet Transistor
090194	* BC560 TO92 LN Pnp Transistor
090183	* BC550 TO92 LN Npn Transistor
090153	* BC327 TO92 Pnp Transistor
090152	* BC337 TO92 Npn Transistor
080606	* GBU8D 8A Rectifier Diodes Bridge
080156	* 1N4002 1A 100V Rectifier Diode
080103	* 1N4148 100mA 75V Signal Diode
070121	* 1K 20% Horizontal Linear Trimmer
060161	* 1E5 5W 10% Wire Resistor
030882	* 10000uF 50V Snap-In Electrolytic Capacitor
030880	* 10000uF 25V Snap-In Electrolytic Capacitor
030858	* 4700uF 25V 20% Vert Electrolytic Capacitor

Crossover Board

5 731029	Crossover Board (Pcb#310651)
230587	* 3.

140918	**	2 Contacts Hor Male Connector
140872	**	4 Contactc Hor Male Connector
100740	**	HD6433278 Cpu F=20MHz
100605	**	74HC125 Quad 3-State Buffer
090194	**	BC560 TO92 LN Pnp Transistor
050493	**	10Kx4 1/8w 5% Resistor Array
050492	**	10Kx8 1/8w 5% Resistor Array
050414	**	2K2x4 1/8w 5% Resistor Array
010725	**	20MHz Ceramic Resonator With Capacitors
010662	**	220p 10% 50V X8 Cap Array
010661	**	47p 10% 50V X8 Cap Array
81 731033	*	After-Touch Connection Board (Pcb#315187)
140918	**	2 Contacts Hor Male Connector
140890	**	4 Contacts Hor Male Single-Strip
78 720617	*	88N TP21 Keyboard Assembly
78 720634	*	88N TP23 Keyboard Assembly
77 810552	**	39N Left Contacts Board (Pcb#310531)
340764	***	3 Dual Contacts Rubber Strip
340211	***	12 Dual Contact Rubber Strip
141018	***	20 Contacts Vert Female Connector
141010	***	4 Contacts Vert Female Connector
080103	***	1N4148 100mA 75V Signal Diode
79 810551	**	49N Right Contacts Board (Pcb#310530)
340212	***	13 Dual Contact Rubber Strip
340211	***	12 Dual Contact Rubber Strip
141018	***	20 Contacts Vert Female Connector
141010	***	4 Contacts Vert Female Connector
080103	***	1N4148 100mA 75V Signal Diode
160216	**	Key Return Spring (TP21P)
32 151236	**	Last C Key (TP21P)
12 151235	**	First A Key (TP21P)
22 151234	**	Sharp Key (TP21P)
21 151233	**	B Key (TP21P)
20 151232	**	A Key (TP21P)
19 151231	**	G Key (TP21P)
18 151230	**	F Key (TP21P)
17 151229	**	E Key (TP21P)
16 151228	**	D Key (TP21P)
15 151227	**	C Key (TP21P)
160220	**	Key Return Spring (TP23)
32 151256	**	Last C Key (TP23)
12 151255	**	First A Key (TP23)
22 151254	**	Sharp Key (TP23)
21 151253	**	B Key (TP23)
20 151252	**	A Key (TP23)
19 151251	**	G Key (TP23)
18 151250	**	F Key (TP23)
17 151249	**	E Key (TP23)
16 151248	**	D Key (TP23)
15 151247	**	C Key (TP23)
340092	*	5mm Board Spacer
120288	*	WL3x20tc Blck Screw

Controls Panel Assembly

64 820608		Controls Panel Assembly (GPS2600)(B)(M)
64 820610		Controls Panel Assembly (GPS2600)(W)
820609		Controls Panel Assembly (GPS3600)(B)(M)
820611		Controls Panel Assembly (GPS3600)(W)
841065	*	3 (of 4) Wires 7.5cm Length Crimp Terminal Cable
841007	*	20 Wires 20cm Length Flat Cable
840838	*	20 Wires 15cm Length Flat Cable
840826	*	14 Wires 15cm Length Flat Cable
840801	*	20 Wires 17.5cm Length Flat Cable
840721	*	14 Wires 10cm Length Flat Cable
50 810681	*	Left Control Panel Board (Pcb#315184)
51 730508	**	Contrast Board (Pcb#315105)
140874	***	Single In Line Vert Male Strip (specify contacts)
070702	***	5K Linear Rotary Potentiometer
340523	**	6.5mm Spacer
141018	**	20 Contacts Vert Female Connector
141015	**	14 Contacts Vert Female Connector
140914	**	7 Contacts Hor Female Zif Mylar Connector
140872	**	4 Contactc Hor Male Connector
140529	**	Microswitch 12V 50mA 0.25mm
100607	**	74HC164 8bit S To P Shift Register
080743	**	3mm Wide Diffused Green Led
080711	**	3mm High Efficiency Red Led
60 810299	*	Right Control Panel Board (Pcb#315100)
141018	**	20 Contacts Vert Female Connector
141015	**	14 Contacts Vert Female Connector
140914	**	7 Contacts Hor Female Zif Mylar Connector
140529	**	Microswitch 12V 50mA 0.25mm
100620	**	74HC86 Quad 2-Input Exor Gate
100614	**	74HC74 Dual Flip-Flop
100607	**	74HC164 8bit S To P Shift Register

080711	**	3mm High Efficiency Red Led
56 761196	*	Control Panel Interface Board (Pcb#315183)
141018	**	20 Contacts Vert Female Connector
141015	**	14 Contacts Vert Female Connector
140873	**	4 Contacts Vert Male Connector
140854	**	16 Contacts Vert Male Connector Din41651
140324	**	9 Contacts Vert Male Connector
100740	**	HD6433278 Cpu F=20MHz
100645	**	74HC4351 8ch Analog Multiplexer
100605	**	74HC125 Quad 3-State Buffer
090194	**	BC560 TO92 LN Pnp Transistor
090183	**	BC550 TO92 LN Npn Transistor
090153	**	BC327 TO92 Pnp Transistor
080103	**	1N4148 100mA 75V Signal Diode
070207	**	22K 20% Vertical Linear Trimmer
010725	**	20MHz Ceramic Resonator With Capacitors
49 730505	**	Sliders Board (Pcb#315104)
141015	**	14 Contacts Vert Female Connector
070551	**	10K Linear 30mm Slider Potentiometer
53 730246	*	DC-AC Converter Board (Pcb# Cs032001)
720621	*	Pitch Assembly
770887	**	Pitch Cables Assembly
45 340568	**	Wheel
340331	**	Sheath For Spring
210264	**	Black Felt
46 171711	**	Wheel Reinforcement
47 171710	**	Wheel Support
160166	**	Return Spring
120554	**	Lock Washer
120276	**	B2.9x6.5mm Screw
48 074700	**	10KB Rotative Pot with pin at 1/3 stroke
660663	*	Controls Panel (GPS2600)(B)(M)
660705	*	Controls Panel (GPS2600)(W)
660665	*	Controls Panel (GPS3600)(B)(M)
660706	*	Controls Panel (GPS3600)(W)
651563	*	Cloth For Panel Slits
76 651561	*	Display Frame (B)(M)
76 653492	*	Display Frame (W)
70 651560	*	Display Plastic Glass
340556	*	Polycarbonate Washer for Dial
340523	*	6.5mm Spacer
58 340521	*	Dial Support
75 340516	*	<EDIT> Rubber Key Pad
74 340515	*	<SOUND GROUP> Rubber Key Pad
66 340514	*	<START STOP> Rubber Key Pad
65 340513	*	<STYLE-GROUP> Rubber Key Pad
62 340512	*	Slider Potentiometer Guide
63 340494	*	Slider Potentiometer Knob
73 340493	*	Dial Knob
71 340482	*	Display Right Rubber Key Pad
68 340481	*	Display Left Rubber Key Pad
340466	*	Spacer H=8mm
67 340370	*	Contrast Knob
340155	*	Spacer H=15mm
230584	*	EMI Ferrite For Flat Cable
210253	*	Potentiometers Anti-Dust Gasket
210093	*	Adhesive Black Felt Strip
210020	*	1.5x12mm Adhesive Red Felt (specify mt)
171755	*	Controls Panel Support
52 171288	*	Display Support
57 171284	*	Boards Support
54 171224	*	DC-AC Converter Support
72 140528	*	Right Contact Mylar Strip (display)
69 140527	*	Left Contact Mylar Strip (display)
120960	*	Dial Steel Sphere
120581	*	M3 Nut
120451	*	3.2x7x0.5 Black Washer
120286	*	B2.9x4.5tc Black Screw
120272	*	WL3x10tc Black Screw
120028	*	M3x6tc Black Screw
59 110254	*	Dial Encoder with Snap
55 080755	*	Lcd Display 320X240 dots SP14Q001 Hitachi

Cpu & Sound Generator Board

30 761195	*	Cpu & Sound Generator Board (Pcb#315150/1)
340934	*	Insulation Washer for Quartz
340547	*	6.5mm Spacer
231000	*	BLM21A102STP Smd EMI Coil For Signal
230527	*	BL02RN2-R62 EMI Coil For Signal
141018	**	20 Contacts Vert Female Connector
141016	**	16 Contacts Vert Female Connector
141011	*	6 Contacts Vert Female Connector
141010	*	4 Contacts Vert Female Connector
140922	*	32 Contacts Vert Male Strip P=2mm
140917	*	2 Contacts Vert Male Connector

140915	*	44 Contacts Vert Male Strip P=2mm
140913	*	14mm Socket 30 Pin
140881	*	14 Contacts Vert Female Con. For Mylar Cable
140877	*	Jumper For Contacts Strip (p=2.54mm)
140874	*	Single In Line Vert Male Strip (specify contacts)
140873	*	4 Contacts Vert Male Connector
140866	*	34 Contacts Vert Male Connector Din41651
140854	*	16 Contacts Vert Male Connector Din41651
140325	*	12 Contacts Vert Male Connector
120857	*	Vertical Male Faston 6.3mm
106003	*	MAX709 Power Monitor With Reset
105009	*	DISP3 QFP Digital Sound Processor (Hitachi)
105005	*	FPGA - Video/Lcd Controller
105004	*	MC68360EM25 QFP Cpu
104041	*	23C64000G SOP 64MBit Rom "Wave98"
104037	*	23C32000G 32Mbit Rom "Styles"
104036	*	MX23C6410 64Mbit Rom "Samples2"
104035	*	MX23C6410 64Mbit Rom "Samples1"
104020	*	KM62256CLG SOP 256Kbit SRam Ta=55nS
104010	*	HM514280AJ 4M5bit Dram Ta=70nS
104009	*	HM5118160ALJ 16Mbit Dram Ta=70nS
104007	*	E28F016SV-70 1Mbit Flash Memory Ta=70nS
103012	*	74HC125D SOIC Quad Tri-State Buffer
103010	*	74HC04D SOIC Hex Inverter
103004	*	AD1865R SOP 18bit D/A Converter
103002	*	74HC245DW SOIC Octal Bus Transceiver
103001	*	74HC08D SOIC Quad 2-Input And Gate
101506	*	74AC04D SOIC Hex Inverter Gate
101502	*	74AC125D SOIC Quad Tri-State Buffer
100904	*	LM393 Dual Comparator
100731	*	DS1202 Clock Calendar
100591	*	GM82C765B Floppy Disk Controller
100059	*	7805 +5V 1A Voltage Regulator
100058	*	7905 -5V 1A Voltage Regulator
091000	*	BC847 TO236 Smd Npn Transistor
090153	*	BC327 TO92 Pnp Transistor
090152	*	BC337 TO92 Npn Transistor
081000	*	PMLL4148 Smd 100mA 75V Signal Diode
080156	*	1N4002 1A 100V Rectifier Diode
070160	*	2K2 20% Horizontal Linear Trimmer
055103	*	470E X4 1/16w 5% Smd Resistor Array
055102	*	33E X4 1/16w 5% Smd Resistor Array
055101	*	4K7 X4 1/16w 5% Smd Resistor Array
055100	*	100E X4 1/16w 5% Smd Resistor Array
010732	*	4.194304MHz Quartz Oscillator
010727	*	45.1584MHz Quartz Resonator
010725	*	20MHz Ceramic Resonator With Capacitors
010710	*	32768Hz Quartz Resonator
010704	*	16MHz Quartz Resonator

Cpu Modules

761168	*	8Mbyte DRam Module (Pcb# 315152)
140945	*	44 Contacts Vert Female Strip P=2mm
104040	*	KM416V4100BS-L6 Dram 64Mbit Ta=60ns
103037	*	74FCT164245T 5V-3V 16bit Bidirectional Converter
091001	*	BC857 TO236 Smd Pnp Transistor
091000	*	BC847 TO236 Smd Npn Transistor
090152	*	BC337 TO92 Npn Transistor
081000	*	PMLL4148 Smd 100mA 75V Signal Diode
031007	*	10u 16V 20% Smd Electrolytic Tantalium Capacitor
761094	*	2Mbyte DRam Module (Pcb# 315094)
140923	*	32 Contacts Vert Female Strip P=2mm
104009	*	HM5118160ALJ 16Mbit Dram Ta=70nS
761093	*	Buffer Module Board (Pcb# 315023)
103013	*	74HC138D SOIC 1 Of 8 Decoder
103003	*	74HC374DW SOIC Octal D-Type Flip-Flop
081000	*	PMLL4148 Smd 100mA 75V Signal Diode

A/V & Vocal Processor Board

27 761152	*	A/V Ntsc & Vocal Proc. Board (Pcb# 315109)(Baldwin)
27 761143	*	A/V Pal & Vocal Processor Board (Pcb# 315109)(Gem)
231000	*	BLM21A102STP Smd EMI Coil For Signal
230582	*	LC Delay Line 400ns 0.5MHz
230561	*	47uH 10% 100mA RF-Coil
190231	*	5x2.5x0.8 Insulated Washer
160122	*	Jump Length 2.5mm
141016	*	16 Contacts Vert Female Connector
141013	*	10 Contacts Vert Female Connector
140917	*	2 Contacts Vert Male Connector
140877	*	Jumper For Contacts Strip (p=2.54mm)
140874	*	Single In Line Vert Male Strip (specify contacts)
140866	*	34 Contacts Vert Male Connector Din41651
140324	*	9 Contacts Vert Male Connector
106003	*	MAX709 Power Monitor With Reset
106000	*	TDA8501 PAL/NTSC Encoder

105010	*	ADSP2181 Dsp Microcomputer
105005	*	FPGA - Video/Lcd Controller
104003	*	HM514260JP SOJ 4Mbit Dynamic Ram Ta=70ns
103031	*	74HC00D SOIC Quad 2-In Nand Gate
103030	*	74HC32D SOIC Quad 2-In Or Gate
103012	*	74HC125D SOIC Quad Tri-State Buffer
103011	*	AD1877 SOIC Dual Channel 1bit ADC
103010	*	74HC04D SOIC Hex Inverter
103007	*	74HC74D SOIC Dual Flip-Flop
101500	*	74AC138D SOIC 1 Of 8 Decoder
100739	*	ADV476 Color Palette Ram Dac
100059	*	7805 +5V 1A Voltage Regulator
100045	*	7812 +12V 1A Voltage Regulator
100043	*	7912 -12V 1A Voltage Regulator
100019	*	TL071 LN J-Fet Operational Amplifier
091001	*	BC857 TO236 Smd Pnp Transistor
091000	*	BC847 TO236 Smd Npn Transistor
090153	*	BC327 TO92 Pnp Transistor
090102	*	2N918 VHF Npn Transistor
081000	*	PMLL4148 Smd 100mA 75V Signal Diode
080500	*	BB204G Dual Varicap Diode
055102	*	33E X4 1/16w 5% Smd Resistor Array
055101	*	4K7 X4 1/16w 5% Smd Resistor Array
030411	*	47u 25V 20% Low Prof Vert Electrolytic Capacitor
030246	*	10u 25V 20% Low Prof Vert Electrolytic Capacitor
010724	*	16MHz Ceramic Resonator With Capacitors
010717	*	30.20979MHz Quartz Resonator (Ntsc)
010714	*	30MHz Quartz Resonator (Pal)
010715	*	8.867238MHz Quartz Resonator (Pal)
010716	*	7.15909MHz Quartz Resonator (Ntsc)
010602	*	5p2-30pF N750 Ceramic Capacitor Trimmer

Controls & MIDI I/O Board

36 730651	*	Controls & MIDI I/O Board (Pcb#315103)
230569	*	FL5R200PNT EMI Coil For Signal
141102	*	6 Contacts Vert Male Connector
141018	**	20 Contacts Vert Female Connector
141013	*	10 Contacts Vert Female Connector
140324	*	9 Contacts Vert Male Connector
140248	*	4 Poles Mini Din Female Socket
140247	*	8 Poles Mini Din Female Socket
140231	*	Jack Horizontal S-F Socket (dual switch)
140219	*	13 Poles Din Horizontal Female Socket
140217	*	Jack Slim Horizontal S-F Socket
140216	*	6 Poles Din Horizontal Female Socket
140212	*	5 Poles Din Horizontal Female Socket
100919	*	MC33078 Dual LN Operational Amplifier
100734	*	MAX202E RS232 Drivers/Receiver
100618	*	74HC14 Hex Inverter Schmitt Trigger
100035	*	6N138 Optocoupler
090183	*	BC550 TO92 LN Npn Transistor
080103	*	1N4148 100mA 75V Signal Diode
071011	*	2x10K Alog Rotary Pot

Wiring Connections

841239	*	10 Wires 55cm Length Flat Cable
841238	*	9 Wires 35cm Length Flat Cable with Ferrite
841152	*	34 Wires 5cm Length Flat Cable with Ferrite
841071	*	20 Wires 30cm Length Flat Cable
841030	*	16 Wires 5cm Length Flat Cable with Ferrite
841025	*	1 Shielded Wire 10cm Crimp Terminal Cable
840824	*	44 Wires 7.5cm Length Flat Cable
840799	*	4 Wires 7.5cm Length Flat Cable
840781	*	6 Wires 30cm Length Flat Cable
840764	*	Ground Cable 10cm Length
840708	*	3 (of 4) Wires 80cm Length Crimp Terminal Cable
840689	*	12 Wires 10cm Length Crimp Terminal Cable
840582	*	34 Wires 40 Cm Length Flat Cable
840569	*	3 (of 4) Wires 17.5cm Length Crimp Terminal Cable
840529	*	16 Wires 20cm Length Flat Cable
840204	*	9 Wires 15cm Length Flat Cable
84020		