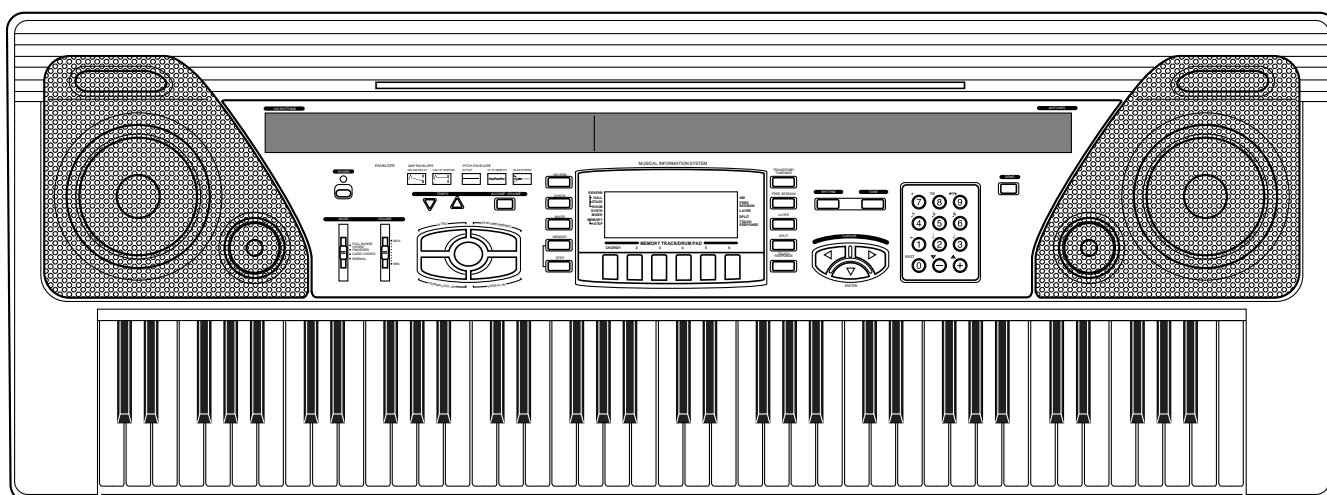


# CASIO®

# Service Manual

(without price)

## WK-1200



WK-1200

**INDEX**

**ELECTRONIC KEYBOARD**

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## SPECIFICATIONS

### GENERAL

<b>Keyboard:</b>	73 standard-size keys, 6 octaves (with touch response on/off)
<b>Drum pads:</b>	6
<b>Tones:</b>	200 (128 General MIDI, 32 synthesized, 8 drum, 32 user); with layer and split
<b>Rhythm instrument tones:</b>	51
<b>Polyphony:</b>	24 notes maximum (12 for certain tones)
<b>Digital effects:</b>	3 reverb types (HALL, STAGE, ROOM)
<b>Auto accompaniment</b>	
Rhythm patterns:	100
Tempo:	Variable (216 steps, ♩ = 40 to 255)
Chords:	3 fingering methods (CASIO CHORD, FINGERED, FULL RANGE CHORD)
Rhythm controller:	START/STOP, INTRO, NORMAL /FILL-IN, VAR/FILL-IN, SYNCHRO/ENDING
Accomp volume:	0 to 127 (128 steps)
<b>Free session</b>	
Number of patterns	100 (auto-accompaniment in accordance with selected chord progression)
<b>Memory function</b>	
Songs:	2
Recording tracks:	6 (2 through 6 are melody tracks)
Recording methods:	Real-time, step
Memory capacity:	Approximately 5,200 notes (total for two songs)
Edit function:	Equipped
<b>Demo tunes:</b>	2
<b>Synthesizer function</b>	
Parameters:	PCM set, amp envelope set, attack rate, release rate, pitch envelope set, pitch, level, touch sense, pan
<b>Mixer function</b>	
Channels:	16
Parameters:	Program change number, volume, expression, pan, coarse tuning, fine tuning, on/off/solo
<b>MIDI:</b>	16 multi-timbre receive, GM Level 1 standard
<b>Other functions</b>	
Pitch bend range:	12 semitones upwards and downwards
Transpose:	25 steps (-12 semitones to +12 semitones)
Tuning:	Variable (A4 = approximately 440 Hz ± 50 cents)

## Terminals

MIDI terminals:	IN, OUT
Assignable terminal:	Standard jack (sustain, sostenuto, soft, rhythm start/stop)
Headphone/Output terminal:	Stereo standard jack Output Impedance: 200 $\Omega$ Output Voltage: 4.9 V (RMS) MAX
Power supply terminal:	12 V DC

## Power supply

Batteries:	Dual power supply system Six D-size batteries
Battery life:	Approximately 2 hours (UM-1/R20) 8 hours (AM-1/LR20)
AC adaptor:	AD-12
Auto power off:	Turns power off approximately six minutes after last key operation. Enabled under battery power only, can be disabled manually.

## Power consumption:

12 V  $\approx$  18 W

## Speaker output:

5 W + 5 W

## Dimensions (HWD):

116.2  $\times$  42.1  $\times$  14.7 cm (45-13/16  $\times$  16-9/16  $\times$  5-13/16 inches)

## Weight:

Approximately 9.1 kg (20.1 lbs) (without batteries)

## ELECTRICAL

### Current drain with 12 V DC:

No sound output	430 mA $\pm$ 20 %
Maximum volume	1570 mA $\pm$ 20 %
with 24 keys from C4 to C6 pressed in Bassoon tone	
Volume: maximum, Touch response: maximum	
Reverb: Hall	

### Phone output level (Vrms with 8 $\Omega$ load each channel):

with key A5 pressed in Bassoon tone	L-ch	165 mV $\pm$ 20 %
Volume: maximum	R-ch	150 mV $\pm$ 20 %
Reverb: Hall		

### Speaker output level (Vrms with 4 $\Omega$ load each channel):

with key A5 pressed in Bassoon tone	L-ch	5500 mV $\pm$ 20 %
Volume: maximum	R-ch	5200 mV $\pm$ 20 %
Reverb: Hall		

### Output level (Vrms with 47 k $\Omega$ load each channel):

with key A5 pressed in Bassoon tone	L-ch	4260 mV $\pm$ 20%
	R-ch	3950 mV $\pm$ 20%

### Minimum operating voltage:

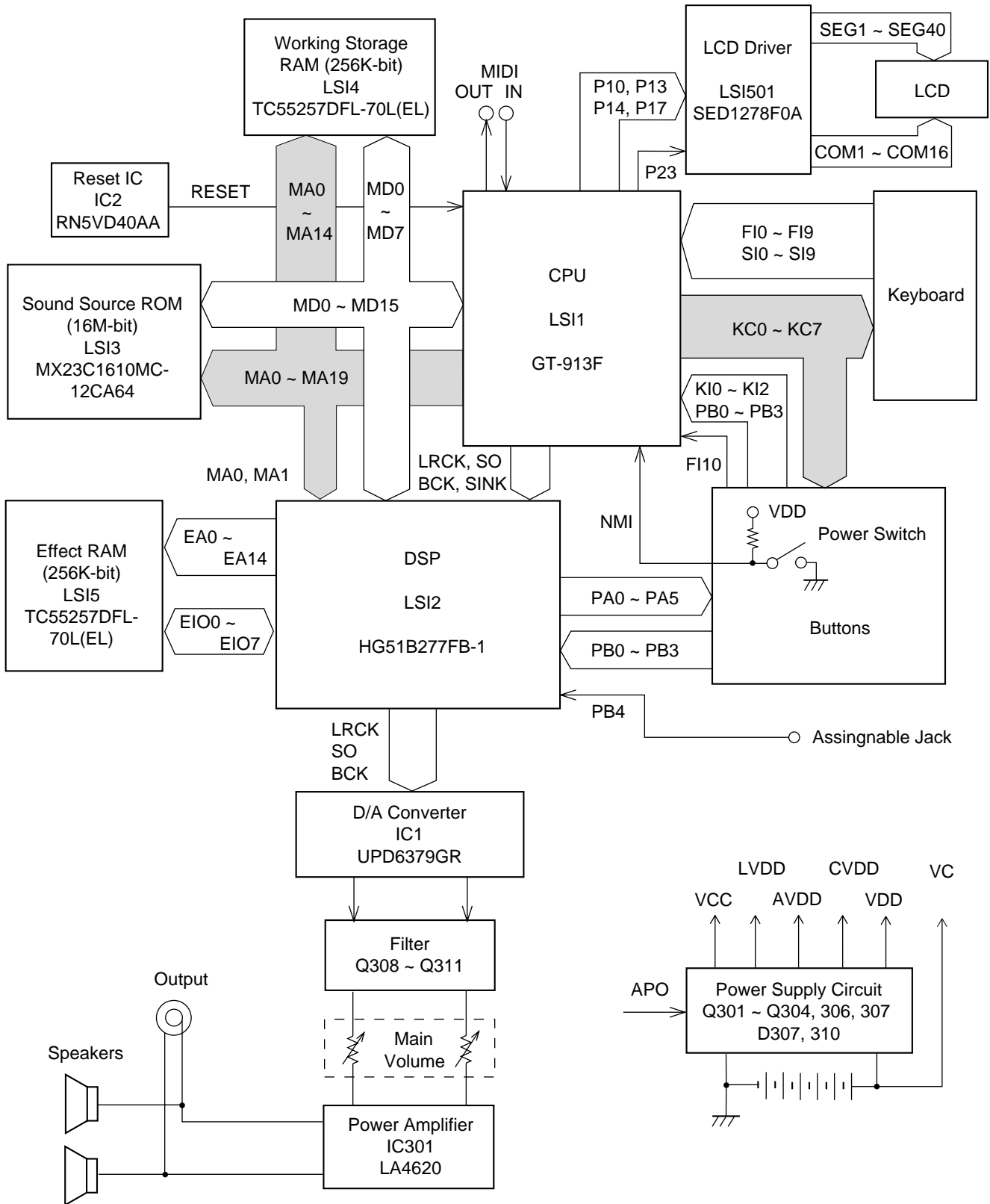
6.3 V

## About General MIDI

General MIDI standardizes MIDI data for all sound source types, regardless of manufacturer. General MIDI specifies such factors as tone numbering, drum sounds, and available MIDI channels for all sound sources. This standard makes it possible for all MIDI equipment to reproduce the same nuances when playing General MIDI data, regardless of the manufacturer of the sound source.

This keyboard supports General MIDI, so it can be used to play commercially available pre-recorded General MIDI data and General MIDI data sent to it from a personal computer.

# BLOCK DIAGRAM

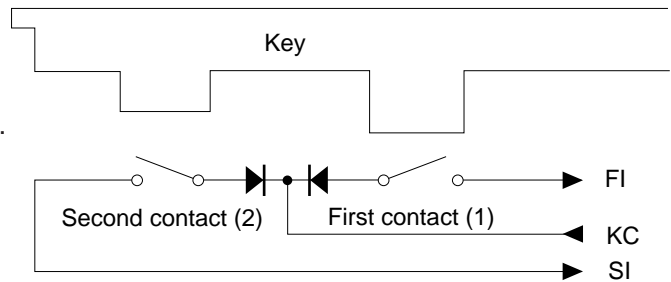


# CIRCUIT DESCRIPTION

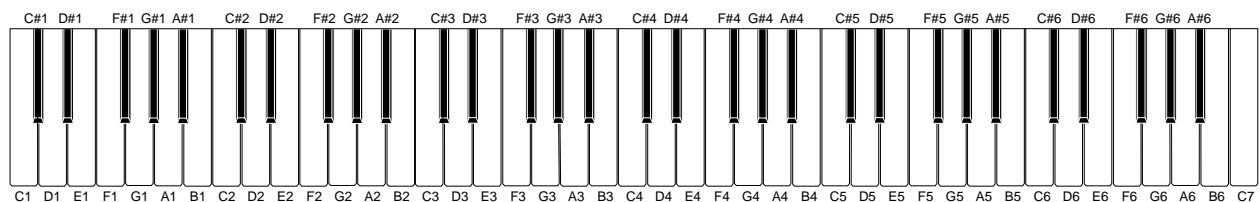
## KEY MATRIX

	KC0	KC1	KC2	KC3	KC4	KC5	KC6	KC7
<b>FI0</b>	C1 (1)	C#1 (1)	D1 (1)	D#1 (1)	E1 (1)	F1 (1)	F#1 (1)	G1 (1)
<b>SI0</b>	C1 (2)	C#1 (2)	D1 (2)	D#1 (2)	E1 (2)	F1 (2)	F#1 (2)	G1 (2)
<b>FI1</b>	G#1 (1)	A1 (1)	A#1 (1)	B1 (1)	C2 (1)	C#2 (1)	D2 (1)	D#2 (1)
<b>SI1</b>	G#1 (2)	A1 (2)	A#1 (2)	B1 (2)	C2 (2)	C#2 (2)	D2 (2)	D#2 (2)
<b>FI2</b>	E2 (1)	F2 (1)	F#2 (1)	G2 (1)	G#2 (1)	A2 (1)	A#2 (1)	B2 (1)
<b>SI2</b>	E2 (2)	F2 (2)	F#2 (2)	G2 (2)	G#2 (2)	A2 (2)	A#2 (2)	B2 (2)
<b>FI3</b>	C3 (1)	C#3 (1)	D3 (1)	D#3 (1)	E3 (1)	F3 (1)	F#3 (1)	G3 (1)
<b>SI3</b>	C3 (2)	C#3 (2)	D3 (2)	D#3 (2)	E3 (2)	F3 (2)	F#3 (2)	G3 (2)
<b>FI4</b>	G#3 (1)	A3 (1)	A#3 (1)	B3 (1)	C4 (1)	C#4 (1)	D4 (1)	D#4 (1)
<b>SI4</b>	G#3 (2)	A3 (2)	A#3 (2)	B3 (2)	C4 (2)	C#4 (2)	D4 (2)	D#4 (2)
<b>FI5</b>	E4 (1)	F4 (1)	F#4 (1)	G4 (1)	G#4 (1)	A4 (1)	A#4 (1)	B4 (1)
<b>SI5</b>	E4 (2)	F4 (2)	F#4 (2)	G4 (2)	G#4 (2)	A4 (2)	A#4 (2)	B4 (2)
<b>FI6</b>	C5 (1)	C#5 (1)	D5 (1)	D#5 (1)	E5 (1)	F5 (1)	F#5 (1)	G5 (1)
<b>SI6</b>	C5 (2)	C#5 (2)	D5 (2)	D#5 (2)	E5 (2)	F5 (2)	F#5 (2)	G5 (2)
<b>FI7</b>	G#5 (1)	A5 (1)	A#5 (1)	B5 (1)	C6 (1)	C#6 (1)	D6 (1)	D#6 (1)
<b>SI7</b>	G#5 (2)	A5 (2)	A#5 (2)	B5 (2)	C6 (2)	C#6 (2)	D6 (2)	D#6 (2)
<b>FI8</b>	E6 (1)	F6 (1)	F#6 (1)	G6 (1)	G#6 (1)	A6 (1)	A#6 (1)	B6 (1)
<b>SI8</b>	E6 (2)	F6 (2)	F#6 (2)	G6 (2)	G#6 (2)	A6 (2)	A#6 (2)	B6 (2)
<b>FI9</b>	C7 (1)							
<b>SI9</b>	C7 (2)							

Note: 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
F10	DRUM PAD 3 CHORD 3	DRUM PAD 1 CHORD 1	PITCH BEND ▼	▼ ENTER	9	6	+	TONE
K10	DRUM PAD 4 CHORD 4	DRUM PAD 2 CHORD 2	PITCH G BEND ▲	START/ STOP	8	3	—	RHYTHM
K11	DRUM PAD 5 CHORD 5	STEP	TEMPO ▼	▶	7	2	0	DEMO
K12	DRUM PAD 6 CHORD 6	MEMORY	TEMPOG ▲	◀	4	5	1	TRANSPOSE/ TUNE/MIDI

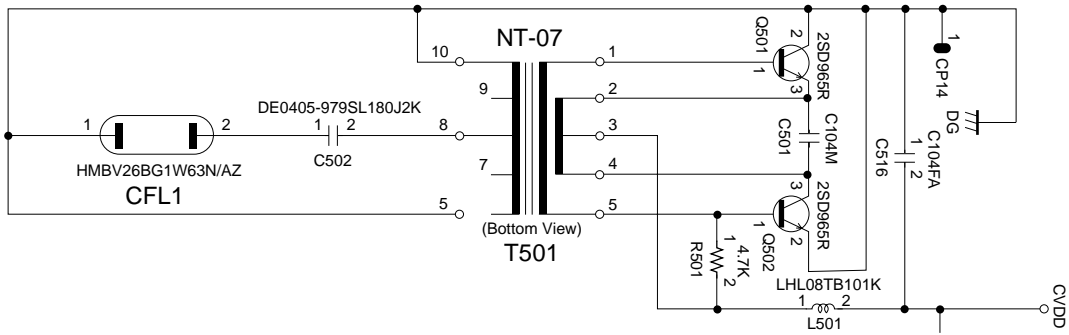
	PA0	PA1	PA2	PA3
PB0	FULL RANGE CHORD	INTRO	TOUCH RESPONSE	REVERB
PB1	FINGERED	NORMAL/ FILL-IN	FREE SESSION	ACCOMP VOLUME
PB2	CASIO CHORD	SYNCHRO/ ENDING	LAYER	SYNTH
PB3	NORMAL	VARIATION/ FILL-IN	SPILIT	MIXER

## POWER SUPPLY CIRCUIT

The power supply circuit generates five voltages as shown in the following table. VDD and VC voltages are always generated. The others are controlled by APO signal from the CPU.

Name	Voltage	For operation of
VDD	+5 V	CPU, Reset IC, DSP, Sound source ROM, Working storage RAM, Effect RAM
AVDD	+5 V	DAC, Filter
LVDD	+5.6 V	LCD driver
VCC,VC	+9 V	Power amplifier, Pilot lamp
CVDD	+5 V	Power jack, Pedal jack, MIDI jacks, Source voltage for LCD backlight

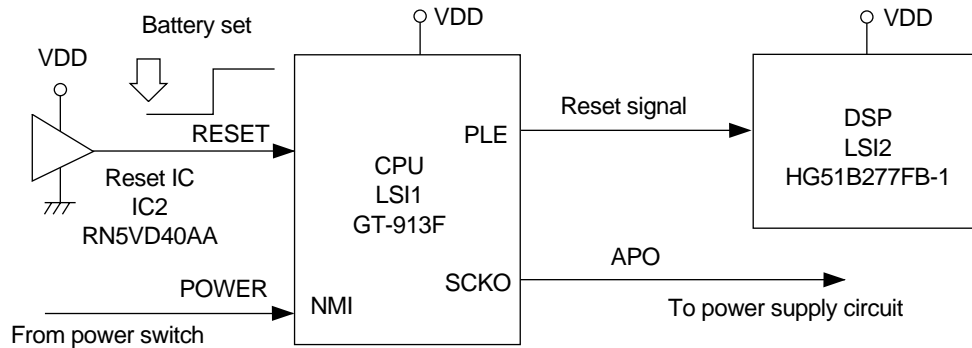
## LCD BACKLIGHT



When voltage CVDD is supplied, transistors Q501 and 502 start oscillation. From the oscillation voltage, transformer T501 generates about 600 V which is necessary for lighting the backlight.

## RESET CIRCUIT

When batteries are set or an AC adapter is connected, the reset IC provides a low pulse to the CPU. The CPU then initializes its internal circuit, and clears the working storage RAM. When the power switch is pressed, the CPU receives a low pulse of POWER signal. The CPU sends APO signal to the power supply circuit, also sends a reset signal to the DSP.



## CPU (LSI1: GT-913F)

The 16-bit CPU contains a 1k-byte RAM, three 8-bit I/O ports, two timers, a key controller and serial interfaces. The CPU detects key velocity by counting the time between first-key input signal FI and second-key SI from the keyboard. The CPU reads sound data and velocity data from the sound source ROM in accordance with the selected tone; the CPU can read rhythm data simultaneously when a rhythm pattern is selected. Then the CPU provides 16-bit serial sound data to the DSP. The CPU also controls MIDI input/output and stores sequencer data into the working storage RAM.

The following table shows the pin functions of LSI1.

Pin No.	Terminal	In/Out	Function
1	TXD0	Out	MIDI signal output
2	RXD0	In	MIDI signal input
3	SCK0	Out	APO (Auto Power Off) signal output
4, 5	TXD/P13, RXD/P14	In/Out	Data bus for the LCD driver
6	SCK1	Out	1 MHz synchronizing pulse output
7	AVCC	In	CVDD (+5 V) source
8	AN0	In	AC adaptor detection terminal. +5 V when the keyboard is powered by batteries and becomes 0 V to cancel the APO function when AC adaptor is connected.
9	AN1	In	Input from pitch bender
10	AGND	In	Ground (0 V) source
11	BCK	Out	Bit clock output
12	SO	Out	Serial sound data output
13	LRCK	Out	Word clock output
14	GND	In	Ground (0 V) source
15, 16	XLT0, XLT1	In/Out	30 MHz clock input/output
17	VCC	In	+5 V source
18, 19	MOD0, MOD1	In	Mode selection terminal
20	RSTB	In	Reset signal input
21	NMI	In	Power ON signal input
22	INT/P10	In/Out	Data bus for the LCD driver
23 ~ 30	FI0 ~ FI3 SI0 ~ SI3	In	Terminal for key input signal
31 ~ 38	KC0 ~ KC7	Out	Terminal for key scan signal
39 ~ 50	FI4 ~ FI9 SI4 ~ SI9	In	Terminal for key input signal
51	FI10	In	Terminal for button input signal
52	SI10/P23	Out	Chip enable signal for the LCD driver
53 ~ 55	KI0 ~ KI2	In	Terminal for button input signal
56	MWNB	Out	Write enable signal for the DSP
57 ~ 76	MA0 ~ MA19	Out	Address bus
77	MCSB0	Out	Chip enable signal output for the sound source ROM
78	MCSB1	Out	Not used
79	MCSB2	Out	Chip enable signal output for the DSP



Pin No.	Terminal	In/Out	Function
80	VCC	In	+5 V source
81	GND	In	Ground (0 V) source
82	MRDB	Out	Read enable signal output for the sound source ROM
83 ~ 98	MD0 ~ MD15	In/Out	Data bus
99	PLE	Out	Reset signal output for the DSP
100	P17	In/Out	Data bus for the LCD driver

## DIGITAL SIGNAL PROCESSOR (LSI2: HG51B227FB-1)

The DSP receives 16-bit serial sound data output from the CPU and adds the selected effect to the sound data using the effect RAM. Then the DSP provides the sound data to the DAC. The DSP also controls button input/output.

The following table shows the pin functions of LSI2.

Pin No.	Terminal	In/Out	Function
1 ~ 3, 80	PB0 ~ PB3	In	Button input terminals
4	PB4	In	ASSIGNABLE Jack input
5	SO	Out	Serial sound data output for the DAC
6	WCKO	Out	Word clock output for the DAC
7	VDD3	In	+5 V source
8	TEST	—	Not used
9	RESB	In	Reset signal input
10	VSS2	In	Ground (0 V) source
11, 12	XIN, XOUT	In/Out	20 MHz clock input/output
13	WCKI	In	Word clock input from the CPU
14	SI	In	Serial sound data input from the CPU
15	BCKI	In	Bit clock input from the CPU
16	SINC	In	1 MHz synchronizing pulse input
17	VDD2	In	+5 V source
18 ~ 25	IO0 ~ IO7	In/Out	Data bus
26	RCEB	Out	Chip enable signal output for the working storage RAM
27	VSS3	In	Ground (0 V) source
28	AD1	In	Address bus
29	DEB	In	Data enable signal for working storage RAM
30	WEB	In	Write enable signal
31	VDD3	In	+5 V source
32	CE2	In	Chip enable signal input. High active.
33	AD0	In	Address bus
34	CE1B	In	Chip enable signal input. Low active.
35 ~ 41, 43	EIO0 ~ EIO7	In/Out	Data bus for the effect RAM
42, 44, 46 ~ 48, 51 ~ 59, 61	EA0 ~ EA14	Out	Address bus for the effect RAM
45	ECEB	Out	Chip enable signal output for the effect RAM

Pin No.	Terminal	In/Out	Function
49	EOEB	Out	Read enable signal output for the effect RAM
50	VSS3	In	Ground (0 V) source
60	BWEB	Out	Write enable signal output for the effect RAM
62, 66, 70, 74, 78	VSS2	In	Ground source
63, 67, 71, 75, 79	VDD2	In	+5 V source
64, 65, 68, 69, 72, 73	PA0 ~ PA5	Out	Button scan signal output
76, 77	PA6/7	Out	Not used

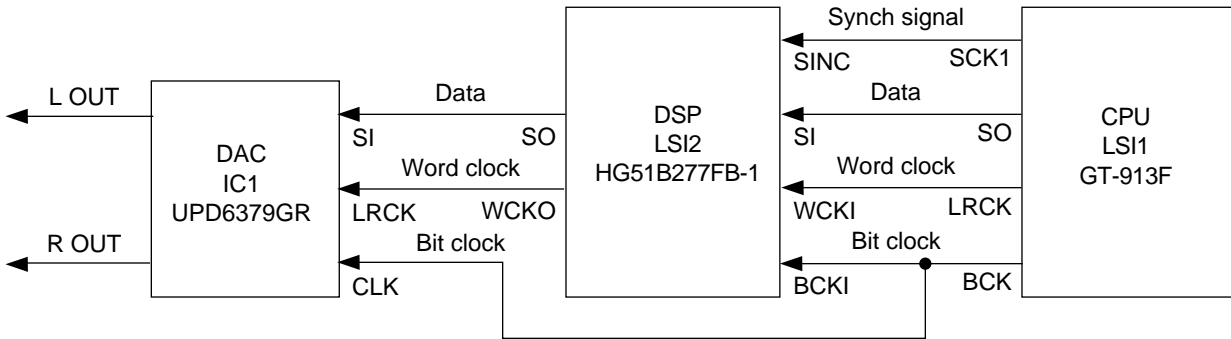
## LCD DRIVER (LSI501 : SED1278F0A)

The LCD driver can drive a dot matrix LCD having 40 segment and 16 common lines. The LSI contains 240 graphic symbols in the built-in character generator ROM, and stores 80 characters in the built-in display data RAM. In accordance with command from the CPU, the LSI is capable of displaying up to 16 characters simultaneously. The following table shows the pin functions of LSI 501.

Pin No.	Terminal	In/Out	Function
1 ~ 22, 63 ~ 80	SEG1 ~ SEG40	Out	Segment signal output
23	VSS	—	GND (0 V) source
24, 25	OSC1, OSC2	In/Out	Terminals for the built-in clock pulse generator. The external resistor connected determines the oscillation frequency.
26 ~ 30	V1 ~ V5	In	LCD drive voltage input. Those voltages are used for generating the stepped pulse of the LCD drive signals.
31, 32	LP, XSCL	—	Not used
33	VDD	In	LVDD (+5 V) source
34, 35	FR, DO	—	Not used
36	RS	In	Data/command determination terminal. High: data, Low: command
37	R/W	In	Read/write terminal. High: read, Low: write
38	E	In	Chip enable signal. High: enable, the writing is done at fall edge. Low: disenable
39 ~ 42	DB0 ~ DB3	—	Not used. Connected to GND (0 V)
43 ~ 46	DB4 ~ DB7	In/Out	Data bus
47 ~ 62	COM1 ~ COM16	Out	Common signal/output

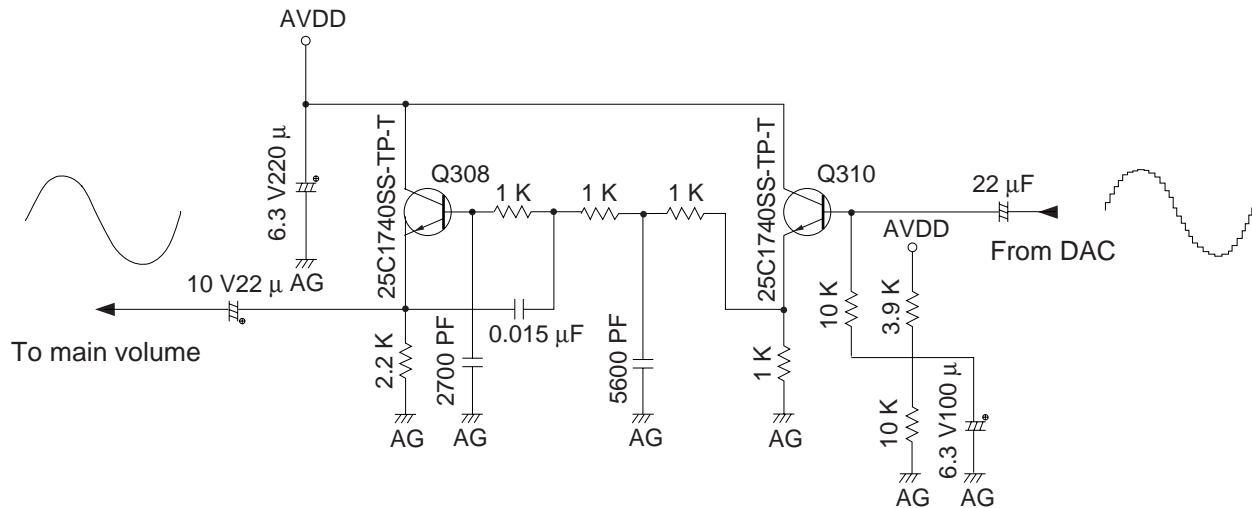
## DAC (IC1: UPD6379GR)

The DAC receives 16-bit serial data output from the DSP. The data contains digital sound data of the melody, chord, bass, and percussion for the right and left channels. The DAC converts the data into analog waveforms and outputs them to each channel separately.



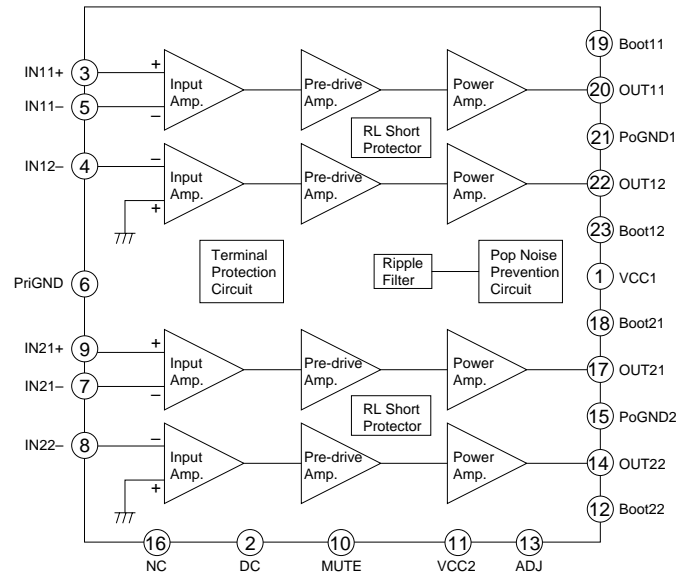
## FILTER BLOCK

Since the sound signals from the DAC are stepped waveforms, the filter block is added to smooth the waveforms.



## POWER AMPLIFIER (IC301: LA4620)

The power amplifier is a two-channel amplifier with standby switch.



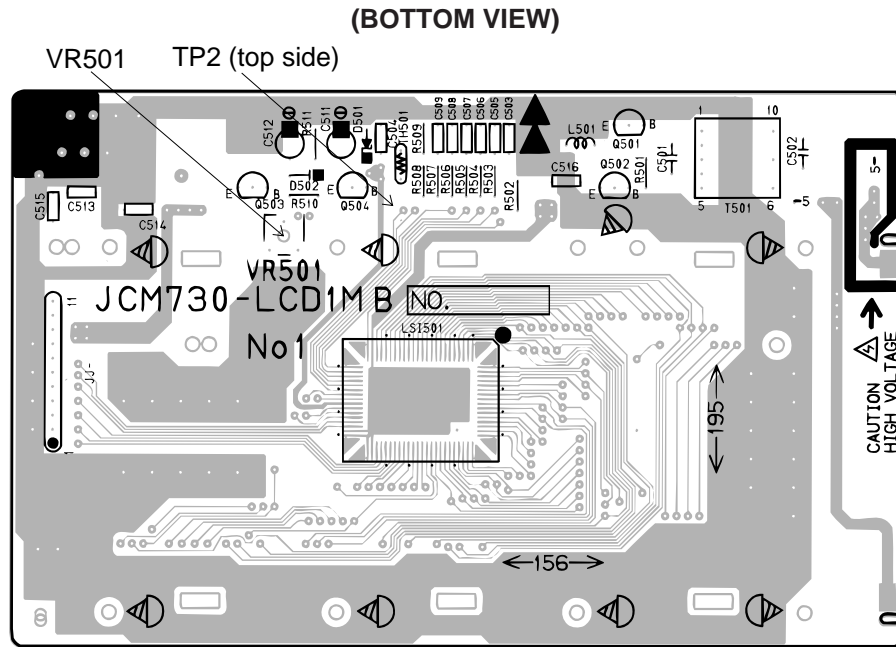
# ADJUSTMENT

## DISPLAY PCB

1) Items to be adjusted:

Item	Measuring Instrument
Vop voltage setting	Voltmeter

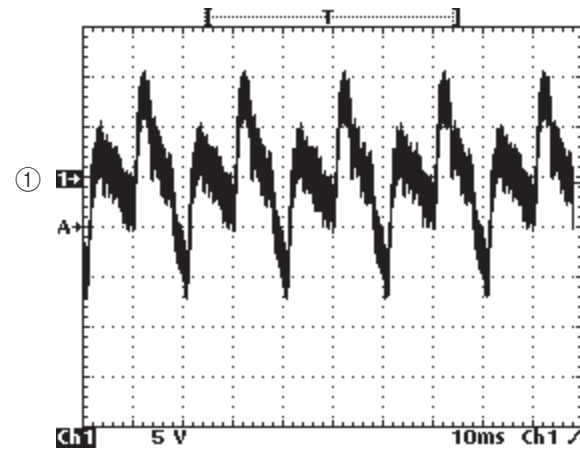
2) Adjustment and Test Point Locations



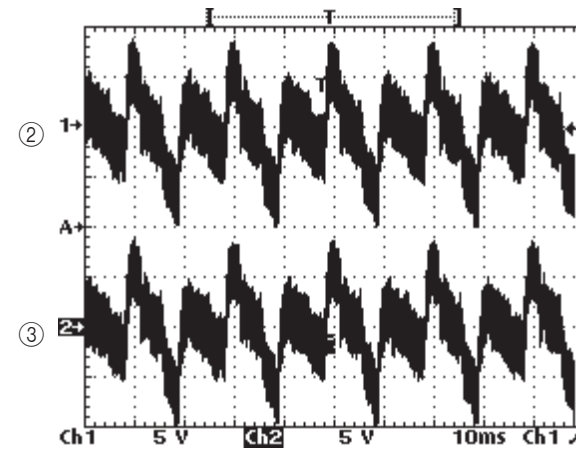
3) Equipment connection/Procedure

Vop voltage setting						
Input Connection	Input Point	Input Signal	Adjust	Output Connection	Output Point	Adjust for
—	—	—	VR501	Voltmeter	TP2	Adjust for $4.4 \pm 0.1$ V reading on voltmeter. Make fine adjustment according to the next instruction.
<p>Watching the LCD at a <math>37.40^\circ</math> angle to the horizontal, adjust Vop voltage so that unenergized segments are seen dimly.</p>						

## MAJOR WAVEFORMS

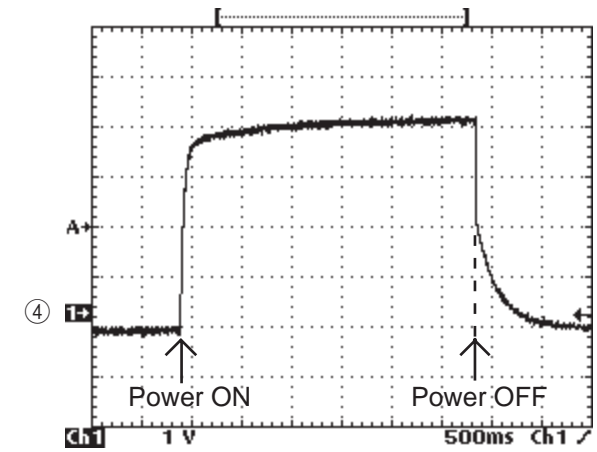


① Clock signal SINK  
Test point T5

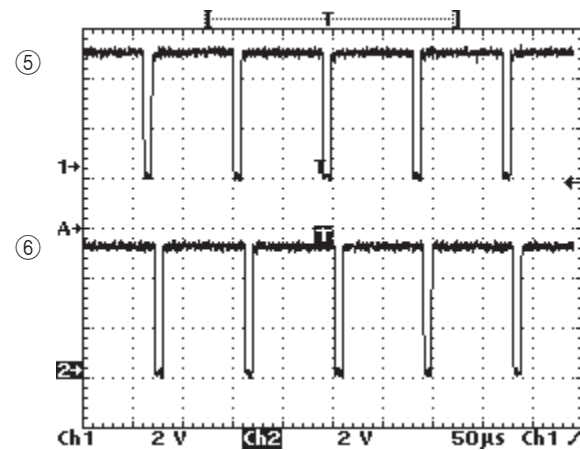


② Clock signal FB1  
Test point T3

③ Clock signal FB2  
Test point T4

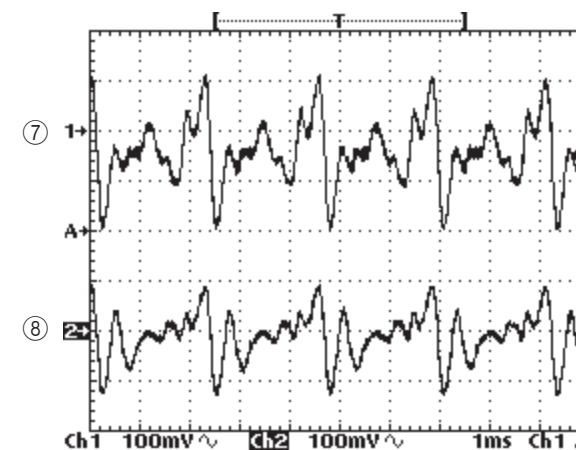


④ APO signal  
JH connector pin 4



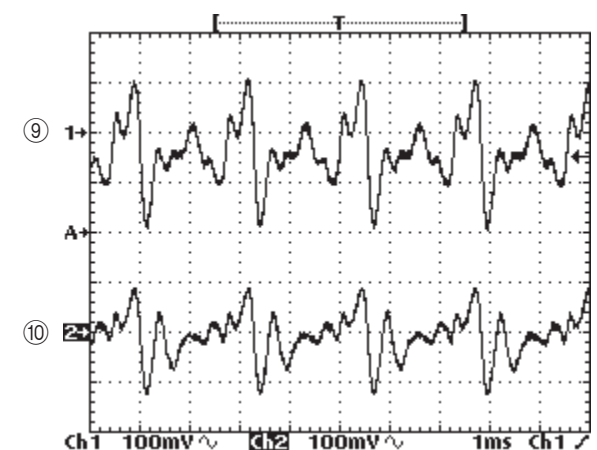
⑤ Key common signal KC0  
JC connector pin 3

⑥ Key common signal KC1  
JC connector pin 4



⑦ Sound signal (LMEL)  
Test point T2

⑧ Sound signal (RMEL)  
Test point T1



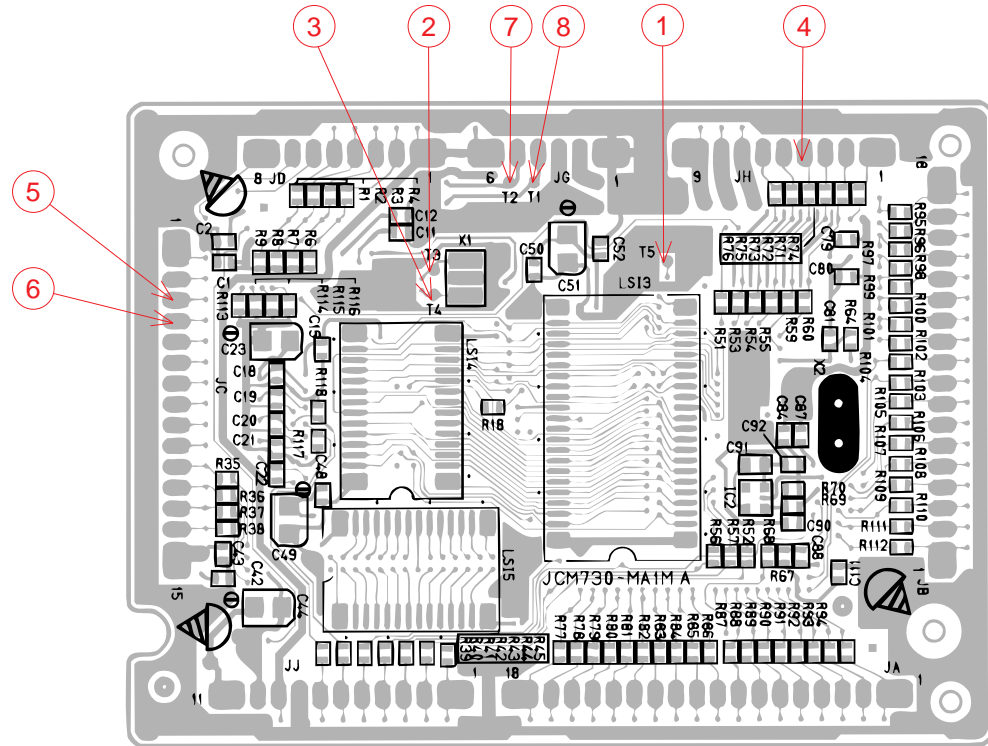
⑨ Sound signal (LIN)  
JK connector pin 1

⑩ Sound signal (RIN)  
JK connector pin 2

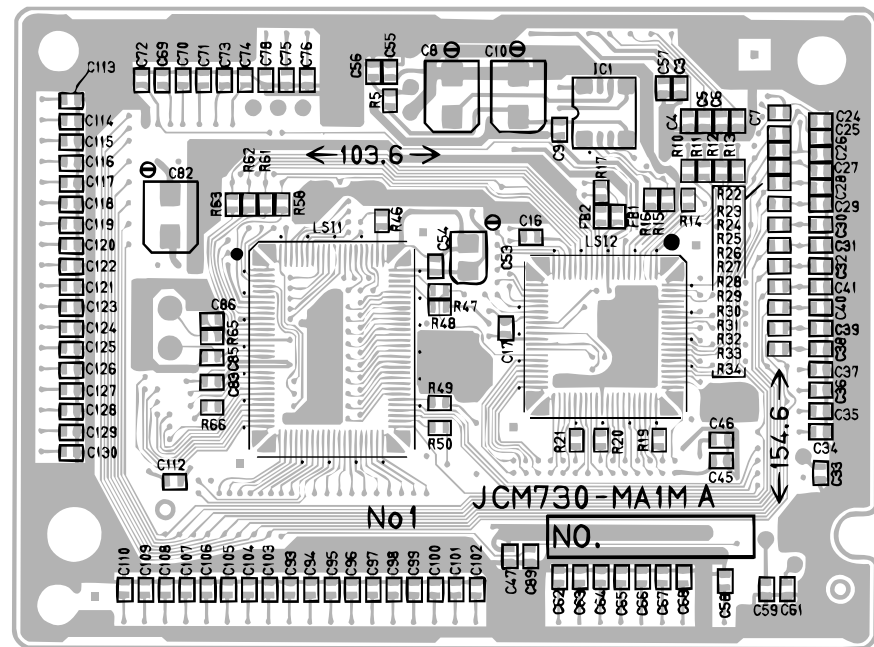
Tone: Bassoon, Volume: Maximum  
Touch speed: Maximum, Reverb: Hall  
Key: A4

# PRINTED CIRCUIT BOARDS

Main PCB JCM730-MA1M

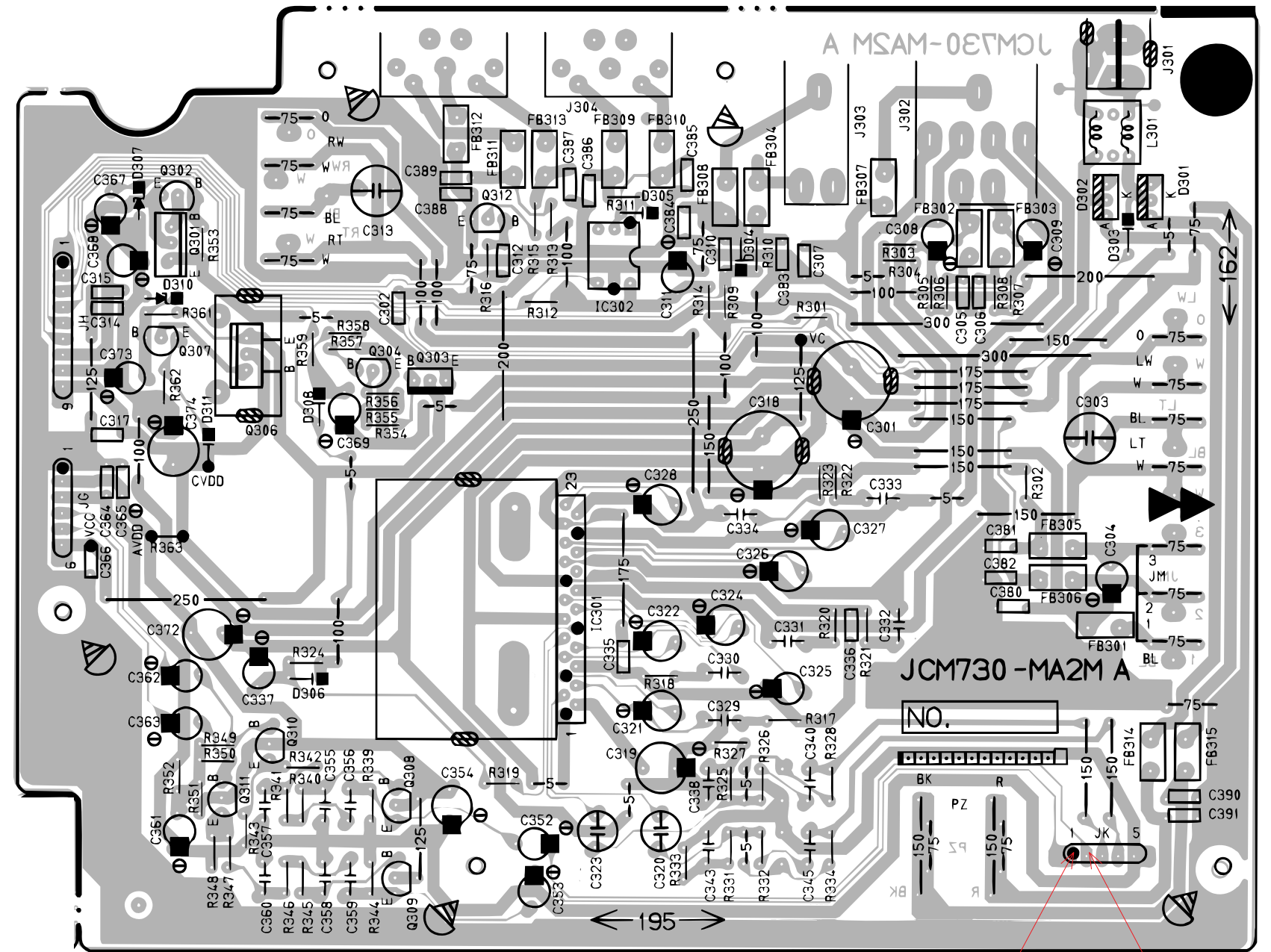


Top View



Bottom View

Sub PCB JCM730-MA2M

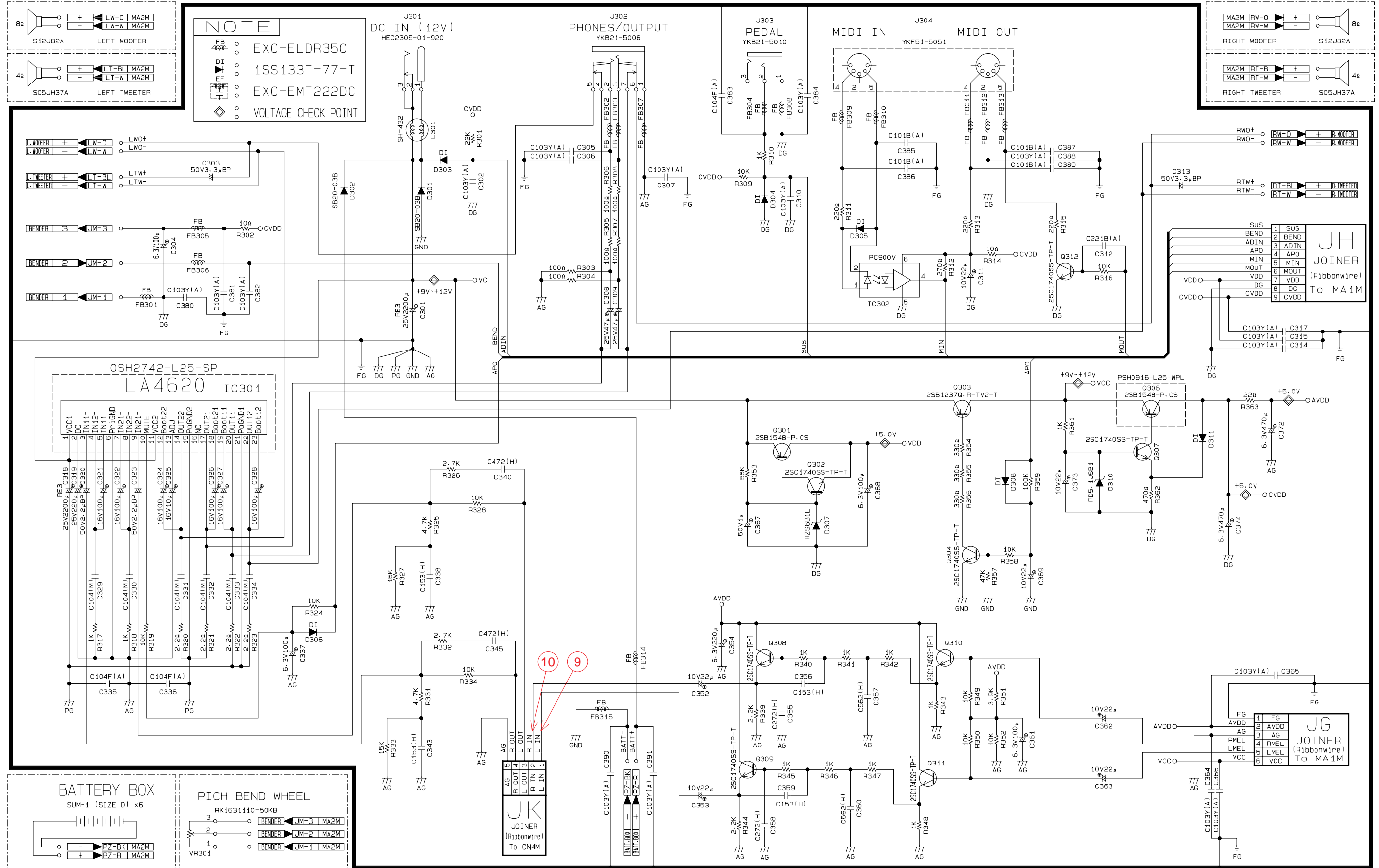


9 10



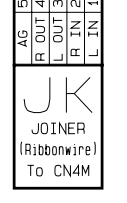
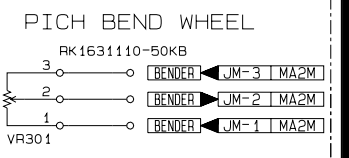
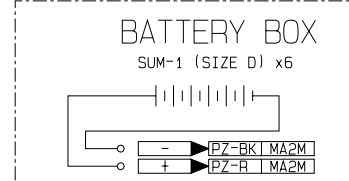
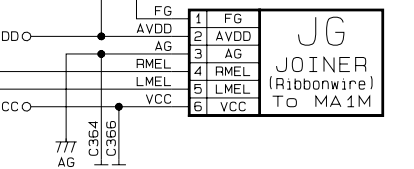
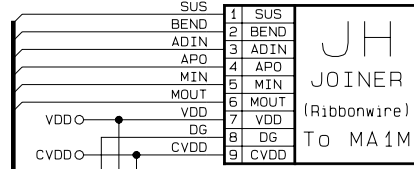
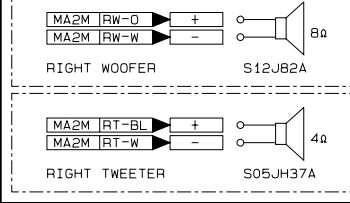
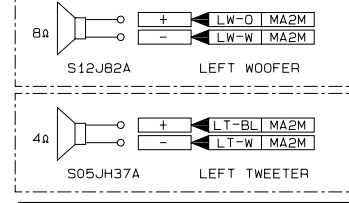
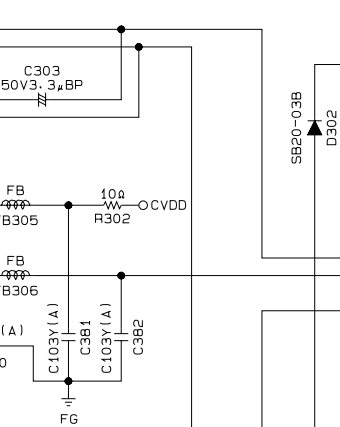


# Sub PCB JCM730-MA2M

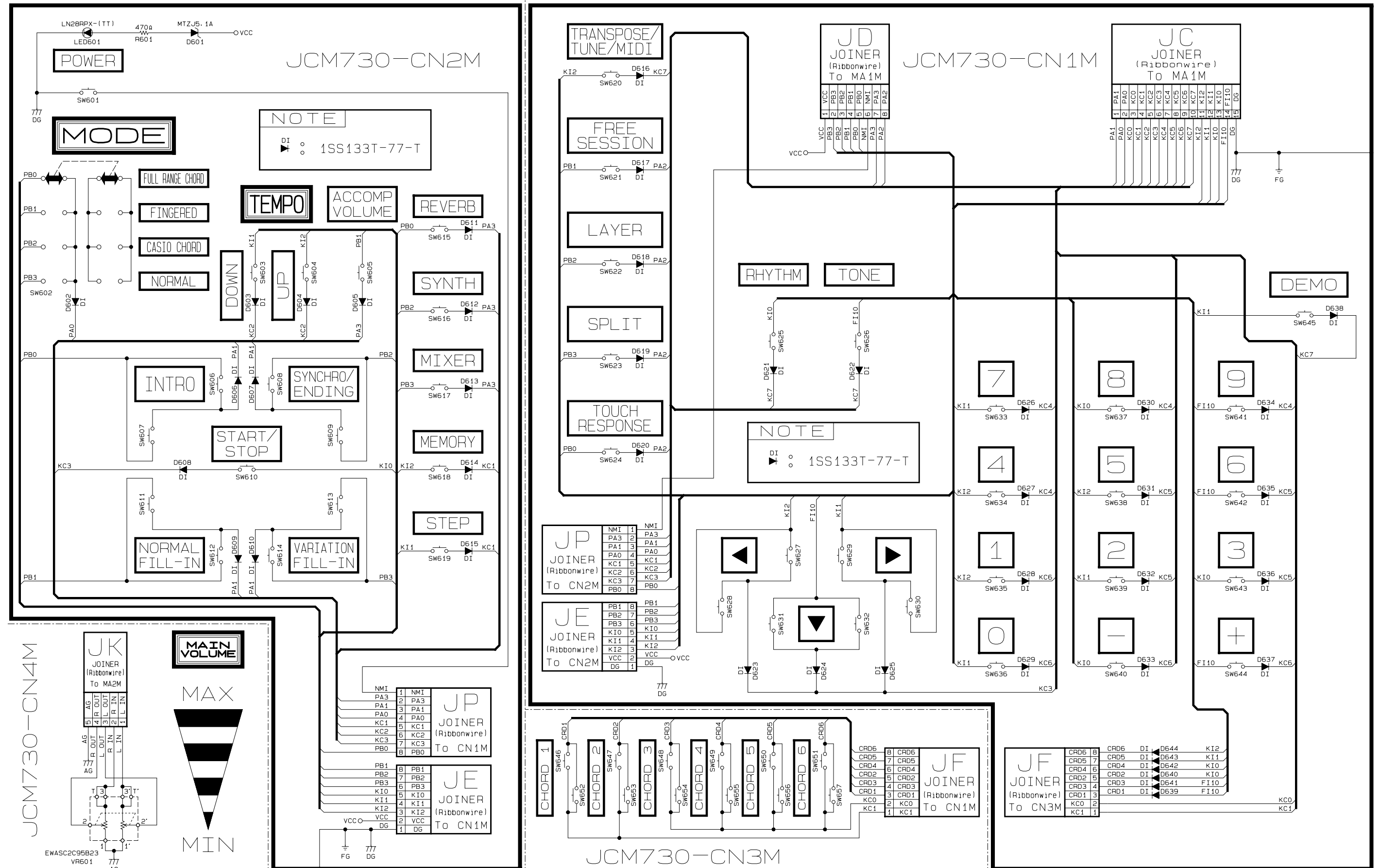


**NOTE**

- ○ ○ ○ ○ EXC-ELDR35C
- ○ ○ ○ ○ 1SS133T-77-T
- ○ ○ ○ ○ EXC-EMT222DC
- ◇ ○ ○ ○ ○ VOLTAGE CHECK POINT



Console PCBs JCM730-CN1M/CN2M/CN3M/CN4M



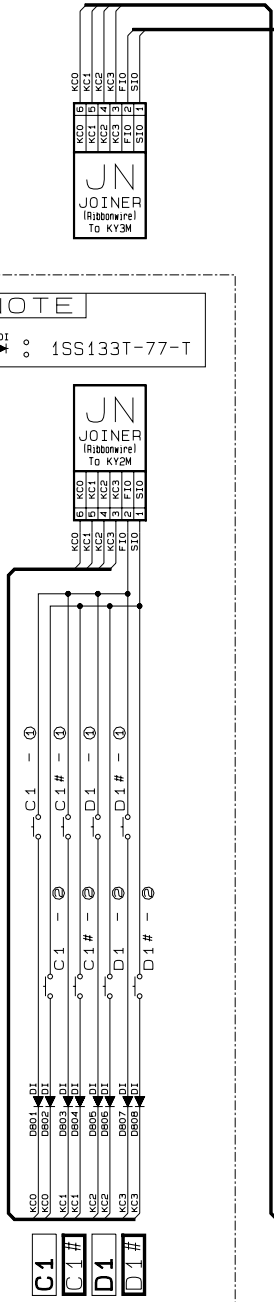


Keyboard PCBs JCM731T-KY1M/KY2M/KY3M

NOTE  
 ▼R  
 ○ 1S2473T-77-T

JN  
 JOINER (Ribbonwire)  
 To KY3M

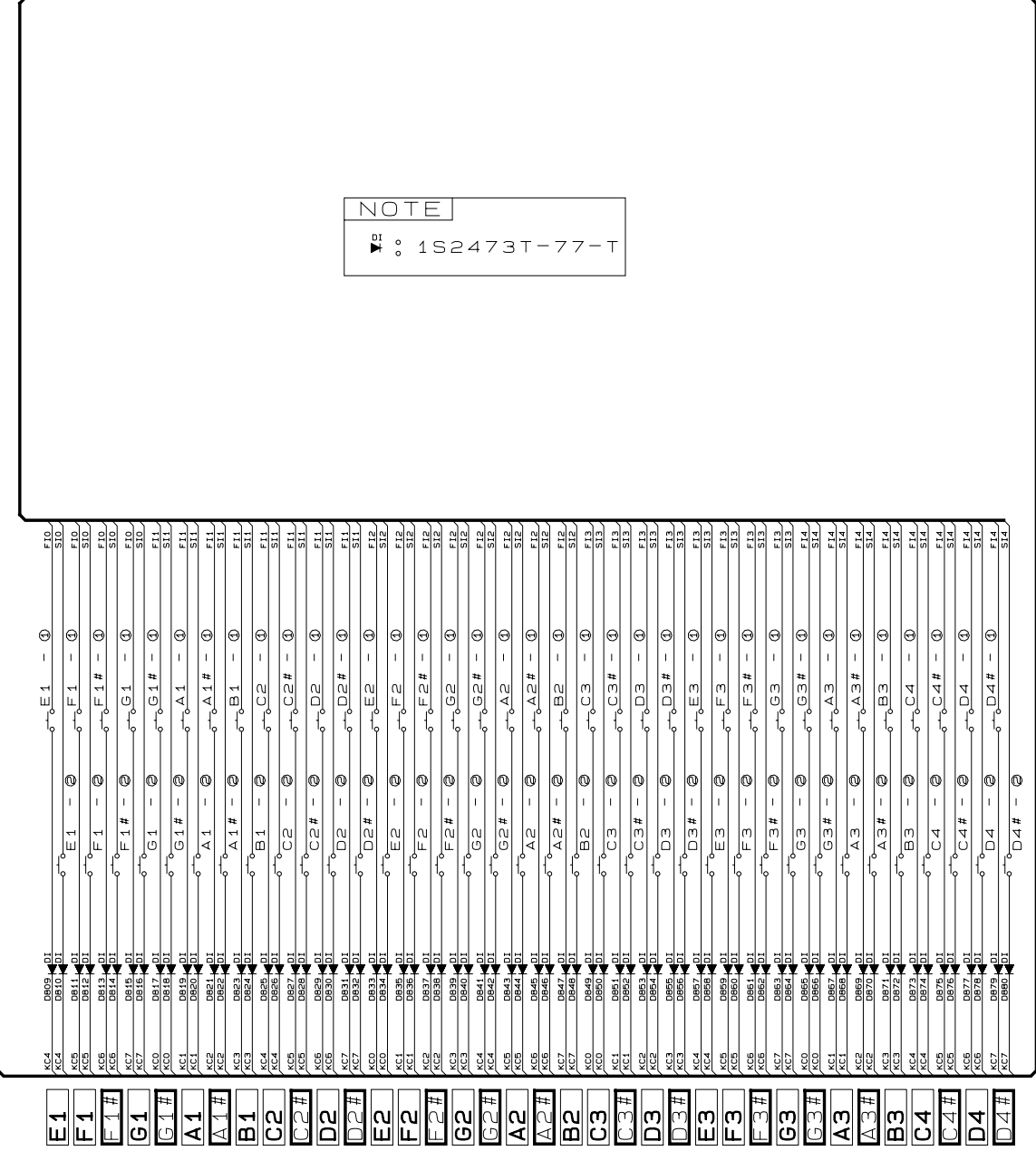
JN  
 JOINER (Ribbonwire)  
 To KY2M



JCM731T-KY3M

NOTE  
 ▼R  
 ○ 1S2473T-77-T

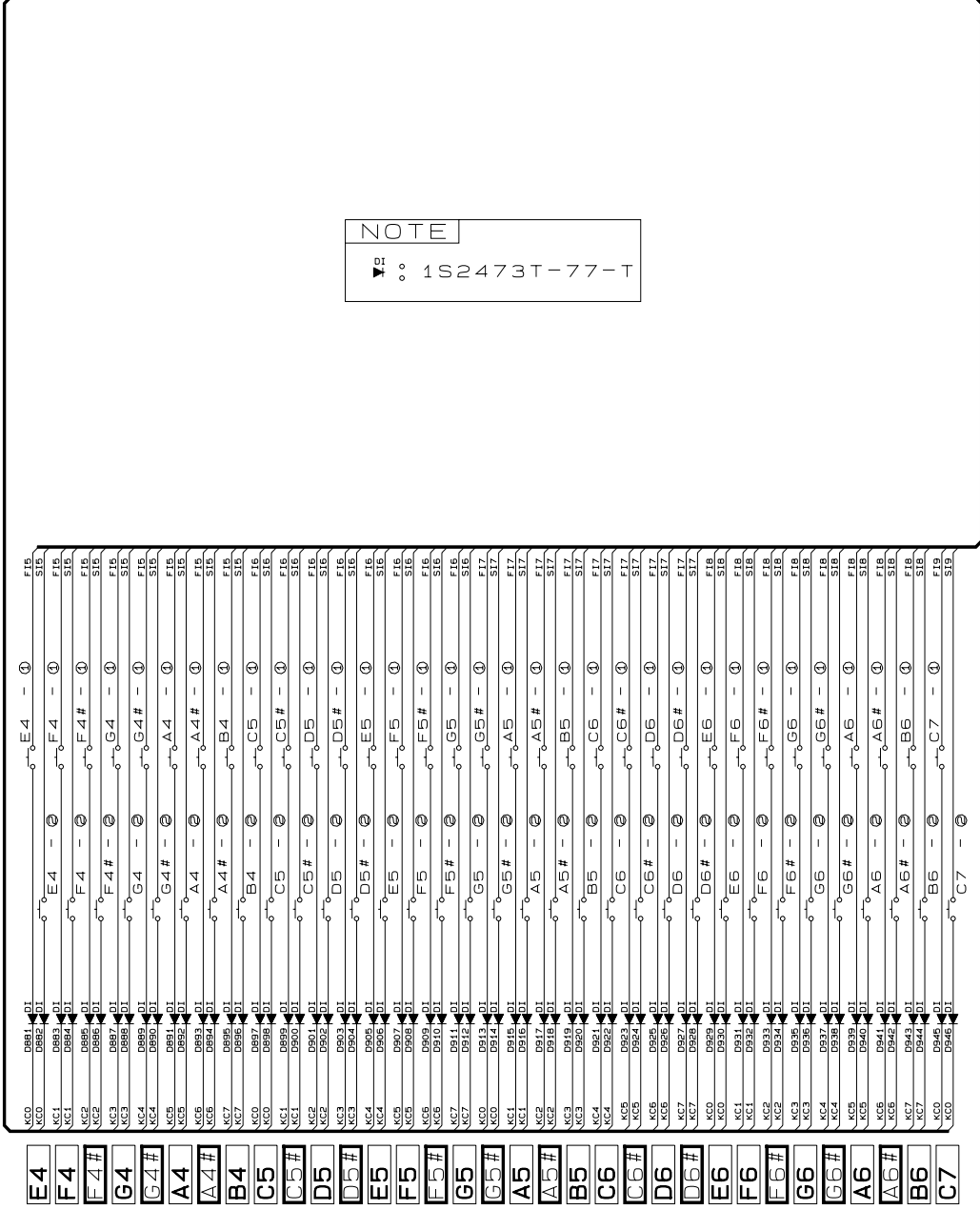
JB  
 JOINER (Ribbonwire)  
 To MA1M



JCM731T-KY2M

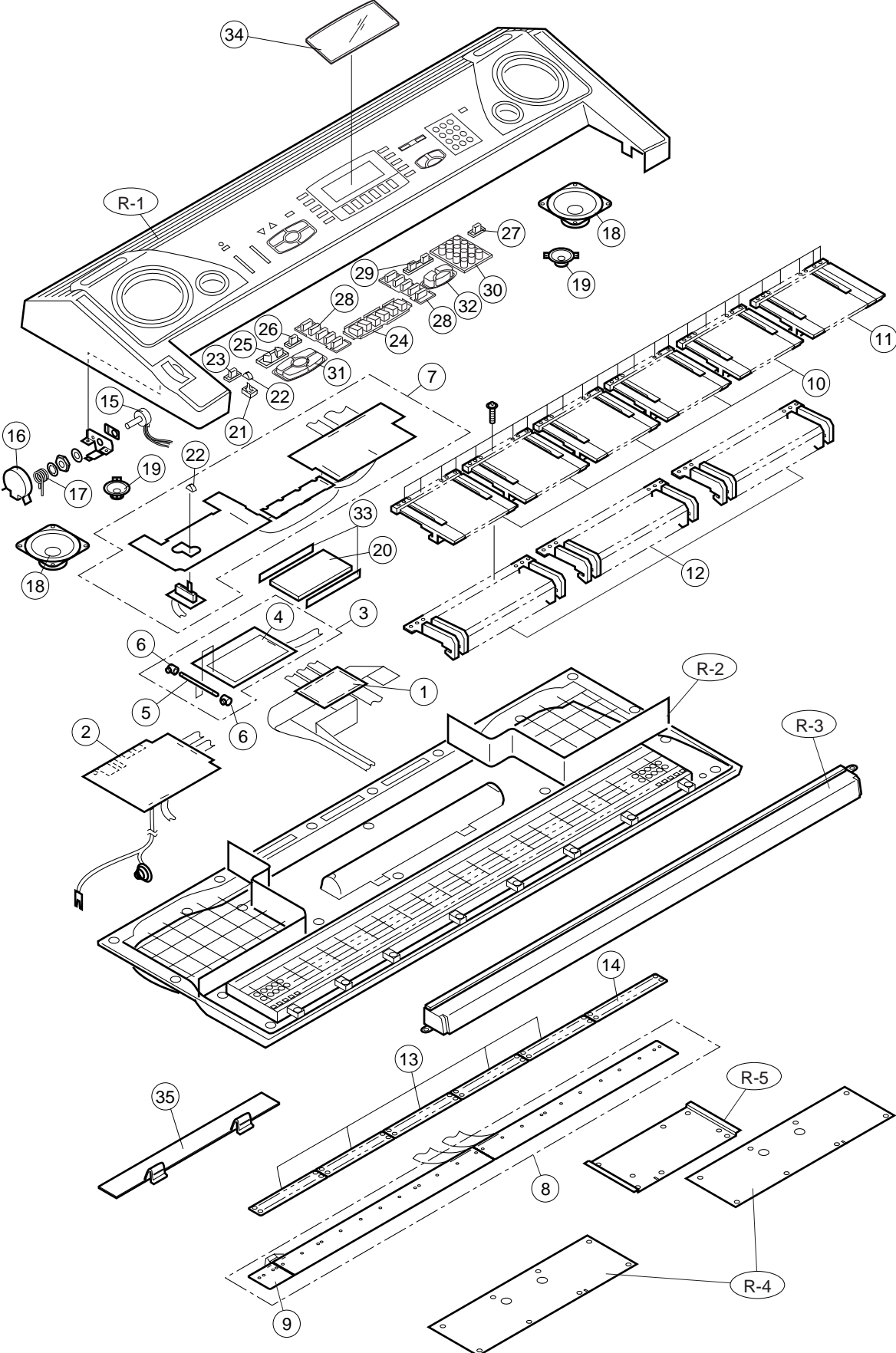
NOTE  
 ▼R  
 ○ 1S2473T-77-T

JA  
 JOINER (Ribbonwire)  
 To MA1M



JCM731T-KY1M

# EXPLODED VIEW



# PARTS LIST

## WK-1200

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.

Item	Code No.	Parts Name	Specification	Q	R
<b>MA1M PCB</b>					
1	6925 8890	PCB/ASSY (MA1M)	M240676*1	1	A
LSI1	2012 5005	LSI,CPU	GT913F(T)	1	A
LSI2	2012 4494	LSI,DSP	HG51B277FB-1	1	A
LSI3	2012 5665	LSI/MASK-ROM	MX23C1610MC-12CA64	1	A
LSI4/LSI5	2012 5572	LSI/S-RAM	TC55257DFL-70L(EL)	2	A
IC1	2105 4746	LSI/D/A CONVERTER	UPD6379GR-E1	1	A
IC2	2012 1883	IC/MOS	RN5VD40AA-TR	1	A
X1	2590 2699	OSCILLATOR/CERAMIC	EFO-B2005E0	1	A
X2	2590 2700	OSCILLATOR/CRYSTAL	XA10412	1	A
<b>MA2M PCB</b>					
2	6925 8920	PCB/ASSY (MA2M)	M140624*1	1	B
IC301	2114 1883	IC/LINEAR	LA4620	1	A
IC302	2114 1421	IC/PHOTO COUPLER	PC900V	1	B
Q301, Q306	2251 0672	TRANSISTOR	2SB1548-P.CS	2	B
Q302/304					
Q307-Q312	2252 0154	TRANSISTOR	2SC1740SS-TP-T	8	B
Q303	2251 0910	TRANSISTOR	2SB1237Q,R-TV2-T	1	A
Q307	2360 1085	DIODE/ZENER	HZS6B1LTD-T	1	A
D301/302	2390 1463	DIODE,SHOTTKY	SB20-03B	2	B
D303 - D306					
D308/311	2390 1344	DIODE	1SS133T-77-T	6	B
D310	2360 2233	DIODE/ZENER	RD5.1JSB1-T1-T	1	A
J301	3501 5012	JACK/POWER	HEC2305-01-920	1	B
J302	3612 0665	JACK	YKB21-5006	1	B
J303	3612 0789	JACK	YKB21-5010	1	B
J304	3501 4816	JACK/DIN	YKF51-5051	1	B
<b>BL ass'y</b>					
3	6925 8950	BL ASSY	M240682*1	1	B
4	6925 8960	PCB/ASSY (LCD1M)	M240678*1	1	B
5	3122 3524	LAMP,FLORESCENT	HMBV26BAG63N/AZ	1	A
6	5861 3522	CUSHION/LAMP	HRB-0256	2	B
LSI501	2012 5569	LSI/LCD DRIVER	SED1278F0A	1	A
Q501/502	2253 0710	TRANSISTOR	2SD965-R(TA)	2	B
Q503	2250 1577	TRANSISTOR	2SA933ASTPR	1	B
Q504	2220 1409	TRANSISTOR	2SC1740SR-TP-T	1	B
D501	2360 3056	DIODE/ZENER	HZS6A2LTD-T	1	B
D502	2390 1344	DIODE	1SS133T-77-T	1	B
C501	2830 9236	MYLAR CAPACITOR	NNMTP104K50-T	1	C
L501	3841 1197	COIL	LHL08TB101K	1	C
T501	3012 1470	TRANS/INVERTER	NT-07	1	B
VR501	2775 0994	POTENTIOMETER	EVN-D8AA03B53	1	B
<b>CN1 ~ CN4 PCBs</b>					
7	6925 8970	PCB/ASSY (CN1,2,3,4)	M140606*1	1	B
D601	2360 1729	DIODE/ZENER	MTZJ5.1AT-77-T	1	B
D602 - D644	2390 1344	DIODE	1SS133T-77-T	43	C
LED601	2370 0343	LED	LN28RPX-(TT)	1	C
VR601	2765 2178	POTENTIOMETER	EWASC2C95B23	1	B
<b>KY PCBs</b>					
8	6925 8930	PCB/ASSY (KY1,2)	M140614*1	1	B
D809 - D946	2390 1344	DIODE	1SS133T-77-T	138	B
9	6925 8940	PCB/ASSY (KY3)	M340666*1	1	B
D801 - D808	2390 1344	DIODE	1SS133T-77-T	8	B

Notes: Q – Quantity per unit  
R – Rank

Item	Code No.	Part Name	Specification	Q	R
<b>Keyboard</b>					
10	6922 2720	KEY SET/LT WHITE	M312118*1	5	A
11	6922 2730	KEY SET/LT WHITE	M312118*2	1	A
12	6906 8481	KEYSET/BLACK 10P	M140369A-3	3	A
13	6926 2500	RUBBER/CONTACT	M240699-2	5	A
14	6926 2510	RUBBER/CONTACT	M240700-2	1	A
<b>Bender</b>					
15	2765 1141	POTENTIOMETER	RK1631110-50KB	1	B
16	6906 8492	KNOB/BEND	M31488B-4	1	B
17	6911 5261	SPRING/BENDER	M41949A-1	1	C
<b>Panel</b>					
18	3831 1074	SPEAKER	S12J82A	2	B
19	3831 1075	SPEAKER	S05JH37A	2	B
20	3335 6571	LCD	LD-B10060E	1	A
21	6909 5890	SWITCH/SLIDE KNOB	CSB-12D	1	B
22	6921 5031	KNOB	M311859A-1	2	B
23	6925 9380	RUBBER/BUTTON	M240641-1	1	B
24	6925 9390	RUBBER/BUTTON	M240636-1	1	B
25	6925 9400	RUBBER/BUTTON	M240638-1	1	B
26	6925 9410	RUBBER/BUTTON	M240640-1	1	B
27	6925 9420	RUBBER/BUTTON	M240640-2	1	B
28	6925 9430	RUBBER/BUTTON	M240635-1	2	B
29	6925 9440	RUBBER/BUTTON	M240639-1	1	B
30	6925 9450	RUBBER/BUTTON	M240634-1	1	B
31	6925 9460	RUBBER/BUTTON	M240632-1	1	B
32	6925 9470	RUBBER/BUTTON	M240633-1	1	B
33	6926 2540	RUBBER/INTERCONNECTOR	M440459-2	2	B
34	6925 9340	PANEL/DISPLAY	M340642-1	1	C
35	6906 8456	COVER/BATTERY	M311164F*12	1	B
<b>Accessory</b>					
	6925 9770	STAND/NOTE	M140586-1	1	B

Notes: Q – Quantity per unit  
R – Rank



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