

DTXTREME

DRUM TRIGGER MODULE

SERVICE MANUAL



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This document is printed on chlorine free (ECF) paper with soy ink.

IMPORTANT NOTICE

This manual has been provided for the use of authorized Yamaha Retailers and their service personnel. It has been assumed that basic service procedures inherent to the industry, and more specifically Yamaha Products, are already known and understood by the users, and have therefore not been restated.

WARNING: Failure to follow appropriate service and safety procedures when servicing this product may result in personal injury, destruction of expensive components, and failure of the product to perform as specified. For these reasons, we advise all Yamaha product owners that all service required should be performed by an authorized Yamaha Retailer or the appointed service representative.

IMPORTANT: The presentation or sale of this manual to any individual or firm does not constitute authorization, certification, recognition of any applicable technical capabilities, or establish a principle-agent relationship of any form.

The data provided is believed to be accurate and applicable to the unit(s) indicated on the cover. The research, engineering, and service departments of Yamaha are continually striving to improve Yamaha products. Modifications are, therefore, inevitable and changes in specification are subject to change without notice or obligation to retrofit. Should any discrepancy appear to exist, please contact the distributor's Service Division.

WARNING: Static discharges can destroy expensive components. Discharge any static electricity you body may have accumulated by grounding yourself to the ground buss in the unit (heavy gauge black wires connect to this buss).

IMPORTANT: Turn the unit OFF during disassembly and parts replacement. Recheck all work before you apply power to the unit.

LITHIUM BATTERY HANDLING

This product uses a lithium battery for memory back-up.

WARNING: Lithium batteries are dangerous because they can be exploded by improper handling. Observe the following precautions when handling or replacing lithium batteries.

- Leave lithium battery replacement to qualified service personnel.
- Always replace with batteries of the same type.
- When installing on the PC board by soldering, solder using the connection terminals provided on the battery cells.
- Never solder directly to the cells. Perform the soldering as quickly as possible.
- Never reverse the battery polarities when installing.
- Do not short the batteries.
- Do not attempt to recharge these batteries.
- Do not disassemble the batteries.
- Never heat batteries or throw them into fire.

ADVARSEL!

Lithiumbatteri-Eksplosionsfare ved fejlagtig håndtering. Udskiftning må kun ske med batteri af samme fabrikat og type. Levér det brugte batteri tilbage til leverandøren.

VARNING

Explosionsfara vid felaktigt batteribyte.

Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren.

Kassera använt batteri enligt fabrikantens instruktion.

VAROITUS

Paristo voi räjähtää, jos se on virheellisesti asennettu.

Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin.

Hävitätä käytetty paristo valmistajan ohjeiden mukaisesti.

The following information complies with Dutch Official Gazette 1995. 45; ESSENTIALS OF ORDER ON THE COLLECTION OF BATTERIES.

- Please refer to the disassembly procedure for the removal of Back-up Battery.
- Leest u voor het verwijderen van de backup batterij deze beschrijving.

WARNING: CHEMICAL CONTENT NOTICE!

The solder used in the production of this product contains LEAD. In addition, other electrical/electronic and /or plastic (where applicable) components may also contain traces of chemicals found by the California Health and Welfare Agency (and possibly other entities) to cause cancer and/or birth defects or other reproductive harm.

DO NOT PLACE SOLDER, ELECTRICAL/ELECTRONIC OR PLASTIC COMPONENTS IN YOUR MOUTH FOR ANY REASON WHATSOEVER EVER!

Avoid prolonged, unprotected contact between solder and your skin! When soldering, do not inhale solder fumes or expose eyes to solder/flux vapor!

If you come in contact with solder or components located inside the enclosure of this product, wash your hands before handling food.

■ SPECIFICATIONS

Tone Generator

16-bit AWM2(PCM)

Wave Memory

DRAM16 Mbit × 2 (max47sec@44.1 kHz)

Poylphony

Maximum of 64 notes

Parts

16 parts

Voices

1757 Drum and Percussion Voices, 128 Keyboard Voice (GM Level 1)

System Effects

2 Blocks (Reverb, Chorus)

Effect for Drum Kit

2 Insertion Effects

Sequencer

2 Tracks MIDI sequencer

MODES

8 modes

Drum Kit Play mode
 Drum Kit Trigger Edit mode
 Drum Kit Voice Edit mode
 Drum Kit Effect Edit mode
 Chain Play mode
 Song Job mode
 Utility mode
 Store mode

Controls

23 Push switches

Page ▲, Page ▼, RHYTHM, BASS, OTHERS, CLICK, TOP, REW, PLAY/STOP, FF, REC, PLAY, CHAIN, SONG JOB, UTILITY, EXIT/NO, SHIFT, TRIGGER, VOICE, EFFECT, STORE, ENTER/YES, SPEAKER

10 Slide Volumes

MASTER VOLUME, PHONES, ACCOMP/REVERB, CLICK, SNARE, KICK, TOM, HI-HAT, CYMBAL, MISC

5 Rotary encoders

Display

- 40 × 2 characters Backlit LCD
- 3 digits 7 segments LED
- 14 operation LEDs

Memory Card

SmartMedia™, 3.3 V card used only

Input and Output

Rear Panel

- MIDI IN/OUT/THRU
- TO HOST, Host select SW
- FOOT SW (mono phone) — FC4, FC5, HH60
- HI-HAT CONTROL (stereo phone) — HH80, HH80A, HH60
- OUTPUT L/MONO (mono phone)
- OUTPUT R (mono phone)
- INDIVIDUAL OUTPUT 1 ~ 6 (mono phone)
- Trigger input 1 ~ 8 (stereo phone — L: trigger, R: sw) × 8
- Trigger input 9/10, 11/12, 13/14, 15/16 (stereo phone — L, R: trigger) × 4
- INPUT ATTENUATION switch 1 ~ 16 (DIP SW)

Side Panel

- SmartMedia™ connector

Front Panel

- PHONES (stereo phone)
- AUX IN (stereo mini)
- AUX IN VOL

Power Requirements

DC 12 V

Dimensions(W x H x D)

300 mm × 71 mm × 229 mm

Weight

2.2 kg

Included Accessories

AC power adaptor (PA-5B or PA-D12)

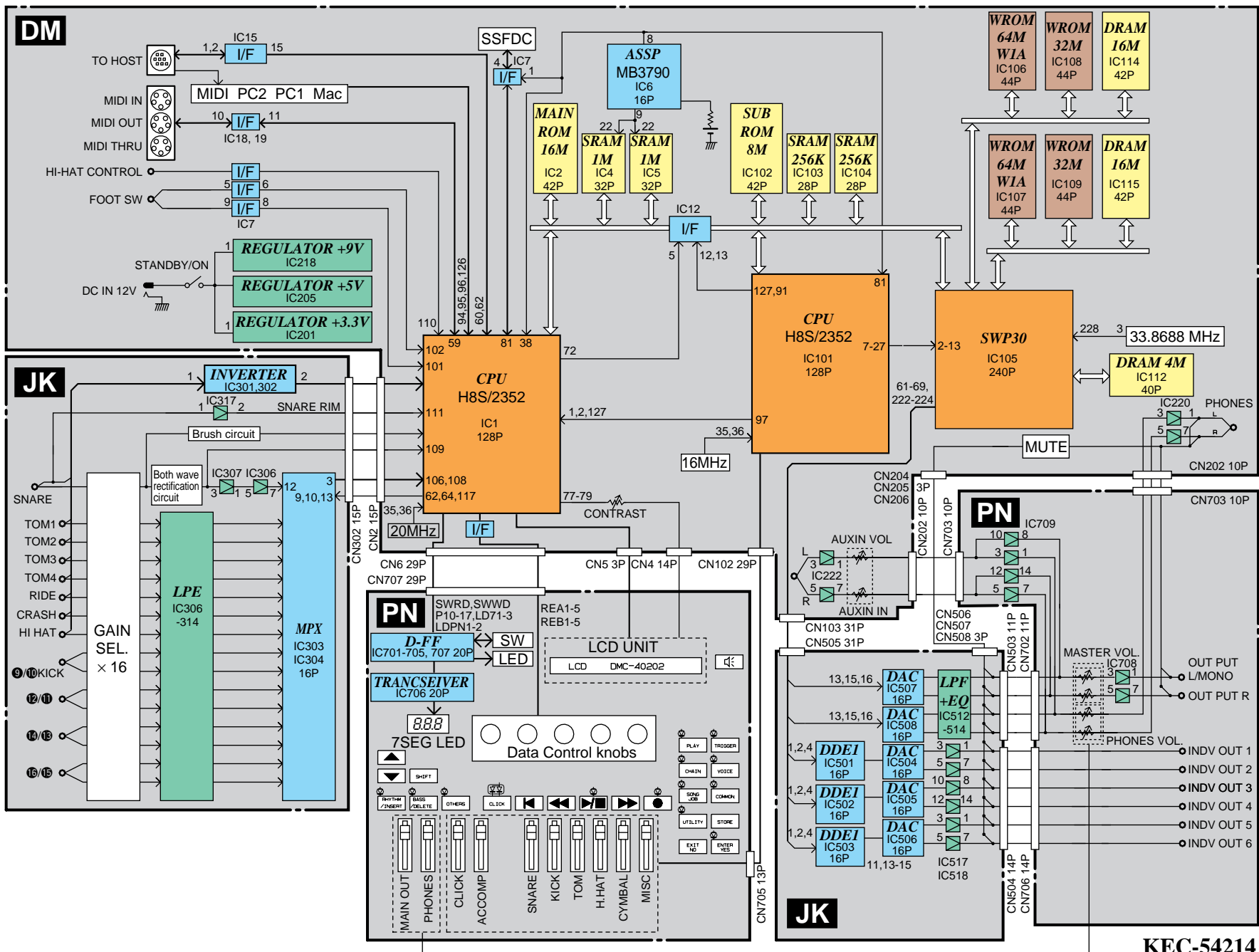
Consume electric power

6 W

OUTPUT LEVEL

Please see TEST PROGRAM (Page 40) in this service manual.

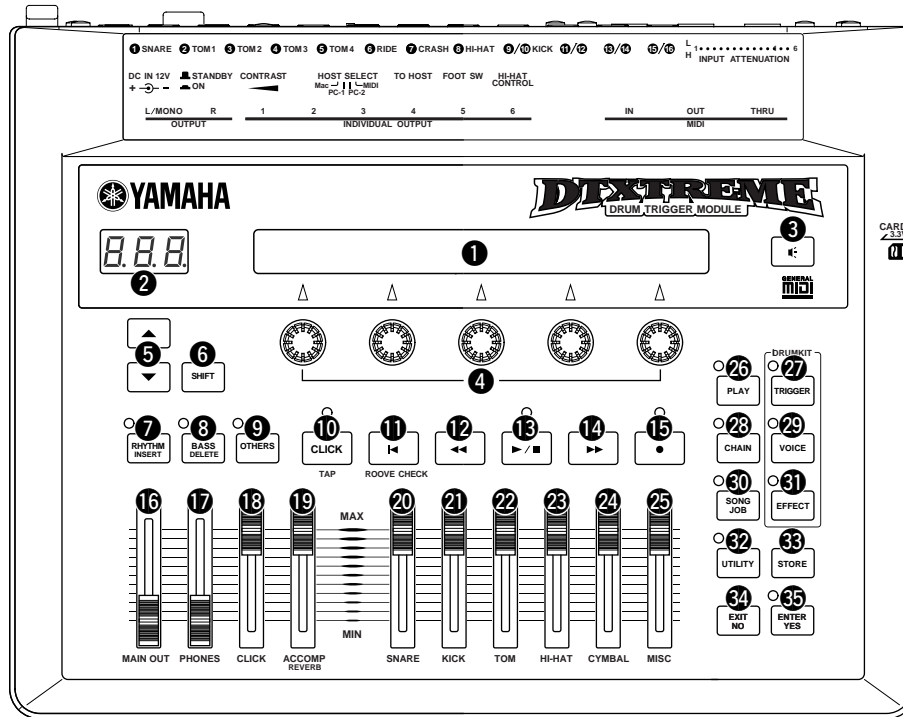
■ BLOCK DIAGRAM



KEC-54214

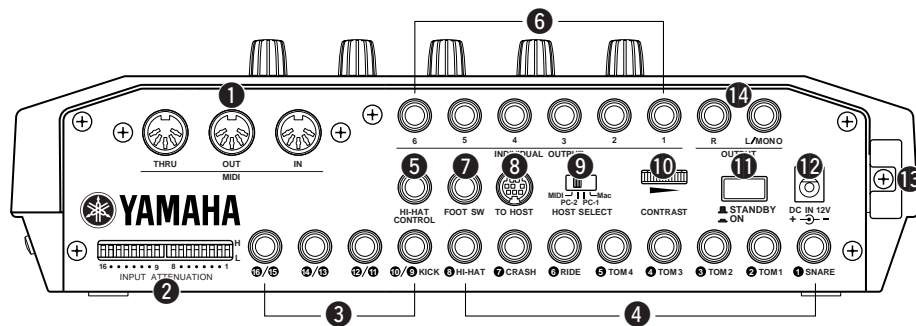
■ PANEL LAYOUT

● Front Panel



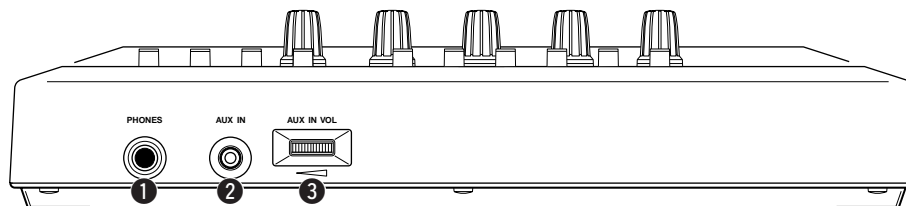
- | | |
|----------------------------------|----------------------------|
| ① Liquid crystal display or LCD | ⑲ ACCOMP/REVERB slider |
| ② LED display | ⑳ SNARE slider |
| ③ Sound button | ㉑ KICK slider |
| ④ Data Control knobs | ㉒ TM TOM slider |
| ⑤ Page up and Down (▲/▼) buttons | ㉓ HI-HAT slider |
| ⑥ SHIFT button | ㉔ CYMBAL slider |
| ⑦ RHYTHM/INSERT button | ㉕ MISC slider |
| ⑧ BASS/DELETE button | ㉖ PLAY button |
| ⑨ OTHERS button | ㉗ TRIGGER button |
| ⑩ CLICK button | ㉘ CHAIN button |
| ⑪ Top button | ㉙ VOICE button |
| ⑫ Rewind button | ㉚ SONG JOB button |
| ⑬ Start/Stop button | ㉛ EFFECT button |
| ⑭ Forward button | ㉜ UTILITY button |
| ⑮ Record button | ㉝ STORE button |
| ⑯ MAIN OUT slider | ㉞ EXIT/NO button |
| ⑰ PHONES slider | ㉟ ENTER/YES button |
| ⑱ CLICK slider | |

● Rear Panel



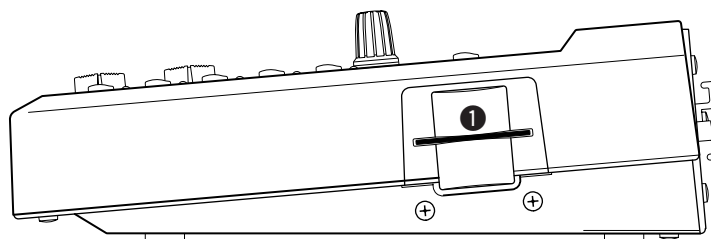
- | | |
|---|--|
| <ul style="list-style-type: none"> ❶ MIDI IN, THRU, and OUT ports ❷ INPUT ATTENUATION ❸ Trigger inputs: 9/10/ KICK, 11/12, 13/14, 15/16 ❹ Trigger inputs: 1 SNARE, 2 TOM1,...8 HI-HAT ❺ HI-HAT CONTROL jack ❻ INDIVIDUAL OUTPUT 1-6 jacks ❼ FOOT SW jack | <ul style="list-style-type: none"> ❽ TO HOST serial port ❾ HOST SELECT switch ❿ CONTRAST knob ⓫ STANDBY/ON switch ⓬ DC IN socket ⓭ Cable hook ⓮ OUTPUT L/MONO and jacks |
|---|--|

● Top Panel



- | | |
|--|--|
| <ul style="list-style-type: none"> ❶ PHONES jack ❷ AUX IN jack | <ul style="list-style-type: none"> ❸ AUX IN VOL control |
|--|--|

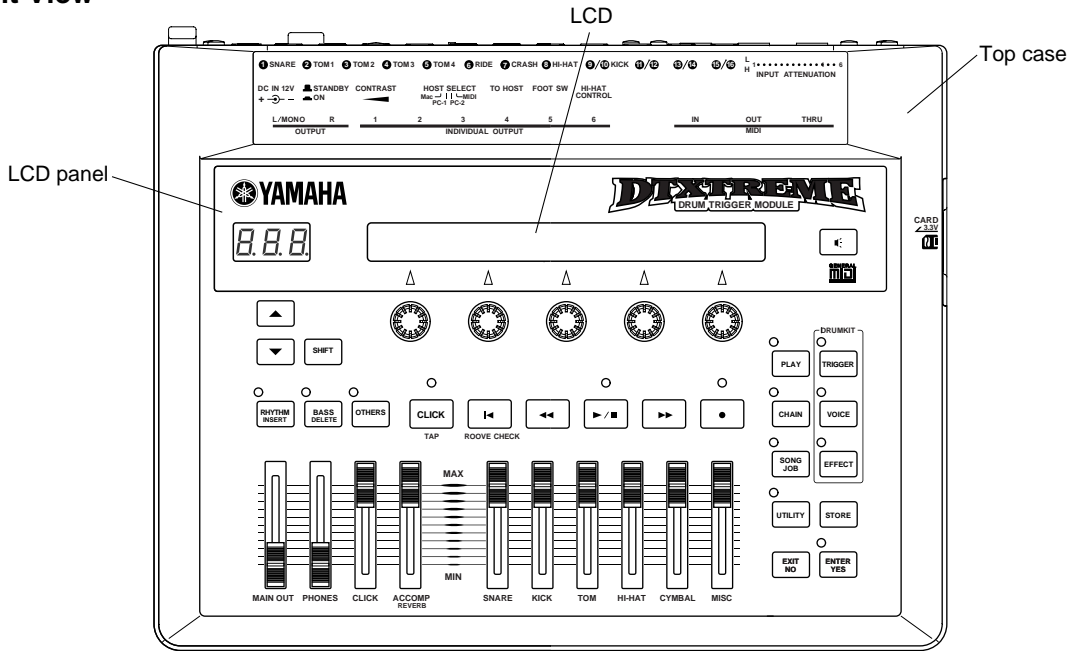
● Side Panel



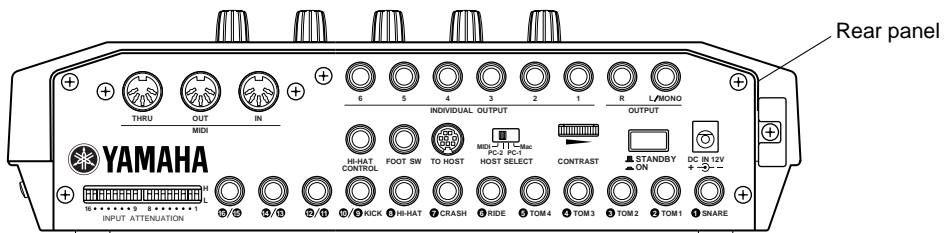
- ❶ CARD slot

UNIT LAYOUT and WIRING

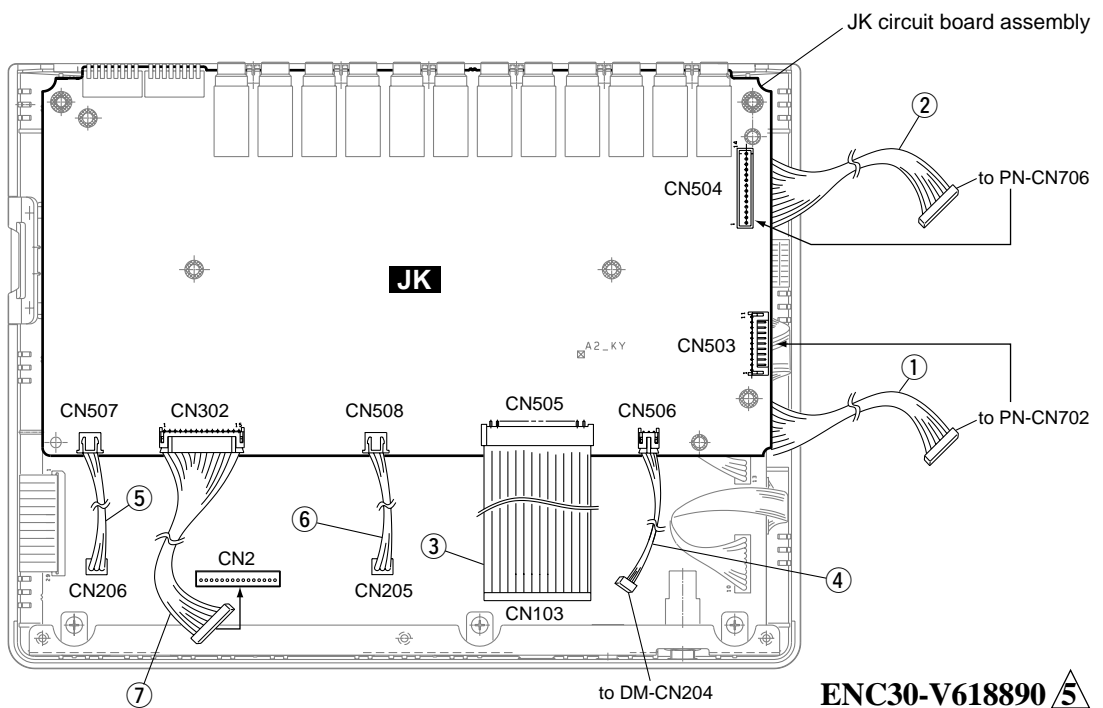
● Front View



● Rear View

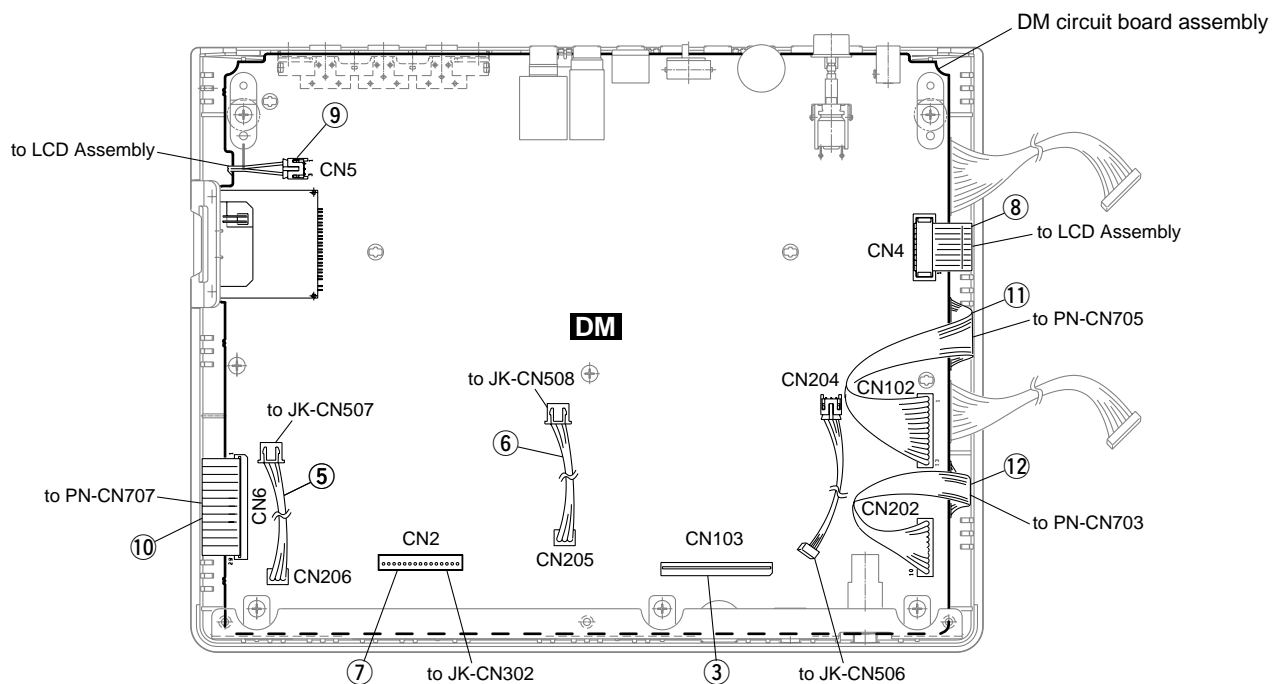


● Inside View 1

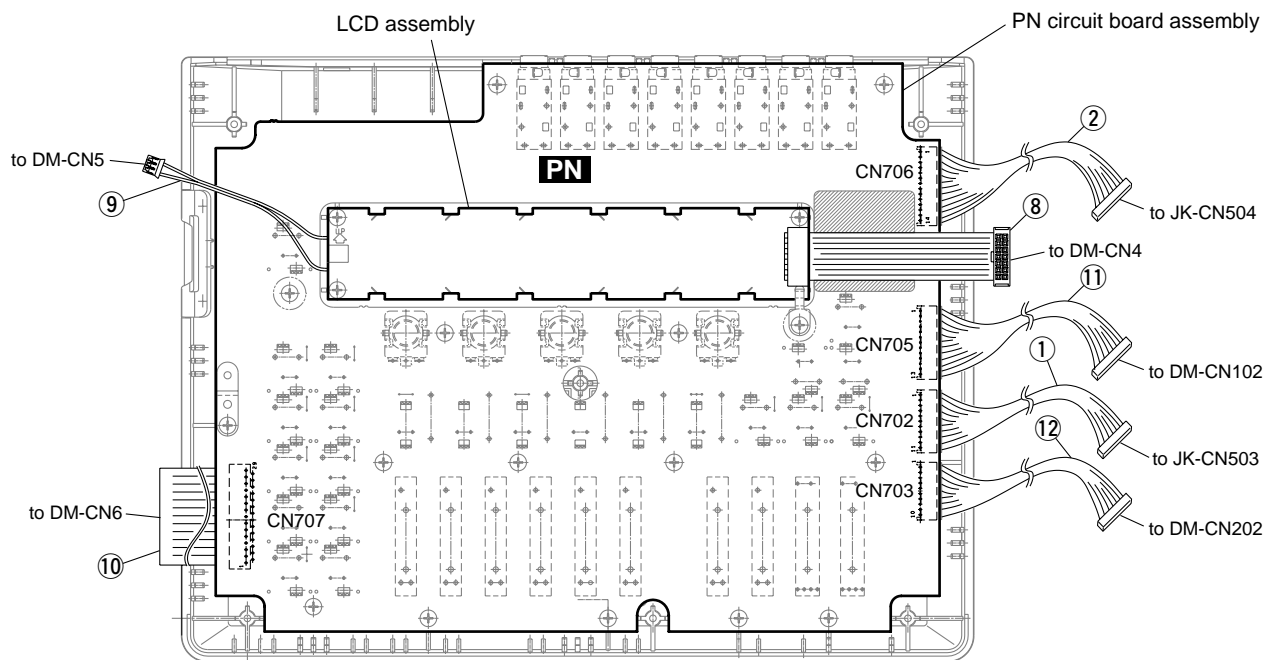


ENC30-V618890

● Inside View 2



● Inside View 3



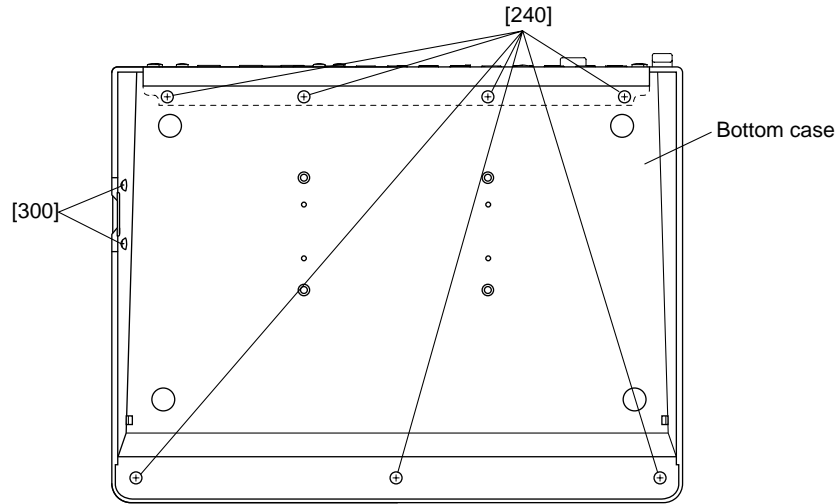
ENC30-V618890 5

REF.NO.	DESTINATION	PIN	REF.NO.	DESTINATION	PIN
①	JK-CN503 – PN-CN702	11P	⑦	JK-CN302 – DM-CN2	15P
②	JK-CN504 – PN-CN706	14P	⑧	DM-CN4 – LCD Assembly	14P
③	JK-CN505 – DM-CN103	31P	⑨	DM-CN5 – LCD Assembly	3P
④	JK-CN506 – DM-CN204	3P	⑩	DM-CN6 – PN-CN707	29P
⑤	JK-CN507 – DM-CN206	3P	⑪	DM-CN102 – PN-CN705	13P
⑥	JK-CN508 – DM-CN205	3P	⑫	DM-CN202 – PN-CN703	10P

■ DISASSEMBLY PROCEDURE

1. Bottom Case (time required: about 1 minutes)

- 1-1 Remove the seven (7) screws marked [240] and the two (2) screws marked [300]. The bottom case can then be removed. (Fig. 1)



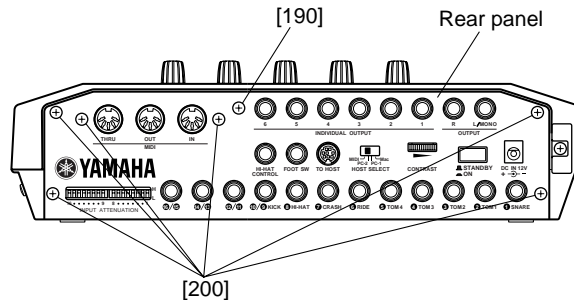
[240]: Bind Head Tapping Screw-B 3.0 × 6 MFZN2BL (EP600230)

[300]: Bind Head Tapping Screw-P 3.0 × 8 MFZN2BL (EP600220)

(Fig. 1)

2. Rear Panel (time required: about 2 minutes)

- 2-1 Remove the bottom case. (See Procedure 1.)
 2-2 Remove the screw marked [190] and the six (6) screws marked [200]. The rear panel can then be removed. (Fig. 2)



[190]: Bind Head Tapping Screw-B 3.0 × 6 MFZN2BL (EP600230)

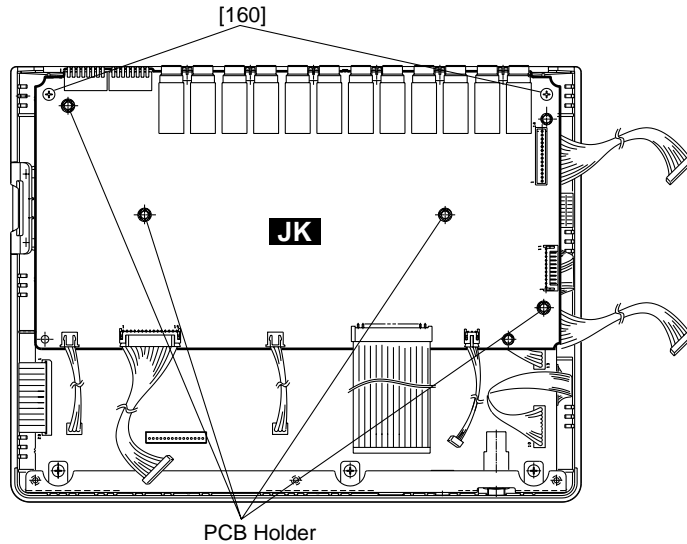
[200]: Bind Head Tapping Screw-P 3.0 × 8 MFZN2BL (EP600220)

(Fig. 2)

3. JK Circuit Board (time required: about 4 minutes)

- 3-1 Remove the bottom case. (See Procedure 1.)
- 3-2 Remove the rear panel. (See Procedure 2.)
- 3-3 Remove the two (2) screws marked [160] and the four (4) PCB holder. The JK circuit board can then be removed.

(Fig. 3)

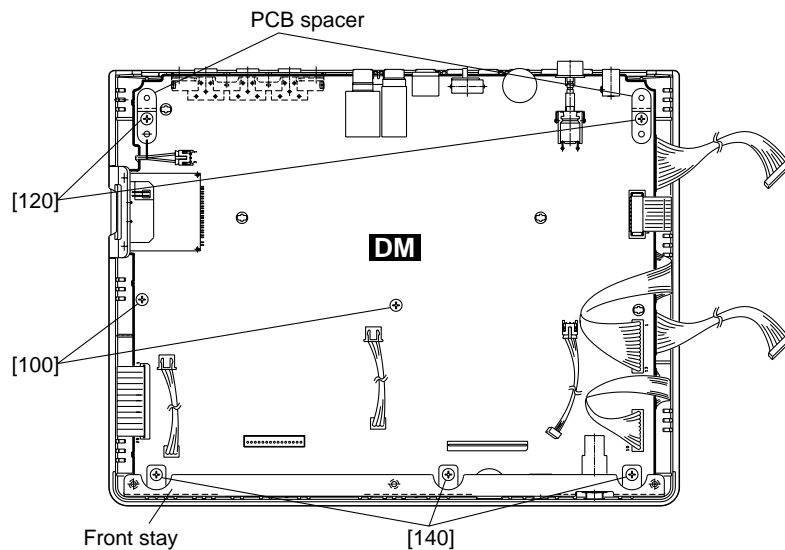


[160]: Bind Head Tapping Screw-B 3.0 × 8 MFZN2Y (EP600250)

(Fig. 3)

4. DM Circuit Board (time required: about 7 minutes)

- 4-1 Remove the bottom case. (See Procedure 1.)
- 4-2 Remove the rear panel. (See Procedure 2.)
- 4-3 Remove the JK circuit board . (See Procedure 3.)
- 4-4 Remove the three (3) screws marked [140]. The front stay can then be removed. (Fig. 4)
- 4-5 Remove the two (2) screws marked [100], the two (2) screws marked [120] and the two (2) DM PCB spacer. The DM circuit board can then be removed. (Fig. 4)



[100], [120], [140]: Bind Head Tapping Screw-B 3.0 × 8 MFZN2Y (EP600250)

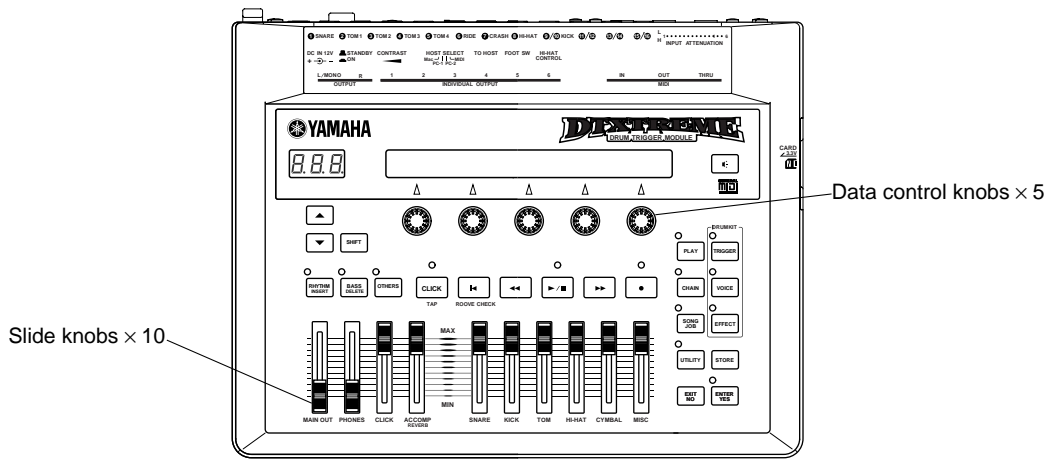
(Fig. 4)

5. LCD Assembly (time required: about 8 minutes)

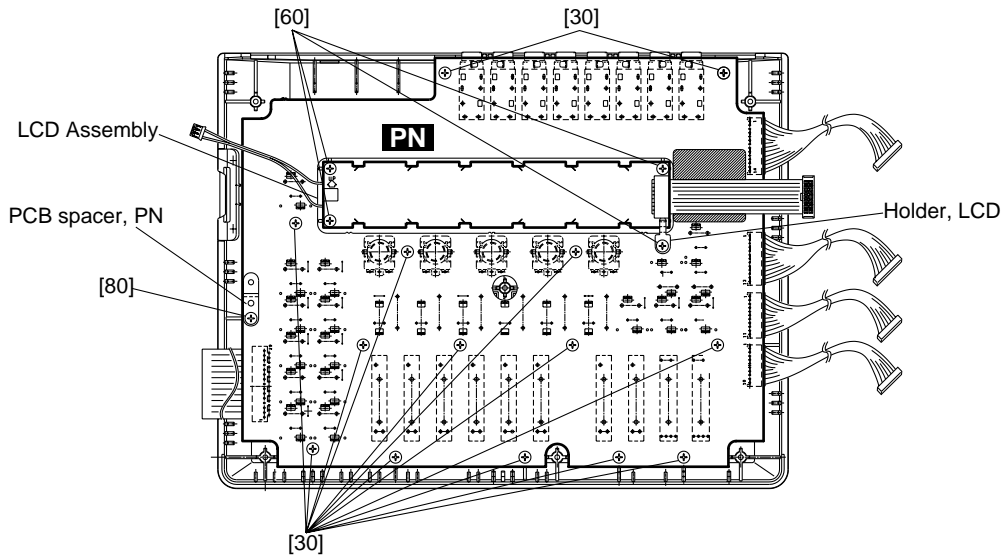
- 5-1 Remove the bottom case. (See Procedure 1.)
- 5-2 Remove the rear panel. (See Procedure 2.)
- 5-3 Remove the JK circuit board . (See Procedure 3.)
- 5-4 Remove the DM circuit board . (See Procedure 4.)
- 5-5 Remove the four (4) screws marked [60] and LCD holder. The LCD Assembly can then be removed. (Fig. 6)

6. PN Circuit Board (time required: about 9 minutes)

- 6-1 Remove the bottom case. (See Procedure 1.)
- 6-2 Remove the rear panel. (See Procedure 2.)
- 6-3 Remove the JK circuit board . (See Procedure 3.)
- 6-4 Remove the DM circuit board . (See Procedure 4.)
- 6-5 Remove the five (5) marked data control knobs and ramove the ten (10) marked slide knobs. (Fig. 5)
- 6-6 Remove the screw marked [60], the LCD holder and remove the fourteen (14) screws marked [30]. Remove the screw marked [80] and the PN PCB spacer. The PN circuit board can then be removed. (Fig. 6)



(Fig. 5)



[30], [60], [80]: Bind Head Tapping Screw-B 3.0 x 8 MFZN2Y (EP600250)

(Fig. 6)

■ LSI PIN DESCRIPTION

● HD6412352-F20 (XW832A00) CPU

DM: IC001, 101

PIN No.	NAME	I/O	FUNCTION	PIN No.	NAME	I/O	FUNCTION		
1	PG3//CS1	I/O	Port G	65	VSS	I	Ground		
2	PG4//CS0	I/O	Port G	66	P60//DREQ0//CS4	I/O	Port 6		
3	VSS	I	Ground	67	VSS	I	Ground		
4	NC		N.C	68	VSS	I	Ground		
5	VCC		Power Supply	69	P61//TEND0//CS5	I/O			
6	PC0/A0	I/O	Port C	70	P62//DREQ1	I/O	Port 6		
7	PC1/A1	I/O			71	P63//TEND1	I/O		
8	PC2/A2	I/O			72	P27//P07//TIOC85//TMO1	I/O	Port 2	
9	PC3/A3	I/O		73	P28//P08//TIOC85//TMO0	I/O			
10	VSS	I	Ground	74	P29//P09//TIOC84//TMC11	I/O			
11	PC4/A4	I/O	Port C	75	P24//P04//TIOC44//TMR11	I/O			
12	PC5/A5	I/O			76	P23//P03//TIOC03//TMC10	I/O		
13	PC6/A6	I/O			77	P22//P02//TIOC03//TMR10	I/O		
14	PC7/A7	I/O	Port B	78	P21//P01//TIOC03	I/O			
15	PB0/A8	I/O			79	P20//P00//TIOC03	I/O		
16	PB1/A9	I/O			80	/WDTOVF	O	N.C	
17	PB2/A10	I/O	Port B	81	/RES	I	Reset		
18	PB3/A11	I/O			82	NMI	I	Interrupt request	
19	VSS	I		Ground	83	/STBY	I	Standby mode signal	
20	PB4/A12	I/O	Port B	84	VCC	I	Power Supply		
21	PB5/A13	I/O			85	XTAL	I	Clock	
22	PB6/A14	I/O			86	EXTAL	I	Clock	
23	PB7/A15	I/O	Port A	87	VSS	I	Ground		
24	PA0/A16	I/O			88	PF7/Ø	I	N.C	
25	PA1/A17	I/O			89	VCC	I	Power Supply	
26	PA2/A18	I/O	Port A	90	PF6//AS	I/O	N.C		
27	PA3/A19	I/O			91	PF5//RD	I/O	Port F	
28	VSS	I		Ground	92	PF4//HWR	I/O		
29	PA4/A20//IRQ4	I/O	Port A	93	PF3//LWR	I/O			
30	PA5/A21//IRQ5	I/O	Port A	94	PF2//CAS//WAIT//BREQ0	I/O			
31	PA6/A22//IRQ6	I/O	N.C	95	PF1//BACK	I/O			
32	PA7/A23//IRQ7	I/O	N.C	96	PF0//BREQ	I/O			
33	P67//CS7//IRQ3	I/O	Port 6	97	P50//TXD2	I/O	Port 5		
34	P66//CS6//IRQ2	I/O	Port 6	98	P51//RXD2	I/O	Port 5		
35	VSS	I	Ground	99	VSS	I	Ground		
36	VSS	I	Ground	100	VSS	I	Ground		
37	P65//IRQ1	I/O	Port 6	101	P52//SCK2	I/O	Port 5		
38	P64//IRQ0	I/O	Port 6	102	P53//ADTRG	I/O	Port 5		
39	VCC	I	Power Supply	103	AVCC	I	Power Supply		
40	PE0/D0	I/O	Port E	104	VREF	I	Power Supply		
41	PE1/D1	I/O			105	P40//AN0	I/O	Port 4	
42	PE2/D2	I/O			106	P41//AN2	I/O		
43	PE3/D3	I/O		107	P42//AN3	I/O			
44	VSS	I	Ground	108	P43//AN3	I/O			
45	PE4/D4	I/O	Port E	109	P44//AN4	I/O			
46	PE5/D5	I/O			110	P45//AN5	I/O		
47	PE6/D6	I/O			111	P46//AN6//DA0	I/O		
48	PE7/D7	I/O	Port D	112	P47//AN7//DA1	I/O			
49	PD0/D8	I/O			113	AVSS	I	Analog ground	
50	PD1/D9	I/O			114	VSS	I	Power Supply	
51	PD2/D10	I/O	Port D	115	P17//P015//TIOC82//TCLKD	I/O	Port 1		
52	PD3/D11	I/O			116	P16//P014//TIOCA2		I/O	
53	VSS	I		Ground	117	P15//P013//TIOC81//TCLKC		I/O	
54	PD4/D12	I/O		118	P14//P012//TIOCA1	I/O			
55	PD5/D13	I/O	Port D	119	P13//P011//TIOC00//TCLKB	I/O			
56	PD6/D14	I/O			120	P12//P010//TIOC00//TCLKA	I/O		
57	PD7/D15	I/O			121	P11//P09//TIOC80//DACK1	I/O		
58	VCC	I	Power Supply	122	P10//P08//TIOCA0//DACK0	I/O			
59	P30//TXD0	I/O	Port 3	123	MD0	I	Mode Control		
60	P31//TXD1	I/O			124	MD1		I	
61	P32//RXD0	I/O			125	MD2		I	
62	P33//RXD1	I/O			126	PG0//CAS	I/O	Port G	
63	P34//SCK0	I/O			127	PG1//CS3	I/O		Bus Control
64	P35//SCK1	I/O		128	PG2//CS2	I/O	Bus Control		

• TC203C760HF-002 (XS725A00) SWP30B (AWM Tone Generator coped with MEG) Standard Wave Processor DM: IC105

PIN No.	NAME	I/O	FUNCTION	PIN No.	NAME	I/O	FUNCTION	
1	VSS		(Ground)	121	VSS		(Ground)	
2	CA0	I	Address bus of internal register	122	HMD0	I/O	Wave memory data bus (Upper 16 bits)	
3	CA1	I		123	HMD1	I/O		
4	CA2	I		124	HMD2	I/O		
5	CA3	I		125	HMD3	I/O		
6	CA4	I		126	HMD4	I/O		
7	CA5	I		127	HMD5	I/O		
8	CA6	I		128	HMD6	I/O		
9	CA7	I		129	HMD7	I/O		
10	CA8	I		130	HMD8	I/O		
11	CA9	I		131	HMD9	I/O		
12	CA10	I		132	HMD10	I/O		
13	CA11	I	133	HMD11	I/O			
14	VSS		(Ground)	134	HMD12	I/O		
15	CD0	I/O	Data bus of internal register	135	HMD13	I/O		
16	CD1	I/O		136	HMD14	I/O		
17	CD2	I/O		137	HMD15	I/O		
18	CD3	I/O		138	VSS		(Ground)	
19	CD4	I/O		139	HMA0	O	Wave memory address bus	
20	CD5	I/O		140	HMA1	O		
21	CD6	I/O		141	HMA2	O		
22	CD7	I/O		142	HMA3	O		
23	CD8	I/O		143	HMA4	O		
24	CD9	I/O		144	HMA5	O		
25	CD10	I/O	145	HMA6	O			
26	CD11	I/O	146	HMA7	O			
27	CD12	I/O	147	HMA8	O			
28	CD13	I/O	148	HMA9	O			
29	CD14	I/O	149	HMA10	O			
30	VDD		(Power supply)	150	VDD		(Power supply)	
31	VSS		(Ground)	151	VSS		(Ground)	
32	CD15	I/O	Chip select	152	HMA11	O	Wave memory address bus	
33	CSN	I		153	HMA12	O		
34	WRN	I		154	HMA13	O		
35	RDN	I		155	HMA14	O		
36	VDD		(Power supply)	156	HMA15	O		
37	SYSH0	O	NSYS/LNSYS upper 16 bits output	157	HMA16	O		
38	SYSH1	O		158	HMA17	O		
39	SYSH2	O		159	HMA18	O		
40	SYSH3	O		160	HMA19	O		
41	SYSH4	O		161	HMA20	O		
42	SYSH5	O		162	HMA21	O		
43	SYSH6	O		163	HMA22	O		
44	SYSH7	O	164	HMA23	O			
45	KONO0	O	Key on data	165	HMA24	O		
46	KONO1	O		166	VSS		(Ground)	
47	KONO2	O		167	MRASN	O	RAS when DRAM(s) is connected to wave memory	
48	KONO3	O	(Ground)	168	MCASN	O	CAS when DRAM(s) is connected to wave memory	
49	VSS		(Ground)	169	MOEN	O	Wave memory output enable	
50	SYSL0	I/O	NSYS input/LNSYS output lower 8 bits	170	MWEN	O	Wave memory write enable	
51	SYSL1	I/O		171	VSS		(Ground)	
52	SYSL2	I/O		172	LMD0	I/O	Wave memory data bus (Lower 16 bits)	
53	SYSL3	I/O		173	LMD1	I/O		
54	SYSL4	I/O		174	LMD2	I/O		
55	SYSL5	I/O		175	LMD3	I/O		
56	SYSL6	I/O		176	LMD4	I/O		
57	SYSL7	I/O		177	LMD5	I/O		
58	KONI0	I	178	LMD6	I/O			
59	KONI1	I	179	LMD7	I/O			
60	VDD		(Power supply)	180	VDD			(Power supply)
61	VSS		(Ground)	181	VSS			(Ground)
62	KONI2	I	DAC output	182	LMD8	I/O	Wave memory data bus (Lower 16 bits)	
63	KONI3	I		183	LMD9	I/O		
64	DAC0	O		184	LMD10	I/O		
65	DAC1	O	185	LMD11	I/O			
66	WCLK	O	DAC0/DAC1 word clock	186	LMD12	I/O		
67	MELO0	O	MEL wave data output	187	LMD13	I/O		
68	MELO1	O		188	LMD14	I/O		
69	MELO2	O		189	LMD15	I/O		
70	MELO3	O		190	VSS			(Ground)
71	MELO4	O		191	LMA0	O		Wave memory address bus (Lower data memory)
72	MELO5	O	192	LMA1	O			
73	MELO6	O	193	LMA2	O			
74	MELO7	O	194	LMA3	O			
75	VDD		(Power supply)	195	LMA4	O		
76	ADLR	O	ADC word clock	196	LMA5	O		
77	MELI0	I	MEL wave data input	197	LMA6	O		
78	MELI1	I		198	LMA7	O		
79	MELI2	I		199	LMA8	O		
80	MELI3	I		200	LMA9	O		
81	MELI4	I		201	LMA10	O		
82	MELI5	I		202	LMA11	O		
83	MELI6	I		203	VSS		(Ground)	
84	MELI7	I	204	LMA12	O			
85	VSS		(Ground)	205	LMA13	O		
86	RCASN	O	DRAM column address strobe (RAS signal)	206	LMA14	O		
87	RA8	O	DRAM address bus	207	LMA15	O		
88	RA7	O		208	LMA16	O		
89	RA6	O		209	LMA17	O		
90	VDD			(Power supply)	210	VDD		(Power supply)
91	VSS			(Ground)	211	VSS		(Ground)
92	RA5	O		212	LMA18	O		
93	RA4	O		213	LMA19	O		
94	RA3	O	214	LMA20	O			
95	RA2	O	215	LMA21	O			
96	RA1	O	216	LMA22	O			
97	RA0	O	217	LMA23	O			
98	RRASN	O	DRAM row address strobe (RAS signal)	218	LMA24	O		
99	RWEN	O	DARM write enable	219	VSS		(Ground)	
100	VSS		(Ground)	220	SYO	O	Sync. signal for master clock	
101	RD7	I/O	DRAM data bus	221	SYOD	O	Sync. signal for HCLK/QCLK	
102	RD6	I/O		222	QCLK	O	1/12 master clock (64Fs)	
103	RD5	I/O		223	HCLK	O	1/6 master clock (128Fs)	
104	RD4	I/O		224	CK256	O	1/3 master clock (256Fs)	
105	RD3	I/O		225	SYSCLK	O	1/2 master clock (384Fs)	
106	RD2	I/O		226	VDD		(Power supply)	
107	RD1	I/O		227	SYI	I	Sync. clock	
108	RD0	I/O		228	MCLKI	I	Master clock input	
109	VSS			(Ground)	229	MCLKO	O	Master clock output
110	RD17	I/O		230	VDD		(Power supply)	
111	RD16	I/O	231	XIN	I	Crystal osc. input		
112	RD15	I/O	232	XOUT	O	Crystal osc. output		
113	RD14	I/O	233	VSS		(Ground)		
114	RD13	I/O	234	ICN	I	Initial clear		
115	RD12	I/O	235	CHIP2	I	2 chips mode enable		
116	RD11	I/O	236	SLAVE	I	Master/Slave select when 2 chips mode		
117	RD10	I/O	237	TESTON	I	Test pin		
118	RD9	I/O	238	ACIN	I			
119	RD8	I/O	239	DCTEST	I			
120	VDD		(Power supply)	240	VDD			(Power supply)

● **JG710069** (XM326B00) **DDE1** (DAC Dynamic Range Enhancer)

JK: IC501-503

PIN No.	NAME	I/O	FUNCTION	PIN No.	NAME	I/O	FUNCTION
1	CLK	I	Master clock	9	SH 0	O	N.C.
2	SYW	I	Sync signal	10	SH 1	O	N.C.
3	MIN 1	I	Signal input	11	LE	O	Latch enable for DAC
4	MIN 0	I	Signal input	12	VDD		
5	Vss			13	DACO 0	O	Output (DAC)
6	SEL 1	I	Mode select	14	DACO 1	O	Output (DAC)
7	SEL 0	I	Mode select	15	DCLK	O	Clock for DAC
8	SUP	I	1 bit shift up input	19	ICN	I	Initial clear

● **μPD63200GS-E1** (XP867A00) **DAC** (Digital to Analog Converter)

JK: IC504-508

PIN No.	NAME	I/O	FUNCTION	PIN No.	NAME	I/O	FUNCTION
1	4/8FS	I	4/8 Fs selection	9	R. REF		Channel R voltage reference
2	D. GND		Digital ground	10	L. REF		Channel L voltage reference
3	16/8 BIT	I	16 bit/8 bit selection	11	L. OUT	O	Channel L output
4	D. VDD		Digital power supply	12	A. GND		Analog ground
5	A. GND		Analog ground	13	LRCX/WD	I	Left/right check, Word clock
6	R. OUT	O	Channel R output	14	LR/RSI	I	Left/right selection, Channel R series input
7	A. VDD		Analog power supply	15	SI/LSI	I	Series input/Channel L series input
8	A. VDD			16	CLK	I	Clock

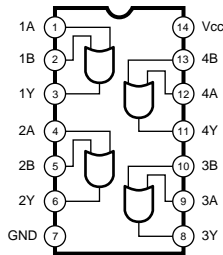
■ **IC BLOCK DIAGRAM**

● **TC74VHC32F (EL)** (XY537A00)

Quad 2 Input OR

DM: IC008, 017, 208

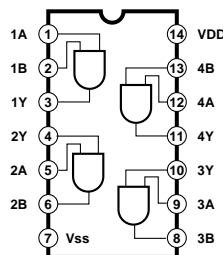
JK: IC315



● **HD74HC08FPEL** (XL093A00)

AND

DM: IC020

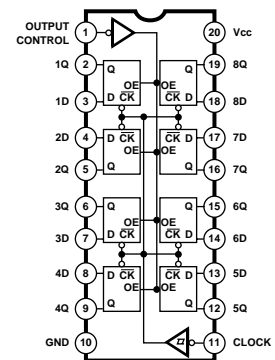


● **HD74HC374FPEL** (XL342A00)

Octal 3-State D-Type Flip-Flop

PN: IC701-705, 707

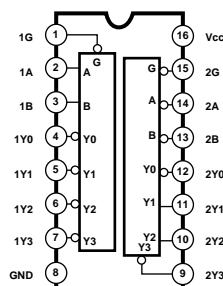
DM: IC011, 013



● **HD74LVC139FPEL** (XS048A00)

DEMULTIPLEXER

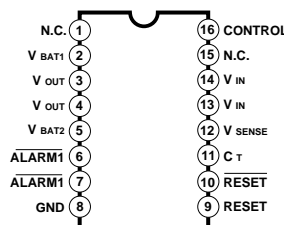
DM: IC113



● **MB3790PF** (XR967A00)

ASSP

DM: IC006

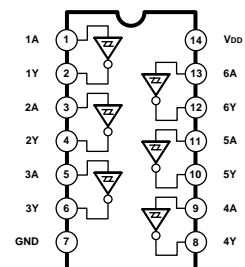


● **MM74HC14SJX** (XW104A00)

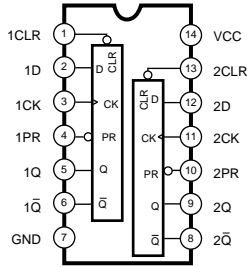
Hex INVERTER

DM: IC007, 018, 211-212

JK: IC301-302

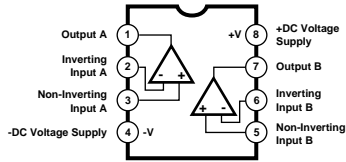


- **MM74HC74ASJX** (XY153A00)
Dual D-Type Flip-Flop
DM: IC012, 213-217

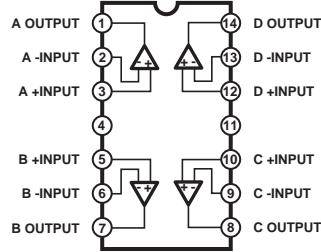


INPUTS				OUTPUTS	
PR	CLR	CLK	D	Q	Q̄
L	H	X	X	H	L
H	L	X	X	L	H
L	L	X	X	H	H
H	H	f	H	H	L
H	H	f	L	L	H
H	H	L	X	Q _o	Q _o

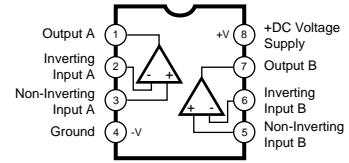
- **NJM4556AMT1** (XQ138A00)
Dual Operational Amplifier
DM: IC220



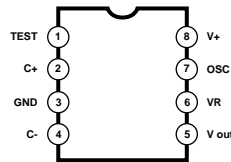
- **NJM2902M-T1** (XR562A00)
Dual Operational Amplifier
JK: IC307-314, 316



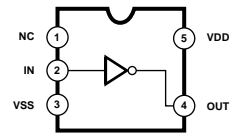
- **NJM2904M** (XV190A00)
Dual Operational Amplifier
JK: IC317



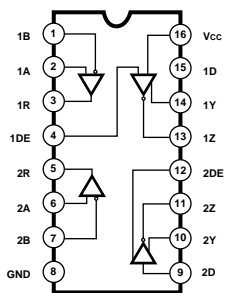
- **NJU7662M** (XW643A00)
DC/DC CONVERTER
JK: IC305



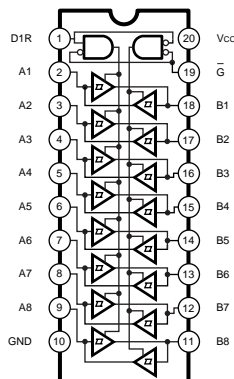
- **SC7SU04FEL** (XI348A00)
Inverter Gate
DM: IC009



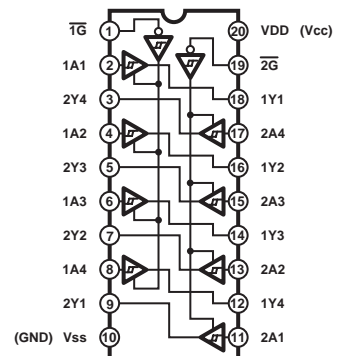
- **SN75C1168NSR** (XU073A00)
LINE DRIVER
DM: IC015



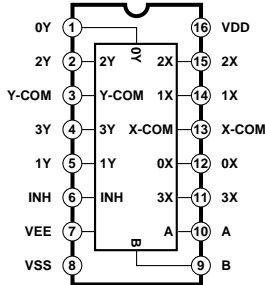
- **TC74HC245AF** (XS720A00)
TRANSCEIVER
PN: IC706
DM: IC010, 209, 210



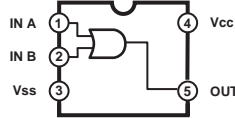
- **TC74VHC245F** (XT800A00)
Octal 3-state Bus Buffer
DM: IC203



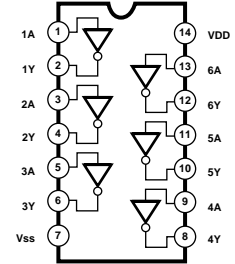
- **TC74HC4052AF** (XS790A00)
MPX
JK: IC303-304



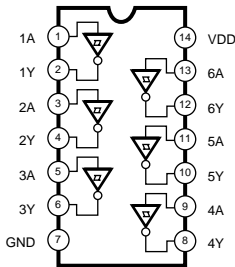
- **TC7S32F** (XM588A00)
OR
DM: IC014



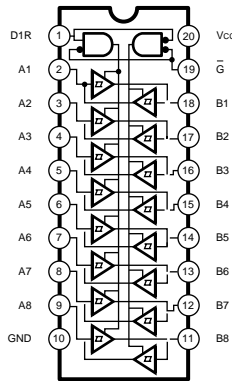
- **TC74VHC04F** (XM332A00)
Hex Inverter
DM: IC207



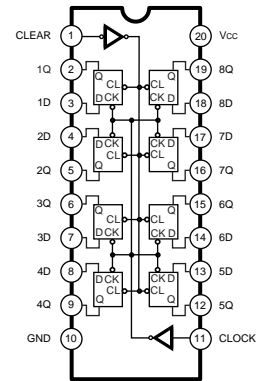
- **TC74VHC14F-EL** (XW876A00)
Hex Inverter
JK: IC318



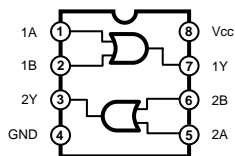
- **TC74VHCT245AF** (XV242A00)
Octal 3-State Bus Transceiver
DM: IC202



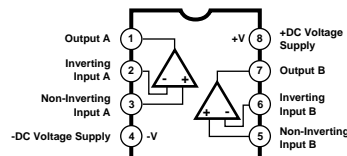
- **TC74VHC273F(EL)** (XY254A00)
Dual D-Type Flip-Flop
DM: IC204



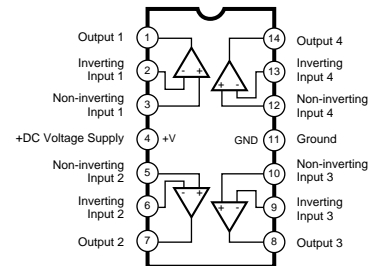
- **TC7W32FU(TE12L)** (XQ173A00)
Dual 2-Input OR
DM: IC221



- **μPC4570G2** (XF291A00)
Dual Operational Amplifier
PN: 708
DM: IC206, 222
JK: IC513-514, 518-519



- **μPC4574G2** (XE518A00)
Dual Operational Amplifier
PN: IC709
JK: IC306, 512, 517

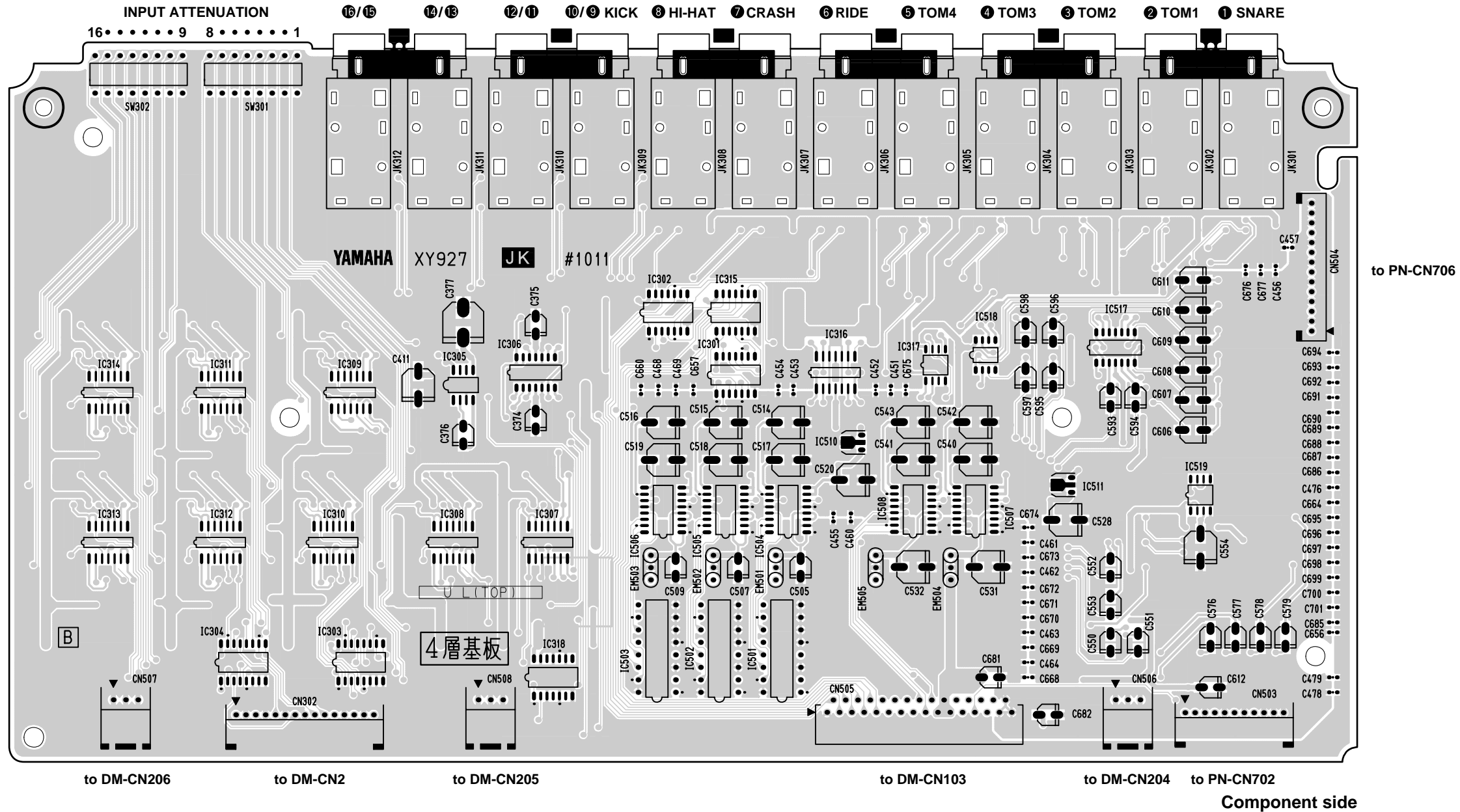


■ CIRCUIT BOARDS

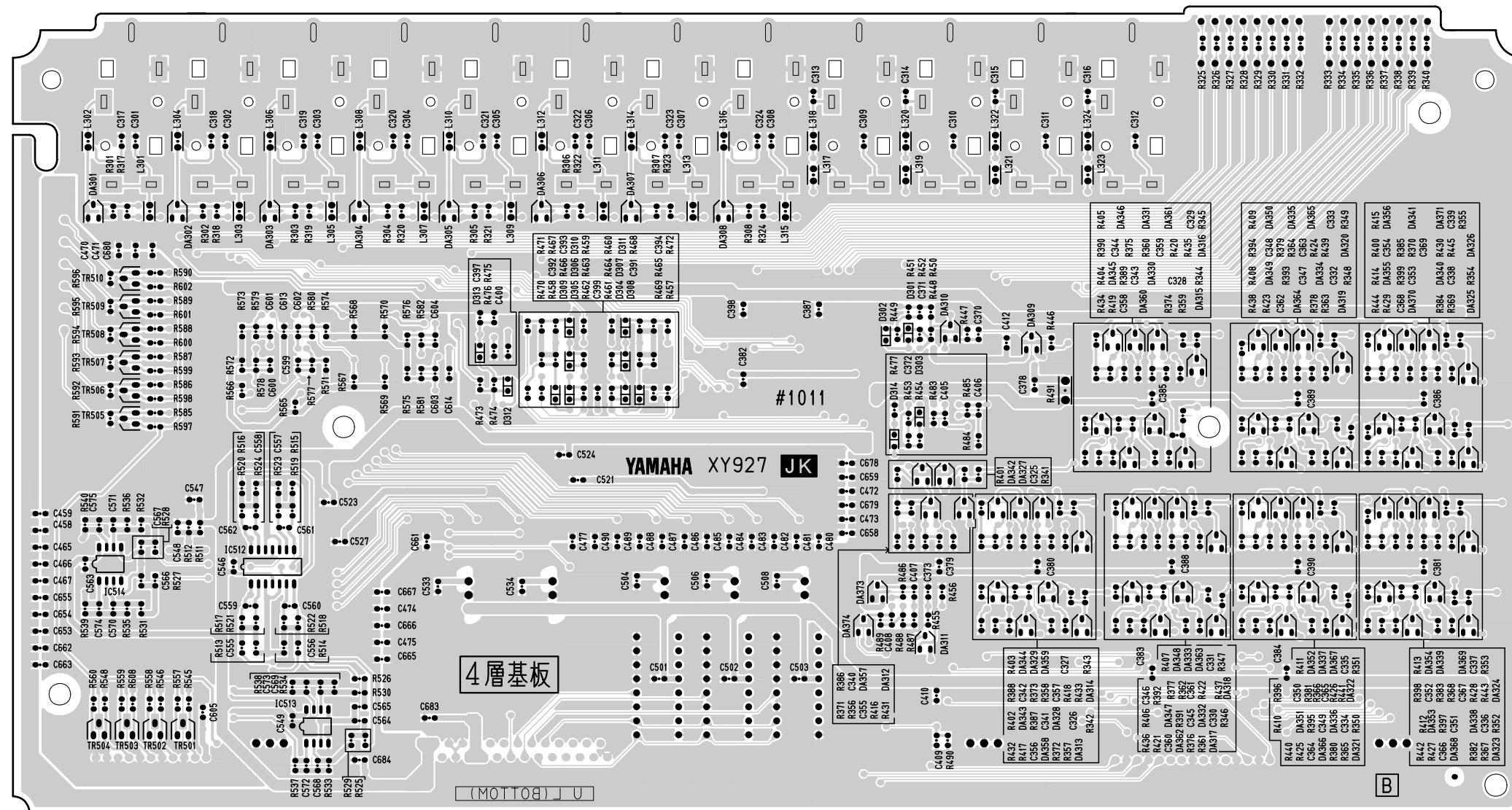
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JK Circuit board	V618510	(XY927B0).....	Page 18
DM Circuit board	V618500	(XY926B0).....	Page 22
PN Circuit board	V618520	(XY928B0).....	Page 26

● JK Circuit board

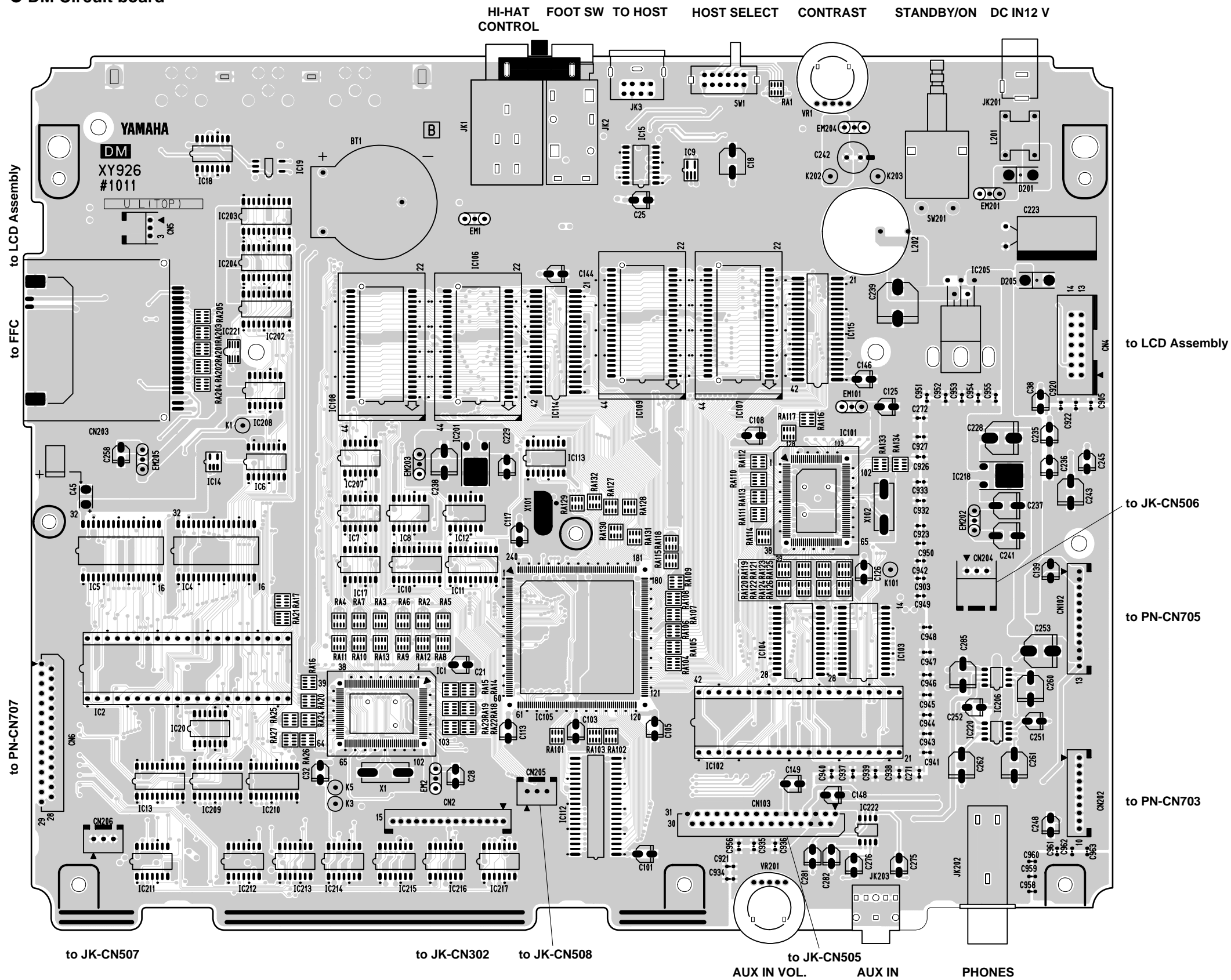


● JK Circuit board



Pattern side

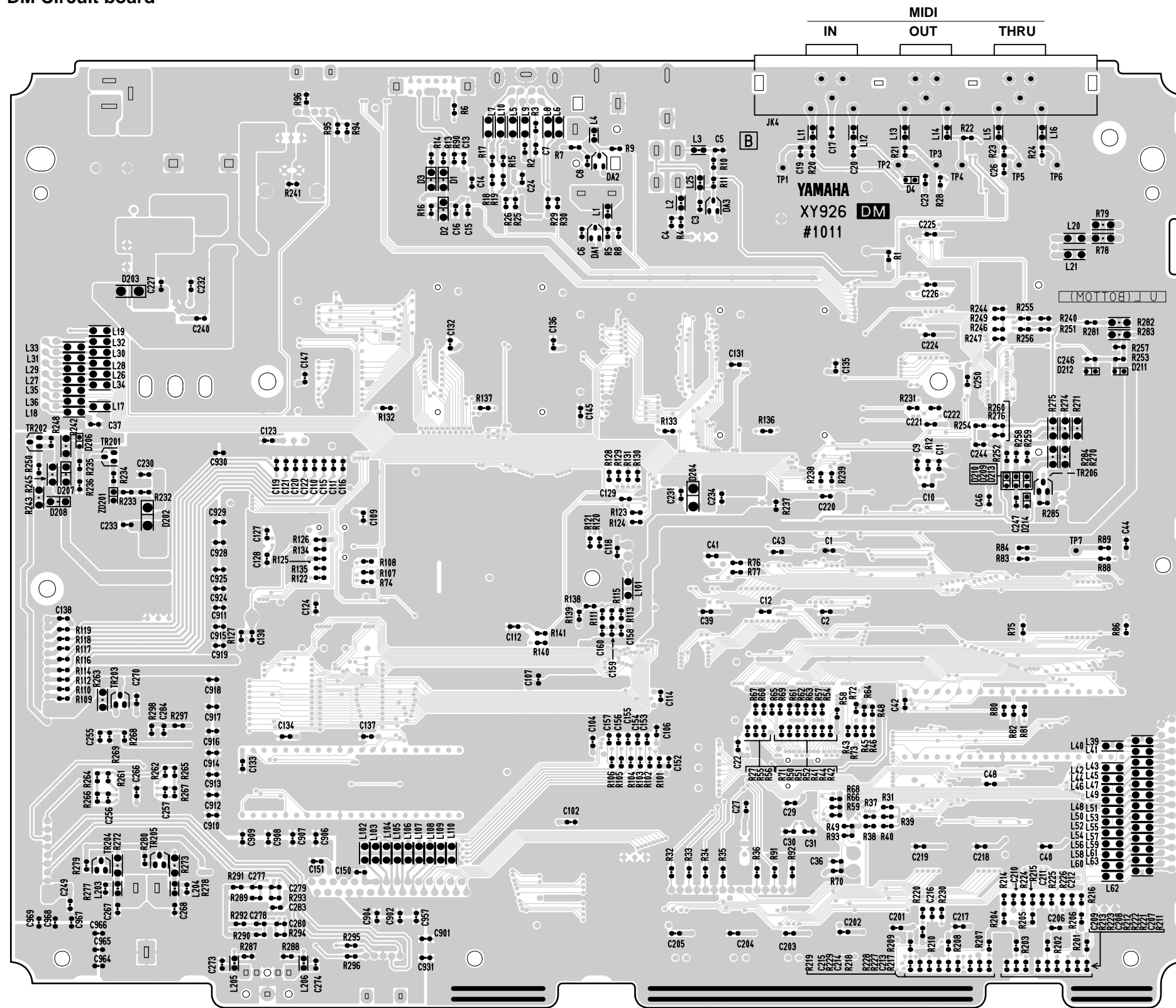
● DM Circuit board



Component Side

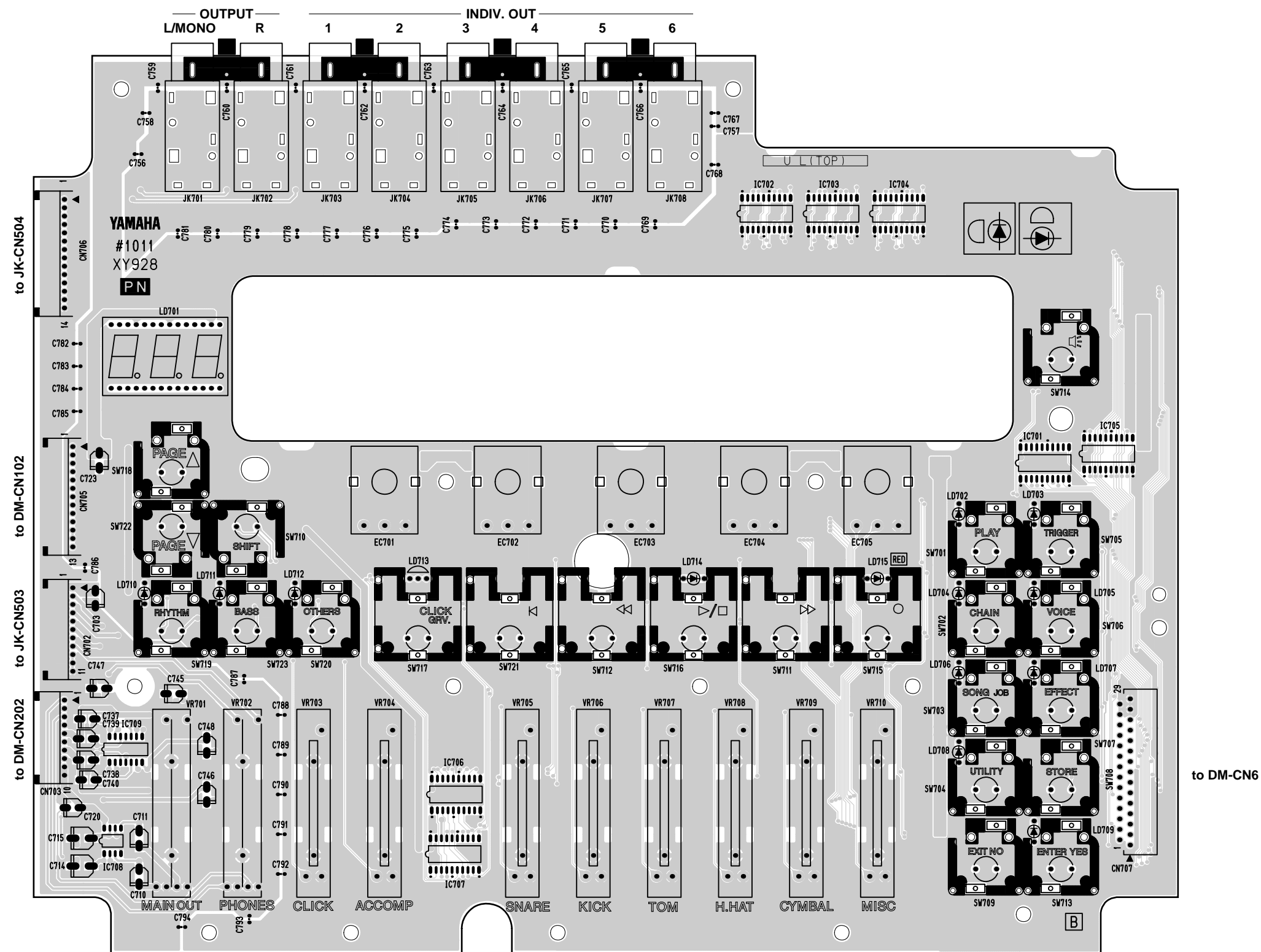
ENA-V618500

● DM Circuit board



Pattern side

● PN Circuit board



Component Side

■ TEST PROGRAM

Test No.	Title	Judgment criteria, etc.
	MEASURING CONDITION	
A	TEST ENTRY	
B	CARRYING ON THE TEST AND THE TEST AT THE TIME OF FAIL	
C	TEST ITEM	
C-01.	MAIN ROM	Automatic test
C-02.	SUB ROM	Automatic test
C-03.	MAIN SRAM	SRAM READ / WRITE (automatic test)
C-04.	SUB SRAM	SRAM READ / WRITE (automatic test)
C-05.	SUB SWP	Automatic test
C-06.	SUB WAVE ROM 1	Automatic test
C-07.	SUB WAVE ROM 2	Automatic test
C-08.	SUB WAVE ROM 3	Automatic test
C-09.	SUB WAVE ROM 4	Automatic test
C-10.	SUB EFFECT DRAM	DRAM READ / WRITE (automatic test)
C-11.	SUB WAVE DRAM 1	DRAM READ / WRITE (automatic test)
C-12.	SUB WAVE DRAM 2	DRAM READ / WRITE (automatic test)
C-13.	TO HOST	Connect the TO HOST Loop Back cable.
C-14.	SMART MEDIA	Insert the Smart Media card and check READ/ WRITE.
C-15.	MIDI	Connect MIDI IN and OUT.
C-16.	CLICK VOLUME	Maximum, Minimum
C-17.	ACCOMP VOLUME	Maximum, Minimum
C-18.	SNARE VOLUME	Maximum, Minimum
C-19.	KICK VOLUME	Maximum, Minimum
C-20.	TOM VOLUME	Maximum, Minimum
C-21.	H.HAT VOLUME	Maximum, Minimum
C-22.	CYMBAL VOLUME	Maximum, Minimum
C-23.	MISC VOLUME	Maximum, Minimum
C-24.	LCD	Indication and contrast of each pattern on the LCD (visual checking)
C-25.	PANEL LED	Check visually
C-26.	7SEG LED	Check visually
C-27.	PANEL SW	Panel SW ON
C-28.	HOST SELECT SW	Check the HOST SELECT switch.
C-29.	FOOT SW L	Turn ON/ OFF the left-hand FOOT SW.
C-30.	FOOT SW R	Turn ON/ OFF the right-hand H. H CONT.
C-31.	HI-HAT CONTROLLER	Maximum, Minimum
C-32.	ROTARY ENCODER 1	Turn counterclockwise/ clockwise.
C-33.	ROTARY ENCODER 2	Turn counterclockwise/ clockwise.
C-34.	ROTARY ENCODER 3	Turn counterclockwise/ clockwise.
C-35.	ROTARY ENCODER 4	Turn counterclockwise/ clockwise.
C-36.	ROTARY ENCODER 5	Turn counterclockwise/ clockwise.
C-37.	INPUT 1 RIM TRIGGER	Input looped signals from PHONES.
C-38.	INPUT 1 BRUSH	This test is not carried out either in manual or MIDI mode.
C-39.	INPUT 1 P-SENS	Input looped signals from PHONES.
C-40.	RIM SW IN 1	Check the rim switch for ON/ OFF operation.
C-41.	RIM SW IN 2	Check the rim switch for ON/ OFF operation.
C-42.	RIM SW IN 3	Check the rim switch for ON/ OFF operation.
C-43.	RIM SW IN 4	Check the rim switch for ON/ OFF operation.
C-44.	RIM SW IN 5	Check the rim switch for ON/ OFF operation.
C-45.	RIM SW IN 6	Check the rim switch for ON/ OFF operation.
C-46.	RIM SW IN 7	Check the rim switch for ON/ OFF operation.
C-47.	RIM SW IN 8	Check the rim switch for ON/ OFF operation.
C-48.	TRIGGER SW IN 2	Check the trigger switch for ON/ OFF operation.
C-49.	TRIGGER SW IN 3	Check the trigger switch for ON/ OFF operation.
C-50.	TRIGGER SW IN 4	Check the trigger switch for ON/ OFF operation.

Test No.	Title	Judgment criteria, etc.
C-51.	TRIGGER SW IN 5	Check the trigger switch for ON/ OFF operation.
C-52.	ATTENUATION SW H IN 01	Input looped signals from PHONES. (Level)
C-53.	ATTENUATION SW H IN 02	Input looped signals from PHONES. (Level)
C-54.	ATTENUATION SW H IN 03	Input looped signals from PHONES. (Level)
C-55.	ATTENUATION SW H IN 04	Input looped signals from PHONES. (Level)
C-56.	ATTENUATION SW H IN 05	Input looped signals from PHONES. (Level)
C-57.	ATTENUATION SW H IN 06	Input looped signals from PHONES. (Level)
C-58.	ATTENUATION SW H IN 07	Input looped signals from PHONES. (Level)
C-59.	ATTENUATION SW H IN 08	Input looped signals from PHONES. (Level)
C-60.	ATTENUATION SW H IN 09	Input looped signals from PHONES. (Level)
C-61.	ATTENUATION SW H IN 10	Input looped signals from PHONES. (Level)
C-62.	ATTENUATION SW H IN 11	Input looped signals from PHONES. (Level)
C-63.	ATTENUATION SW H IN 12	Input looped signals from PHONES. (Level)
C-64.	ATTENUATION SW H IN 13	Input looped signals from PHONES. (Level)
C-65.	ATTENUATION SW H IN 14	Input looped signals from PHONES. (Level)
C-66.	ATTENUATION SW H IN 15	Input looped signals from PHONES. (Level)
C-67.	ATTENUATION SW H IN 16	Input looped signals from PHONES. (Level)
C-68.	ATTENUATION SW L IN 01	Input looped signals from PHONES. (Time constant/ level)
C-69.	ATTENUATION SW L IN 02	Input looped signals from PHONES. (Time constant/ level)
C-70.	ATTENUATION SW L IN 03	Input looped signals from PHONES. (Time constant/ level)
C-71.	ATTENUATION SW L IN 04	Input looped signals from PHONES. (Time constant/ level)
C-72.	ATTENUATION SW L IN 05	Input looped signals from PHONES. (Time constant/ level)
C-73.	ATTENUATION SW L IN 06	Input looped signals from PHONES. (Time constant/ level)
C-74.	ATTENUATION SW L IN 07	Input looped signals from PHONES. (Time constant/ level)
C-75.	ATTENUATION SW L IN 08	Input looped signals from PHONES. (Time constant/ level)
C-76.	ATTENUATION SW L IN 09	Input looped signals from PHONES. (Time constant/ level)
C-77.	ATTENUATION SW L IN 10	Input looped signals from PHONES. (Time constant/ level)
C-78.	ATTENUATION SW L IN 11	Input looped signals from PHONES. (Time constant/ level)
C-79.	ATTENUATION SW L IN 12	Input looped signals from PHONES. (Time constant/ level)
C-80.	ATTENUATION SW L IN 13	Input looped signals from PHONES. (Time constant/ level)
C-81.	ATTENUATION SW L IN 14	Input looped signals from PHONES. (Time constant/ level)
C-82.	ATTENUATION SW L IN 15	Input looped signals from PHONES. (Time constant/ level)
C-83.	ATTENUATION SW L IN 16	Input looped signals from PHONES. (Time constant/ level)
C-84.	OUTPUT L 1KHz	Measurement
C-85.	OUTPUT R 1KHz	Measurement
C-86.	PHONES L 1KHz	Measurement
C-87.	PHONES R 1KHz	Measurement
C-88.	INDIV. OUT 1 1KHz	Measurement
C-89.	INDIV. OUT 2 1KHz	Measurement
C-90.	INDIV. OUT 3 1KHz	Measurement
C-91.	INDIV. OUT 4 1KHz	Measurement
C-92.	INDIV. OUT 5 1KHz	Measurement
C-93.	INDIV. OUT 6 1KHz	Measurement
C-94.	AUX INPUT	Measurement
C-95.	64ch OUT	Auditory sense
C-96.	FACTORY SET	
	Inspect the main unit for sound	

Measuring condition

- 1) Use PA-5C or PA-D12 (adapter).
- 2) Measuring instruments
Low-frequency oscillator, analog waveform measuring instrument, keyboard amplifier
- 3) Jigs
MIDI cable, TO HOST Loop Back cable, Smart Media card, a set of speakers

A. TEST ENTRY

Activate power on the main unit by pressing the [PLAY] + [EXIT/ NO] keys at the same time.
[Initial screen]

**	YAMAHA DRUM TRIGGER MODULE	**
**	DTXTREME	**

After a while, the following indication appears.

[DLAG 1]	MIN	MAX	MIN_ATT	MAX_ATT
	45	57	90	113

If any change is made, set each parameter to the following value through [DIAG 1] ~ [DIAG].

Setting

Using [▲] and [▼], switch over screens through [DIAG 1] ~ [DIAG 4]. Change each parameter by rotating the encoder under the numeral. The following describes each parameter.

* Variable parameter

The parameters, which are set at the upper or lower limit in the range of 0 ~ 127, are all included in the OK range

[DIAG 1] LCD indication

[DLAG 1]	MIN	MAX	MIN_ATT	MAX_ATT
	45	57	90	113

- MIN =45 (2D)
- MAX =57 (39)
- MIN_ATT =90 (5A)
- MAX_ATT =113 (71)

Lower limit in the OK range in case sw = ON at INPUT1~16.
Upper limit in the OK range in case sw = ON at INPUT1~16.
Lower limit in the OK range in case sw = ON at INPUT1~16.
Upper limit in the OK range in case sw = ON at INPUT1~16.

[DIAG 2] LCD indication

[DLAG 2]	MIN_1R	MAX_1R	MIN_CR	MAX_CR
	96	103	16	26

- MIN_INIR =127- 31 =96 (60)
- MAX_INIR =127- 24 =103 (67)
- MIN_CR =16 (10)
- MAX_CR =26 (1A)

Upper limit in the OK range of INPUT1 RIM (value by subtraction from 127 due to reverse polarity)
Lower limit in the OK range of INPUT1 RIM (value by subtraction from 127 due to reverse polarity)
Lower limit in the OK range after time elapse in the time constant inspection in case sw = ON at INPUT1~16
Upper limit in the OK range after time elapse in the time constant inspection in case sw = ON at INPUT1~16

[DIAG 3] LCD indication

[DLAG 3]	MIN_POS	MAX_POS
	58	73

- MIN_POS =58 (3A)
- MAX_POS =73 (49)

Lower limit of the maximum value in the OK range in the input test for INPUT1 POSITION SENS
Upper limit of the maximum value in the OK range in the input test for INPUT1 POSITION SENS

[DIAG 4] LCD indication

[DIAG 4]	RIMATT	BRSATT	OUTATT
	58	73	31

- RIMATT =45 (2D)
- BRSATT =72 (48)
- OUTATT =31 (1F)

The unit of the sine wave output attenuation level is - 0.75 dB In the inspection of INPUT2-5 RIM.
The unit of the sine wave output attenuation level is - 0.75 dB In the inspection of brush ON.
The unit of the sine wave output attenuation level is - 0.75 dB In the inspection of input1~16.

Note that the figure is a default one with the value in the parentheses () represented by HEX.

Press the [ENTER/ YES] key after setting each parameter. The following appears.

1 MAIN ROM

B. CARRYING ON THE TEST AND THE TEST AT THE TIME OF FAIL

1. After setting each parameter in "A. TEST ENTRY", press the "ENTER/ YES" key. The following appears.

[Indication screen]

1 MAIN ROM

Use this indication as a [Test No. Selection Screen]. If using [▲] and [▼] or the leftmost encoder, the test No. is selected and the [ENTER/ YES] key is pressed, the test is automatically carried on in test No. sequence starting with the selected test. In case of any failure, [FAIL] appears and the test stops.

2. Carrying on the test which is judged to be FAIL
For each test which is judged to be FAIL, press the [EXIT/ NO] key and the test No. selection screen appears.

C-01. MAIN ROM

[Initial indication]

1 MAIN ROM

[Test content]

Read data from MAIN ROM and perform Verify Check.

[Test method]

Perform the test.

[Check item]

Check LCD test results.

[Indication of judgment result]

In case of OK

1 MAIN ROM
OK

In case of NG

1 MAIN ROM
FAIL (XXXX)

Checksum in case of XXXX

[Content of FAIL judgment]

[Completing the test]

OK: Go on to the next test.

NG: For handling the FAIL judgment, see "B. CARRYING ON THE TEST".

C- 02. SUB ROM

[Initial indication]

2 SUB ROM

[Content of test]

Read data from SUB ROM and perform Verify Check.

[Test method]

Perform the test.

[Check item]

Check LCD test results.

[Indication of judgment result]

In case of OK

2 SUB ROM
OK

In case of NG

2 SUB ROM
FAIL (XXXX)

Checksum in case of XXXX

[Content of FAIL judgment]

None

[Completing the test]

OK: Go on to the next test.

C- 03. MAIN SRAM

[Initial indication]

3 MAIN SRAM

[Test content]

WRITE/ READ data to SRAM (MAIN) (IC4, IC5) and perform Verify Check.

[Test method]

Perform the test.

[Check item]

Check LCD test results.

[Indication of judgment result]

In case of OK

3 MAIN SRAM
OK

In case of NG

3 MAIN SRAM
FAIL

[Content of FAIL judgment]

None

[Completing the test]

OK: Go on to the next test.

NG: For handling the FAIL judgment, see "B. CARRYING ON THE TEST".

C- 04. SUB SRAM

[Initial indication]

4 SUB SRAM

[Test content]

WRITE/ READ data to SRAM (SUB) (IC103, IC104) and perform Verify Check.

[Test method]

Perform the test.

[Check item]

Check LCD test results.

[Indication of judgment result]

In case of OK

4 SUB SRAM
OK

In case of NG

4 SUB SRAM
FAIL

[Content of FAIL judgment]

None

[Completing the test]

OK: Go on to the next test.

NG: For handling the FAIL judgment, see “B. CARRYING ON THE TEST”.

C- 05. SUB SWP

[Initial indication]

5 SUB SWP

[Test content]

Check the SWP30 free running counter for operation.

[Test method]

Perform the test.

[Check item]

Check LCD test results.

[Indication of judgment result]

In case of OK

5 SUB SWP
OK

In case of NG

5 SUB SWP
FAIL

[Content of FAIL judgment]

None

[Completing the test]

OK: Go on to the next test.

NG: For handling the FAIL judgment, see “B. CARRYING ON THE TEST”.

C- 06. SUB WAVE ROM 1

[Initial indication]

6 SUB WAVE ROM 1

[Test content]

Read data from WAVE ROM 1 (IC106) via SWP30 and perform Verify Check.

[Test method]

Perform the test.

[Check item]

Check LCD test results.

[Indication of judgment result]

In case of OK

6 SUB WAVE ROM 1
OK

In case of NG

6 SUB WAVE ROM 1
FAIL (XXXX)

Checksum in case of XXXX

[Content of FAIL judgment]

None

[Completing the test]

OK: Go on to the next test.

NG: For handling the FAIL judgment, see “B. CARRYING ON THE TEST”.

C- 07. SUB WAVE ROM 2

[Initial indication]

7 SUB WAVE ROM 2

[Test content]

Read data from the WAVE ROM 2 (IC107) via SWP30 and perform Verify Check.

[Test method]

Perform the test.

[Check item]

Check LCD test results.

[Indication of judgment result]

In case of OK

7 SUB WAVE ROM 2
OK

In case of NG

7 SUB WAVE ROM 2
FAIL (XXXX)

Checksum in case of XXXX
[Content of FAIL judgment]
None

[Completing the test]
OK: Go on to the next test.
NG: For handling the FAIL judgment, see “B. CARRYING ON THE TEST”.

C- 08. SUB WAVE ROM 3

[Initial indication]

8 SUB WAVE ROM 3

[Test content]
Read data from WAVE ROM 3 (IC108) via SWP30 and perform Verify Check.

[Test method]
Perform the test.

[Check item]
Check LCD test results.

[Indication of judgment result]
In case of OK

8 SUB WAVE ROM 3
OK

In case of NG

8 SUB WAVE ROM 3
FAIL (XXXX)

Checksum in case of XXXX
[Content of FAIL judgment]
None

[Completing the test]
OK: Go on to the next test.
NG: For handling the FAIL judgment, see “B. CARRYING ON THE TEST”.

C- 09. SUB WAVE ROM 4

[Initial indication]

9 SUB WAVE ROM 4

[Test content]
Read data from WAVE ROM 4 (IC109) via SWP30 and perform Verify Check.

[Test method]
Perform the test.

[Check item]
Check LCD test results.

[Indication of judgment result]
In case of OK

9 SUB WAVE ROM 4
OK

In case of NG

9 SUB WAVE ROM 4
FAIL (XXXX)

Checksum in case of XXXX
[Content of FAIL judgment]
None

[Completing the test]
OK: Go on to the next test.
NG: For handling the FAIL judgment, see “B. CARRYING ON THE TEST”.

C- 10. SUB EFFECT DRAM

[Initial indication]

10 SUB EFFECT DRAM

[Test content]
WRITE/ READ date from SWP30 to DRAM (IC112) and perform Verify Check.

[Test method]
Perform the test.

[Check item]
Check LCD test results.

[Indication of judgment result]
In case of OK

10 SUB EFFECT DRAM
OK

In case of NG

10 SUB EFFECT DRAM
FAIL

[Content of FAIL judgment]
None

[Completing the test]
OK: Go on to the next test.
NG: For handling the FAIL judgment, see “B. CARRYING ON THE TEST”.

C- 11. SUB WAVE DRAM 1

[Initial indication]

11 SUB WAVE DRAM 1

[Test content]

WRITE/ READ data from SWP30 to DRAM (IC114) and perform Verify Check.

[Test method]

Perform the test.

[Check item]

Check LCD test results.

[Indication of judgment result]

In case of OK

11 SUB WAVE DRAM 1
OK

In case of NG

11 SUB WAVE DRAM 1
FAIL

[Content of FAIL judgment]

None

[Completing the test]

OK: Go on to the next test.

NG: For handling the FAIL judgment, see “B. CARRYING ON THE TEST”.

C- 12. SUB WAVE DRAM 2

[Initial indication]

12 SUB WAVE DRAM 2

[Test content]

WRITE/ READ data from SWP30 to DRAM (IC115) and perform Verify Check.

[Test method]

Perform the test.

[Check item]

Check LCD test results.

[Indication of judgment result]

In case of OK

12 SUB WAVE DRAM 2
OK

In case of NG

12 SUB WAVE DRAM 2
FAIL

[Content of FAIL judgment]

None

[Completing the test]

OK: Go on to the next test.

NG: For handling the FAIL judgment, see “B. CARRYING ON THE TEST”.

C- 13. TO HOST

[Initial indication]

13 TO HOST

[Test content]

Insert the TO HOST Loop Back cable and check that Pin 3/ Pin 5 and Pin 6/ Pin 8 are respectively shorted at the TO HOST terminal.

[Test method]

Insert the TO HOST Loop Back cable and proceed to the test.

[Check item]

Check LCD test results.

[Indication of judgment result]

In case of OK

13 TO HOST
OK

In case of NG

13 TO HOST
FAIL

[Content of FAIL judgment]

None

[Completing the test]

OK: Go on to the next test.

NG: For handling the FAIL judgment, see “B. CARRYING ON THE TEST”.

C- 14. SMART MEDIA

[Initial indication]

14 SMART MEDIA

[Test content]

Insert the Smart Media card, WRITE/ READ data, and perform Verify Check.

[Test method]

Insert the Smart Media card and proceed to the test.

[Check item]

Check LCD test results.

[Indication of judgment result]

In case of OK

14 SMART MEDIA
OK

In case of NG

14 SMART MEDIA
FAIL

[Content of FAIL judgment]

None

[Completing the test]

OK: Go on to the next test.

NG: For handling the FAIL judgment, see "B. CARRYING ON THE TEST".

C- 15. MIDI

[Initial indication]

15 MIDI

[Test content]

Send the test pattern (AA 50 5F) from MIDI OUT and receive it at IN.

[Test method]

After connecting MIDI OUT and MIDI IN with the MIDI cable, proceed to the test.

[Check item]

Check LCD test results.

[Indication of judgment result]

In case of OK

Go on to the next test.

In case of NG

15 MIDI
FAIL

[Content of FAIL judgment]

None

[Completing the test]

OK: Go on to the next test.

NG: For handling the FAIL judgment, see "B. CARRYING ON THE TEST".

C- 16. CLICK VOLUME

C- 17. ACCOMP VOLUME

C- 18. SNARE VOLUME

C- 19. KICK VOLUME

C- 20. TOM VOLUME

C- 21. HI- HAT VOLUME

C- 22. CYMBAL VOLUME

C- 23. MISC VOLUME

[Initial indication]

16 CLICK VOL
-XX-

XX indicates 00 ~ 99.

[Test content]

Check that control by each volume of CLICK~MISC operates correctly.

[Test method]

Move each volume of CLICK ~ MISC up and down to the limit to display the figure 00 ~ 99 at the bottom of LCD.

[Check item]

Check LCD test results.

[Indication of judgment result]

In case of OK (Go next.)

17 ACCOMP VOL
-XX-

In case of NG

16 CLICK VOL
FAIL

[Content of FAIL judgment]

In case of NG, no further step will take place.

[Completing the test]

OK: Go on to the next test.

NG: For handling the FAIL judgment, see "B. CARRYING ON THE TEST".

C- 24. LCD

[Initial indication]

None

[Test content]

Visually check by looking at dots on LCD with the eyes. Check that Contrast VR (VR1) works correctly.

[Test method]

Check that black and white are flashing alternately. Rotate Contrast V (VR1) and check that there are changes in contrast.

[Check item]

Check LCD test results.

[Indication of judgment result]

None

[Content of FAIL judgment]

None

[Completing the test]

Rotate Manual Mode Contrast VR (VR1) and check there are changes in contrast. Then press the [ENTER/YES] key and go to the next test.

* Rotate Contrast VR (VR1) to MIN (fully counterclockwise) (for access to the best view).

C- 25. PANEL LED

[Initial indication]

25 PANEL LED

[Test content]

Check that PANEL LED lights up correctly.

[Test method]

1. Check that the LEDs corresponding to the following panel switches light up in the sequential order below.

[RHYTHM / INS]
 [BASS / DEL]
 [OTHERS]
 [CLICK] Red
 [CLICK] Green
 [PLAY / STOP]
 [REC]
 [PLAY]
 [CHAIN]
 [SONG / JOB]
 [UTILITY]
 [TRIGGER]
 [VOICE]
 [EFFECT]
 [ENTER / YES]
 [CLICK] Red

[Check item]

Check that the LEDs light up in order of the above tests. Also visually check that all LEDs provide the same degree of brightness.

[Indication of judgment result]

None

[Content of FAIL judgment]

None

[Completing the test]

OK: Go on to the next test.

C- 26. 7SEG LED

[Initial indication]

25 7SEG LED

[Test content]

Check that 7SEG LED lights up correctly.

[Test method]

Check that 7SEG LED lights up. Light up each segment of the 7-segment LED (2-digit/dot) in the following order.

{Cross-bar, upper}
 {Vertical bar, upper right}
 {Vertical bar, lower right}
 {Cross-bar, lower}
 {Vertical bar, lower left}
 {Vertical bar, upper left}
 {Cross-bar, middle}
 {Period}



Finally, all light up.

[Check item]

Check that the LEDs light up in the above order. Also visually check that there is no variance in brightness.

[Indication of judgment result]

None

[Content of FAIL judgment]

None

[Completing the test]

OK: Go on to the next test.

C- 27. PANEL SW

[Initial indication]

27 PANEL SW
 [PAGE UP]

[Test content]

Check that the panel switches turn ON/ OFF correctly.

[Test method]

Turn ON the panel switches from [▲] to [ENTER/ YES] according to the LCD indication as below.

27 PANEL SW
 [XXXXX]

XXXXX indicates the name of the panel switch.

[▲] ([PAGE UP])
 [▼] ([PAGE DOWN])
 [RHYTHM / INS]
 [SHIFT]
 [BASS / DEL]
 [OTHERS]
 [CLICK]
 [TOP]
 [REWIND]
 [PLAY / STOP]
 [FFWD]
 [REC]
 [PLAY]
 [CHAIN]
 [SONG / JOB]
 [UTILITY]
 [EXIT/NO]
 [SOUND]
 [TRIGGER]
 [VOICE]
 [EFFECT]
 [STORE]
 [ENTER/YES]

[Check item]

Check LCD test results.

[Indication of judgment result]

In case of OK

27 PANEL SW
 OK

In case of NG

27 PANEL SW
 FAIL [XXXXX]

XXXXX indicates the name of the panel switch.

[Content of FAIL judgment]

If the key is not pressed as indicated on the LCD, you cannot go on to the next step.

[Completing the test]

OK: Go on to the next test.

NG: For handling the FAIL judgment, see “B. CARRYING ON THE TEST”.

C- 28. HOST SELECT SW

[Initial indication]

28 HOST SELECT SW [XXXX]

Content of [XXXX] Mac, PC-1, PC-2, MIDI

[Test content]

Check that the HOST SELECT switch works correctly.

[Test method]

Locate the HOST SELECT switch at all positions of mac, PC1, PC2, and MIDI.

[Check item]

Check LCD test results.

[Indication of judgment result]

In case of OK

28 HOST SELECT SW OK

In case of NG

28 HOST SELECT SW FAIL

[Content of FAIL judgment]

None

[Completing the test]

OK: Go on to the next test.

NG: For handling the FAIL judgment, see “B. CARRYING ON THE TEST”.

C- 29. FOOT SW L

[Initial indication]

29 FOOT SW L OK

[Test content]

Attach the ON/ OFF switch to FOOT SW Input (left-hand side) and check that it works correctly.

[Test method]

Insert the switch plug into the FOOT SW Jack (JK2) and turn the switch ON/ OFF.

[Check item]

Check LCD test results.

[Indication of judgment result]

In case of OK

29 FOOT SW L OK

In case of NG: None

[Content of FAIL judgment]

Working with the switch plug will not even proceed to the next step.

[Completing the test]

OK: Go on to the next test.

C- 30. FOOT SW R

[Initial indication]

30 FOOT SW R

[Test content]

Attach the ON/ OFF switch to FOOT SW Input (left-hand side) and check that it works correctly.

[Test method]

Insert the high-hat controller plug (stereo) into the FOOT SW Jack (JK2) and set the high-hat controller to the lower limit.

[Check item]

Check LCD test results.

[Indication of judgment result]

In case of OK

30 FOOT SW R OK

In case of NG: None

[Content of FAIL judgment]

Working with the high-hat controller will not even go to the next step.

[Completing the test]

OK: Go on to the next test.

C- 31. HI- HAT CONTROLLER

[Initial indication]

31 HI-HAT CONTROLLER

[Test content]

Check that control by the high-hat controller works correctly.

[Test method]

Insert the high-hat controller plug (stereo) into HI-HAT CONTROL (JK1) and move the high-hat controller up and down to the limit (in either order).

[Check item]

Check LCD test results.

[Indication of judgment result]

In case of OK

31 HI-HAT CONTROLLER OK

In case of NG: None

[Content of FAIL judgment]

Working with the high-hat controller will not even proceed to the next step.

[Completing the test]

OK: Go on to the next test.

- C- 32. ROTARY ENCODER 1
- C- 33. ROTARY ENCODER 2
- C- 34. ROTARY ENCODER 3
- C- 35. ROTARY ENCODER 4
- C- 36. ROTARY ENCODER 5

[Initial indication]

32 ROTARY ENCODER 1

[Test content]

Check that the rotary encoder rotates clockwise and counterclockwise correctly in order from the left (EC705) to the right end (EC705).

[Test method]

Rotate the encoder clockwise and then counterclockwise according to the LCD indication.
Clockwise rotation

32 ROTARY ENCODER 1
rotate right

Counterclockwise rotation

32 ROTARY ENCODER 1
rotate left

[Check item]

Check LCD test results.

[Indication of judgment result]

In case of OK, "Go Next" is displayed, so rotate the 2nd one from the left until it reaches the leftmost end.

33 ROTARY ENCODER 2
rotate right

In case of NG

32 ROTARY ENCODER 1
FAIL rotate right(left)

[Content of FAIL judgment]

FAIL is displayed on the LCD as above and no further process will occur even if the encoder is rotated in the direction indicated by the LCD.

[Completing the test]

OK: Go on to the next test.

C- 37. INPUT 1 RIM TRIGGER

[Initial indication]

37 INPUT 1 RIM TRIGGER
waiting

[Test content]

Add looped signals from PHONES to the right side of IN01 (SNARE) and check that the inputted signals are being inputted into the CPU at the correct gain. Take care, however, to cut off DC by installing a capacitor (approx. 0.1 μ) on the signal line (right-hand) side

[Test method]

Maximize PHONES VR. Connect the looped signals from PHONES to IN01 (SNARE) using a stereo cable. Take care to cut off DC by installing a capacitor (approx. 0.1 μ) on the signal line (right-hand) side

[Check item]

Check LCD test results.

[Indication of judgment result]

In case of OK

37 INPUT 1 RIM TRIGGER
OK

In case of NG

37 INPUT 1 RIM TRIGGER
FAIL XXXX

[Content of FAIL judgment]

In case of NG, no further step will take place.

[Completing the test]

OK: Go on to the next test.

NG: For handling the FAIL judgment, see "B. CARRYING ON THE TEST".

C- 38. INPUT 1 BRUSH

* This test is not performed.

C- 39. INPUT 1 SENS

[Initial indication]

39 INPUT 1 P-SENS
Waiting

[Test content]

Add a looped signal from PHONES to the L side of IN01 (SNARE), and check that the signal is inputted into the CPU with correct gain.

[Test method]

Using a stereo cable, input looped signals into IN01 (SNARE) from HEADPHONES. (With HEADPHONES VR at maximum) Set the attenuator switch for the L side, and for the OFF side on the JK circuit board.

[Check item]

Check LCD test results.

[Indication of judgment result]

In case of OK

39 INPUT 1 P-SENS
OK

In case of NG

39 INPUT 1 P-SENS
FAIL XXXXX

XXXXXX indicates too High or too Lo.

[Content of FAIL judgment]

In case of NG, no further step will take place.

[Completing the test]

Pressing the [ENTER/ YES] key proceeds to the next test. For handling the FAIL judgment during the test, see "B. CARRYING ON THE TEST".

- C- 40. RIM SW IN 1
- C- 41. RIM SW IN 2
- C- 42. RIM SW IN 3
- C- 43. RIM SW IN 4
- C- 44. RIM SW IN 5
- C- 45. RIM SW IN 6
- C- 46. RIM SW IN 7
- C- 47. RIM SW IN 8

[Initial indication]

40 RIM SW IN 1
waiting

[Test content]

Connect a band with RIM switch to each Input for IN1(SNARE) ~ N8(H.HAT) and check for correct operation.

[Test method]

Connect a band with RIM switch to each Input Jack in order of INPUT1 ~ 8 and press the RIM switch.

[Indication of OK]

41 RIM SW IN 2
waiting

If the above is displayed, connect to IN2 (TOM1). Repeat it in order until IN8 (H.HAT) is reached and confirmed.

[Indication of judgment result]

Check LCD test results.

[Indication of OK]

41 RIM SW IN 2
waiting

The above is displayed and the next test is performed.

[Indication of NG]

40 RIM SW IN 1
FAIL

[Content of FAIL judgment]

No further step will take place.

[Completing the test]

Pressing the [ENTER/ YES] key proceeds to the next test. For handling the FAIL judgment during the test, see "B. CARRYING ON THE TEST".

- C- 48. TRIGGER SW IN 2
- C- 49. TRIGGER SW IN 3
- C- 50. TRIGGER SW IN 4
- C- 51. TRIGGER SW IN 5

[Initial indication]

48 TRIGGER SW IN 2
waiting

[Test content]

Add looped signals to IN2(TOM1) ~ IN5 (TOM4) from PHONES and check that the trigger switch works correctly. Take care, however, to cut off DC by installing a capacitor (approx. 0.1 μ) on the signal line (right-hand) side.

[Test method]

Maximize PHONES VR and put in a looped stereo cable from PHONES in order from IN2 (TOM1) to IN5 (TOM4). Take care, however, to cut off DC by inserting a capacitor (approx. 0.1 μ) on the signal line (right-hand) side.

[Indication of judgment result]

Check LCD test results.

[Indication of OK]

49 TRIGGER SW IN 3
waiting

The above is displayed and the next test is performed.

[Indication of NG]

48 TRIGGER SW IN 2
FAIL

No further step will take place.

[Completing the test]

Pressing the [ENTER/ YES] key proceeds to the next test. For handling the FAIL judgment during the test, see "B. CARRYING ON THE TEST".

- C- 52. ATTENUATION SW H IN 01
- C- 53. ATTENUATION SW H IN 02
- C- 54. ATTENUATION SW H IN 03
- C- 55. ATTENUATION SW H IN 04
- C- 56. ATTENUATION SW H IN 05
- C- 57. ATTENUATION SW H IN 06
- C- 58. ATTENUATION SW H IN 07
- C- 59. ATTENUATION SW H IN 08
- C- 60. ATTENUATION SW H IN 09
- C- 61. ATTENUATION SW H IN 10
- C- 62. ATTENUATION SW H IN 11
- C- 63. ATTENUATION SW H IN 12
- C- 64. ATTENUATION SW H IN 13
- C- 65. ATTENUATION SW H IN 14
- C- 66. ATTENUATION SW H IN 15
- C- 67. ATTENUATION SW H IN 16

[Initial indication]

<p>52 ATTENUATION SW H IN01</p> <p>waiting</p>
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[Test content]

For attenuation switches IN01 ~ IN16, add looped signals from PHONES (ON and lower side of JK board) and check that the inputted signals are being inputted into the CPU at correct gain. Also check that no signals are missing for other inputs.

[Test method]

Put all attenuation switches at H side (ON and lower side of JK board) and maximize PHONES VR. Put in a looped cable in order from IN01 to IN16.

[Check item]

Check LCD test results.

[Indication of OK]

<p>53 ATTENUATION SW H IN02</p> <p>waiting</p>
--

If the above appears, connect a cable to IN02 (TOM1). (Go on to the next test.) Repeat in order until IN16 is reached and confirmed.

[Indication of NG]

<p>52 ATTENUATION SW H IN01</p> <p>FAIL XXXX</p>
--

XXXXXX indicates too High, too Lo, XtalkIN 2, BAD curve, etc.

[Indication of judgment result]

None

[Content of FAIL judgment]

No further step will take place.

[Completing the test]

Pressing the [ENTER/YES] key proceeds to the next step.

- C- 68. ATTENUATION SW L IN 01
- C- 69. ATTENUATION SW L IN 02
- C- 70. ATTENUATION SW L IN 03
- C- 71. ATTENUATION SW L IN 04
- C- 72. ATTENUATION SW L IN 05
- C- 73. ATTENUATION SW L IN 06
- C- 74. ATTENUATION SW L IN 07
- C- 75. ATTENUATION SW L IN 08
- C- 76. ATTENUATION SW L IN 09
- C- 77. ATTENUATION SW L IN 10
- C- 78. ATTENUATION SW L IN 11
- C- 79. ATTENUATION SW L IN 12
- C- 80. ATTENUATION SW L IN 13
- C- 81. ATTENUATION SW L IN 14
- C- 82. ATTENUATION SW L IN 15
- C- 83. ATTENUATION SW L IN 16

[Initial indication]

<p>68 ATTENUATION SW L IN01</p> <p>waiting</p>
--

[Test content]

For attenuation switches IN01 ~ IN16, add looped signals from PHONES on the left-hand side (ON and upper side of JK board) and check that the inputted signals are being inputted into the CPU at correct gain and correct attenuation level . Also check that no signals are missing for other inputs.

[Test method]

Put all attenuation switches at H side (ON and lower side of JK board) and maximize PHONES VR. Put in a looped cable in order from IN01 to IN16.

[Check item]

Check LCD test results.

[Indication of OK]

<p>69 ATTENUATION SW L IN02</p> <p>waiting</p>
--

If the above is displayed, connect a cable to IN02 (TOM1). (Go on to the next test.) Repeat in order until IN16 is reached and confirmed.

[Indication of NG]

<p>68 ATTENUATION SW L IN01</p> <p>FAIL XXXX</p>
--

XXXXXX indicates too High, too Lo, XtalkIN 2, BAD curve, etc.

[Indication of judgment result]

None

[Content of FAIL judgment]

No further step will take place.

[Completing the test]

Pressing the [ENTER/ YES] key proceeds to the next test.

C- 84. OUTPUT L 1 kHz

[Initial indication]

<p>84 OUTPUT L</p>

[Test content]

Check that correct signals are being outputted from OUTPUT (L/MONO).

[Test method]

Insert the standard (stereo) phone plug into both OUTPUTs (L/MONO, R) and measure the output waveform. Set the MAINOUT, AUX IN volume to MAX. Check that no plug is inserted into AUX IN. (Input voltage must be - 90 dBm or less.)

[Check item]

OUTPUT(L/MONO): When -5.1 +/- 2 dBm (load of 10 KΩ) OUTPUT (R) plug is pulled out

OUTPUT (L/MONO): -10.8 +/- 2 dBm (load of 10 KΩ)

[Indication of judgment result]

None

[Content of FAIL judgment]

None

[Completing the test]
Pressing the [ENTER/ YES] key proceeds to the next test.

C- 85. OUTPUT R 1 kHz

[Initial indication]

85 OUTPUT R

[Test content]

Check that correct signals are being outputted from OUTPUT (R).

[Test method]

Insert the standard (stereo) phone plug into both OUTPUTs (L/MONO, R) and measure the output waveform. Set the volume to MAX. Check that no plug is inserted into AUX IN. (Input voltage must be – 90 dBm or less.)

[Check item]

OUTPUT(R): -5.1 +/- 2 dBm (load of 10 K Ω)

[Indication of judgment result]

None

[Content of FAIL judgment]

None

[Completing the test]

Pressing the [ENTER/ YES] key proceeds to the next test.

C- 86. PHONES L 1 kHz

[Initial indication]

86 PHONES L

[Test content]

Check that correct signals are being outputted from PHONES (L).

[Test method]

Insert the standard (stereo) phone plug into PHONES and measure the output waveform. Set the PHONESVOL, AUX IN volume to MAX. Check that no plug is inserted into AUX IN. (Input voltage must be – 90 dBm or less.)

[Check item]

PHONES (L): +0.1 +/- 2 dBm (load of 33 Ω)

[Indication of judgment result]

None

[Content of FAIL judgment]

None

[Completing the test]

Pressing the [ENTER/ YES] key proceeds to the next test.

C- 87. PHONES R 1 kHz

[Initial indication]

87 PHONES R

[Test content]

Check that correct signals are being outputted from PHONES (R).

[Test method]

Insert the standard (stereo) phone plug into PHONES and measure the output waveform. Set the PHONESVOL, AUX IN volume to MAX. Check that no plug is inserted into AUX IN. (Input voltage must be – 90 dBm or less.)

[Check item]

PHONES (L): +0.1 +/- 2 dBm (load of 33 Ω)

[Indication of judgment result]

None

[Content of FAIL judgment]

None

[Completing the test]

Pressing the “ENTER/ YES” key proceeds to the next test.

C- 88. INDIVIDUAL OUT 1 1 kHz

C- 89. INDIVIDUAL OUT 2 1 kHz

C- 90. INDIVIDUAL OUT 3 1 kHz

C- 91. INDIVIDUAL OUT 4 1 kHz

C- 92. INDIVIDUAL OUT 5 1 kHz

C- 93. INDIVIDUAL OUT 6 1 kHz

[Initial indication]

88 INDIV. OUT 1

[Test content]

Check that correct signals are being outputted from INDIVIDUAL OUTPUT 1 ~ 6.

[Test method]

Insert the standard (mono) phone plug into INDIVIDUAL OUTPUT 1 ~ 6 and measure each output waveform. Set the MAIN OUT, AUX IN volume to MAX. Check that no plug is inserted into AUX IN. (Input voltage must be – 90 dBm or less.)

[Check item]

INDIVIDUAL OUT 1 ~ 6: -5.6 +/- 2 dBm (load of 10 K Ω)

[Indication of judgment result]

None

[Content of FAIL judgment]

None

[Completing the test]

Pressing the “ENTER/ YES” key proceeds to the next test.

C- 94. AUX INPUT

[Initial indication]

94 AUX INPUT

[Test content]

Check that the signals inputted from AUX IN are being outputted from PHONES (L/ R) as correct ones.

[Test method]

Input the following sine wave (“Check item” below) into AUX IN (L/ R). Insert the standard stereo phone plug into PHONES (L/ R) and measure the frequency, output waveform level, and distortion factor of each output. (Maximize PHONES VR and AUXIN VR.)

[Check item]

- Input a sine wave of - 20 dBm, 1kHz into AUX IN (L). (Connect AUX IN (R) to ground and set AUX IN and PHONES volume to MAX.)
PHONES (L): +1.0 +/- 2 dBm, distortion factor of 0.5 % or less (Load of 33 Ω)
- Input a sine wave of -20 dBm, 1kHz into AUX IN (R). (Connect AUX IN (L) to ground and set AUX IN and PHONES volume to MAX.)
PHONES (R): +1.0 +/- 2 dBm, distortion factor of 0.5 % or less (Load of 33 Ω)

[Indication of judgment result]

None

[Content of FAIL judgment]

None

[Completing the test]

Pressing the [ENTER/ YES] key proceeds to the next test.

C- 95. 64ch OUT

[Initial indication]

95 64ch OUT

[Test content]

Check that 64 sound channel is producing sounds correctly with 1 ~ 32ch producing sounds from OUTPUT (L/MONO) and 33 ~ 64ch producing sounds from OUTPUT (R).

[Test method]

If the [ENTER/ YES] key is pressed, the LCD indicates “Sounding” for approx. 0.3 seconds and “Silent” for approx. 0.1 second. This is repeated 32 times. Set the MAIN OUT volume to MAX.

95 64ch OUT
Lch=XX Rch=XX

XX: Number of the channel currently producing sounds

[Check item]

Check by auditory sense that 64 sound is produced correctly. Also check that the output wave is a correct sine wave. (Lch = 1 kHz, Rch = 700 Hz)

[Indication of judgment result]

None

[Content of FAIL judgment]

None

[Completing the test]

The test will proceed to the next one automatically.

C- 96. FACTORY SET

[Initial indication]

96 FACTORY SET

[Test content]

Reset to the ex-factory data.

[Test method]

Pressing the [ENTER/ YES] key provides factory setting with [END] being displayed.

[Check item]

None

[Indication of judgment result]

None

[Content of FAIL judgment]

None

[Completing the test]

None

Inspecting the Main Unit for Sound Production

Turn off powder once. Then turn it on again and inspect the following in normal mode.

In play mode subsequent to exit from test mode, check that the noise level meets the requirements below.

(Maximize each volume.)

OUTPUT(L/MONO):	-75 dBm or less (DIN AUDIO)
OUTPUT(R):	-75 dBm or less (DIN AUDIO)
PHONES(L):	-65 dBm or less (DIN AUDIO)
PHONES(R):	-65 dBm or less (DIN AUDIO)
INDIVIDUAL OUTPUT 1~6	-75 dBm or less (DIN AUDIO)

1. Connect OUTPUT (both L/MONO and R) to the speaker and turn the encoder so that Song No. is set for SONG = P3.
2. Press [PLAY / STOP] to sound the song and check audibly that each sound is not distorted. Check that a sound is produced by pressing [CLICK].
3. Move "MAIN OUT VOL" from "MIN" to "MAX" and check that the volume changes from 0 to maximum.
4. Press [PLAY / STOP] and check that the music stops. Press [CLICK] and check that the sound stops.
5. Check that there is no dull sound coming up from OUTPUT L/MONO and OUTPUT R during the ON/ OFF of power. See to it, however, that the MAIN OUT volume is at MAX.
6. While pressing [PLAY] and [TRIGGER] at the same time, reset to the factory specification.
7. Set Song No. to SONG=P2 once. Then put it back to SONG=P1. Then check that KIT=P59.
8. Turn power OFF. Turn each of the following volumes to check that it turns smoothly.

MAIN OUT VOL.	HI-HAT VOL.
PHONES VOL.	CYMBAL VOL.
CLICK VOL.	MISC VOL.
ACCOMP. VOL.	AUX IN VOL.
SNARE VOL.	CONTRAST VOL.
KICK VOL.	Each rotary encoder
TOM VOL.	
9. Set each volume as follows.

MAIN OUT VOL. MIN	HI-HAT VOL. MAX
PHONES VOL. MIN	CYMBAL VOL. MAX
CLICK VOL. MAX	MISC VOL. MAX
ACCOMP. VOL. MAX	AUX IN VOL. MIN
SNARE VOL. MAX	CONTRAST VOL. MIN (fully counter-clockwise)
KICK VOL. MAX	ATTENUATION SW 1~16 L
TOM VOL. MAX	
10. Checking Mac 1 MHz waveform
With the HOST SELECT switch at Mac, connect to the TO HOST terminal. While checking the waveform with an oscilloscope, check that a waveform of 1 MHz is coming out from Pin 1.

■ ERROR MESSAGES

```
ERROR: MIDI input buffer full
      Push [ENTER]
```

MIDI buffer memory has become full by receiving too much MIDI data at a time via MIDI IN or TO HOST. Reduce the amount of data (data transfer rate) or increase the interval between each transfer on the sending device.

```
ERROR: MIDI data error
      Push [ENTER]
```

An error has occurred while MIDI data was being received. Check if the MIDI cable is properly connected and if the MIDI data is appropriate.

```
ERROR: Host data error
      Push [ENTER]
```

An error has occurred while MIDI data was being received via TO HOST. Check if the MIDI cable is properly connected and the HOST SELECT switch is properly set.

```
ERROR: HOST is offline
      Push [ENTER]
```

Communications via TO HOST are not working. Check if the computer connected to TO HOST is turned on, the serial cable is properly connected to TO HOST, and the HOST SELECT switch is properly set.

```
WARNING: ALL data initialized
      Push [ENTER]
```

All setting data is initialized because the backup battery inside the DTXTREME may be running short.

```
WARNING: Battery voltage is low
      Push [ENTER]
```

The backup battery inside the DTXTREME may be running low. All setting data may be lost if the DTXTREME is turned off after this message is shown. First try to save necessary data to a memory card or so on, then consult your nearest Yamaha dealer on replacing the battery.

```
ERROR: MIDI check sum error
      Push [ENTER]
```

Checksum of the received bulk data is incorrect. Check if the data is not corrupted and appropriate for the DTXTREME, and then retry.

```
ERROR: MIDI Illegal data
      Push [ENTER]
```

Received bulk data contains illegal data. Check the data is not corrupted and appropriate for the DTXTREME, and then retry.if

```
ERROR: Sequencer is Running
      Push [ENTER]
```

This message will be shown if you attempt an operation while the internal sequencer is running. Stop the sequencer and retry.

```
ERROR: Sequence data is not empty
      Push [ENTER]
```

This message will be shown if you attempt recording to operation to the track that contains data. Retry recording to an empty track.

```
ERROR: Memory full
      Push [ENTER]
```

User memory has become full. Save necessary user data to the memory card and clear unnecessary data to release the memory.

```
ERROR: Card is Write Protected
      Push [ENTER]
```

This message will be shown if you attempt saving onto a write-protected memory card. Cancel write-protection of the memory card and retry.

```
ERROR: Card read/write error
      Push [ENTER]
```

An error has occurred while the DTXTREM was reading or writing a memory card. First re-format the memory card and retry. If the message still appears when you attempt reading writing on the re-formatted card, that memory card may be broken. Replace the memory card. In any case, the data stored on the troubled card may be corrupted.

```
ERROR: File is unknown format  
      push [ENTER]
```

The DTXTREME cannot recognize the specified file (file format). Check if the file is suitable for the DTXTREME and is not corrupted.

```
ERROR: Can't edit preset song  
      push [ENTER]
```

This message will be shown if you attempt to load a song from the memory card or by receiving bulk data when a preset song is selected (in Drum Kit Play mode). First select a user song and then retry loading a song.

```
ERROR: Can't edit card song  
      push [ENTER]
```

This message will be shown if you attempt to load a song from the memory card or by receiving bulk data when a card song is selected (in Drum Kit Play mode). First select a card song and then retry loading a song.

■ TROUBLESHOOTING

The DTXTREME is Not Making a Sound or a Triggered Sound

- Make sure the pads and triggers are connected correctly to the input jacks of the DTXTREME.
- Make sure the connectors from the DTXTREME OUTPUT jack (and NOT the INDIV. OUT jack) are plugged correctly to the input jacks of the amplifier or mixer.
- Raise the volume by using the volume slider.
- Make sure the input level is displayed on the LCD when you play the pad or drum with a trigger.
- Raise the minimum value of the level range.
- Make sure the output settings of the voice is not “INDIV. OUT.”
- Make sure the Trigger Bypass switch in Utility mode is OFF .
- Check the Local Control in Utility mode. The Local Control should be “on.”
- Check the cables.

The External Tone Generator is Not Making a Sound

- Make sure the MIDI connectors are correctly connected.
- Make sure the MIDI channels match the input jack numbers of the connected external devices.
- Make sure the value of the MIDI note numbers are set correctly.
- Make sure the Trigger Bypass switch in Utility mode is “off.”
- Make sure the HOST SELECT switch is set correctly.

The Sound does not Match the Settings

- Make sure you have not plugged the monaural phone plug when the power is still ON. This sets the rim switch ON on the DTXTREME. Turn the power OFF and ON again.
- Make sure the output MIDI channel is set to Drum Voice (ch=10).
- Make sure the pad type is set correctly. If set incorrectly, the mute and egde functions will not work properly.

The Velocity (Sound) is Too Small

- Raise the gain setting.
- If the pads have an output or velocity control volume, adjust them (by raising them).
- Raise the velocity.
- Try a different velocity curve.
- Raise the volume of the voice.
- Make sure the input type is correct.
- Reset the INPUT ATTENUATION switch on the rear panel.

The Triggered Sound is Not Stable (When using acoustic drums)

- Make sure you have select the correct input type. Try a larger drum.
- Make sure the trigger pickup (DT series) is securely fastened with new sticky tape.
- Make sure the cable is securely inserted into the DT10 jack.

Double-triggering

- If you are using a sensor made by other manufacturers, it may be sending a large signal causing double-triggering.
- Make sure the head is not causing irregular vibration. If it is, it is necessary to mute the head.
- Make sure the sensor is fixed near the rim (above the bearing) and not near the center of the head.
- Make sure that nothing is touching the sensor
- If the pads have an output or velocity control volume, adjust them (by lowering them).
- Raise the rejection parameter. Be careful not to set it too high or it may cause a sound to be muted when another drum is played at the same time.
- Try using the self rejection parameter
- Try switching the INPUT A TTENUATION switch on the rear panel.

You are Experiencing “Crosstalk”

- Replace the sensor away from the nearby drum.
- The minimum input level needs to be higher
- Raise the gain setting.
- Raise the rejection parameter. Be careful not to set it too high or it may cause a sound to be muted when another drum is played at the same time.
- If the sound crosstalks with a specific trigger input, use the Spec rejection settings.

The Sounds are Cut when you Play Continuously

- If you are playing a rim shot, set the RIM Velocity parameter in Drum Kit Trigger Edit mode to a setting other than “mute Hi” and “mute Lo.”
- Set the unnecessary 2nd notes on to “off” in Drum Kit Trigger Edit mode.
- Set the Key mode in Drum Kit Voice Edit mode to “semi2,” “semi3,” “semi4” and so on.

Only 1 Sound is Heard when 2 Pads (Drums) are Played

- Raise the gain setting of the pad (drum) that is not making a sound.]
- Lower the rejection parameter of the pad (drum) that is not making a sound.
- Make sure that the pads (drums) are not assigned to the same group in the Alternate Group settings in Drum Kit Voice Edit mode.

The Sound is Too Loud (The Velocity is Permanently Too High)

- Lower the gain setting.
- Lower the minimum value of the velocity range.
- Try another velocity curve.
- If you are using a sensor made by other manufacturers, it may be sending a large signal.
- Reset the INPUT A ATTENUATION switch on the rear panel.

The Hi-hat Foot Controller or Footswitch Works Oppositely

- Turn the power switch on again with the foot controller or footswitch connected to the rear panel. The DTXTREME will automatically detect the polarity of the switch and enable regular operation. (If the power is currently ON, turn it OFF once and then ON again).
- Make sure you are not stepping on the foot controller or footswitch when you turn the power ON.

The Bass or Chord Patterns do Not Play in Pattern or Song Mode

- Make sure the tracks are not muted.
- Make sure the Trparameter in Song Play mode is not set to “mute.”

The DTXTREME does Not Receive any Switch or Trigger Data

- A data error has occurred. Turn the power OFF and then ON while holding the Play and Trigger buttons and the DTXTREME will reset to its initial settings. Beware that all the data will be lost. (Be sure to save the data before initialization)

The Sound will Not Stop

- Some sounds may have an extremely long release when the Rev Key Off function is enabled. In such a case, press the VOICE button while holding SHIFT to temporarily stop the sound.

The Edge Sound is Hard to Produce

- You need to use the position sensing RHP120SD pad.

DTXTREME

YAMAHA [Drum Trigger Module]
 Model DTXTREME MIDI Implementation Chart

Date:10-May-2000
 Version:1.0

Function ...	Transmitted	Recognized	Remarks
Basic Channel Default Changed	1 - 16 1 - 16	1 - 16 1 - 16	memorized
Mode Default Messages Alterd	× × *****	3 3 ×	
Note Number: True voice	0 - 127 0 - 127	0 - 127 0 - 127	
Velocity Note ON Note Off	○ 9nH, v=1-127 × 9nH, v=0	○ v=1-127 ×	
After Touch Key's Ch's	× ×	× ×	
Pitch Bender	×	○	7 bit resolution
Control Change 0,4,7,10,32 1,6,11,64 71,72,73 74,84,91 93,100,101	○ × × × ×	○ ○ ○ ○ ○	
Prog Change: True #	○ 0 - 127 *****	○ 0 - 127	
System Exclusive	○	○	
System: Song Pos. : Song Sel. Common: Tune	× × ×	× ○ ×	
System :Clock Real Time:Commands	○ ○	○ ○	
Aux :All Sound Off :Reset All Cntrls :Local ON/OFF :All Notes OFF Mes- :Active Sense sages:Reset	× × ○ × ○ ×	○ ○ ○ ○ (123-127) ○ ×	

Mode 1: OMNI ON, POLY Mode 2: OMNI ON, MONO ○: Yes
 Mode 3: OMNI OFF, POLY Mode 4: OMNI OFF, MONO ×: No

DIXTREME

DRUM TRIGGER MODULE

PARTS LIST

■ CONTENTS


OVERALL ASSEMBLY	2
PN CIRCUIT BOARD ASSEMBLY	6
ELECTRICAL PARTS	8

Notes: DESTINATION ABBREVIATIONS

A: Australian model	J: Japanese model
B: British model	U: U.S.A. model
C: Canadian model	V: General export model (110V)
E: European model	W: General export model (220V)
H: North European model	X: General export model
I: Indonesian model	Y: Export model

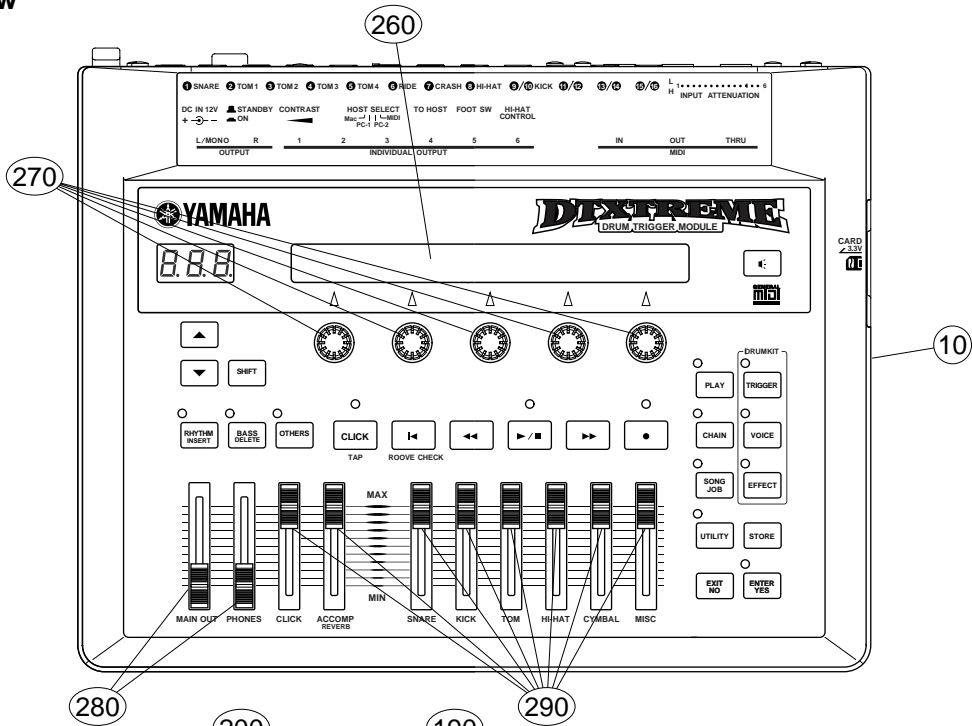
- The numbers in "QTY" show quantities for each unit.
- The parts with "--" in "Parts No." are not available as spare parts.
- The mark "}" in the remarks column indicates that these parts are interchangeable.
- The second letter of the shaded (■) part number is I, not one.

■ WARNING

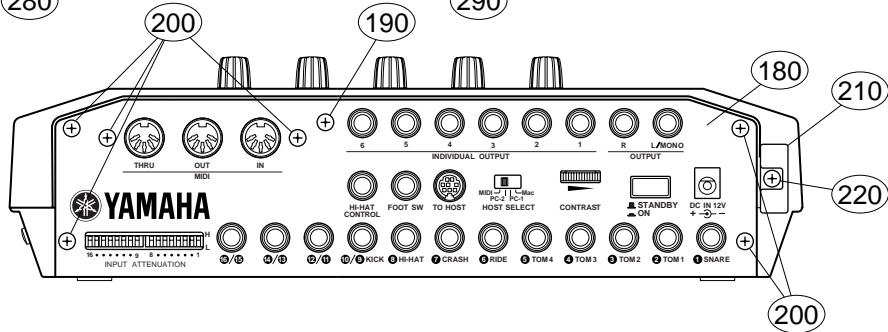
Components having special characteristics are marked  and must be replaced with parts having specification equal to those originally installed.

OVERALL ASSEMBLY

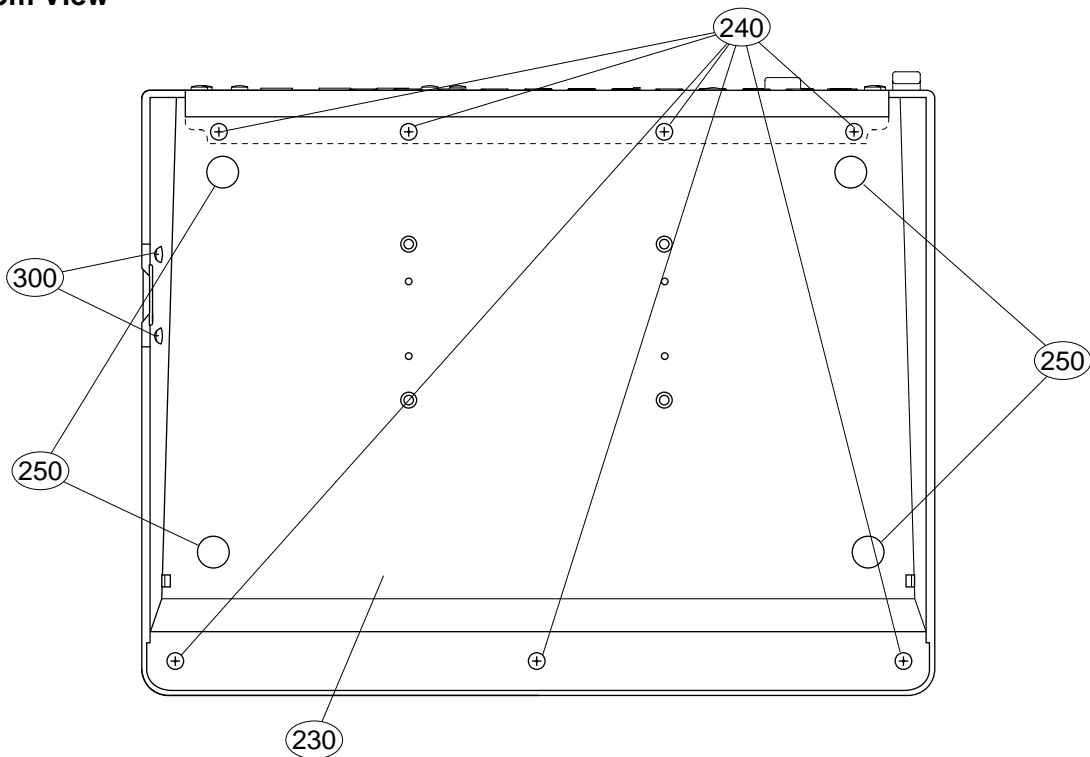
● Front View



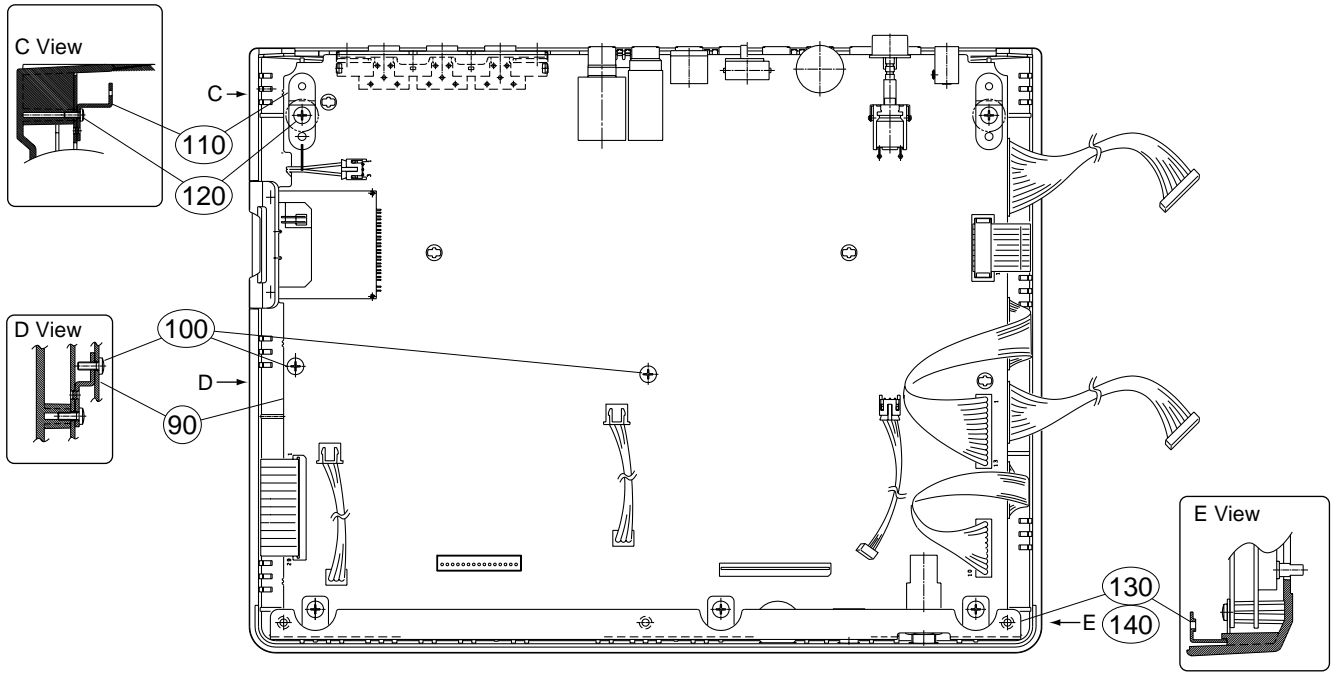
● Rear View



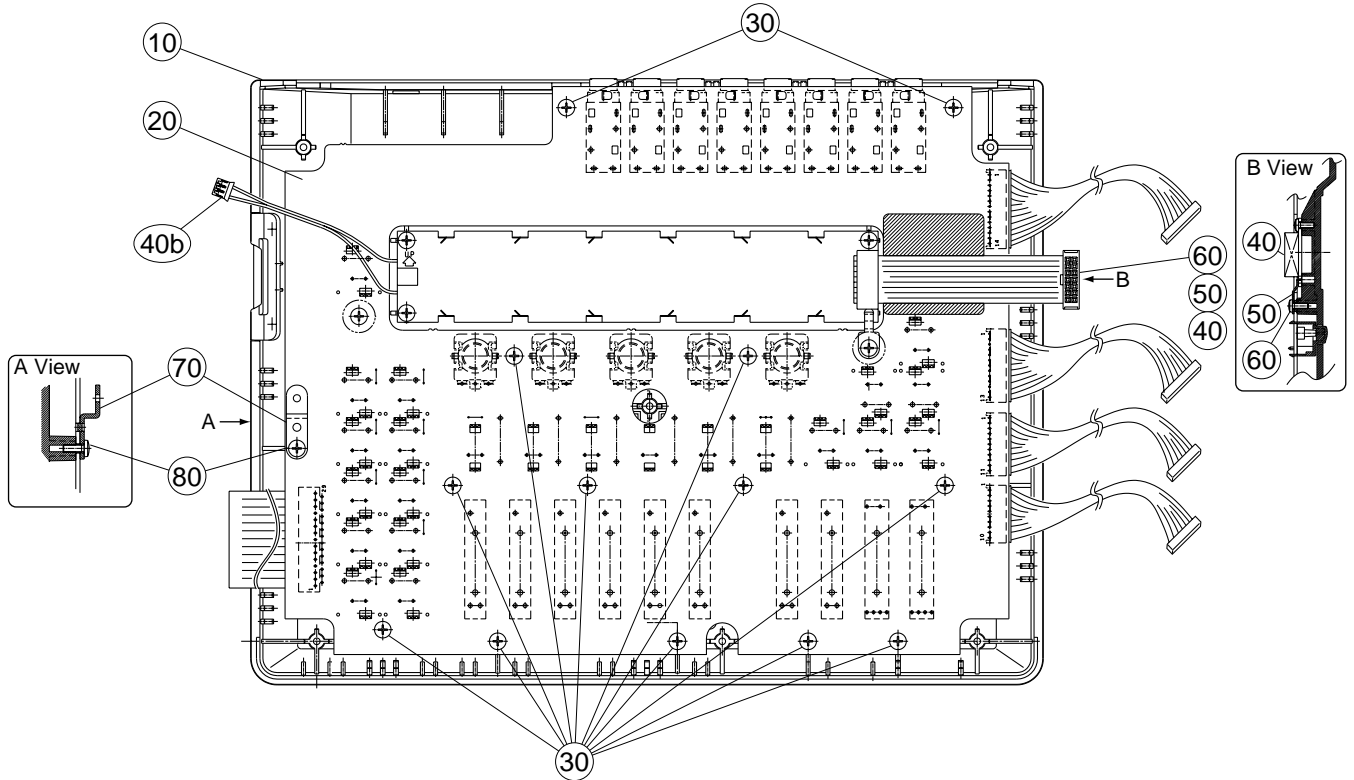
● Bottom View



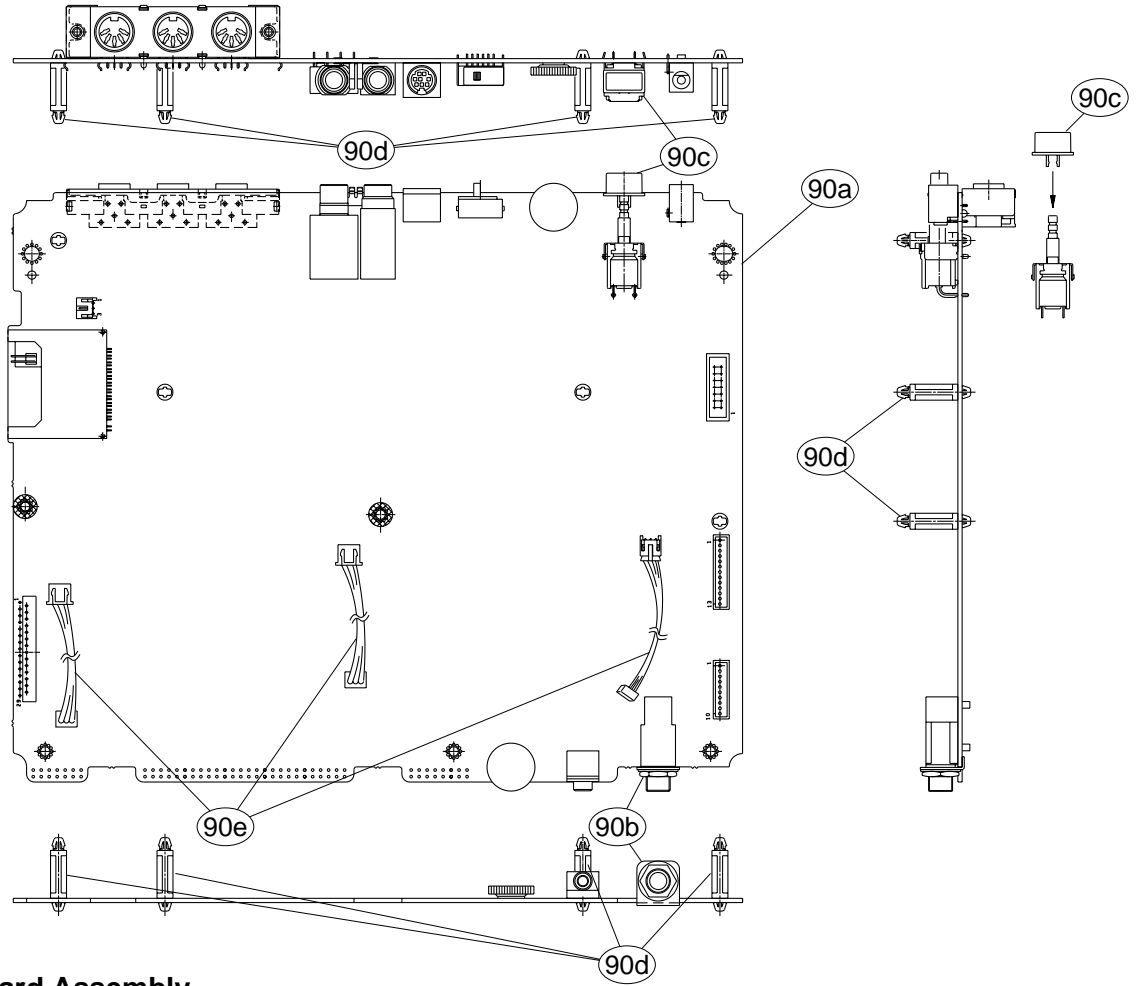
● Inside View 1



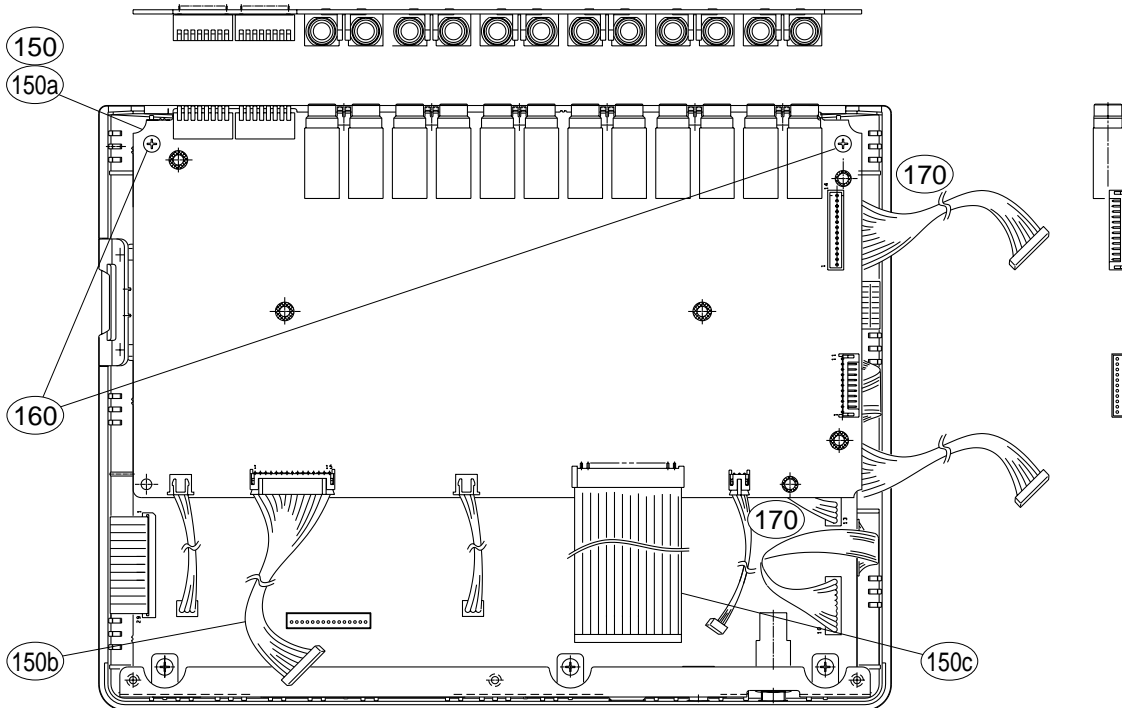
● InsideView 2



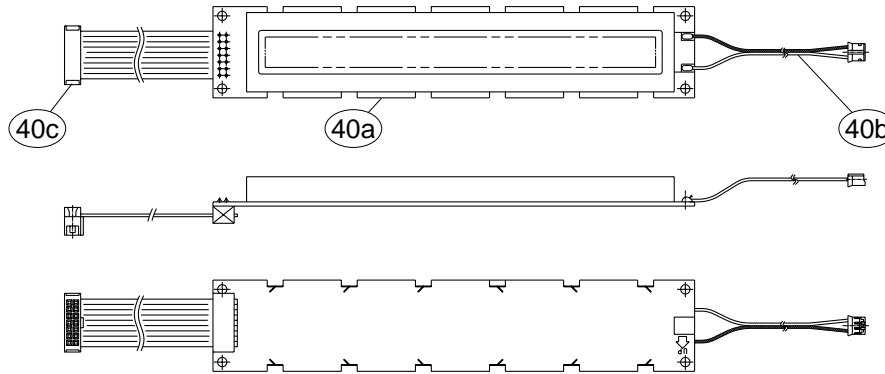
● DM Circuit Board Assembly



● JK Circuit Board Assembly



● LCD Assembly



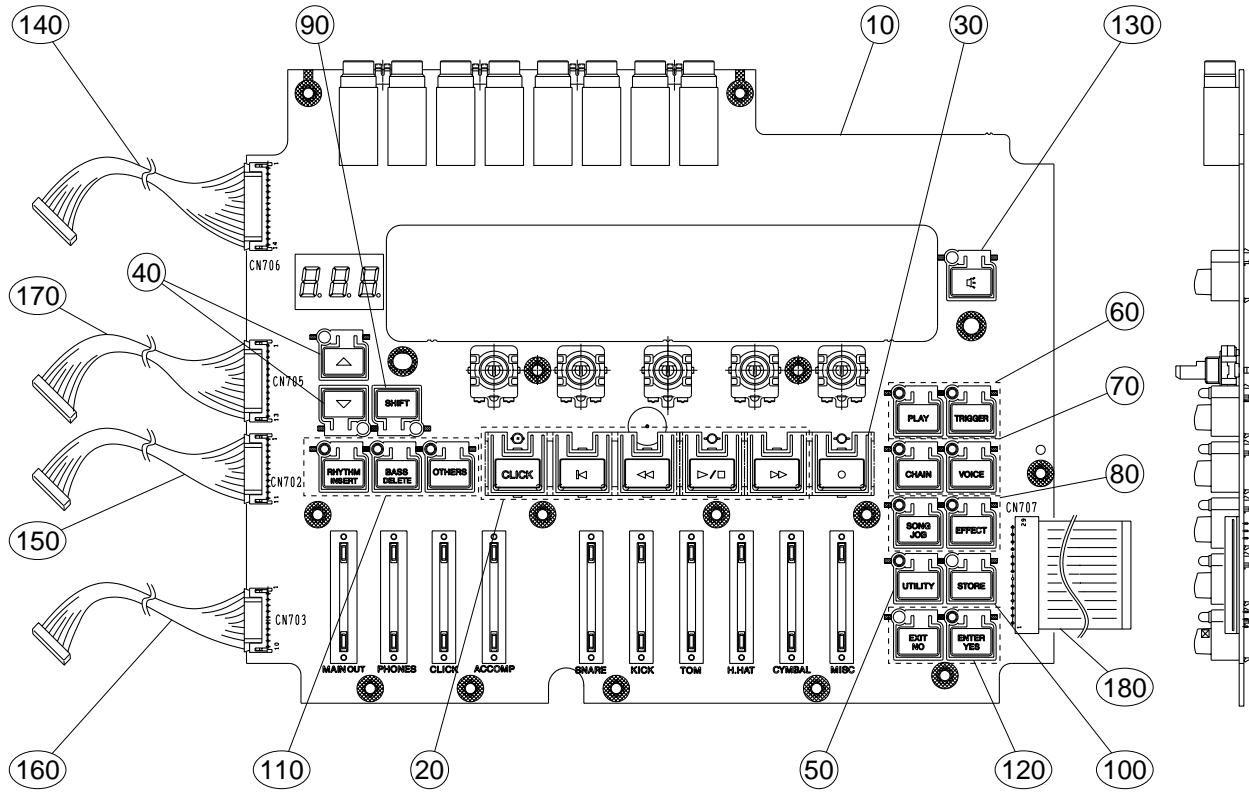
REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
		OVERALL ASSEMBLY		DTXTREME		
	--	Overall Assembly		(V618890)		
* 10	V6193700	Top Case				
20	--	Circuit Board Assembly	PN	(V619670)		
* 30	EP600250	Bind Head Tapping Screw-B	3.0X8 MFZN2Y		14	01
* 40	V6196100	LCD Assembly	LCD			
* 40a	V3624400	LCD	DMC40202NB-LY-AQ			
* 40b	V7080900	Connector Assembly	C&C 3P L=100			
* 40c	V6183200	Connector Assembly	HIF 14P L=90			
* 50	V6193500	Holder, LCD				
60	EP600250	Bind Head Tapping Screw-B	3.0X8 MFZN2Y			01
* 70	V6193600	PCB Spacer, PN	A			
80	EP600250	Bind Head Tapping Screw-B	3.0X8 MFZN2Y			01
90	--	Circuit Board Assembly	DM	(V619320)		
* 90a	V6185000	Circuit Board	DM	(XY926B0)		
* 90b	V6196500	Stay, PH				
90c	VF705700	Button (P) Gray				01
90d	V6196000	PCB Holder	3M61-30		4	
* 90e	V6337900	Connector Assembly	C&C 3P L=60		3	
100	EP600250	Bind Head Tapping Screw-B	3.0X8 MFZN2Y		2	01
* 110	V6192800	PCB Spacer, DM	B		2	
120	EP600250	Bind Head Tapping Screw-B	3.0X8 MFZN2Y		2	01
* 130	V6193000	Front Stay				
140	EP600250	Bind Head Tapping Screw-B	3.0X8 MFZN2Y		3	01
150	--	Circuit Board Assembly	JK	(V619050)		
* 150a	V6185100	Circuit Board	JK	(XY927B0)		
* 150b	V7422600	Connector Assembly	C&C 15P L=105			
* 150c	MF131070	Connector Assembly	31 70mm P=1.25			
160	EP600250	Bind Head Tapping Screw-B	3.0X8 MFZN2Y		2	01
170	VV104600	Cord Holder	CV-100		2	01
* 180	V6190200	Rear Panel				
190	EP600230	Bind Head Tapping Screw-B	3.0X6 MFZN2BL		1	01
200	EP630220	Bind Head Tapping Screw-P	3.0X8 MFZN2BL		6	01
210	VC407100	Cord Column				02
220	EP630220	Bind Head Tapping Screw-P	3.0X8 MFZN2BL			01
* 230	V6189800	Bottom Case				
240	EP600230	Bind Head Tapping Screw-B	3.0X6 MFZN2BL		7	01
250	VU859300	Leg	SR200		4	01
* 260	V6193800	LCD Panel				
270	V2647700	Knob	ENCODER	Data Control knobs	5	03
280	VF008700	Knob Black/Red	Slide	MAIN OUT, PHONES	2	02
290	VE037600	Knob Black	Slide	CLICK, ACCOMP REVERB, SNERE, KICK, TOM, HI-HAT, CYMBAL, MISC	8	02
300	EP630220	Bind Head Tapping Screw-P	3.0X8 MFZN2BL		2	01
		ACCESSORIES				
⚠	VU113800	AC Adapter	PA-5C J	J		09
⚠	VU113700	AC Adapter	PA-5C U/C	UC		09
⚠	VU113600	AC Adapter	PA-5C E	H		09

*: New parts

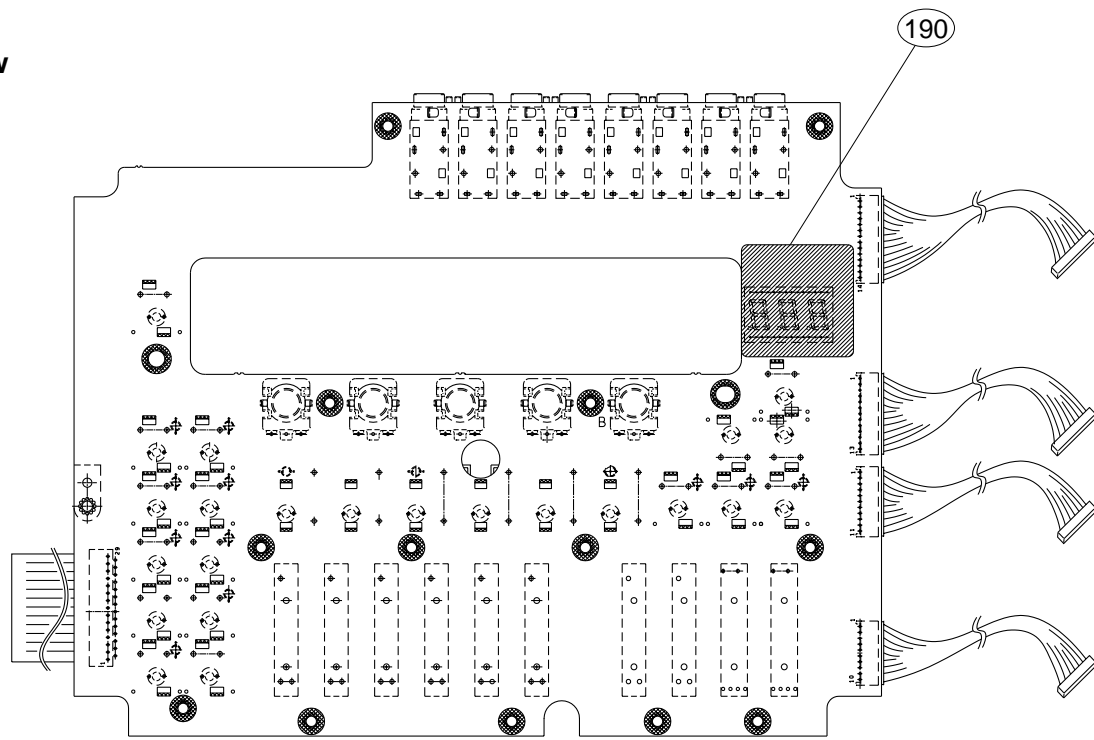
RANK: Japan only

PN CIRCUIT BOARD ASSEMBLY

● Front View



● Rear View



REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
		CIRCUIT BOARD ASSEMBLY		DTXTREME		
	--	Circuit Board Assembly	PN	(V619670)		
* 10	V6185200	Circuit Board	PN	(XY928B0)		
* 20	V6194400	Knob	Switch	CLICK, ◀, ◀◀, ▶, ▶▶		
* 30	V6194500	Knob	Switch	●		
* 40	V6194600	Button		Page ▲, Page ▼	2	
* 50	V6194700	Button		UTILITY		
* 60	V6194800	Button		PLAY, TRIGGER		
* 70	V6194900	Button		CHAIN, VOICE		
* 80	V6195000	Button		SONG/JOB, EFFECT		
* 90	V6195100	Button		SHIFT		
* 100	V6195200	Button		STORE		
* 110	V6195300	Button		RHYTHM INSERT, BASS DELETE, OTHERS		
* 120	V6195400	Button		EXIT NO, ENTER YES		
* 130	V6346200	Button		☑: Sound		
* 140	V6182900	Connector Assembly	C&C 14P L=100			
* 150	V6182800	Connector Assembly	C&C 11P L=120			
* 160	V6182700	Connector Assembly	C&C 10P L=110			
* 170	V6182600	Connector Assembly	C&C 13P L=100			
* 180	MF129060	Connector Assembly	29 60mm P=1.25			
* 190	V6196200	Insulation Sheet				

*: New parts

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■ ELECTRICAL PARTS

REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
		ELECTRICAL PARTS		DTXTREME		
*	V6185200	Circuit Board	PN	(XY928C0)		
*	V6185000	Circuit Board	DM	(XY926B0)		
*	V6185100	Circuit Board	JACK	(XY927C0)		
*	V6185200	Circuit Board	PN	(XY928C0)		
10	V3605300	Terminal	GND			04
20	VT857100	LED Spacer	L			03
C0701	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
C0702	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
C0703	UF037100	Electrolytic Cap. (chip)	10 16V			01
C0704	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
-0709	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
C0710	UF037100	Electrolytic Cap. (chip)	10 16V			01
C0711	UF037100	Electrolytic Cap. (chip)	10 16V			01
C0712	UX062220	Ceramic Capacitor (chip)	220P 50V J			
C0713	UX062220	Ceramic Capacitor (chip)	220P 50V J			
C0714	UF037220	Electrolytic Cap. (chip)	22 16V			01
C0715	UF037220	Electrolytic Cap. (chip)	22 16V			01
C0716	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
C0717	UX061220	Ceramic Capacitor (chip)	22P 50V J			
C0718	UX061220	Ceramic Capacitor (chip)	22P 50V J			
C0719	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
C0720	UF037100	Electrolytic Cap. (chip)	10 16V			01
C0721	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
C0722	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
C0723	UF037100	Electrolytic Cap. (chip)	10 16V			01
C0724	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
C0725	UX063470	Ceramic Capacitor (chip)	4700P 50V K			
-0730	UX063470	Ceramic Capacitor (chip)	4700P 50V K			
C0731	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
-0736	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
C0737	UF037100	Electrolytic Cap. (chip)	10 16V			01
-0740	UF037100	Electrolytic Cap. (chip)	10 16V			01
C0741	UX062220	Ceramic Capacitor (chip)	220P 50V J			
-0744	UX062220	Ceramic Capacitor (chip)	220P 50V J			
C0745	UF337100	Electrolytic Cap. (chip)	10 16V 4.5MML			01
C0746	UF037100	Electrolytic Cap. (chip)	10 16V			01
C0747	UF337100	Electrolytic Cap. (chip)	10 16V 4.5MML			01
C0748	UF037100	Electrolytic Cap. (chip)	10 16V			01
C0749	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
C0751	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
-0807	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
CN702	VV068500	Connector Base Post	M2426XXR 11P SE			
CN703	VV068400	Connector Base Post	M2426XXR 10P SE			01
CN705	VV068700	Connector Base Post	M2426XXR 13P SE			
CN706	VV068800	Connector Base Post	M2426XXR 14P SE			01
CN707	VQ045800	Connector , FFC	52044 29P SE			
DA701	VZ182400	Diode Array	DAN202K T146			01
-712	VZ182400	Diode Array	DAN202K T146			01
EC701	VR101400	Encoder	EC16B24204=15	Data control knobs		03
-705	VR101400	Encoder	EC16B24204=15	Data control knobs		03
IC701	XL342A00	IC	HD74HC374FPEL	D-FF		03
IC702	XL342A00	IC	HD74HC374FPEL	D-FF		03
IC703	XL342A00	IC	HD74HC374FPEL	D-FF		03
IC704	XL342A00	IC	HD74HC374FPEL	D-FF		03
IC705	XL342A00	IC	HD74HC374FPEL	D-FF		03
IC706	XS720A00	IC	TC74HC245AF	TRANSCIVER		03
IC707	XL342A00	IC	HD74HC374FPEL	D-FF		03
IC708	XF291A00	IC	UPC4570G2	OP AMP		03
IC709	XE518A00	IC	UPC4574G2	OP AMP		03
JK701	VS056400	Phone Jack	HLJ7101-01-	OUTPUT L/MONO, R,		01
-708	VS056400	Phone Jack	HLJ7101-01-	INDIVIDUAL OUT PUT 1-6		01
L0701	VS740100	Chip Inductance	BLM21B751S 2125			03
-0708	VS740100	Chip Inductance	BLM21B751S 2125			03
LD701	V5262500	LED Display	SL-1323-20H	LED display		
LD702	V6536600	GREEN	L-1154GD-TNR5/9-90	PLAY, TRIGGER, CHAIN, VOICE,		
-712	V6536600	LED	L-1154GD-TNR5/9-90	SONG JOB, EFFECT, UTILITY,		
				ENTER YES, RHYTHM INSERT,		
				BASS DELETE, OTHERS		
LD713	VZ059800	LED Red/Green	SLP-581D-37	CLICK		02
LD714	V6536600	GREEN	L-1154GD-TNR5/9-90	▶/■		
LD715	V6536700	LED	L-1154ID-TNR5/9-90	●		
R0701	RG005820	Carbon Resistor (chip)	820 0.1 J			
-0724	RG005820	Carbon Resistor (chip)	820 0.1 J			

*: New parts

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REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
* R0725	RG005560	Carbon Resistor (chip)	560 0.1 J			
* -0735	RG005560	Carbon Resistor (chip)	560 0.1 J			
* R0736	RG205180	Carbon Resistor (chip)	180 1/4 J			
* R0737	RG005560	Carbon Resistor (chip)	560 0.1 J			
* R0738	RG005560	Carbon Resistor (chip)	560 0.1 J			
* R0739	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* -0744	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* R0745	RG008100	Carbon Resistor (chip)	100K 0.1 J			
* R0746	RG008100	Carbon Resistor (chip)	100K 0.1 J			
* R0747	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
* R0748	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
* R0749	RG006470	Carbon Resistor (chip)	4.7K 0.1 J			
* R0750	RG006470	Carbon Resistor (chip)	4.7K 0.1 J			
* R0751	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
* R0752	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
* R0753	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* R0754	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* R0755	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
* R0756	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
* R0757	RG008100	Carbon Resistor (chip)	100K 0.1 J			
* -0760	RG008100	Carbon Resistor (chip)	100K 0.1 J			
* R0761	RG006470	Carbon Resistor (chip)	4.7K 0.1 J			
* -0768	RG006470	Carbon Resistor (chip)	4.7K 0.1 J			
* R0769	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
* -0772	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
* R0773	RG005560	Carbon Resistor (chip)	560 0.1 J			
SW701	VZ085500	Tact Switch	SKQNAM004A	PLAY, CHAIN, SONG JOB, UTILITY, TRIGGER, VOICE, EFFECT, STORE, EXIT NO, █; SHIFT, ►, ◄, ENTER YES, ●, ►/■, CLICK, , PAGE ▲, RHYTHM INSERT, OTHERS, ◄, PAGE ▼, BASS DELETE	01	
-723	VZ085500	Tact Switch	SKQNAM004A		01	
TR701	VD303700	Transistor	2SC3326 A,B TE85R			01
TR702	VD303700	Transistor	2SC3326 A,B TE85R			01
VR701	VL453300	Slide Variable Resistor	A 10.0K RS30112A9	MAIN OUT VOL. PHONES VOL. CLICK, ACCOMP REVERB, SNARE, KICK, TOM, HI-HAT, CYMBAL, MISC		03
VR702	VL453300	Slide Variable Resistor	A 10.0K RS30112A9			03
VR703	VH335400	Slide Variable Resistor	B 10K RS30111A9			03
-710	VH335400	Slide Variable Resistor	B 10K RS30111A9			03
* -	V6185000	Circuit Board	DM	(XY926B0)		04
	V3605300	Terminal	GND			
	-	Plate, Regulator		(V619310)		
	V6774700	Pan Head Screw	SP 3.0X10 MFZN2Y			01
	VK863100	IC Socket	DICF-42CS-E			03
	VS246400	Lithium Battery	CR2450			03
	VS246300	Battery Holder	CR2450BH			03
* BT001	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0001	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0002	UX064100	Ceramic Capacitor (chip)	0.0100 50V K			
* -0005	UX064100	Ceramic Capacitor (chip)	0.0100 50V K			
* C0006	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0007	UX062100	Ceramic Capacitor (chip)	100P 50V J			
* C0008	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* -0014	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0015	UX062100	Ceramic Capacitor (chip)	100P 50V J			
* C0016	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0017	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0018	UF217470	Electrolytic Cap.-BP (chip)	47 6.3V UWPOJ4			
* C0019	UX064100	Ceramic Capacitor (chip)	0.0100 50V K			
* C0020	UX064100	Ceramic Capacitor (chip)	0.0100 50V K			
* C0021	UF037100	Electrolytic Cap. (chip)	10 16V			01
* C0022	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* -0024	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0025	UF037100	Electrolytic Cap. (chip)	10 16V			01
* C0026	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0027	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0028	UF037100	Electrolytic Cap. (chip)	10 16V			01
* C0029	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0030	UX061120	Ceramic Capacitor (chip)	12P 50V J			
* C0031	UX061120	Ceramic Capacitor (chip)	12P 50V J			
* C0032	UF037100	Electrolytic Cap. (chip)	10 16V			01
* C0036	UX062100	Ceramic Capacitor (chip)	100P 50V J			
* C0037	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			

*: New parts

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REF NO.	PART NO.	DESCRIPTION	REMARKS	QTY	RANK
C0038	UF037100	Electrolytic Cap. (chip)	10 16V		01
* C0039	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
* -0044	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
C0045	VD989700	Tantalum Cap.	4.70 16V M		03
* C0046	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
* C0048	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
C0101	UF037100	Electrolytic Cap. (chip)	10 16V		01
* C0102	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
C0103	UF037100	Electrolytic Cap. (chip)	10 16V		01
* C0104	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
C0105	UF037100	Electrolytic Cap. (chip)	10 16V		01
* C0106	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
* C0107	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
C0108	UF037100	Electrolytic Cap. (chip)	10 16V		01
* C0109	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
* C0110	UX064100	Ceramic Capacitor (chip)	0.0100 50V K		
* C0111	UX064100	Ceramic Capacitor (chip)	0.0100 50V K		
* C0112	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
C0113	UF037100	Electrolytic Cap. (chip)	10 16V		01
* C0114	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
* C0115	UX064100	Ceramic Capacitor (chip)	0.0100 50V K		
* C0116	UX064100	Ceramic Capacitor (chip)	0.0100 50V K		
C0117	UF037100	Electrolytic Cap. (chip)	10 16V		01
* C0118	UX064100	Ceramic Capacitor (chip)	0.0100 50V K		
* -0122	UX064100	Ceramic Capacitor (chip)	0.0100 50V K		
* C0123	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
* C0124	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
C0125	UF037100	Electrolytic Cap. (chip)	10 16V		01
C0126	UF037100	Electrolytic Cap. (chip)	10 16V		01
* C0127	UX061120	Ceramic Capacitor (chip)	12P 50V J		
* C0128	UX061120	Ceramic Capacitor (chip)	12P 50V J		
* C0129	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
* C0130	UX062100	Ceramic Capacitor (chip)	100P 50V J		
* C0131	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
* -0138	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
C0139	UF037100	Electrolytic Cap. (chip)	10 16V		01
C0144	UF037100	Electrolytic Cap. (chip)	10 16V		01
* C0145	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
C0146	UF037100	Electrolytic Cap. (chip)	10 16V		01
* C0147	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
C0148	UF037100	Electrolytic Cap. (chip)	10 16V		01
C0149	UF037100	Electrolytic Cap. (chip)	10 16V		01
* C0150	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
* C0151	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
* C0152	UX061330	Ceramic Capacitor (chip)	33P 50V J		
* -0160	UX061330	Ceramic Capacitor (chip)	33P 50V J		
* C0201	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
* -0206	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
* C0207	UX064100	Ceramic Capacitor (chip)	0.0100 50V K		
* -0216	UX064100	Ceramic Capacitor (chip)	0.0100 50V K		
* C0217	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
* -0221	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
* C0222	UX061470	Ceramic Capacitor (chip)	47P 50V J		
C0223	UR849100	Electrolytic Cap.	1000 25.0V		01
* C0224	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
* -0227	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
C0228	UF148100	Electrolytic Cap. (chip)	100 25V UUR1E1		01
C0229	UF037100	Electrolytic Cap. (chip)	10 16V		01
* C0230	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
* C0231	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
* C0232	UX064100	Ceramic Capacitor (chip)	0.0100 50V K		
* C0233	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
* C0234	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
C0235	UF037100	Electrolytic Cap. (chip)	10 16V		01
C0236	UF037100	Electrolytic Cap. (chip)	10 16V		01
C0237	UF038100	Electrolytic Cap. (chip)	100 16V		01
C0238	UF037470	Electrolytic Cap. (chip)	47 16V		01
C0239	UF138470	Electrolytic Cap. (chip)	470 16V UUR1C4		02
* C0240	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
C0241	UF038100	Electrolytic Cap. (chip)	100 16V		01
C0242	V6990400	Capacitor.	100 16V 16SA100MTS		01
C0243	UF038100	Electrolytic Cap. (chip)	100 16V		01
* C0244	UX062100	Ceramic Capacitor (chip)	100P 50V J		
C0245	UF037100	Electrolytic Cap. (chip)	10 16V		01
* C0246	UX062100	Ceramic Capacitor (chip)	100P 50V J		

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REF NO.	PART NO.	DESCRIPTION	REMARKS	QTY	RANK
* C0247	UX062100	Ceramic Capacitor (chip)	100P 50V J		
C0248	UF037100	Electrolytic Cap. (chip)	10 16V		01
* C0249	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
* C0250	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
C0251	UF037100	Electrolytic Cap. (chip)	10 16V		01
C0252	UF037100	Electrolytic Cap. (chip)	10 16V		01
C0253	UF148100	Electrolytic Cap. (chip)	100 25V UUR1E1		01
* C0255	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
* C0256	UX062220	Ceramic Capacitor (chip)	220P 50V J		
* C0257	UX062220	Ceramic Capacitor (chip)	220P 50V J		
C0258	UF037100	Electrolytic Cap. (chip)	10 16V		01
C0260	UF037470	Electrolytic Cap. (chip)	47 16V		01
-0262	UF037470	Electrolytic Cap. (chip)	47 16V		01
* C0266	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
* C0267	UX063100	Ceramic Capacitor (chip)	1000P 50V K		
* C0268	UX063100	Ceramic Capacitor (chip)	1000P 50V K		
* C0270	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
* -0272	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
* C0273	UX061100	Ceramic Capacitor (chip)	10P 50V D		
* C0274	UX061100	Ceramic Capacitor (chip)	10P 50V D		
C0275	UF065100	Electrolytic Cap. (chip)	0.1 50V		01
C0276	UF065100	Electrolytic Cap. (chip)	0.1 50V		01
* C0277	UX061390	Ceramic Capacitor (chip)	39P 50V J		
* C0278	UX061390	Ceramic Capacitor (chip)	39P 50V J		
* C0279	UX062220	Ceramic Capacitor (chip)	220P 50V J		
* C0280	UX062220	Ceramic Capacitor (chip)	220P 50V J		
C0281	UF066100	Electrolytic Cap. (chip)	1 50V		01
C0282	UF066100	Electrolytic Cap. (chip)	1 50V		01
* C0283	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
* C0284	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
C0285	UF037470	Electrolytic Cap. (chip)	47 16V		01
* C0901	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
* -0969	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
CN002	VV067500	Connector Base Post	M2426XX 15P TE		01
* CN004	V6526300	Receptacle	CH87142V100 14P		
CN005	VV067700	Connector Base Post	M2426XXR 3P SE		01
CN006	VQ047900	FFC Connector	52045 29P TE		03
* CN102	VV067300	Connector Base Post	M2426XX 13P TE		
CN103	VQ048000	FFC Connector	52045 31P TE		02
CN202	VV067000	Connector Base Post	M2426XX 10P TE		01
CN203	V3962800	Connector	CN015R-3013-0		05
* CN204	V3765500	Connector Base Post	M24185XXR 3P SE		
CN205	V3764100	Connector Base Post	M24185XX 3P TE		
CN206	V3764100	Connector Base Post	M24185XX 3P TE		
D0001	VV925900	Diode	RLS-73 TE-11		01
-0003	VV925900	Diode	RLS-73 TE-11		01
D0004	VT332900	Diode	1SS355 TE-17		01
D0201	VZ016600	Diode	D3FP3		03
D0202	VS201100	Diode	D1F60		01
-0204	VS201100	Diode	D1F60		01
D0205	VZ016600	Diode	D3FP3		03
D0206	VT332900	Diode	1SS355 TE-17		01
D0207	VB493900	Diode	MA221		01
D0208	VB493900	Diode	MA221		01
DA001	V3749000	Diode Array	DA204K 2A X2 T146		01
#REF!	V3749000	Diode Array	DA204K 2A X2 T146		01
EM001	FZ006970	LC Filter	LS MT Y223NB		02
EM002	VR193800	LC Filter	STF-104ZB-TBM		01
EM101	VR193800	LC Filter	STF-104ZB-TBM		01
EM201	VR193800	LC Filter	STF-104ZB-TBM		01
-205	VR193800	LC Filter	STF-104ZB-TBM		01
* IC001	XW832A00	IC	HD6412352	CPU H8S-2352	
* IC002	XZ178100	IC		MAIN ROM 16M	
IC004	XV976A00	IC	M5M51008CFP-70H	SRAM 1M	07
IC005	XV976A00	IC	M5M51008CFP-70H	SRAM 1M	07
IC006	XR967A00	IC	MB3790PF	ASSP	05
IC007	XW104A00	IC	MM74HC14SJX	INVERTER	01
IC008	XY537A00	IC	TC74VHC32F(EL)	OR	01
IC009	XI348A00	IC	SC7SU04FEL	INVERTER	01
IC010	XS720A00	IC	TC74HC245AF	TRANSCIVER	03
IC011	XL342A00	IC	HD74HC374FPFEL	D-FF	03
IC012	XY153A00	IC	MM74HC74ASJX	D-FF	01
IC013	XL342A00	IC	HD74HC374FPFEL	D-FF	03
IC014	XM588A00	IC	TC7S32F	OR	01
IC015	XU073A00	IC	SN75C1168NSR	LINE DRIVER	05

*: New parts

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REF NO.	PART NO.	DESCRIPTION	REMARKS	QTY	RANK	
IC017	XY537A00	IC	TC74VHC32F(EL)		OR	01
IC018	XW104A00	IC	MM74HC14SJX		INVERTER	01
IC019	VN686000	Photo Coupler	PC410T			04
IC020	XL093A00	IC	HD74HC08FPEL		AND	01
IC101	XW832A00	IC	HD6412352		CPU H8S-2352	
IC102	XZ179100	IC			SUB ROM 8M	
IC103	XV411A00	IC	W24258S-70LE-EL10		SRAM 256K	07
IC104	XV411A00	IC	W24258S-70LE-EL10		SRAM 256K	07
IC105	XS725A00	IC	TC203C760HF-002		SWP30B	19
IC106	XZ180100	IC			MASK ROM 64M W1A	
IC107	XZ181100	IC			MASK ROM 64M W1B	
IC108	XZ182100	IC			WROM 32M	
IC109	XZ183100	IC	OTP#1011W2A		WROM 32M	
IC112	XV077A00	IC	OTP#1011W2B		DRAM 4M	07
IC113	XS048A00	IC	MSM5114260C-60JS		DEMULTIPLEXER	03
IC114	XV932A00	IC	HD74LVC139FPEL		DRAM 16M	12
IC115	XV932A00	IC	MSM5118160D-60J		DRAM 16M	12
IC201	XS516A00	IC	MSM5118160D-60J		REGULATOR +3.3V	03
IC202	XV242A00	IC	UPC2933T-E1		TRANSCEIVER	03
IC203	XT800A00	IC	TC74VHCT245AF		BUFFER	03
IC204	XY254A00	IC	TC74VHC244F		D-FF	03
IC205	XT514A00	IC	TC74VHC273F(EL)		REGULATOR +5V	05
IC206	XF291A00	IC	SI-8050S(LF1103)		OP AMP	03
IC207	XM332A00	IC	UPC4570G2		INVERTER	01
IC208	XY537A00	IC	TC74VHC04F		OR	01
IC209	XS720A00	IC	TC74VHC32F(EL)		TRANSCEIVER	03
IC210	XS720A00	IC	TC74HC245AF		TRANSCEIVER	03
IC211	XW104A00	IC	TC74HC245AF		INVERTER	01
IC212	XW104A00	IC	MM74HC14SJX		INVERTER	01
IC213	XY153A00	IC	MM74HC14SJX		D-FF	01
IC214	XY153A00	IC	MM74HC74ASJX		D-FF	01
IC215	XY153A00	IC	MM74HC74ASJX		D-FF	01
IC216	XY153A00	IC	MM74HC74ASJX		D-FF	01
IC217	XY153A00	IC	MM74HC74ASJX		D-FF	01
IC218	XT441A00	IC	UPC2909T-E1		REGULATOR +9V	03
IC220	XQ138A00	IC	NJM4556AMT1		OP AMP	03
IC221	XQ173A00	IC	TC7W32FU(TE12L)		OR	01
IC222	XF291A00	IC	UPC4570G2		OP AMP	03
JK001	V6527600	Phone Jack	HTJ-064-04K		HI-HAT CONTROL	
JK002	VS056300	Phone Jack	HLJ7001-01-		FOOT SW	01
JK003	V6525800	DIN Connector	DINJACK LNB0509B-8		TO HOST	
JK004	VI466400	DIN Connector	3 DIN YKF51-5046		MIDI IN, OUT, THRU	04
JK201	V6177200	Connector	HTJ-020-05A		DC IN 12V	
JK202	V6547700	Phone Jack	HTJ-064-12D		PHONES	
JK203	V6526000	Phone Jack	ST LJE0361-5		AUX IN	
L0001	VS740100	Chip Inductance	BLM21B751S 2125			03
-0004	VS740100	Chip Inductance	BLM21B751S 2125			03
L0005	VL139800	Chip Solid Inductance	BLM31A700SPT 70ohm			01
-0008	VL139800	Chip Solid Inductance	BLM31A700SPT 70ohm			01
L0010	VL139800	Chip Solid Inductance	BLM31A700SPT 70ohm			01
L0011	VS740100	Chip Inductance	BLM21B751S 2125			03
-0016	VS740100	Chip Inductance	BLM21B751S 2125			03
L0017	VL139800	Chip Solid Inductance	BLM31A700SPT 70ohm			01
-0021	VL139800	Chip Solid Inductance	BLM31A700SPT 70ohm			01
L0025	VS740100	Chip Inductance	BLM21B751S 2125			03
L0026	VL139800	Chip Solid Inductance	BLM31A700SPT 70ohm			01
-0036	VL139800	Chip Solid Inductance	BLM31A700SPT 70ohm			01
L0039	VL139800	Chip Solid Inductance	BLM31A700SPT 70ohm			01
-0063	VL139800	Chip Solid Inductance	BLM31A700SPT 70ohm			01
L0101	VL139800	Chip Solid Inductance	BLM31A700SPT 70ohm			01
-0110	VL139800	Chip Solid Inductance	BLM31A700SPT 70ohm			01
L0201	VG238200	LC Filter	PLT2003C			04
L0202	V6525500	Coil	THA02-180HZ 180U			
L0203	VS740100	Chip Inductance	BLM21B751S 2125			03
-0206	VS740100	Chip Inductance	BLM21B751S 2125			03
R0001	RG007100	Carbon Resistor (chip)	10K 0.1 J			
R0003	RG004560	Carbon Resistor (chip)	56 0.1 J			
R0004	RG005220	Carbon Resistor (chip)	220 0.1 J			
R0005	RG008220	Carbon Resistor (chip)	220K 0.1 J			
R0006	RG004560	Carbon Resistor (chip)	56 0.1 J			
R0007	RG007120	Carbon Resistor (chip)	12K 0.1 J			
R0008	RG005100	Carbon Resistor (chip)	100 0.1 J			
R0009	RG005100	Carbon Resistor (chip)	100 0.1 J			
R0010	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
R0011	RG006270	Carbon Resistor (chip)	2.7K 0.1 J			

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REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
* R0013	RG005100	Carbon Resistor (chip)	100 0.1 J			
* R0014	RG005100	Carbon Resistor (chip)	100 0.1 J			
* R0015	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* R0016	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
* R0017	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* R0018	RG005220	Carbon Resistor (chip)	220 0.1 J			
* -0024	RG005220	Carbon Resistor (chip)	220 0.1 J			
* R0025	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* R0026	RG005100	Carbon Resistor (chip)	100 0.1 J			
* R0027	RG005100	Carbon Resistor (chip)	100 0.1 J			
* R0028	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
* R0029	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* R0030	RG005100	Carbon Resistor (chip)	100 0.1 J			
* R0031	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* R0032	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
* -0036	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
* R0037	RG005100	Carbon Resistor (chip)	100 0.1 J			
* R0038	RG005100	Carbon Resistor (chip)	100 0.1 J			
* R0039	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* R0040	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* R0041	RG005100	Carbon Resistor (chip)	100 0.1 J			
* R0042	RG005100	Carbon Resistor (chip)	100 0.1 J			
* R0043	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
* R0044	RG005100	Carbon Resistor (chip)	100 0.1 J			
* -0046	RG005100	Carbon Resistor (chip)	100 0.1 J			
* R0048	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* R0049	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* R0050	RG005100	Carbon Resistor (chip)	100 0.1 J			
* -0052	RG005100	Carbon Resistor (chip)	100 0.1 J			
* R0054	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* R0055	RG005100	Carbon Resistor (chip)	100 0.1 J			
* R0056	RG005100	Carbon Resistor (chip)	100 0.1 J			
* R0057	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* -0064	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* R0065	RG005100	Carbon Resistor (chip)	100 0.1 J			
* R0066	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* -0068	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* R0069	RG005100	Carbon Resistor (chip)	100 0.1 J			
* R0070	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* R0071	RG005100	Carbon Resistor (chip)	100 0.1 J			
* R0072	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* R0073	RG005100	Carbon Resistor (chip)	100 0.1 J			
* R0074	RG005100	Carbon Resistor (chip)	100 0.1 J			
* R0076	RG005100	Carbon Resistor (chip)	100 0.1 J			
* R0077	RG005100	Carbon Resistor (chip)	100 0.1 J			
* R0078	RG204150	Carbon Resistor (chip)	15 1/4 J			
* R0079	RG204150	Carbon Resistor (chip)	15 1/4 J			
* R0082	RG000000	Carbon Resistor (chip)	0 0.1 J			
* R0084	RG000000	Carbon Resistor (chip)	0 0.1 J			
* R0089	RG000000	Carbon Resistor (chip)	0 0.1 J			
* R0090	RG006470	Carbon Resistor (chip)	4.7K 0.1 J			
* R0091	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
* R0092	RG005100	Carbon Resistor (chip)	100 0.1 J			
* R0093	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* R0096	RG006220	Carbon Resistor (chip)	2.2K 0.1 J			
* R0101	RG005100	Carbon Resistor (chip)	100 0.1 J			
* -0106	RG005100	Carbon Resistor (chip)	100 0.1 J			
* R0107	RG007470	Carbon Resistor (chip)	47K 0.1 J			
* R0108	RG005100	Carbon Resistor (chip)	100 0.1 J			
* R0109	RG006470	Carbon Resistor (chip)	4.7K 0.1 J			
* R0110	RG006470	Carbon Resistor (chip)	4.7K 0.1 J			
* R0111	RG005100	Carbon Resistor (chip)	100 0.1 J			
* R0112	RG006470	Carbon Resistor (chip)	4.7K 0.1 J			
* R0113	RG005100	Carbon Resistor (chip)	100 0.1 J			
* R0114	RG006470	Carbon Resistor (chip)	4.7K 0.1 J			
* R0115	RG005100	Carbon Resistor (chip)	100 0.1 J			
* R0116	RG006470	Carbon Resistor (chip)	4.7K 0.1 J			
* -0119	RG006470	Carbon Resistor (chip)	4.7K 0.1 J			
* R0120	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* R0121	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* R0122	RG005100	Carbon Resistor (chip)	100 0.1 J			
* R0123	RG004680	Carbon Resistor (chip)	68 0.1 J			
* R0124	RG004680	Carbon Resistor (chip)	68 0.1 J			
* R0125	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* -0127	RG007100	Carbon Resistor (chip)	10K 0.1 J			

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REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
*	R0128	RG004680	Carbon Resistor (chip)	68 0.1 J		
*	R0129	RG004680	Carbon Resistor (chip)	68 0.1 J		
*	R0130	RG007100	Carbon Resistor (chip)	10K 0.1 J		
*	R0131	RG007100	Carbon Resistor (chip)	10K 0.1 J		
*	R0132	RG000000	Carbon Resistor (chip)	0 0.1 J		
*	-0134	RG000000	Carbon Resistor (chip)	0 0.1 J		
*	R0138	RG005100	Carbon Resistor (chip)	100 0.1 J		
*	R0139	RG007100	Carbon Resistor (chip)	10K 0.1 J		
*	R0140	RG005100	Carbon Resistor (chip)	100 0.1 J		
*	R0141	RG007100	Carbon Resistor (chip)	10K 0.1 J		
*	R0201	RG007100	Carbon Resistor (chip)	10K 0.1 J		
*	-0210	RG007100	Carbon Resistor (chip)	10K 0.1 J		
*	R0211	RG008100	Carbon Resistor (chip)	100K 0.1 J		
*	-0220	RG008100	Carbon Resistor (chip)	100K 0.1 J		
*	R0221	RG006100	Carbon Resistor (chip)	1.0K 0.1 J		
*	-0230	RG006100	Carbon Resistor (chip)	1.0K 0.1 J		
*	R0231	RG005100	Carbon Resistor (chip)	100 0.1 J		
*	R0232	RG006330	Carbon Resistor (chip)	3.3K 0.1 J		
*	R0233	RG006330	Carbon Resistor (chip)	3.3K 0.1 J		
*	R0234	RG005740	Carbon Resistor (chip)	470 0.1 J		
*	R0235	RG006560	Carbon Resistor (chip)	5.6K 0.1 J		
*	R0236	RG006560	Carbon Resistor (chip)	5.6K 0.1 J		
*	R0237	RG007100	Carbon Resistor (chip)	10K 0.1 J		
*	R0238	RG004330	Carbon Resistor (chip)	33 0.1 J		
*	R0240	RG007100	Carbon Resistor (chip)	10K 0.1 J		
*	R0241	RG007100	Carbon Resistor (chip)	10K 0.1 J		
*	R0242	RG204100	Carbon Resistor (chip)	10 1/4 J		
*	R0243	RG205150	Carbon Resistor (chip)	150 1/4 J		
*	R0244	RG007100	Carbon Resistor (chip)	10K 0.1 J		
*	R0245	RG204680	Carbon Resistor (chip)	68 1/4 J		
*	R0246	RG008470	Carbon Resistor (chip)	470K 0.1 J		
*	R0247	RG007100	Carbon Resistor (chip)	10K 0.1 J		
*	R0248	RG007470	Carbon Resistor (chip)	47K 0.1 J		
*	R0249	RG008470	Carbon Resistor (chip)	470K 0.1 J		
*	R0250	RG008100	Carbon Resistor (chip)	100K 0.1 J		
*	R0251	RG008470	Carbon Resistor (chip)	470K 0.1 J		
*	R0252	RG005100	Carbon Resistor (chip)	100 0.1 J		
*	-0254	RG005100	Carbon Resistor (chip)	100 0.1 J		
*	R0255	RG004680	Carbon Resistor (chip)	68 0.1 J		
*	R0256	RG004680	Carbon Resistor (chip)	68 0.1 J		
*	R0257	RG007100	Carbon Resistor (chip)	10K 0.1 J		
*	R0258	RG007100	Carbon Resistor (chip)	10K 0.1 J		
*	R0260	RG007100	Carbon Resistor (chip)	10K 0.1 J		
*	R0261	RG008100	Carbon Resistor (chip)	100K 0.1 J		
*	R0262	RG008100	Carbon Resistor (chip)	100K 0.1 J		
*	R0263	RG205470	Carbon Resistor (chip)	470 1/4 J		
*	R0264	RG005820	Carbon Resistor (chip)	820 0.1 J		
*	R0265	RG005820	Carbon Resistor (chip)	820 0.1 J		
*	R0266	RG007180	Carbon Resistor (chip)	18K 0.1 J		
*	R0267	RG007180	Carbon Resistor (chip)	18K 0.1 J		
*	R0268	RG007100	Carbon Resistor (chip)	10K 0.1 J		
*	R0269	RG007330	Carbon Resistor (chip)	33K 0.1 J		
*	R0272	RG204470	Carbon Resistor (chip)	47 1/4 J		
*	R0273	RG204470	Carbon Resistor (chip)	47 1/4 J		
*	R0274	RG200000	Carbon Resistor (chip)	0.0 1/4 J		
*	R0276	RG007100	Carbon Resistor (chip)	10K 0.1 J		
*	-0278	RG007100	Carbon Resistor (chip)	10K 0.1 J		
*	R0279	RG006100	Carbon Resistor (chip)	1.0K 0.1 J		
*	-0281	RG006100	Carbon Resistor (chip)	1.0K 0.1 J		
*	R0284	RG205470	Carbon Resistor (chip)	470 1/4 J		
*	R0285	RG008100	Carbon Resistor (chip)	100K 0.1 J		
*	R0287	RG009100	Carbon Resistor (chip)	1.0M 0.1 J		
*	R0288	RG009100	Carbon Resistor (chip)	1.0M 0.1 J		
*	R0289	RG007100	Carbon Resistor (chip)	10K 0.1 J		
*	R0290	RG007100	Carbon Resistor (chip)	10K 0.1 J		
*	R0291	RG009100	Carbon Resistor (chip)	1.0M 0.1 J		
*	R0292	RG009100	Carbon Resistor (chip)	1.0M 0.1 J		
*	R0293	RG007100	Carbon Resistor (chip)	10K 0.1 J		
*	R0294	RG007100	Carbon Resistor (chip)	10K 0.1 J		
*	R0295	RG006470	Carbon Resistor (chip)	4.7K 0.1 J		
*	R0296	RG006470	Carbon Resistor (chip)	4.7K 0.1 J		
*	R0297	RG007100	Carbon Resistor (chip)	10K 0.1 J		
*	R0298	RG007100	Carbon Resistor (chip)	10K 0.1 J		
*	RA001	RH047100	Resistor Array	10KX4		
*	-007	RH047100	Resistor Array	10KX4		

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REF NO.	PART NO.	DESCRIPTION	REMARKS	QTY	RANK
* RA008	RH045100	Resistor Array	100X4		
* -013	RH045100	Resistor Array	100X4		
* RA014	RH047100	Resistor Array	10KX4		
* RA015	RH045100	Resistor Array	100X4		
* RA016	RH045100	Resistor Array	100X4		
* RA017	RH047100	Resistor Array	10KX4		
* RA018	RH047100	Resistor Array	10KX4		
* RA019	RH045100	Resistor Array	100X4		
* RA020	RH045100	Resistor Array	100X4		
* RA021	RH047100	Resistor Array	10KX4		
* RA022	RH047100	Resistor Array	10KX4		
* RA023	RH045100	Resistor Array	100X4		
* RA024	RH045100	Resistor Array	100X4		
* RA025	RH047100	Resistor Array	10KX4		
* RA026	RH045100	Resistor Array	100X4		
* RA027	RH047100	Resistor Array	10KX4		
* RA101	RH045100	Resistor Array	100X4		
* -114	RH045100	Resistor Array	100X4		
* RA115	RH044680	Resistor Array	68X4		
* RA116	RH047100	Resistor Array	10KX4		
* RA117	RH045100	Resistor Array	100X4		
* RA118	RH047100	Resistor Array	10KX4		
* RA119	RH045100	Resistor Array	100X4		
* RA120	RH047100	Resistor Array	10KX4		
* RA121	RH045100	Resistor Array	100X4		
* RA122	RH047100	Resistor Array	10KX4		
* RA123	RH045100	Resistor Array	100X4		
* RA124	RH047100	Resistor Array	10KX4		
* RA125	RH045100	Resistor Array	100X4		
* RA126	RH047100	Resistor Array	10KX4		
* RA127	RH045100	Resistor Array	100X4		
* -133	RH045100	Resistor Array	100X4		
* RA134	RH047100	Resistor Array	10KX4		
* RA201	RH044680	Resistor Array	68X4		
* RA202	RH044680	Resistor Array	68X4		
* RA203	RH048100	Resistor Array	100KX4		
* RA204	RH048100	Resistor Array	100KX4		
* RA205	RH044680	Resistor Array	68X4		
* SW001	VN210700	Slide Switch	SSSF124-S06N-0	HOST SELECT	03
* SW201	V4577800	Push Switch	SDKLA10200	STANDBY/ON	
TR201	VV556400	Transistor	2SC2412K Q, R, S		01
TR202	VJ927200	Transistor	2SA1162 O,Y		01
TR203	VD303700	Transistor	2SC3326 A,B TE85R		01
-205	VD303700	Transistor	2SC3326 A,B TE85R		01
TR206	VJ927200	Transistor	2SA1162 O,Y		01
* VR001	V5878900	Micro Variable Resistor	10KA RK14J12A0	CONTRAST	
* VR201	V5878900	Micro Variable Resistor	10KA RK14J12A0	AUX IN VOL	
X0001	VQ274700	Quartz Crystal Unit	20.0M SMD-49		04
X0101	VV345500	Quartz Crystal Unit	DOC-49S5		05
X0102	VP864900	Quartz Crystal Unit	16M SMD-49		04
ZD201	VU172600	Zener Diode	UDZS 10B TE-17		
*	V6185100	Circuit Board	JACK	(XY927C0)	
*	V3605300	Terminal	GND		04
* C0301	UX063100	Ceramic Capacitor (chip)	1000P 50V K		
* -0316	UX063100	Ceramic Capacitor (chip)	1000P 50V K		
* C0317	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
* -0339	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
* C0340	UX062100	Ceramic Capacitor (chip)	100P 50V J		
* -0354	UX062100	Ceramic Capacitor (chip)	100P 50V J		
* C0355	UX035100	Ceramic Capacitor (chip)	0.1000 16V K		
* -0369	UX035100	Ceramic Capacitor (chip)	0.1000 16V K		
* C0370	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
* C0371	UX062100	Ceramic Capacitor (chip)	100P 50V J		
* C0372	UX062100	Ceramic Capacitor (chip)	100P 50V J		
* C0373	UX035100	Ceramic Capacitor (chip)	0.1000 16V K		
C0374	UF037100	Electrolytic Cap. (chip)	10 16V		01
C0376	UF037100	Electrolytic Cap. (chip)	10 16V		01
C0377	UF038100	Electrolytic Cap. (chip)	100 16V		01
* C0378	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
* -0390	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		
* C0391	UX035100	Ceramic Capacitor (chip)	0.1000 16V K		
* -0394	UX035100	Ceramic Capacitor (chip)	0.1000 16V K		
* C0397	UX035100	Ceramic Capacitor (chip)	0.1000 16V K		
* C0398	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z		

*: New parts

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REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
* -0400	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0403	UX063100	Ceramic Capacitor (chip)	1000P 50V K			
* C0404	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0405	UX064100	Ceramic Capacitor (chip)	0.0100 50V K			
* C0406	UX062470	Ceramic Capacitor (chip)	470P 50V J			
* C0407	UX064100	Ceramic Capacitor (chip)	0.0100 50V K			
* C0408	UX062470	Ceramic Capacitor (chip)	470P 50V J			
* C0409	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0410	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0411	UF037470	Ceramic Capacitor (chip)	47 16V			01
* C0412	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			01
* C0451	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* -0490	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0501	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* -0504	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0505	UF037100	Electrolytic Cap. (chip)	10 16V			01
* C0506	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0507	UF037100	Electrolytic Cap. (chip)	10 16V			01
* C0508	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0509	UF037100	Electrolytic Cap. (chip)	10 16V			01
* C0514	UF037470	Electrolytic Cap. (chip)	47 16V			01
* -0520	UF037470	Electrolytic Cap. (chip)	47 16V			01
* C0521	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0523	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0524	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0527	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0528	UF037470	Electrolytic Cap. (chip)	47 16V			01
* C0531	UF037470	Electrolytic Cap. (chip)	47 16V			01
* C0532	UF037470	Electrolytic Cap. (chip)	47 16V			01
* C0533	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0534	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0540	UF037470	Electrolytic Cap. (chip)	47 16V			01
* -0543	UF037470	Electrolytic Cap. (chip)	47 16V			01
* C0546	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* -0549	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0550	UF066100	Electrolytic Cap. (chip)	1 50V			01
* -0553	UF066100	Electrolytic Cap. (chip)	1 50V			01
* C0554	UF037470	Electrolytic Cap. (chip)	47 16V			01
* C0555	UX063100	Ceramic Capacitor (chip)	1000P 50V K			
* -0558	UX063100	Ceramic Capacitor (chip)	1000P 50V K			
* C0559	UX062150	Ceramic Capacitor (chip)	150P 50V J			
* -0562	UX062150	Ceramic Capacitor (chip)	150P 50V J			
* C0563	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0564	UX063680	Ceramic Capacitor (chip)	6800P 50V K			
* -0567	UX063680	Ceramic Capacitor (chip)	6800P 50V K			
* C0568	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* -0571	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0572	UX062100	Ceramic Capacitor (chip)	100P 50V J			
* -0575	UX062100	Ceramic Capacitor (chip)	100P 50V J			
* C0576	UF037100	Electrolytic Cap. (chip)	10 16V			01
* C0577	UF037100	Electrolytic Cap. (chip)	10 16V			01
* -0579	UF037100	Electrolytic Cap. (chip)	10 16V			01
* C0593	UF037100	Electrolytic Cap. (chip)	10 16V			01
* -0598	UF037100	Electrolytic Cap. (chip)	10 16V			01
* C0599	UX063330	Ceramic Capacitor (chip)	3300P 50V K			
* -0604	UX063330	Ceramic Capacitor (chip)	3300P 50V K			
* C0605	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0606	UF037220	Electrolytic Cap. (chip)	22 16V			01
* -0611	UF037220	Electrolytic Cap. (chip)	22 16V			01
* C0612	UF037100	Electrolytic Cap. (chip)	10 16V			01
* C0613	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0614	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0653	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* -0680	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* C0681	UF037100	Electrolytic Cap. (chip)	10 16V			01
* C0682	UF037100	Electrolytic Cap. (chip)	10 16V			01
* C0683	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* -0701	UX145100	Ceramic Capacitor (chip)	0.1000 25V Z			
* CN302	VV068900	Connector Base Post	M2426XXR 15P SE			
* CN503	VV068500	Connector Base Post	M2426XXR 11P SE			
* CN504	VV067400	Connector Base Post	M2426XX 14P TE			
* CN505	VQ046000	Connector , FFC	52044 31P SE			03
* CN506	V3765500	Connector Base Post	M24185XXR 3P SE			
* CN507	V3765500	Connector Base Post	M24185XXR 3P SE			
* CN508	V3765500	Connector Base Post	M24185XXR 3P SE			

*: New parts

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REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
D0301	VT332900	Diode	1SS355 TE-17			01
-0314	VT332900	Diode	1SS355 TE-17			01
DA301	V3749000	Diode Array	DA204K 2A X2 T146			01
-356	V3749000	Diode Array	DA204K 2A X2 T146			01
DA357	VZ182300	Diode Array	DAP202K T146			01
-371	VZ182300	Diode Array	DAP202K T146			01
DA373	V3749000	Diode Array	DA204K 2A X2 T146			01
DA374	VZ182300	Diode Array	DAP202K T146			01
EM301	VR193800	LC Filter	STF-104ZB-TBM			01
EM501	VR193800	LC Filter	STF-104ZB-TBM			01
-505	VR193800	LC Filter	STF-104ZB-TBM			01
IC301	XW104A00	IC	MM74HC14SJX	INVERTER		01
IC302	XW104A00	IC	MM74HC14SJX	INVERTER		01
IC303	XS790A00	IC	TC74HC4052AF	MPX		02
IC304	XS790A00	IC	TC74HC4052AF	MPX		02
*	IC305	XW643A00	IC	NJU7662M	DC/DC CONVERTER	
IC306	XE518A00	IC	UPC4574G2	OP AMP		03
IC307	XR562A00	IC	NJM2902M-T1	OP AMP		02
-314	XR562A00	IC	NJM2902M-T1	OP AMP		02
IC315	XY537A00	IC	TC74VHC32F(EL)	OR		01
IC316	XR562A00	IC	NJM2902M-T1	OP AMP		02
*	IC317	XV190A00	IC	NJM2904M	OP AMP	
IC318	XW876A00	IC	TC74VHC14F-EL	INVERTER		01
IC501	XM326B00	IC	JG710069	DDE1		04
-503	XM326B00	IC	JG710069	DDE1		04
IC504	XP867A00	IC	UPD63200GS-E1	DAC		07
-508	XP867A00	IC	UPD63200GS-E1	DAC		07
IC510	XJ598A00	IC	NJM78L05UA	REGULATOR +5V		02
IC511	XJ598A00	IC	NJM78L05UA	REGULATOR +5V		02
IC512	XE518A00	IC	UPC4574G2	OP AMP		03
IC513	XF291A00	IC	UPC4570G2	OP AMP		03
IC514	XF291A00	IC	UPC4570G2	OP AMP		03
IC517	XE518A00	IC	UPC4574G2	OP AMP		03
IC518	XF291A00	IC	UPC4570G2	OP AMP		03
IC519	XF291A00	IC	UPC4570G2	OP AMP		03
JK301	VS056300	Phone Jack	HLJ7001-01-	① SNARE, ② TOM1, ③ TOM2,		01
-0312	VS056300	Phone Jack	HLJ7001-01-	④ TOM3, ⑤ TOM4, ⑥ RIDE,		01
				⑦ CRASH, ⑧ HI-HAT,		
				⑩ ⑨ KICK, ⑫ ⑪, ⑬ ⑬, ⑭ ⑬		
L0301	VS740100	Chip Inductance	BLM21B751S 2125			03
-0324	VS740100	Chip Inductance	BLM21B751S 2125			03
*	R0301	RG008150	Carbon Resistor (chip)	150K 0.1 J		
*	-0308	RG008150	Carbon Resistor (chip)	150K 0.1 J		
*	R0317	RG005100	Carbon Resistor (chip)	100 0.1 J		
*	-0324	RG005100	Carbon Resistor (chip)	100 0.1 J		
*	R0325	RG008220	Carbon Resistor (chip)	220K 0.1 J		
*	-0340	RG008220	Carbon Resistor (chip)	220K 0.1 J		
*	R0341	RG007220	Carbon Resistor (chip)	22K 0.1 J		
*	-0355	RG007220	Carbon Resistor (chip)	22K 0.1 J		
*	R0356	RG008220	Carbon Resistor (chip)	220K 0.1 J		
*	-0370	RG008220	Carbon Resistor (chip)	220K 0.1 J		
*	R0371	RG006100	Carbon Resistor (chip)	1.0K 0.1 J		
*	-0385	RG006100	Carbon Resistor (chip)	1.0K 0.1 J		
*	R0386	RG007330	Carbon Resistor (chip)	33K 0.1 J		
*	-0400	RG007330	Carbon Resistor (chip)	33K 0.1 J		
*	R0401	RG006150	Carbon Resistor (chip)	1.5K 0.1 J		
*	-0415	RG006150	Carbon Resistor (chip)	1.5K 0.1 J		
*	R0416	RG008390	Carbon Resistor (chip)	390K 0.1 J		
*	-0430	RG008390	Carbon Resistor (chip)	390K 0.1 J		
*	R0431	RG006470	Carbon Resistor (chip)	4.7K 0.1 J		
*	-0445	RG006470	Carbon Resistor (chip)	4.7K 0.1 J		
*	R0446	RG007220	Carbon Resistor (chip)	22K 0.1 J		
*	R0447	RG008220	Carbon Resistor (chip)	220K 0.1 J		
*	R0448	RG007100	Carbon Resistor (chip)	10K 0.1 J		
*	R0449	RG007100	Carbon Resistor (chip)	10K 0.1 J		
*	R0450	RG006820	Carbon Resistor (chip)	8.2K 0.1 J		
*	-0452	RG006820	Carbon Resistor (chip)	8.2K 0.1 J		
*	R0453	RG008220	Carbon Resistor (chip)	220K 0.1 J		
*	R0454	RG007220	Carbon Resistor (chip)	22K 0.1 J		
*	R0455	RG008390	Carbon Resistor (chip)	390K 0.1 J		
*	R0456	RG006470	Carbon Resistor (chip)	4.7K 0.1 J		
*	R0457	RG007100	Carbon Resistor (chip)	10K 0.1 J		
*	-0460	RG007100	Carbon Resistor (chip)	10K 0.1 J		
*	R0461	RG008390	Carbon Resistor (chip)	390K 0.1 J		
*	-0464	RG008390	Carbon Resistor (chip)	390K 0.1 J		

*: New parts

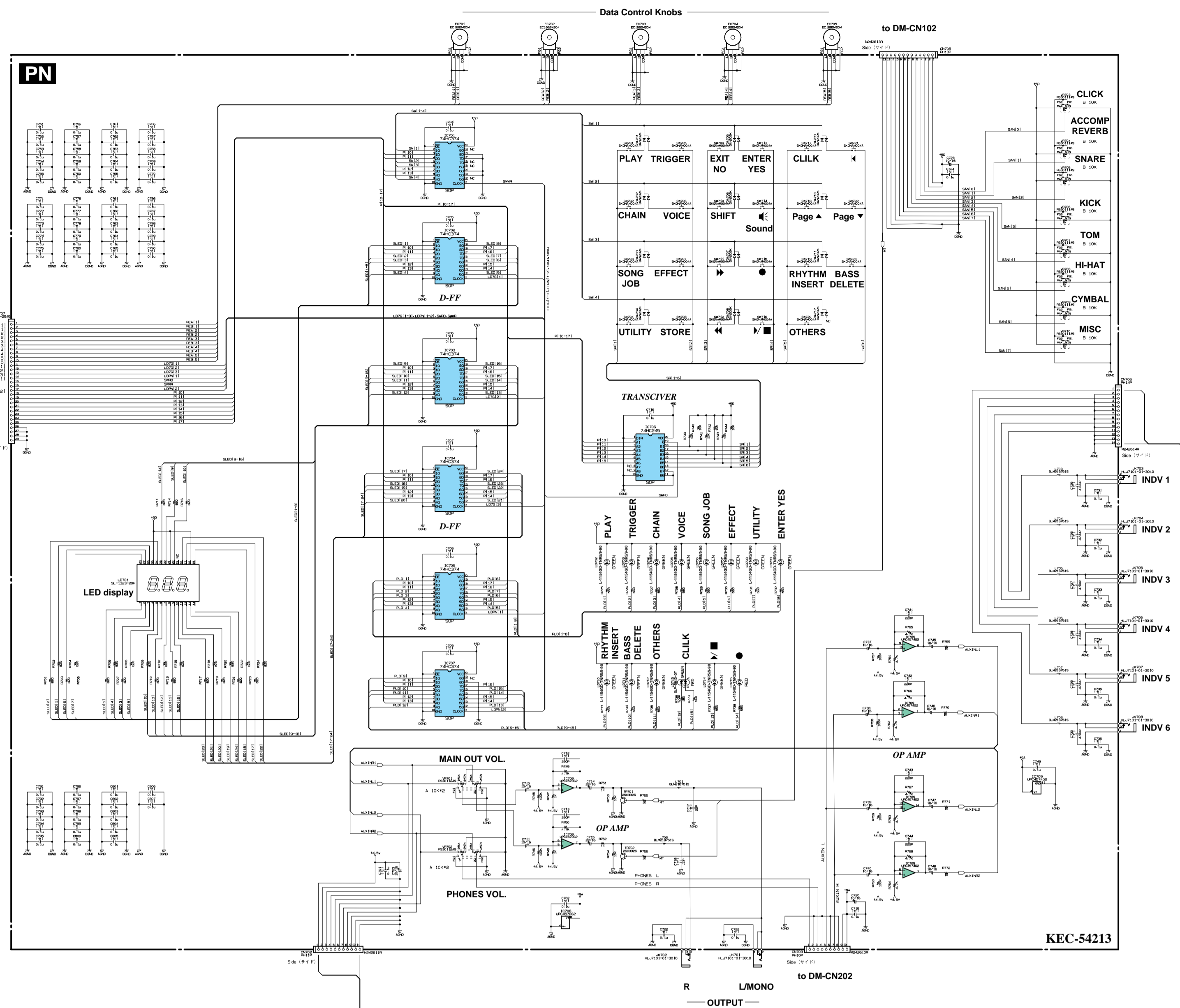
RANK: Japan only

REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
* R0465	RG008220	Carbon Resistor (chip)	220K 0.1 J			
* -0468	RG008220	Carbon Resistor (chip)	220K 0.1 J			
* R0469	RG005100	Carbon Resistor (chip)	100 0.1 J			
* -0472	RG005100	Carbon Resistor (chip)	100 0.1 J			
* R0473	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* R0474	RG008180	Carbon Resistor (chip)	180K 0.1 J			
* R0475	RG008220	Carbon Resistor (chip)	220K 0.1 J			
* R0476	RG006470	Carbon Resistor (chip)	4.7K 0.1 J			
* R0477	RG008100	Carbon Resistor (chip)	100K 0.1 J			
* R0481	RG007220	Carbon Resistor (chip)	22K 0.1 J			
* R0482	RG008220	Carbon Resistor (chip)	220K 0.1 J			
* R0483	RG008100	Carbon Resistor (chip)	100K 0.1 J			
* R0484	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
* R0485	RG007470	Carbon Resistor (chip)	47K 0.1 J			
* R0486	RG007220	Carbon Resistor (chip)	22K 0.1 J			
* R0487	RG008100	Carbon Resistor (chip)	100K 0.1 J			
* R0488	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
* R0489	RG007470	Carbon Resistor (chip)	47K 0.1 J			
* R0490	RG008470	Carbon Resistor (chip)	470K 0.1 J			
* R0491	RG204100	Carbon Resistor (chip)	10K 0.1 J			
* R0511	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* R0512	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* R0513	RG007330	Carbon Resistor (chip)	33K 0.1 J			
* -0520	RG007330	Carbon Resistor (chip)	33K 0.1 J			
* R0521	RG006680	Carbon Resistor (chip)	6.8K 0.1 J			
* -0524	RG006680	Carbon Resistor (chip)	6.8K 0.1 J			
* R0525	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
* -0528	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
* R0529	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* -0532	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* R0533	RG006820	Carbon Resistor (chip)	8.2K 0.1 J			
* -0536	RG006820	Carbon Resistor (chip)	8.2K 0.1 J			
* R0537	RG007240	Carbon Resistor (chip)	24K 0.1 J			
* -0540	RG007240	Carbon Resistor (chip)	24K 0.1 J			
* R0545	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
* R0546	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
* R0548	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
* R0557	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
* -0560	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
* R0565	RG008100	Carbon Resistor (chip)	100K 0.1 J			
* -0570	RG008100	Carbon Resistor (chip)	100K 0.1 J			
* R0571	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
* -0576	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
* R0577	RG006470	Carbon Resistor (chip)	4.7K 0.1 J			
* -0582	RG006470	Carbon Resistor (chip)	4.7K 0.1 J			
* R0585	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
* -0590	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
* R0591	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* -0596	RG007100	Carbon Resistor (chip)	10K 0.1 J			
* R0597	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
* -0602	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
* R0608	RG006100	Carbon Resistor (chip)	1.0K 0.1 J			
* SW301	V6526400	Dip Switch	RPL-08	INPUT ATTENUATION 1.....8		
* SW302	V6526400	Dip Switch	RPL-08	INPUT ATTENUATION 9.....16		
* TR501	VD303700	Transistor	2SC3326 A,B TE85R			01
* -0510	VD303700	Transistor	2SC3326 A,B TE85R			01
*	V3624400	LCD	DMC40202NB-LY-AQ			
⚠	VU113800	AC Adapter	PA-5C J	J		09
⚠	VU113700	AC Adapter	PA-5C U/C	UC		09
⚠	VU113600	AC Adapter	PA-5C E	H		09

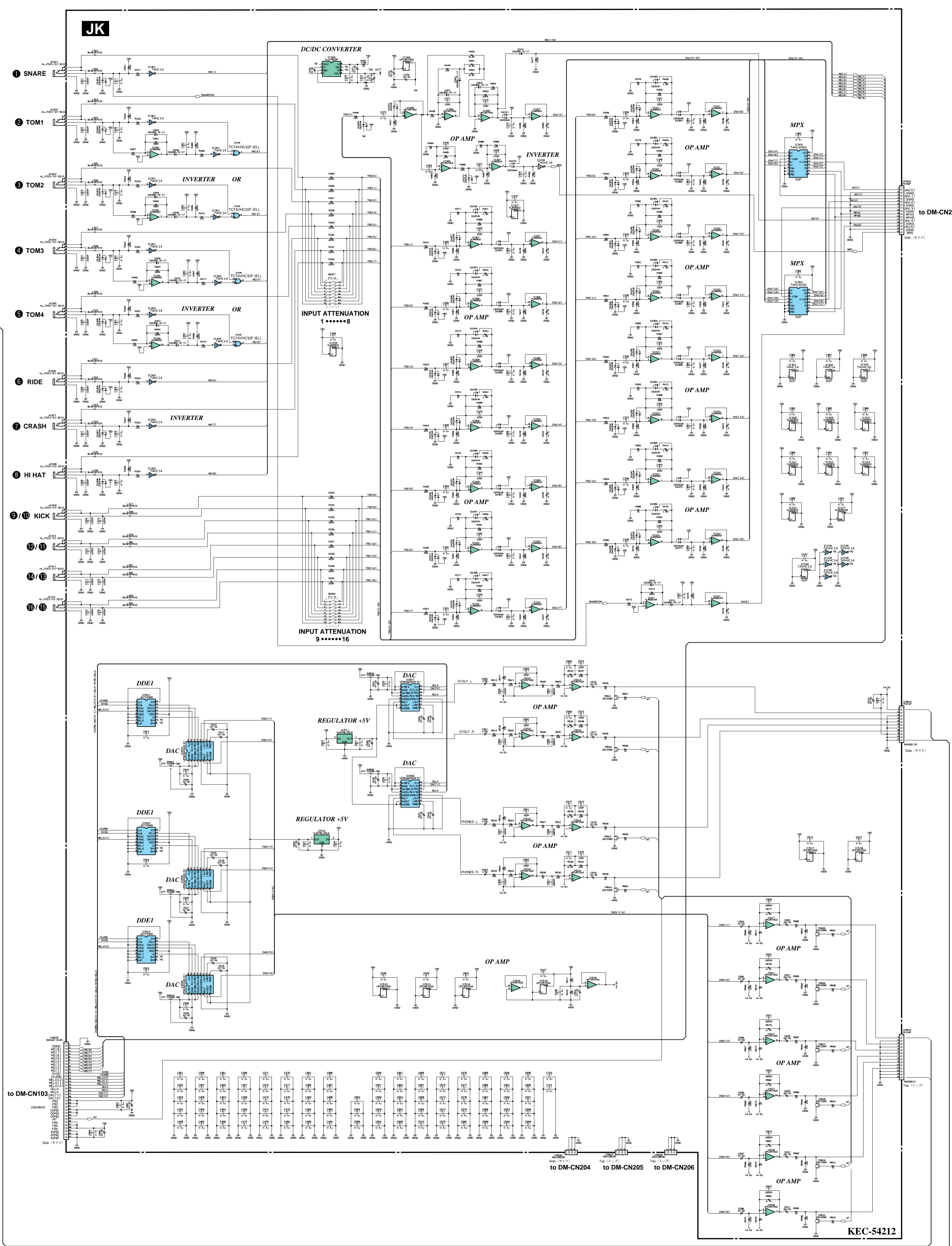
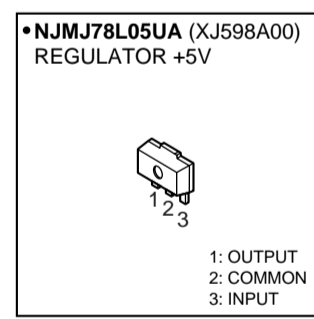
*: New parts

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DTXTREME OVERALL CIRCUIT DIAGRAM (総回路図) 1/2 (PN, JK)

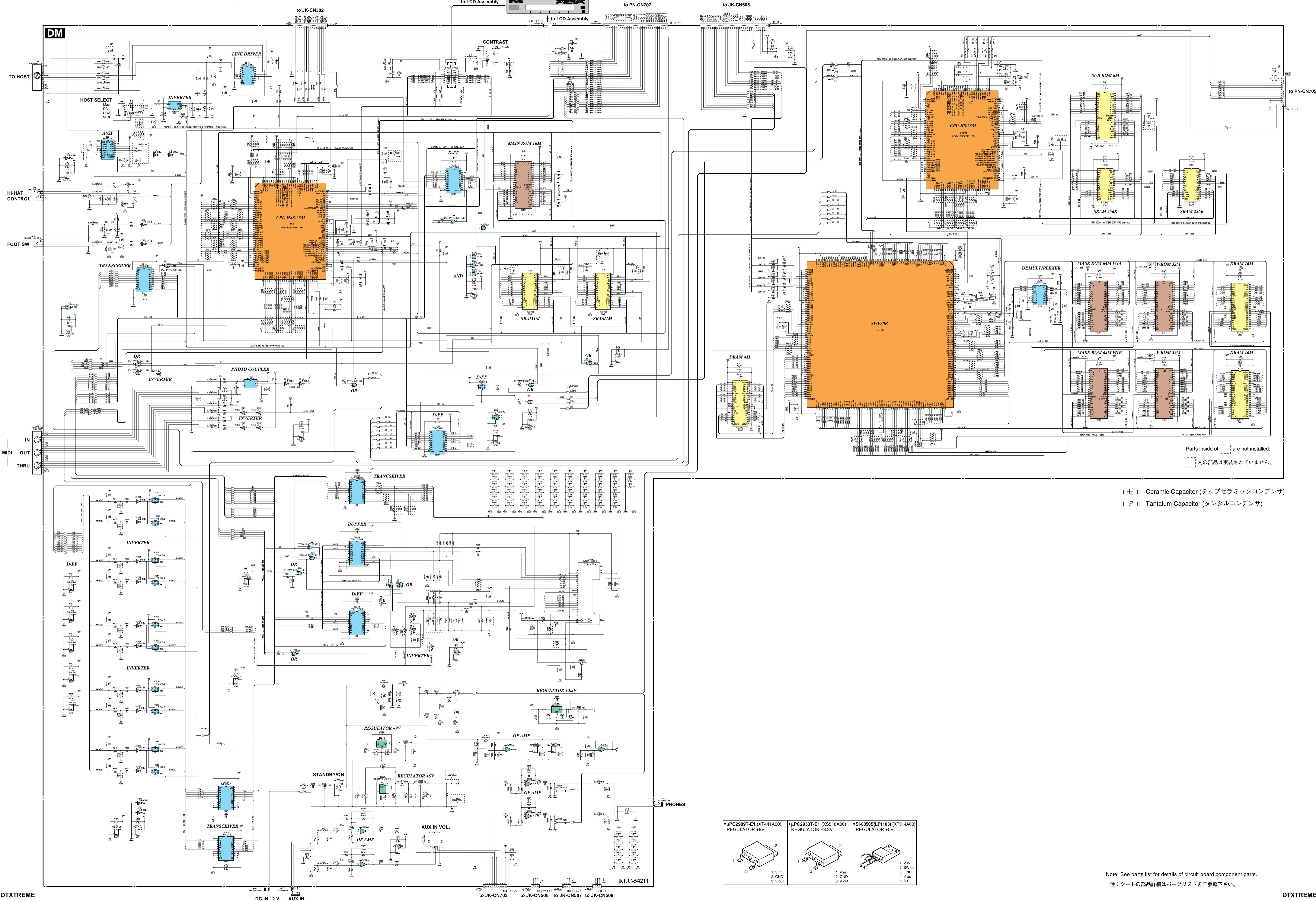


(セ): Ceramic Capacitor (チップセラミックコンデンサ)



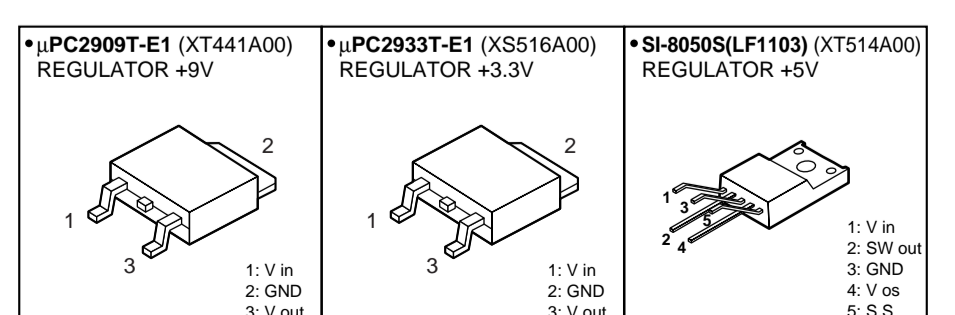
Note: See parts list for details of circuit board component parts.
注: シートの部品詳細はパーツリストをご参照下さい。

DTXTREME OVERALL CIRCUIT DIAGRAM (総回路図) 2/2 (DM)



Parts inside of [] are not installed.
 [] 内の部品は実装されていません。

(セ) : Ceramic Capacitor (チップセラミックコンデンサ)
 [タ] : Tantalum Capacitor (タンタルコンデンサ)



Note: See parts list for details of circuit board component parts.
 注: シートの部品詳細はパーツリストをご参照下さい。