

CASIO®

Service Manual

(without price)

AP-80R

SEP. 2004



AP-80R

ELECTRONIC KEYBOARD

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SPECIFICATIONS

GENERAL

Keyboard:	88 piano keys (with touch response)
Polyphony:	32 notes, maximum
Tones:	120 panel tones + 128 GM tones + 10 drum sets; with layer and split
Digital Effects:	Reverb (4 types), Chorus (4 types)
Metronome:	
Time Signatures:	0, 2, 3, 4, 5, 6
Tempo Range:	20 to 255
Auto Accompaniment:	
Number of Rhythms:	120
Tempo Range:	20 to 255
Modes:	Normal; CASIO CHORD; FINGERED; FULL RANGE CHORD
Accompaniment Volume:	Adjustable
One Touch Presets:	Optimal tone, tempo, layer/auto harmonize on/off settings to match rhythm
Auto Harmonize:	12 types; adds harmony notes to melody in accordance with auto accompaniment chord fingerings.
Built-in Tunes:	
Number of Tunes:	Piano Group 50 + Song Group 30 + 10 loaded song data (Approximately 132 kilobytes)
Tempo:	20 to 255
Demo:	Sequential looping of all 80 preset tunes
Song Volume:	Adjustable
Lesson Function:	Lesson Part: Left hand, right hand
Song Memory:	
Number of Songs:	Two (1 Song Recording, 1 Free Recording)
Recorded Data:	Song Recording: Right-hand part, left-hand part, both-hand parts Free Recording: Track 1 (chord accompaniment), Track 2 (melody)
Recording Method:	Real-time
Memory Capacity:	Approximately 5,300 notes (two songs)
Pedals:	Damper, Soft, Sostenuto
Registration Memory:	Number of Memory Areas: 16 (4 sets × 4 banks)
Card Slot:	3.3V SmartMedia™
Other Functions:	
Touch:	3 types, off
Transpose:	1 octave (F# to C to F)
Tuning:	A4 = 440.0Hz ±50 cents (adjustable)
Display Contrast:	Adjustable
MIDI:	16 multi-timbre receive, GM Level 1 standard

Input/Output:

Headphones: Stereo standard jacks × 2
Output Impedance : 170Ω
Output Voltage : 1.1V (RMS) MAX

LINE OUT (R)(L/MONO): Standard jacks × 2
Output impedance: 2.3kΩ
Output voltage: 1.0V (RMS) MAX

MIC IN: Standard jack
Input impedance: 3.3kΩ
Input voltage: 10mV

MIDI (OUT) (IN)

USB port

Speakers: ø16 cm × 2 + ø5 cm × 2 (Output: 20W + 20W)

Power Supply: AP-80R: 120V
AP-80RV: 220-240V

Power Consumption: 60W

Dimensions:

Digital Piano (without stand): 138.0 × 47.6 × 24.4 cm (54 ³/₈ × 18 ³/₄ × 9 ⁵/₈ inch)
Digital Piano: 138.1 × 47.7 × 84.6 cm (54 ⁷/₁₆ × 18 ¹³/₁₆ × 33 ⁵/₁₆ inch)

Weight:

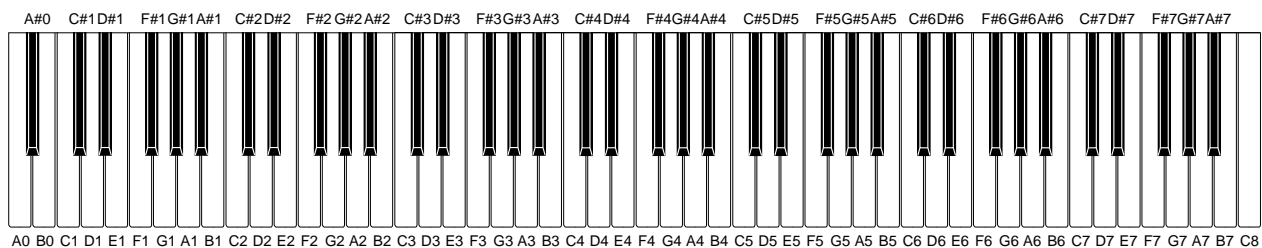
Digital Piano (without stand): approximately 41.6 kg (91.7 lbs)
Digital Piano: Approximately 54.0 kg (119.0 lbs)

CIRCUIT DESCRIPTION

KEY MATRIX

	KC0	KC1	KC2	KC3	KC4	KC5	KC6	KC7
FI0	A0①	A0#①	B0①	C1①	C1#①	D1①	D1#①	E1①
SI0	A0②	A0#②	B0②	C1②	C1#②	D1②	D1#②	E1②
FI1	F1①	F1#①	G1①	G1#①	A1①	A1#①	B1①	C2①
SI1	F1②	F1#②	G1②	G1#②	A1②	A1#②	B1②	C2②
FI2	C2#①	D2①	D2#①	E2①	F2①	F2#①	G2①	G2#①
SI2	C2#②	D2②	D2#②	E2②	F2②	F2#②	G2②	G2#②
FI3	A2①	A2#①	B2①	C3①	C3#①	D3①	D3#①	E3①
SI3	A2②	A2#②	B2②	C3②	C3#②	D3②	D3#②	E3②
FI4	F3①	F3#①	G3①	G3#①	A3①	A3#①	B3①	C4①
SI4	F3②	F3#②	G3②	G3#②	A3②	A3#②	B3②	C4②
FI5	C4#①	D4①	D4#①	E4①	F4①	F4#①	G4①	G4#①
SI5	C4#②	D4②	D4#②	E4②	F4②	F4#②	G4②	G4#②
FI6	A4①	A4#①	B4①	C5①	C5#①	D5①	D5#①	E5①
SI6	A4②	A4#②	B4②	C5②	C5#②	D5②	D5#②	E5②
FI7	F5①	F5#①	G5①	G5#①	A5①	A5#①	B5①	C6①
SI7	F5②	F5#②	G5②	G5#②	A5②	A5#②	B5②	C6②
FI8	C6#①	D6①	D6#①	E6①	F6①	F6#①	G6①	G6#①
SI8	C6#②	D6②	D6#②	E6②	F6②	F6#②	G6②	G6#②
FI9	A6①	A6#①	B6①	C7①	C7#①	D7①	D7#①	E7①
SI9	A6②	A6#②	B6②	C7②	C7#②	D7②	D7#②	E7②
FI10	F7①	F7#①	G7①	G7#①	A7①	A7#①	B7①	C8①
SI10	F7②	F7#②	G7②	G7#②	A7②	A7#②	B7②	C8②

NOMENCLATURE OF KEYS



BUTTON MATRIX

	SI0	SI1	SI2	SI3	SI4	SI5	SI6	SI7
SC0	SING ALONG	ECHO	TRANSPOSE/ KEY CONTROL ▾	TRANSPOSE/ KEY CONTROL ▲	PLAY/ STOP	MODE		
SC1	POPS	DANCE/ FUNK	ROCK	JAZZ	EUROPEAN	LATIN	REVERB/ CHORUS	SETTING
SC2	INTRO	NOMAL/ FILL-IN	VARIATION/ FILL-IN	SYNCHRO/ ENDING	START/ STOP	VARIOUS	SPLIT	LAYER
SC3	CARD	ACCOMP/ SONG VOLUME	SONG MEMORY	METRONOME	ONE TOUCH PRESET	FOR PIANO	4 (REGISTRATION)	STORE (REGISTRATION)
SC4	SONG/USER (MUSIC LIBRARY)	PIANO (MUSIC LIBRARY)	TRACK	AUTO HARMONIZE	TEMPO ▲	TEMPO ▾	2 (REGISTRATION)	3 (REGISTRATION)
SC5			BANK (REGISTRATION)	1 (REGISTRATION)	PIPE	SYNTH- LEAD	SYNTH- PAD	GM TONES
SC6	PIANO	E.PIANO	ORGAN	GUITAR	BASS	STRINGS	BRASS	REED

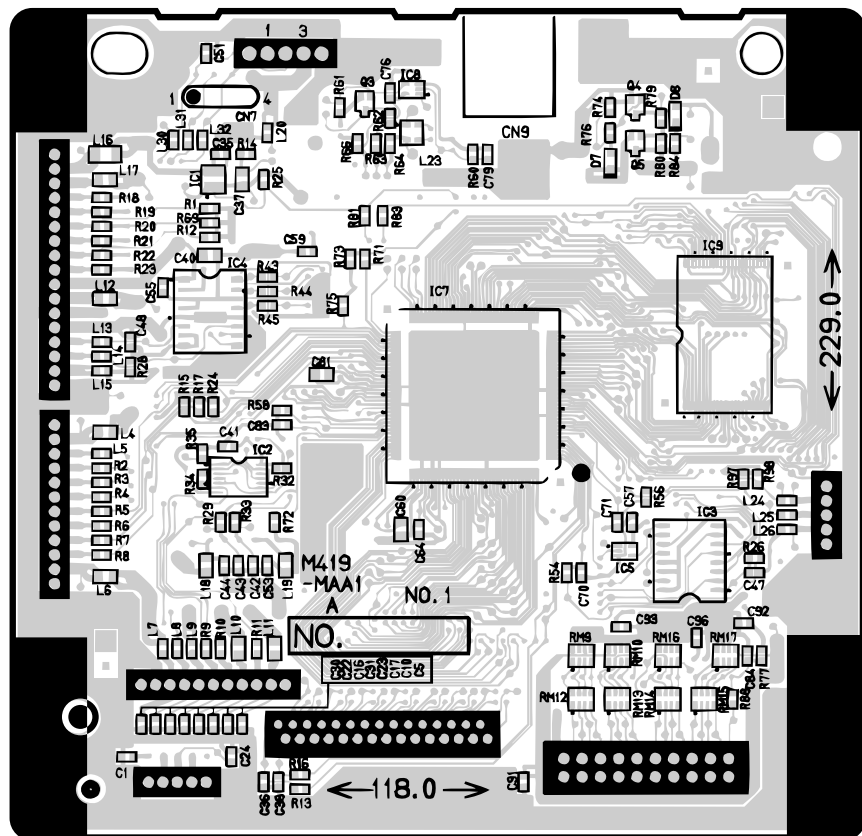
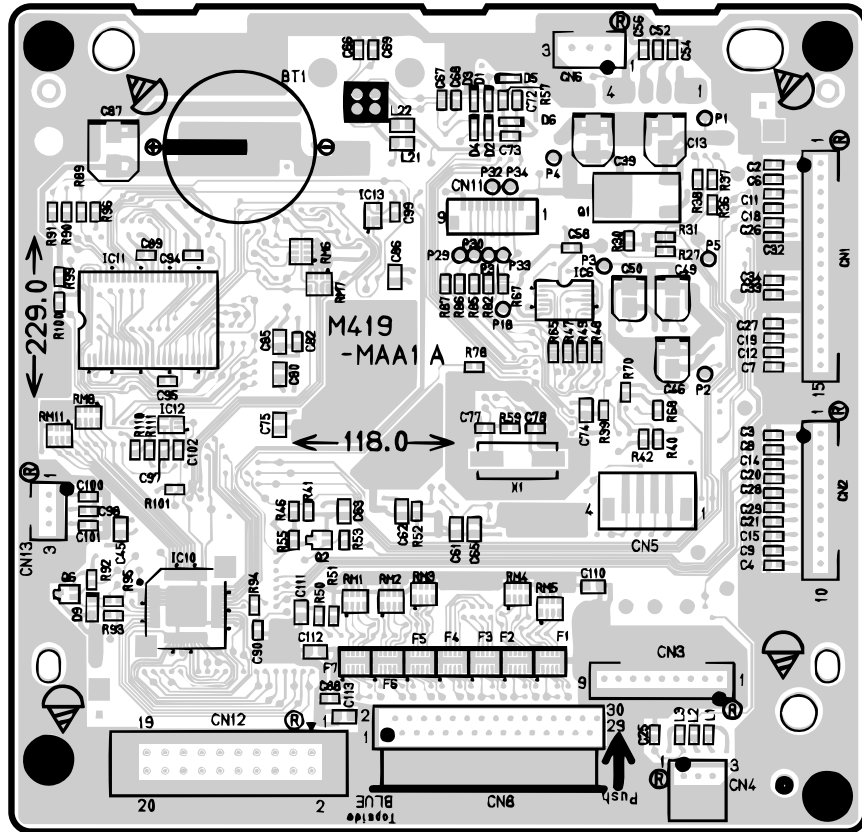
KEY LED MATRIX

	LH25	LH24	LH23	LH22	LH21	LH20	LH19	LH18
LL0	SING ALONG	FINGERED	VARIOUS	JAZZ	FOR PIANO	TEMPO 2	TEMPO 1	START/ STOP
LL1	ECHO	FULL RANGE CHORD	LATIN	ROCK	SONG MEMORY	TEMPO 3	TRACK 1/L	PLAY/ STOP
LL2	POPS	CASIO CHORD	EUROPEAN	DANCE/ FUNK	AUTO HARMONIZE	TEMPO 4	TRACK 2/R	REPERT

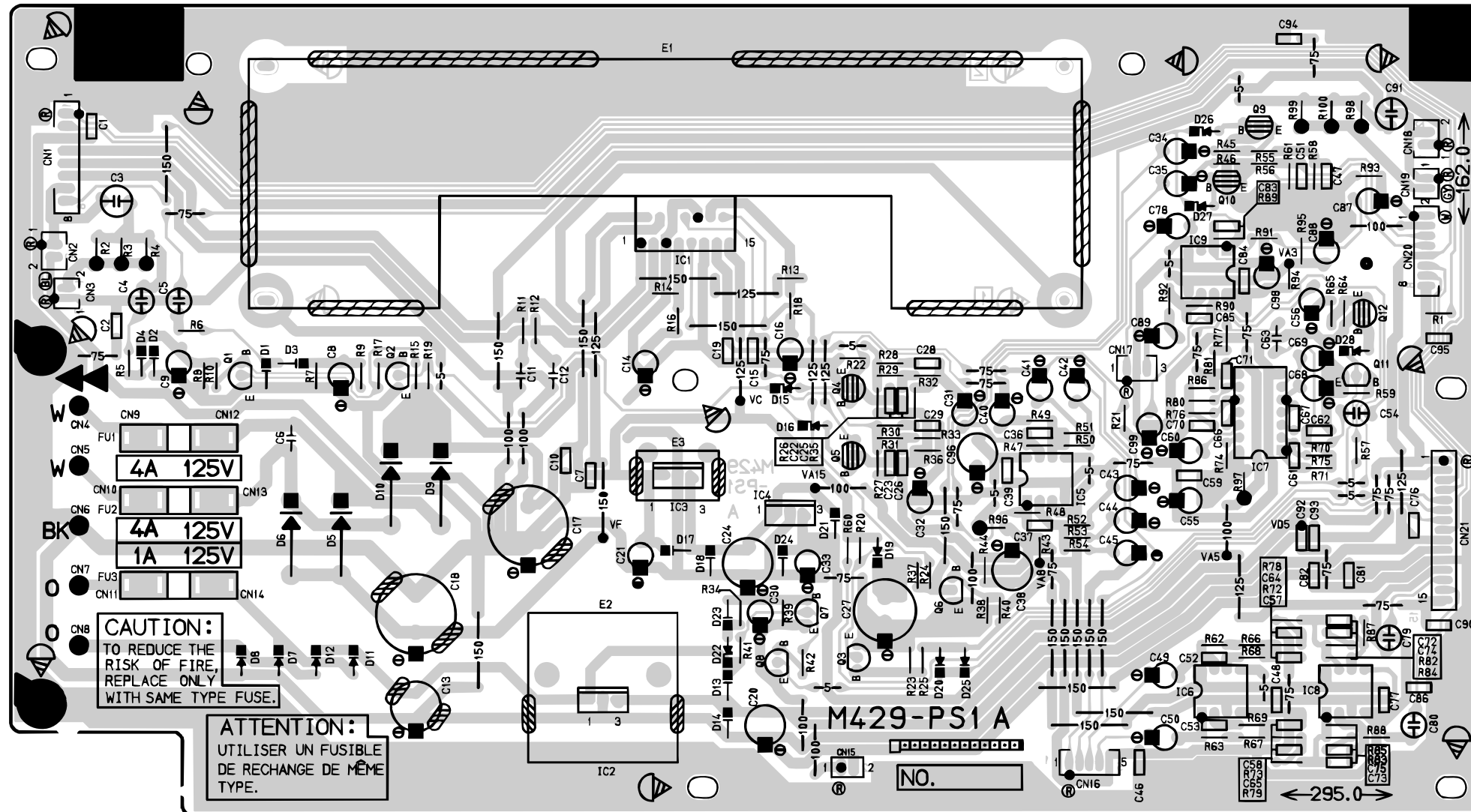
	LH17	LH14	LH13	LH12	LH11	LH10	LH9	
LL0	PIANO (MUSIC LIBRARY)	E.PIANO	STRINGS	BRASS	GM TONES	LAYER	REVERB	
LL1	CARD	ORGAN	BASS	REED	SYNTH- PAD	SPLIT	CHORUS	
LL2	SONG/USER (MUSIC LIBRARY)		GUITAR	PIPE	SYNTH- LEAD	PIANO		

PRINTED CIRCUIT BOARDS

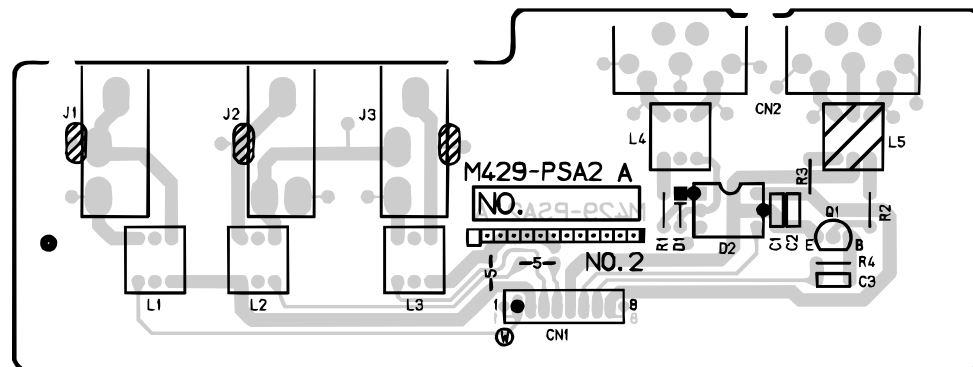
MAIN PCB M419-MAA1



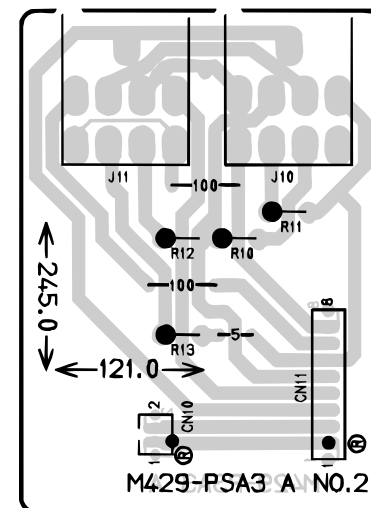
SUB PCB M429-PS1



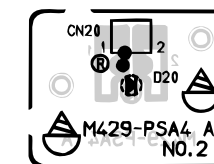
JACK PCB M429-PSA2



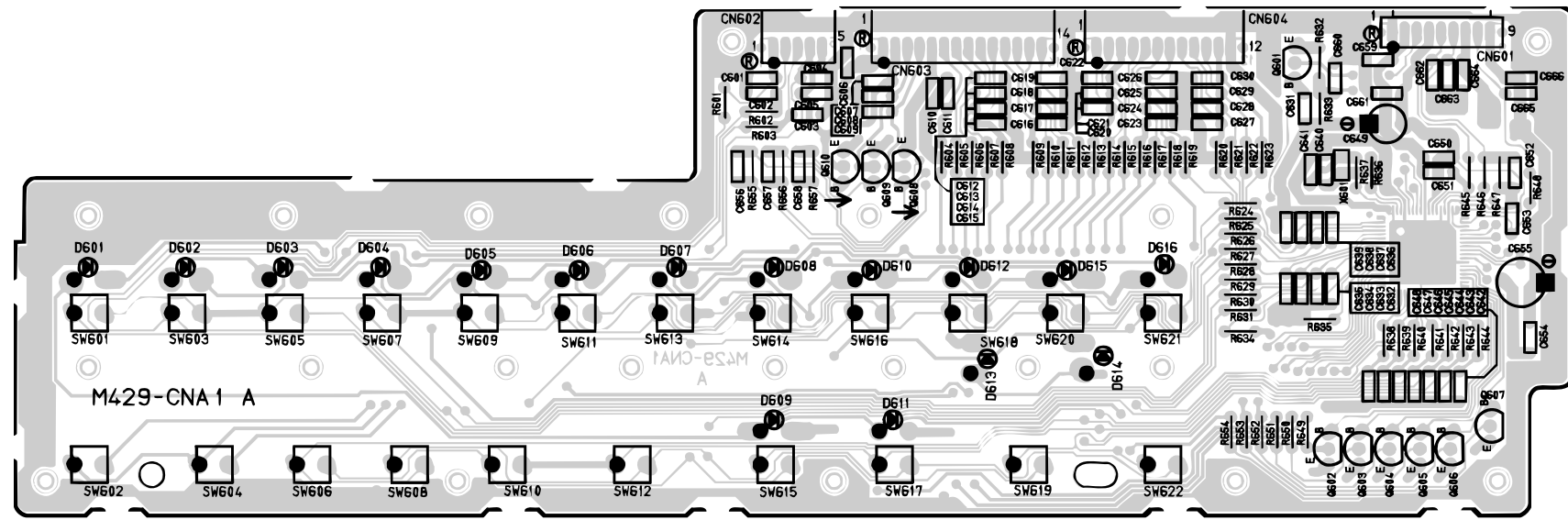
JACK PCB M429-PSA3



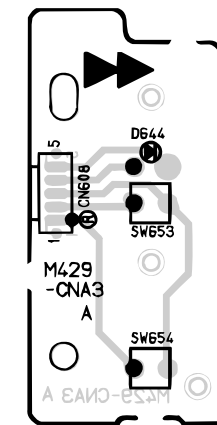
POWER LED PCB M429-PSA4



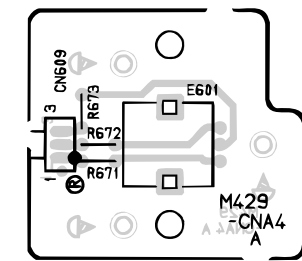
CONSOLE PCB M429-CNA1



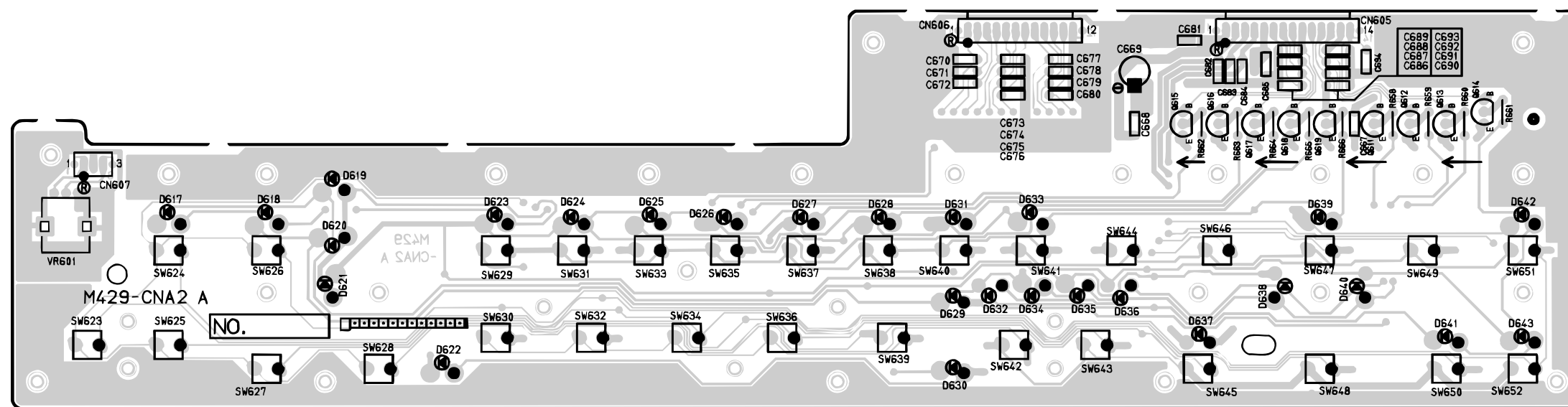
CONSOLE PCB M429-CNA3



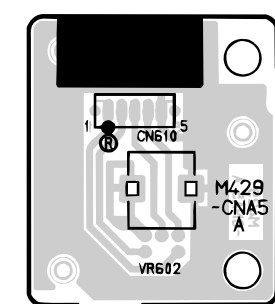
CONSOLE PCB M429-CNA4



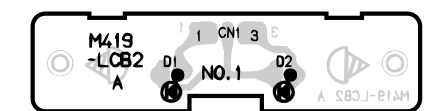
CONSOLE PCB M429-CNA2



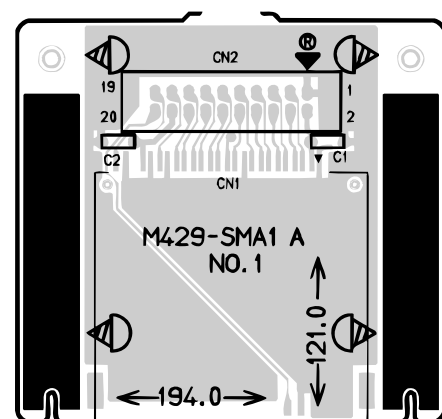
CONSOLE PCB M429-CNA5



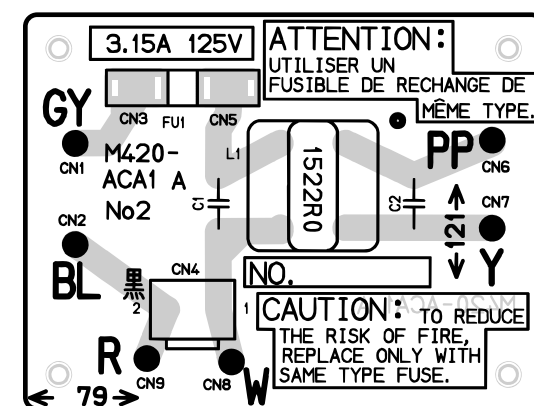
LED PCB M419-LCB2



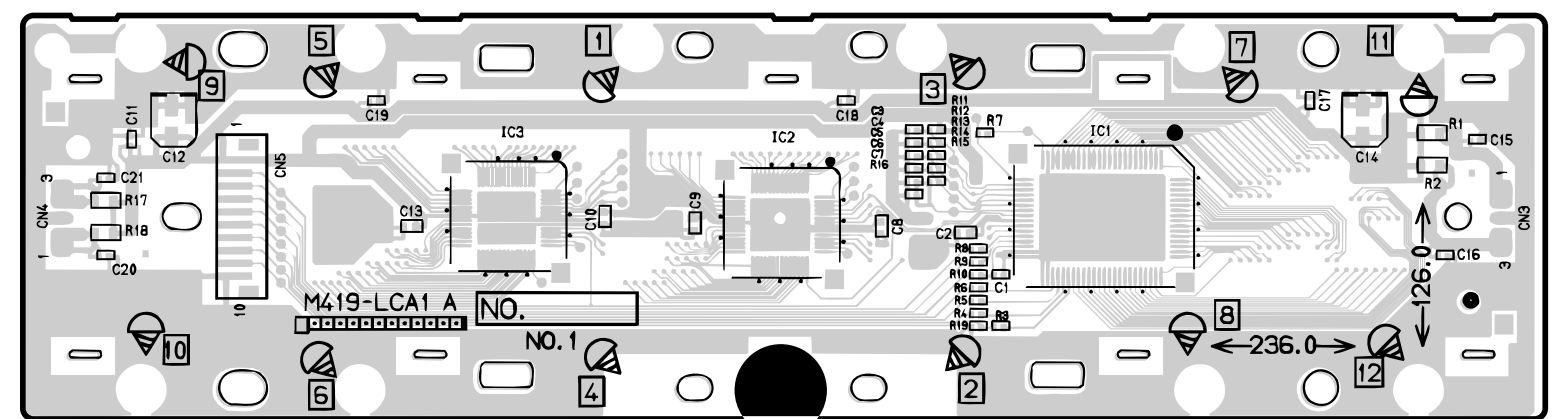
I/O PCB M429-SMA1



POWER SUPPLY PCB M420-ACA1

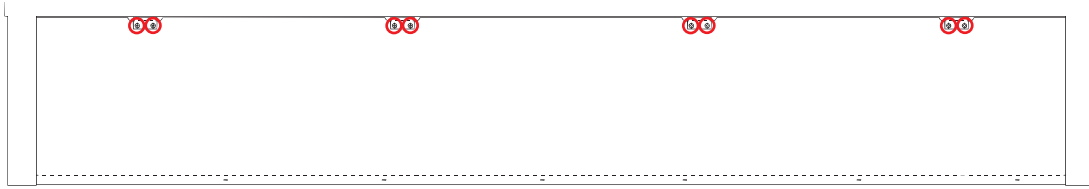


LED PCB M419-LCA1



DISASSEMBLY

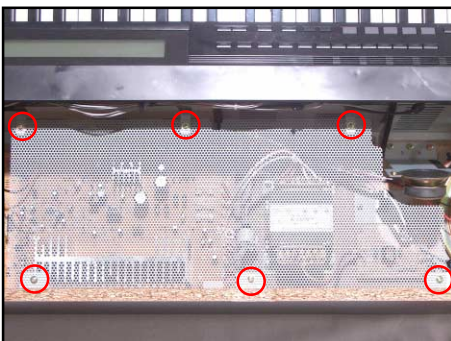
1. Remove eight screws on the back of the main unit, and then remove the top board.



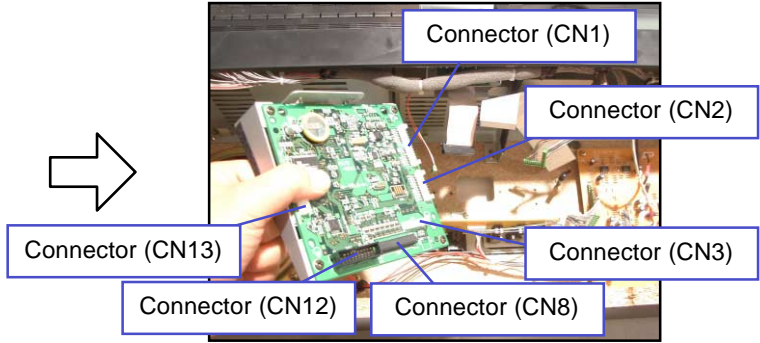
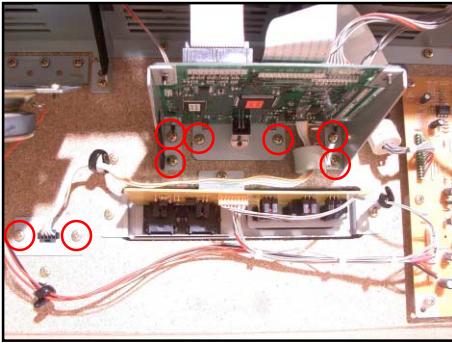
2. Remove one screw and the key cover.



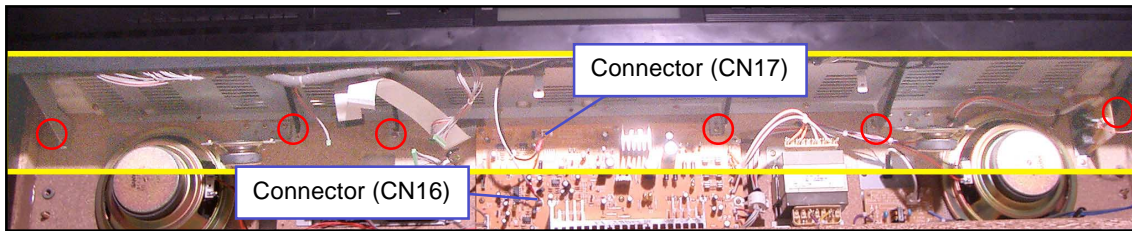
3. Remove six screws and the wire netting.



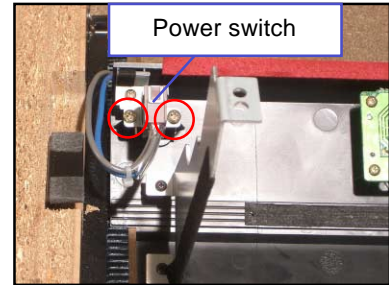
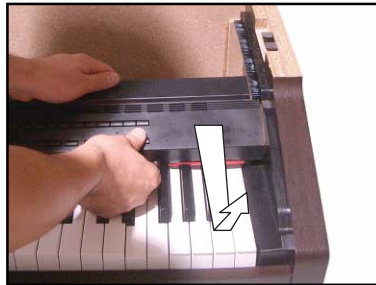
- To remove the main PCB (M419-MAA1)
 4. Remove six connectors on the main PCB.
 5. Remove eight screws and the main PCB.



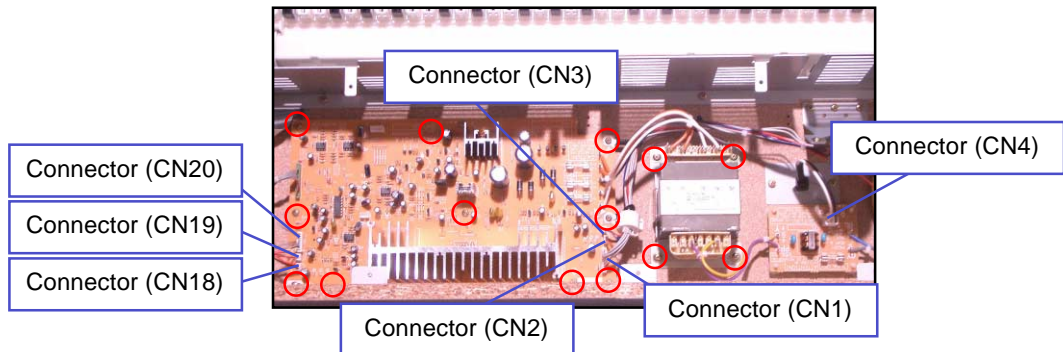
- To remove the panel part
 6. Remove two connectors and six screws.



7. Remove the panel part from the main unit.
8. Remove two screws in the power switch, and then remove the panel part.



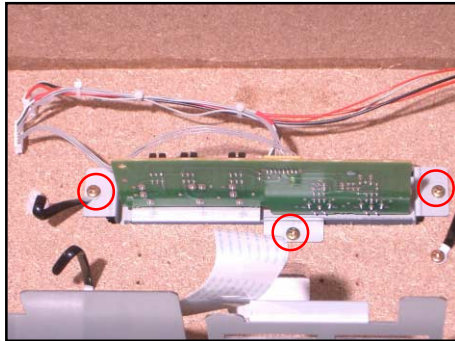
- To remove the sub PCB (M429-PS1), power PCB (M420-ACA1) and the transformer
 9. Remove seven connectors.
 10. Remove 14 screws, sub PCB (M429-PS1), power PCB (M420-ACA1) and the transformer.



■ To remove the jack PCB (M429-PS2) and the jack PCB (M429-PS3)

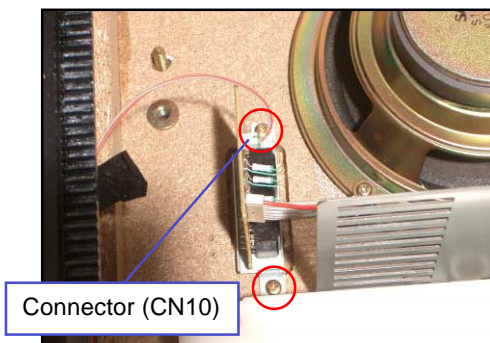
11. Remove the Insulok tie.
12. Remove three screws and the jack PCB (M429-PS2).

Note: Arrange the cables using the Insulok tie when assembling.



13. Remove the Insulok tie.
14. Remove one connector, two screws and the jack PCB (M429-PS3).

Note: Arrange the cables using the Insulok tie when assembling.



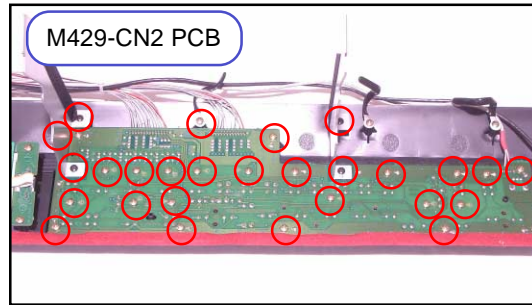
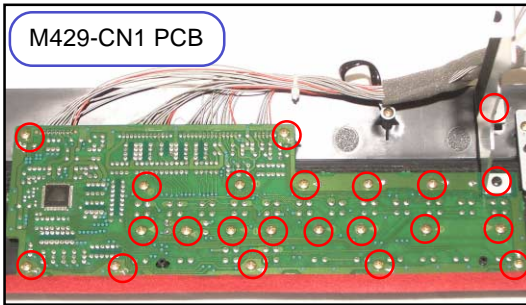
■ To remove the speaker (only on the right side)

15. Remove six screws and two speakers.



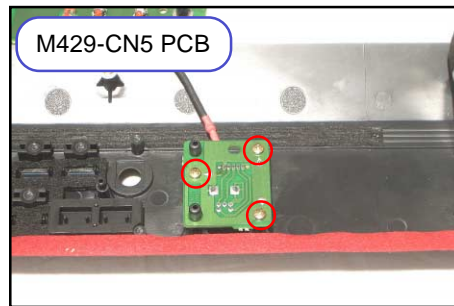
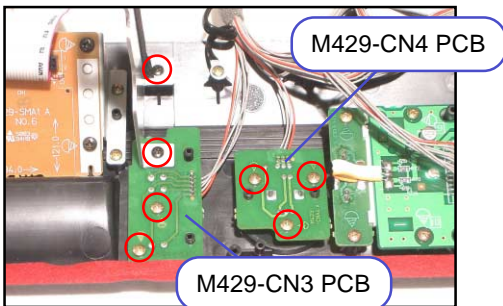
■ To remove the console PCB (M429-CN PCB ASSY)

16. Remove 22 screws of the M429-CN1 PCB.
17. Remove 27 screws of the M429-CN2 PCB.
18. Remove the volume knob of the M429-CN2 PCB.

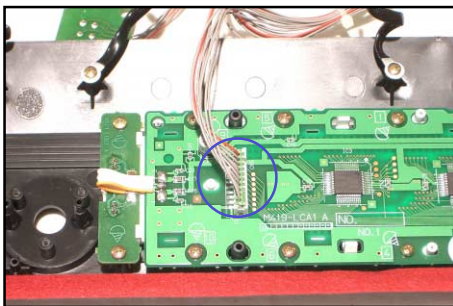


■ To remove the console PCB (M429-CN PCB ASSY)

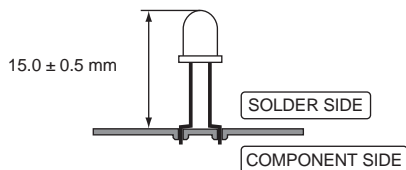
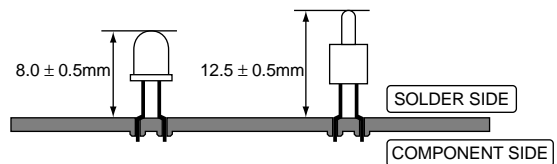
19. Remove four screws of the M429-CN3 PCB.
20. Remove three screws of the M429-CN4 PCB.
21. Remove the volume knob of the M429-CN4 PCB.
22. Remove three screws of the M429-CN5 PCB.
23. Remove the volume knob of the M429-CN5 PCB.



24. Remove one connector and the M429-CN PCB ASSY.

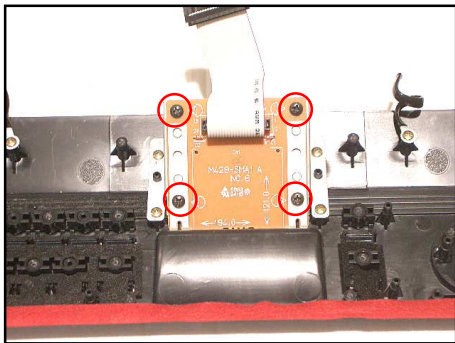


Note: How to fix the LED



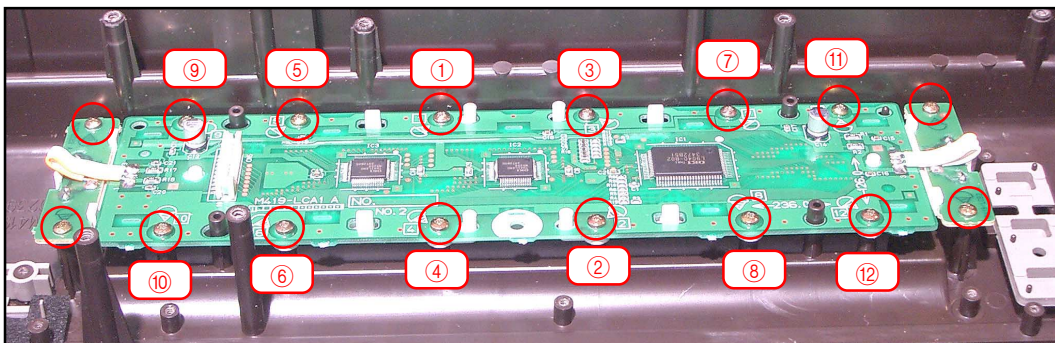
■ To remove the smart media (M429-SMA1) and the LCD PCB (M419-LCA1)

25. Remove four screws of the M429-SMA1 PCB.



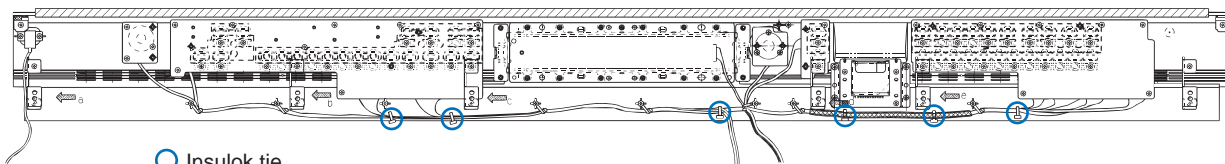
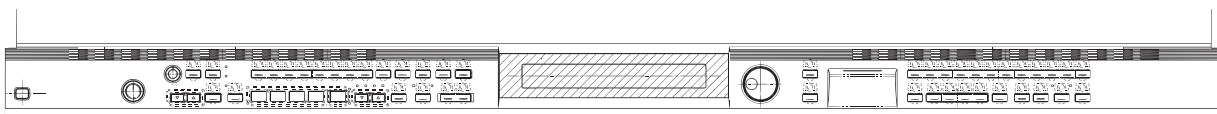
26. Remove 16 screws and the LCD unit.

Note: Fix the screws in the right order when assembling.



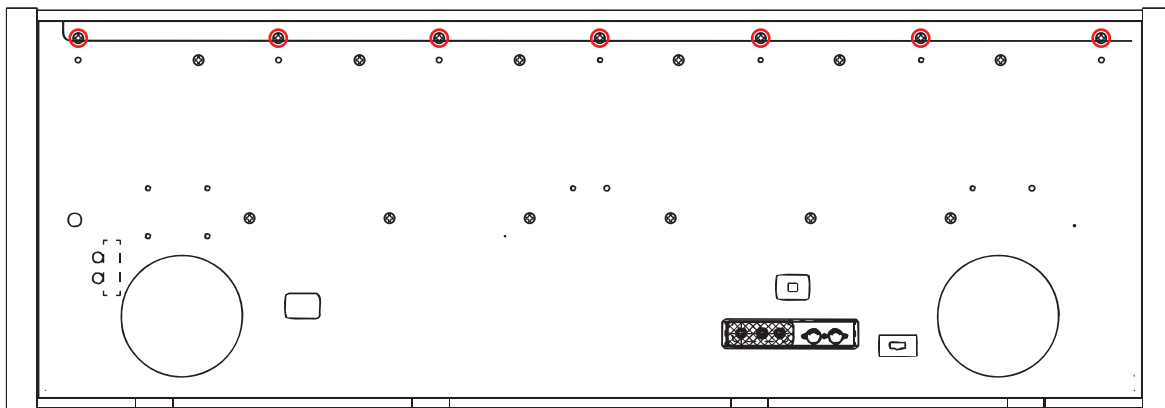
Precautions during assembly

Arrange the cables around the panel part.

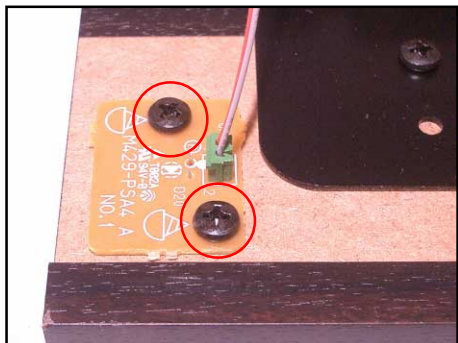


■ To remove the POWER LED PCB (M429-PSA4)

27. Remove seven screws on the bottom.



28. Remove two screws and the M429-PSA4 PCB.

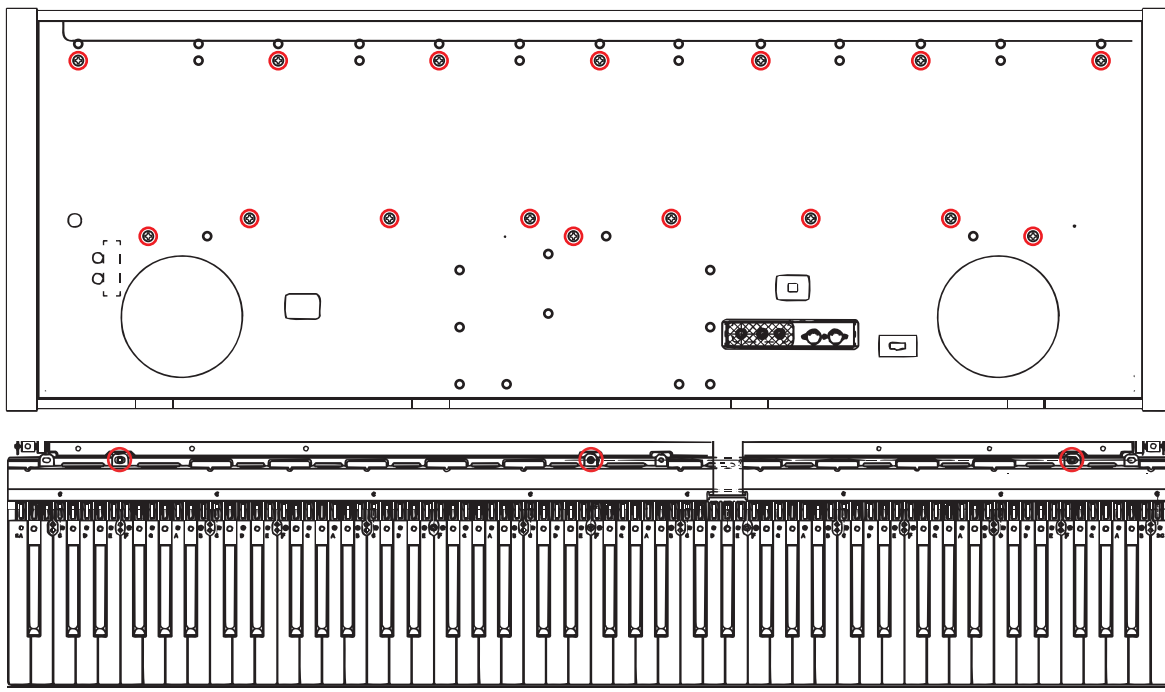


■ To remove the keyboard

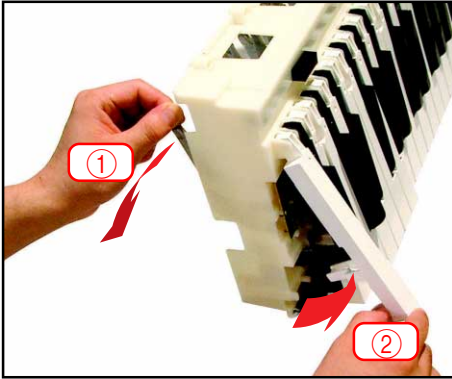
29. Remove 16 screws on the bottom.

30. Remove three screws on the surface.

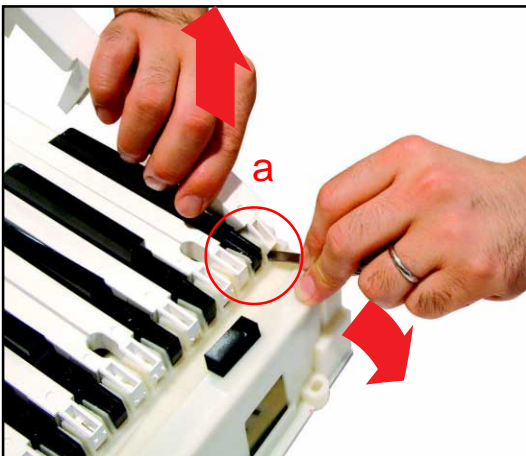
31. Separate the case and the keyboard.



32. ① Pull the hammer, and ② Remove the key from the hammer.

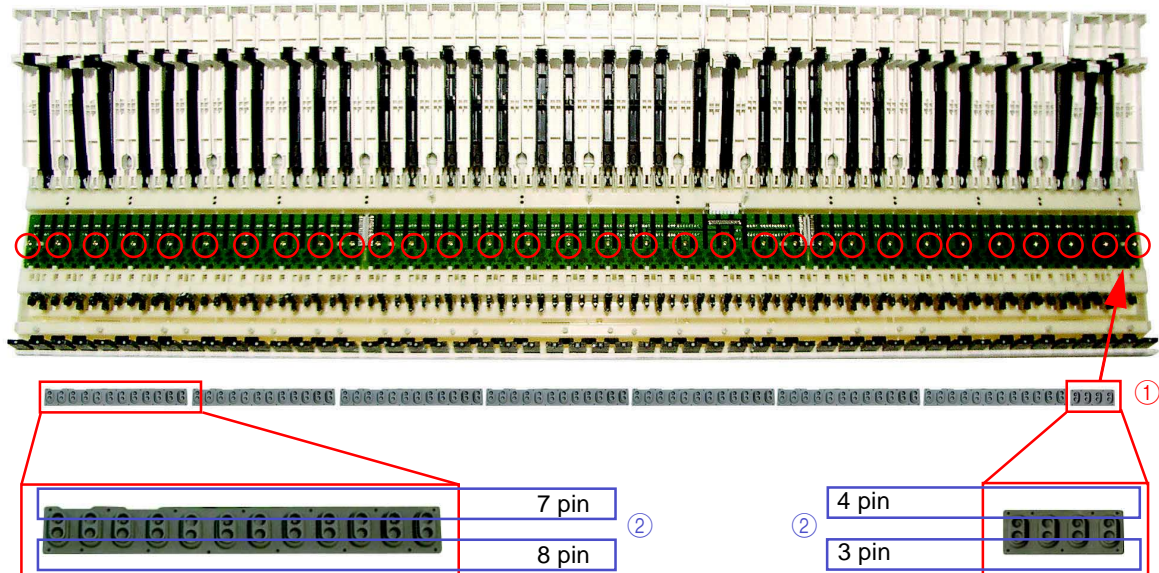


33. Insert the edge of the tweezers as shown in “a” part of the figure, and then remove the keys.



34. Remove eight rubber keys.
 35. Remove 32 screws and the key PCB.

- * Precautions when assembling the rubber keys
- ① The length of this one key is different.
- ② The number of pins on the upper side is different from that on the lower side.
- ③ Fix the pins tightly.



DIAGNOSTIC PROGRAM

■ Initial Setting

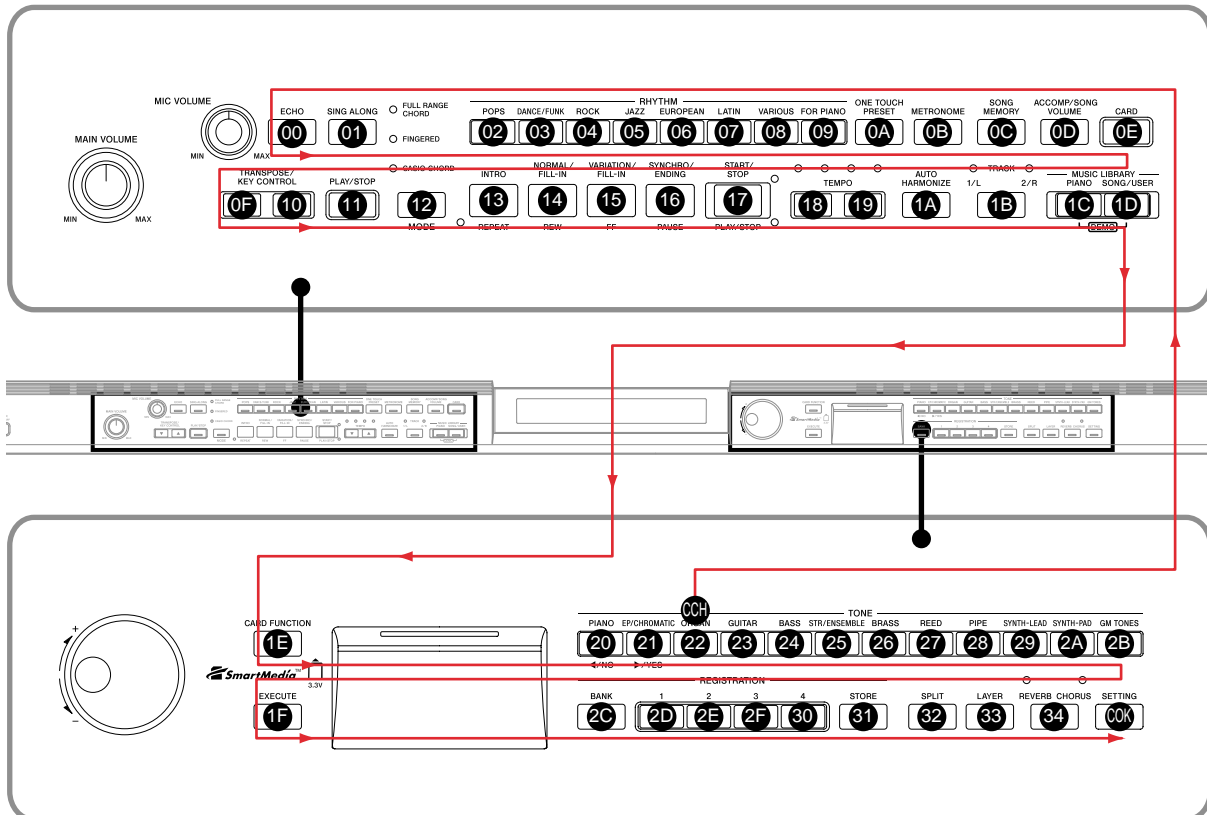
1. Connect the AC adaptor.
2. Connect the Pedal.
3. "Main" volume: MAX
4. "Mic" volume: MAX

■ How to start diagnostic program

1. Press and hold "EXECUTE" button.
2. "POWER" switch → "ON"
3. Release "EXECUTE" button.

■ Diagnostic program

	Message on LCD
1. RAM check ① Press "PIANO" button.	AOK
2. ROM check ① Press "E.PIANO/CHROMATIC" button.	OOK
3. SWITCH check ① Press "ORGAN" button. ② Press the buttons in the following order. * The Switch number appears on the LCD. * The button numbers are written in hexadecimal numerals.	CCH SWITCH No.



Message on LCD

4. DIAL check

- ① Press "GUITAR" button.
- ② DIAL → "Turn right"
* Increase the number on Display.

ROT
2 digits number

5. Pedal check (If there is no Pedal, this check can be skipped)

- ① Press the "STRINGS/ENSEMBLE" button.
- ② Press the "DAMPER" pedal.
* Sound C4 beep.
- ② Press the "SOSTENUTO" pedal.
* Sound E4 beep.
- ③ Press the "SOFT" pedal.
* Sound G4 beep.

TCH
DUM

SOS

SOF

6. TUNING check

- ① Connect the Tuning Meter. (LINE OUT L)
- ② Press "PIPE" button.
* Sound A4 sin wave sound.
* The Tuning meter indicate "A4 ± 2¢".
- ③ Press "GM TONES" button.
* Stop sound.
- ④ Disconnect the Tuning Meter.

7. MIDI check

- ① Connect the MIDI Cable. (MIDI IN/OUT)
- ② Press "POPS" button.
* Sound C4, E4 and G4 polyphonic beep.
- ③ Disconnect the MIDI Cable.

DOK

8. USB check

- ① Connect the USB Cable. (To a PC that USB driver installed)
- ② Press "DANCE/FUNC" button.
* Sound C4, E4 and G4 polyphonic beep.
- ③ Disconnect the USB Cable.

ACT

9. HEAD PHONE check

- ① Press "ROCK" button.
- ② Connect the Head phone "A".
- ③ Disconnect the Head phone "A".
- ④ Connect the Head phone "B".
- ⑤ Disconnect the Head phone "B".

HOK

HOK

10. LCD check

- ① Press "JAZZ" button.
 - * Turn on all segments.
- ② Press "JAZZ" button.
 - * Turn off all segments.
- ③ Press "LATIN" button.
 - * Turn on all RHYTHM buttons.
- ④ Press "LATIN" button.
 - * Turn off all RHYTHM buttons.
 - * Turn on all TONE buttons.
- ⑤ Press "LATIN" button.
 - * Turn off all TONE buttons.
 - * Turn on all other LEDs (24 LEDs)

11. CARD check

- ① Insert the SMART MEDIA CARD. (16MB)
- ② Press "VARIOUS" button.
 - * All LEDs turn off.
 - * Takes about 3 sec.
 - * Sound C4, E4 and G4 polyphonic beep.
- ③ Remove the SMART MEDIA CARD.

UOK

12. PRODUCT NUMBER check

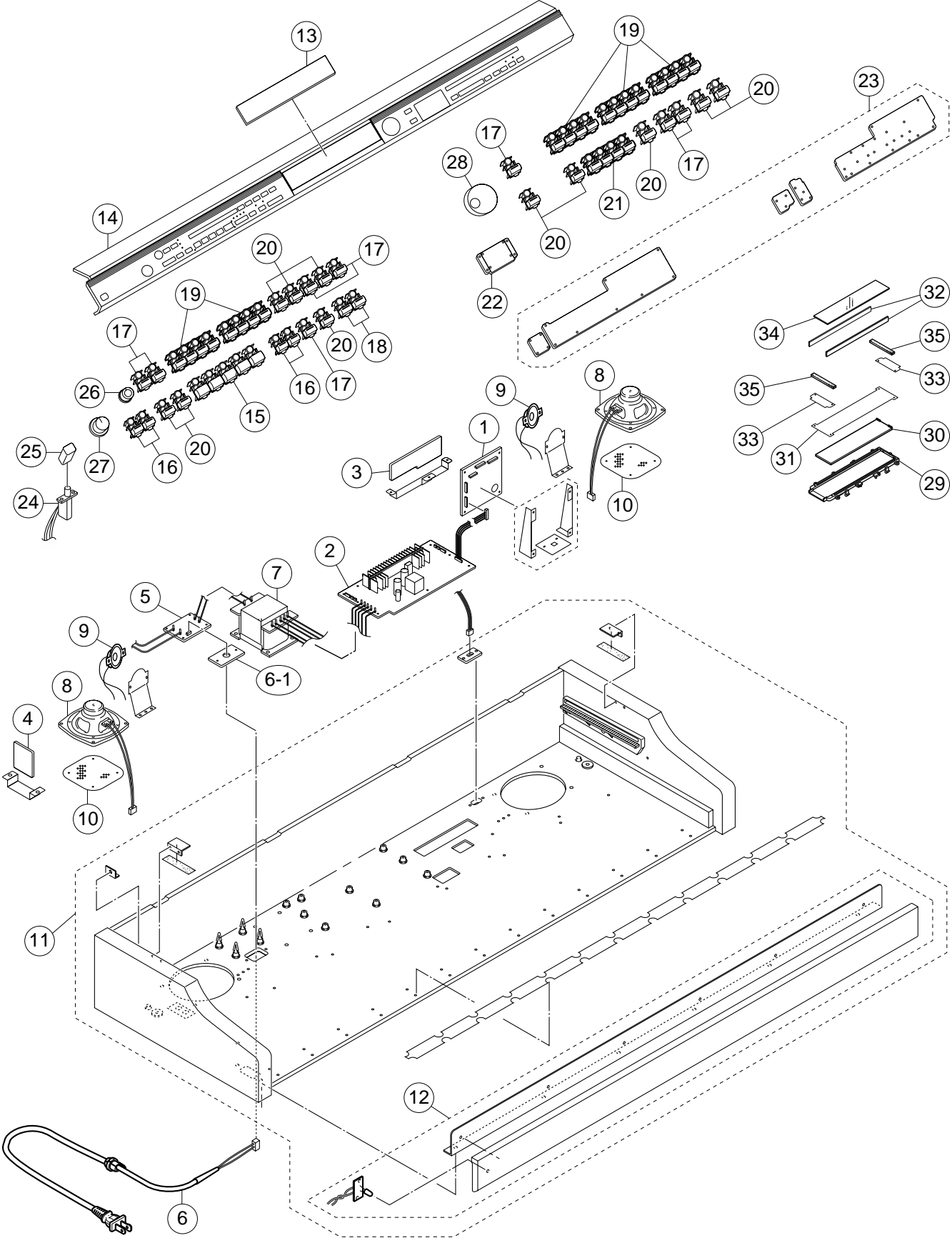
- ① Press "FOR PIANO" button.
 - * Display shows model number.
- ② Press "FOR PIANO" button.
 - * Display shows internal RON Version.
- ③ Press "FOR PIANO" button.
 - * Display shows external RON Version.

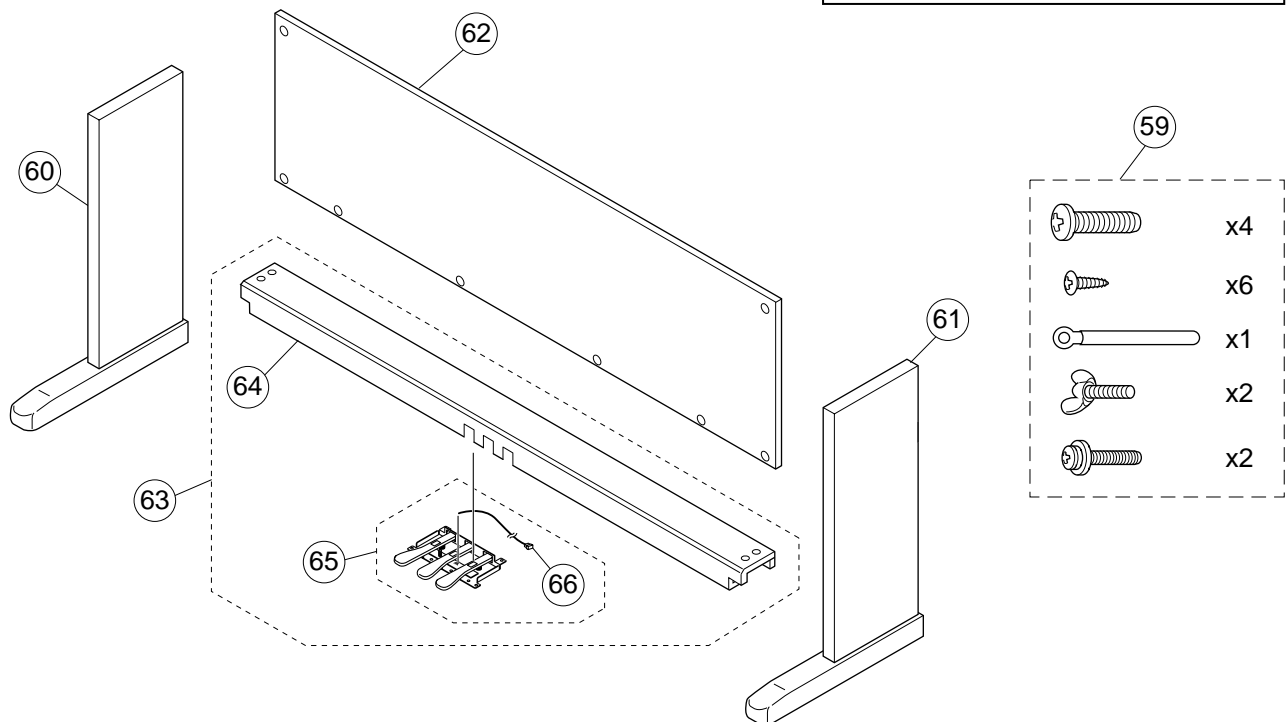
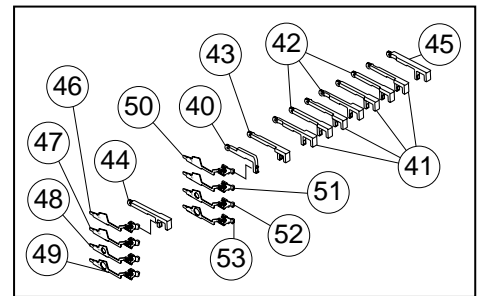
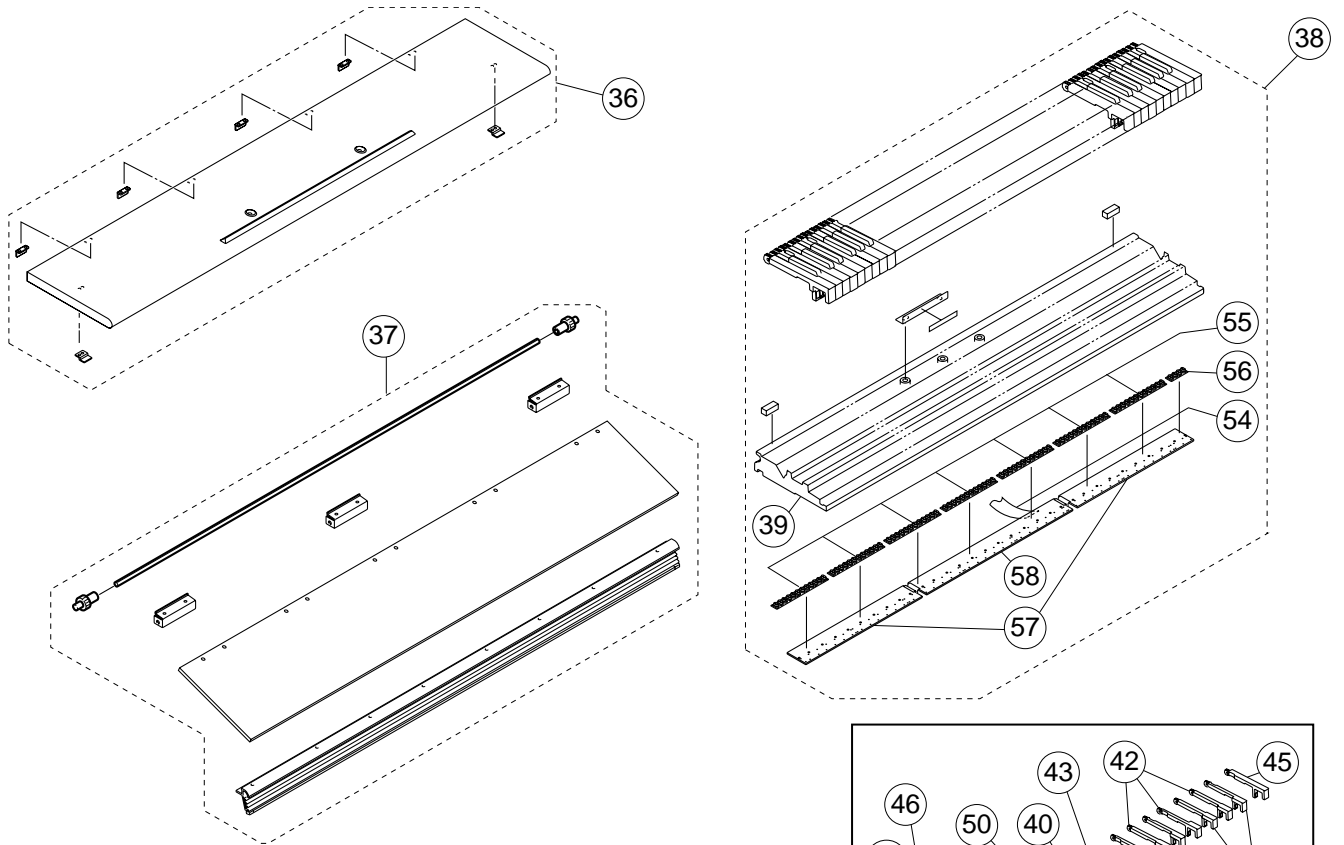
429

13. DIAGNOSTIC PROGRAM IS FINISHED

- ① Press "EXECUTE" button.
 - * Exit to normal operation mode.

EXPLODED VIEW





PARTS LIST

AP-80R

Notes: This parts list does not include the cosmetic parts, which parts are marked with item No. "R-X" in the exploded view.

Contact our spare parts department if you need these parts for refurbish.

1. Prices and specifications are subject to change without prior notice.
2. As for spare parts order and supply, refer to the "GUIDEBOOK for Spare parts Supply", published separately.
3. The numbers in item column correspond to the same numbers in drawing.

N	Item	Parts code	Parts name	Specification	Q	Price Code	R	Remarks
MAIN PCB								
N	1	10174870	PCB ASSY/MAIN	TK-RJM504695*001	1	DI	A	
	BT1	10052229	BATTERY	CR2032/1HF1	1	AG	C	
	CN8	35017294	CONNECTOR	30FMZ-ST	1	AF	X	
	CN2	35013696	CONNECTOR	B10B-PH-K-S	1	AB	X	
	CN13	35005845	CONNECTOR	B3B-PH-K-S	1	AA	X	
	D7	10133383	DIODE	02DZ2.7-Z(TPH3)	1	AA	X	
	D9	23901820	DIODE	1SS355TE-17	1	AA	X	
	D8	23902576	DIODE	RB501V-40TE-17	1	AB	X	
	IC1	69320063	IC	R1151N001C-TR	1	AN	C	
	IC3	10132442	IC	TC74HCT174AF(EL)	1	AD	C	
	IC6	10123003	IC	TC74VHCT08AFT(EL)	1	AC	C	
	IC13	69309994	IC	TC7SH32FU(TE85L)	1	AB	C	
	IC5	10022304	IC	TC7SZ04FU(TE85L)	1	AB	C	
	IC12	10116307	IC	TC7SZ126FU(TE85L)	1	AB	C	
	IC4	21056665	IC	UPD63200GS-E1	1	AX	C	
	IC11	10129081	MEMORY	CY62136VLL-55ZIT	1	BC	C	
	Q3	71015898	FET	2SJ346(TE85L)	1	AC	X	
	Q4	10116461	TRANSISTOR	KTC4075GR-RTK	1	AA	X	
	X1	10133372	RESONATOR	SMD-49-12M	1	AI	C	
PS1 PCB								
N	2	10174873	PCB ASSY/PS1J	TK-RJM504705*001	1	CW	B	120V
N	2	10174865	PCB ASSY/PS1E	TK-RJM504708*001	1	CW	B	240V
	CN17	35005845	CONNECTOR	B3B-PH-K-S	1	AA	C	
	CN20	35015551	CONNECTOR	B8B-PH-K-S	1	AA	C	
	D10,D5,D6,D9	10047403	DIODE	1N5401-EP	4	AA	C	
	D11,D12,D7,D8	10036785	DIODE	2A02B	4	AA	C	
	FU3	10052231	FUSE	51MS010L	1	AC	B	120V
	FU3	10054029	FUSE	50T010H	1	AC	B	240V
	FU1,FU2	10052230	FUSE	51MS040L	2	AC	B	120V
	FU1,FU2	10054030	FUSE	50T040H	2	AC	B	240V
	IC1	10043418	IC	LM4765T	1	BC	C	
	IC5,IC6,IC8,IC9	21210072	IC	NJM2068D-D	4	AD	C	
	IC2,IC4	21145796	IC	NJM78M05FA	2	AE	C	
	IC3	21145794	IC	NJM78M15FA	1	AE	C	
	D1- D4,D13,D14,D17, D18,D21,D23,D2	10079928	DIODE	1SS133TA	11	AA	X	
	D22	10085189	DIODE	DZ5.6BSBTA	1	AA	X	
	U15,U16,U20- D28	10137846	DIODE	DZ7.5BSBTA	5	AA	X	
	D20,D25	10079929	DIODE	SRT14TA	2	AA	X	
	Q4,Q5,Q9,Q10,Q 12	10025042	TRANSISTOR	2SD1468STPR	5	AA	X	
	Q1-Q3,Q6- Q8,Q11	10079927	TRANSISTOR	KTC3199GR-AT	7	AA	X	
PSA2,PSA3 PCB								
N	3	10174871	PCB ASSY/PSA2	TK-RJM504699*001	1	BK	C	
	CN2	10081222	CONNECTOR	HDC-052S-02	1	AA	X	
	D2	69323623	PHOTO COUPLER	PC900V0NSZX	1	AF	X	
	J2	69325081	CONNECTOR	JY-6314-01-030	1	AB	X	
	J1,J3	69325358	CONNECTOR	JY-6314-01-130	2	AA	X	

N	Item	Parts code	Parts name	Specification	Q	Price Code	R	Remarks
	L5	10057360	COIL	R2318-RB53-856396	1	BB	X	
	L1-L4	10056228	COIL	R2318-RB53-856397	4	AB	X	
	D1	10079928	DIODE	1SS133TA	1	AA	X	
	Q1	10079927	TRANSISTOR	KTC3199GR-AT	1	AA	X	
N	4	10174872	PCB ASSY/PSA3	TK-RJM504702*001	1	BN	C	
N	J10,J11	10126045	CONNECTOR	JY-6360*04-090	2	AE	X	
MAIN CASE UNIT								
	5	10164284	PCB ASSY/ACA1U	TK-RJM503880*001	1	BA	C	120V
	FU1	10047399	FUSE	51MS032L	1	AC	X	
	5	10164286	PCB ASSY/ACA1E	TK-RJM503882*001	1	AZ	C	240V
	FU1	10047508	FUSE	50T025H	1	AC	X	
	6	10164278	CORD ASSY/AC	TK-RJM503864*002	1	AM	C	120V
	6	10045707	CORD SET	BC2NC-M001A	1	BD	C	UK type
	6	10045706	CORD SET	EC2NC-M001A	1	AM	C	EU type
	6	10100792	CORD SET	INQ.1258(1)	1	AP	C	Korea type
	6-1	10164279	INLET ASSY/AC	TK-RJM503865*001	1	AH	C	240V
	7	10054031	TRANSFORMER	TE-427-1M1	1	CW	C	120V
	7	10054032	TRANSFORMER	TE-427-2M1	1	CW	C	240V
	8	10047602	SPEAKER	S16J75A	2	BL	C	
	9	38311094	SPEAKER	S05JH46A	2	AT	C	
N	10	10047589	SPEAKER NET	M441191-1	2	AD	X	
N	11	10174858	CASE ASSY/MAIN	TK-RJM504639*001	1	DL	C	
N	12	10174876	BOARD ASSY/FRONT	TK-RJM504663*001	1	CE	C	
CONSOLE UNIT								
N	13	10174520	PLATE/DISPLAY	RJM504085-001V01	1	AD	C	
N	14	10174877	PANEL ASSY	TK-RJM504665*001	1	CF	C	
N	15	10174518	RUBBER KEY/A	RJM504079-001V01	1	AC	X	
N	16	10174519	RUBBER KEY/B	RJM504080-001V01	2	AA	X	
N	17	10172215	BUTTON/TACT	RJM504081-010V01	8	AC	X	
N	18	10172216	BUTTON/TACT	RJM504081-011V01	1	AE	X	
N	19	10172217	BUTTON/TACT	RJM504081-012V01	5	AG	X	
N	20	10172218	BUTTON/TACT	RJM504081-013V01	11	AC	X	
N	21	10172220	BUTTON/TACT	RJM504081-015V01	1	AG	X	
N	22	10174866	PCB ASSY/SMA1	TK-RJM504711*001	1	BA	C	
N	23	10177326	PCB ASSY/CAN	TK-RJM504714*001	1	CY	C	
	IC601	10159709	LSI	UPD65881GK-1019ETA	1	AS	X	CNA1
	X601	10093909	RESONATOR	CSBLA1M00J58-B0	1	AC	X	
	D601-612,D615,616	10171339	LED	LT5J14-43-S24	14	AA	X	
	Q608-610	10047532	TRANSISTOR	2SC5720(TPE4)	3	AA	X	
	Q601	10079927	TRANSISTOR	KTC3199GR-AT	1	AA	X	
	Q602-607	10047535	TRANSISTOR	RN2205(TPE4)	6	AA	X	
	SW601-SW622	10096077	SWITCH	SKQNADD010	22	AA	X	
	D617,618,623-628,631,633,637,639,641,642,643	10171339	LED	LT5J14-43-S24	15	AA	X	CNA2
	Q611-619	10047535	TRANSISTOR	RN2205(TPE4)	9	AA	X	
	SW623-652	10096077	SWITCH	SKQNADD010	30	AA	X	
	D644	10171339	LED	LT5J14-43-S24	1	AA	X	CNA3
	SW653,654	10096077	SWITCH	SKQNADD010	2	AA	X	

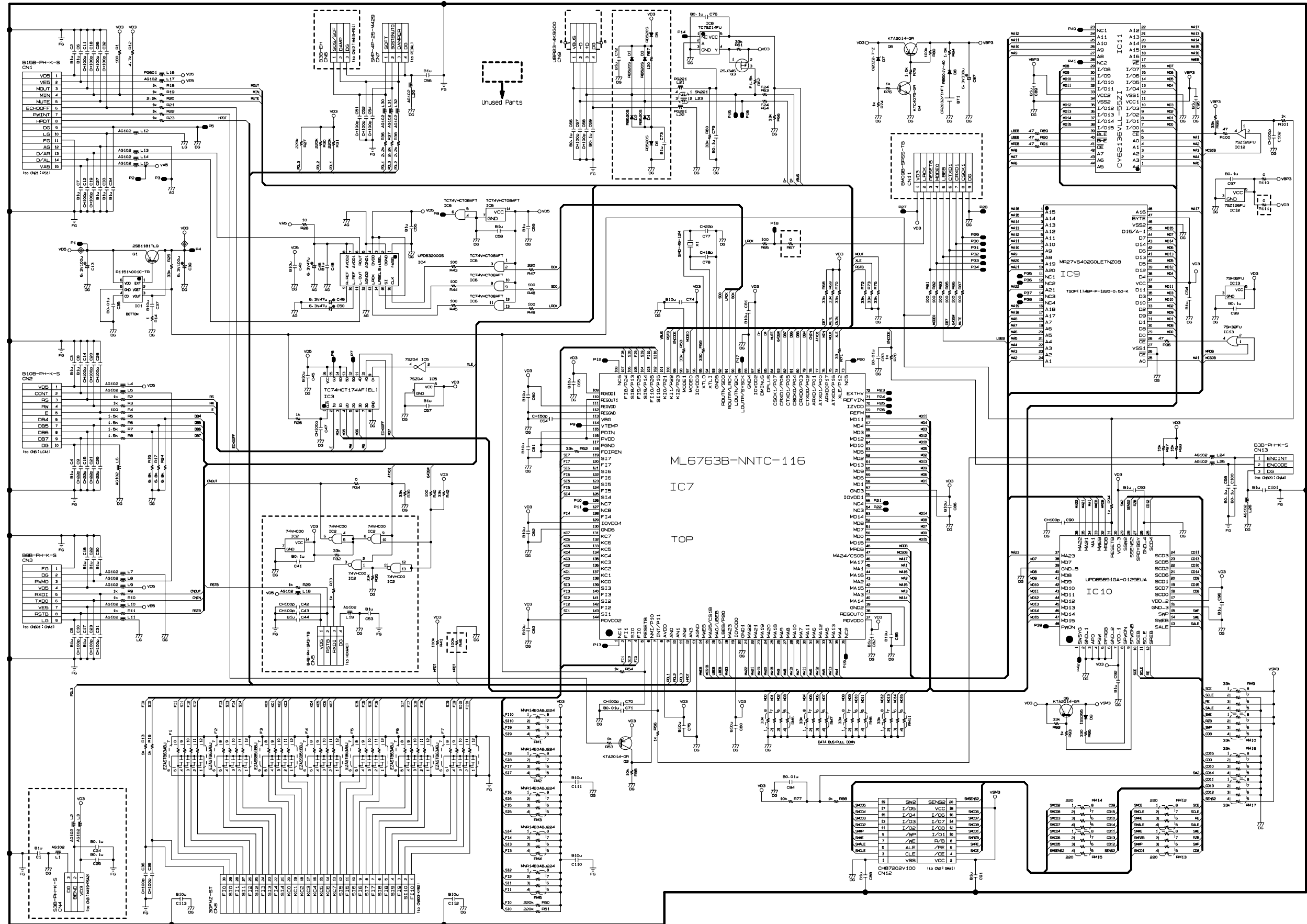
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N	VR602	10122556	VARIABLE R	RK09K12C0D1A	1	AL	X	CNA5	
N	24	10174868	SW ASSY/POWER	TK-RJM504725*001	1	AT	X		
	25	69245260	BUTTON/POWER	M340318-1	1	AA	X		
	26	10052232	KNOB/RTR	M341402-1	1	AE	X		
N	27	10174514	KNOB/ROTARY	RJM502503-008V01	1	AA	X		
N	28	10174513	KNOB/DL	RJM501770-002V01	1	AB	X		
	29	10171844	BL ASSY	TK-RJM504540*001	1	CG	C		
	30	10171103	PLATE/BL	RJM504061-001V01	1	AN	X		
	31	10170780	FILM/BL	RJM504083-001V01	1	AA	X		
	32	10170779	CONNECTOR	RJM504082-001V01	2	AM	X		
	33	10170781	TOP PIECE	RJM504084-001V01	2	AA	X		
	34	10170942	LCD	WK-TZB843-TG-A	1	BJ	C		
	35	10174521	SPONGE	RJM504740-001V01	2	AA	X		
N	36	10174857	BOARD ASSY/TOP	TK-RJM504638*001	1	CY	C		
N	37	10174856	COVER ASSY/KEY	TK-RJM504637*001	1	DC	C		
KEYBOARD UNIT									
N	38	10174874	KEY UNIT	TK-RJM504178*003	1	EF	A		
	39	10164305	CHASSIS ASSY	TK-RJM504180*001	1	DK	C		
	40	10135317	BLACK KEY	RJM502797-001V01	36	AC	C		
	41	10135426	WHITE KEY/CEGB	RJM502862-001V01	7	AT	C		
	42	10135427	WHITE KEY/DFA	RJM502863-001V01	7	AQ	C		
	43	10135428	WHITE KEY/B	RJM502794-001V01	1	AG	C		
	44	10135429	WHITE KEY/SA	RJM502795-001V01	1	AJ	C		
	45	10135430	WHITE KEY/SC	RJM502796-001V01	1	AJ	C		
	46	10135435	HAMMER ASSY/W1	TK-RJM503155*001	13	AL	C		
	47	10135436	HAMMER ASSY/W2	TK-RJM503216*001	13	AL	C		
	48	10135437	HAMMER ASSY/W3	TK-RJM503217*001	13	AL	C		
	49	10135438	HAMMER ASSY/W4	TK-RJM503218*001	13	AL	C		
	50	10135439	HAMMER ASSY/B1	TK-RJM503219*001	9	AK	C		
	51	10135440	HAMMER ASSY/B2	TK-RJM503220*001	9	AK	C		
	52	10135442	HAMMER ASSY/B3	TK-RJM503221*001	9	AK	C		
	53	10135443	HAMMER ASSY/B4	TK-RJM503222*001	9	AK	C		
	54	10027792	CABLE	N30405B1B05-UL2896	1	AO	C		
	55	10133656	KEY RUBBER	RJM502920-001V01	7	AK	C		
	56	10133635	KEY RUBBER	RJM502921-001V01	1	AG	C		
	57	10133488	PCB ASSY/KYA	TK-RJM503365*001	1	BI	C		
	58	10133482	PCB ASSY/KYB	TK-RJM503366*001	1	BC	C		
STAND									
N	59	10174864	SCREW SET	TK-RJM504673*001	1	AR	C		
N	60	10174860	STAND BOARD/L	TK-RJM504668*001	1	CN	C		
N	61	10174861	STAND BOARD/R	TK-RJM504669*001	1	CN	C		
N	62	10170701	STAND BOARD/BACK	RJM504038-001V01	1	CD	C		
N	63	10174862	BOARD ASSY/PEDAL	TK-RJM504670*001	1	CX	C		
N	64	10174863	BOARD ASSY	TK-RJM504671*001	1	CM	C		
N	65	10164314	PEDAL ASSY	TK-RJM503901*002	1	CC	C		
N	66	10164049	CABLE	SMR-4P-155-M420	1	AJ	B		
ACCESSORIES									
N	-	10174511	CD ROM	EMI-USB-CDROM-W1	1	AM	C		
N	-	10174878	STAND ASSY/MUSIC	TK-RJM504667*001	1	CG	C		

Notes : Q - Quantity per unit

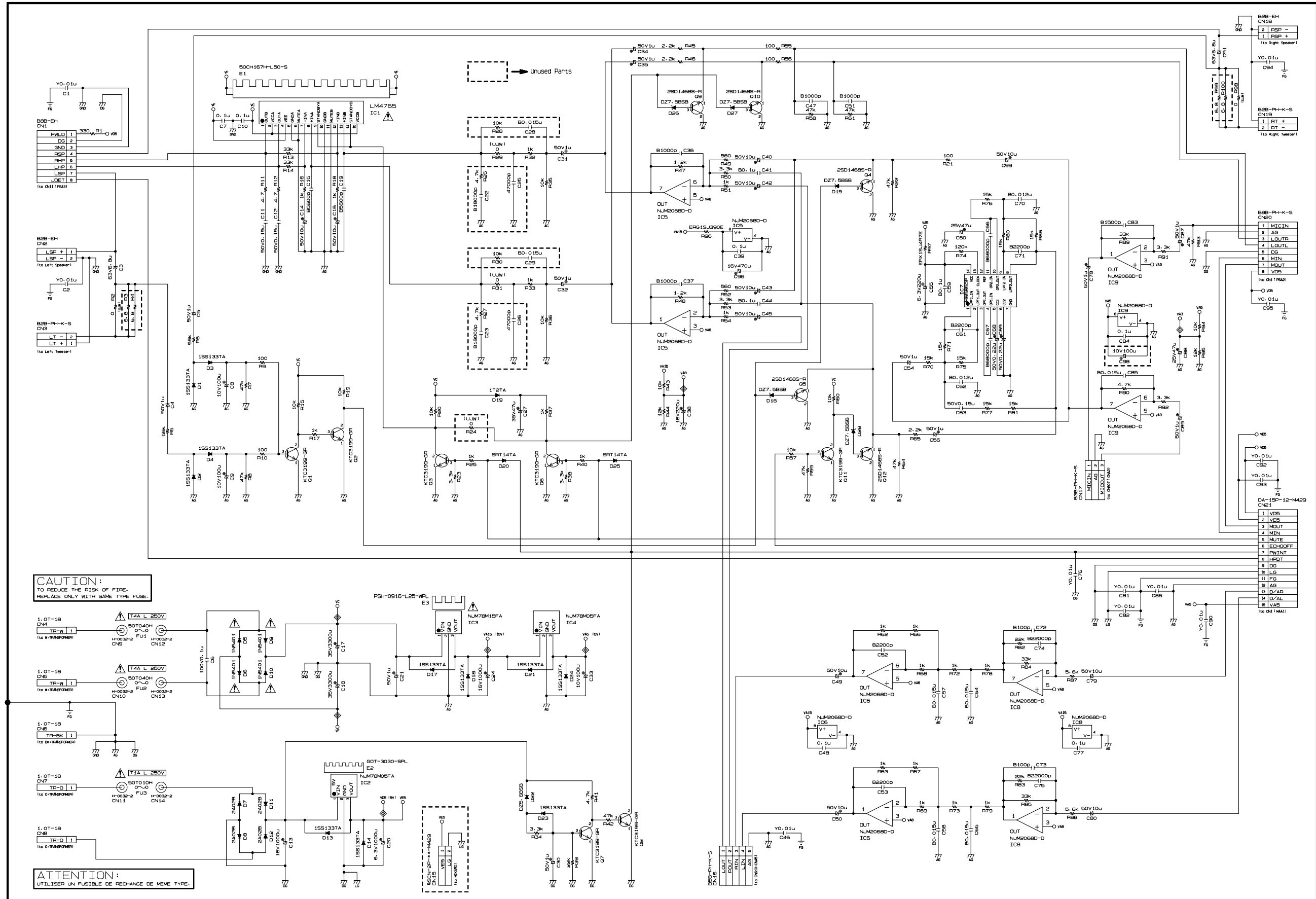
R - Rank

SCHEMATIC DIAGRAMS

MAIN PCB M419-MAA1



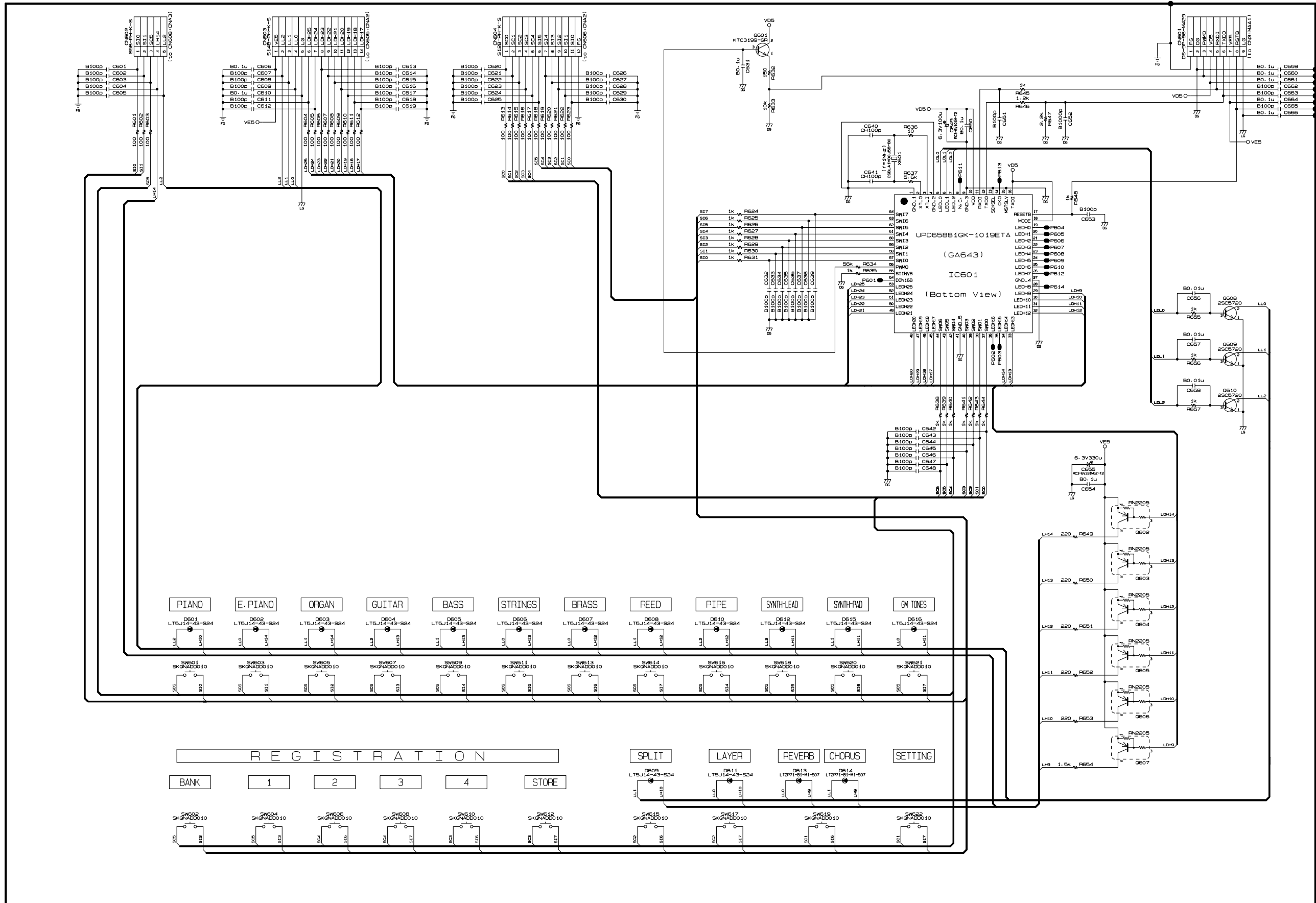
SUB PCB M429-PS1



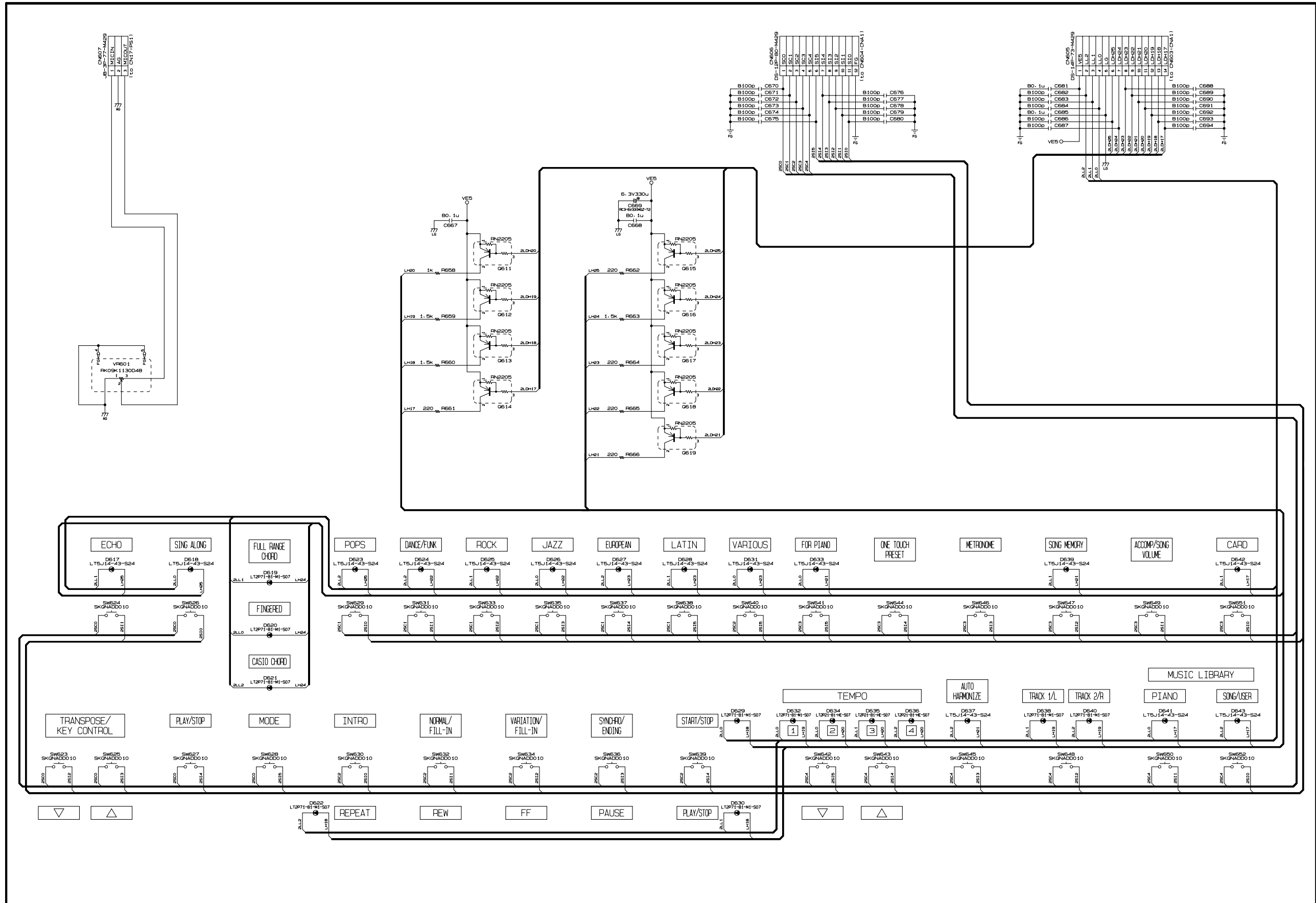
CAUTION:
TO REDUCE THE RISK OF FIRE,
REPLACE ONLY WITH SAME TYPE FUSE.

ATTENTION:
UTILISER UN FUSIBLE DE RECHANGE DE MEME TYPE.

CONSOLE PCB M429-CNA1

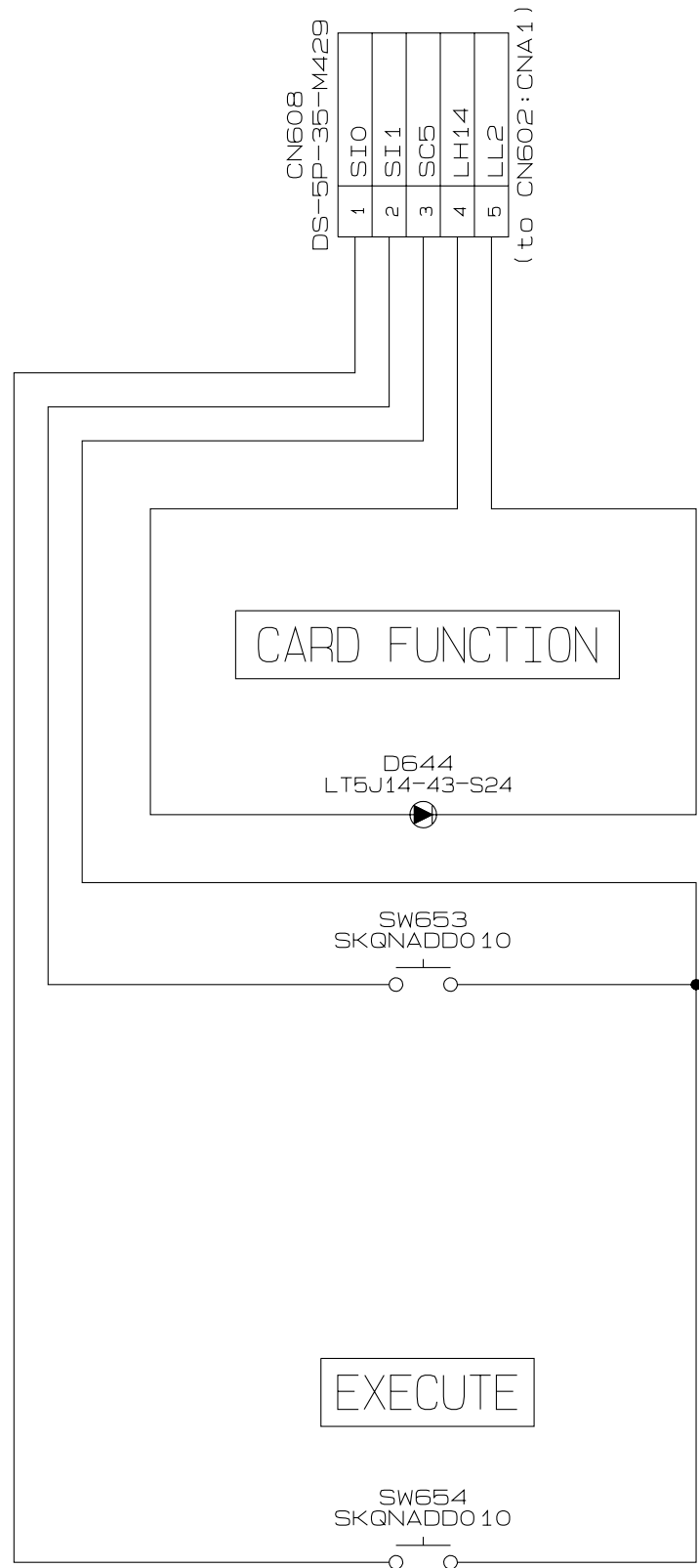


CONSOLE PCB M429-CNA2

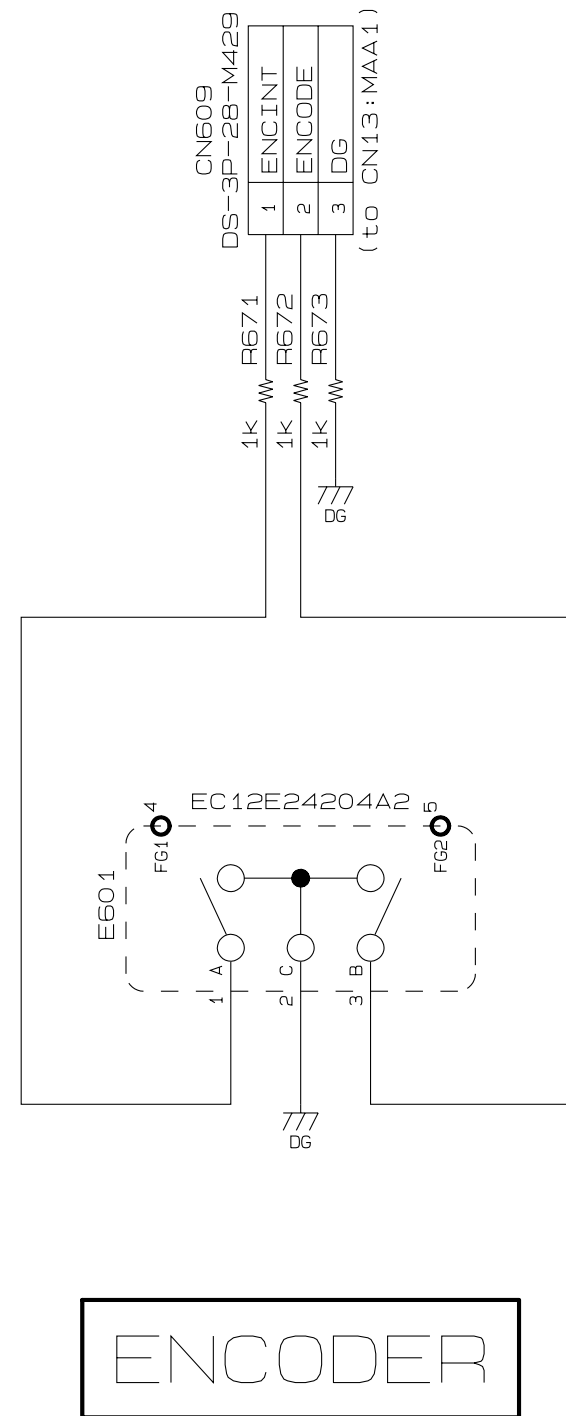


CONSOLE PCBs M429-CNA3/CNA4/CNA5

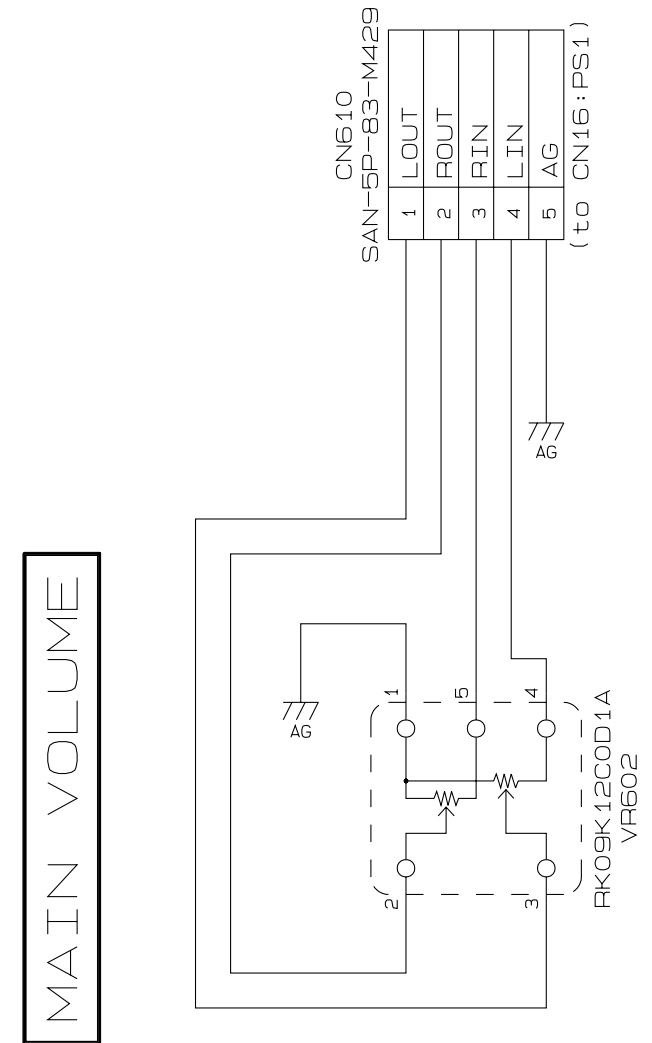
M429-CNA3



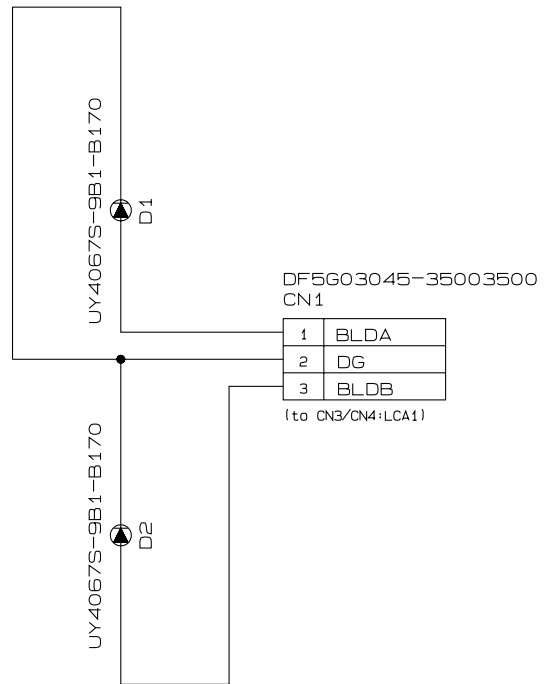
M429-CNA4



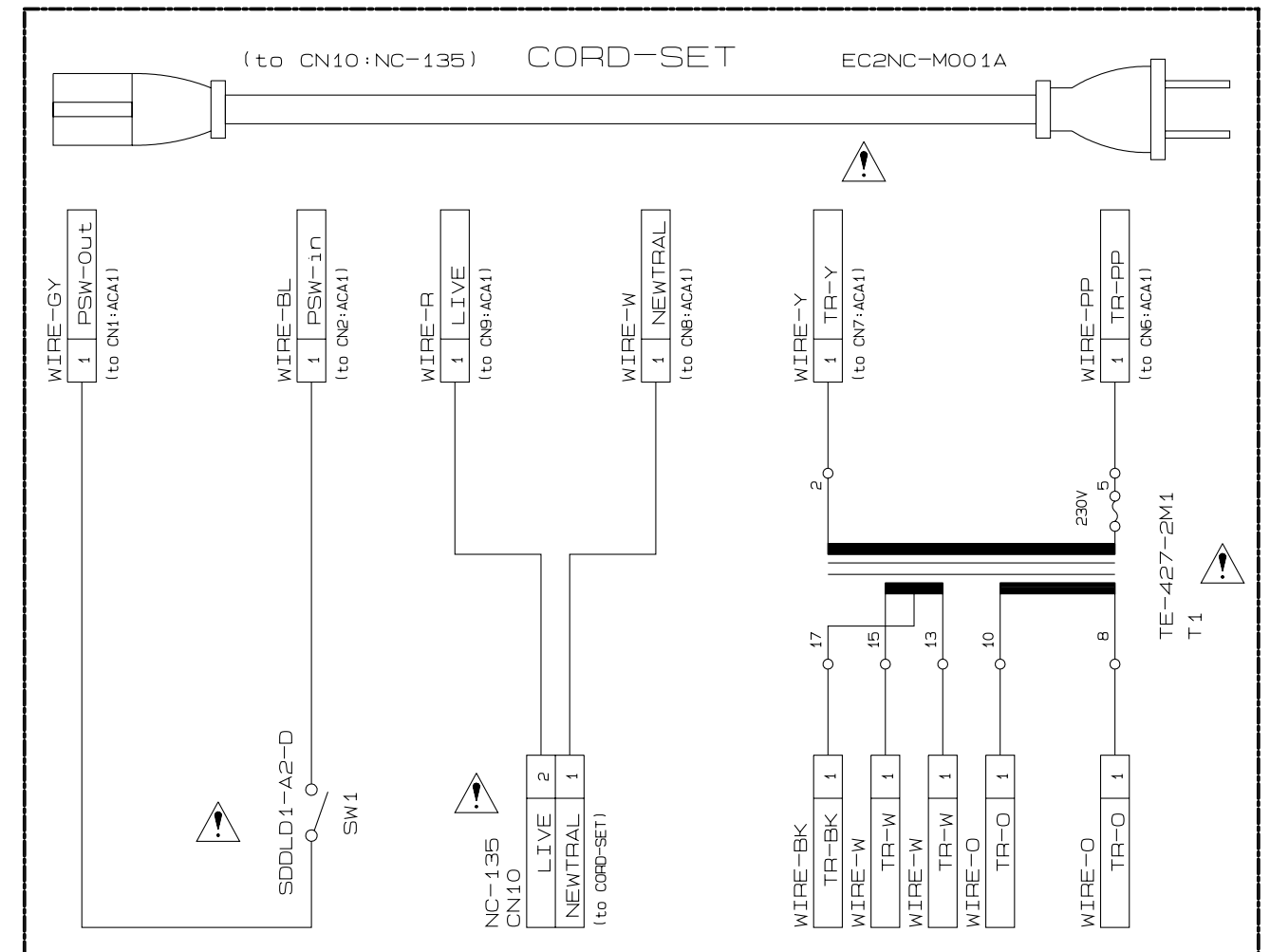
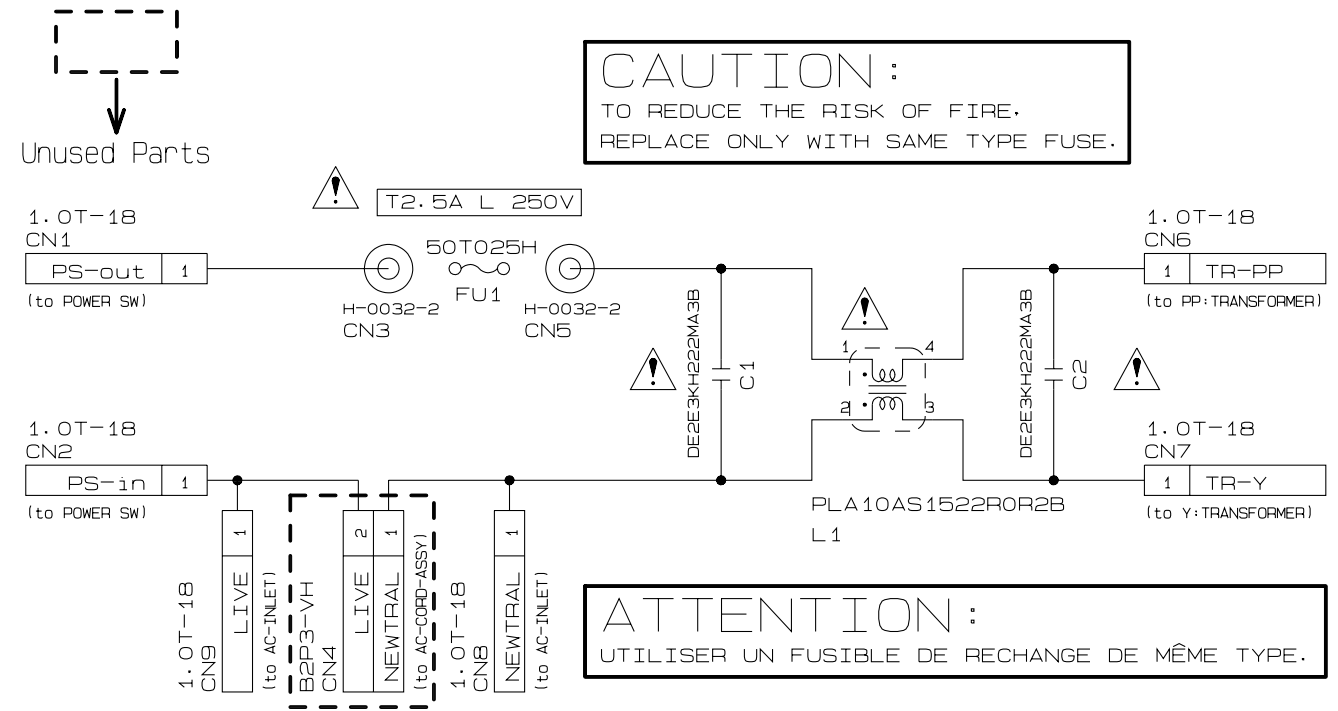
M429-CNA5



LED PCB M419-LCA2



POWER SUPPLY PCB M420-ACA1



JACK PCB M429-PSA2

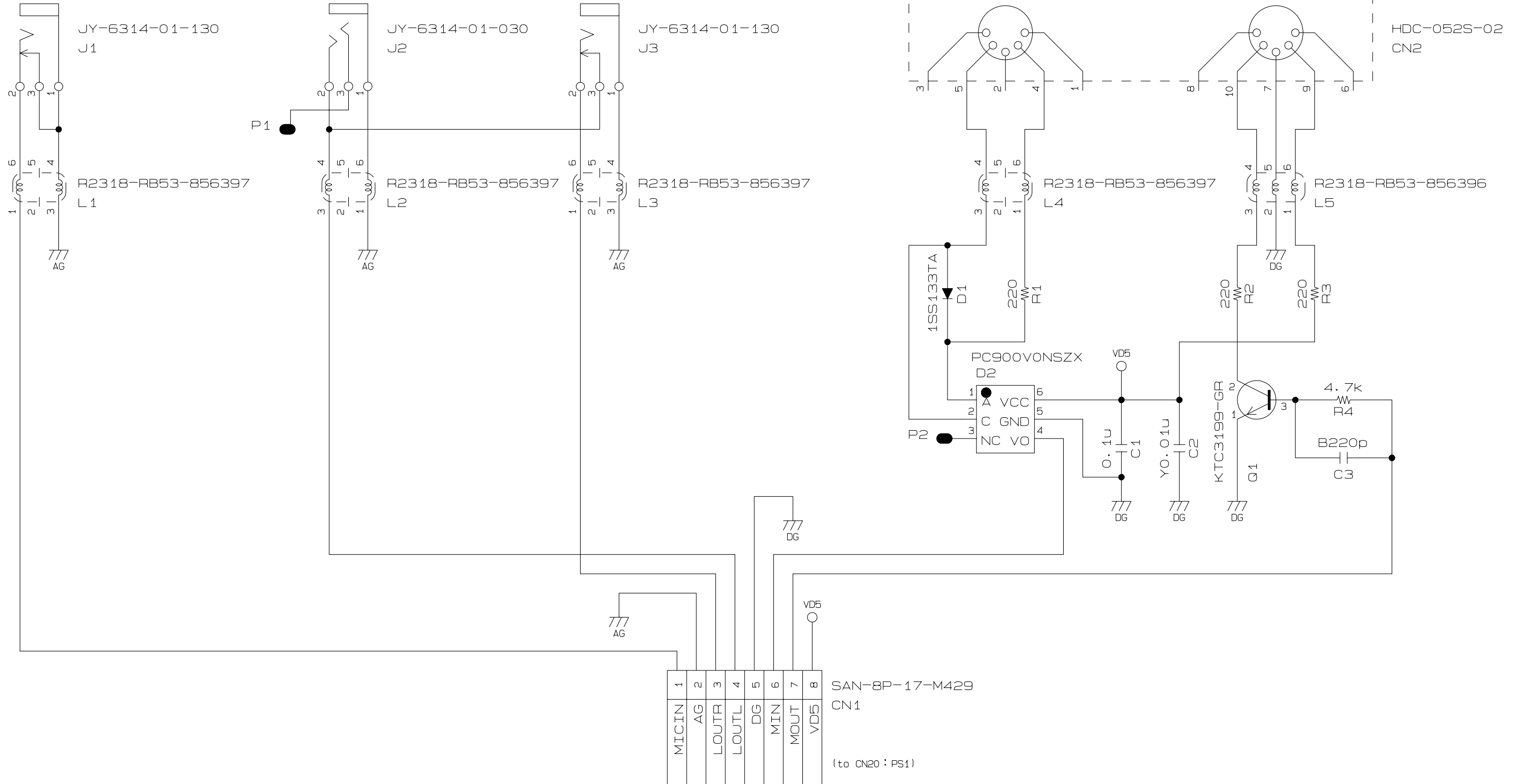
MIC IN

LINE OUT
L/MONO

LINE OUT
R

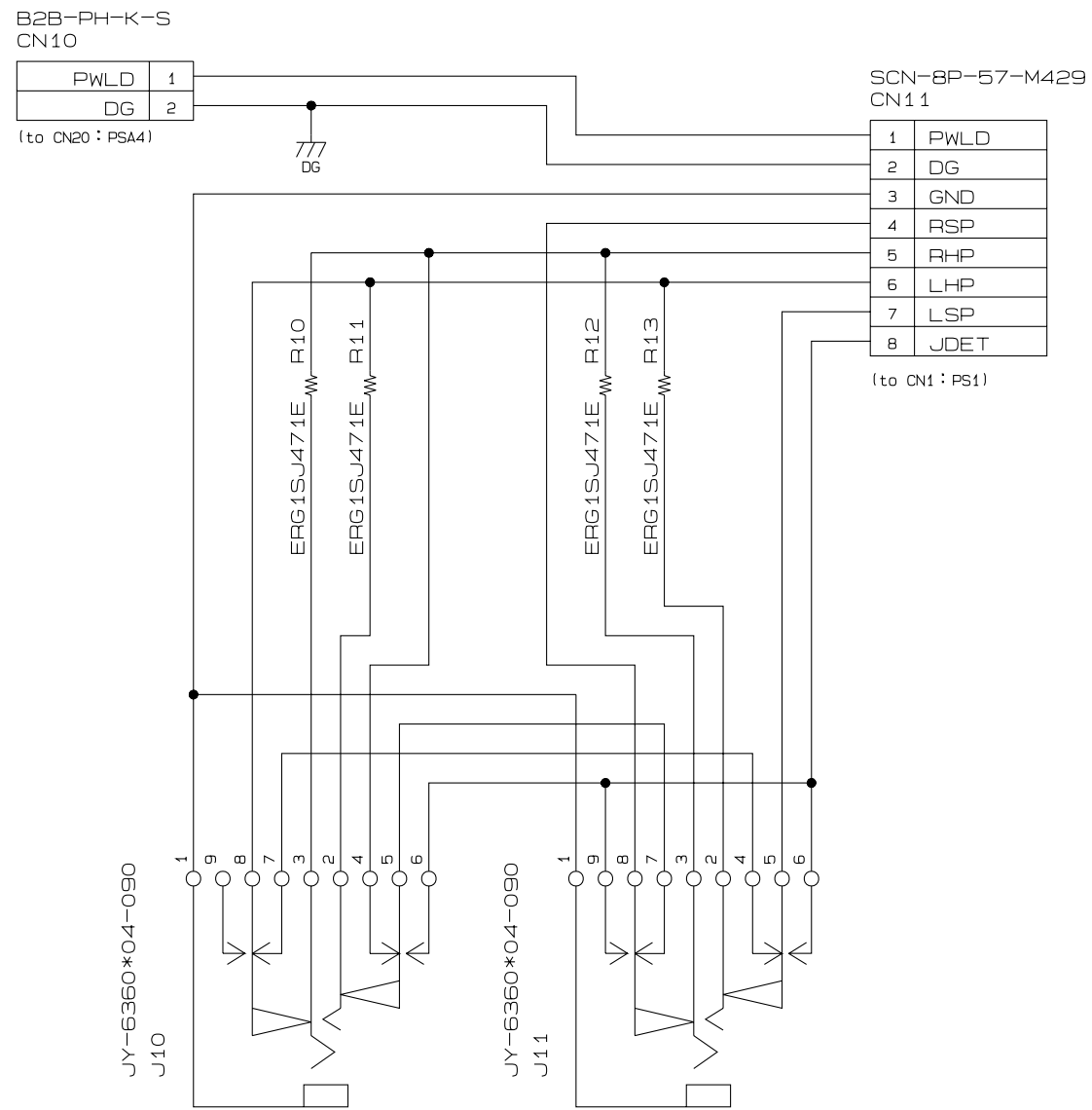
MIDI IN

MIDI OUT

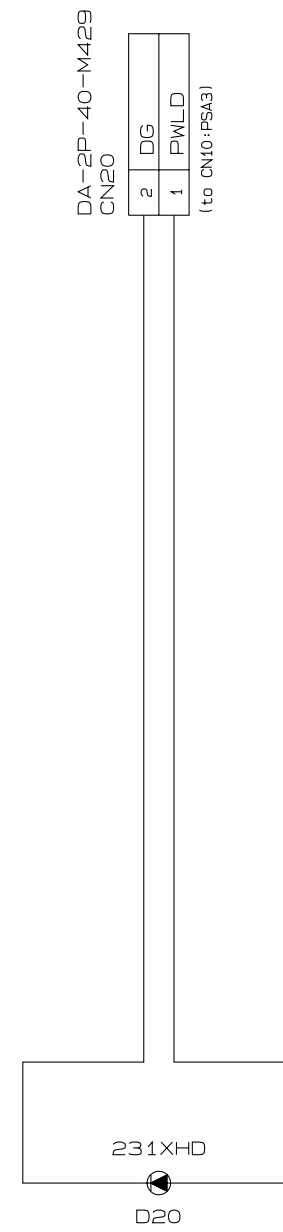


JACK PCB M429-PSA3/POWER LED PCB M429-PSA4

M429-PSA3

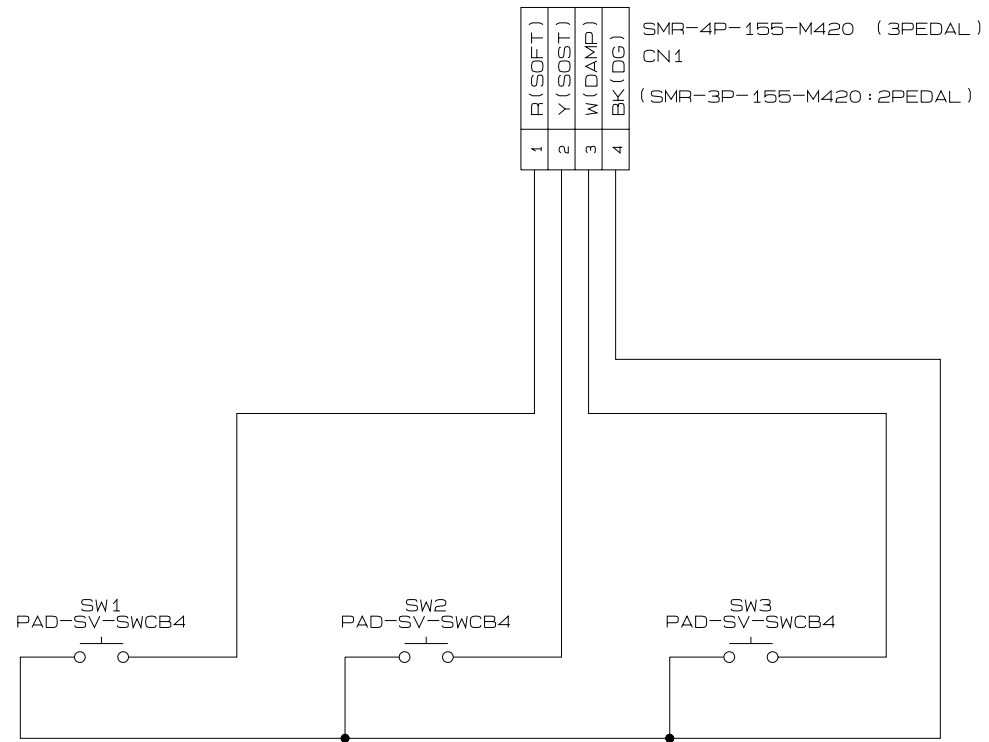


M429-PSA4

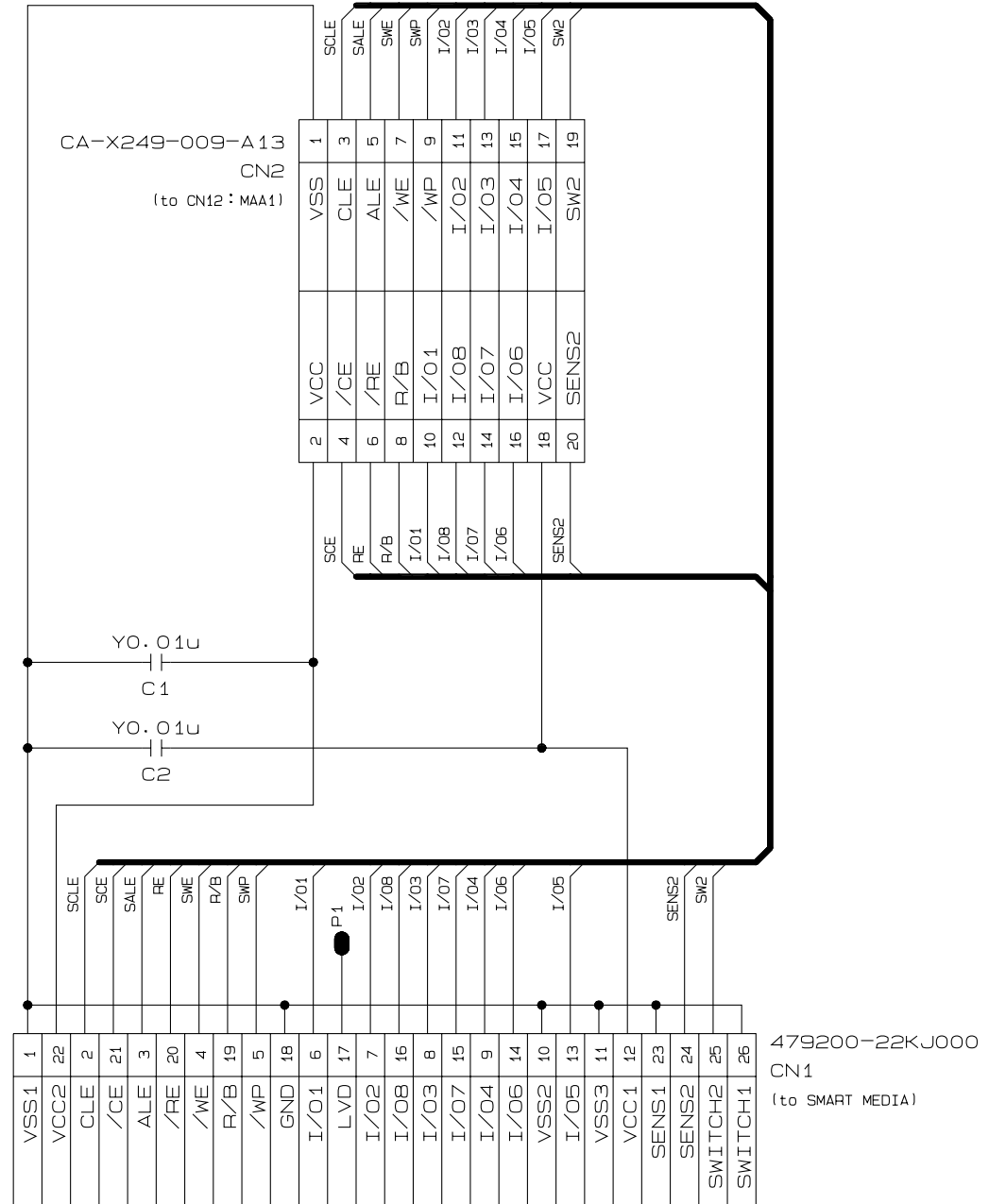


JACK PWB M420-PDA1/IO PCB M429-SMA1

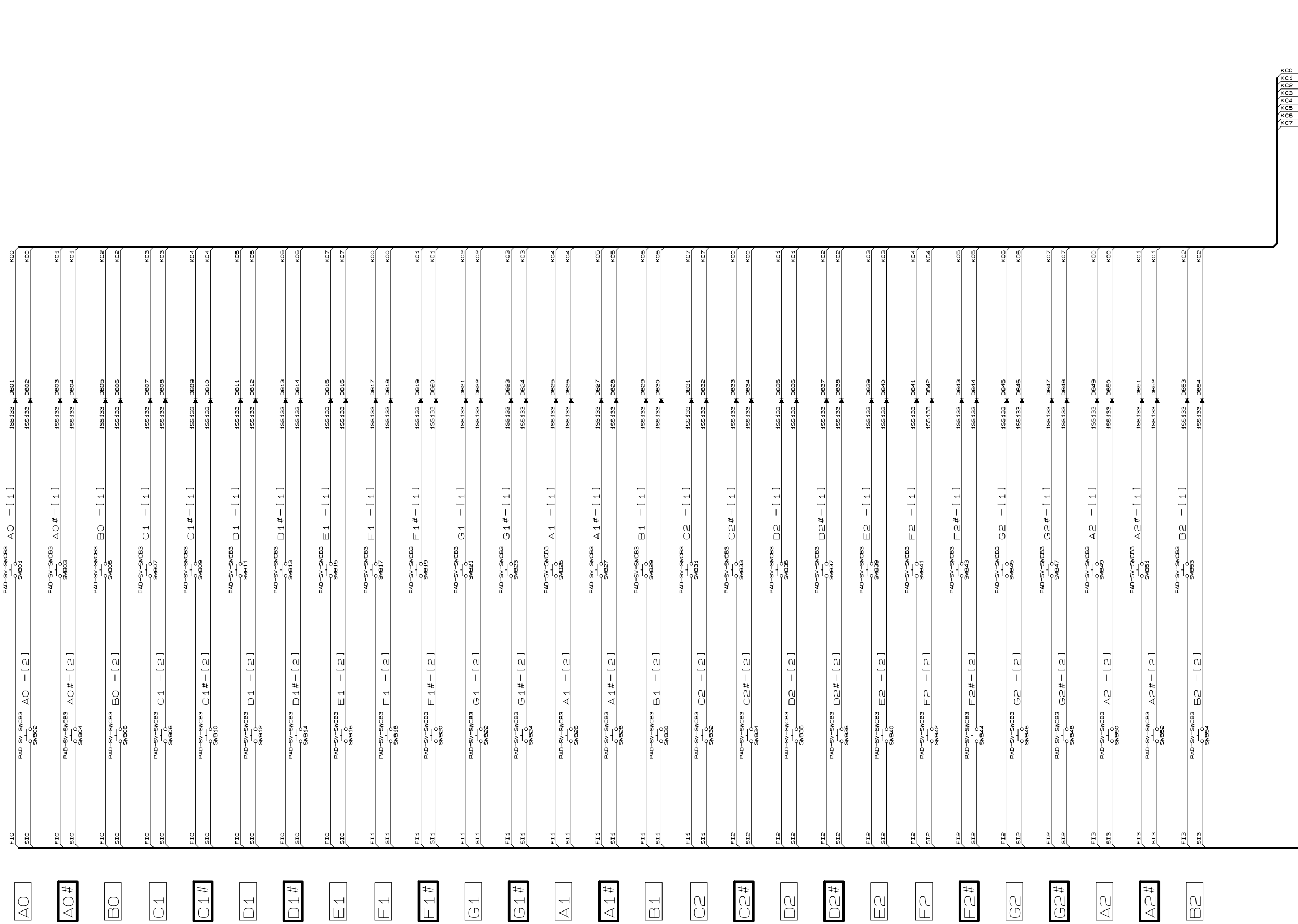
M420-PDA1



M429-SMA1



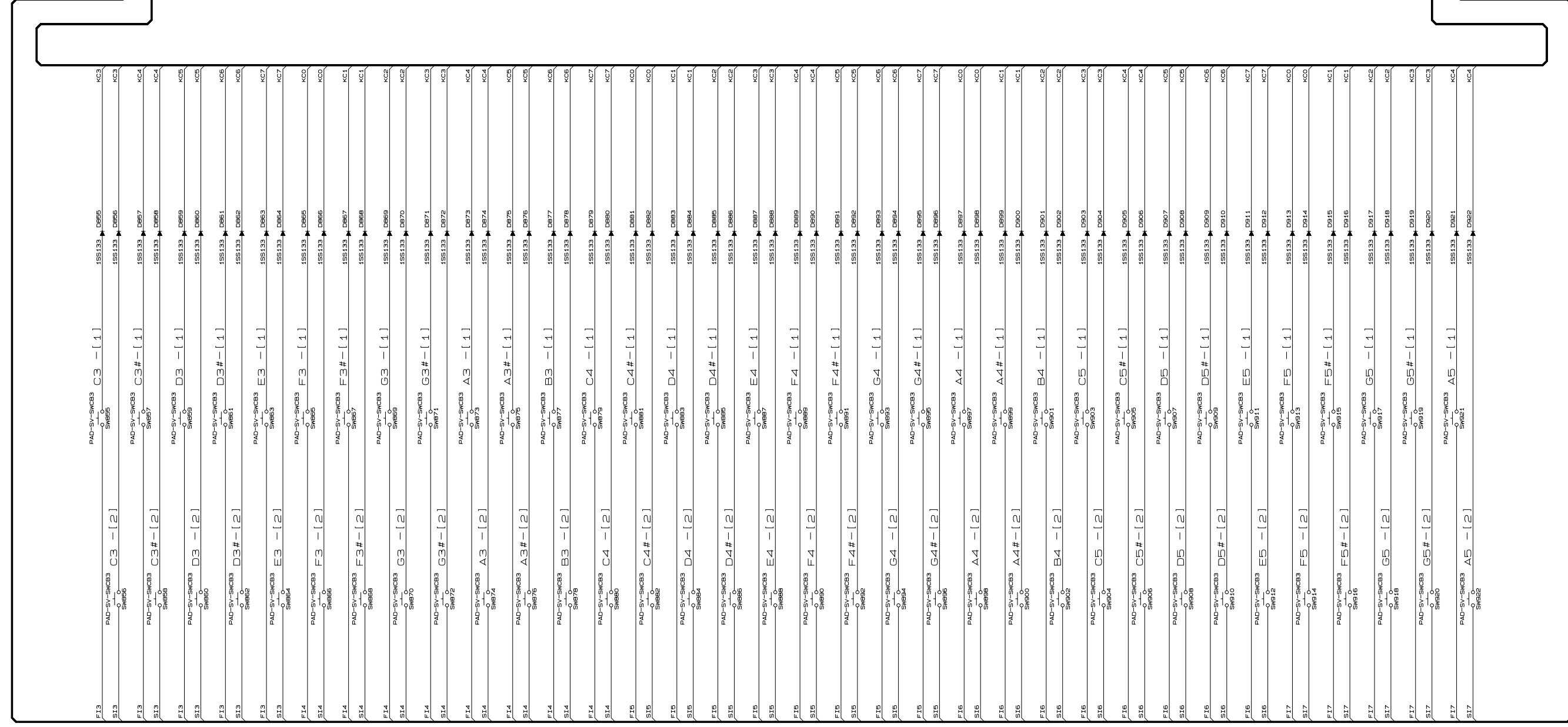
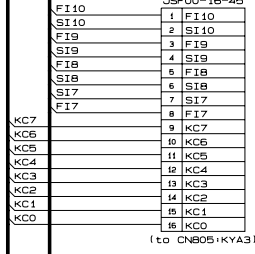
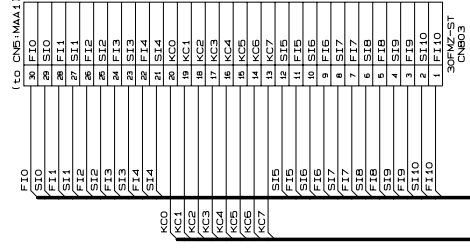
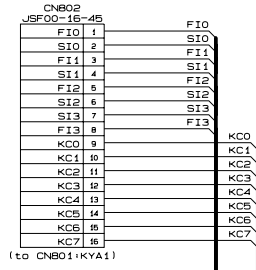
KEY PCB MCPK-KYA1



KC0	F10
KC1	S10
KC2	F11
KC3	S11
KC4	F12
KC5	S12
KC6	F13
KC7	S13
	F10
	S10
	F11
	S11
	F12
	S12
	F13
	S13
	F10
	S10
	F11
	S11
	F12
	S12
	F13
	S13
	F10
	S10
	F11
	S11
	F12
	S12
	F13
	S13

(to CNB02+KYB2)

KEY PCB MCPK-KYB2

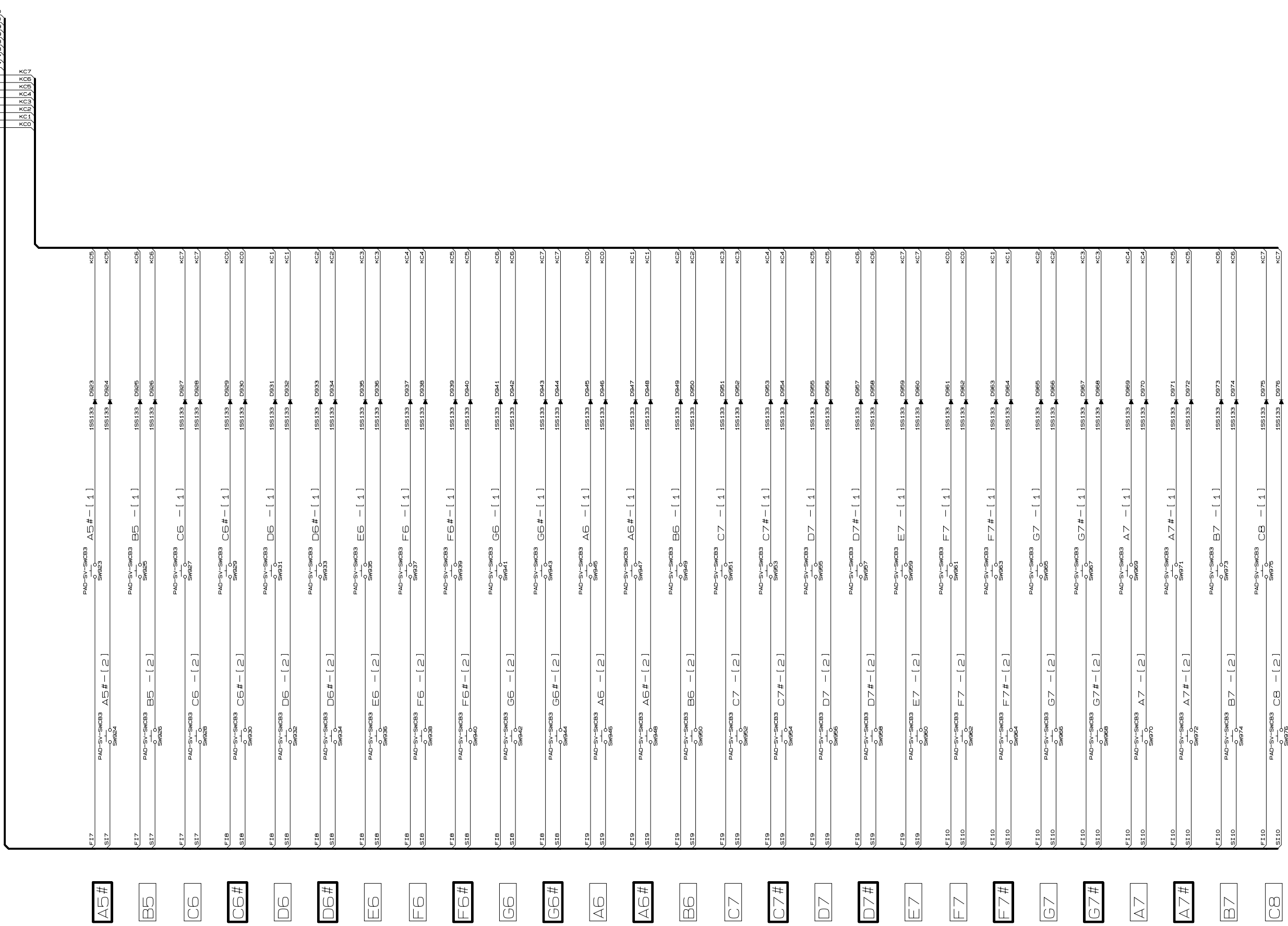


- C3
- C3#
- D3
- D3#
- E3
- F3
- F3#
- G3
- G3#
- A3
- A3#
- B3
- C4
- C4#
- D4
- D4#
- E4
- F4
- F4#
- G4
- G4#
- A4
- A4#
- B4
- C5
- C5#
- D5
- D5#
- E5
- F5
- F5#
- G5
- G5#
- A5

KEY PCB MCPK-KYA3

FN808	FI10	KC7
JSFC00-16-45	SI10	KC6
FI10 1	FI9	KC5
SI10 2	SI9	KC4
FI9 3	FI8	KC3
SI9 4	SI8	KC2
FI8 5	SI7	KC1
SI8 6	FI7	KC0
SI7 7		
FI7 8		
KC7 9		
KC6 10		
KC5 11		
KC4 12		
KC3 13		
KC2 14		
KC1 15		
KC0 16		

(to CNB04+KYB2)



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