

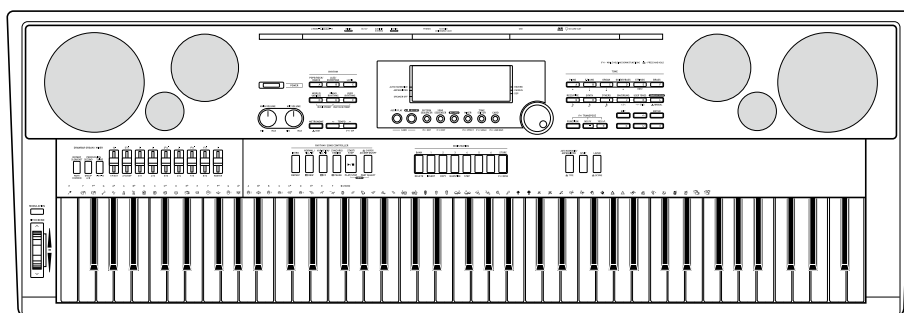
CASIO®

SERVICE MANUAL & PARTS LIST

(without price)

WK-7500

OCT. 2010



WK-7500

ELECTRONIC KEYBOARD

Ver. 1 : Feb. 2011

CONTENTS

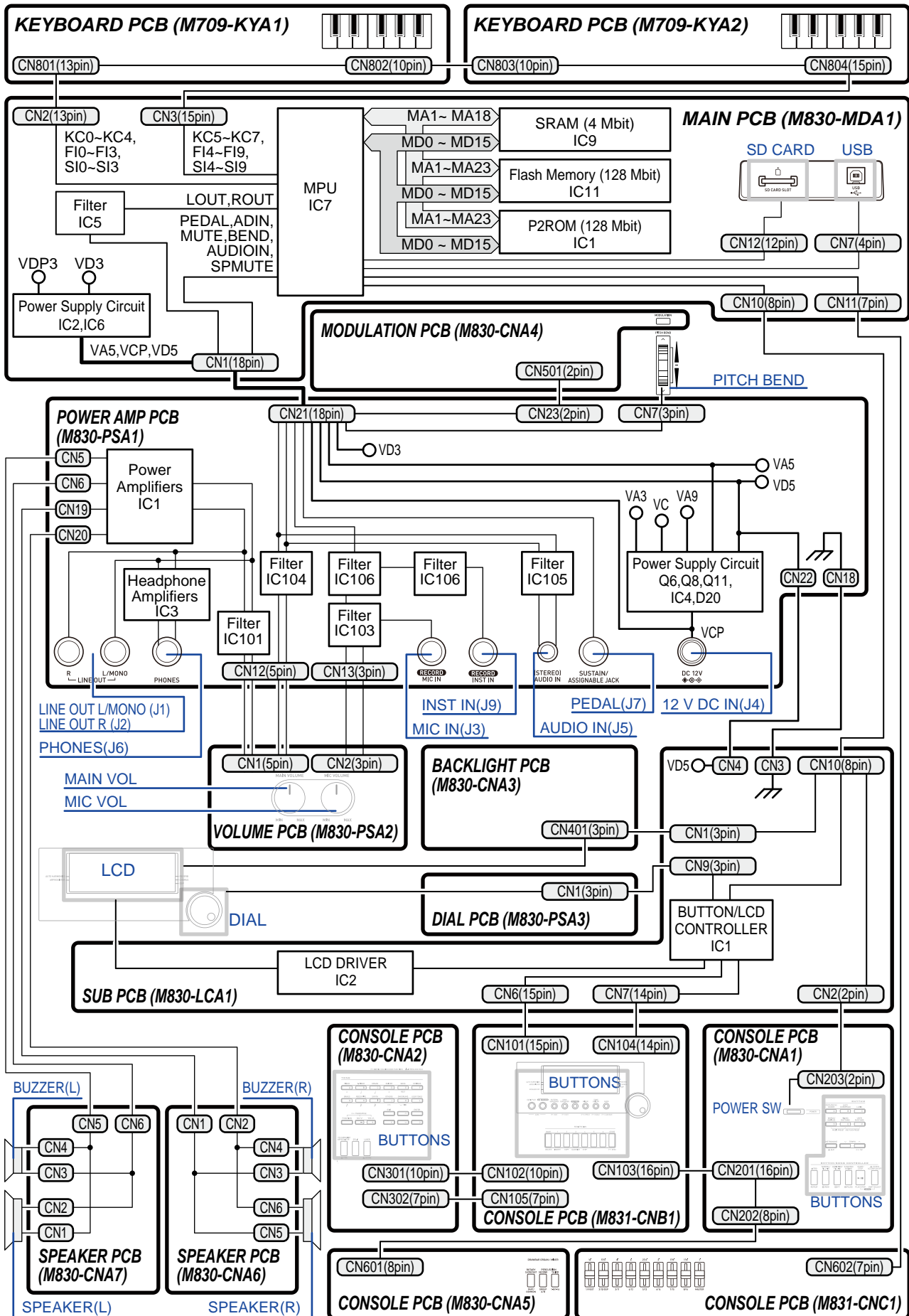
SPECIFICATIONS.....	1
BLOCK AND WIRING DIAGRAM	3
PCB INFORMATION.....	4
CIRCUIT DESCRIPTION	5
PRINTED CIRCUIT BOARDS.....	7
DISASSEMBLY	13
DIAGNOSTIC PROGRAM	33
EXPLODED VIEW.....	44
PARTS LIST.....	45
SCHEMATIC DIAGRAMS.....	50

SPECIFICATIONS

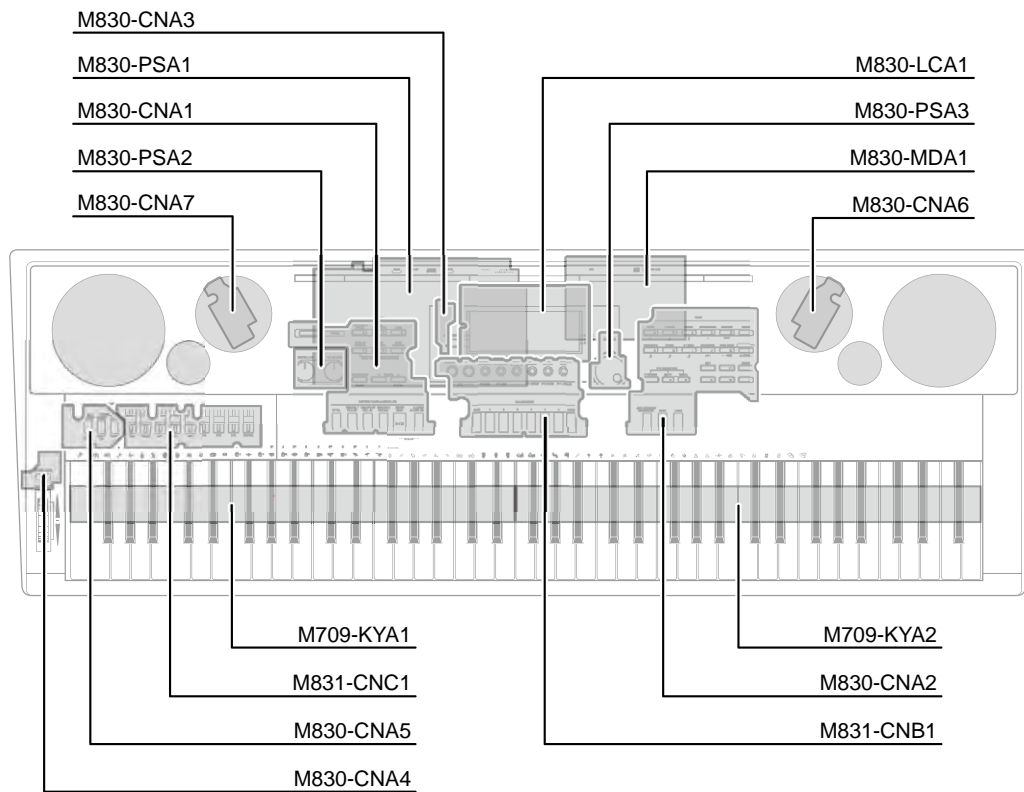
Keyboard	76 standard-size keys
Touch Response	2 types, Off
Maximum Polyphony	64 notes (32 for certain tones, 21 for drawbar organ tones)
Tones	
Built-in Tones	800
User Tones	Up to 100 (Tone Editor), up to 50 (Drawbar Edit)
Functions	Layer, Split
Drawbar Organ	
Drawbars	9 sliders (16', 5 1/3', 8', 4', 2 2/3', 2', 1 3/5', 1 1/3', 1')
Percussion	Second/Third
Click	On/Off
Rotary	Effect Fast/Slow
Reverb	1 to 10, Off
Chorus	1 to 5
DSP	
Preset DSP	100
User DSP	Up to 100
Metronome	
Beats per Measure	0, 2 to 6
Tempo Range	30 to 255
Auto Accompaniment	
Built-in Rhythms	250
User Rhythms	Up to 100 (Pattern Sequencer)
Demo Songs	5 songs
Registration	96 (6 setups × 16 banks)
Song Sequencer	Real-time recording, playback Punch-in recording
Keyboard Play	5 songs, 17 tracks
Memory Capacity	Approximately 30,000 notes (total for 5 songs)
Audio Recording and Playback Functions	
Requirement	An SD or SDHC memory card, 2 GB to 32 GB
Recording	Recording of keyboard play, song sequencer song playback, sound input from MIC IN jack and INST IN jack Up to 5 audio files (maximum recording time: approximately 13 minutes for a single audio file)
Playback	Up to 999 files (including files used for recording)
Mixer	32 parts (A01-A16/B01-B16) Master parameters, DSP parameters, Part parameters, MIC/INST parameters

Other Functions	
Transpose	±1 octaves (-12 to +12 semitones)
Octave Shift	UPPER 1/UPPER 2/LOWER ±2 octaves
Tuning	A4 = 415.5 - 440.0 - 465.9 Hz
Scale Tuning	Scale Fine Tune, Preset Scales
Music Preset	305 built-in, plus 100 user presets
One Touch Preset	250
Auto Harmonize	12 types
Arpeggiator	150 types
MIDI	16 multi-timbre received, GM Level 1 standard
Pitch Bend Wheel	
Pitch Bend	Range 0 to 12 semitones
Memory Cards	
Supported Memory Cards	SD or SDHC memory cards, 2 GB to 32 GB
Functions	SMF playback, file storage, file recall, file delete, card format
Inputs/Outputs	
USB port	TYPE B
Sustain/Assignable jack	Standard jack (sustain, sostenuto, soft, start/stop)
Phones jack	Stereo standard jack
Line Out R, L/MONO jacks	Standard jack × 2
Audio In jack	Output Impedance: 2.3 kΩ, Output Voltage: 1.5 V (RMS) MAX Stereo mini jack
Inst In Jack	Input Impedance: 9 kΩ, Input Sensitivity: 200 mV Standard jack
Mic In jack	Input Impedance: 9 kΩ, Input Sensitivity: 200 mV Standard jack (connect a dynamic microphone only) Input Impedance: 3 kΩ, Input Sensitivity: 10 mV
Power Jack	12 V DC
Power Supply	2-way
Batteries	6 D-size zinc-carbon batteries or alkaline batteries
Battery Life	Approximately 4 hours continuous operation on alkaline batteries
AC Adaptor	AD-A12150LW
Auto Power Off	Approximately 6 minutes after last key operation during battery use, approximately 4 hours after last key operation during AC adaptor use. Auto Power Off can be disabled.
Speakers	12 cm × 2 + 3 cm × 2 (Output: 7.0 W + 7.0 W)
Power Consumption	12 V --- 18 W
Dimensions	118.7 × 39.9 × 14.9 cm (46 ³ / ₄ × 15 ³ / ₄ × 5 ⁷ / ₈ inch)
Weight	Approximately 8.9 kg (19.6 lbs) (without batteries)

BLOCK AND WIRING DIAGRAM



PCB INFORMATION



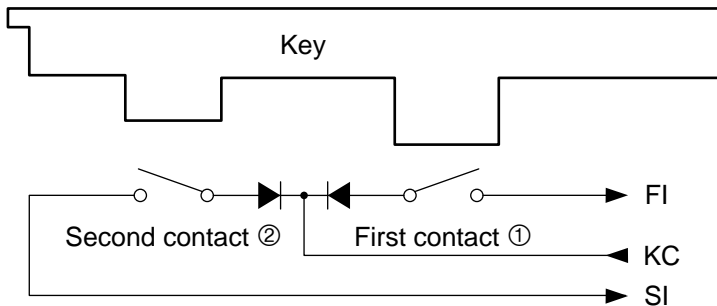
Classification	Parts Name	PCB Name	Components
Main PCB	PCB UNIT / MAIN	M830-MDA1	MPU, Power Supply Unit, SRAM (4 Mbit) Flash Memory (128 Mbit), P2ROM (128 Mbit), Key Controller, SD Card Slot, USB Port
Power Amp PCB	PCB UNIT / POWER AMP	M830-PSA1	Power Supply Unit, Headphone Amplifiers, Power Amplifiers, PHONES Jack, LINE OUT R, L/MONO Jacks, DC 12 V IN Jack, SUSTAIN/ASSIGNABLE Jack, AUDIO IN Jack, MIC IN Jack, INST IN Jack
Sub PCB	BACK LIGHT ASSY	M830-LCA1	LCD, Button/LCD Controller, LCD Driver
Console PCB	PCB UNIT / CNA1	M830-CNA1	Buttons
		M830-CNA5	
	PCB UNIT / CNA2	M830-CNA2	
	PCB UNIT / CNB1	M831-CNB1	
	PCB UNIT / CNC1	M831-CNC1	Drawbar
Modulation PCB	PCB UNIT / CNA4	M830-CNA4	Modulation
Backlight PCB	PCB UNIT / CNA3	M830-CNA3	LCD Backlight
Volume PCB	PCB UNIT / PSA2	M830-PSA2	Main Volume, Mic Volume
Dial PCB	PCB UNIT / PSA3	M830-PSA3	Dial
Speaker PCB	PCB / CNA6	M830-CNA6	Speaker, Buzzer
	PCB / CNA7	M830-CNA7	
Keyboard PCB	PCB UNIT / KEYBOARD	M709-KYA1	Keyboard
		M709-KYA2	

CIRCUIT DESCRIPTION

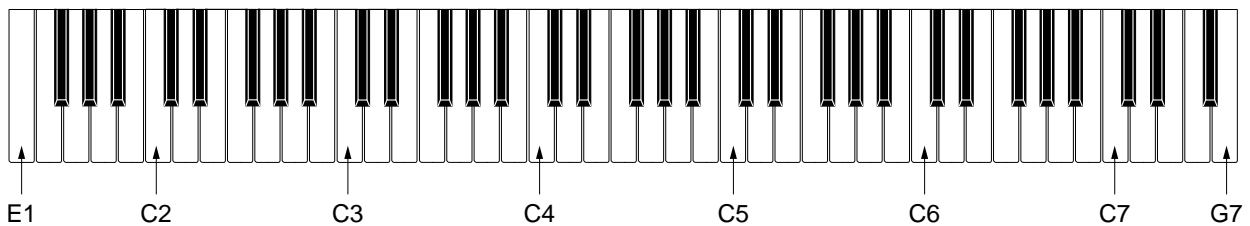
■ KEY MATRIX

	KC0	KC1	KC2	KC3	KC4	KC5	KC6	KC7
FI0		E1①	F1①	F1#①	G1①	G1#①	A1①	A1#①
SI0		E1②	F1②	F1#②	G1②	G1#②	A1②	A1#②
FI1	B1①	C2①	C2#①	D2①	D2#①	E2①	F2①	F2#①
SI1	B1②	C2②	C2#②	D2②	D2#②	E2②	F2②	F2#②
FI2	G2①	G2#①	A2①	A2#①	B2①	C3①	C3#①	D3①
SI2	G2②	G2#②	A2②	A2#②	B2②	C3②	C3#②	D3②
FI3	D3#①	E3①	F3①	F3#①	G3①	G3#①	A3①	A3#①
SI3	D3#②	E3②	F3②	F3#②	G3②	G3#②	A3②	A3#②
FI4	B3①	C4①	C4#①	D4①	D4#①	E4①	F4①	F4#①
SI4	B3②	C4②	C4#②	D4②	D4#②	E4②	F4②	F4#②
FI5	G4①	G4#①	A4①	A4#①	B4①	C5①	C5#①	D5①
SI5	G4②	G4#②	A4②	A4#②	B4②	C5②	C5#②	D5②
FI6	D5#①	E5①	F5①	F5#①	G5①	G5#①	A5①	A5#①
SI6	D5#②	E5②	F5②	F5#②	G5②	G5#②	A5②	A5#②
FI7	B5①	C6①	C6#①	D6①	D6#①	E6①	F6①	F6#①
SI7	B5②	C6②	C6#②	D6②	D6#②	E6②	F6②	F6#②
FI8	G6①	G6#①	A6①	A6#①	B6①	C7①	C7#①	D7①
SI8	G6②	G6#②	A6②	A6#②	B6②	C7②	C7#②	D7②
FI9	D7#①	E7①	F7①	F7#①	G7①			
SI9	D7#②	E7②	F7②	F7#②	G7②			

Each key has two contacts, the first contact ① and second contact ②.



■ NOMENCLATURE OF KEYS

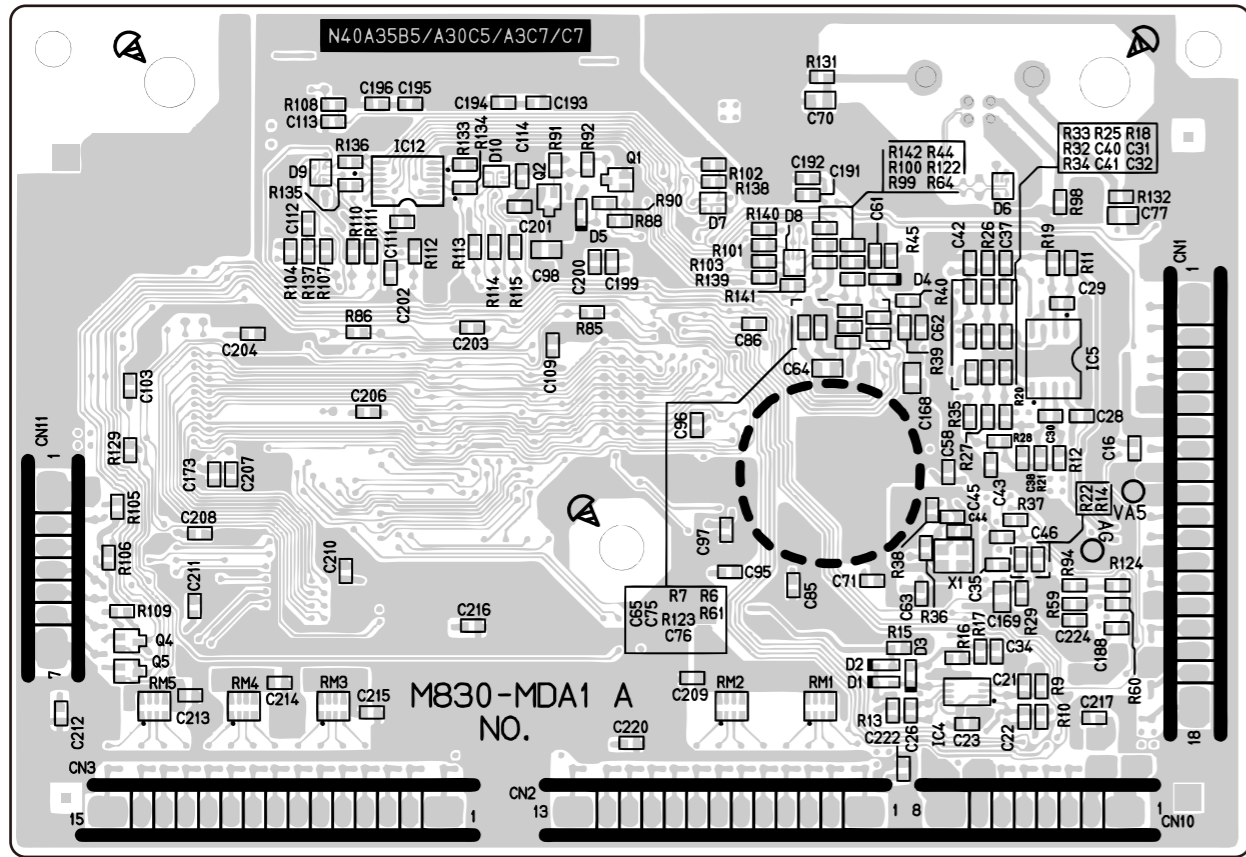


■ **BUTTON MATRIX**

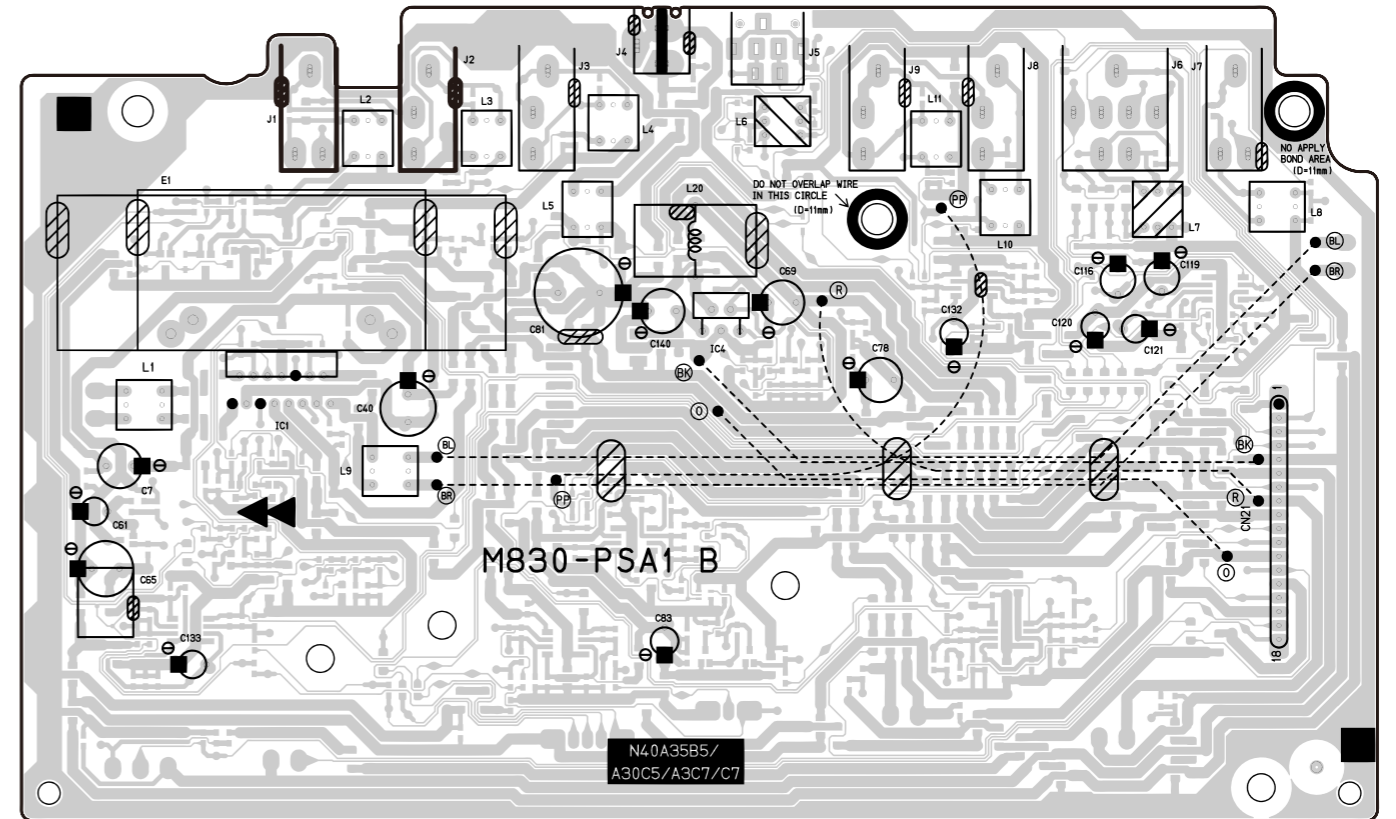
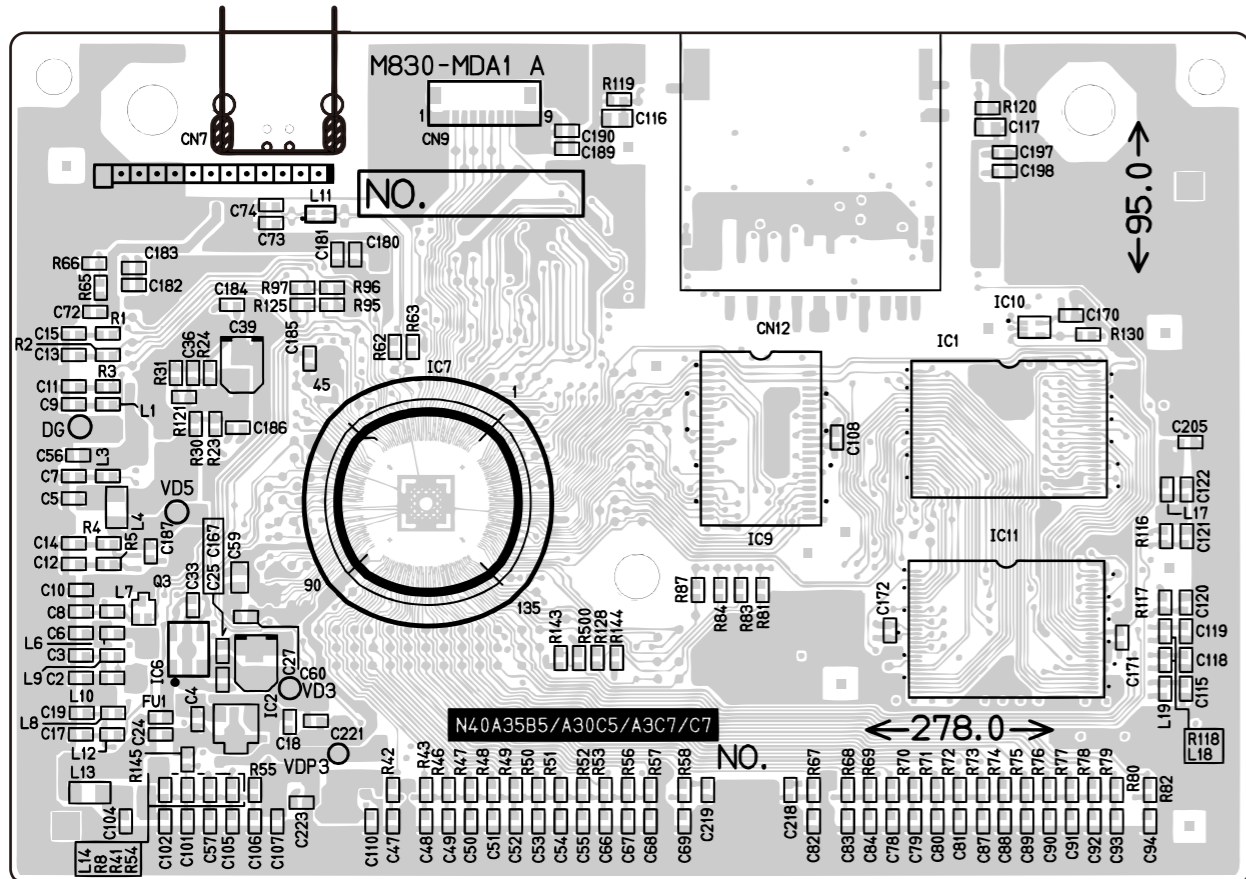
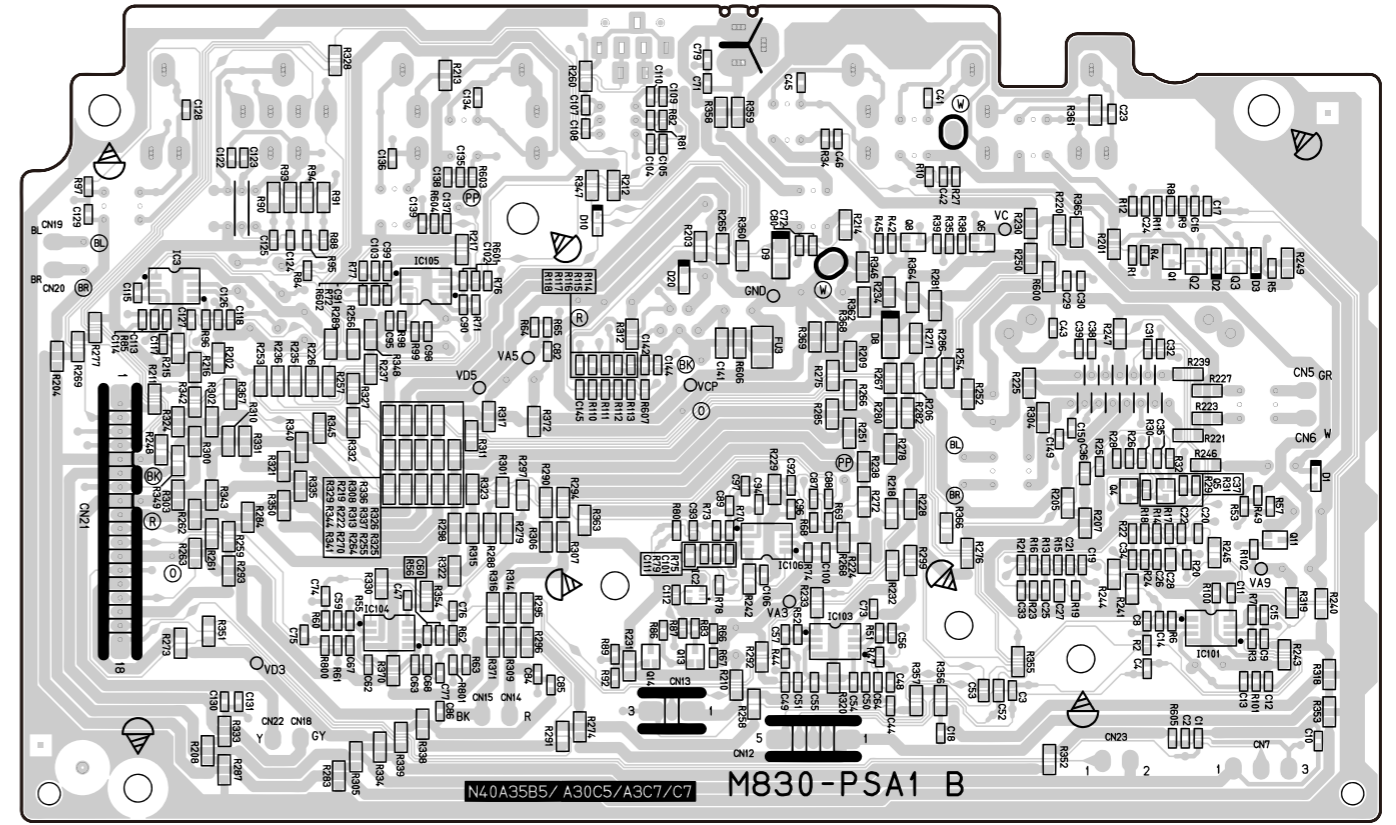
	KC0	KC1	KC2	KC3	KC4	KC5	KC6	KC7
KI0	ACCOMP ON/OFF, ↓ CHORDS, PART SELECT, DEMO	VARIATION/ FILL-IN, ▶▶FF	NORMAL/ FILL-IN, ◀◀REW	STORE, (F+)MENU	MIXER, (F+) EFFECT	AUDIO PLAY	RECORD	
KI1	SYNCHRO/ ENDING, PAUSE	START/STOP, PLAY/STOP, DEMO	INTRO, REPEAT	BANK, DELETE	SONG SEQUENCER, (F+)EDIT	CARD, (F+) LOAD/ SAVE	AUDIO RECORD	
KI2		TONE EDITOR, (F+)SCALE	6	ENTER	▼	>	[F] BRASS	
KI3	5	4, STEP	PATTERN SEQUENCER, (F+)EDIT	<	EXIT	[E] STRINGS, REST	^	
KI4	[F] USER RHYTHMS	[C] LATIN	TEMPO ^, (F+)TAP	LAYER, ↓OCTAVE	[L] DRAWBAR ORGAN, ↓MANUAL	[K] USER TONES, ~(TIE)	[D] GUITAR/BASS, •	ROTARY SLOW/FAST, PART/ COMMON
KI5	TEMPO ▼	[E] PIANO RHYTHMS, ONE TOUCH PRESET	[B] JAZZ/ EUROPEAN	YES/^/+	[I] OTHERS, ♪	[J] GM/DRUMS, r3r	[C] ORGAN, ♪	PERCUSSION SECOND, GROUP A/B
KI6	[D] WORLD/ VARIOUS, MUSIC PRESET	[A] POPS/ROCK/ DANCE	METRONOME, ↓BEAT	SPLIT	[H] SYNTH, ♪	NO/▼/-	[B] E. PIANO, ♪	PERCUSSION THIRD, 1-8/9-16
KI7	3, QUANTIZE	2, COPY	1, INSERT	AUTO HARMONIZE/ ARPEGGIATOR, ↓TYPE	FUNCTION	[G] REED/PIPE, ♪	[A] PIANO, •	

PRINTED CIRCUIT BOARDS

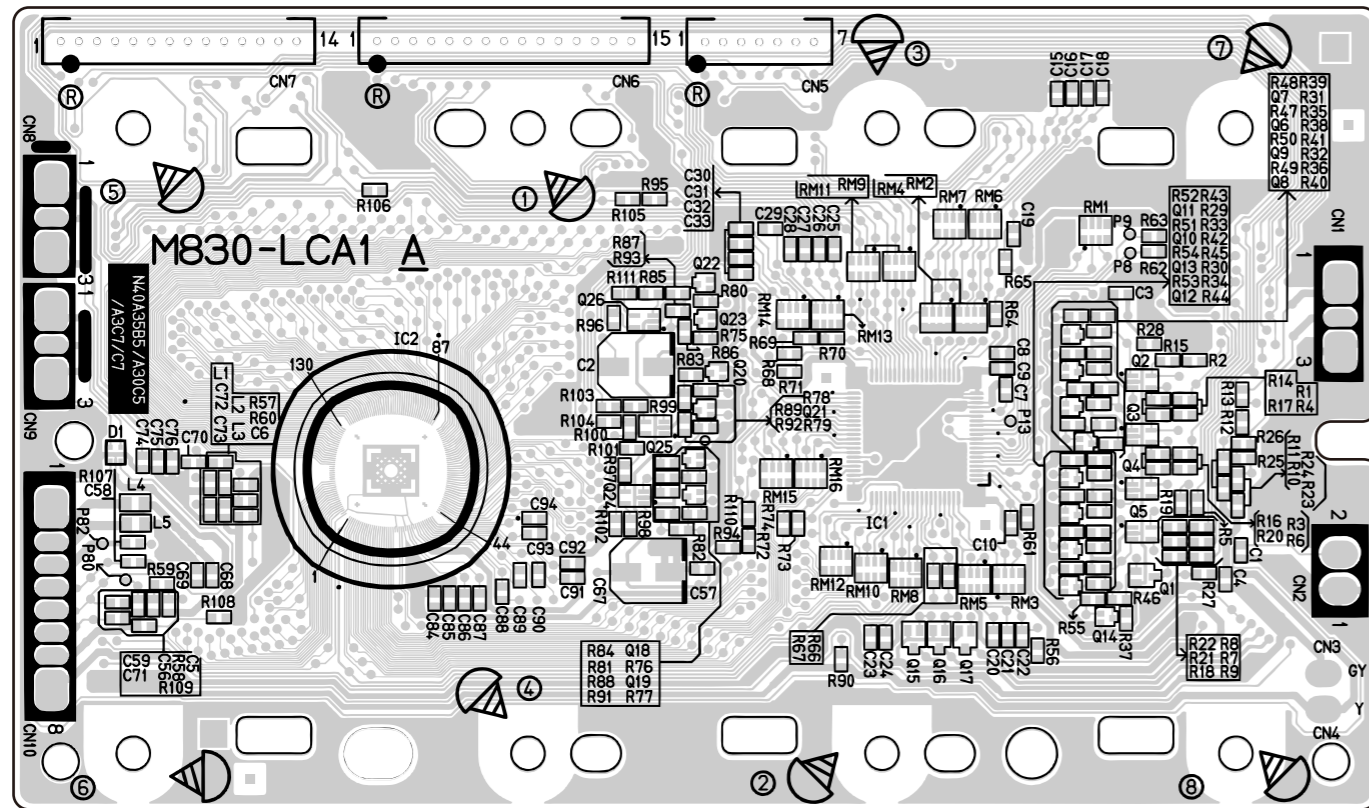
Main PCB: M830-MDA1



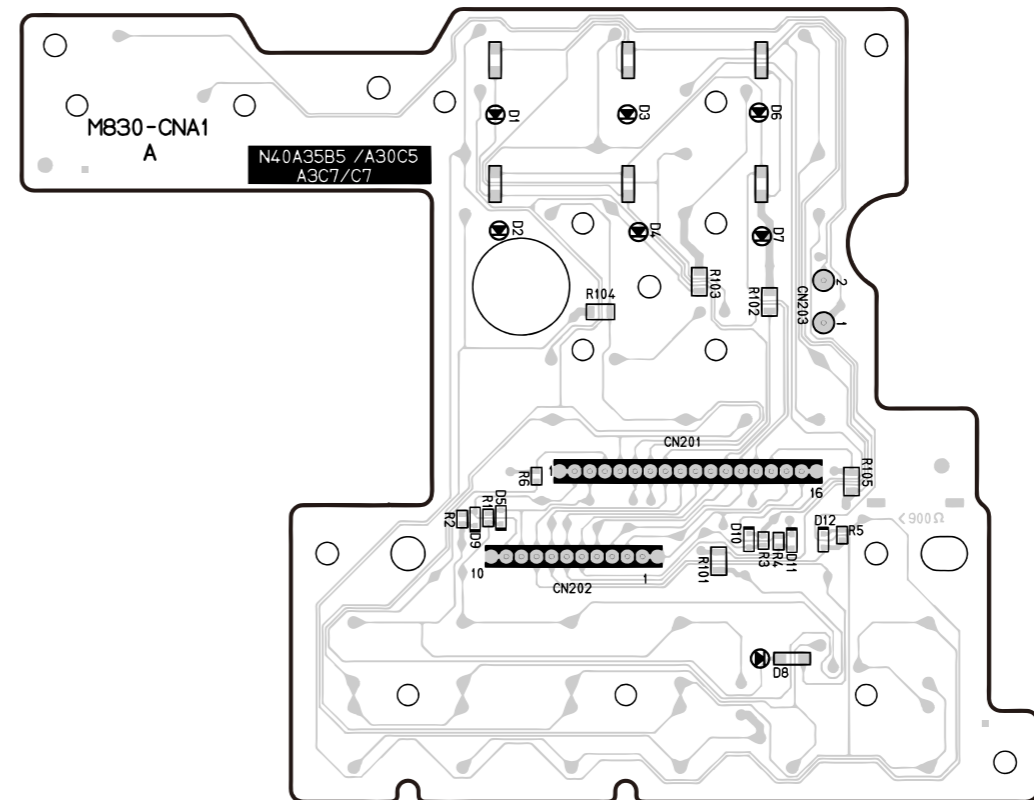
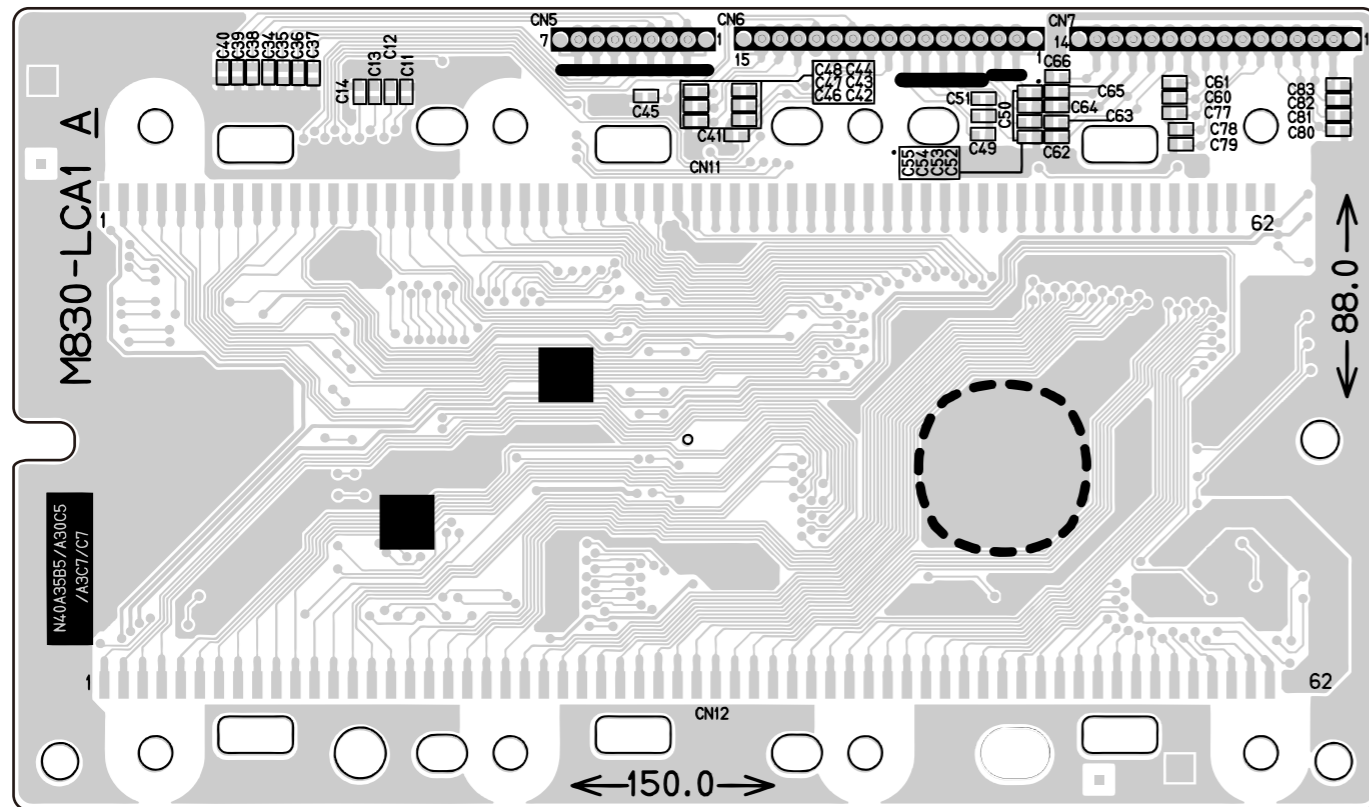
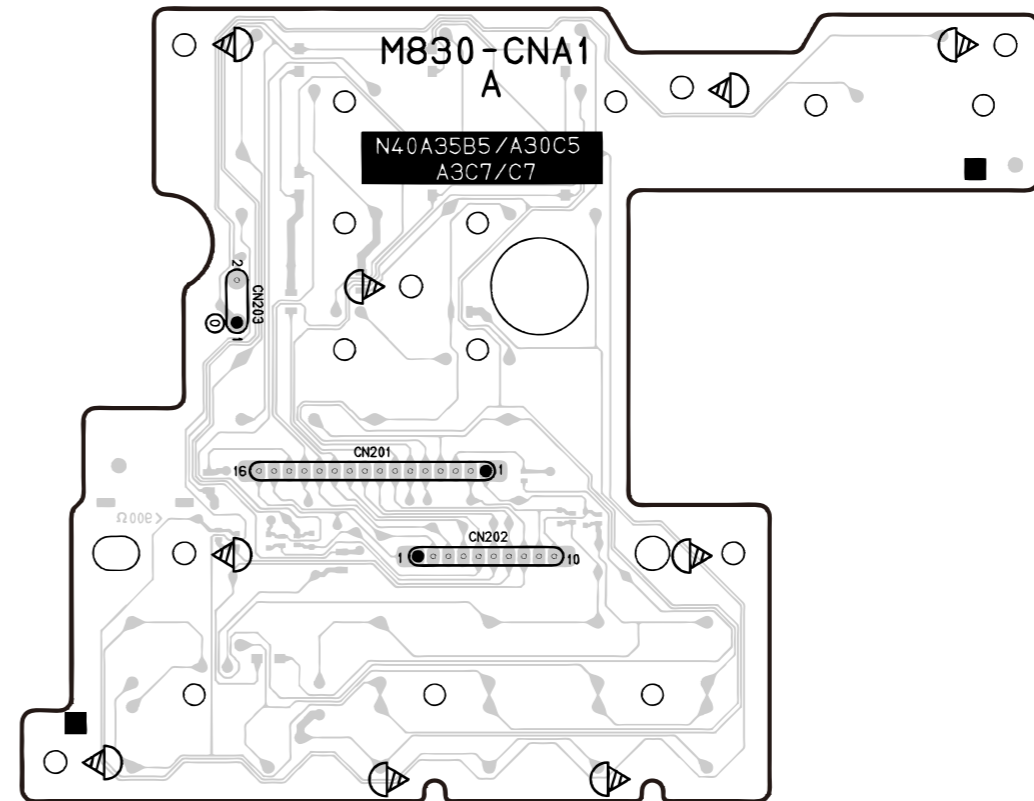
Power Amp PCB: M830-PSA1



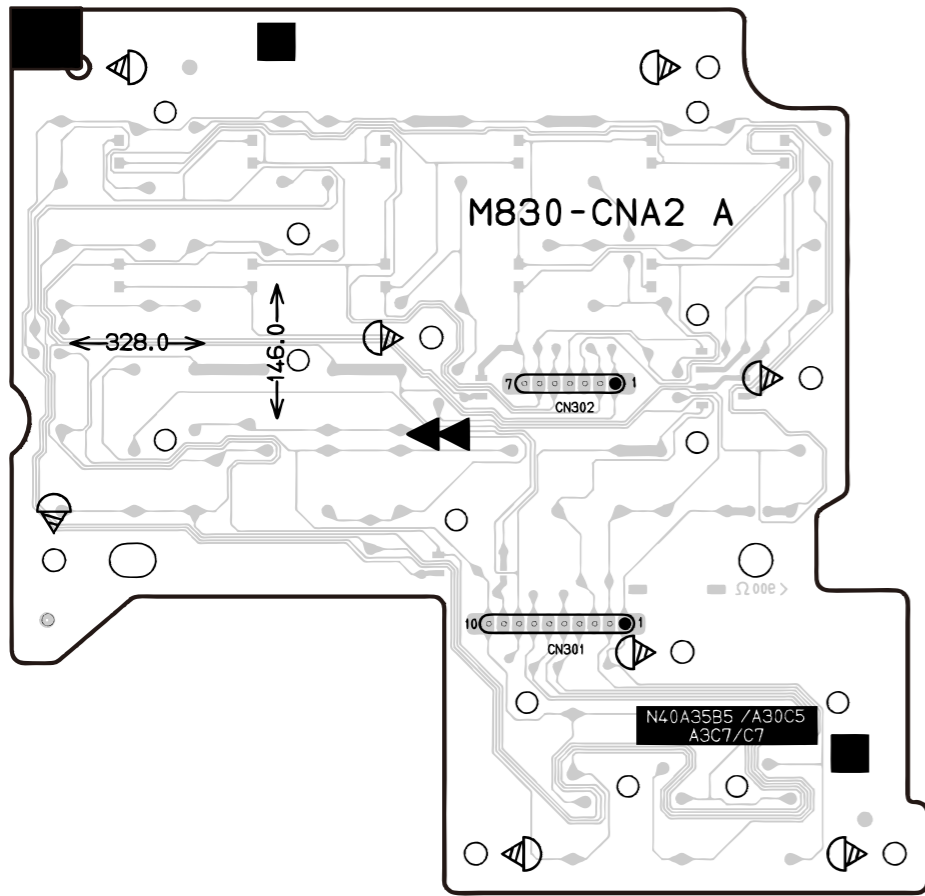
Sub PCB: M830-LCA1



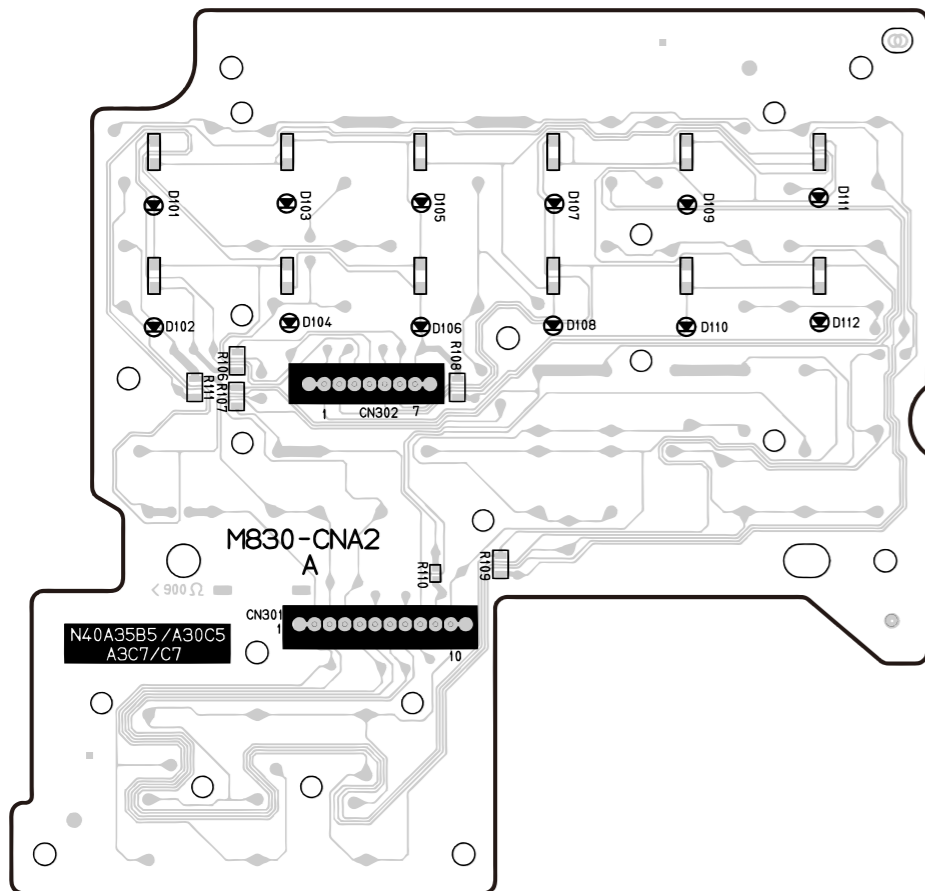
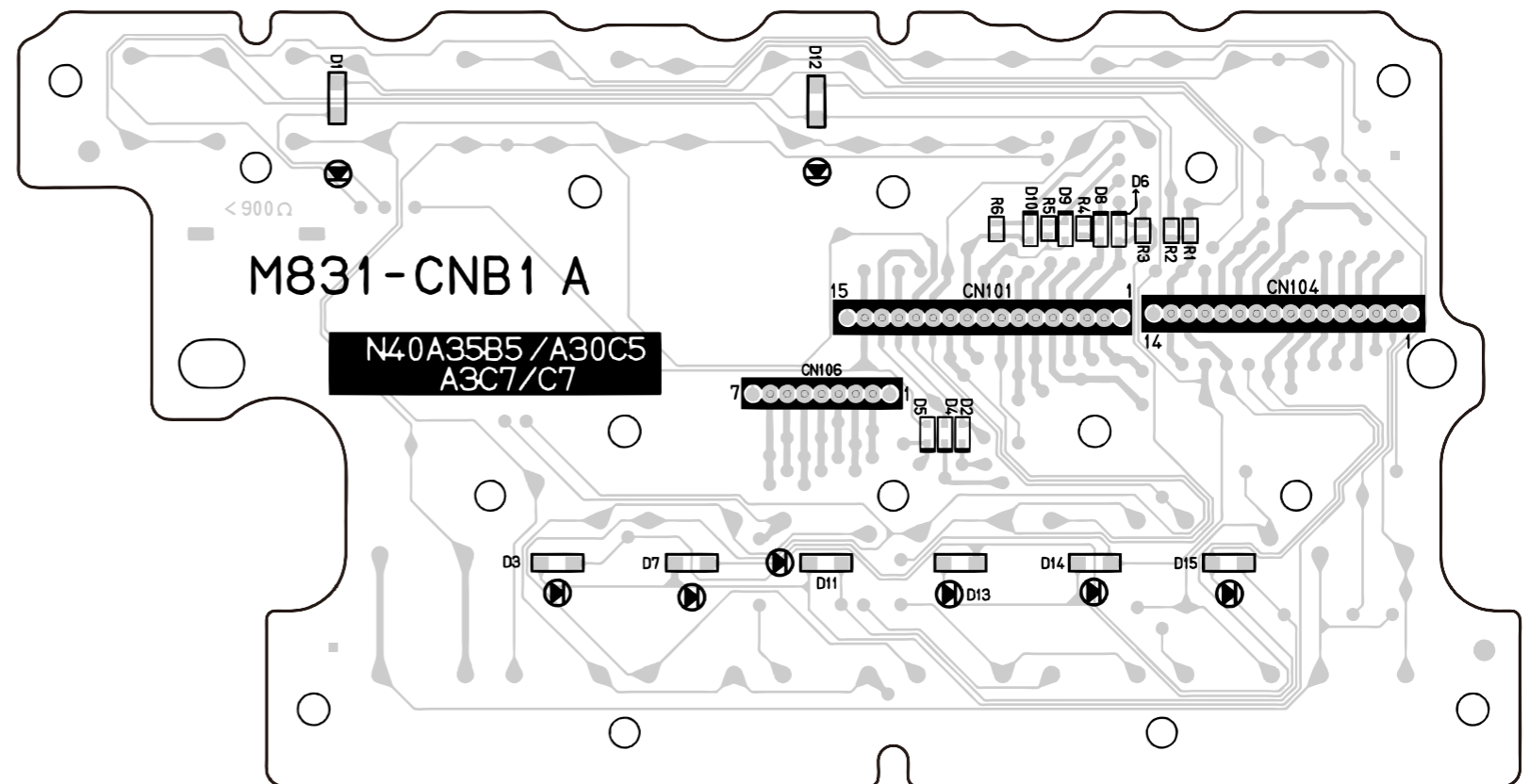
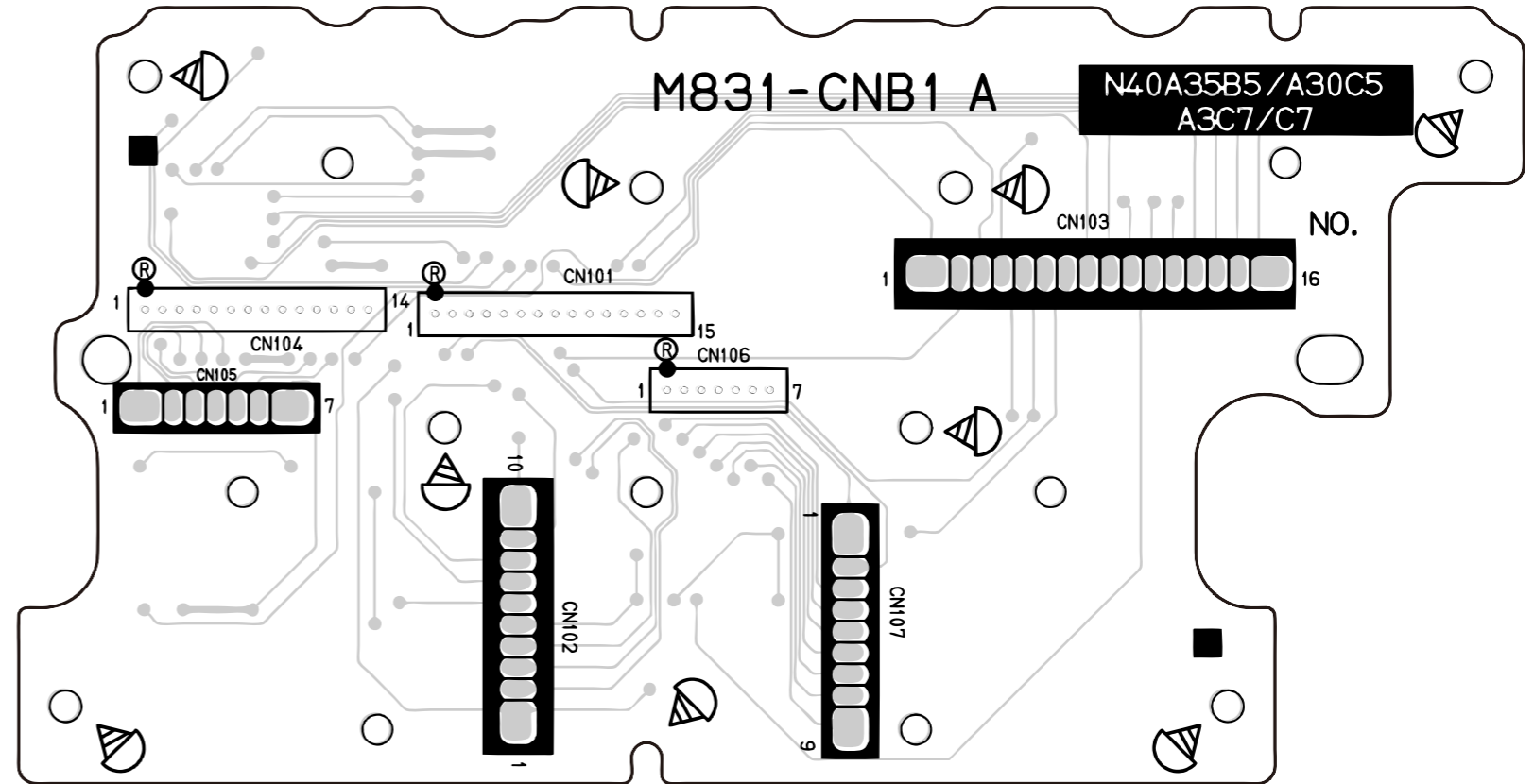
Console PCB: M830-CNA1



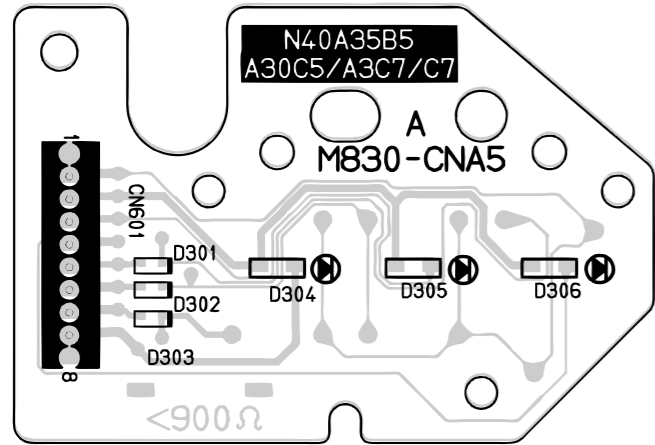
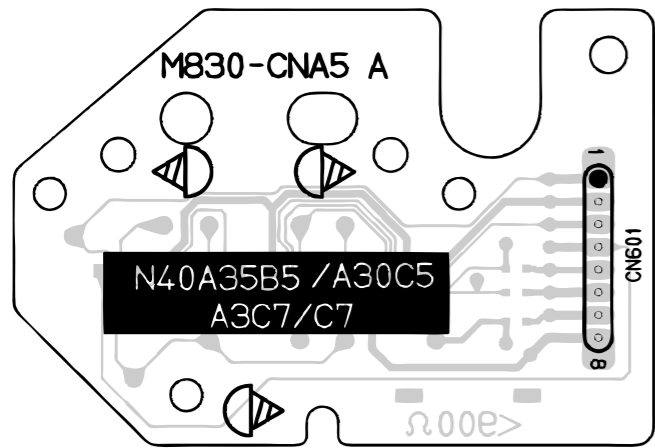
Console PCB: M830-CNA2



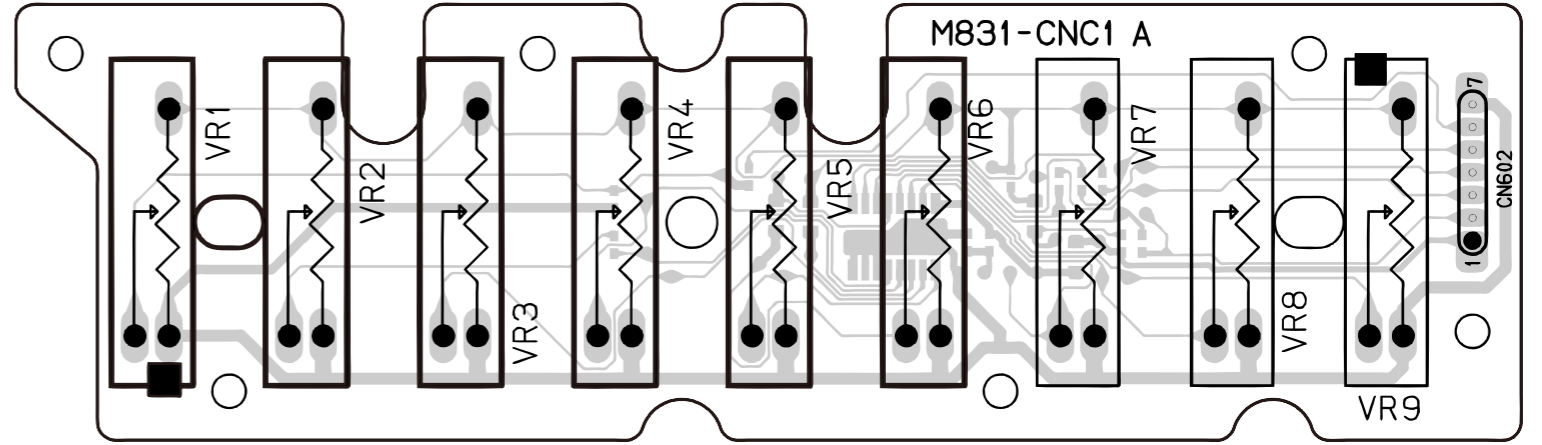
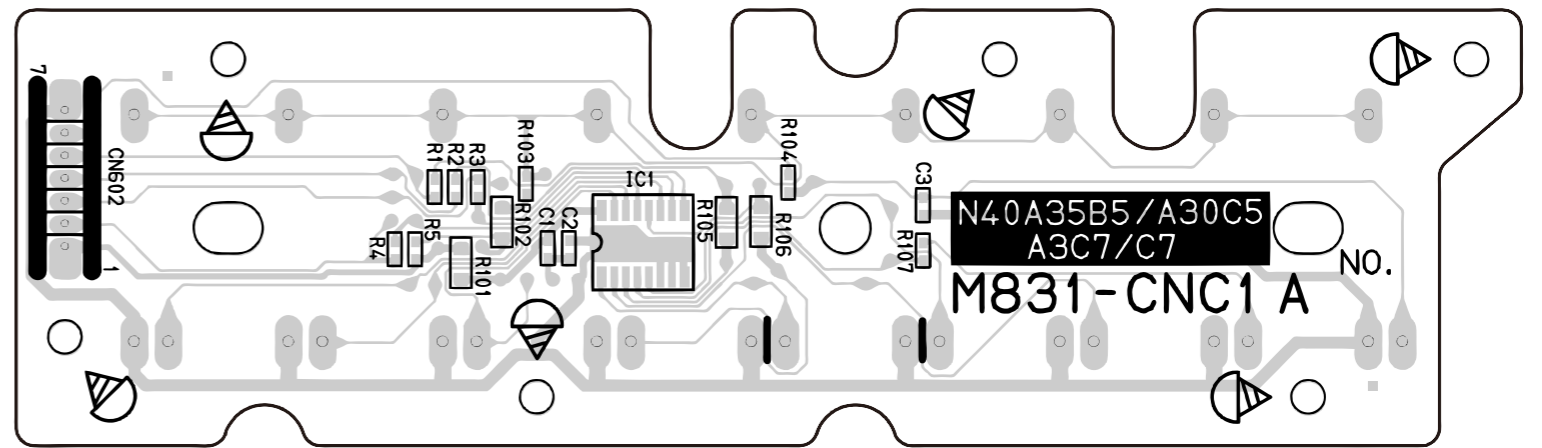
Console PCB: M831-CNB1



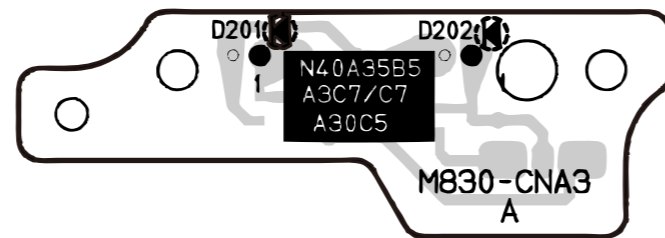
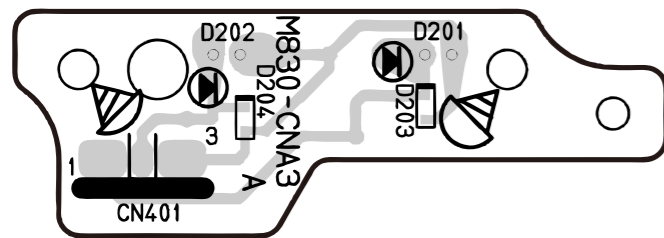
Console PCB: M830-CNA5



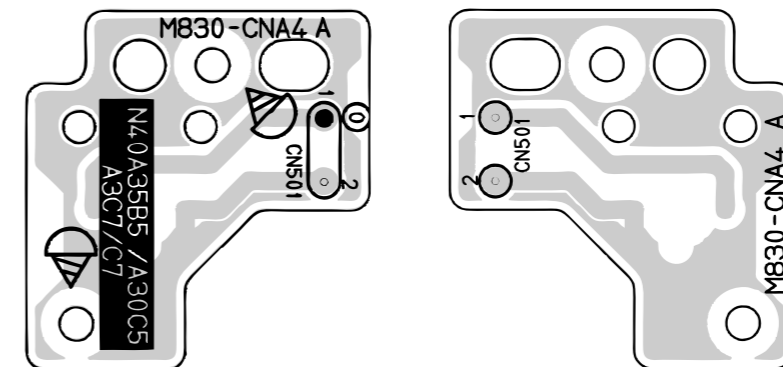
Console PCB: M831-CNC1



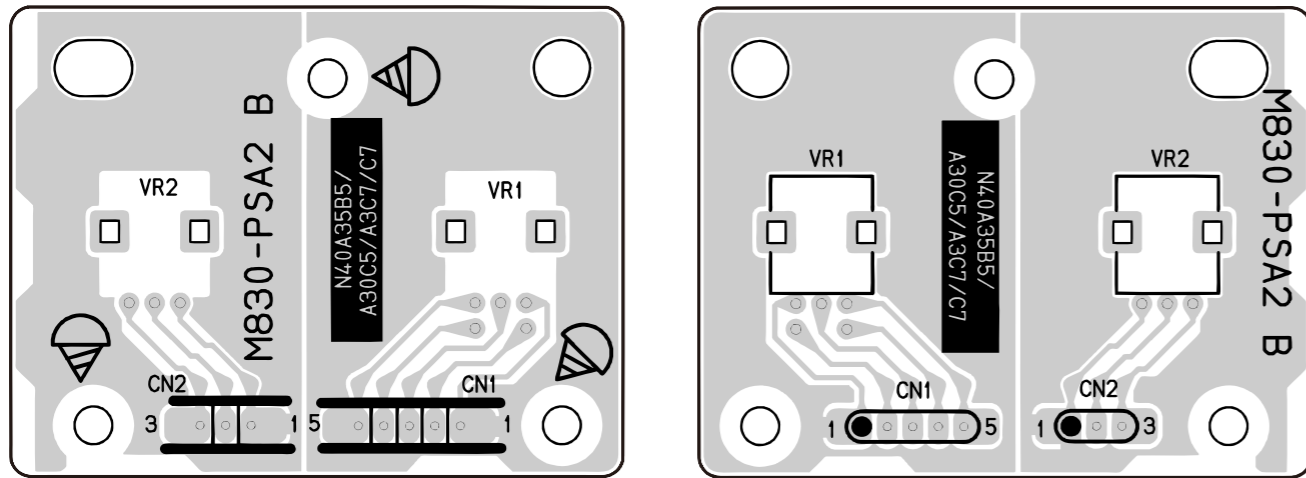
Backlight PCB: M830-CNA3



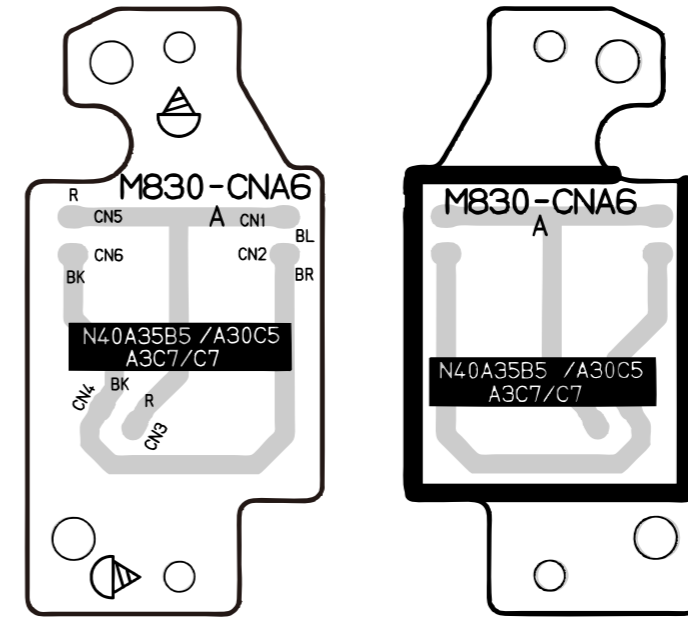
Modulation PCB: M830-CNA4



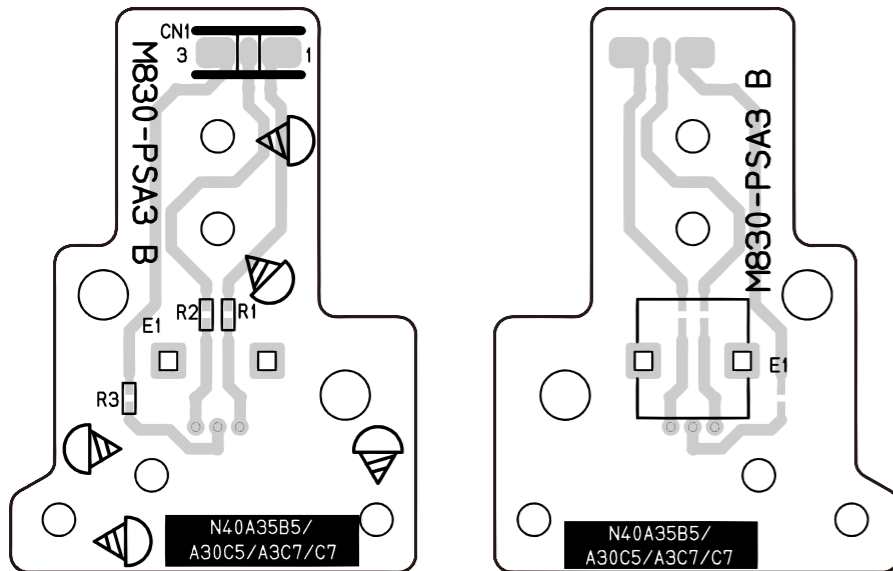
Volume PCB: M830-PSA2



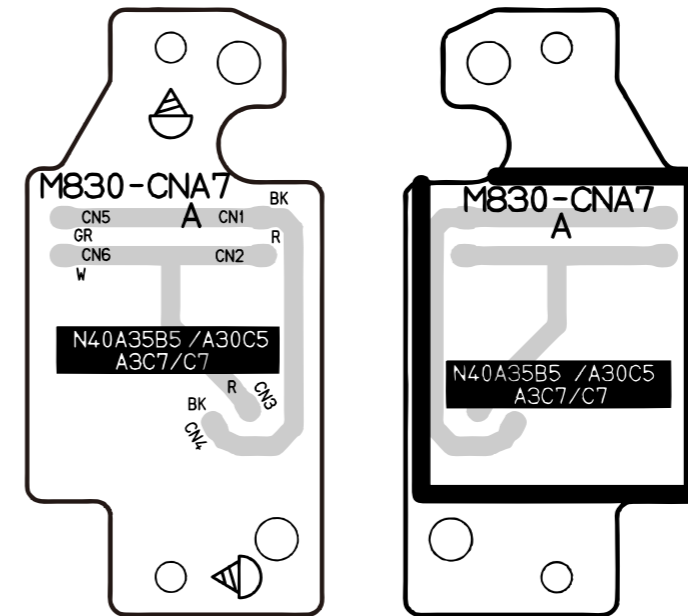
Speaker PCB: M830-CNA6



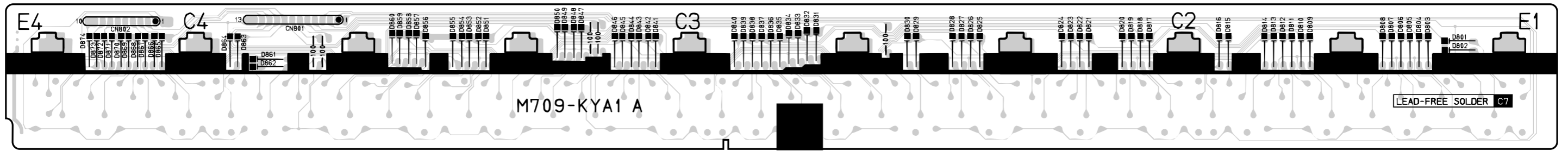
Dial PCB: M830-PSA3



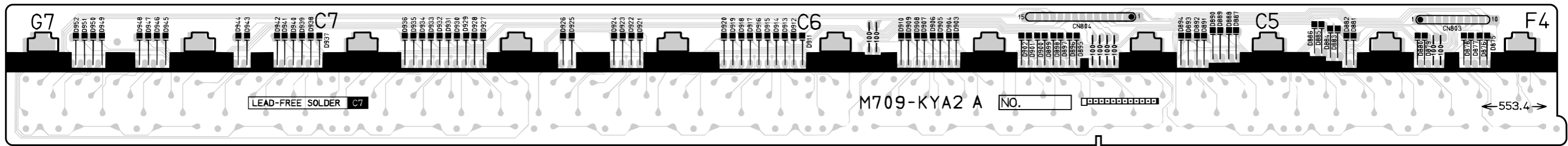
Speaker PCB: M830-CNA7



Keyboard PCB: M709-KYA1



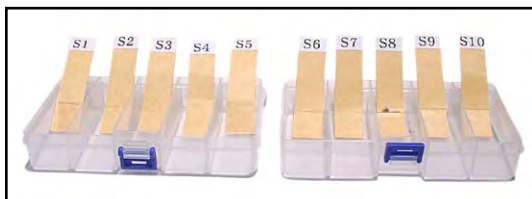
Keyboard PCB: M709-KYA2



DISASSEMBLY

■ CAUTION

- The photos show a prototype. The appearance of the instrument, such as color, may differ from the actual model.
- To avoid damages to the instrument and the floor, lay the instrument on a mattress or blanket before starting disassembling.
- There are several kinds of screws. Be sure to use the correct type of screws when reassembling. It is advisable to sort the screws as shown below after removing them.



- If a screw cap is attached to a screw, be sure to reattach the screw cap when reassembling.

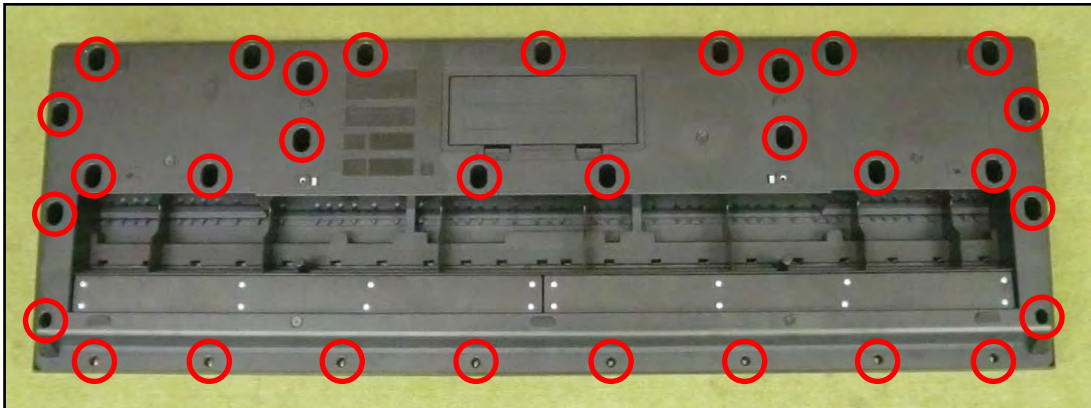
■ BEFORE STARTING REPAIR OR SERVICING

- Remove the AC adaptor or AC cord.
- Remove accessories such as the music stand.

■ DISASSEMBLY

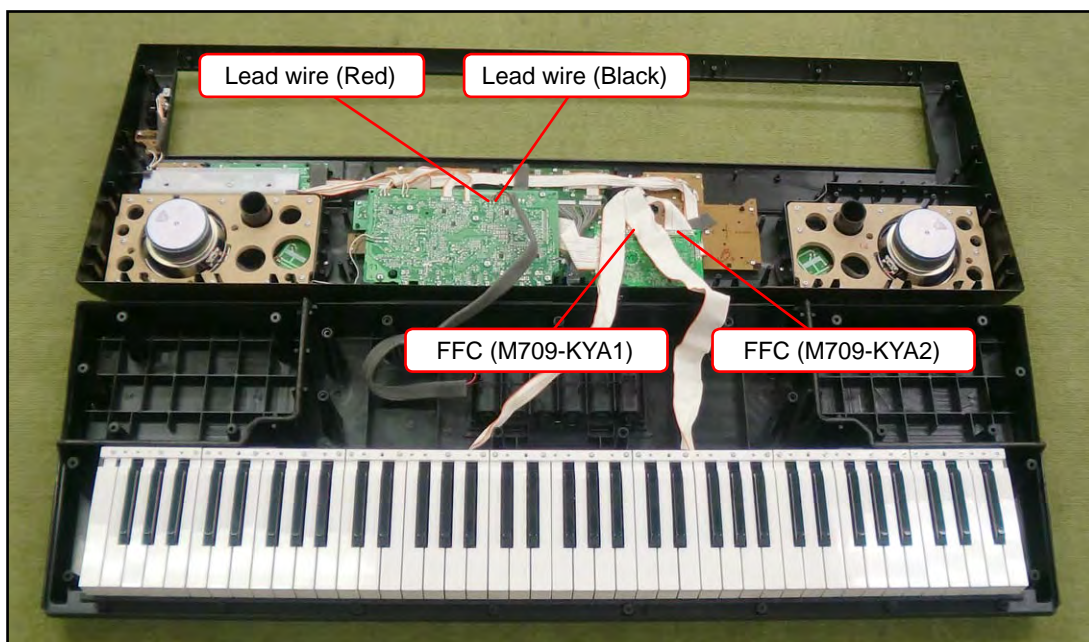
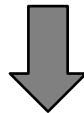
A. REMOVE THE UPPER CASE UNIT

A-1. Undo 31 screws on the bottom surface of the main unit.



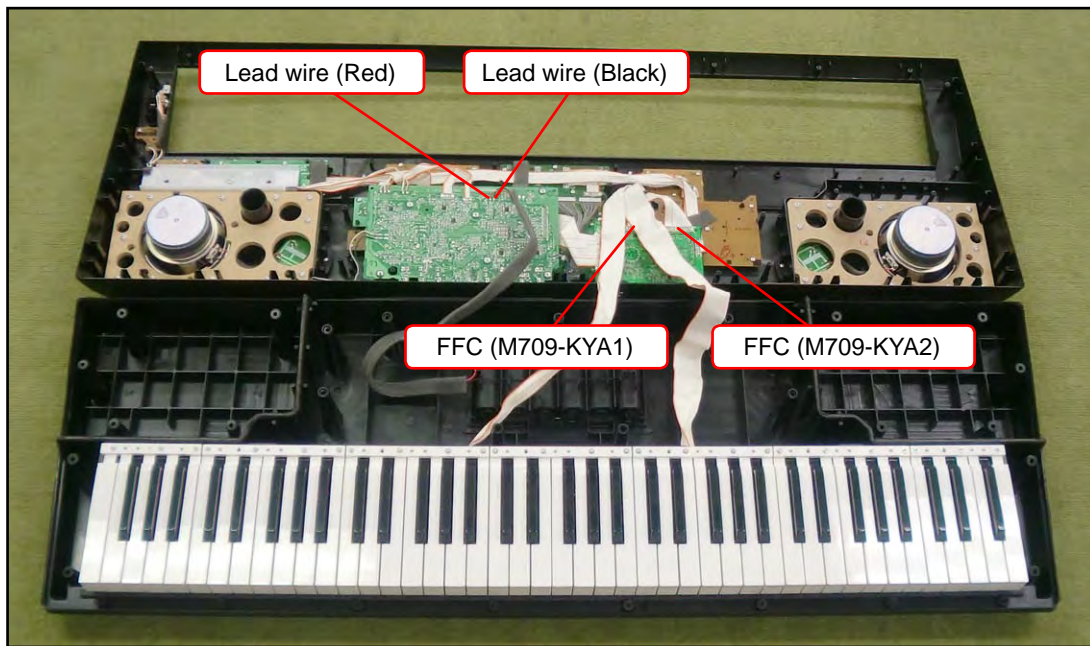
A-2. Turn over the upper case unit.

NOTE: The upper case unit is connected to the lower case unit with two lead wires and two FFCs. Use caution when turn over the upper case unit.

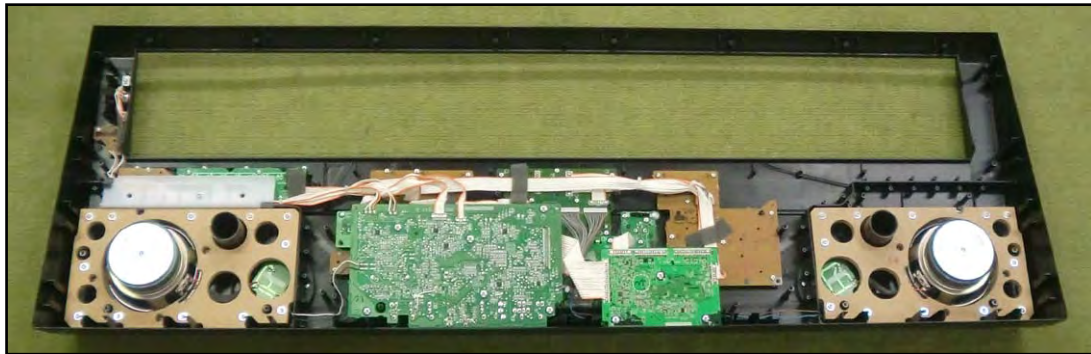


To remove the entire upper case unit, follow the steps below.

A-3. Unsolder two lead wires and two FFCs.



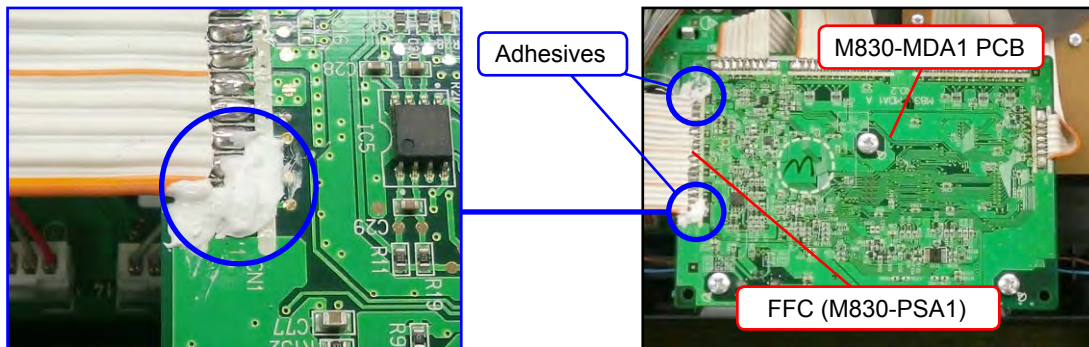
A-4. Remove the upper case unit.



B. REMOVE THE M830-MDA1 (MAIN PCB)

B-1. Remove adhesive that fixes the FFC of the M830-PSA1 PCB. There are two locations.

NOTE: Use plastic tweezers so as not to damage or scratch the PCB and FFC.

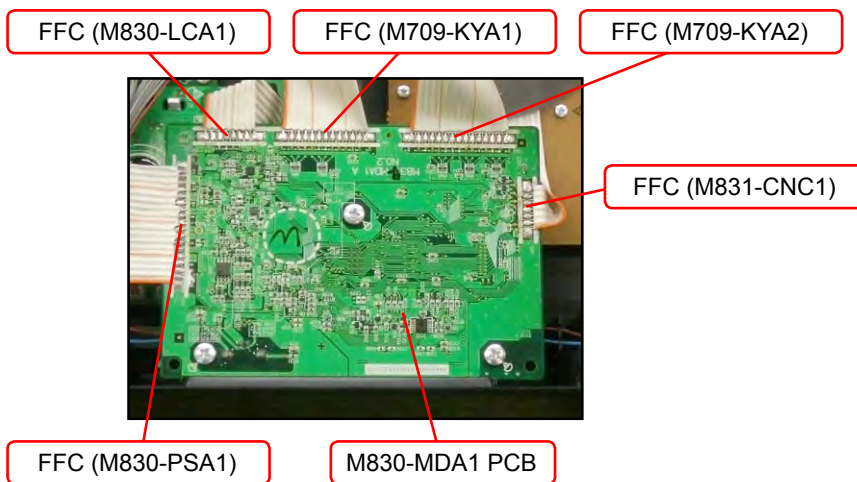


<Notes On Assembly>

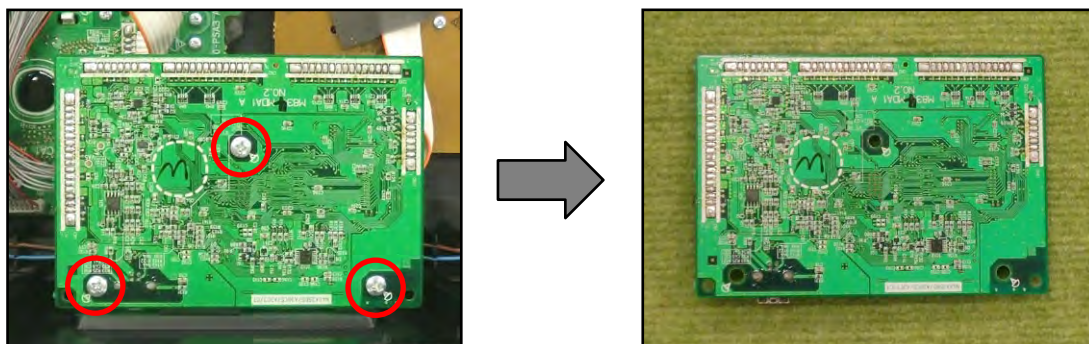
After soldering the FFC of the M830-PSA1 PCB, secure it at two locations as shown above with adhesive.

NOTE: Use SC608Z2 (Sony Chemical) for adhesive.
(Parts Code: 94817894)

B-2. Unsolder five FFCs.



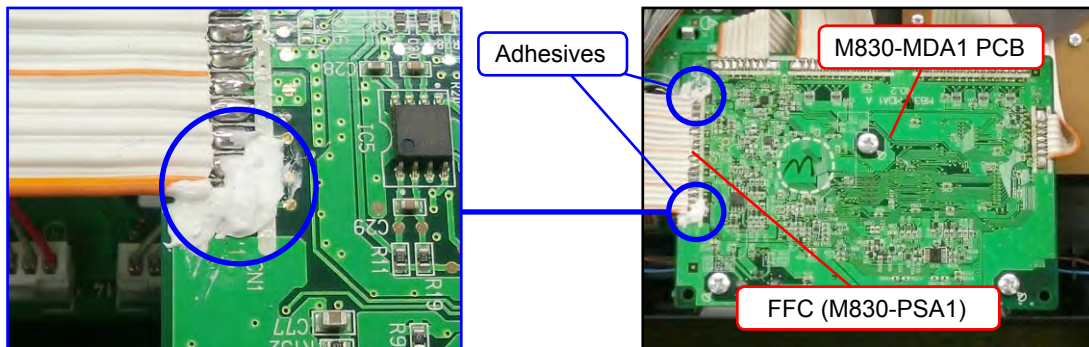
B-3. Undo three screws and then remove the M830-MDA1 PCB.



C. REMOVE THE M830-PSA1 (POWER AMP PCB)

C-1. Remove adhesive that fixes the FFC to the M830-MDA1 PCB. There are two locations.

NOTE: Use plastic tweezers so as not to damage or scratch the PCB and FFC.

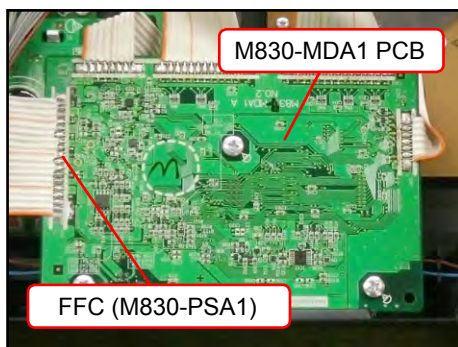


<Notes On Assembly>

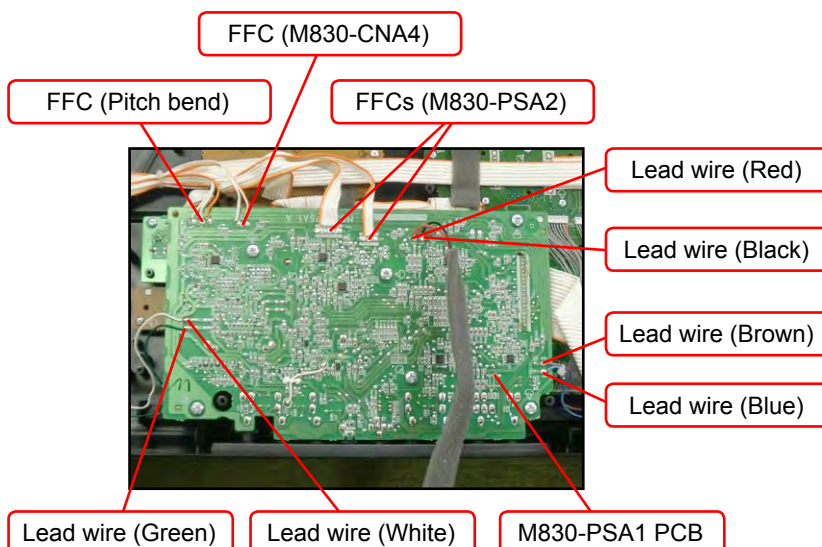
After soldering the FFC of the M830-PSA1 PCB, secure it at two locations as shown above with adhesive.

NOTE: Use SC608Z2 (Sony Chemical) for adhesive.
(Parts Code: 94817894)

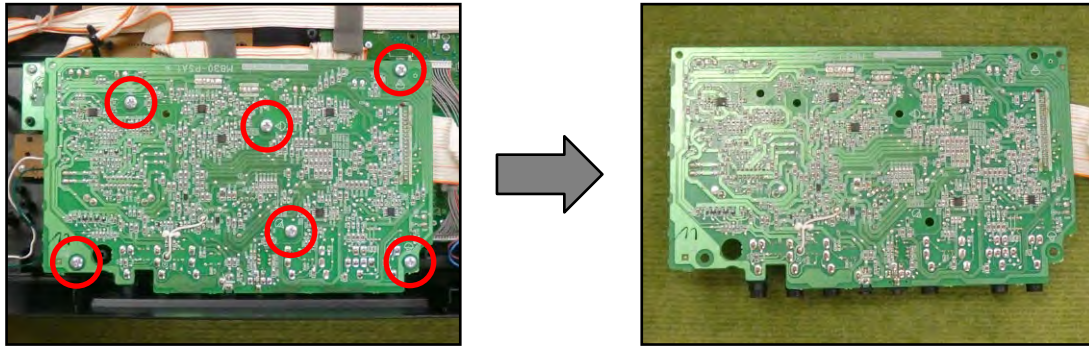
C-2. Unsolder one FFC connected to the M830-MDA1 PCB.



C-3. Unsolder six lead wires and four FFCs.

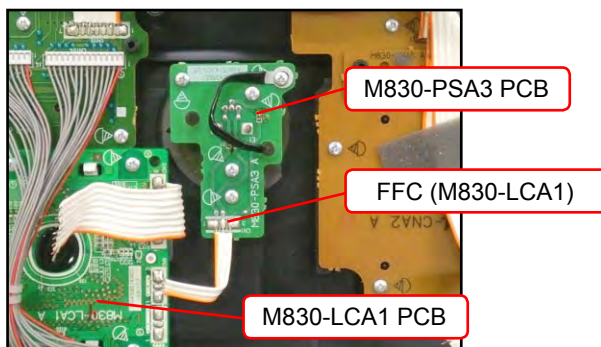


C-4. Undo six screws and then remove the M830-PSA1 PCB.



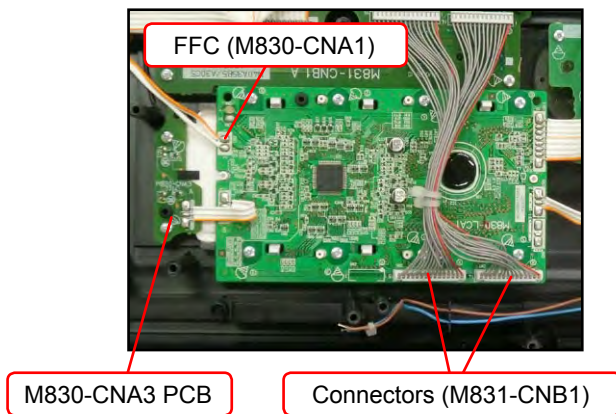
D. REMOVE THE BACK-LIGHT-ASSY (M830-LCA1/M830-CNA3)

D-1. Unsolder one FFC connected to the M830-PSA3 PCB.

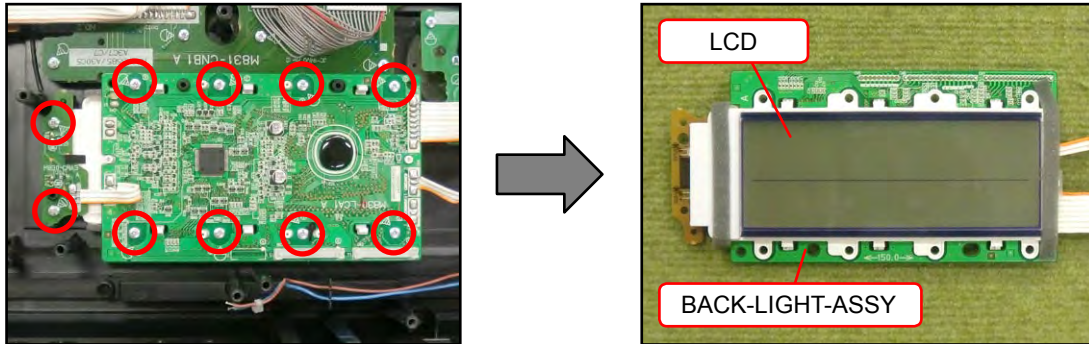


D-2. Remove two connectors.

D-3. Unsolder one FFC.

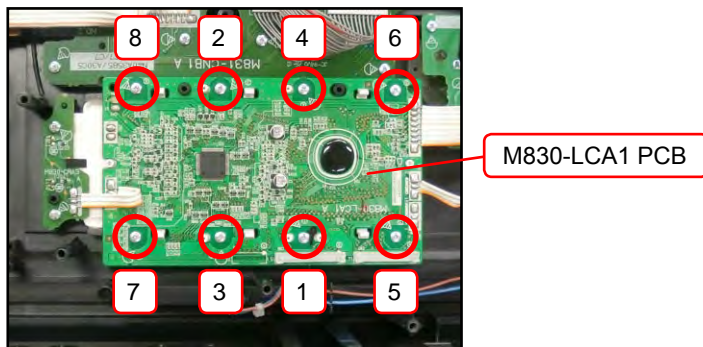


D-4. Undo 10 screws and then remove the BACK-LIGHT-ASSY.



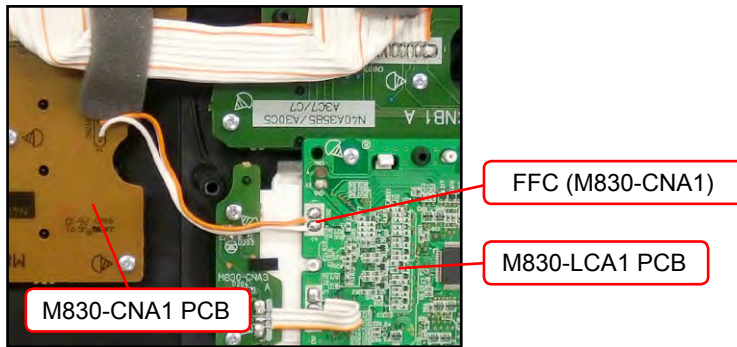
<Notes On Assembly>

To install the M830-LCA1 PCB of BACK-LIGHT-ASSY, tighten the screws for the LCD part in the order indicated with the numbers below. If not tighten correctly, it may cause the LCD display errors.

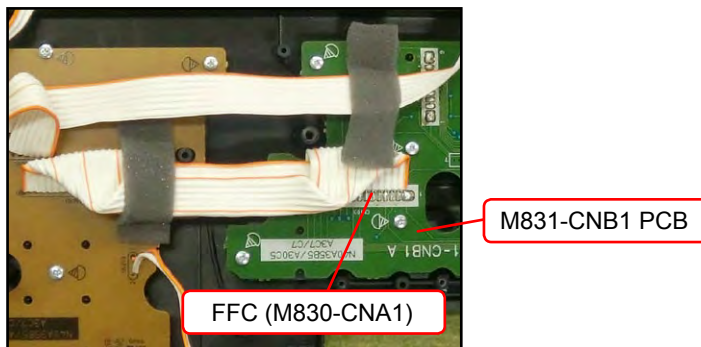


E. REMOVE THE M830-CNA1/CNA5 (CONSOLE PCB)

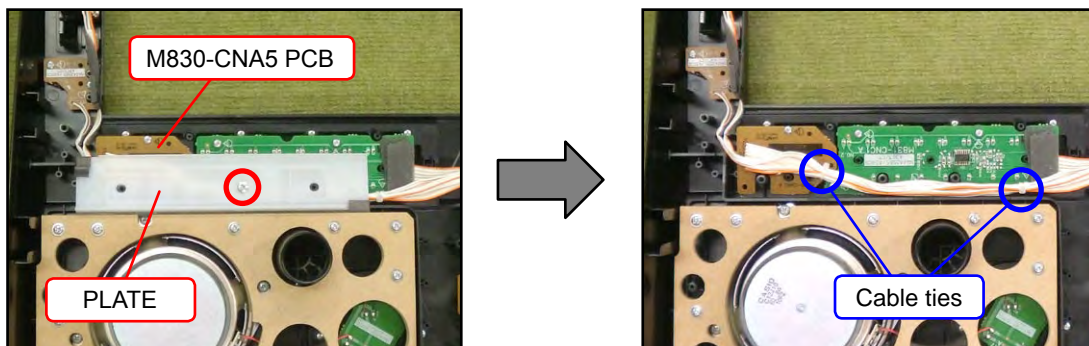
E-1. Unsolder one FFC connected to the M830-LCA1 PCB.



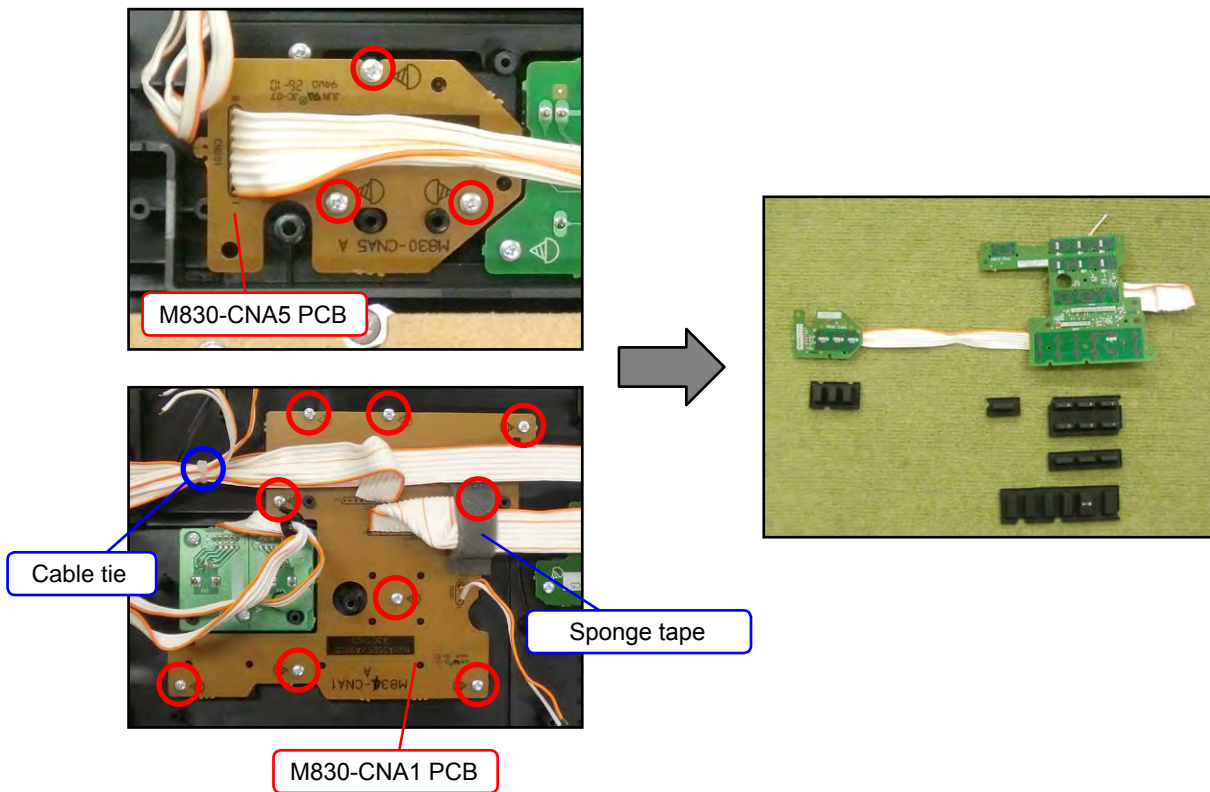
E-2. Unsolder one FFC connected to the M831-CNB1 PCB.



E-3. Undo one screw and then remove the PLATE.

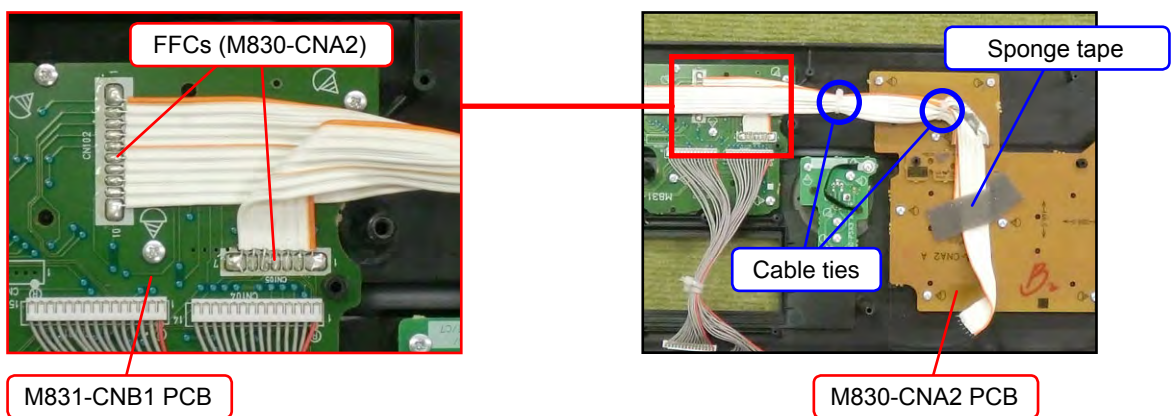


E-4. Undo 12 screws and then remove the M830-CNA1/CNA5 PCBs and rubber keys.

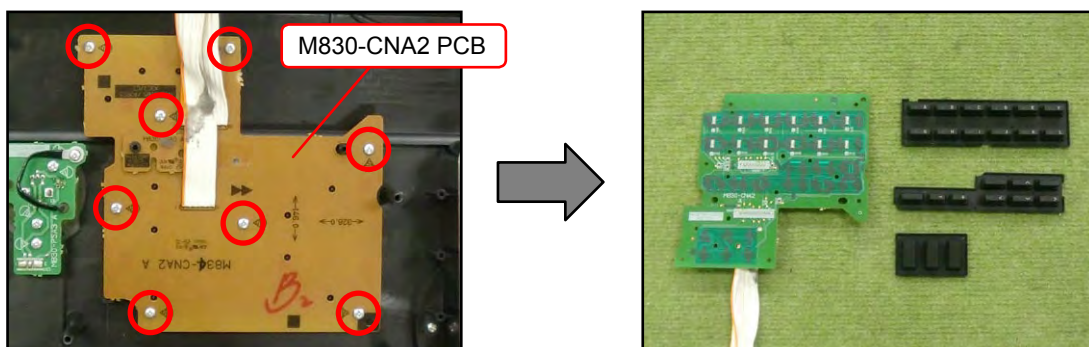


F. REMOVE THE M830-CNA2 (CONSOLE PCB)

F-1. Unsolder two FFCs connected to the M831-CNB1 PCB.

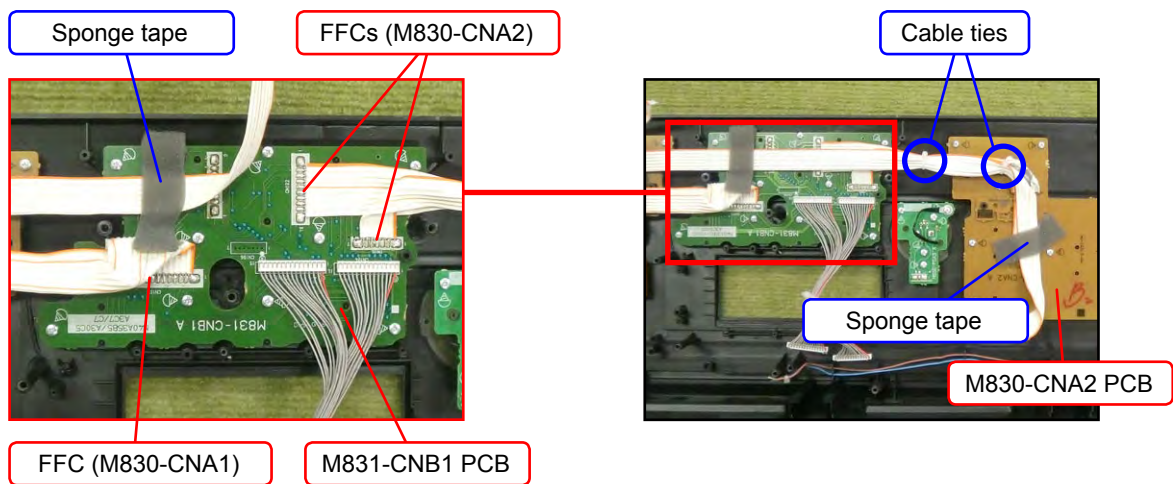


F-2. Undo eight screws and then remove the M830-CNA2 PCB and rubber keys.

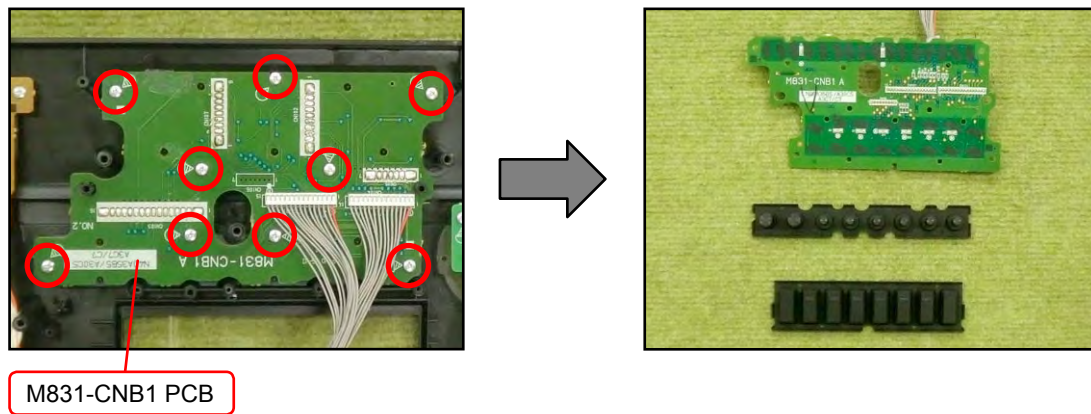


G. REMOVE THE M831-CNB1 (CONSOLE PCB)

G-1. Unsolder three FFCs.

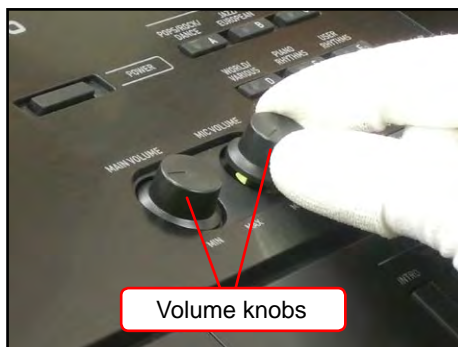


G-2. Undo nine screws and then remove the M831-CNB1 PCB and rubber keys.

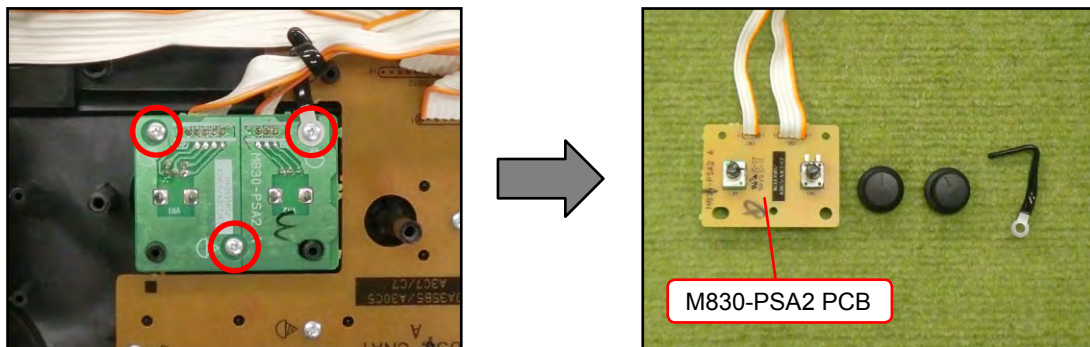


H. REMOVE THE M830-PSA2 (VOLUME PCB)

H-1. Remove two volume knobs.



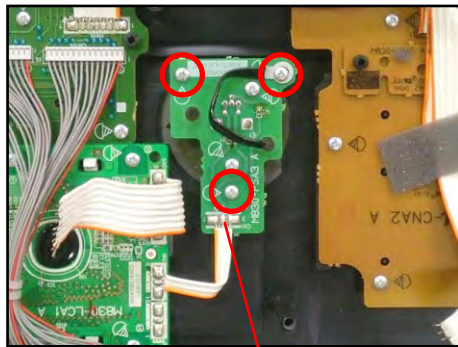
H-2. Undo three screws and then remove the M830-PSA2 PCB.



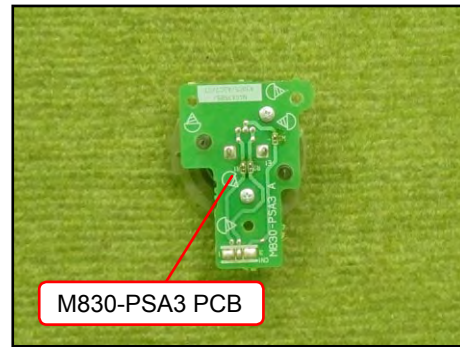
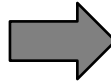
I. REMOVE THE M830-PSA3 (DIAL PCB)

I-1. Unsolder one FFC.

I-2. Undo three screws and then remove the M830-PSA3 PCB.

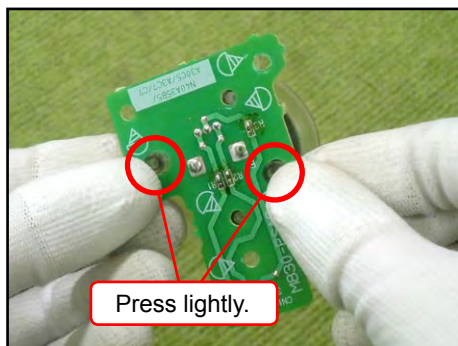
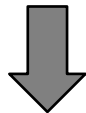
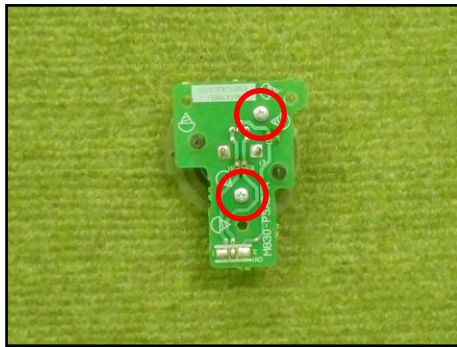


FFC (M830-LCA1)

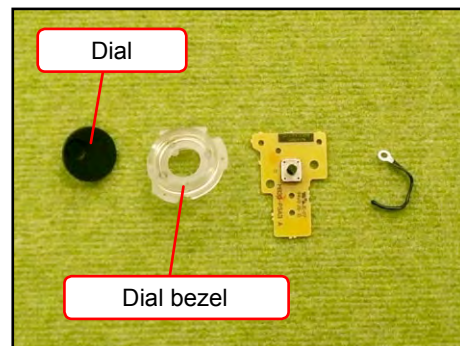
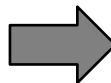


M830-PSA3 PCB

I-3. Undo two screws and then remove the dial and dial bezel.



Press lightly.

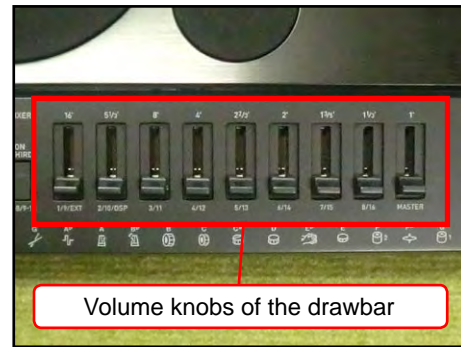
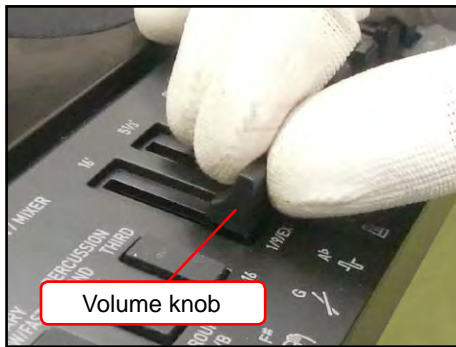


Dial

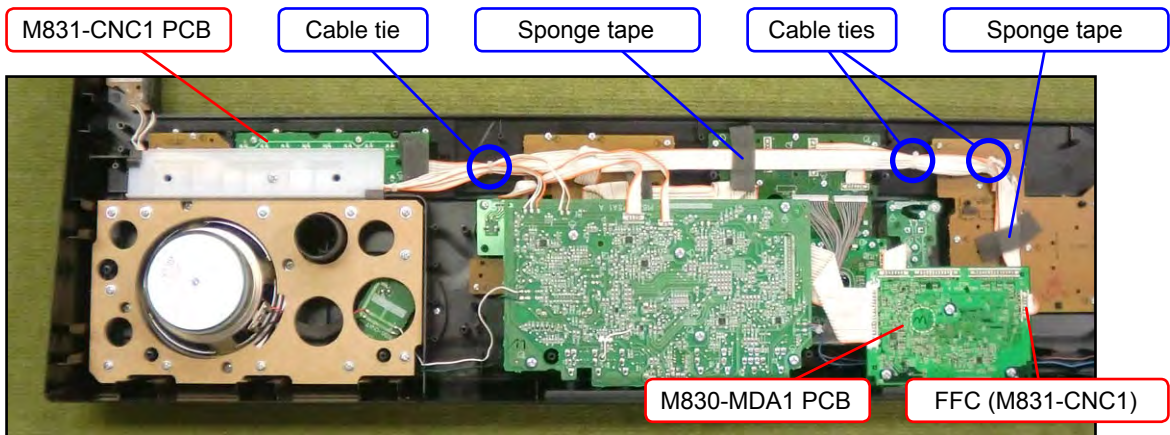
Dial bezel

J. REMOVE THE M831-CNC1 (CONSOLE PCB)

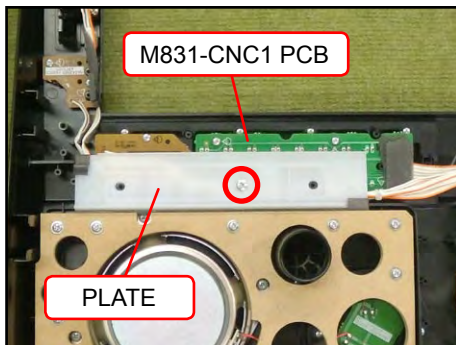
J-1. Remove nine volume knobs of the drawbar.



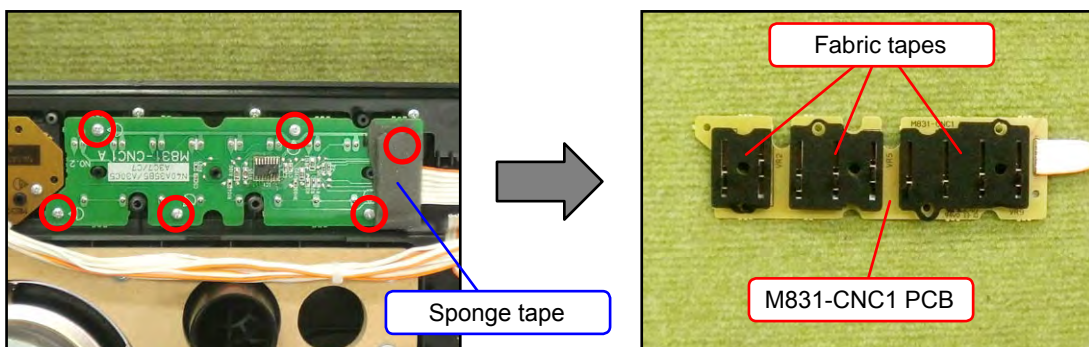
J-2. Unsolder one FFC connected to the M830-MDA1 PCB.



J-3. Undo one screw and then remove the PLATE.

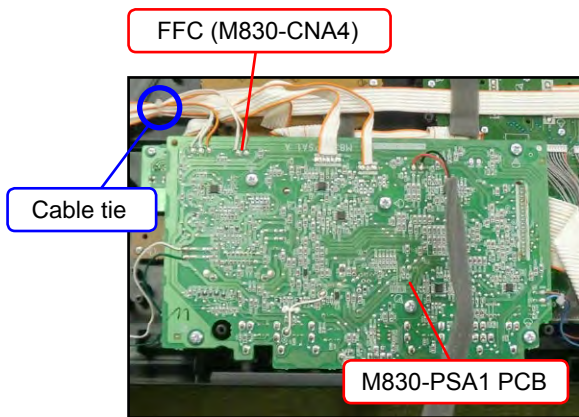


J-4. Undo six screws and then remove the M831-CNC1 PCB and three fabric tapes.

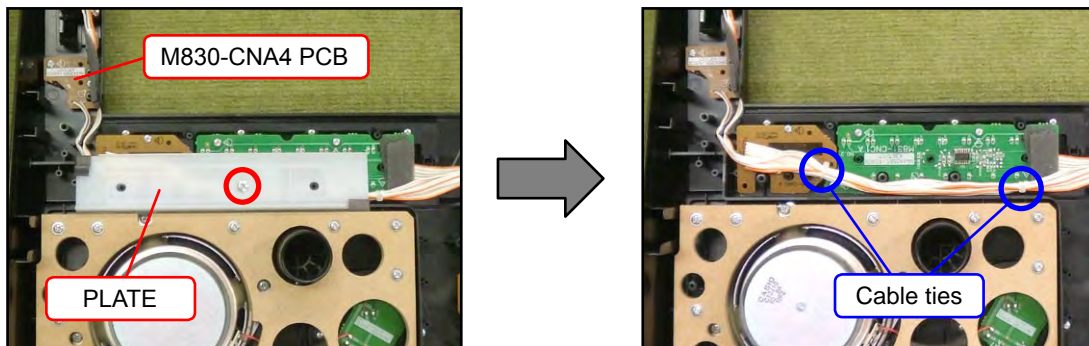


K. REMOVE THE M830-CNA4 (MODULATION PCB)

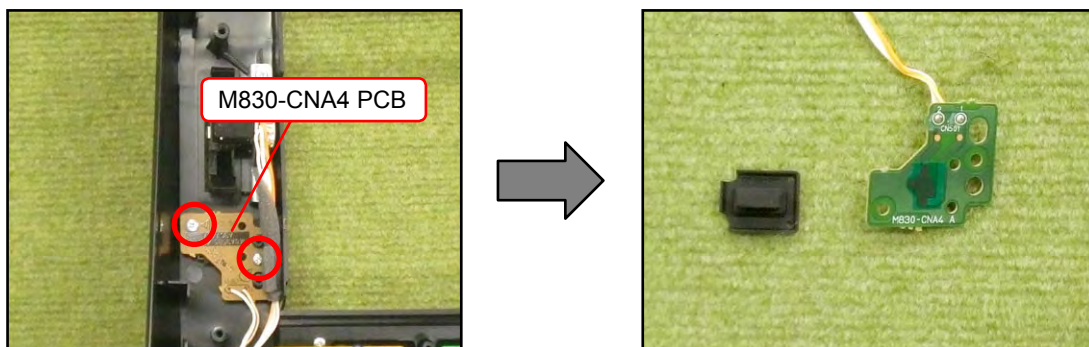
K-1. Unsolder one FFC connected to the M830-PSA1 PCB.



K-2. Undo one screw and then remove the PLATE.

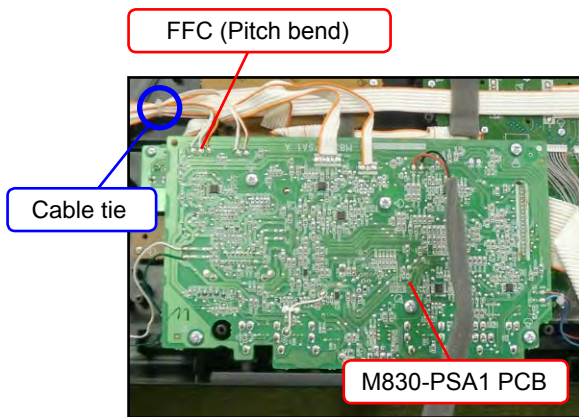


K-3. Undo two screws and then remove the M830-CNA4 PCB and rubber key.

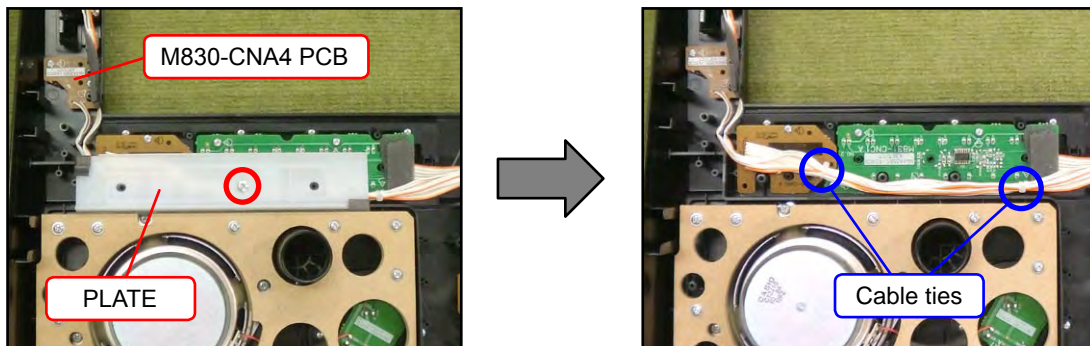


L. REMOVE THE PITCH BEND

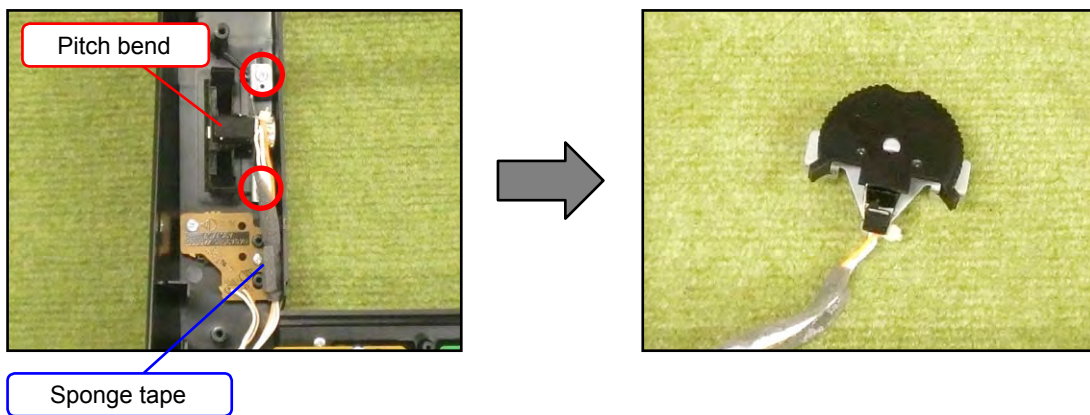
L-1. Unsolder one FFC connected to the M830-PSA1 PCB.



L-2. Undo one screw and then remove the PLATE.

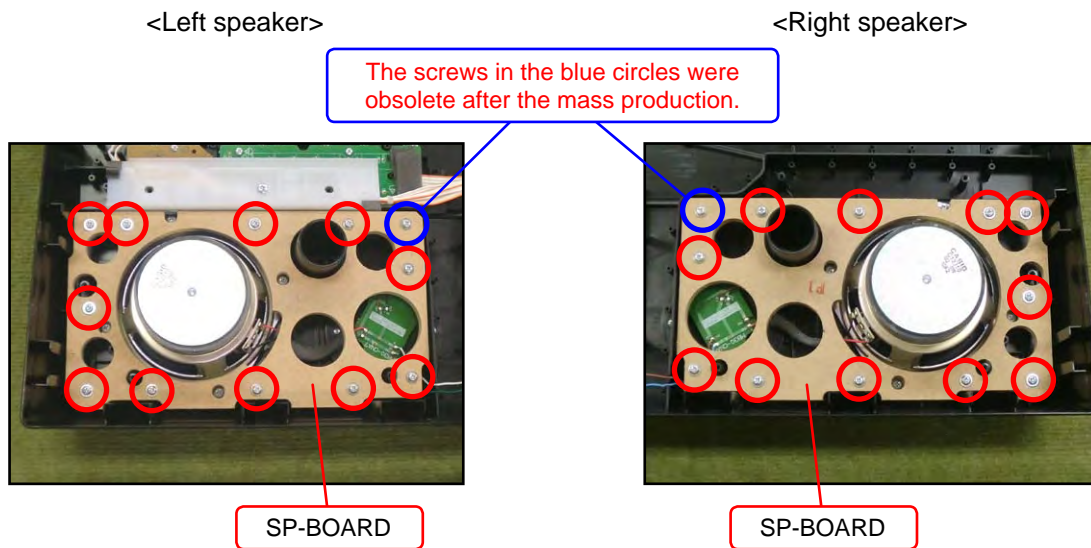


L-3. Undo two screws and then remove the pitch bend.



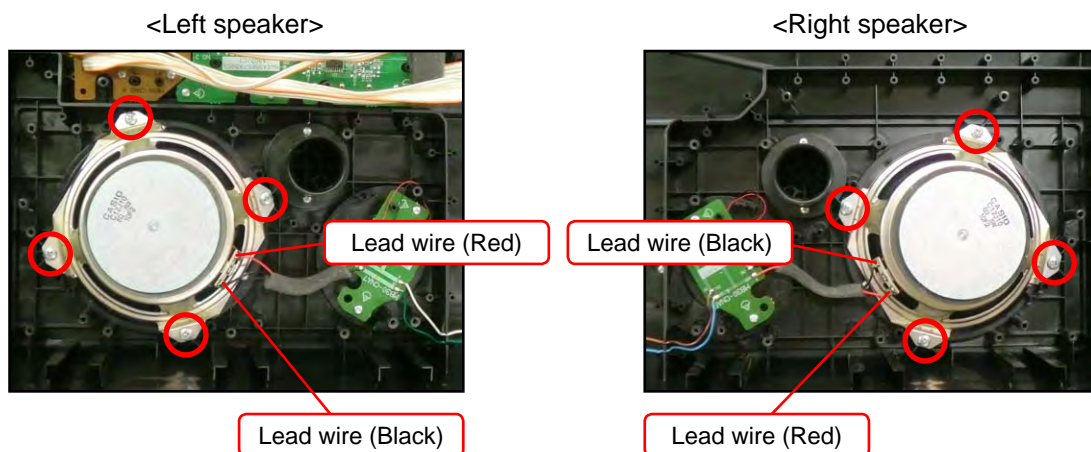
M. REMOVE THE SPEAKER

M-1. Undo 11 (or 12) screws and then remove the SP-BOARD.



M-2. Unsolder two lead wires.

M-3. Undo four screws and then remove the speaker.

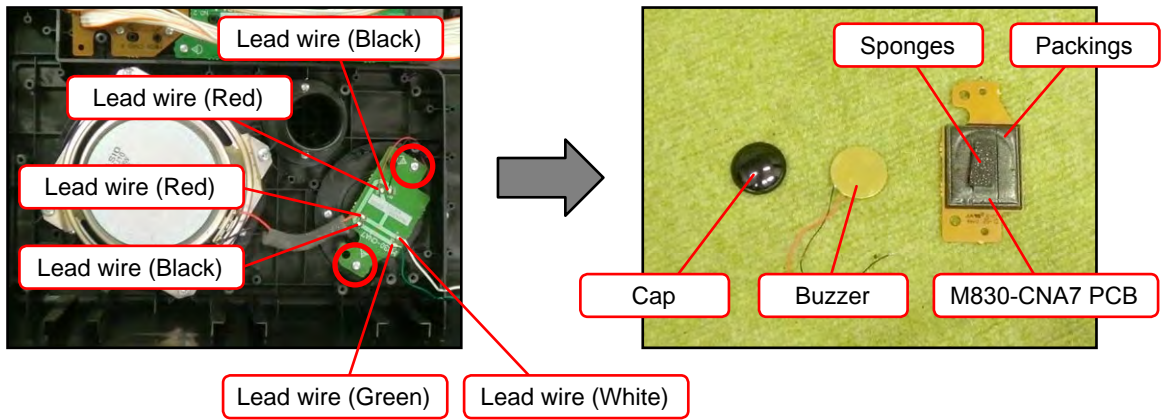


N. REMOVE THE M830-CNA6/CNA7 (SPEAKER PCB)

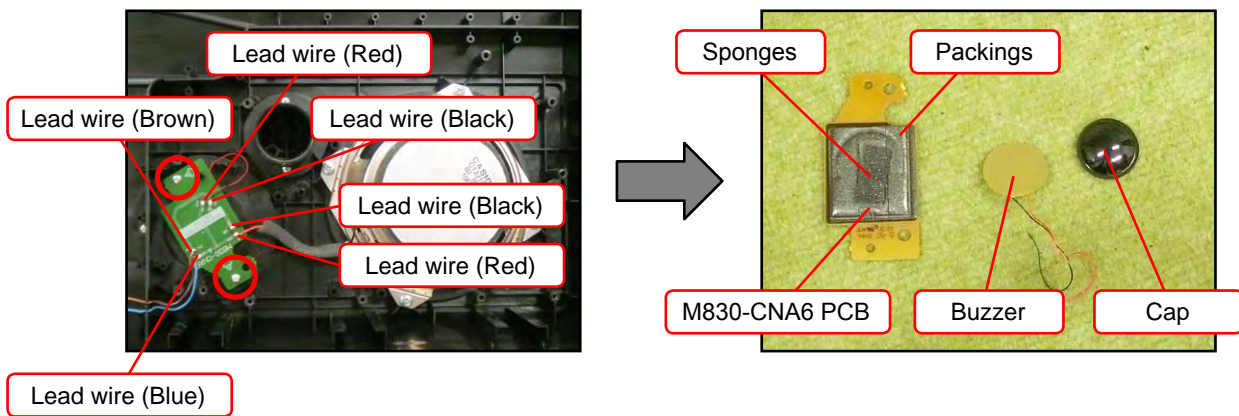
N-1. Unsolder six lead wires.

N-2. Undo two screws and then remove the M830-CNA6 PCB or M830-CNA7 PCB.

<Left speaker side>

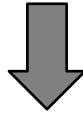
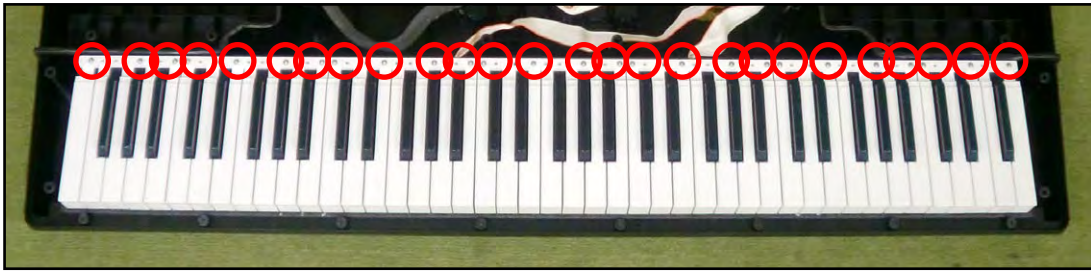


<Right speaker side>



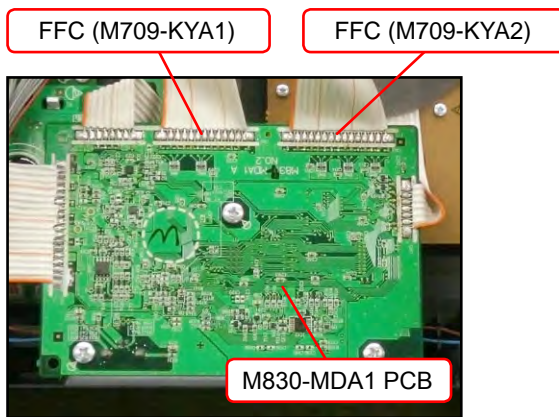
O. REMOVE THE KEYBOARD

O-1. Undo 26 screws and then remove the keyboards.

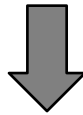
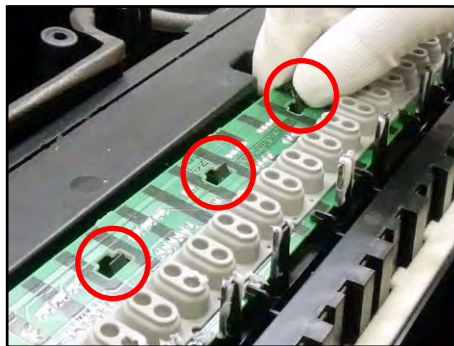


P. REMOVE THE M709-KYA1/KYA2 (KEYBOARD PCB)

P-1. Unsolder two FFCs connected to the M830-MDA1 PCB.



P-2. Disengage the hooks and then remove the M709-KYA1/KYA2 PCBs.



P-3. Remove seven rubber contact strips.

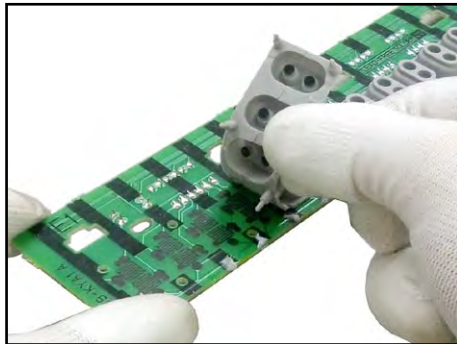
NOTE: There are three types of rubber contact strips with differing lengths.






Rubber contact strips 1

Rubber contact strips 2

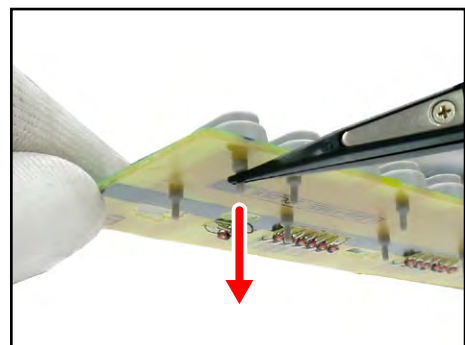
Rubber contact strips 3



<p>Rubber contact strips 1 (Length: 106.15 mm)</p>	
<p>Rubber contact strips 2 (Length: 162.10 mm)</p>	
<p>Rubber contact strips 3 (Length: 109.10 mm)</p>	

<How To Install Rubber Contact Strips>

Lightly insert the tip of a rubber contact strip into the PCB. Pull the tip from the back of the PCB and install it using a tool such as tweezers. Do not forcibly pull it.



DIAGNOSTIC PROGRAM

INITIAL SETTING

- (1) Connect the AC adaptor.
NOTE: “AC ADAPTOR CHECK” cannot be performed unless the AC adaptor is connected.
 - (2) Turn the main volume to the maximum.
 - (3) Connect the pedal (SP-3 or SP-20) to the SUSTAIN/ASSIGNABLE jack.
NOTE: SP-3 and SP-20 pedals are sold separately.
“PEDAL CHECK” cannot be performed unless the pedal is connected.
 - (4) Insert an SD card into the card slot.
NOTE: Use an SD card or SDHC card with a capacity of 2 GB or higher and 32 GB or lower.
NOTE: “SD CARD CHECK” cannot be performed unless the card is inserted.
 - (5) Have a PC and a USB cable ready.
NOTE: “USB CHECK” cannot be performed without a PC and a USB cable.
- Operating System: Windows® XP (SP2 or later) *1
Windows Vista® *2
Windows 7® *3
Mac OS® X (10.3.9, 10.4.11 or later, 10.5.8 or later, 10.6.3 or later)

*1: Windows XP Home Edition/Windows XP Professional (32 bit)

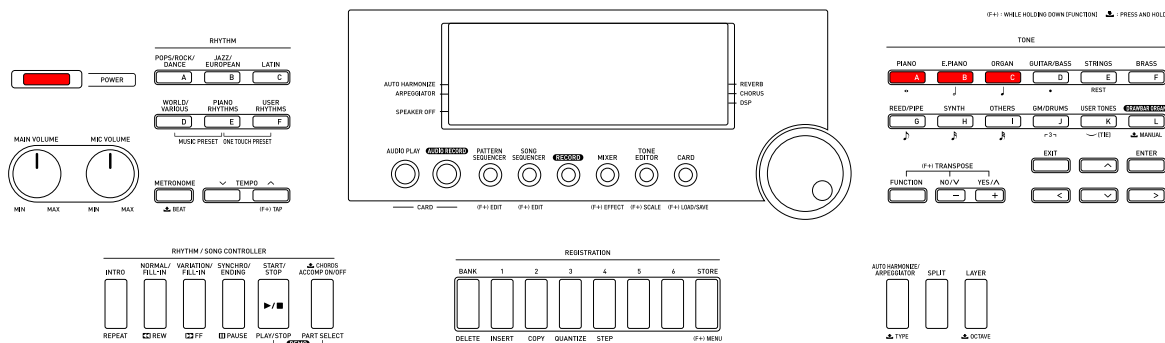
*2: Windows Vista (32 bit)

*3: Windows 7 (32 bit, 64 bit)

HOW TO START THE DIAGNOSTIC PROGRAM

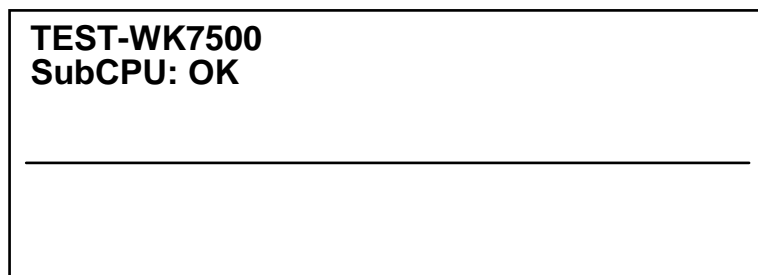
- (1) Hold down the “TONE [A]”, “TONE [B]” and “TONE [C]” buttons at the same time, to turn the power ON.

NOTE: Be sure to turn off the power when the test is finished.



- (2) Release the “TONE [A]”, “TONE [B]” and “TONE [C]” buttons.
- (3) Once the diagnostic program is launched, “MODEL CHECK” and “SUB CPU CHECK” are performed automatically, and then the result is displayed.

<Testing Main Screen>



NOTE: After the test is performed even once, the “SUB CPU CHECK” result will not be displayed on the main screen.

■ TEST ITEMS

Pressing a test button while on the main screen enables the corresponding test item to be tested.

Test Items	Buttons	Note
A. BUTTON CHECK	TONE [A]	
B. LED CHECK	TONE [L]	
C. LCD CHECK	TONE [B]	
D. ROM CHECK	TONE [E]	
E. RAM CHECK	TONE [F]	
F. ROM VERSION CHECK	TONE [I]	
G. PEDAL CHECK	TONE [J]	Pedal (SP-3 or SP-20)
H. SD CARD CHECK	TONE [G]	SD card
I. USB CHECK	TONE [H]	PC, USB cable
J. AC ADAPTOR CHECK	TONE [K]	AC adaptor

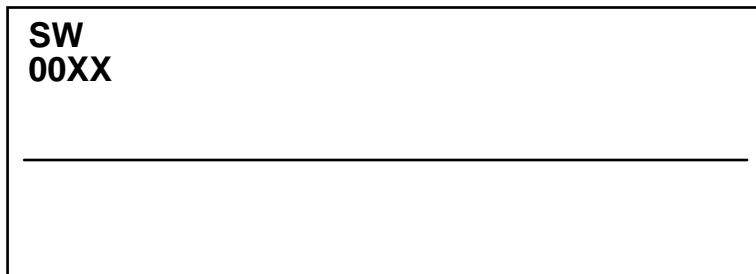
■ DIAGNOSTIC PROGRAM

A. BUTTON CHECK

- A-1. Press the "TONE [A]" button to select the "BUTTON CHECK".
- A-2. Press the button in the order indicated in the illustration below.

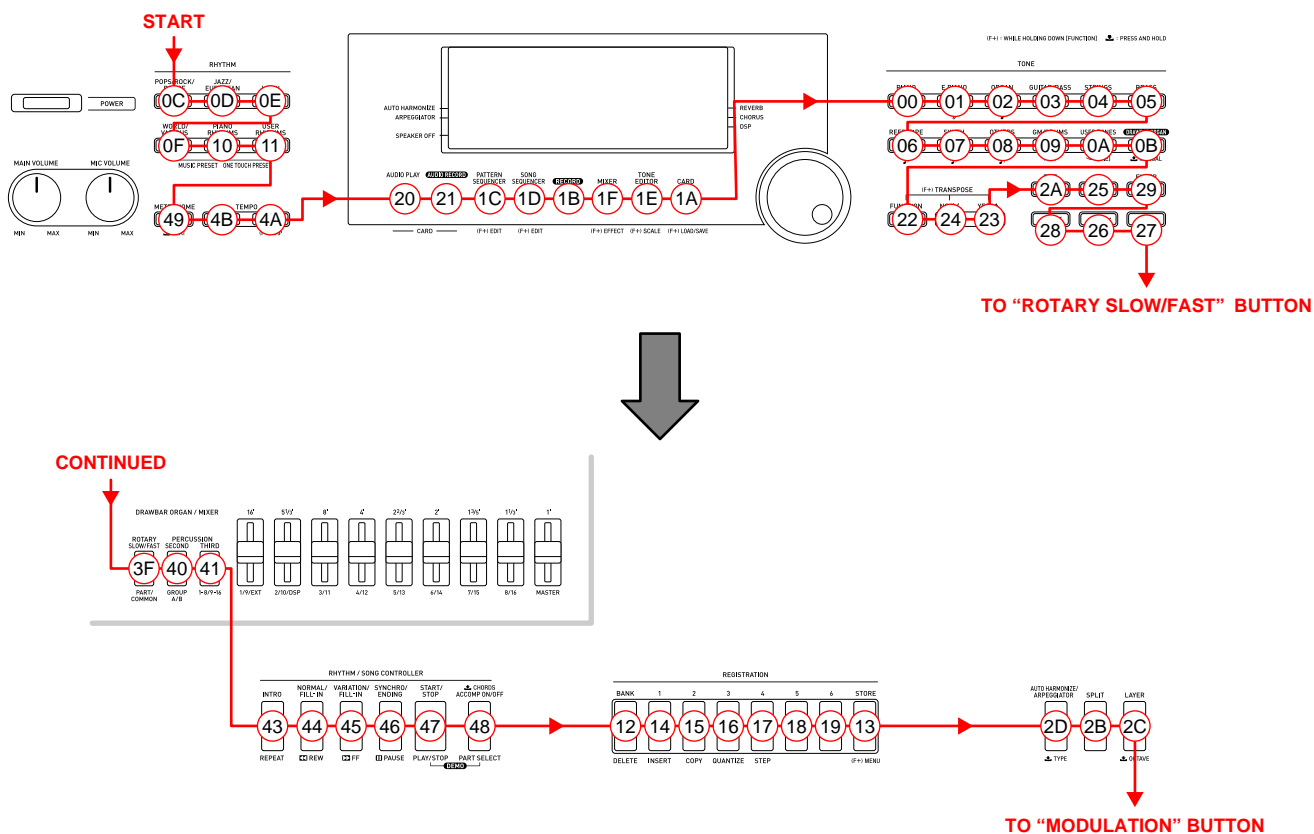
<If the result passes>

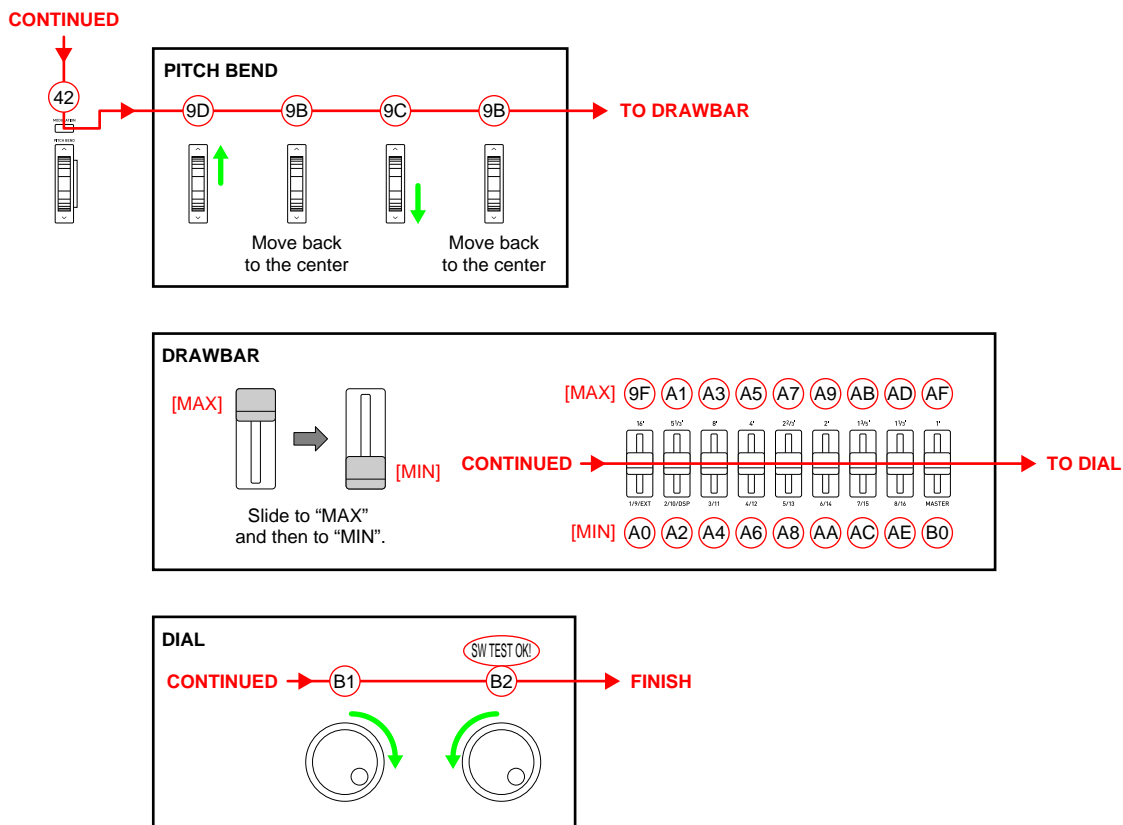
The confirmation chord sounds and "00XX" is displayed on the LCD with "XX" indicating the corresponding button number in the illustration below.



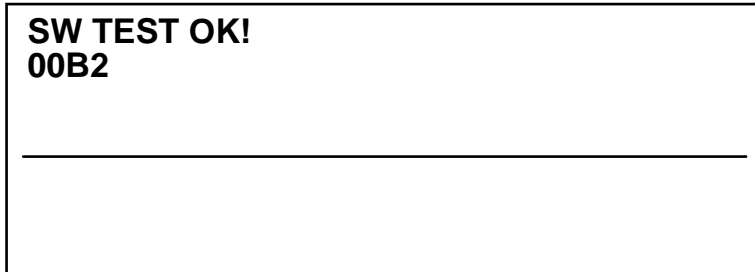
<If the result fails>

If there is a button failure or the buttons are pressed in a wrong sequence, an error tone sounds and the button number which you pressed will be displayed on the LCD.





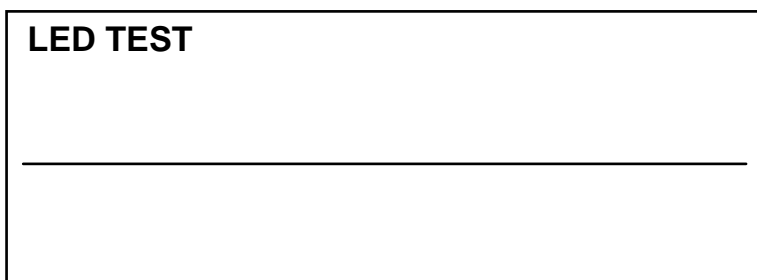
A-3. When you turn the dial at the end, a confirmation chord sounds and "SW TEST OK!" is displayed on the LCD.
Check to see if the LCD is as shown below.



A-4. Press the "RHYTHM [A]" button to return to the main screen.

B. LED CHECK

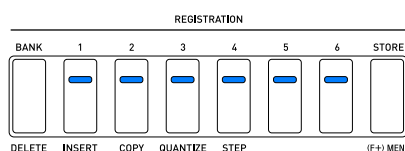
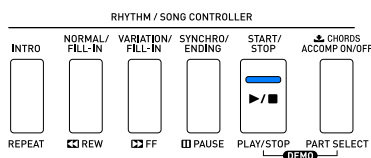
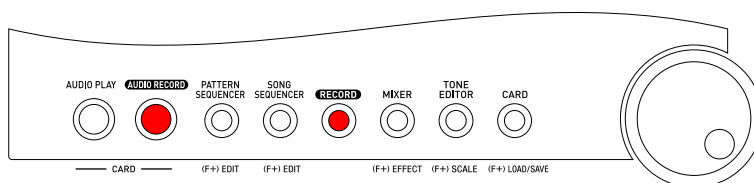
B-1. Press the “TONE [L]” button to perform the “LED CHECK”.



B-2. Check to see if the LEDs indicated below are lit.

<CENTER BLOCK>

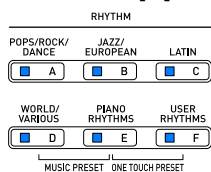
“AUDIO RECORD”, “RECORD”, “START/STOP”, “REGISTRARION 1”, “REGISTRARION 2”, “REGISTRARION 3”, “REGISTRARION 4”, “REGISTRARION 5”, “REGISTRARION 6”



B-3. Press “TONE [L]” and check to see if the LEDs indicated below are lit.

<RHYTHM BLOCK>

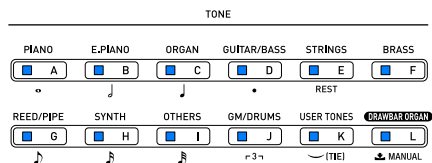
“RHYTHM [A]”, “RHYTHM [B]”, “RHYTHM [C]”, “RHYTHM [D]”, “RHYTHM [E]”, “RHYTHM [F]”



B-4. Press “TONE [L]” and check to see if the LEDs indicated below are lit.

<TONE BLOCK>

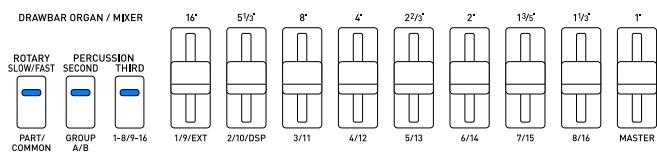
“TONE [A]”, “TONE [B]”, “TONE [C]”, “TONE [D]”, “TONE [E]”, “TONE [F]”, “TONE [G]”, “TONE [H]”, “TONE [I]”, “TONE [J]”, “TONE [K]”, “TONE [L]”



B-5. Press “TONE [L]” and check to see if the LEDs indicated below are lit.

<DRAWBAR BLOCK>

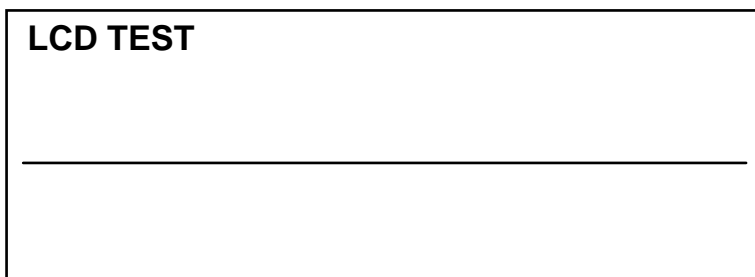
“ROTARY SLOW/FAST”, “PERCUSSION SECOND”, “PERCUSSION THIRD”



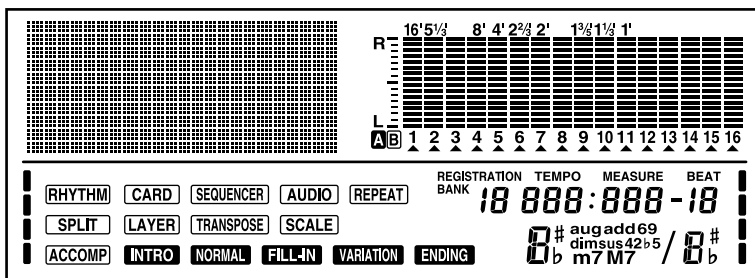
B-6. Press the “RHYTHM [A]” button to return to the main screen.

C. LCD CHECK

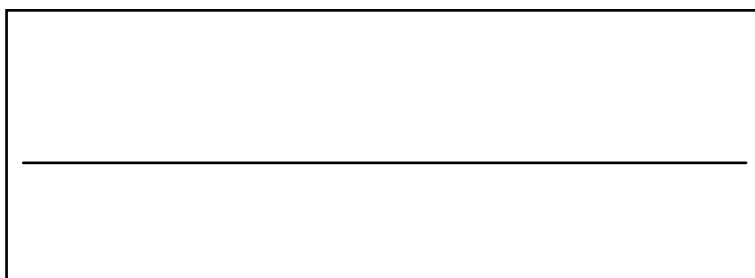
C-1. Press the “TONE [B]” button to select the “LCD CHECK”.



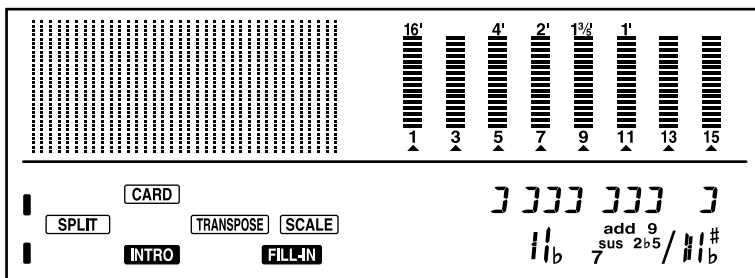
C-2. Press “TONE [B]” and check to see if all LCDs are lit.



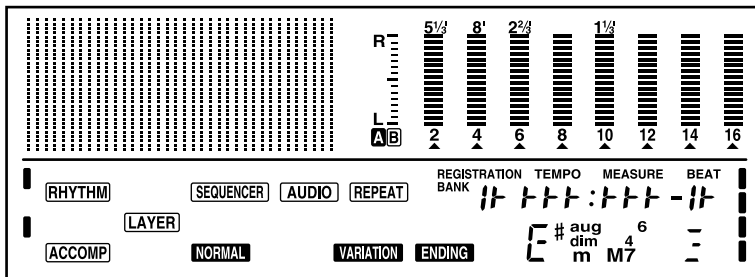
C-3. Press “TONE [B]” and check to see if all LCDs are turned off.



C-4. Press “TONE [B]” and check to see if the LCD is as shown below.



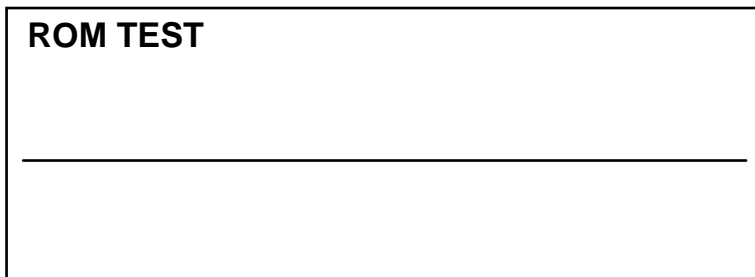
C-5. Press “TONE [B]” and check to see if the LCD is as shown below.



C-6. Press the “RHYTHM [A]” button to return to the main screen.

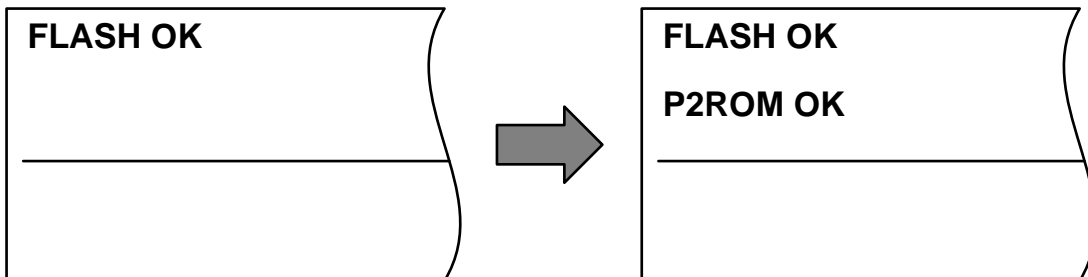
D. ROM CHECK

D-1. Press the “TONE [E]” button to select the “ROM CHECK”.



D-2. Press the “TONE [E]” button to perform the “ROM CHECK”.
Check to see if the LCD is as shown below.

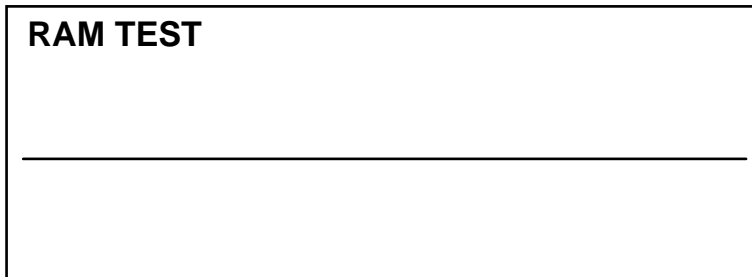
NOTE: The results for both FLASH ROM and P2ROM appear.



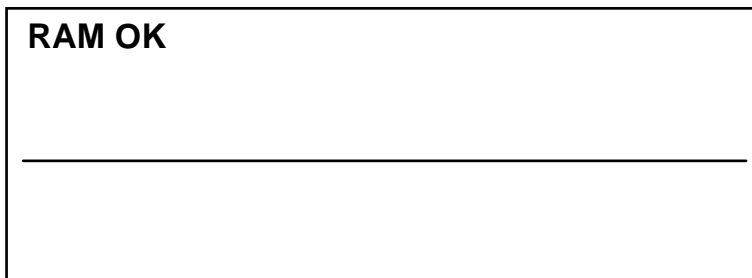
D-3. Press the “RHYTHM [A]” button to return to the main screen.

E. RAM CHECK

E-1. Press the "TONE [F]" button to select the "RAM CHECK".



E-2. Press the "TONE [F]" button to perform the "RAM CHECK".
Check to see if the LCD is as shown below.

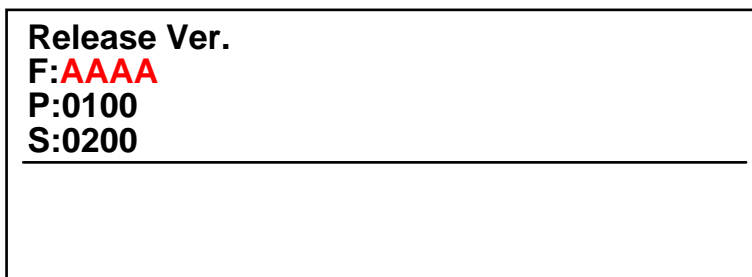


E-3. Press the "RHYTHM [A]" button to return to the main screen.

F. ROM VERSION CHECK

F-1. Press the "TONE [I]" button to perform the "ROM VERSION CHECK".
The ROM version appears on the LCD.

F-2. Check to see if the LCD is as shown below.

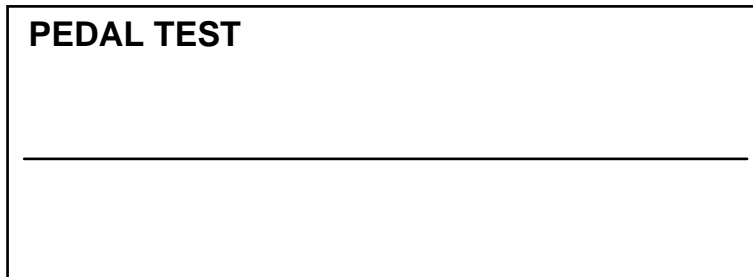


"AAAA" = "0100" or "0200"

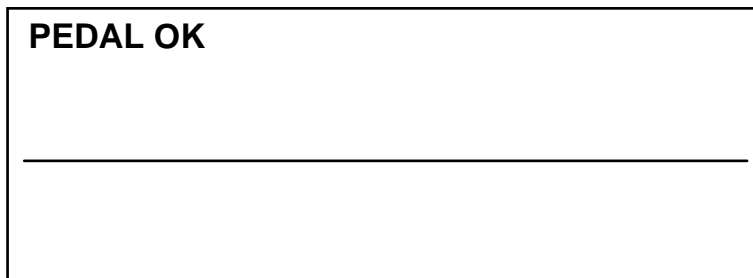
F-3. Press the "RHYTHM [A]" button to return to the main screen.

G. PEDAL CHECK

G-1. Press the "TONE [J]" button to select the "PEDAL CHECK".



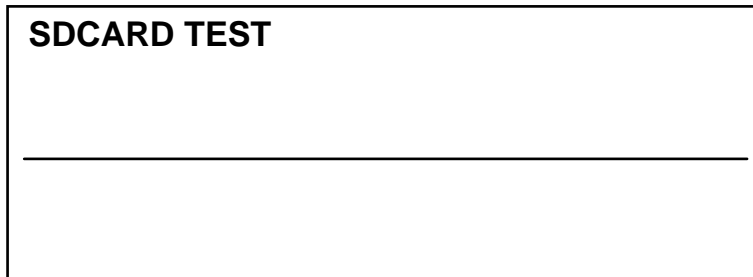
G-2. Press the pedal.
The confirmation chord sounds. Check to see if the LCD is as shown below.



G-3. Press the "RHYTHM [A]" button to return to the main screen.

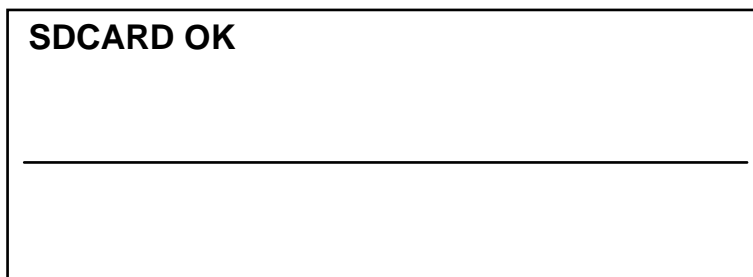
H. SD CARD CHECK

H-1. Press the "TONE [G]" button to select the "SD CARD CHECK".



H-2. Press the "TONE [A]" button to perform the "SD CARD CHECK".
Check to see if the LCD is as shown below.

NOTE: If [OK] does not appear, try formatting the SD card and re-running the test.
Please refer to the instruction manual for how to format an SD card.



H-3. Press the "RHYTHM [A]" button to return to the main screen.

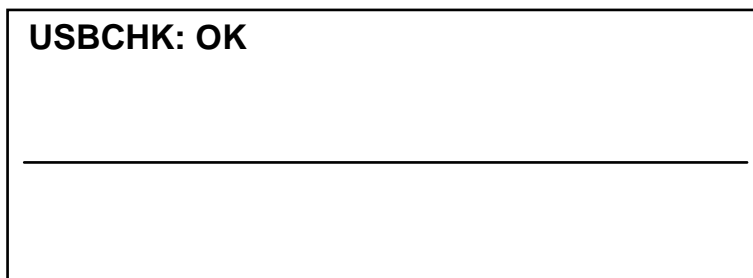
H-4. Remove the SD card.

I. USB CHECK

- I-1. Connect CTK-7000 to the PC with a USB cable.
- I-2. Press the "TONE [H]" button to select the "USB CHECK".



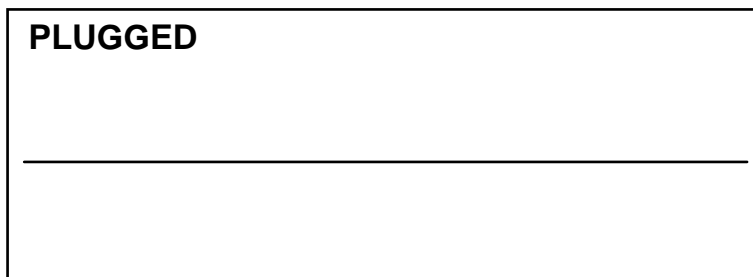
- I-3. Press the "TONE [F]" button to perform the "USB CHECK".
Check to see if the LCD is as shown below.



- I-4. Press the "RHYTHM [A]" button to return to the main screen.
- I-5. Disconnect the USB cable.

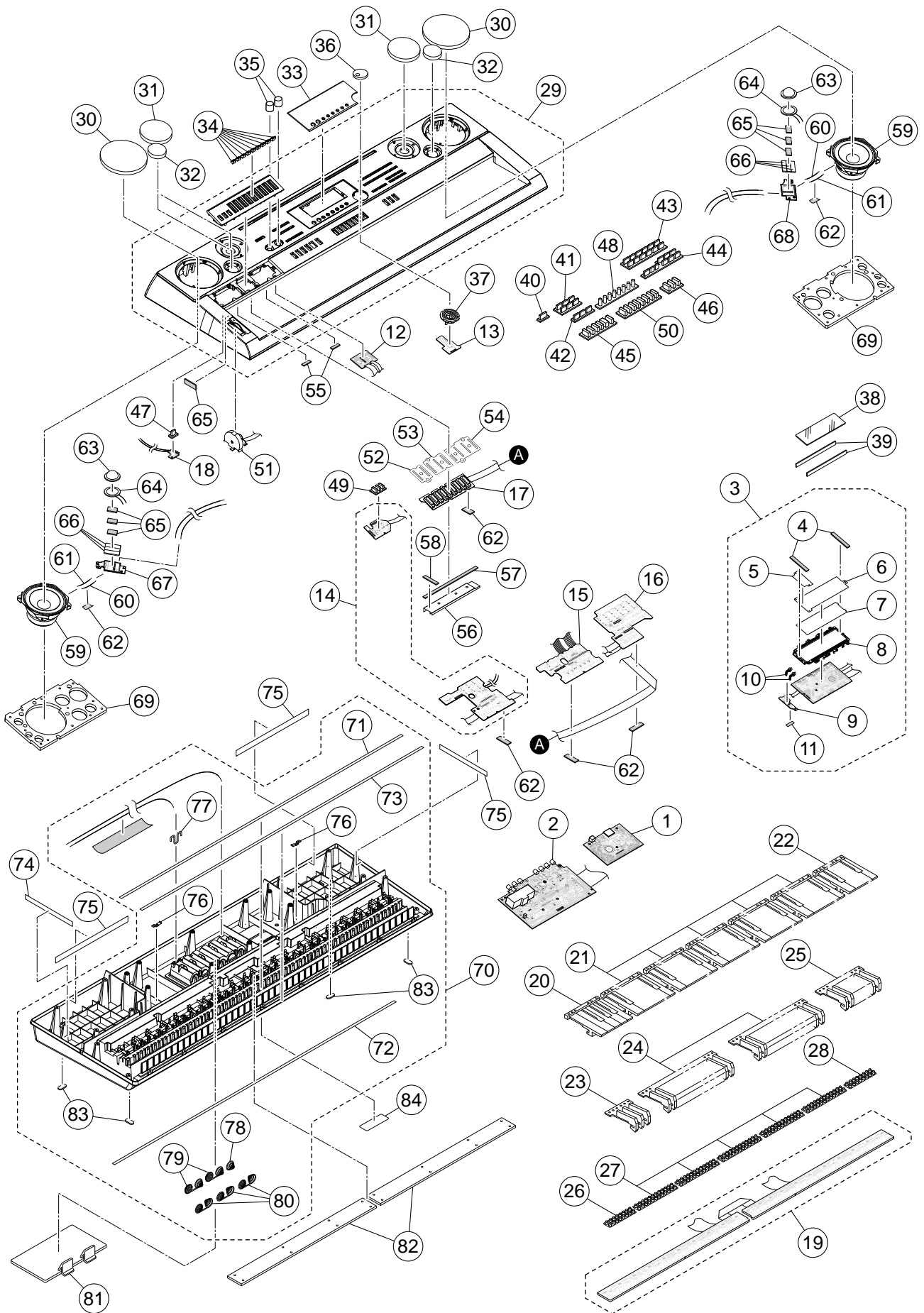
J. AC ADAPTOR CHECK

- J-1. Press the "TONE [K]" button to perform the "AC ADAPTOR CHECK".
Check to see if the LCD is as shown below.



- J-2. Press the "RHYTHM [A]" button to return to the main screen.

EXPLODED VIEW



PARTS LIST

WK-7500

Notes:

1. Prices and specifications are subject to change without prior notice.
2. Refer to the latest “Parts Price Code” at “PARTS FINDER” on the Casio Service WEB site (<https://www.servicecasio.com>).
3. As for spare parts order and supply, refer to the “GUIDEBOOK for Spare parts Supply”, published separately.
4. The numbers in item column correspond to the same numbers in drawing.

- 1: WK-7500_DI
- 2: WK-7500_EU
- 3: WK-7500_UK
- 4: WK-7500_US

N	Item	Code No.	Parts Name	Specification	Q'ty				Price Code	R	Remarks
					1	2	3	4			
MAIN PCB											
N	1	10377474	PCB UNIT / MAIN	TK-RJM510794*001	1	1	1	1		A	MDA1 PCB
	CN7	10236624	CONNECTOR / USB	UBR24-4K5G00	1	1	1	1		C	USB PORT
	CN12	10375067	CONNECTOR / SD CARD	SDK9BNSK13GNTBLFS4	1	1	1	1		X	SD CARD SLOT
	D1-D5	10276977	DIODE	L1SS400T1G	5	5	5	5		X	
	D8-D10	10346940	DIODE	NNCD6.8RL-T1-AT	3	3	3	3		X	
	IC5	10211950	IC	NJM2068M-D(TE1)	1	1	1	1		X	
	IC12	10226394	IC	TC74VHC08FT(EL.K)	1	1	1	1		X	
	IC4	10197809	IC	TC7WH123FU(TE12L.F	1	1	1	1		X	
	IC6	10375074	IC	XC6404FY52PR-G	1	1	1	1		X	
	IC2	10375075	IC	XC6701D332PR-G	1	1	1	1		X	
	IC9	10256784	LSI / MEMORY	CY62146EV30LL45ZST	1	1	1	1		C	
N	IC1	10371415	LSI / MEMORY	MR27T12802L16ATA3A	1	1	1	1		C	
	IC11	10371417	LSI / MEMORY	S29PL127J60TFH130H	1	1	1	1		C	
	L11	10193074	COIL	DLW21HN181SQ2L	1	1	1	1		X	
	Q2	10375028	TRANSISTOR	KTA1532U-RTK/P	1	1	1	1		X	
	Q3-Q5	10202670	TRANSISTOR	KTA2014-GR-RTK/P	3	3	3	3		X	
	Q1	10207675	TRANSISTOR	KTC4075-GR-RTK/P	1	1	1	1		X	
	X1	10375016	RESONATOR	7V48080006	1	1	1	1		X	
POWER AMP PCB											
N	2	10377475	PCB UNIT / POWER AMP	TK-RJM510796*001	1	1	1	1		B	PSA1 PCB
	IC4	10375029	IC	LA5756-MDB-E	1	1	1	1		C	
	IC1	10306512	IC	TDA7297	1	1	1	1		X	
	J1,J7	10206815	JACK / LINE OUT etc	JY-6314*01-030	2	2	2	2		B	LINE OUT L/MONO, SUSTAIN/ ASSIGNABLE
	J2,J3,J9	10206816	JACK / LINE OUT etc	JY-6314*01-130	3	3	3	3		B	LINE OUT R, MIC IN, INST IN
	J6	10305218	JACK / PHONES	JY-6316B*01-070	1	1	1	1		B	PHONES
	J4	10334294	JACK / DC	KM02022ABMP	1	1	1	1		A	DC
	J5	10305131	JACK / AUDIO IN	ST-3529B	1	1	1	1		B	AUDIO IN
	L6,L7	10231919	COIL	RB53-856396NP	2	2	2	2		X	
	L1-L5, L8,L9,L11	10231920	COIL	RB53-856397NP	8	8	8	8		X	
	L20	10232457	COIL	R117-860400NP	1	1	1	1		X	
	D1,D10	10371167	DIODE	L1SS355T1G	2	2	2	2		X	
	D2,D3	10308381	DIODE	LUDZS7.5BT1G	2	2	2	2		X	
	D20	10210387	DIODE	RSX101VA-30TR	1	1	1	1		X	
	D8,D9	10294394	DIODE	SK34A	2	2	2	2		X	
	IC3	10306415	IC	BH3547F-E2	1	1	1	1		X	
	IC101, IC103-IC106	10211950	IC	NJM2068M-D(TE1)	5	5	5	5		X	
	Q6	22501176	TRANSISTOR	2SA1577T106R	1	1	1	1		X	
	Q1,Q4,Q5, Q8,Q11	10207675	TRANSISTOR	KTC4075-GR-RTK/P	5	5	5	5		X	
	Q2,Q3	10305853	TRANSISTOR	KTD1304-RTK/P	2	2	2	2		X	

- 1: WK-7500_DI
- 2: WK-7500_EU
- 3: WK-7500_UK
- 4: WK-7500_US

N	Item	Code No.	Parts Name	Specification	Q'ty				Price Code	R	Remarks
					1	2	3	4			
CONSOLE PCB											
N	3	10377467	BACK LIGHT ASSY	TK-RJM510607*002	1	1	1	1		X	
	IC1	10333225	LSI	PD78F1153AGKSGAKAX	1	1	1	1		X	
	Q2-Q4, Q25,Q26	10178530	TRANSISTOR	2SA1873-GR(TE85L.F	5	5	5	5		X	
	Q6-Q11, Q20-Q23	22592674	TRANSISTOR	DTC114YETL	10	10	10	10		X	
	Q15-Q17	10209027	TRANSISTOR	KTC4076-Y-RTK/P	3	3	3	3		X	
	4	10270485	SPONGE / 8X75	M441167-001V01	2	2	2	2		X	
	5	10131094	TOP PIECE	RJM502565-001V01	1	1	1	1		X	
	6	10250780	FILM	RJM507061-001V01	1	1	1	1		X	
	7	10248119	PLATE / BACK LIGHT	RJM506818-001V01	1	1	1	1		X	
	8	10136032	REFLECTOR	RJM502577-001V02	1	1	1	1		X	
	9	10375094	PCB UNIT / CNA3	TK-RJM510692*001	1	1	1	1		X	CNA3 PCB
	D203,D204	10308381	DIODE	LUDZS7.5BT1G	2	2	2	2		X	
	10	10375069	LED	SLR343WBD2PT3	2	2	2	2		X	
	11	10048977	FABRIC TAPE / 4X10	M440684-2	1	1	1	1		X	
	12	10375099	PCB UNIT / PSA2	TK-RJM510655*001	1	1	1	1		C	PSA2 PCB
	VR2	10304718	VARIABLE RESISTOR	F-09KH1-CASIO-1	1	1	1	1		B	MIC VOLUME
	VR1	10123103	VARIABLE RESISTOR	RK09K12C0D1B	1	1	1	1		B	MAIN VOLUME
	13	10375092	PCB UNIT / PSA3	TK-RJM510645*001	1	1	1	1		C	PSA3 PCB
	E1	10174536	ENCODER	EC12E24204A2	1	1	1	1		B	ENCODER (DIAL)
N	14	10377476	PCB UNIT / CNA1	TK-RJM510807*002	1	1	1	1		X	CNA1, CNA5 PCBs
	D10-D12	10371167	DIODE	L1SS355T1G	3	3	3	3		X	
	D1-D4,D6-D8	10363781	LED	26-21/B1	7	7	7	7		X	
	D301-D303	10371167	DIODE	L1SS355T1G	3	3	3	3		X	
	D304-D306	10363781	LED	26-21/B1	3	3	3	3		X	
N	15	10377471	PCB UNIT / CNB1	TK-RJM510814*001	1	1	1	1		X	CNB1 PCB
	D2,D4,D5	10371167	DIODE	L1SS355T1G	3	3	3	3		X	
	D3,D7,D11, D13-D15	10363781	LED	26-21/B1	6	6	6	6		X	
	D1,D12	10336974	LED	26-21/R1	2	2	2	2		X	
N	16	10377477	PCB UNIT / CNA2	TK-RJM510812*002	1	1	1	1		X	CNA2 PCB
	D101-D112	10363781	LED	26-21/B1	12	12	12	12		X	
N	17	10377480	PCB UNIT / CNC1	TK-RJM510818*002	1	1	1	1		C	CNC1 PCB
N	VR1-VR9	10377425	VARIABLE RESISTOR	RS201111C016	9	9	9	9		B	for DRAWBAR
N	IC1	10377426	IC	TC74HC4051AF(EL.F)	1	1	1	1		X	
N	18	10377479	PCB UNIT / CNA4	TK-RJM510811*002	1	1	1	1		X	CNA4 PCB
KEYBOARD PCB											
	19	10326145	PCB UNIT / KEYBOARD	TK-RJM508870*002	1	1	1	1		C	KYA PCBs
	D801-D952	23153132	DIODE	1SS133T-77	152	152	152	152		X	
KEYBOARD											
	20	10271802	WHITE KEY / SEB	TK-RJM507652*001	1	1	1	1		B	
	21	10304687	WHITE KEY / CB	TK-RJM507243*002	5	5	5	5		A	
	22	10271783	WHITE KEY / CSG	TK-RJM507653*001	1	1	1	1		B	
	23	10274034	BLACK KEY / 3P	RJM506595-003V02	1	1	1	1		B	
	24	10274032	BLACK KEY / 10P	RJM506595-001V02	2	2	2	2		A	
	25	10274033	BLACK KEY / 8P	RJM506595-004V02	1	1	1	1		B	
	26	10269450	RUBBER CONTACT / SEB	RJM507649-001V01	1	1	1	1		B	
	27	10269451	RUBBER CONTACT / CB	RJM507656-001V01	5	5	5	5		A	
	28	10269449	RUBBER CONTACT / CSG	RJM507650-001V01	1	1	1	1		B	

- 1: WK-7500_DI
- 2: WK-7500_EU
- 3: WK-7500_UK
- 4: WK-7500_US

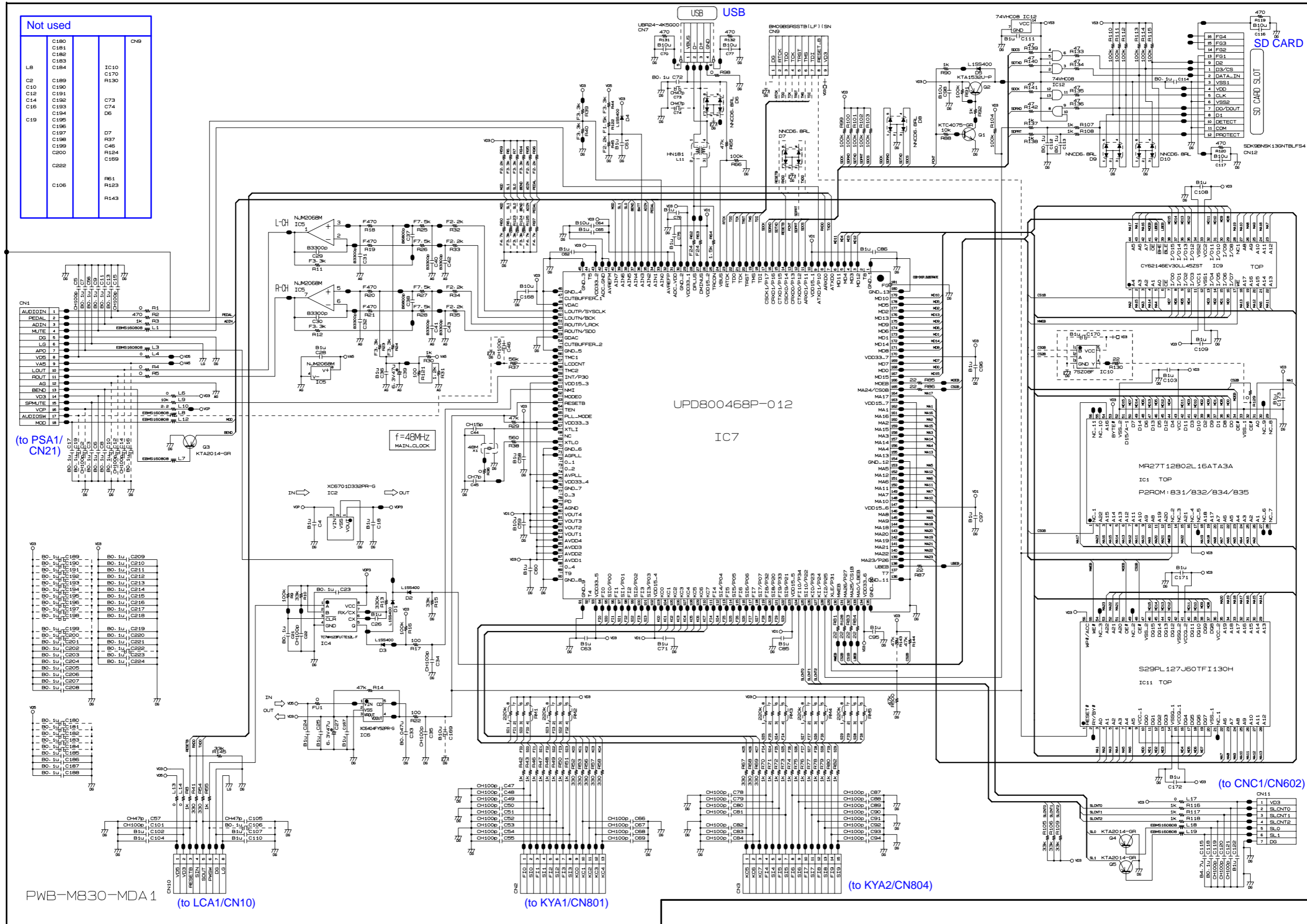
N	Item	Code No.	Parts Name	Specification	Q'ty				Price Code	R	Remarks
					1	2	3	4			
UPPER CASE UNIT											
N	29	10377412	CASE SUB ASSY / UPPER	RJM510621*002V01	1	1	1	1		X	
N	30	10375063	SPEAKER COVER / for FULL RANGE	RJM510710*001V01	2	2	2	2		X	
N	31	10375065	SPEAKER COVER / for TWEETER	RJM510712*001V01	2	2	2	2		X	
N	32	10375066	SPEAKER COVER / for PORT	RJM510713*001V01	2	2	2	2		X	
N	33	10377066	DISPLAY PLATE	RJM510568-001V01	1	1	1	1		X	
N	34	10377404	KNOB / DRAWBAR	RJM510566-001V01	9	9	9	9		C	
	35	10193270	KNOB / ROTARY	RJM502503-008V02	2	2	2	2		C	
	36	10375049	KNOB / DIAL	RJM510590-001V01	1	1	1	1		X	
N	37	10377410	BEZEL / DIAL	RJM510591-002V01	1	1	1	1		X	
	38	10377681	LCD	SR012449DN	1	1	1	1		X	
	39	10203058	RUBBER CONNECTOR / for LCD	RJM505822-001V01	2	2	2	2		X	
	40	10375039	RUBBER BUTTON / A	RJM510571-001V01	1	1	1	1		X	
N	41	10377405	RUBBER BUTTON / B	RJM510572-002V01	1	1	1	1		X	
	42	10375041	RUBBER BUTTON / C	RJM510573-001V01	1	1	1	1		X	
N	43	10377406	RUBBER BUTTON / D	RJM510574-002V01	1	1	1	1		X	
	44	10375043	RUBBER BUTTON / E	RJM510575-001V01	1	1	1	1		X	
	45	10375044	RUBBER BUTTON / F	RJM510576-001V01	1	1	1	1		X	
	46	10375045	RUBBER BUTTON / G	RJM510577-001V01	1	1	1	1		X	
N	47	10377407	RUBBER BUTTON / H	RJM510578-001V01	1	1	1	1		X	
N	48	10377408	RUBBER BUTTON / M	RJM510581-001V01	1	1	1	1		X	
N	49	10377409	RUBBER BUTTON / N	RJM510582-001V01	1	1	1	1		X	
N	50	10377421	RUBBER BUTTON / K	RJM510733-001V01	1	1	1	1		X	
	51	10314427	BEND WHEEL ASSY	TK-RJM507944*005	1	1	1	1		X	
N	52	10377422	FABRIC SHEET / A	RJM510775-001V01	1	1	1	1		X	
N	53	10377423	FABRIC SHEET / B	RJM510776-001V01	1	1	1	1		X	
N	54	10377424	FABRIC SHEET / C	RJM510777-001V01	1	1	1	1		X	
	55	69196290	FABRIC TAPE / 20X10	M411742-1	2	2	2	2		X	
	56	10375048	PLATE	RJM510589-001V01	1	1	1	1		X	
	57	10214574	PACKING / 10X223	RJM506391-001V01	1	1	1	1		X	
	58	10175759	PACKING / 10X75	RJM504745-001V01	1	1	1	1		X	
N	59	10377383	SPEAKER	C12J10	2	2	2	2		X	
	60	10309844	WIRE	1007TASC24100R3030	2	2	2	2		X	for SPEAKER (+)
	61	10309843	WIRE	1007TASC24100K3030	2	2	2	2		X	for SPEAKER (-)
	62	10214402	SPONGE / 20X60	RJM506161-001V01	6	6	6	6		X	
	63	10309766	CAP	HM-2723CAP	2	2	2	2		X	
	64	10309765	BUZZER	HM-2720MYLAR	2	2	2	2		X	
	65	10321183	SPONGE / 10X25	M440349-001V01	7	7	7	7		X	
	66	10259884	PACKING / 12X40	M441333-001V01	6	6	6	6		X	
	67	10374016	PCB / CNA7	RJM510552-007V01	1	1	1	1		X	CNA7 PCB
	68	10374015	PCB / CNA6	RJM510552-006V01	1	1	1	1		X	CNA6 PCB
N	69	10383282	SPEAKER BOARD	RJM510941-001V01	2	2	2	2		X	

- 1: WK-7500_DI
- 2: WK-7500_EU
- 3: WK-7500_UK
- 4: WK-7500_US

N	Item	Code No.	Parts Name	Specification	Q'ty				Price Code	R	Remarks
					1	2	3	4			
MAIN CASE UNIT											
N	70	10314422	CASE UNIT / MAIN	TK-RJM507844*003	1	1	1	1		X	
	71	10218751	FELT / LOWER LIMIT / KEYBOARD	M341580-001V02	1	1	1	1		X	for KEYBOARD
	72	10218752	FELT / UPPER LIMIT / KEYBOARD	M440192-001V02	1	1	1	1		X	for KEYBOARD
	73	10307121	FELT / DAMPER / KEYBOARD	RJM507744-002V01	1	1	1	1		X	for KEYBOARD
	74	10138683	FABRIC TAPE / 15X175	RJM503568-001V01	2	2	2	2		X	
	75	10334298	FABRIC TAPE / 15X270	M411937-001V01	2	2	2	2		X	
	76	10284332	BRACKET / for STAND	M440866-001V02	2	2	2	2		X	
	77	10263726	BATTERY TERMINAL / +	M441101-001V02	1	1	1	1		X	
	78	10263727	BATTERY TERMINAL / -	M441102-001V02	1	1	1	1		X	
	79	10263724	BATTERY TERMINAL / A	M441099-001V02	2	2	2	2		X	
	80	10263725	BATTERY TERMINAL / B	M441100-001V02	3	3	3	3		X	
	81	10271778	BATTERY LID	TK-M341288*002	1	1	1	1		X	
	82	10269409	LOWER COVER	RJM507741-001V01	2	2	2	2		X	
N	83	69307208	RUBBER FOOT	M441160-1	4	4	4	4		X	
	84	10377401	LABEL / RATING	RJM504373-044V02	1	1	1	1		X	
ACCESSORIES											
	-	10025472	MUSIC STAND	M141071-1	1	1	1	1		C	
	-	10370278	AC ADAPTOR	AD-A12150LW-F2C	1	1	1	1		B	without AC CORD
	-	10361066	AC CORD	UC2LT-M006A	1			1		X	for US
	-	10361067	AC CORD	EC2LT-M002A	1	1				X	for EU
	-	10361070	AC CORD	BC2LT-M002A			1			X	for UK

SCHEMATIC DIAGRAMS

Main PCB: M830-MDA1



Not used		
L8	C180	CN9
	C181	
	C182	
	C183	
	C184	
C2	C189	IC10
C10	C190	R130
C12	C191	
C14	C192	C73
C16	C193	C74
	C194	D6
C195	C195	
C197	C197	D7
C198	C198	R37
C199	C199	C46
C200	C200	R124
	C222	C169
C106		R61
		R123
		R143

PWB-M830-MDA1

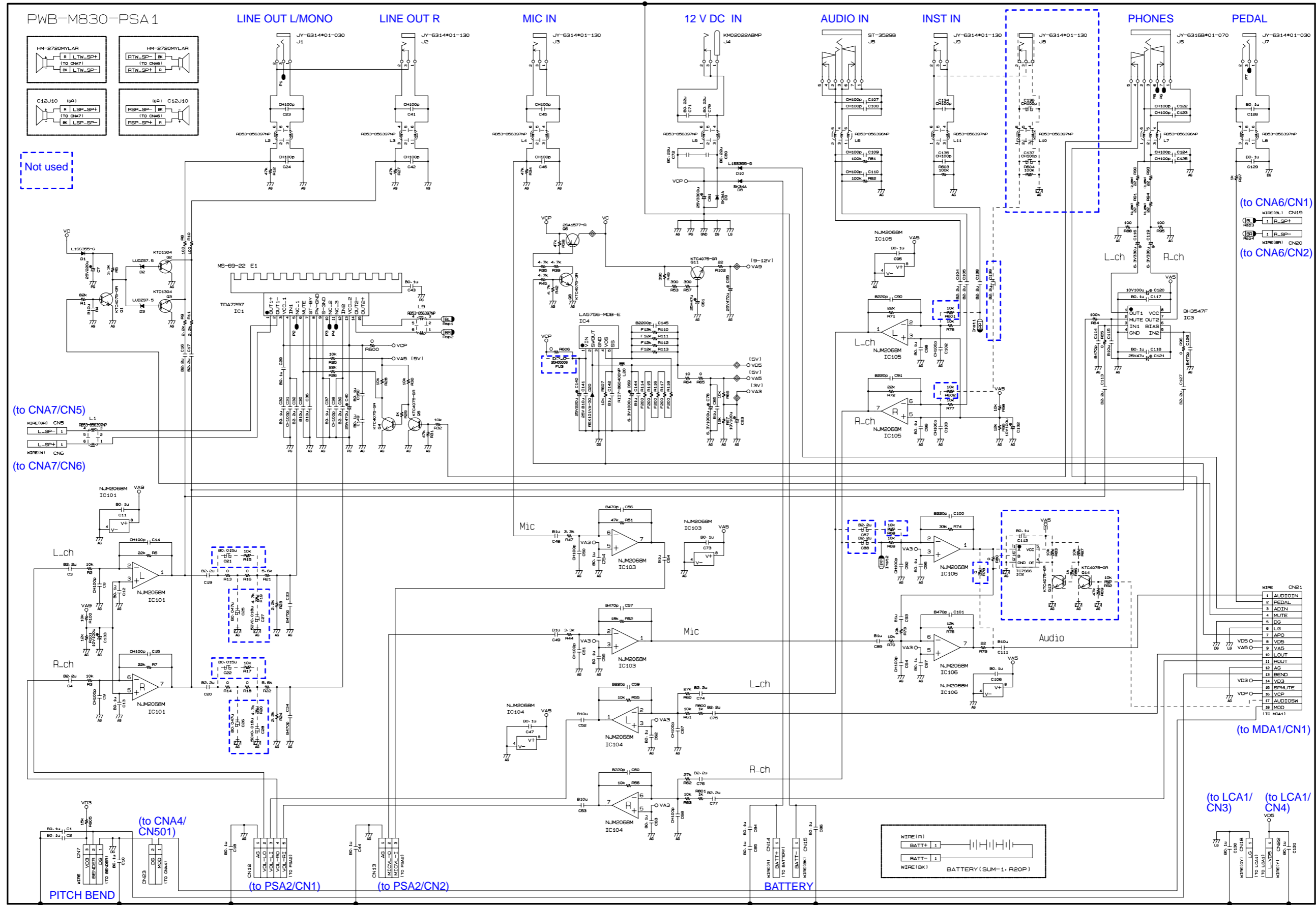
(to LCA1/CN10)

(to KYA1/CN801)

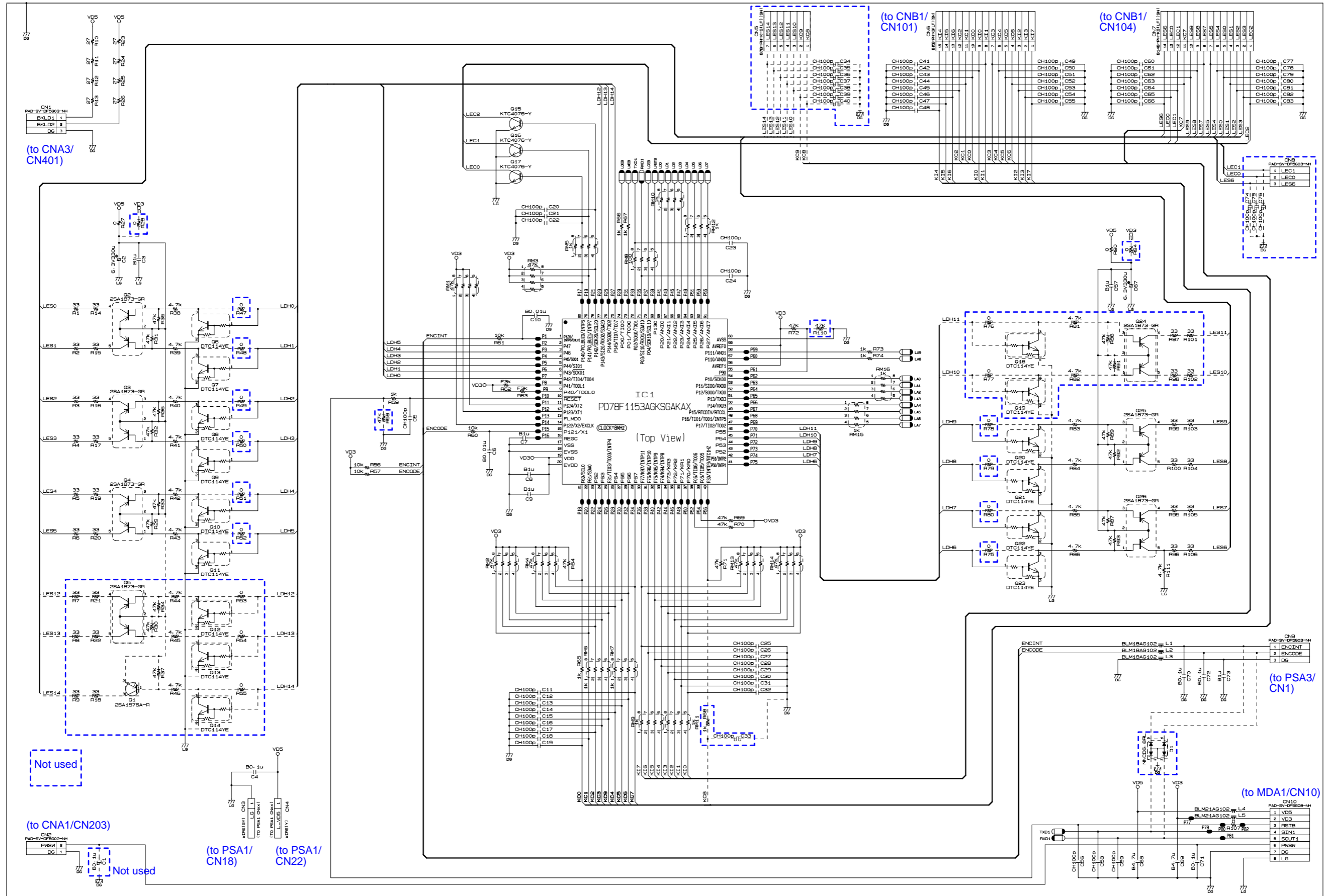
(to KYA2/CN804)

(to CNC1/CN602)

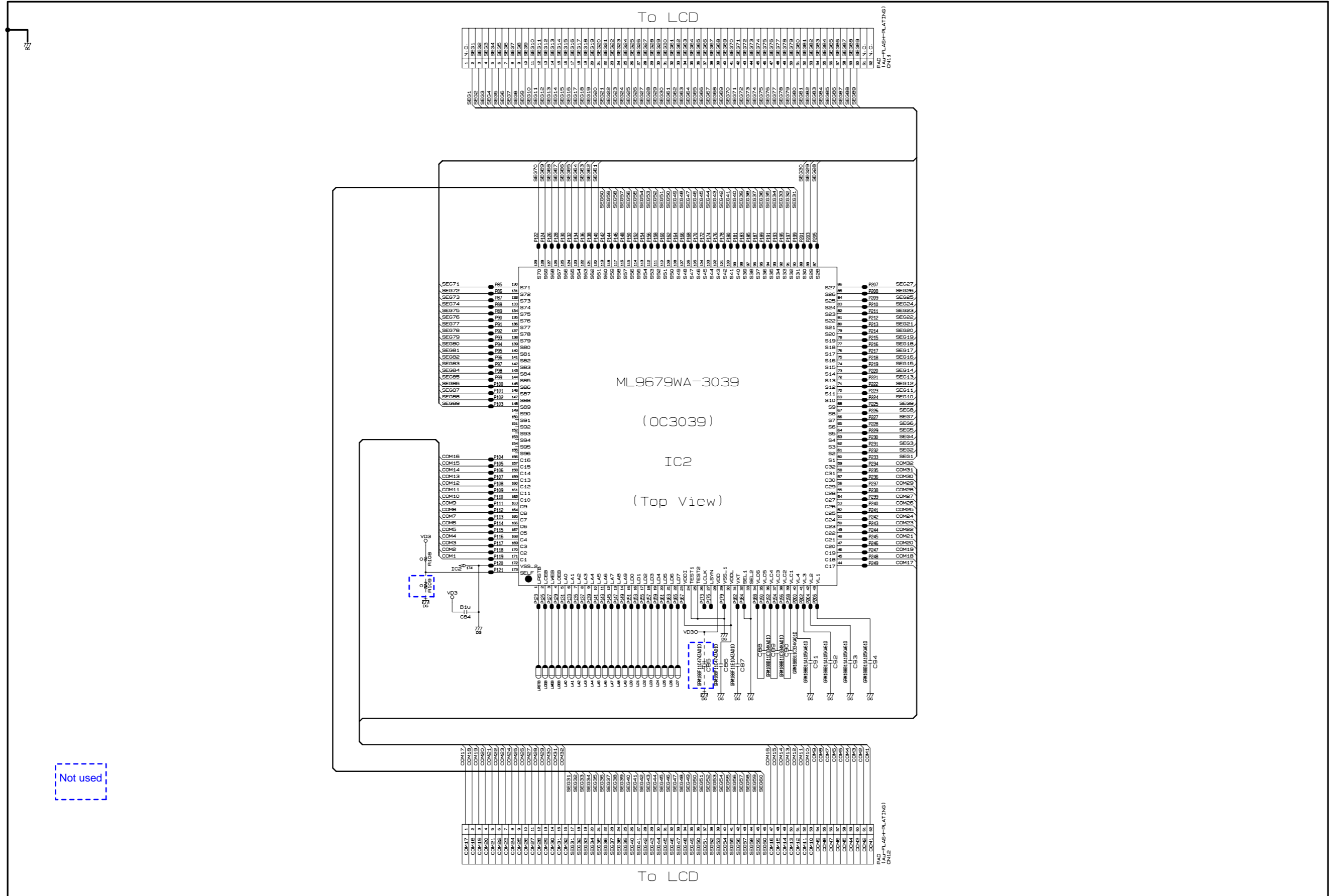
Power Amp PCB: M830-PSA1



Sub PCB: M830-LCA1 (1/2)



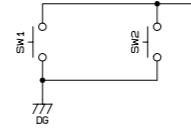
Sub PCB: M830-LCA1 (2/2)



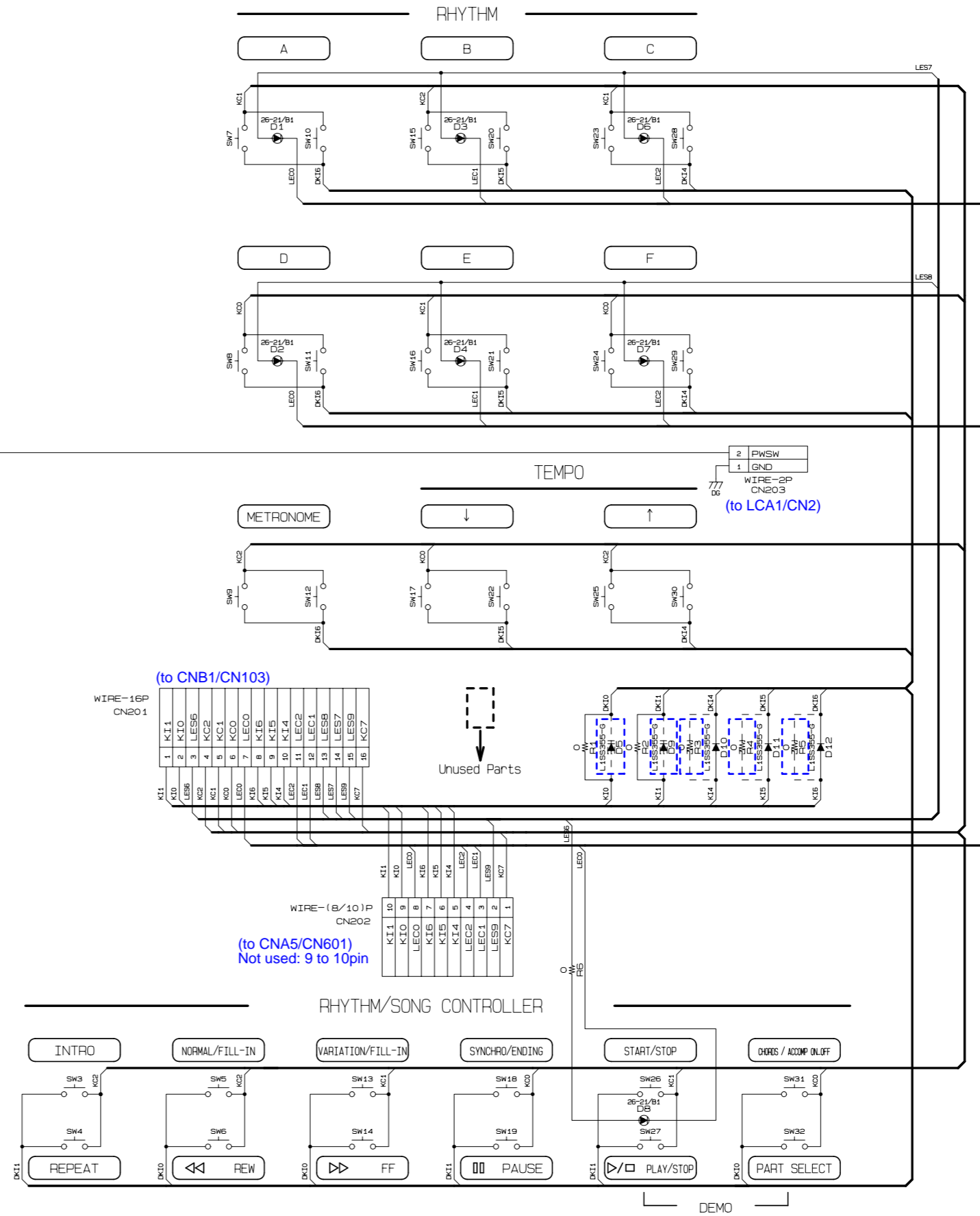
Console PCB: M830-CNA1

Not used

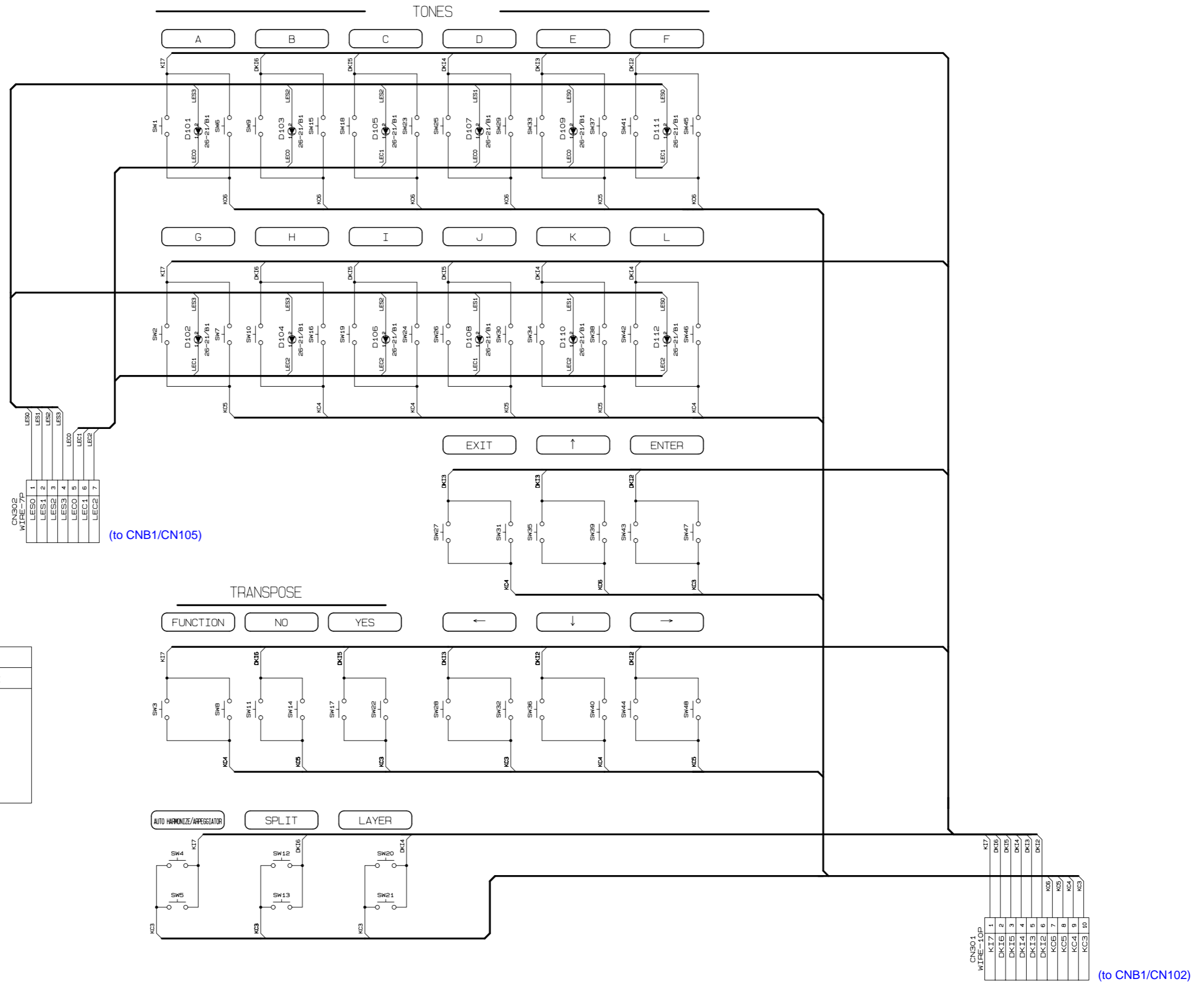
POWER SWITCH
POWER



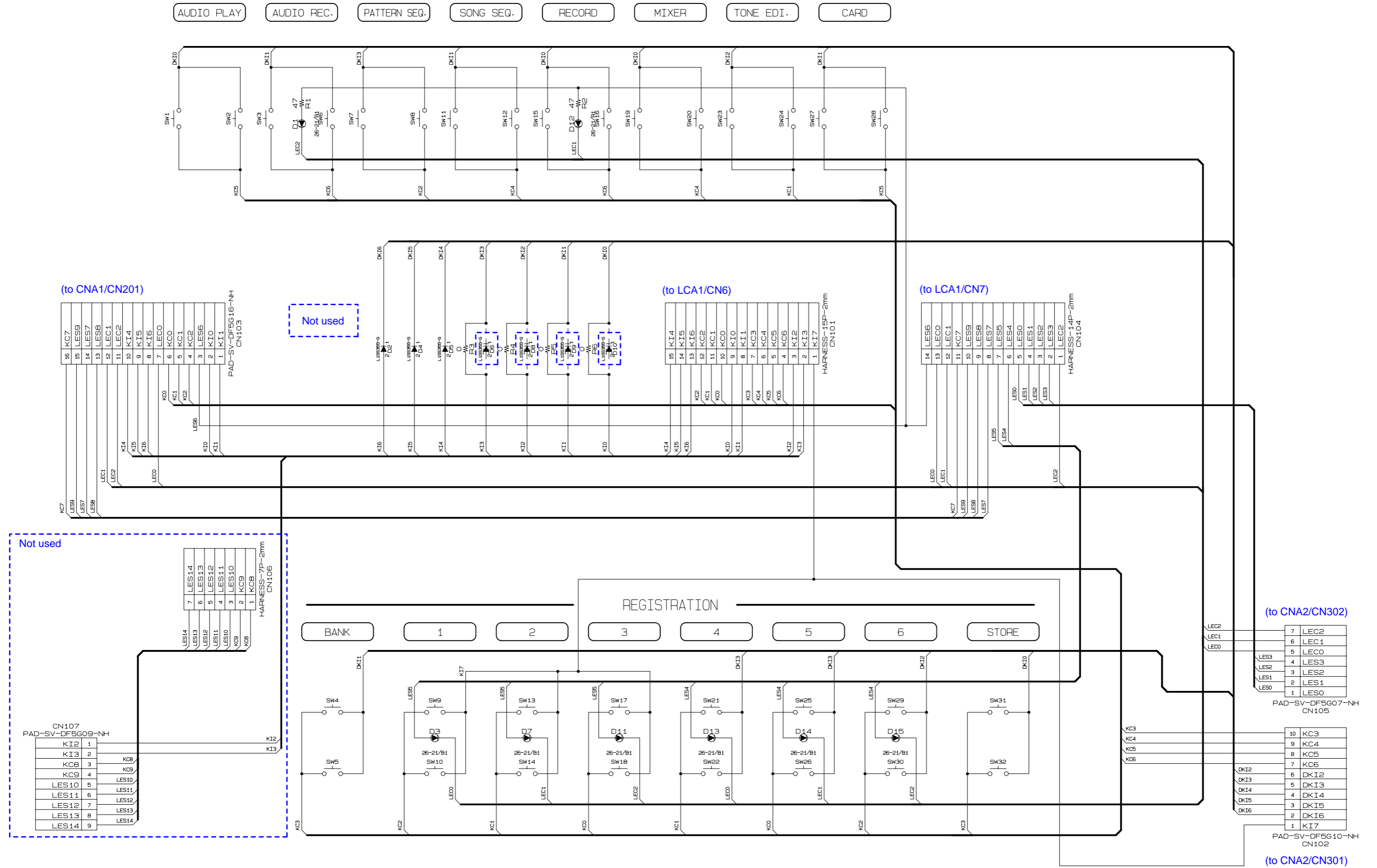
JUMPER RESISTOR	
3216 SIZE	1608 SIZE
R101 W	R104 W
R102 W	R105 W
R103 W	



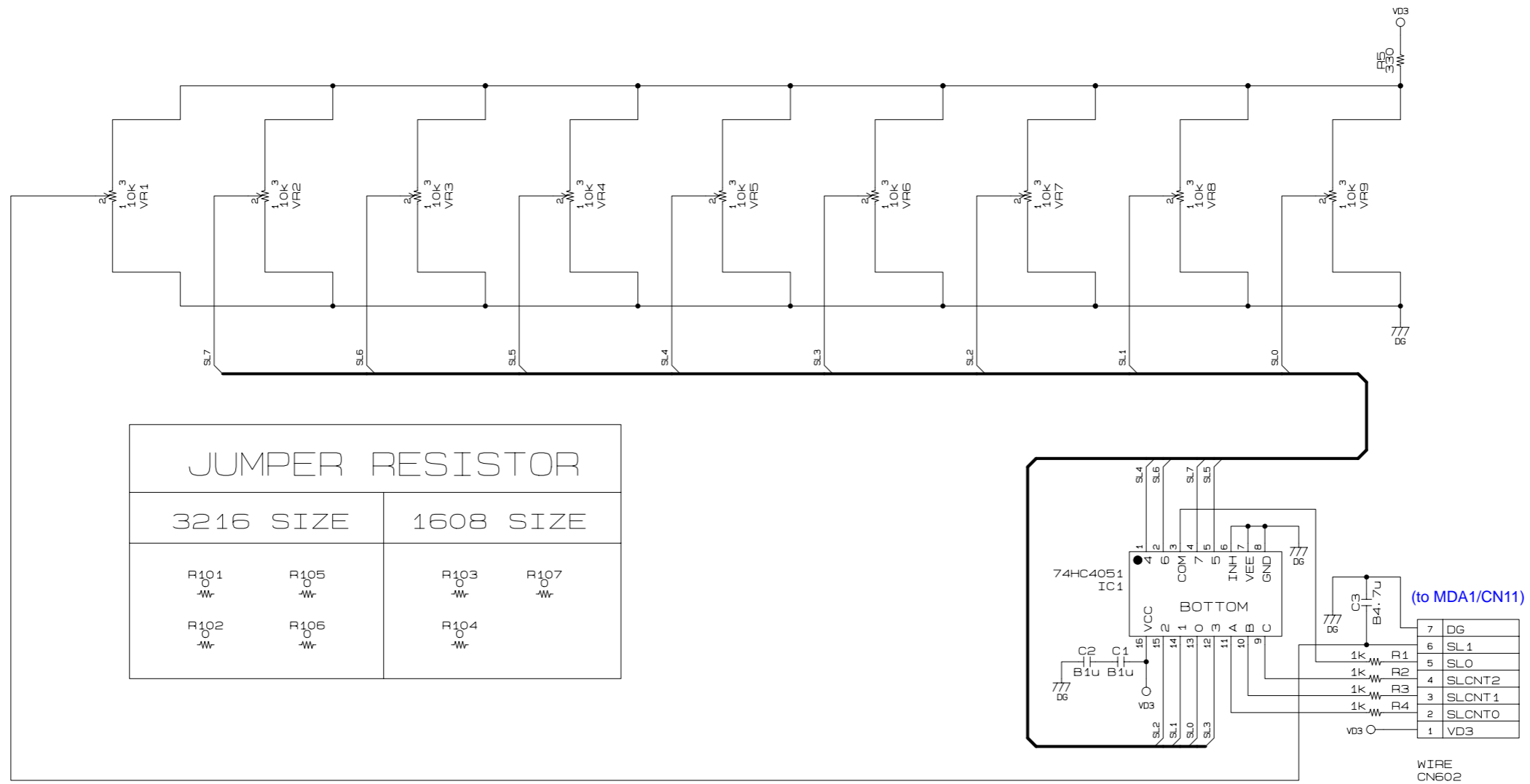
Console PCB: M830-CNA2



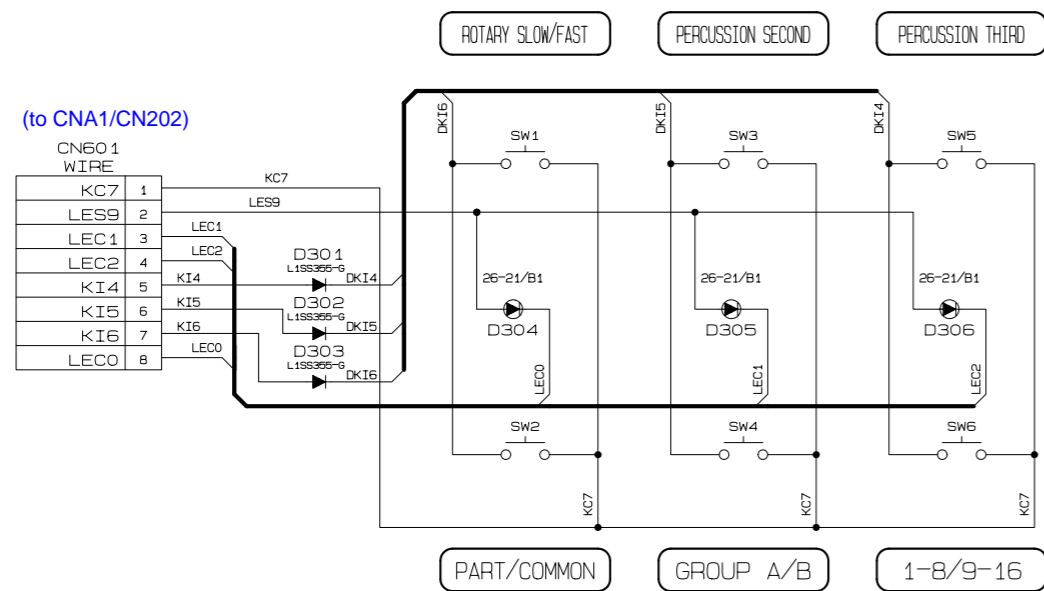
Console PCB: M831-CNB1



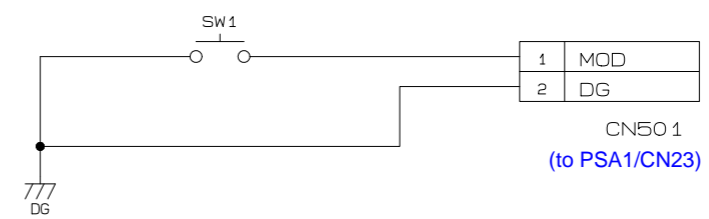
Console PCB: M831-CNC1



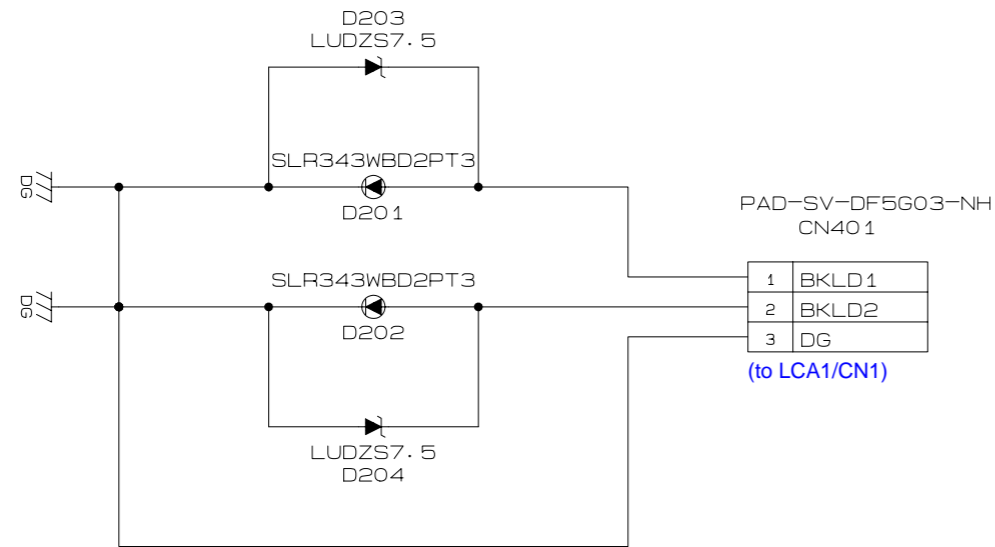
Console PCB: M830-CNA5



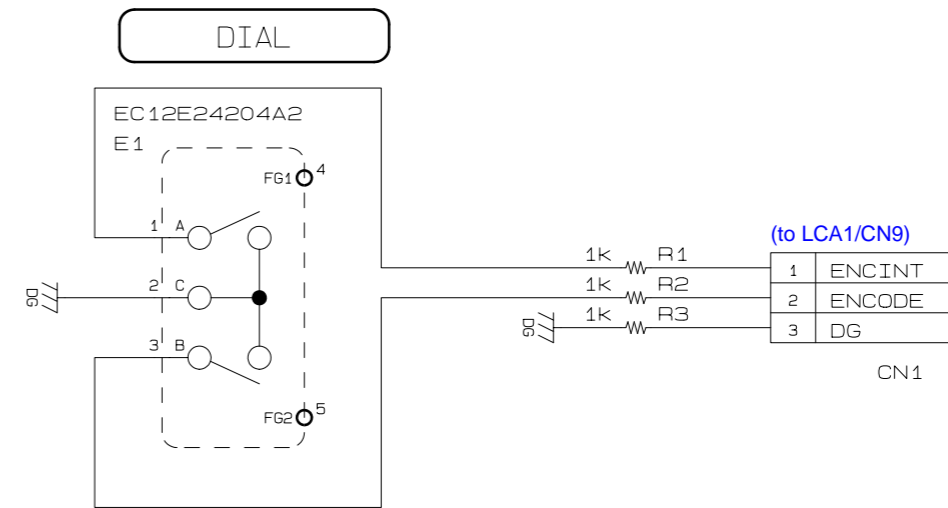
Modulation PCB: M830-CNA4



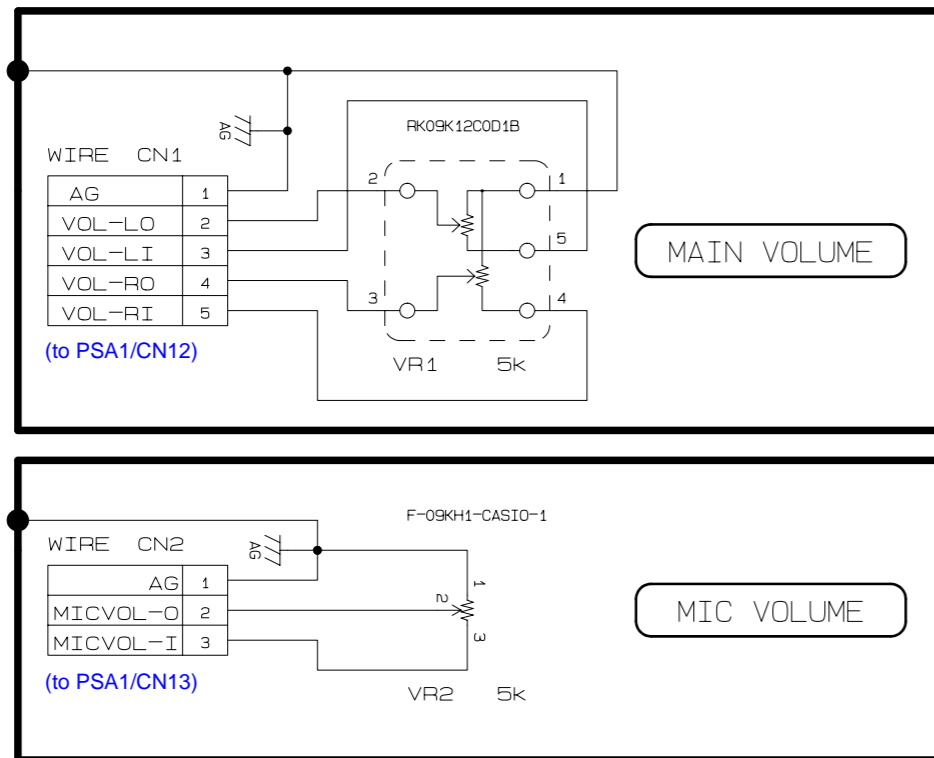
Backlight PCB: M830-CNA3



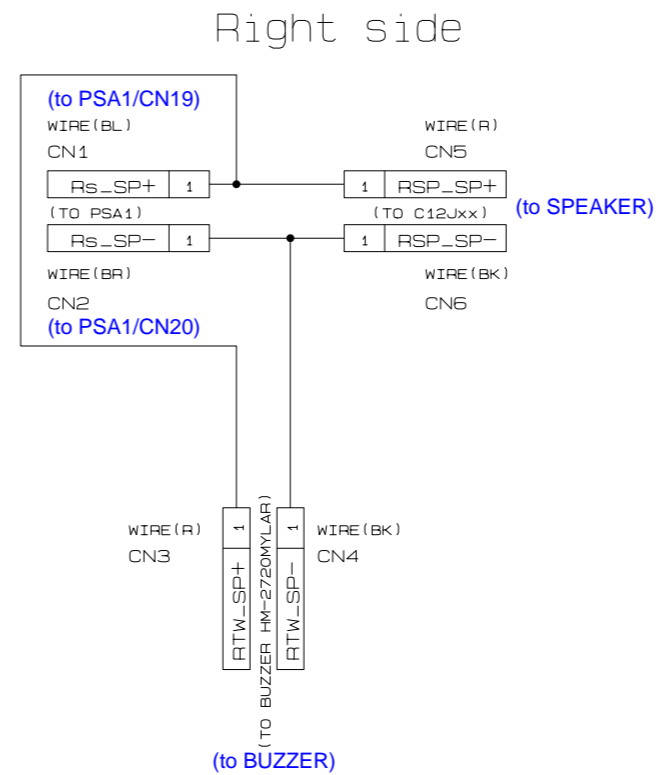
Dial PCB: M830-PSA3



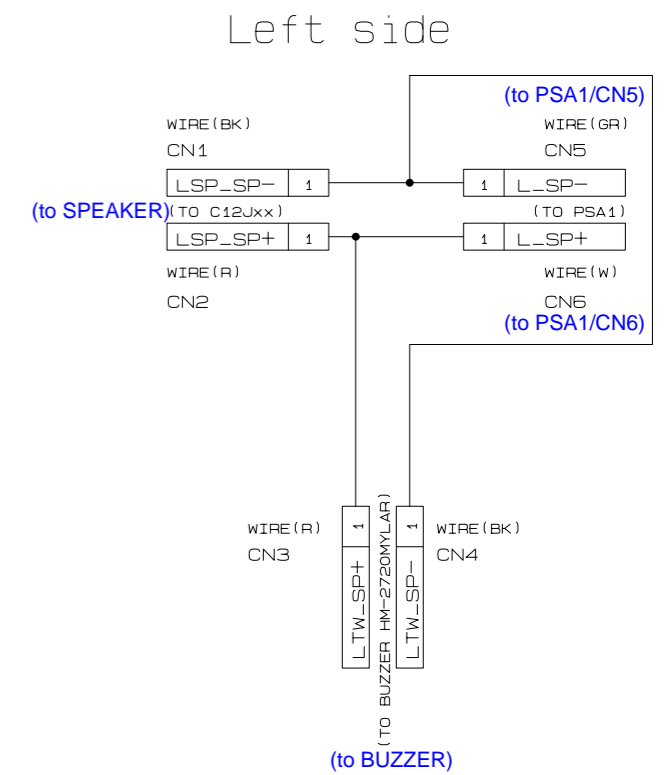
Volume PCB: M830-PSA2



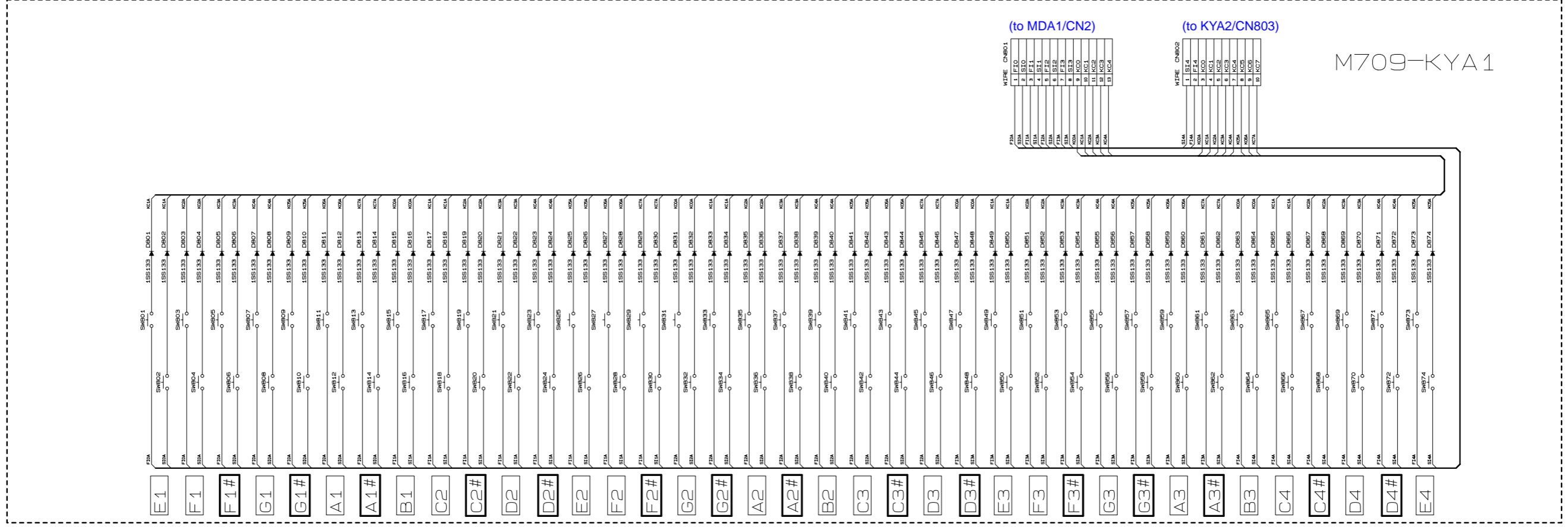
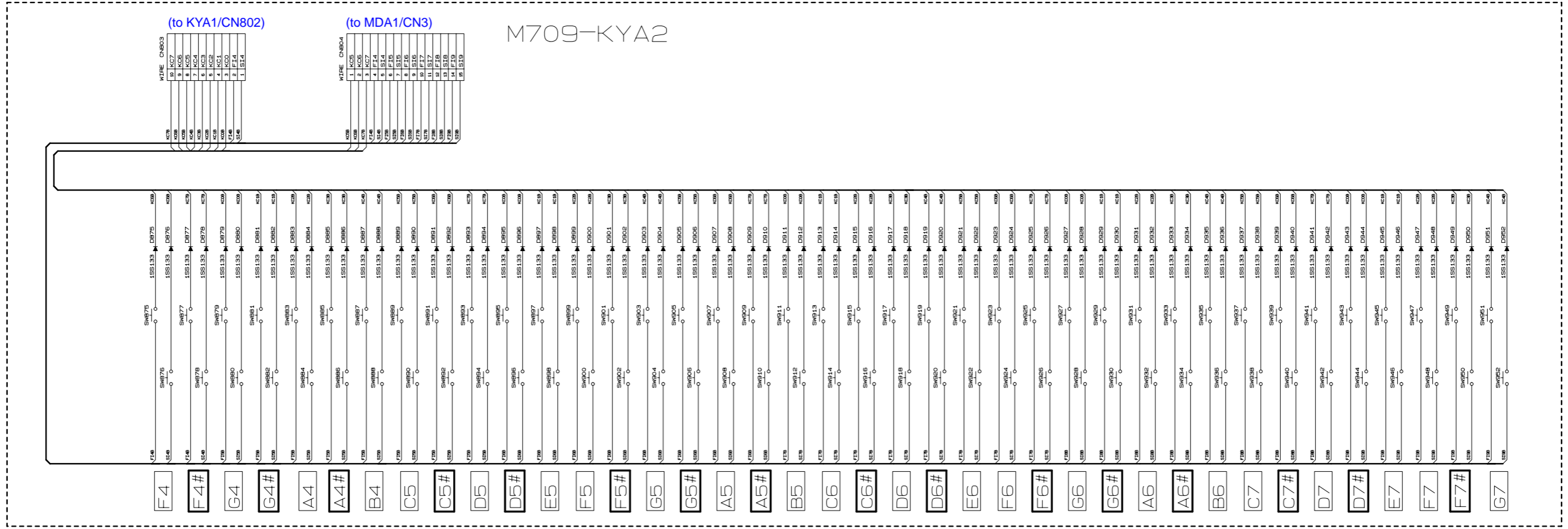
Speaker PCB: M830-CNA6



Speaker PCB: M830-CNA7



Keyboard PCB: M709-KYA1/KYA2



Ver. 1 : Feb. 2011

- Correction of the DISASSEMBLY (P28)
- Correction of the DIAGNOSTIC PROGRAM (P40)

CASIO COMPUTER CO.,LTD.

Overseas Service Division

6-2, Hon-machi 1-Chome
Shibuya-ku, Tokyo 151-8543, Japan