

ACOUSTIC GUITAR PRE-AMPLIFIER

AG-Stomp

SERVICE MANUAL



CONTENTS

SPECIFICATIONS	3/4
PANEL LAYOUT	5
BLOCK DIAGRAM	8
CIRCUIT BOARD LAYOUT	10
WIRING	11
DISASSEMBLY PROCEDURE	12
LSI PIN DESCRIPTION	15
IC BLOCK DIAGRAM	18
CIRCUIT BOARDS	20
TEST PROGRAM	28
ERROR MESSAGES	32
MIDI IMPLEMENTATION CHART	33
PARTS LIST	
OVERALL CIRCUIT DIAGRAM	

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 : This 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 principal-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 your body may have accumulated by grounding yourself to the ground bus in the unit (heavy gauge black wires connect to this bus.)

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

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!

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.

WARNING

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

SPECIFICATIONS

Digital Section

- Full Digital Signal Processing
- Mic Simulator: 8 Types
- Feedback Reduction: 5-band
- Digital Effects
 - Limiter
 - Digital Chorus, Digital Delay
 - Hall Reverb, Room Reverb, Plate Reverb
- External Controller Function (EXP Pedal/MIDI): 8 Controllers/Parameters
- Tuner Function (Chromatic, Auto)

MIDI Functions

Receive: Program Change (Program Change Table can be created), Control Change, Bulk In

Transmit: Program Change, Control Change, Bulk Out, Merge Out

Guitar Power Supply

9V power can be supplied via a TRS phone cable to a guitar's built-in pre-amplifier, etc. that consumes less than 10mA of power, and uses a monaural output.

Controller/Switch

Top Panel

Push Switch x17

UP, DOWN, MANUAL, UTILITY, STORE, LIMITER, FEEDBACK REDUCTION 1-5, CHORUS, DELAY, HALL, ROOM, PLATE, SHIFT

Knob x15

MIC TYPE, BLEND, VOLUME, BASS, MIDDLE, TREBLE, PRESENCE, LIMITER LEVEL, FEEDBACK REDUCTION FREQ, FEEDBACK REDUCTION DEPTH, CHORUS SPEED/DELAY TIME, CHORUS DEPTH/DELAY FEEDBACK, CHORUS LEVEL/DELAY LEVEL, REVERB LEVEL, OUTPUT

Footswitch x4

1, 2, 3 BANK

Rear Panel

STAND-BY ON/OFF, MUTE, +9V SUPPLY ON/OFF

Display

7 Segment LED (3 digit) x1

Push Switch LED x17

Footswitch LED x4

Connections

INPUT: Standard Stereo Phone Jack

OUTPUT L/MONO, R: Standard Stereo Phone Jack (TRS Balanced)

PHONES: Standard Stereo Phone Jack

EXP. PEDAL: Standard Stereo Phone Jack

DIGITAL OUT: COAXIAL

MIDI IN, MIDI OUT: 5-pin DIN

A/D Converter

20 bit

D/A Converter

20 bit

Sampling Frequency

44.1kHz

Memory Allocations

Preset: 30

User: 30

Input Level/Impedance (When using pre-amp bypass)

INPUT: -17dBm/1M Ω

Output Level/Impedance

OUTPUT L/MONO: Balance +4dBm/600 Ω

OUTPUT R: Balance +4dBm/600 Ω

PHONES: 0dBm/47 Ω

Power

Exclusive Power Adaptor (AC-10)

AC Output: AC12V, 1A

Power Consumption

15W

Dimensions

280(W)x70(H)x184(D)mm (11.0"x2.8"x7.2")

Weight

2.2 kg (4lbs. 4oz.)

Accessories

Power Adaptor (AC-10)

TRS Phone Cable for Guitar Power Supply (3m)

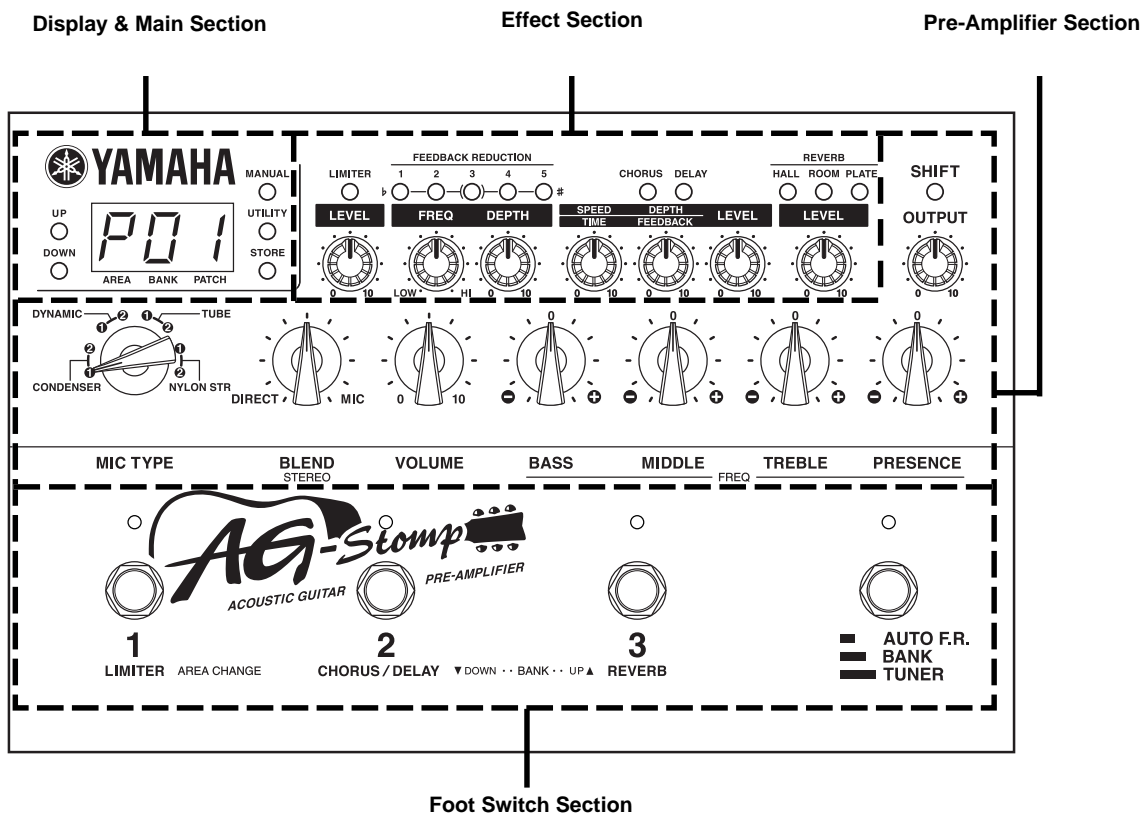
TRS-XLR Converter Cable (x2)

Dummy Battery

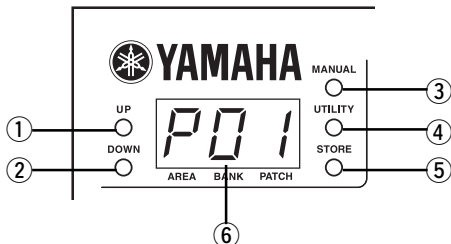
Owner's Manual

PANEL LAYOUT

• Top Panel

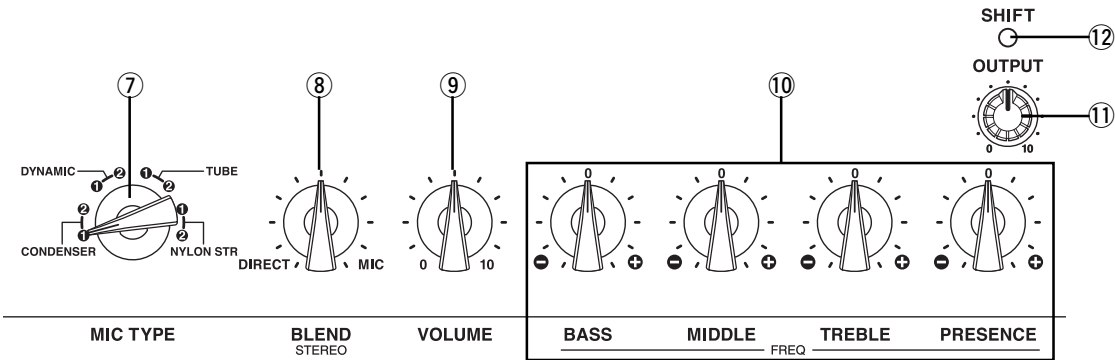


• Display & Main Section



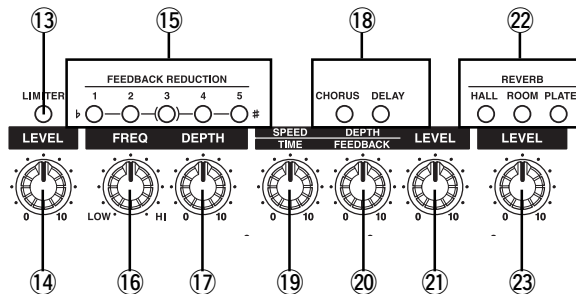
- ① UP Button
- ② DOWN Button
- ③ MANUAL Button
- ④ UTILITY Button
- ⑤ STORE Button
- ⑥ Display

• Pre-AmpSection



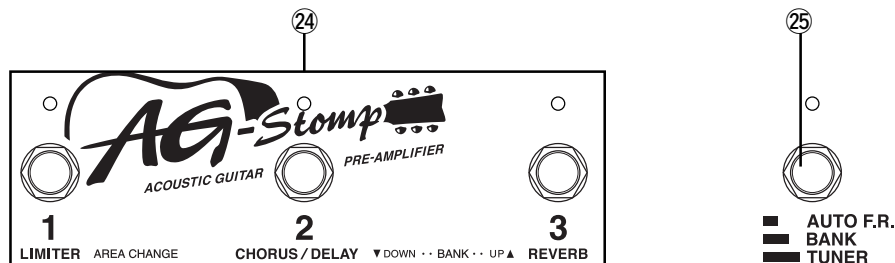
- ⑦ MIC TYPE Select Switch (MIC TYPE)
- ⑧ BLEND Control (BLEND/STEREO)
- ⑨ VOLUME
- ⑩ Tone Controls
- ⑪ OUTPUT Level Control
- ⑫ SHIFT Button

• Effect Section



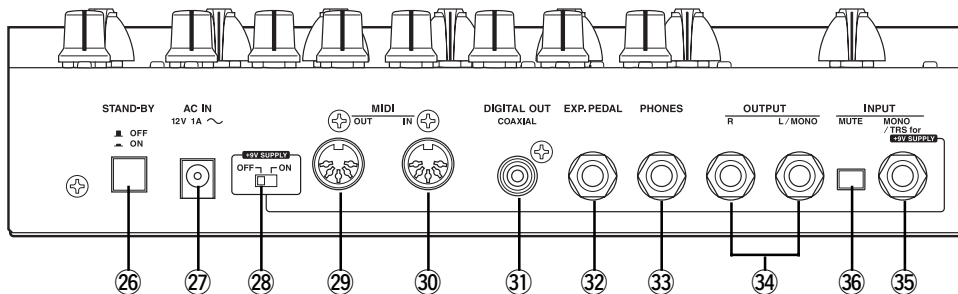
- ⑬ LIMITER Button
- ⑭ LEVEL
- ⑮ Feedback Reduction Buttons
- ⑯ Frequency Control (FREQ)
- ⑰ DEPTH Control
- ⑱ CHORUS/DELAY Effect Buttons
- ⑲ SPEED/TIME Control
- ⑳ DEPTH/FEEDBACK Control
- ㉑ LEVEL
- ㉒ Reverb Effect Buttons
- ㉓ REVERB Volume

• Footswitch Section



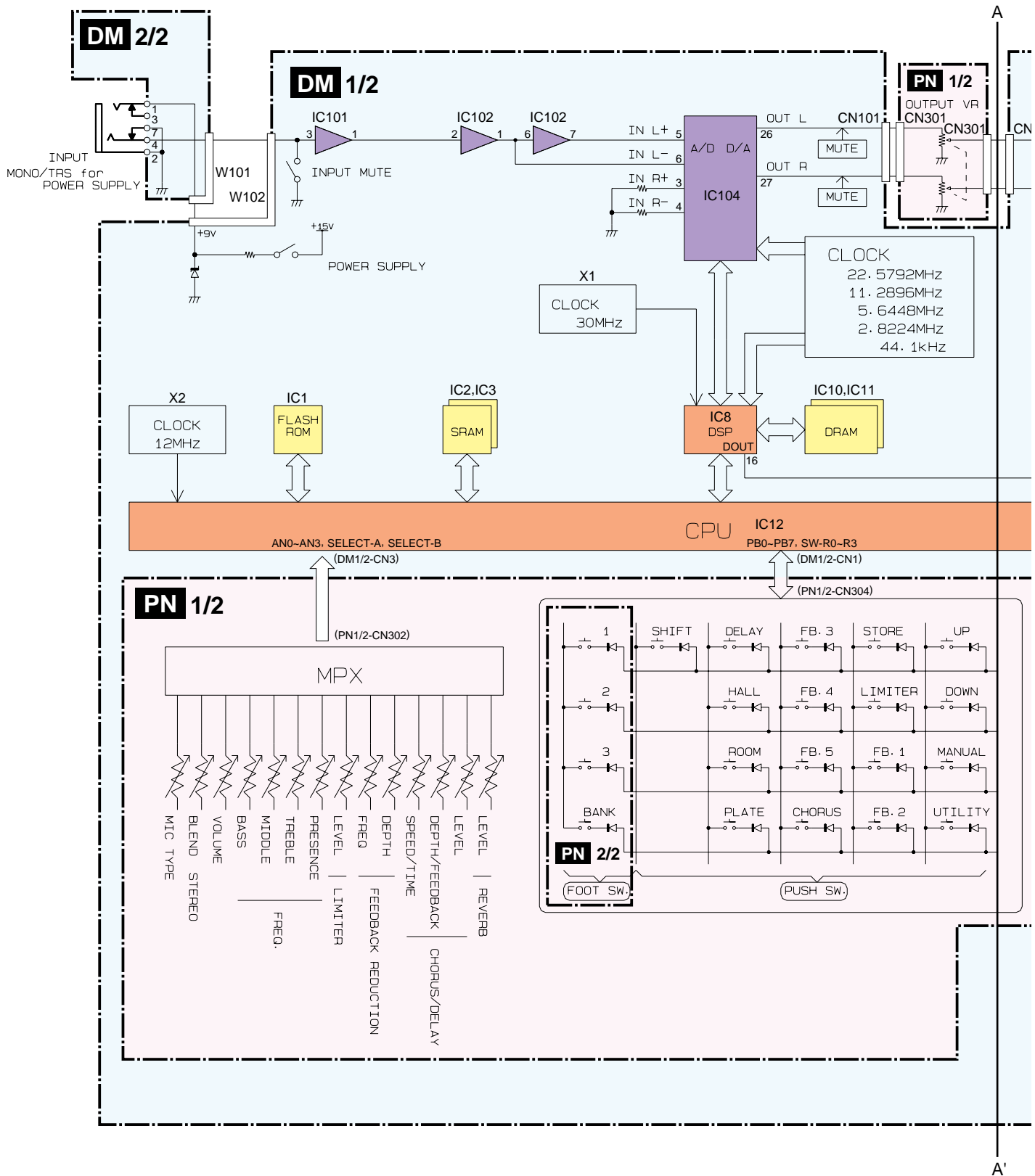
- ②④ Footswitches 1, 2, 3
- ②⑤ Bank Switch (AUTO F.R./BANK/TUNER)

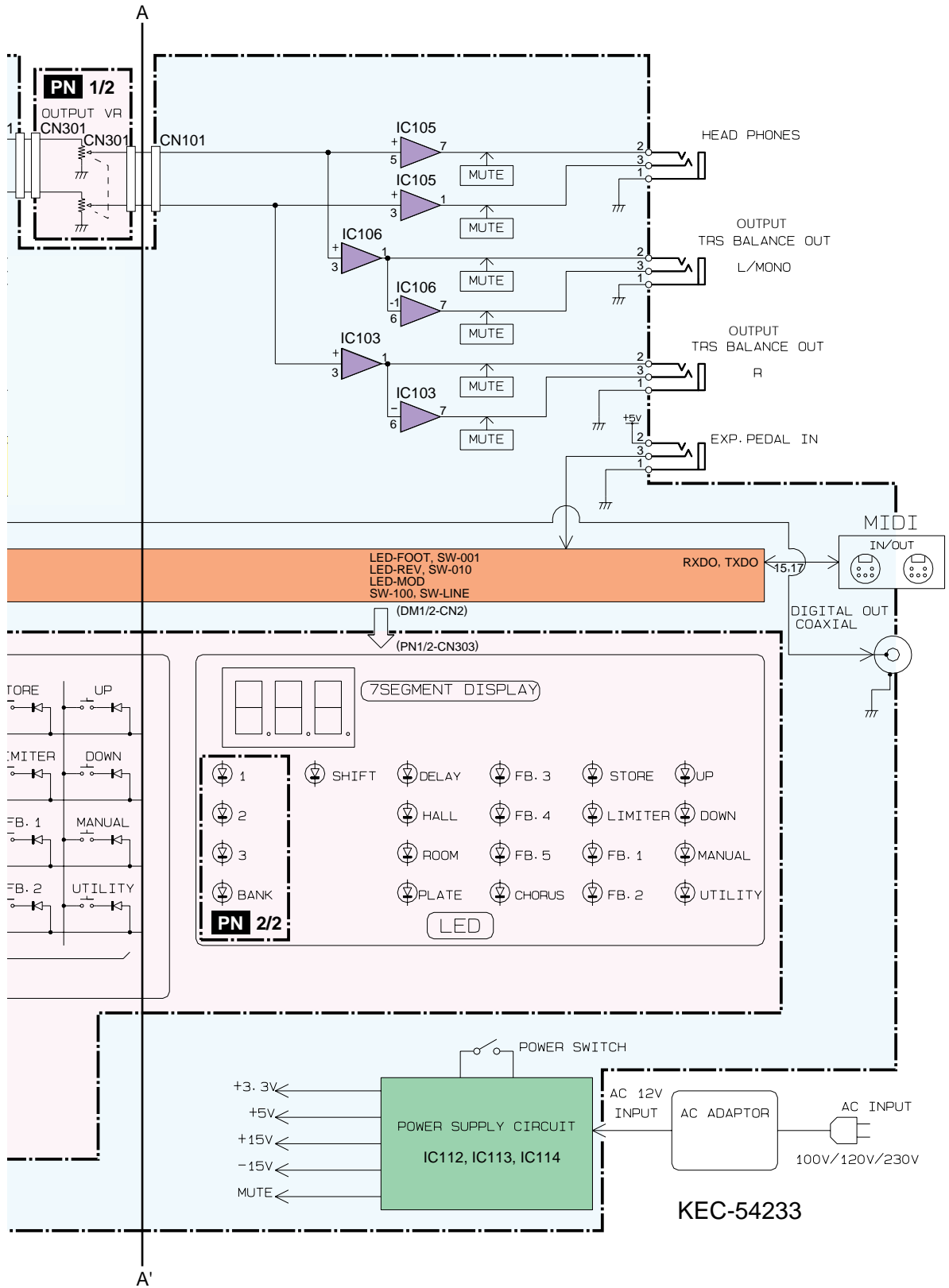
• Rear Panel



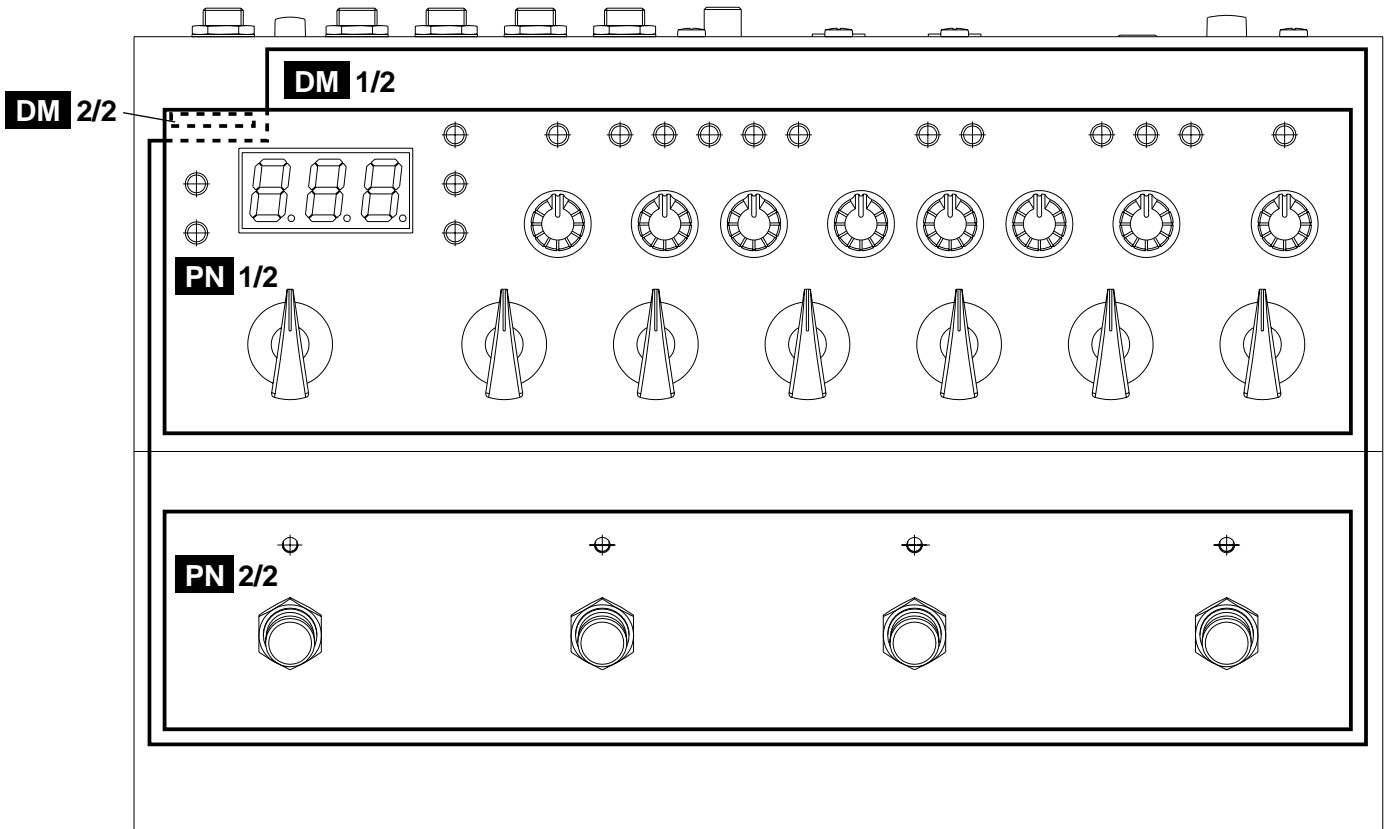
- ②⑥ Power Switch (STAND-BY ON/OFF)
- ②⑦ Power Adaptor Jack (AC IN 12V 1A)
- ②⑧ Guitar Power Supply Switch
- ②⑨ MIDI OUT Jack
- ③⑩ MIDI IN Jack
- ③① Digital Output Jack (DIGITAL OUT)
- ③② EXP. PEDAL Jack
- ③③ Headphone Jack (PHONES)
- ③④ Output Jacks (OUTPUT R, L/MONO)
- ③⑤ INPUT Jack
- ③⑥ Input MUTE Switch

■ BLOCK DIAGRAM

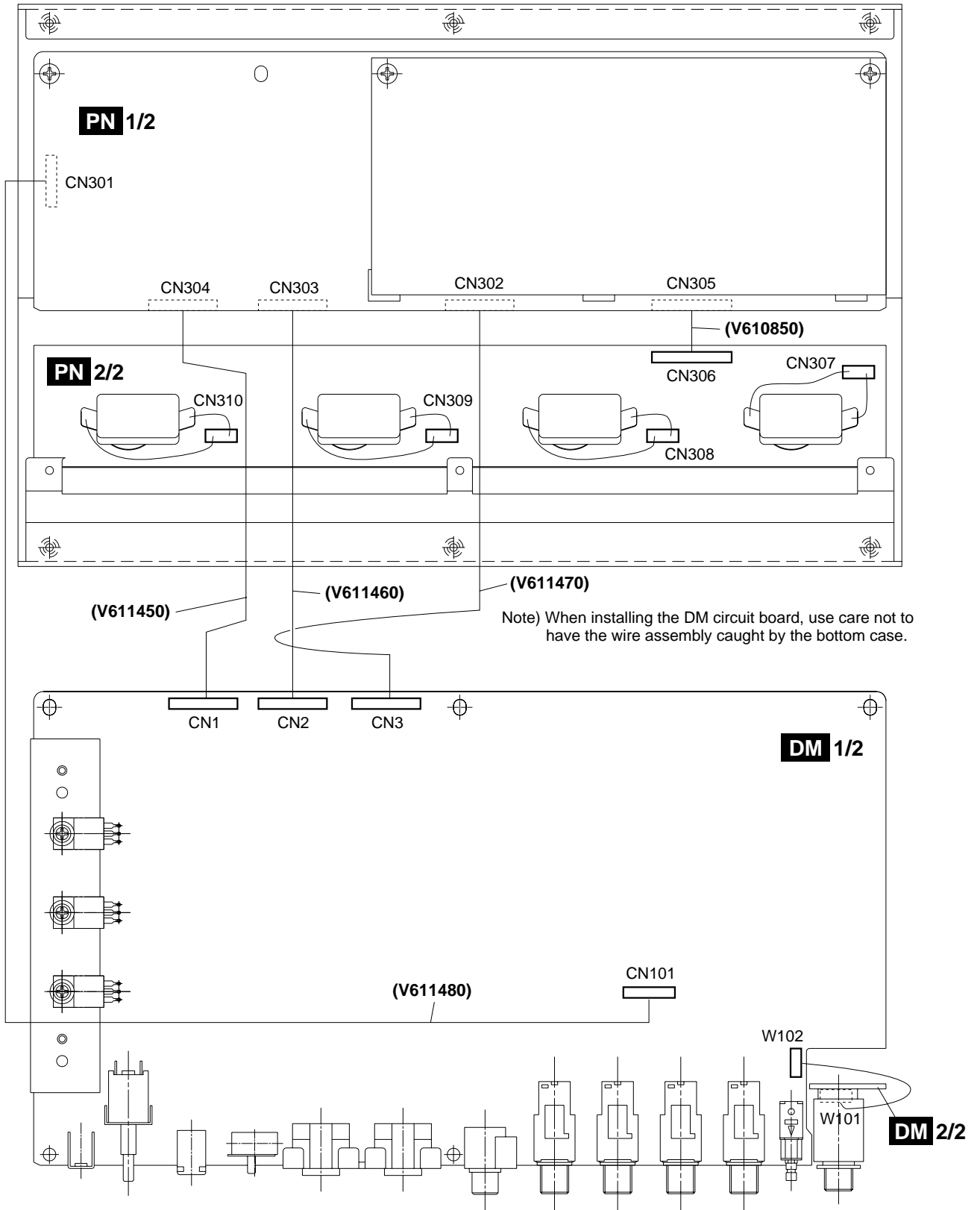




■ CIRCUIT BOARD LAYOUT



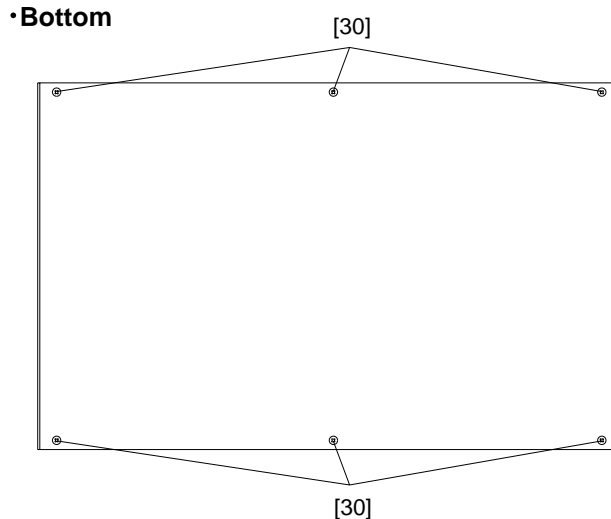
WIRING



■ DISASSEMBLY PROCEDURE

1. Bottom Case (Manhour requirement: 5 min.)

Remove the six (6) screws marked [30]. The bottom case can then be removed. (Fig. 1)



[30]:Bind Head Tapping Screw-B 3.0x8 MFZN2BL (EP600190)

Fig.1

2. DM Circuit Board (Manhour requirement: 15 min.)

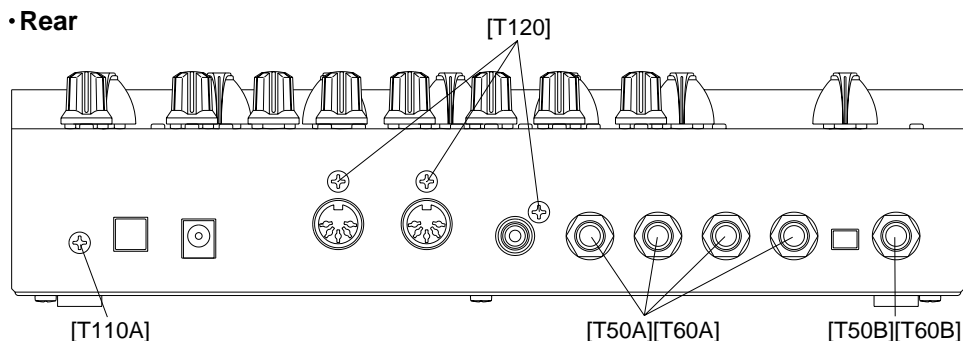
2-1. Remove the bottom case. (See Procedure 1.)

2-2. DM1/2 Circuit Board (Manhour requirement: 10 min.)

Remove the one (1) screw marked [T110A], three (3) screws marked [T120], four (4) hexagonal nuts marked [T50A] and four (4) flat washers marked [T60A] from the rear panel and the three (3) screws marked [T110B] from the DM1/2 circuit board. The DM1/2 circuit board can then be removed. Remove the four (4) toothed washer internal tooth forms marked [T70] as well when removing the DM1/2 circuit board from the main body. (Fig. 2)

2-3. DM2/2 Circuit Board (Manhour requirement: 5 min.)

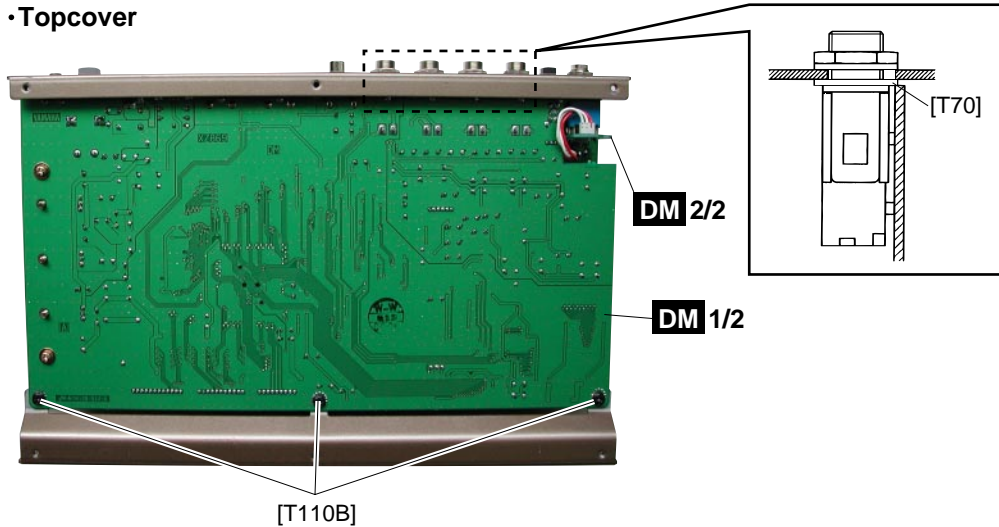
Remove the one (1) hexagonal nut marked [T50B] and one (1) flat washer marked [T60B]. The DM2/2 circuit board can then be removed.



[T50]:Hexagonal Nut 9.0 12x2 MFNI33 (LX200060)

[T60]:Flat Washer 9x14 0.5 FNM3 (VL802300)

[T120]:Bind Head Tapping Screw-P 3.0x12 MFZN2BL (VC161100)



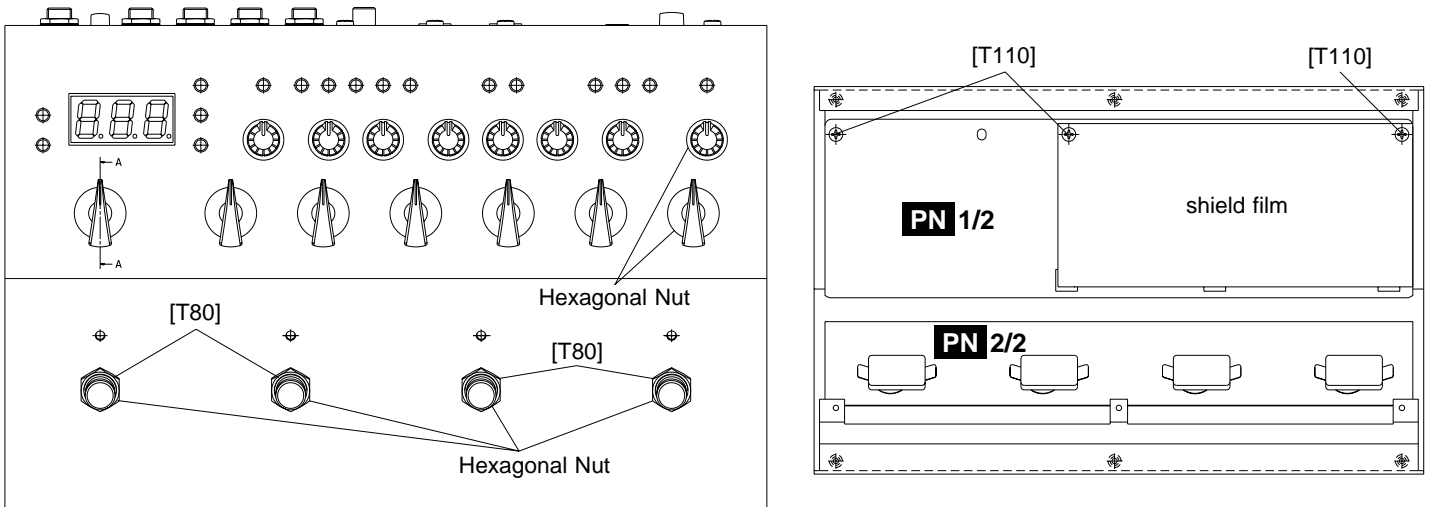
[T70]:Washer 9.0 MFZN2Y (ET800150)
 [T110]:Bind Head Tapping Screw-B 3.0x8 MFZN2BL (EP600190)

Fig.2

3. PN Circuit Boards (1/2, 2/2)

(Manhour requirement: 20 min.)

- 3-1. Remove the bottom case. (See Procedure 1.)
- 3-2. Remove the DM1/2 and DM2/2 circuit boards. (See Procedure 2.)
- 3-3-1. **PN 1/2 Circuit Board (Manhour requirement: 10 min.)**
 Remove the controls, knobs and hexagonal nuts from the front panel, the three (3) screws marked [T110] and the shield film from the PN1/2 circuit board. The PN1/2 circuit board can then be removed. (Fig. 3)
- 3-3-2. **PN 2/2 Circuit Board (Manhour requirement: 5 min.)**
 Remove the four (4) hexagonal nuts and the four (4) flat washers marked [T80] from foot switches. The PN 2/2 circuit board can then be removed. (Fig. 3)



[T80]:Flat Washer 12x17 0.5 MFNI33 (V7407400)
 [T110]:Bind Head Tapping Screw-B 3.0x8 MFZN2BL (EP600190)

Fig.3

4. Heat Sink (Manhour requirement: 25 min.)

- 4-1. Remove the bottom case. (See Procedure 1.)
- 4-2. Remove the DM circuit board. (See Procedure 2.)
- 4-3. Remove the two (2) screws marked [A-a] from the soldered face of the DM circuit board and the three (3) screws marked [A-b] from IC112, IC113 and IC114. The heat sink can then be removed from the DM circuit board. (Fig. 4)

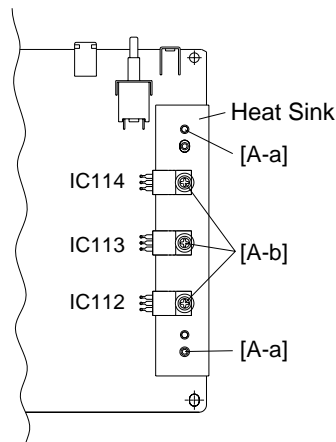


Fig.4

LSI PIN DESCRIPTION

● HD6413002FP16 (XQ375A00) CPU

DM: IC12

PIN NO.	NAME	I/O	FUNCTION	PIN NO.	NAME	I/O	FUNCTION	
1	PA6	O	Port A	51	A12	O	Address bus	
2	PA7	O	Address bus	52	A13	O		
3	VCC		Power supply	53	A14	O		
4	PB0	I	Port B	54	A15	O		
5	PB1	I		55	A16	O		
6	PB2	I		56	A17	O		
7	PB3	I		57	A18	O		
8	PB4	I		58	A19	O		
9	PB5	I		59	VSS		Ground	
10	PB6/DREQ0	I		60	P60//WAIT	I	Port 6	
11	PB7/DREQ1	I		61	P61//BREQ	I		
12	/RESO	O	Reset	62	P62//BACK	I		
13	VSS		Ground	63	∅	O	∅out	
14	P90/TXD0	O	Transmit data (MIDI OUT)	64	/STBY	I	Stand-by mode signal	
15	P91/TXD1	O	KSN-ACK	65	/RES	I	Reset	
16	P92/RXD0	I	Receive data (MIDI IN)	66	NMI	I	Non-maskable interrupt	
17	P93/RXD1	I	KSN-RX	67	VSS		Ground	
18	P94/SCK0	O	Port 9	68	EXTAL	I	Clock	
19	P95/SCK1	I	Port 9	69	XTAL	O	Clock	
20	P40/D0	I/O	Data bus	70	VCC		Power supply	
21	P41/D1	I/O			71	/AS	O	Address strobe
22	P42/D2	I/O			72	/RD	O	Read strobe
23	P43/D3	I/O			73	/HWR	O	Write strobe (High)
24	VSS			(Ground)	74	/LWR	O	Write strobe (Low)
25	P44/D4	I/O			75	MD0	I	Mode select
26	P45/D5	I/O			76	MD1	I	
27	P46/D6	I/O			77	MD2	I	
28	P47/D7	I/O			78	AVCC		Analog power supply
29	D8	I/O			79	VREF	I	Reference voltage
30	D9	I/O			80	P70/AN0	I	Analog data input (EQ)
31	D10	I/O			81	P71/AN1	I	Analog input (EQ)
32	D11	I/O			82	P72/AN2	I	Analog data input
33	D12	I/O			83	P73/AN3	I	Analog input (CS)
34	D13	I/O			84	P74/AN4	I	Analog data input (BEND)
35	D14	I/O		85	P75/AN5	I	Analog input (MOD)	
36	D15	I/O		86	P76/AN6	I	Analog input (FC)	
37	VCC		Power supply	87	P77/AN7	I	Analog input (BAT)	
38	A0	O	Address bus	88	AVSS		Analog ground	
39	A1	O			89	P80	O	Port 8
40	A2	O			90	P81//CS3	O	Chip select
41	A3	O			91	P82//CS2	O	
42	A4	O			92	P83//CS1	O	
43	A5	O			93	P84//CS0	O	
44	A6	O			94	VSS		Ground
45	A7	O			95	PA0	I	Port A
46	VSS			(Ground)	96	PA1	I	
47	A8	O			97	PA2	I	
48	A9	O		98	PA3	O		
49	A10	O		99	PA4	O		
50	A11	O		100	PA5	O		

● YSS910-S (XV988A00) DSP6 (Digital Signal Processor)

DM: IC8

PIN NO.	NAME	I/O	FUNCTION	PIN NO.	NAME	I/O	FUNCTION				
1	Vdd		Power supply (3.3 V)	89	Vss		Ground				
2	Vss		Ground	90	DB13	I/O	Parallel data bus				
3	XI	I	System master clock input (60 MHz or 30 MHz)	91	DB14	I/O					
4	XO	O	System master clock output (High or 30 MHz)	92	DB15	I/O					
5	Vdd		Power supply (5 V)	93	DB16	I/O					
6	/SYNCl	I	Sync. signal input	94	DB17	I/O					
7	/SYNCO	O	Sync. signal output	95	DB18	I/O					
8	Vdd		Power supply (5 V)	96	DB19	I/O					
9	CKI	I	System clock input (30 MHz)	97	DB20	I/O	Ground				
10	CKO	O	System clock output (30 MHz)	98	DB21	I/O					
11	CKSEL	I	System master clock select (0: 60 MHz, 1: 30 MHz)	99	DB22	I/O					
12	Vss		Ground	100	Vss		Power supply (3.3 V)				
13	MCKS	I	Serial I/O master clock input (128 x Fs)	101	Vdd		Ground				
14	/SSYNCl	I	Serial I/O Sync. signal output	102	DB23	I/O					
15	/IC	I	Initial clear	103	DB24	I/O					
16	/TEST	I	Test mode setting (0: Test, 1: Normal)	104	DB25	I/O	Parallel data bus				
17	BTYP	I	Data bus type select (0: 8 bit, 1: 16 bit)	105	DB26	I/O					
18	/IRQ	O	IRQ output	106	DB27	I/O					
19	TRIG	I/O	Trigger signal input/output	107	DB28	I/O	Parallel data bus				
20	Vdd		Power supply (5 V)	108	DB29	I/O					
21	Vss		Ground	109	DB30	I/O					
22	/CS	I	chip select signal input	110	DB31	I/O	Timing signal output/ Parallel data bus output/ input				
23	/WR	I	Write signal input	111	TIMO/DBOB	I/O					
24	/RD	I	Read signal input	112	Vss						
25	CA7	I/O	Address bus of internal register	113	Vdd		Ground				
26	CA6	I/O		Memory data bus	114	DA00	I/O	Power supply (5 V)			
27	CA5	I/O			Memory data bus	115	DA01	I/O			
28	CA4	I/O				Memory data bus	116	DA02	I/O		
29	CA3	I/O					Memory data bus	117	DA03	I/O	
30	CA2	I/O						Memory data bus	118	DA04	I/O
31	CA1	I/O							Memory data bus	119	DA05
32	Vss		Memory data bus							120	DA06
33	Vdd			Memory data bus						121	DA07
34	CD15	I/O			Memory data bus					122	Vss
35	CD14	I/O				Memory data bus				123	DA08
36	CD13	I/O					Memory data bus			124	DA09
37	CD12	I/O						Memory data bus		125	DA10
38	CD11	I/O							Memory data bus	126	DA11
39	CD10	I/O	Memory data bus							127	DA12
40	CD09	I/O		Memory data bus						128	DA13
41	CD08	I/O			Memory data bus					129	DA14
42	CD07	I/O				Memory data bus				130	DA15
43	CD06	I/O					Memory data bus			131	Vss
44	Vss							Memory data bus		132	Vdd
45	Vdd								Memory data bus	133	(n.c)
46	Vdd		Memory data bus							134	Vdd
47	CD05	I/O		Memory data bus						135	DA16
48	CD04	I/O			Memory data bus					136	DA17
49	CD03	I/O				Memory data bus				137	DA18
50	CD02	I/O					Memory data bus			138	DA19
51	CD01	I/O						Memory data bus		139	DA20
52	CD00	I/O							Memory data bus	140	DA21
53	/WAIT	O	Memory data bus							141	DA22
54	Vss			Memory data bus						142	DA23
55	SI0	I			Memory data bus					143	Vss
56	SI1	I				Memory data bus				144	DA24
57	SI2	I					Memory data bus			145	DA25
58	SI3	I						Memory data bus		146	DA26
59	SI4	I							Memory data bus	147	DA27
60	SI5	I	Memory data bus							148	DA28
61	SI6	I		Memory data bus						149	DA29
62	SI7	I			Memory data bus					150	DA30
63	Vss					Memory data bus				151	DA31
64	Vdd						Memory data bus			152	Vdd
65	SO0	O						Memory data bus		153	Vss
66	SO1	O							Memory data bus	154	A00
67	SO2	O	Memory data bus							155	A01
68	SO3	O		Memory data bus						156	A02
69	SO4	O			Memory data bus					157	A03
70	SO5	O				Memory data bus				158	A04
71	SO6	O					Memory data bus			159	A05
72	SO7	O						Memory data bus		160	A06
73	Vss								Memory data bus	161	A07
74	DB00	I/O	Memory data bus							162	A08
75	DB01	I/O		Memory data bus						163	A09
76	DB02	I/O			Memory data bus					164	Vss
77	DB03	I/O				Memory data bus				165	Vdd
78	DB04	I/O					Memory data bus			166	A10
79	DB05	I/O						Memory data bus		167	A11
80	DB06	I/O							Memory data bus	168	A12
81	DB07	I/O	Memory data bus							169	A13
82	DB08	I/O		Memory data bus						170	A14
83	DB09	I/O			Memory data bus					171	A15/RAS
84	DB10	I/O				Memory data bus				172	A16/CAS
85	DB11	I/O					Memory data bus			173	A17/CE
86	DB12	I/O						Memory data bus		174	/WE
87	Vdd								Memory data bus	175	/OE
88	Vdd		Memory data bus							176	Vdd

● **YM3437C-F (XM530A00) DIT2 (Digital Format Interface Transmitter)**

DM: IC17

PIN NO.	NAME	I/O	FUNCTION	PIN NO.	NAME	I/O	FUNCTION	
1	Vss		Ground	9	MUTE	I	Mute	
2	MCLK	I	Master clock input	10	VFL	I	Validity flag	
3	DM0	I	DIN/BCLK/WCLK format select DM1,DM0=0,0 DSP,LDSP (64 bit,LSB first) DM1,DM0=0,1stereo,DSP (64 bit,MSB first) DM1,DM0=1,0 DSP2 (128 bit,MSB first) DM1,DM0=1,1 BB (64 bit,MSB first)	11	CCK	I	C,U bit clock input/C bit data input	
4	DM1	I		12	CIN	I	C,U bit data input/U bit data input	
5	RES	I		System reset	13	CLD	I	End of C,U bit input/16,20 bit/24 bit select
6	WCIN	I		Word clock input	14	CNTR	I	32 bit counter reset/Top of block
7	DIN	I	Digital audio serial data input	15	CSM	I	Channel status input mode select CSM=0 Asynchronous mode CSM=1 Synchronous mode	
8	VDD		Power supply (+5 V)	16	DOUT	O	Digital interface formatted data output	

● **AK4520A-VF-E2 (XT802A00) DAC & ADC**

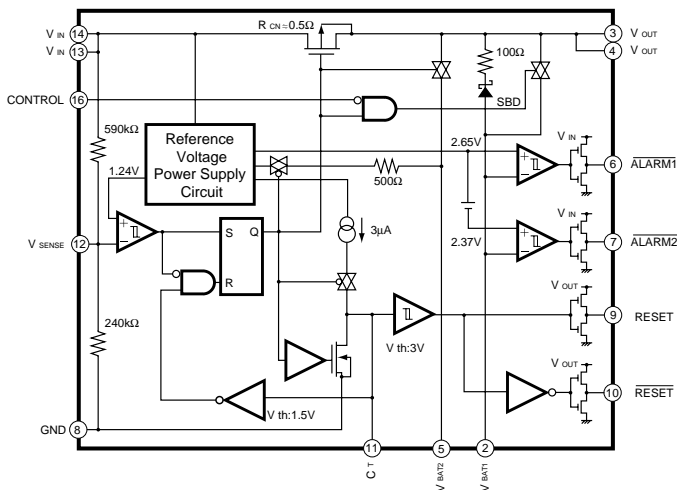
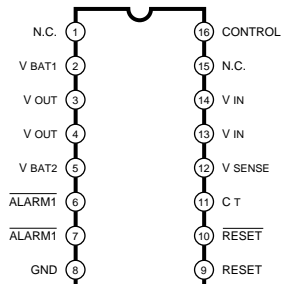
DM: IC104

PIN NO.	NAME	I/O	FUNCTION	PIN NO.	NAME	I/O	FUNCTION
1	VREFH	I	Positive Voltage Reference Input, VA	15	MCLK	I	Master Clock Input
2	VREFL	I	Negative Voltage Reference Input, AGND	16	DEM0	I	De-emphasis Frequency Select
3	AINR+	I	Rch Analog Positive Input	17	DEM1	I	De-emphasis Frequency Select
4	AINR-	I	Rch analog Negative Input	18	TST3	I/O	Test Pins (Pull Down Pins)
5	AINL+	I	Lch Analog Positive Input	19	TST2	I/O	
6	AINL-	I	Lch analog Negative Input	20	TST1	I	
7	VA	-	Analog Power Supply	21	VD	-	Digital Power Supply
8	AGND	-	Analog Ground	22	DGND	-	Digital Ground
9	DIF0	I	Audio Data Interface Format	23	/PWDA	I	DAC power-Down Mode
10	DIF1	I	Audio Data Interface Format	24	/PWAD	I	ADC power-Down Mode
11	LRCK	I	Input/Output Channel Clock	25	CMODE	I	Master Clock Select ("H":384 fs,"L":256 fs)
12	SCLK	I	Audio Serial Data Clock	26	AOUTL	O	Lch Analog Output
13	SDTI	I	Audio Serial Data Input	27	AOUTR	O	Rch Analog Output
14	SDTO	O	Audio Serial Data Output	28	VCOM	O	Common Voltage Output, VA/2

IC BLOCK DIAGRAM

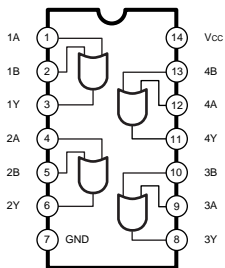
● **MB3790PF(XR967A00)**

DM: IC4
ASSP



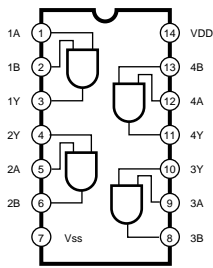
● **74AHC32DT(XZ103A00)**

DM: IC5, IC6
OR



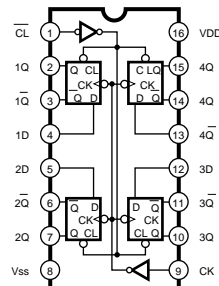
● **74HC08DT(XZ108A00)**

DM: IC7
AND



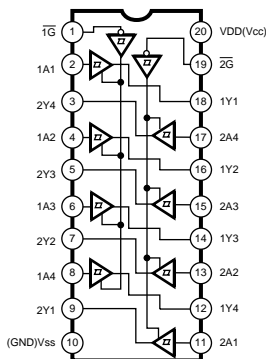
● **74HC175DT(XZ113A00)**

DM: IC110
Quad D-Type Flip-Flop



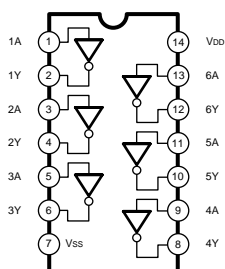
● **74HC244DT(XZ109A00)**

DM: IC14, IC15, IC16
Bus Buffer



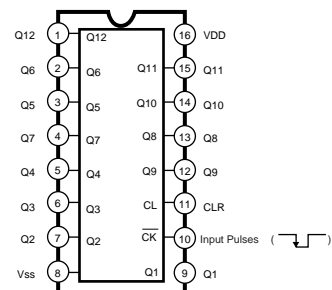
● **74HCU04DT (XZ110A00)**

DM: IC107
INVERTER

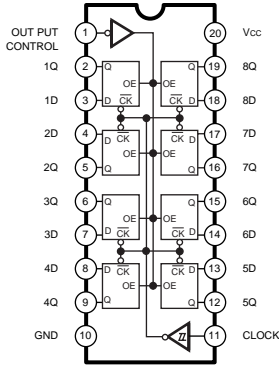


● **TC74HC4040F(XR684A00)**

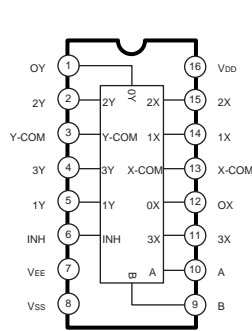
DM: IC108
12-Stage Binary Ripple Counter



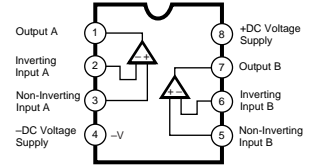
- **74HC374DT(XZ102A00)**
PN: IC301~IC307
D-FF



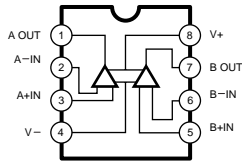
- **74HC4052DT(XZ101A00)**
PN: IC308, IC309
Multiplexer



- **NJM072M(XC458A00)**
DM: IC101
OP AMP



- **NJM5532M (XC011A00)**
DM: IC102, IC103
- **NJM4556AMT1 (XQ138A00)**
DM: IC105, IC106
OP AMP

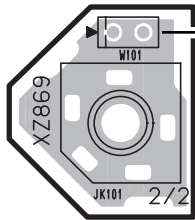


CIRCUIT BOARDS

• DM 2/2 Circuit Board

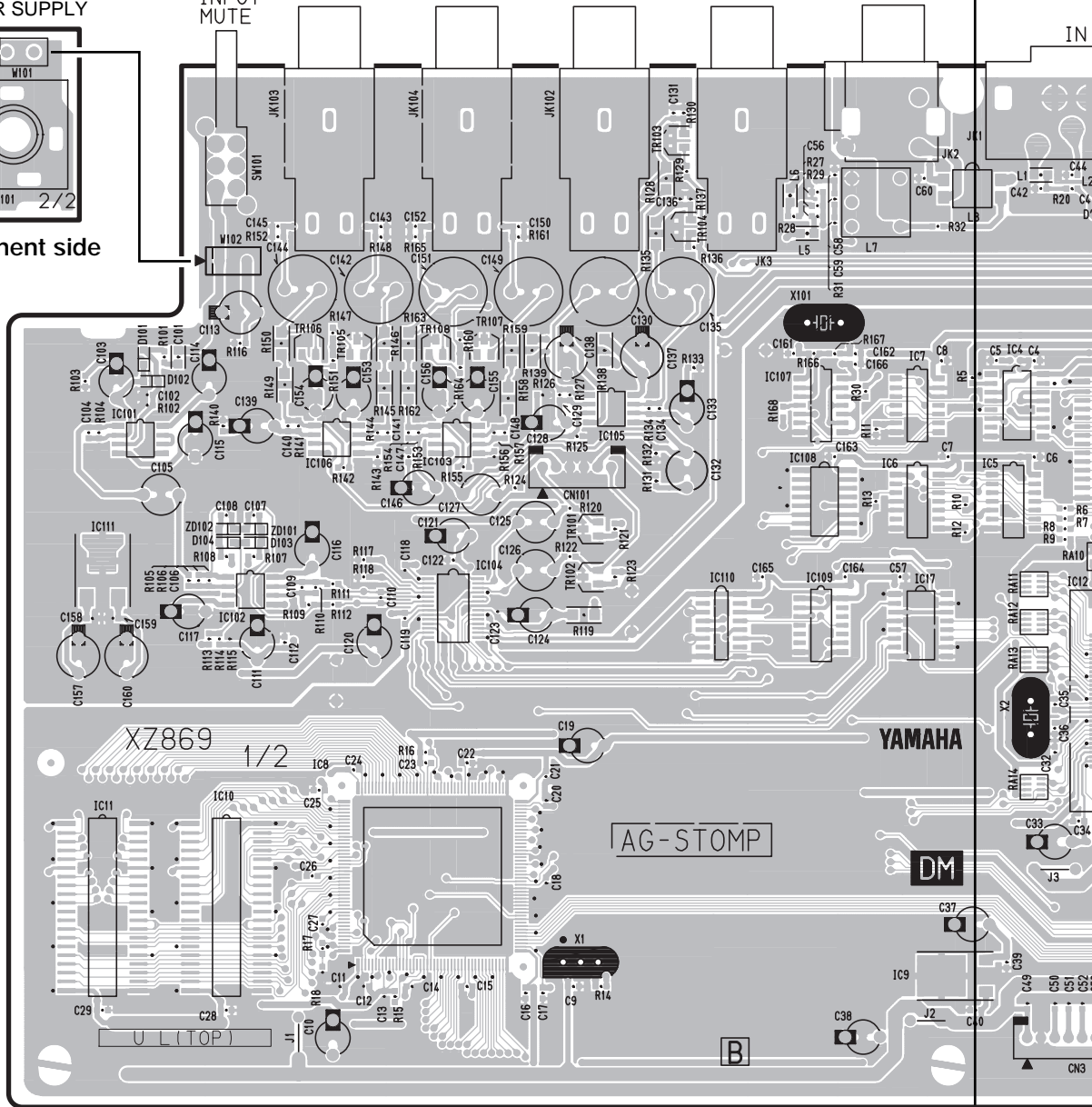
• DM 1/2 Circuit Board

INPUT
MONO/TRS for
POWER SUPPLY



Component side

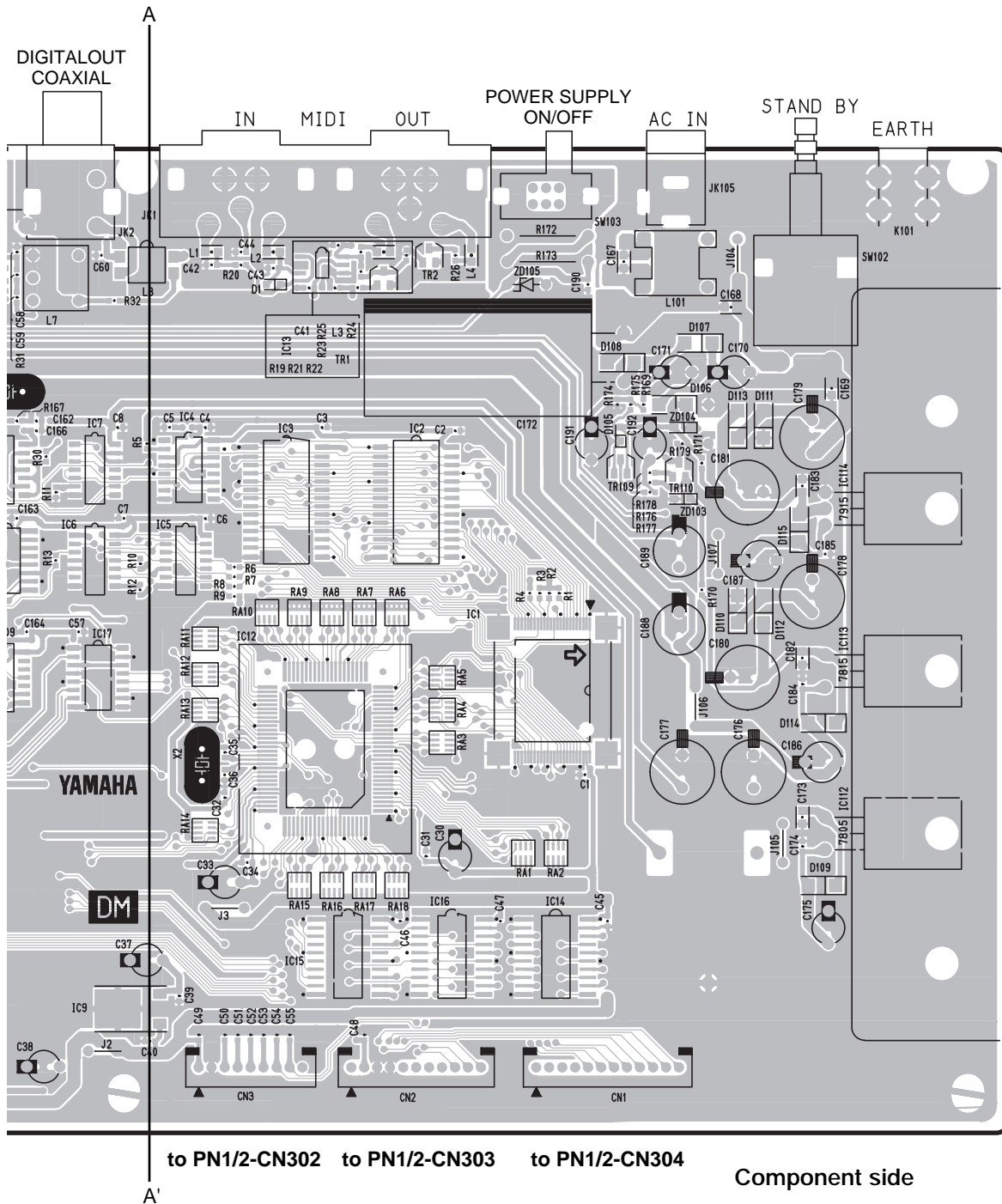
INPUT MUTE L/MONO R PHONES EXP. PEDAL DIGITALOUT COAXIAL IN



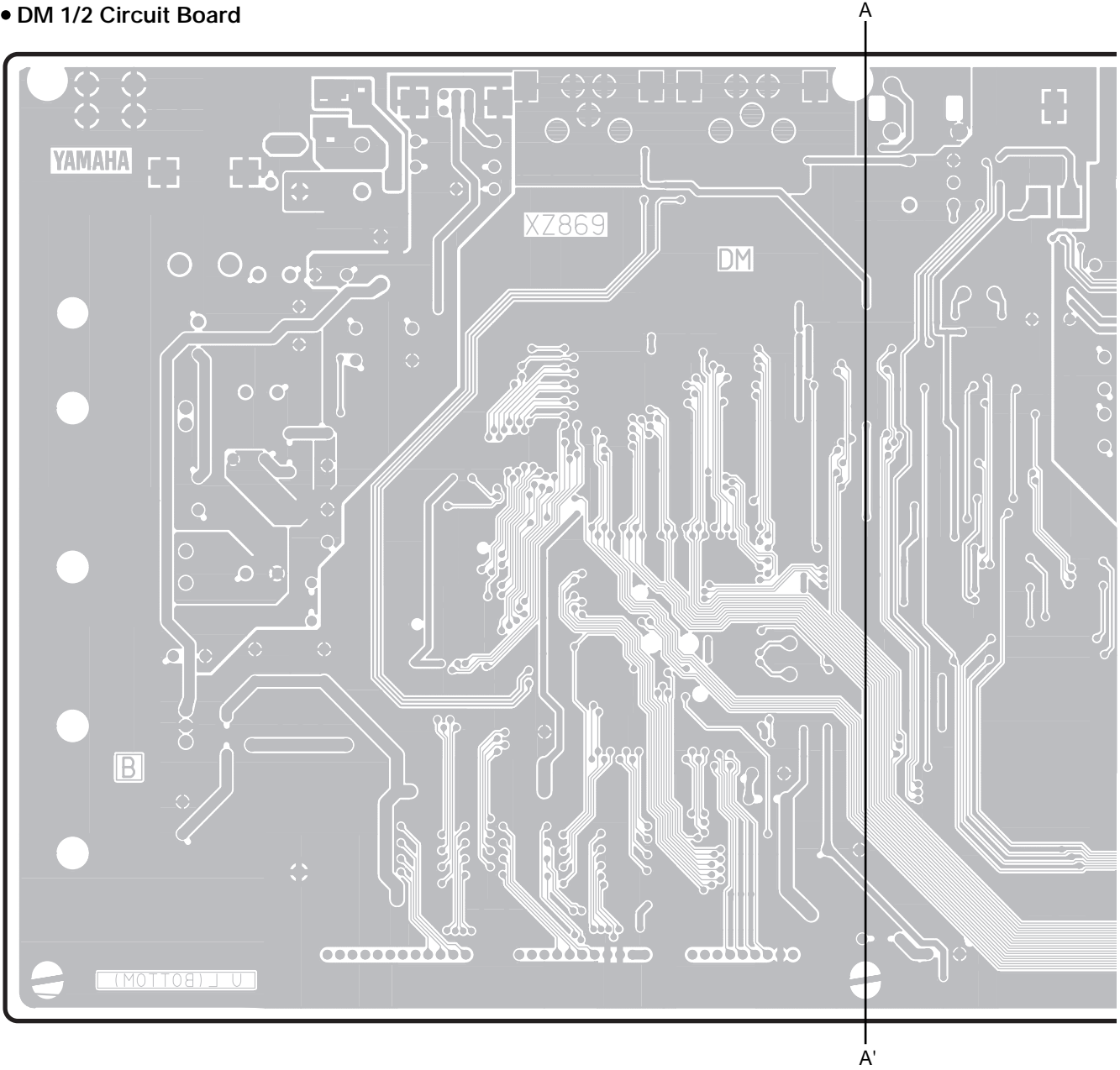
CN101: to PN1/2-CN301

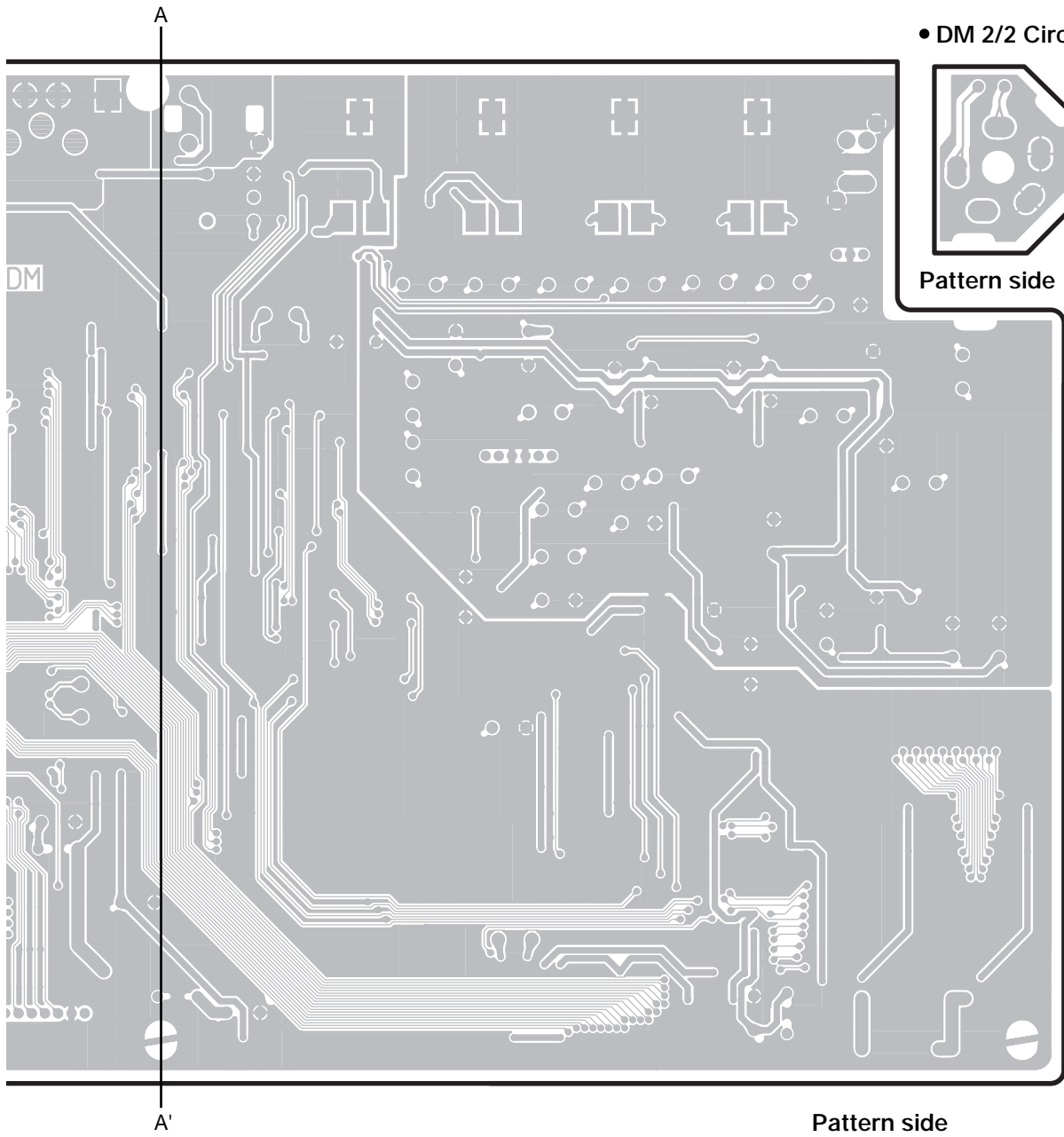
to PN1/2-

A'



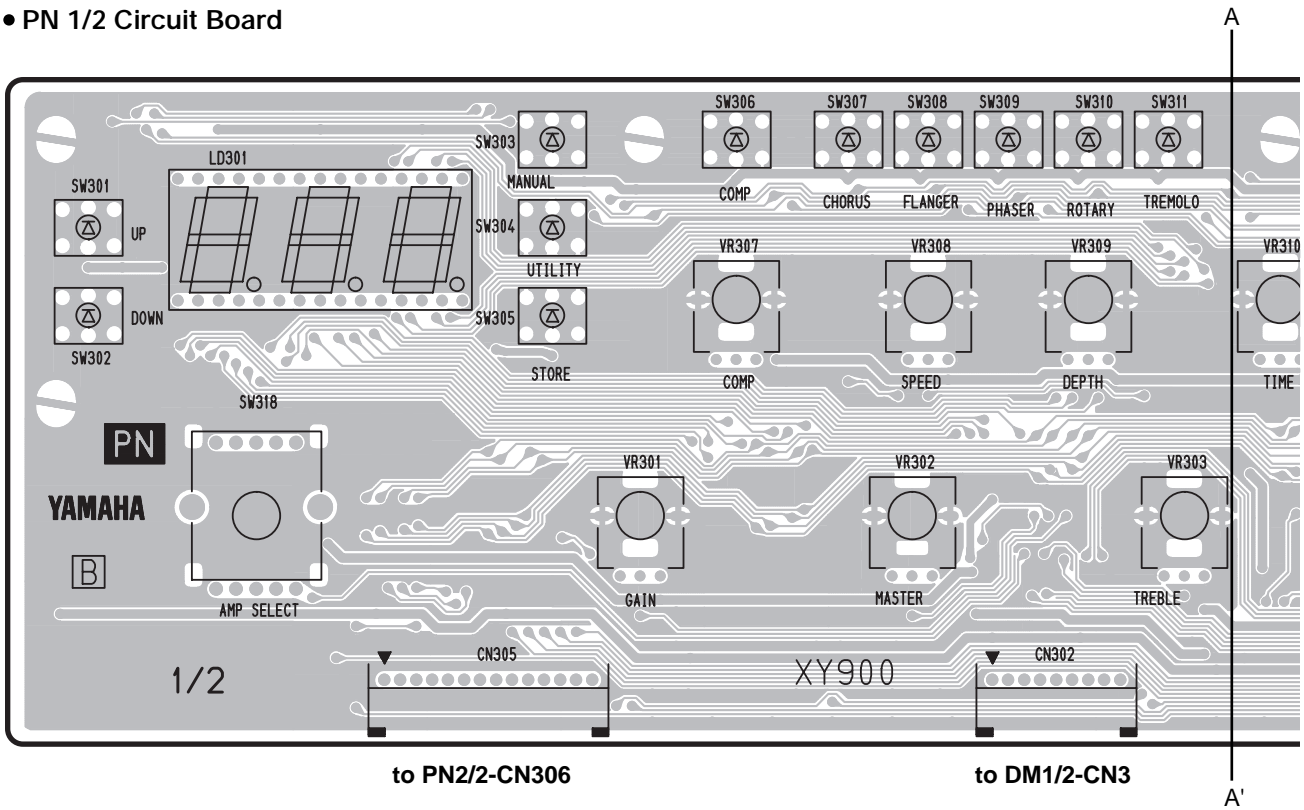
• DM 1/2 Circuit Board



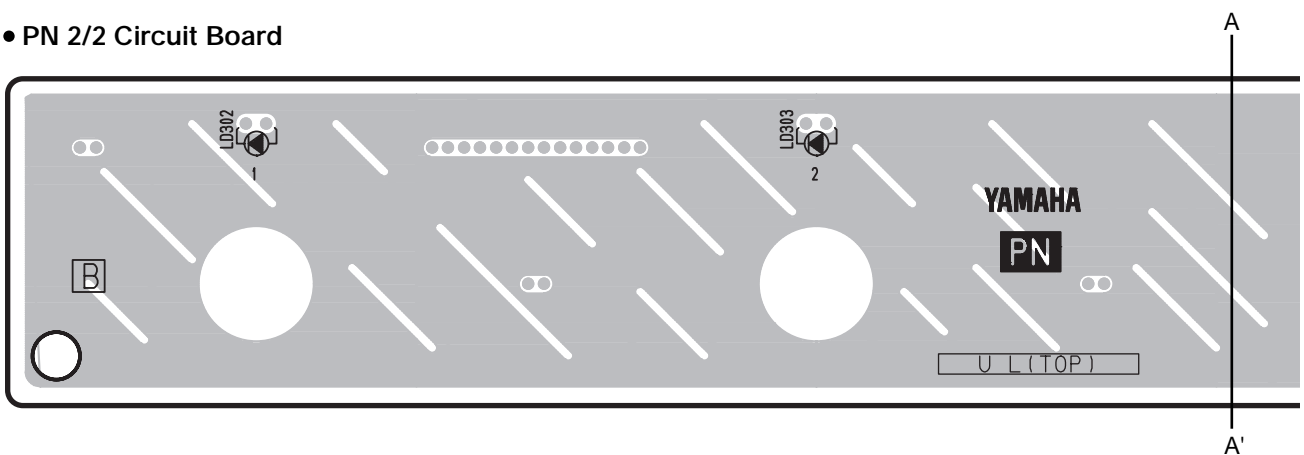


• DM 2/2 Circuit Board

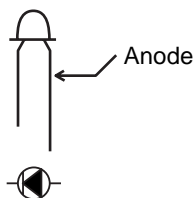
• PN 1/2 Circuit Board



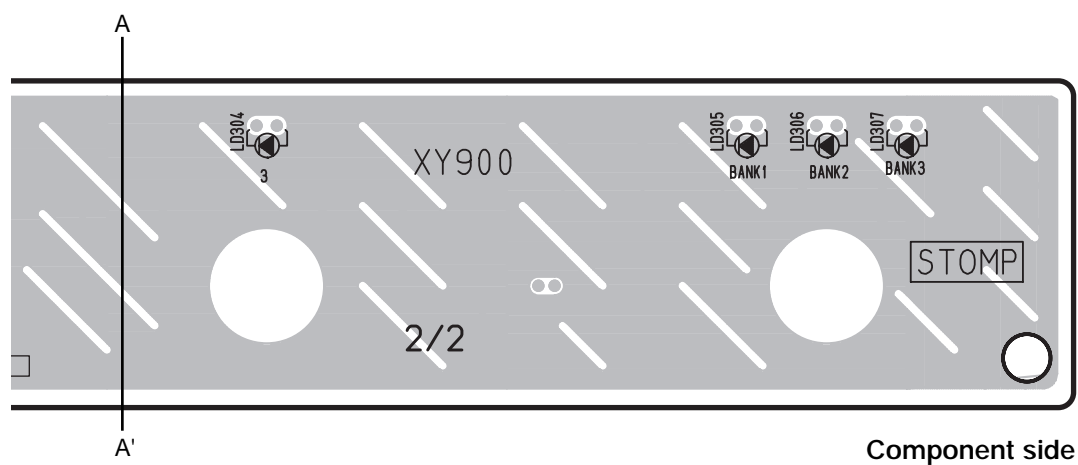
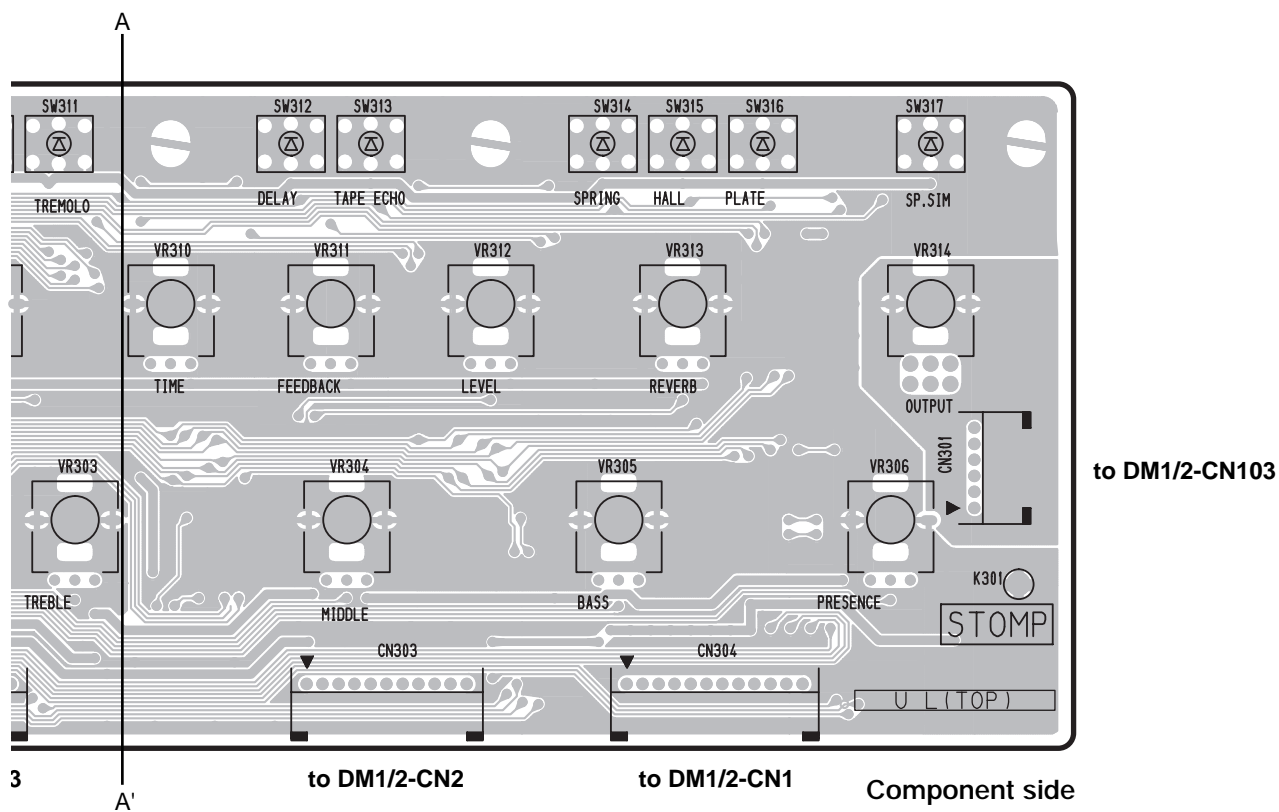
• PN 2/2 Circuit Board



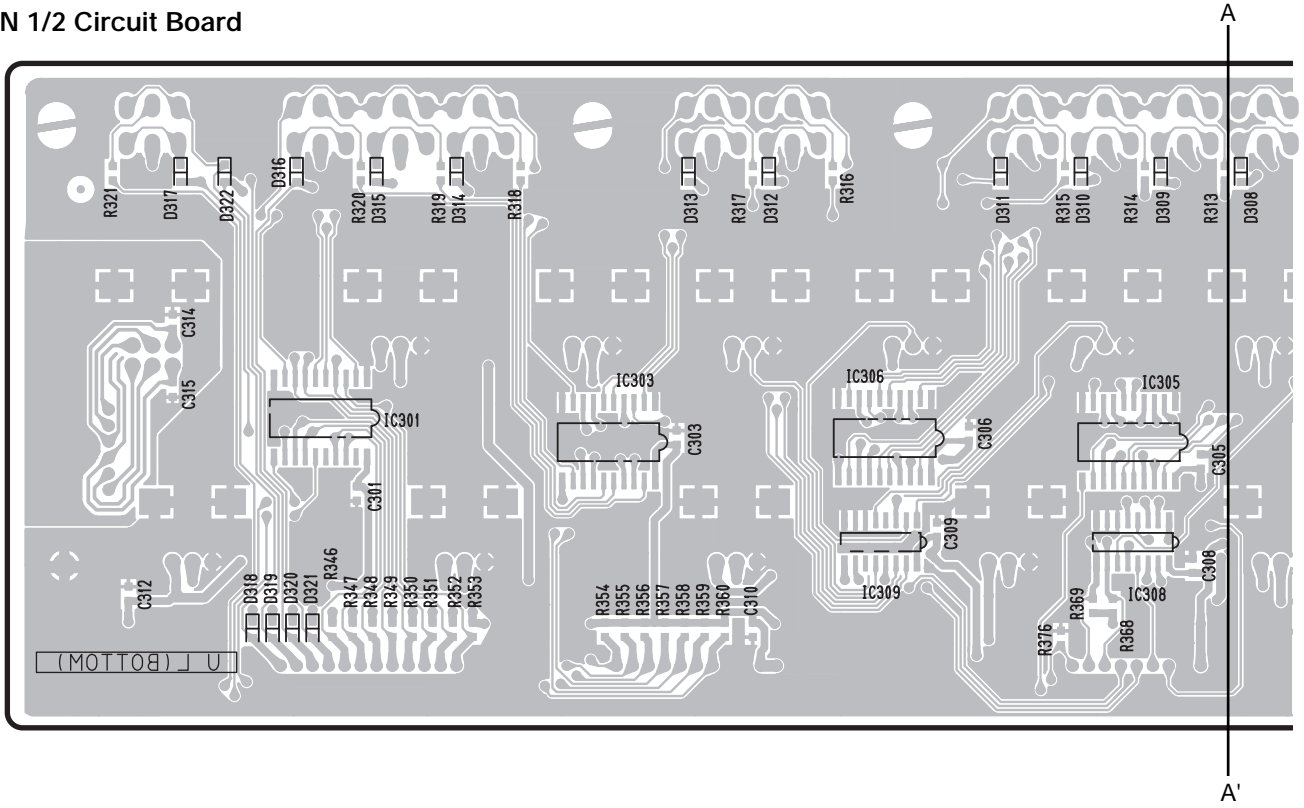
• LD302, LD303, LD304 and LD306 installation



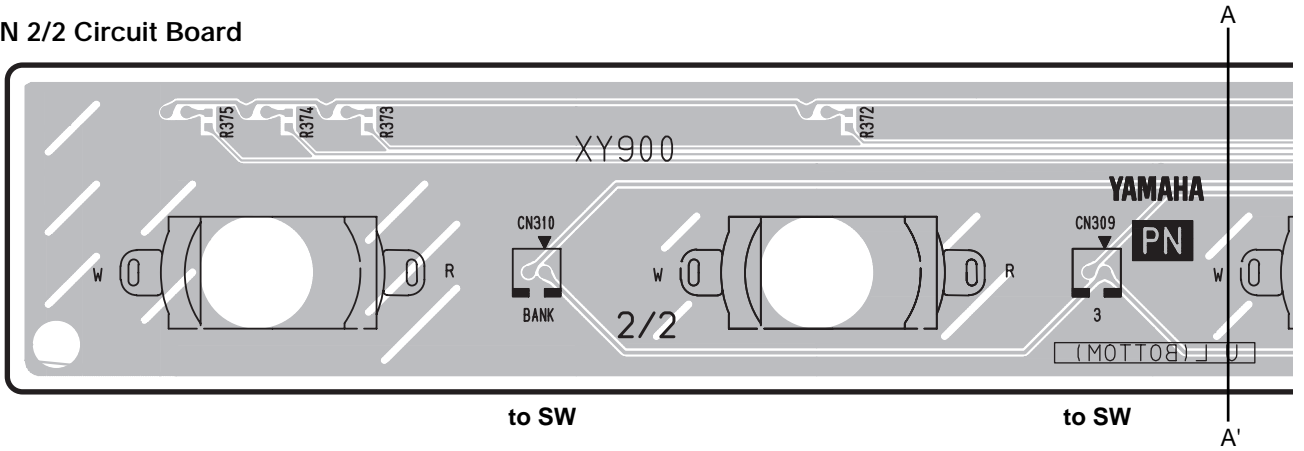
PN: CNA-V776560

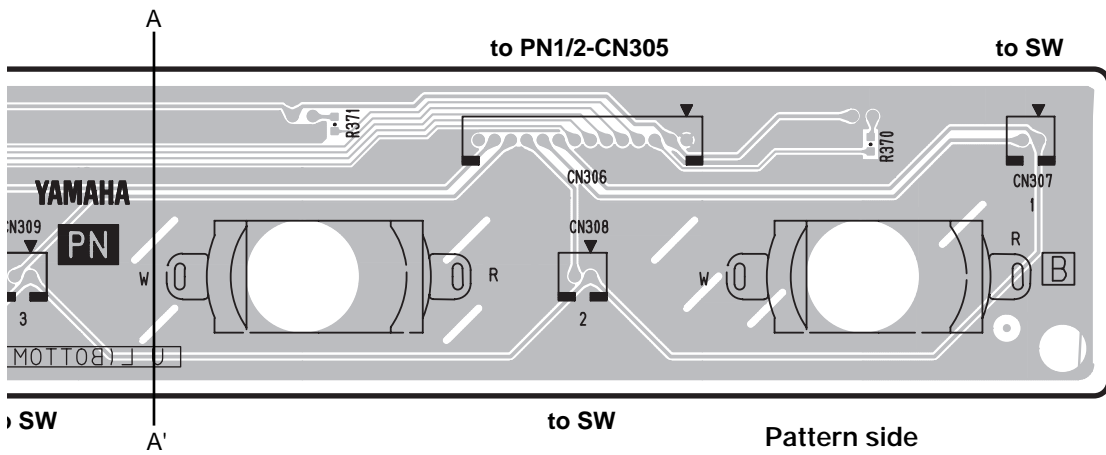
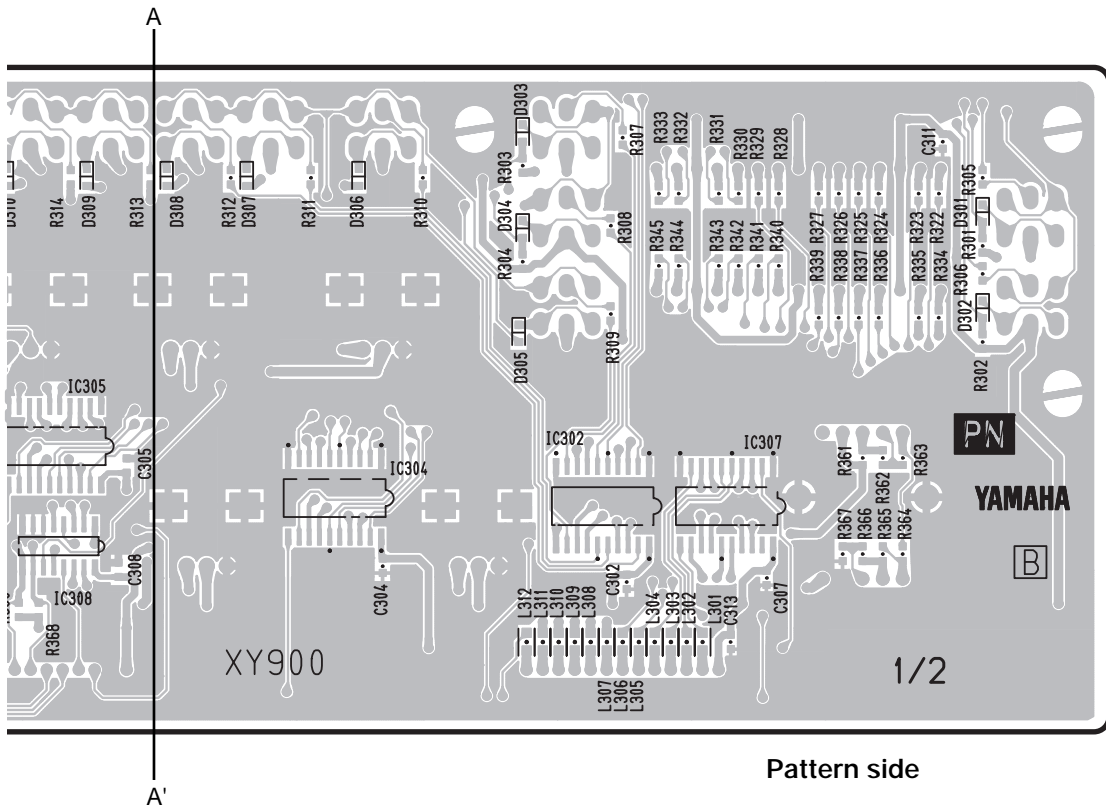


• PN 1/2 Circuit Board



• PN 2/2 Circuit Board





■ TEST PROGRAM

A. CONNECTION OF TERMINALS

- INPUT Monaural input
- OUT L/MONO Balance output (RL 47K Ω)
- OUT R Balance output (RL 47K Ω)
- HEAD PHONES Stereo output (RL 33 Ω)
- EXP. PEDAL FC7 or Connect VR of B50K.
 JK pin 1: MIN of VR JK pin 2: MAX of VR
 JK pin 3: CENTER of VR
- DIGITAL OUT Connect the DA converter.
- MIDI IN, MIDI OUT Connect IN and OUT with the
 DIN 5P cable.
- POWER SUPPLY OFF
- AC IN Connect the AC adaptor

B. CONTENTS OF THE TEST PROGRAM

- 0: LED Check
- 1: SW Check
- 2: VR Check
- 3: MIDI Check
- 4: SRAM Check
- 5: FLASH ROM Check
- 6: DSP Check

C. STARTING THE TEST PROGRAM AND CHECKING

While pressing the MANUAL, STORE and ROOM switches, turn on the POWER switch. The TEST program will then be started. At this time, check to make sure that the model name "AG.S" is displayed for about 2 seconds. The digit at the left end of the 7-segment LED indicates the test No.

D. SELECTING THE TEST NUMBER

- Using the UP and DOWN switches, select the test number and press the STORE switch to start testing.

E. OPERATION OF THE TEST PROGRAM AND CHECKING

0: LED check

- (1) Using the UP and DOWN switches, select "0".
 (This step can be skipped if "0" is already selected.)
- (2) Press the STORE switch.
 - LED segments light up one after another starting with "UP". When "MIC" is reached, "BANK", "1", "2" and "3" light up followed by 7 segments in the following order from the left end. After that, all LED segments light up and go out.(Fig.1)

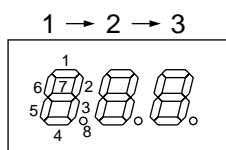


Fig.1

1: SW Check

- (1) Using the UP and DOWN switches, select "1".
(This step can be skipped if "1" is already selected.)
- (2) Press the STORE switch.
- (3) Starting with the UP switch, press each switch whose LED lights up one after another. After "MIC", "BANK", "3", "2" and "1", all LED segments should light up and then go out.
 - A number (0 to 20) is indicated at the right end of the 7 segment LED.
 - If "E" representing an error appears at the left end of the LED, press the UTILITY switch for resetting.

2: VR Check (Be sure to set each of VR, SW and EXP PEDAL to be checked at its center position.)

- (1) Using the UP and DOWN switches, select "2".
(This step can be skipped if "2" is already selected.)

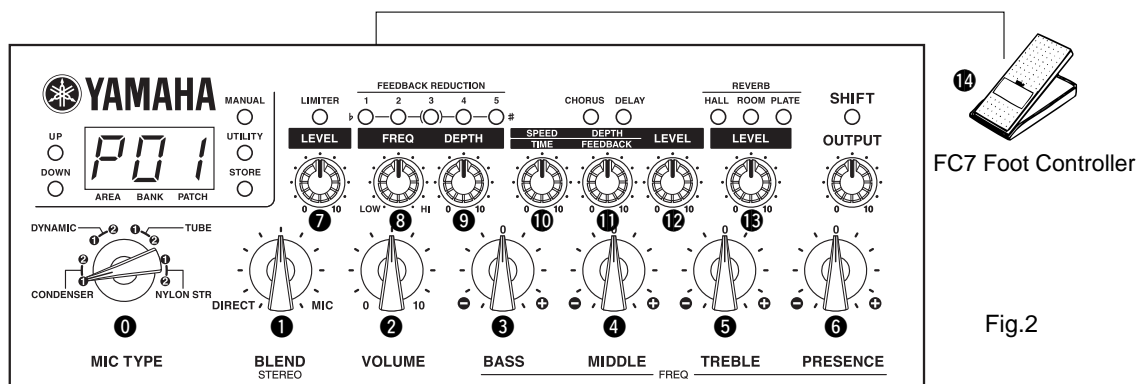


Fig.2

- (2) Press the STORE switch to start checking.
LED display 2. 0
- (3) Turn MIC SW ① counterclockwise.
LED display 2 0.
- (4) Turn MIC SW ① clockwise.
LED display 2. 1
- (5) Set MIC SW ① at the center position.
- (6) Turn BLEND STEREO ① counterclockwise.
LED display 2 1.
- (7) Turn BLEND STEREO ① clockwise.
LED display 2. 2
- (8) Set BLEND STEREO ① at the center position.
- (9) Check other VRs ② to ⑫ (Fig. 2) one after another until LEVEL ⑬ finally.
LED display 2.14
- (10) Return EXP. PEDAL ⑭
LED display 2 14.

(11) Push in the EXP. PEDAL. ⑭

- All LED segments light up and go out, and then the checking proceeds to MIDI check.
- If VR, SW or EXP PEDAL is not set at its center position, checking will result in an error and [E. 0] will appear at the left end of LED.
In such case, set it to the center position and press UTILITY SW for resetting.
- To advance the VR No. to be checked, press MANUAL SW.

3: MIDI Check

- (1) Using the UP and DOWN switches, select "3".
(This step can be skipped if "3" is already selected.)
- (2) Press the STORE switch.
 - If the check result is OK, all LED segments light up and go out. The checking function will proceed to the next step.
 - In case of an error, "E" appears at the left end of the LED. "0" at the right end indicates transmission and "1" indicates reception.

4: SRAM Check

- (1) Using the UP and DOWN switches, select "4".
(This step can be skipped if "4" is already selected.)
- (2) Press the STORE switch.
 - If the check result is OK, all LED segments light up and go out. The checking function will proceed to the next step.
 - In case of an error, "E" appears at the left end of the LED. "0" at the right end indicates IC2 and "1" indicates IC3.

5. FLASH ROM Check

- (1) Using the UP and DOWN switches, select "5".
(This step can be skipped if "5" is already selected.)
- (2) Press the STORE switch.
 - If the check result is OK, all LED segments light up and go out. The checking function will proceed to the next step.
 - In case of an error, "E" appears at the left end of the LED. "0" at the right end indicates "1 sector erase", "1" indicates "Erase check" and "2" indicates "Write check".

6: DSP Electric Characteristic

- (1) Using the UP and DOWN switches, select "6".
(This step can be skipped if "6" is already selected.)
- (2) Press the STORE switch.
 - An input signal will be output when the STORE switch is pressed. "0" appears at the right end of the LED. (Table.1)
 - The sine waveform can be checked in all of the analog circuit, AD, DSP-6 and D/A where the signal has passed.
 - Initial setting: OUTPUT VR ●● MAX

Table1

ITEM	INPUT	OUTPUT
1. INPUT sensitivity	JK101(INPUT)-10dBm(1kHz)	JK103(OUT L/MONO) +5dBm+/-3dB +HOT
2. INPUT sensitivity	JK101(INPUT)-10dBm(10kHz)	JK103(OUT L/MONO) +5dBm+/-3dB +HOT
3. INPUT sensitivity	JK101(INPUT)-10dBm(100Hz)	JK103(OUT L/MONO) +5dBm+/-3dB +HOT
4. INPUT sensitivity	JK101(INPUT)-10dBm(100Hz)	JK103(OUT L/MONO) +5dBm+/-3dB -COLD
5. INPUT sensitivity	JK101(INPUT)-10dBm(10kHz)	JK103(OUT L/MONO) +5dBm+/-3dB -COLD
6. INPUT sensitivity	JK101(INPUT)-10dBm(1kHz)	JK103(OUT L/MONO) +5dBm+/-3dB -COLD
7. INPUT sensitivity	JK101(INPUT)-10dBm(1kHz)	JK104(OUT R) +5dBm+/-3dB +HOT
8. INPUT sensitivity	JK101(INPUT)-10dBm(10kHz)	JK104(OUT R) +5dBm+/-3dB +HOT
9. INPUT sensitivity	JK101(INPUT)-10dBm(100Hz)	JK104(OUT R) +5dBm+/-3dB +HOT
10. INPUT sensitivity	JK101(INPUT)-10dBm(100Hz)	JK104(OUT R) +5dBm+/-3dB -COLD
11. INPUT sensitivity	JK101(INPUT)-10dBm(10kHz)	JK104(OUT R) +5dBm+/-3dB -COLD
12. INPUT sensitivity	JK101(INPUT)-10dBm(1kHz)	JK104(OUT R) +5dBm+/-3dB -COLD
13. INPUT sensitivity	JK101(INPUT)-10dBm(1kHz)	JK102(HP L) -1.0dBm+/-3dB
14. INPUT sensitivity	JK101(INPUT)-10dBm(10kHz)	JK102(HP L) -1.0dBm+/-3dB
15. INPUT sensitivity	JK101(INPUT)-10dBm(100Hz)	JK102(HP L) -2.0dBm+/-3dB
16. INPUT sensitivity	JK101(INPUT)-10dBm(100Hz)	JK102(HP R) -2.0dBm+/-3dB
17. INPUT sensitivity	JK101(INPUT)-10dBm(10kHz)	JK102(HP R) -1.0dBm+/-3dB
18. INPUT sensitivity	JK101(INPUT)-10dBm(1kHz)	JK102(HP R) -1.0dBm+/-3dB
19. MUTE NOISE LEVEL	SW101(INPUT MUTE) -10dBm(1kHz) MUTE SW ON	JK103(OUT L/MONO) -40dB or less +HOT
20. MUTE NOISE LEVEL	SW101(INPUT MUTE) -10dBm(1kHz) MUTE SW ON	JK103(OUT L/MONO) -40dB or less -COLD
21. MUTE NOISE LEVEL	SW101(INPUT MUTE) -10dBm(1kHz) MUTE SW ON	JK104(OUT R) -40dB or less +HOT
22. MUTE NOISE LEVEL	SW101(INPUT MUTE) -10dBm(1kHz) MUTE SW ON	JK104(OUT R) -40dB or less -COLD
23. MUTE NOISE LEVEL	SW101(INPUT MUTE) -10dBm(1kHz) MUTE SW ON	JK102(HP L) -45dB or less
24. MUTE NOISE LEVEL	SW101(INPUT MUTE) -10dBm(1kHz) MUTE SW ON	JK102(HP R) -45dB or less
25. DISTORTION FACTOR	JK101(INPUT) -10dBm(1kHz)	JK103(OUT L/MONO) 0.5% or less +HOT
26. DISTORTION FACTOR	JK101(INPUT) -10dBm(1kHz)	JK103(OUT L/MONO) 0.5% or less -COLD
27. DISTORTION FACTOR	JK101(INPUT) -10dBm(1kHz)	JK104(OUT R) 0.5% or less +HOT
28. DISTORTION FACTOR	JK101(INPUT) -10dBm(1kHz)	JK104(OUT R) 0.5% or less -COLD
29. DISTORTION FACTOR	JK101(INPUT) -10dBm(1kHz)	JK104(OUT L) 0.5% or less
30. DISTORTION FACTOR	JK101(INPUT) -10dBm(1kHz)	JK104(OUT R) 0.5% or less
31. Digital Out	JK101(INPUT) -10dBm(1kHz)	JK2(Digital Out) Lch:-8.5dBm+/-3dB, Rch:-8.5dBm+/-3dB

F. CHEKING OF THE ROM VERSION

While pressing the DOWN and MANUAL switches, turn on the POWER switch. The model name "AG.S" is displayed for about 2 seconds. As the version number "** **" (each * representing a number) appears after that, check it. Then the mode will return to the normal mode.

■ ERROR MESSAGES

If an error occurs during operation, one of the following error message numbers will appear in the display. Stop operation of the AG-Stomp and follow one of the solutions described below.

E1: MIDI Receive Buffer Full

CAUSE: Too much MIDI data is being received and the buffer is full

SOLUTION: Try reducing the amount of data being sent, or break the data into smaller blocks.

E2: Communication Error.

CAUSE: An abnormality is detected during MIDI communications.

SOLUTION: Check all connections, etc. and try again.

E3: Bulk Receive Check Sum Error.

CAUSE: The check sum does not match the received MIDI bulk dump data.

SOLUTION: Check all connections and transmitted data, and try again.

E4: Bulk Receive Data Abnormality.

CAUSE: An abnormality is detected while receiving the bulk dump.

SOLUTION: Check all connections and transmitted data, and try again.

YAMAHA [Acoustic Guitar Pre Amplifier] Date:1-May-2001
 Model AG stomp MIDI Implementation Chart Version : 1.0

Function ...	Transmitted	Recognized	Remarks
:Basic Default	: 1 - 16	: 1 - 16, off	: memorized
:Channel Changed	: 1 - 16	: 1 - 16, off	:
:Mode Default	: 1,3	: 1,3	: memorized
:Mode Messages	: x	: x	:
:Mode Altered	: *****	: x	:
:Note	: x	: x	:
:Number : True voice	: *****	: x	:
:Velocity Note ON	: x	: x	:
:Velocity Note OFF	: x	: x	:
:After Key's	: x	: x	:
:Touch Ch's	: x	: x	:
:Pitch Bender	: x	: x	:
:Control 0	: x	: x	:
:Control 1 - 31	: o	: o	:
:Control 32 - 63	: x	: x	:
:Control 64 - 95	: o	: o	:
:Control 95 -127	: x	: x	:
:Change	:	:	:
:Prog	: o 0 - 127	: o 0 - 127	:
:Change : True #	: *****	:	:
:System Exclusive	: o	: o	: Bulk Dump
:System : Song Pos.	: x	: x	:
:System : Song Sel.	: x	: x	:
:common : Tune	: x	: x	:
:System :Clock	: x	: x	:
:Real Time :Commands	: x	: x	:
:Aux :All Sound OFF	: x	: x	:
:Aux :Reset All Cntrls	: x	: x	:
:Aux :Local ON/OFF	: x	: x	:
:Aux :All Notes OFF	: x	: x	:
:Mes- :Active Sense	: o	: x	:
:sages:Reset	: x	: x	:
Mode 1 : OMNI ON, POLY	Mode 2 : OMNI ON, MONO	o : Yes	
Mode 3 : OMNI OFF, POLY	Mode 4 : OMNI OFF, MONO	x : No	

ACOUSTIC GUITAR PRE-AMPLIFIER

AG-Stamp

PARTS LIST


■ CONTENTS

OVERALL ASSEMBLY	2
ELECTRICAL PARTS	4

Notes : DESTINATION ABBREVIATIONS

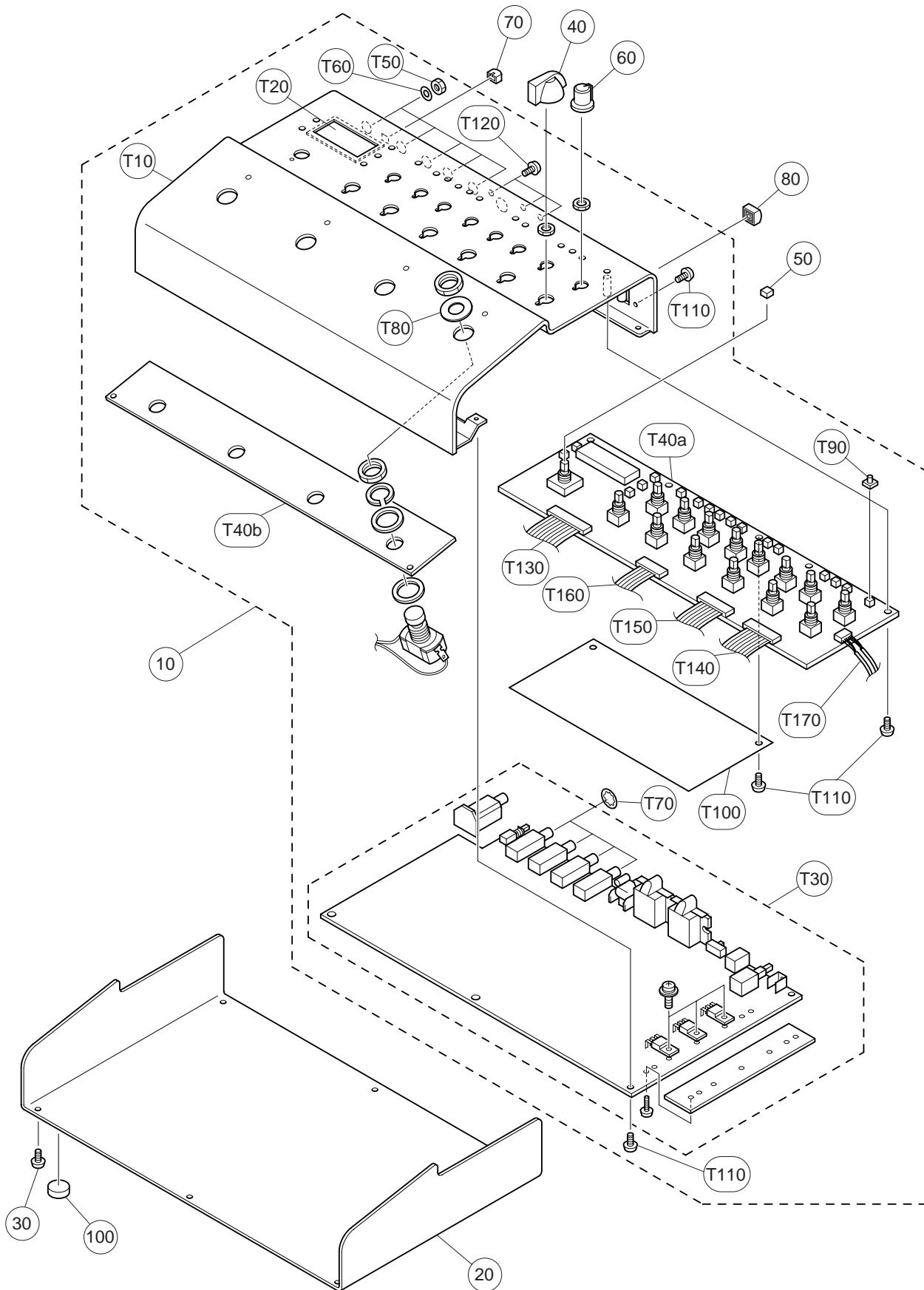
A : Australian model	M : South African model
B : British model	O : Chinese model
C : Canadian model	Q : South-east Asia model
D : German model	T : Taiwan model
E : European model	U : U.S.A. model
F : French model	V : General export model (110V)
H : North European model	W : General export model (220)
I : Indonesian model	N,X : General export model
J : Japanese model	Y : Export model

■ WARNING

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

- The numbers "QTY" show quantities for each unit.
- The parts with "--" in "PART NO." are not available as spare parts.
- This mark "}" in the REMARKS column means these parts are interchangeable.
- The second letter of the shaded (■) part number is O, not zero.
- The second letter of the shaded (■) part number is I, not one.

OVERALL ASSEMBLY



REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
		OVERALL ASSEMBLY		AG-STOMP		
	--	Overall Assembly		(V698510)		
10	--	Top Cover Assembly		(V698560)		
* 20	V6985700	Bottom Case				
30	EP600190	Bind Head Tapping Screw-B	3.0X8 MFZN2BL		6	01
40	V3694100	Knob		MIC,BALANCE,VOLUME,BASS, MIDDLE,TREBLE,PRESENCE	7	02
50	V5851800	Spacer				
60	V5852300	Knob		LIMITER LEVEL, FB REDU.(FREQ.,DEPTH), CHORUS/DELAY(SPEED TIME, DEPTH FB,LEVEL), RV. LEVEL,OUTPUT	8	02
70	VZ429100	Button (S)	GRAY	INPUT MUTE		01
80	VZ968600	Button (L)	NO.947 CD-GRAY	STAND-BY		01
100	VU859300	Leg	SR200		4	01
	--	Top Cover Assembly		(V698560)		
* T10	V6986100	Top Cover				
T20	V5734500	Meter Cover				
* T30	V7177900	Circuit Board	DM	DM1/2,DM2/2 (XZ869B0)		
* T40a	AAx25790	Circuit Board	PN1/2	(V776560)(XY900B0)		
* T40b	AAx25800	Circuit Board	PN2/2	(V776560)(XY900B0)		
T50	LX200060	Hexagonal Nut	9.0 12X2 MFNI33		5	01
T60	VL802300	Flat Washer	9X14 0.5 FNM3		5	01
T70	ET800150	Toothed Lock Washer	9.0 MFZN2Y		4	01
* T80	V7407400	Flat Washer	12X17 0.5 MFNI33		4	
T90	V5852100	Select Button		UP,DOWN,MANUAL,UTILITY, STORE,LIMITER, FB REDU.(1,2,3,4,5), CHORUS,DELAY,REV.(HALL, ROOM,PLATE),SHIFT	17	01
T100	--	Shield Film		(V585150)		
T110	EP600190	Bind Head Tapping Screw-B	3.0X8 MFZN2BL		7	01
T120	VC161100	Bind Head Tapping Screw-P	3.0X12 MFZN2BL		3	01
T130	--	Wire Assembly	C&C #28 14P L 50	(V610850)		
T140	--	Wire Assembly	C&C #28 12P L100	(V611450)		
T150	--	Wire Assembly	C&C #28 11P L100	(V611460)		
T160	--	Wire Assembly	C&C #28 9P L100	(V611470)		
T170	--	Wire	C&C #28 6P L250	(V611480)		
		ACCESSORIES				
⚠	V5882800	AC Adapter	AC-10	J		08
⚠	V5883000	AC Adapter	AC-10	U		08
⚠	V5883100	AC Adapter	AC-10	H		08
⚠	V7930000	Dummy Cell				
* V7929900		TRS XLR Conversion Cable			2	
* V6986000		TRS Phone Cable	3m			

*: New Parts

RANK: Japan only

ELECTRICAL PARTS

REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
		ELECTRICAL PARTS				
*	V7177900	Circuit Board	DM	DM1/2,DM2/2 (XZ869B0)		
*	AAX25790	Circuit Board	PN1/2	(V776560)(XY900B0)		
*	AAX25800	Circuit Board	PN2/2	(V776560)(XY900B0)		
*	V7177900	Circuit Board	DM	DM1/2,DM2/2 (XZ869B0)		
	--	Heat Sink		(V573470)		
	VB763800	Bind Head Screw	SP 3.0X12 MFZN2Y		5	01
CN1	VV067200	Base Post	M2426XX 12P TE			01
CN2	VV067100	Base Post	M2426XX 11P TE			01
CN3	VV066900	Base Post	M2426XX 9P TE			01
CN101	VV066600	Base Post	M2426XX 6P TE			01
C1	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
-9	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
C10	UR838100	Electrolytic Cap.	100.00 16.0V			01
C11	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
-18	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
C19	UR838100	Electrolytic Cap.	100.00 16.0V			01
C20	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
-29	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
C30	UR857100	Electrolytic Cap.	10.00 35.0V			01
C31	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
C32	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
C33	UR857100	Electrolytic Cap.	10.00 35.0V			01
C34	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
C35	UX061120	Ceramic Capacitor(chip)	12P 50V J			
C36	UX061120	Ceramic Capacitor(chip)	12P 50V J			
C37	UR838100	Electrolytic Cap.	100.00 16.0V			01
C38	UR838100	Electrolytic Cap.	100.00 16.0V			01
C39	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
-41	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
C42	UX064100	Ceramic Capacitor(chip)	0.0100 50V K			
C43	UX064100	Ceramic Capacitor(chip)	0.0100 50V K			
C44	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
C45	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
-55	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
C56	UX064100	Ceramic Capacitor(chip)	0.0100 50V K			
C57	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
C58	UX062220	Ceramic Capacitor(chip)	220P 50V J			
C59	UX064100	Ceramic Capacitor(chip)	0.0100 50V K			
C60	UX064100	Ceramic Capacitor(chip)	0.0100 50V K			
C101	UY065220	Ceramic Capacitor(chip)	0.2200 50V Z			
C102	UX062100	Ceramic Capacitor(chip)	100P 50V J			
C103	UR857100	Electrolytic Cap.	10.00 35.0V			01
C104	UX061100	Ceramic Capacitor(chip)	10P 50V D			
C105	V6197100	Electrolytic Cap.-BP	10.00 35.0V			
C106	UX061100	Ceramic Capacitor(chip)	10P 50V D			
C107	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
C108	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
C109	UX061220	Ceramic Capacitor(chip)	22P 50V J			
C110	UX063100	Ceramic Capacitor(chip)	1000P 50V K			
C111	UR857100	Electrolytic Cap.	10.00 35.0V			01
C112	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
C113	UR848100	Electrolytic Cap.	100.00 25.0V			01
C114	UR857100	Electrolytic Cap.	10.00 35.0V			01
-117	UR857100	Electrolytic Cap.	10.00 35.0V			01
C118	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
C119	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
C120	UR857100	Electrolytic Cap.	10.00 35.0V			01
C121	UR857100	Electrolytic Cap.	10.00 35.0V			01
C122	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
C123	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
C124	UR857100	Electrolytic Cap.	10.00 35.0V			01
C125	V6197100	Electrolytic Cap.-BP	10.00 35.0V			
-127	V6197100	Electrolytic Cap.-BP	10.00 35.0V			
C128	UR857100	Electrolytic Cap.	10.00 35.0V			01
C129	UX061220	Ceramic Capacitor(chip)	22P 50V J			
C130	V6197000	Electrolytic Cap.-BP	47.00 25.0V			
C131	UX063100	Ceramic Capacitor(chip)	1000P 50V K			
C132	V6197100	Electrolytic Cap.-BP	10.00 35.0V			

*: New Parts

RANK: Japan only

REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
C133	UR857100	Electrolytic Cap.	10.00 35.0V			01
C134	UX061220	Ceramic Capacitor(chip)	22P 50V J			
C135	V6197000	Electrolytic Cap.-BP	47.00 25.0V			
C136	UX063100	Ceramic Capacitor(chip)	1000P 50V K			
C137	UR848100	Electrolytic Cap.	100.00 25.0V			01
C138	UR848100	Electrolytic Cap.	100.00 25.0V			01
C139	UR857100	Electrolytic Cap.	10.00 35.0V			01
C140	UX061220	Ceramic Capacitor(chip)	22P 50V J			
C141	UX061100	Ceramic Capacitor(chip)	10P 50V D			
* C142	V7494000	Electrolytic Cap.-BP	33.00 50.0V			
C143	UX062100	Ceramic Capacitor(chip)	100P 50V J			
* C144	V7494000	Electrolytic Cap.-BP	33.00 50.0V			
C145	UX062100	Ceramic Capacitor(chip)	100P 50V J			
C146	UR857100	Electrolytic Cap.	10.00 35.0V			01
C147	UX061220	Ceramic Capacitor(chip)	22P 50V J			
C148	UX061100	Ceramic Capacitor(chip)	10P 50V D			
* C149	V7494000	Electrolytic Cap.-BP	33.00 50.0V			
C150	UX062100	Ceramic Capacitor(chip)	100P 50V J			
* C151	V7494000	Electrolytic Cap.-BP	33.00 50.0V			
C152	UX062100	Ceramic Capacitor(chip)	100P 50V J			
C153	UR857100	Electrolytic Cap.	10.00 35.0V			01
-156	UR857100	Electrolytic Cap.	10.00 35.0V			01
C157	UR848100	Electrolytic Cap.	100.00 25.0V			01
C158	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
C159	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
C160	UR848100	Electrolytic Cap.	100.00 25.0V			01
C161	UX060500	Ceramic Capacitor(chip)	5P 50V C			
C162	UX060500	Ceramic Capacitor(chip)	5P 50V C			
C163	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
-166	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
C167	UY065100	Ceramic Capacitor(chip)	0.1000 50V Z			
-169	UY065100	Ceramic Capacitor(chip)	0.1000 50V Z			
C170	UR866100	Electrolytic Cap.	1.00 50.0V			01
C171	UR866100	Electrolytic Cap.	1.00 50.0V			01
C172	V6196900	Electrolytic Cap.	3300 35.0V			
C173	UY065100	Ceramic Capacitor(chip)	0.1000 50V Z			
C174	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
C175	UR838100	Electrolytic Cap.	100.00 16.0V			01
C176	UR839100	Electrolytic Cap.	1000 16.0V			01
C177	UR839100	Electrolytic Cap.	1000 16.0V			01
C178	UR858470	Electrolytic Cap.	470.00 35.0V			01
-181	UR868470	Electrolytic Cap.	470.00 50.0V			01
C182	UY065100	Ceramic Capacitor(chip)	0.1000 50V Z			
C183	UY065100	Ceramic Capacitor(chip)	0.1000 50V Z			
C184	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
C185	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
C186	UR848100	Electrolytic Cap.	100.00 25.0V			01
C187	UR848100	Electrolytic Cap.	100.00 25.0V			01
C188	UR848220	Electrolytic Cap.	220.00 25.0V			01
C189	UR848220	Electrolytic Cap.	220.00 25.0V			01
C190	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
C191	UR866100	Electrolytic Cap.	1.00 50.0V			01
C192	UR866470	Electrolytic Cap.	4.70 50.0V			01
D001	VT332900	Diode	1SS355 TE-17			01
D101	VT332900	Diode	1SS355 TE-17			01
-105	VT332900	Diode	1SS355 TE-17			01
D106	VT532500	Diode	1SR154-400			01
-115	VT532500	Diode	1SR154-400			01
* IC1	XZ912C00	IC	MBM29F400BC-70P	4M FLASH ROM		
IC2	XR115A00	IC	UPD43256BGU-70L SR	256K		08
IC2	XV411A00	IC	W24258S-70LE-EL10	256K		07
IC2	XW433A00	IC	CY62256LL-70SNCT	256K		05
IC2	XZ388A00	IC	W24257S-70LL-EL10	256K		05
IC3	XR115A00	IC	UPD43256BGU-70L SR	256K		08
IC3	XV411A00	IC	W24258S-70LE-EL10	256K		07
IC3	XW433A00	IC	CY62256LL-70SNCT	256K		05
IC3	XZ388A00	IC	W24257S-70LL-EL10	256K		05
IC4	XR967A00	IC	MB3790PF	ASSP		05
IC5	XZ103A00	IC	74AHC32DT	OR		01
IC6	XZ103A00	IC	74AHC32DT	OR		01

*: New Parts

RANK: Japan only

REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
IC7	XZ108A00	IC	74HC08DT	AND		01
IC8	XV988A00	IC	YSS910-S	DSP6		10
IC9	XU965A00	IC	UPC29M33T-E1 3.3V	REGULATOR 3.3V		03
IC10	XV077A00	IC	MSM514260C-60JS	4M		07
IC10	XV077B00	IC	MSM514260E-60JS	4M		
IC10	XV839A00	IC	S1N42T60U6S000B	4M		08
IC11	XV077A00	IC	MSM514260C-60JS	4M		07
IC11	XV077B00	IC	MSM514260E-60JS	4M		
IC11	XV839A00	IC	S1N42T60U6S000B	4M		08
IC12	XQ375A00	IC	HD6413002FP16	CPU		09
IC13	VN686000	Photo Coupler	PC410T			04
IC13	VR903700	Photo Coupler	HCPL-M600			04
IC14	XZ109A00	IC	74HC244DT	BUS BUFFER		02
-16	XZ109A00	IC	74HC244DT	BUS BUFFER		02
IC17	XM530A00	IC	YM3437C-F	DIT2		07
IC101	XC458A00	IC	NJM072M	OP AMP		03
IC102	XC011A00	IC	NJM5532M	OP AMP		03
IC103	XQ138A00	IC	NJM4556AMT1	OP AMP		03
IC104	XT802A00	IC	AK4520A-VF-E2	ADC&DAC		07
IC105	XQ138A00	IC	NJM4556AMT1	OP AMP		03
IC106	XQ138A00	IC	NJM4556AMT1	OP AMP		03
IC107	XZ110A00	IC	74HCU04DT	INVERTER		01
IC108	XR684A00	IC	TC74HC404F	B. COUNTER		03
IC109	XZ112A00	IC	74HC164DT	SHIFT RESISTOR		02
IC110	XZ113A00	IC	74HC175DT	D-FF		02
IC111	XZ162A00	IC	NJM78M05DLA 5.0V	REGULATOR 5V		03
IC112	XJ607A00	IC	NJM7805FA	REGULATOR 5V		02
IC113	XD853A00	IC	NJM7815FA	REGULATOR		03
IC114	XD854A00	IC	NJM7915FA	REGULATOR		03
JK1	V6177500	DIN Connector	JACK 5P3 HDC-052A	MIDI(IN,OUT)		03
JK2	V6178000	PIN Connector	JACK HSP-241V1B	DIGITAL OUT		01
JK3	V6177700	Phone Jack	STEREO HTJ-064-12D	EXP. PEDAL		03
JK101	V3939200	Phone Connector	JY6351J-46-250 2SW	INPUT		02
JK102	V6177700	Phone Jack	STEREO HTJ-064-12D	PHONES,OUTPUT(R,L/MONO)		03
-104	V6177700	Phone Jack	STEREO HTJ-064-12D			03
JK105	V6177200	Power Supply Connector	SOCKET HTJ-020-05A	AC IN		03
J1	--	Jumper Wire	0.55	(VA07890)		
-3	--	Jumper Wire	0.55	(VA07890)		
J104	--	Jumper Wire	0.55	(VA07890)		
-107	--	Jumper Wire	0.55	(VA07890)		
K101	VV075700	Terminal Plate				01
L1	VS740100	Chip Inductor	BLM21B751S			03
-6	VS740100	Chip Inductor	BLM21B751S			03
L7	VC548200	Pulse Transformer	TC-1019-06 7mm			04
L8	V6178900	Noise Filter	ZJYS51R5-2PT			
L101	VG238200	Filter	PLT2003C			04
RA1	RH047100	Resistor Array	10KX4			
-18	RH047100	Resistor Array	10KX4			
R3	RG007100	Carbon Resistor(chip)	10K 0.1 J			
R5	RG007100	Carbon Resistor(chip)	10K 0.1 J			
R6	RG005100	Carbon Resistor(chip)	100 0.1 J			
-10	RG005100	Carbon Resistor(chip)	100 0.1 J			
R11	RG007100	Carbon Resistor(chip)	10K 0.1 J			
R12	RG005100	Carbon Resistor(chip)	100 0.1 J			
R13	RG005100	Carbon Resistor(chip)	100 0.1 J			
R14	RG005270	Carbon Resistor(chip)	270 0.1 J			
R15	RG007100	Carbon Resistor(chip)	10K 0.1 J			
R16	RG007100	Carbon Resistor(chip)	10K 0.1 J			
R17	RG000000	Carbon Resistor(chip)	0 0.1 J			
R19	RG006100	Carbon Resistor(chip)	1.0K 0.1 J			
R20	RG005220	Carbon Resistor(chip)	220 0.1 J			
R21	RG007100	Carbon Resistor(chip)	10K 0.1 J			
-23	RG007100	Carbon Resistor(chip)	10K 0.1 J			
R24	RG006220	Carbon Resistor(chip)	2.2K 0.1 J			
R25	RG005220	Carbon Resistor(chip)	220 0.1 J			
R26	RG005220	Carbon Resistor(chip)	220 0.1 J			
R27	RG009100	Carbon Resistor(chip)	1.0M 0.1 J			
R28	RG006100	Carbon Resistor(chip)	1.0K 0.1 J			
R29	RG006100	Carbon Resistor(chip)	1.0K 0.1 J			
R30	RG000000	Carbon Resistor(chip)	0 0.1 J			

*: New Parts

RANK: Japan only

REF NO.	PART NO.	DESCRIPTION	REMARKS	QTY	RANK
R31	RG004470	Carbon Resistor(chip)	47 0.1 J		
R32	RG004750	Carbon Resistor(chip)	75 0.1 J		
R101	RG007100	Carbon Resistor(chip)	10K 0.1 J		
R102	RG009100	Carbon Resistor(chip)	1.0M 0.1 J		
R103	RG006470	Carbon Resistor(chip)	4.7K 0.1 J		
R104	RG004330	Carbon Resistor(chip)	33 0.1 J		
R105	RG007100	Carbon Resistor(chip)	10K 0.1 J		
R106	RG006330	Carbon Resistor(chip)	3.3K 0.1 J		
R107	RG007100	Carbon Resistor(chip)	10K 0.1 J		
R108	RG007100	Carbon Resistor(chip)	10K 0.1 J		
R109	RG006560	Carbon Resistor(chip)	5.6K 0.1 J		
R110	RG006560	Carbon Resistor(chip)	5.6K 0.1 J		
R111	RG005470	Carbon Resistor(chip)	470 0.1 J		
R112	RG005470	Carbon Resistor(chip)	470 0.1 J		
R113	RG006470	Carbon Resistor(chip)	4.7K 0.1 J		
R114	RG004330	Carbon Resistor(chip)	33 0.1 J		
R115	RG006470	Carbon Resistor(chip)	4.7K 0.1 J		
R116	RG007100	Carbon Resistor(chip)	10K 0.1 J		
R117	RG007100	Carbon Resistor(chip)	10K 0.1 J		
R118	RG007100	Carbon Resistor(chip)	10K 0.1 J		
R119	RG203470	Carbon Resistor(chip)	4.7 1/4 J		
R120	RG006100	Carbon Resistor(chip)	1.0K 0.1 J		
R121	RG007100	Carbon Resistor(chip)	10K 0.1 J		
R122	RG006100	Carbon Resistor(chip)	1.0K 0.1 J		
R123	RG007100	Carbon Resistor(chip)	10K 0.1 J		
R124	RG006220	Carbon Resistor(chip)	2.2K 0.1 J		
R125	RG008100	Carbon Resistor(chip)	100K 0.1 J		
R126	RG006100	Carbon Resistor(chip)	1.0K 0.1 J		
R127	RG007100	Carbon Resistor(chip)	10K 0.1 J		
R128	RG204470	Carbon Resistor(chip)	47 1/4 J		
R129	RG007100	Carbon Resistor(chip)	10K 0.1 J		
R130	RG008100	Carbon Resistor(chip)	100K 0.1 J		
R131	RG006220	Carbon Resistor(chip)	2.2K 0.1 J		
R132	RG008100	Carbon Resistor(chip)	100K 0.1 J		
R133	RG006100	Carbon Resistor(chip)	1.0K 0.1 J		
R134	RG007100	Carbon Resistor(chip)	10K 0.1 J		
R135	RG204470	Carbon Resistor(chip)	47 1/4 J		
R136	RG007100	Carbon Resistor(chip)	10K 0.1 J		
R137	RG008100	Carbon Resistor(chip)	100K 0.1 J		
R138	RG205100	Carbon Resistor(chip)	100 1/4 J		
R139	RG205100	Carbon Resistor(chip)	100 1/4 J		
R140	RG006220	Carbon Resistor(chip)	2.2K 0.1 J		
R141	RG007180	Carbon Resistor(chip)	18K 0.1 J		
R142	RG007470	Carbon Resistor(chip)	47K 0.1 J		
R143	RG007470	Carbon Resistor(chip)	47K 0.1 J		
R144	RG007470	Carbon Resistor(chip)	47K 0.1 J		
* R145	RG205330	Carbon Resistor(chip)	330 1/4 J		
* R146	RG205270	Carbon Resistor(chip)	270 1/4 J		
R147	RG007100	Carbon Resistor(chip)	10K 0.1 J		
R148	RG008100	Carbon Resistor(chip)	100K 0.1 J		
* R149	RG205330	Carbon Resistor(chip)	330 1/4 J		
* R150	RG205270	Carbon Resistor(chip)	270 1/4 J		
R151	RG007100	Carbon Resistor(chip)	10K 0.1 J		
R152	RG008100	Carbon Resistor(chip)	100K 0.1 J		
R153	RG006220	Carbon Resistor(chip)	2.2K 0.1 J		
R154	RG007180	Carbon Resistor(chip)	18K 0.1 J		
R155	RG007470	Carbon Resistor(chip)	47K 0.1 J		
-157	RG007470	Carbon Resistor(chip)	47K 0.1 J		
* R158	RG205330	Carbon Resistor(chip)	330 1/4 J		
* R159	RG205270	Carbon Resistor(chip)	270 1/4 J		
R160	RG007100	Carbon Resistor(chip)	10K 0.1 J		
R161	RG008100	Carbon Resistor(chip)	100K 0.1 J		
* R162	RG205330	Carbon Resistor(chip)	330 1/4 J		
* R163	RG205270	Carbon Resistor(chip)	270 1/4 J		
R164	RG007100	Carbon Resistor(chip)	10K 0.1 J		
R165	RG008100	Carbon Resistor(chip)	100K 0.1 J		
R166	RG009100	Carbon Resistor(chip)	1.0M 0.1 J		
R167	RG005680	Carbon Resistor(chip)	680 0.1 J		
R168	RG005220	Carbon Resistor(chip)	220 0.1 J		
R169	RG007100	Carbon Resistor(chip)	10K 0.1 J		

*: New Parts

RANK: Japan only

AG-Stomp

REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
R170	RG006470	Carbon Resistor(chip)	4.7K 0.1 J			
R171	RG006470	Carbon Resistor(chip)	4.7K 0.1 J			
* R172	V7491800	Metal Oxide Film Resistor	220 1W J			
* R173	V7491800	Metal Oxide Film Resistor	220 1W J			
R174	RG008100	Carbon Resistor(chip)	100K 0.1 J			
R175	RG007220	Carbon Resistor(chip)	22K 0.1 J			
R176	RG008100	Carbon Resistor(chip)	100K 0.1 J			
R177	RG006220	Carbon Resistor(chip)	2.2K 0.1 J			
R178	RG008100	Carbon Resistor(chip)	100K 0.1 J			
R179	RG008100	Carbon Resistor(chip)	100K 0.1 J			
* SW101	V7181600	Push Switch	SPPJ22NE06 NONLOCK	INPUT MUTE		
SW102	V4577800	Push Switch	SDKLA10200	STAND-BY		03
SW103	VV104500	Slide Switch	SSSF122-S06N0	POWER SUPPLY(ON/OFF)		01
TR1	VV556400	Transistor	2SC2412K Q,R,S			01
TR2	VV556400	Transistor	2SC2412K Q,R,S			01
TR101	VD303700	Transistor	2SC3326 A,B TE85R			01
-108	VD303700	Transistor	2SC3326 A,B TE85R			01
TR109	VV556400	Transistor	2SC2412K Q,R,S			01
TR110	VJ927200	Transistor	2SA1162 O,Y			01
W0101	--	Wire Assembly	B&B #28 3P L60	(V718170)		
X1	VU682100	Quartz Crystal Unit	30.00M HZ DOC-49S2			06
X2	VE463500	Quartz Crystal Unit	AT-49/12.0000MHZ			03
X101	VR013200	Quartz Crystal Unit	22.5792M AT-49			03
ZD101	VU170900	Zener Diode	UDZ 2.0BTE-17 2.0V			
ZD102	VU170900	Zener Diode	UDZ 2.0BTE-17 2.0V			
ZD103	VU173000	Zener Diode	UDZ 15B TE-17 15V			01
ZD104	VU173000	Zener Diode	UDZ 15B TE-17 15V			01
ZD105	VG439200	Zener Diode	MTZ J 9.1B 9.1V			01
* AAX25790	Circuit Board	PN1/2		(V776560)(XY900B0)		
* AAX25800	Circuit Board	PN2/2		(V776560)(XY900B0)		
V6220800	Spacer				8	
V6624600	LED Holder	LED3-1A			4	
--	Wire Assembly	C& #24 2P L60		(V654510)	4	
* V7756000	Push Switch	ADS-133-A11		1 LIMITER,2 CHORUS/DELAY, 3 REVERB,AUTO FBR/BANK/ TUNER	4	
CN301	VV068000	Base Post	6P SE			01
CN302	VV068300	Base Post	9P SE			01
CN303	VV068500	Base Post	11P SE			
CN304	VV068600	Base Post	12P SE			01
CN305	VV068800	Base Post	14P SE			01
CN306	VV067400	Base Post	14P TE			
CN307	VV066200	Base Post	2P TE			01
-310	VV066200	Base Post	2P TE			01
C301	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
-315	UX145100	Ceramic Capacitor(chip)	0.1000 25V Z			
D301	VT332900	Diode	1SS355 TE-17			01
-321	VT332900	Diode	1SS355 TE-17			01
IC301	XZ102A00	IC	74HC374DT	D-FF		02
-307	XZ102A00	IC	74HC374DT	D-FF		02
IC308	XZ101A00	IC	74HC4052DT	Multiplexer		02
IC309	XZ101A00	IC	74HC4052DT	Multiplexer		02
K301	VB966900	Style Pin	IMSA-6024			01
LD301	V5801000	LED Display	LTC-5836E			05
LD302	VV620800	LED Red	LT311G-41-C13			01
LD303	VV620800	LED Red	LT311G-41-C13			01
LD304	VV620800	LED Red	LT311G-41-C13			01
LD306	VV620800	LED Red	LT311G-41-C13			01
L301	VS740100	Inductor(chip)	BLM21B751S			03
-312	VS740100	Inductor(chip)	BLM21B751S			03
R301	RG007100	Carbon Resistor(chip)	10K 0.1 J			
-304	RG007100	Carbon Resistor(chip)	10K 0.1 J			
R305	RG005560	Carbon Resistor(chip)	560 0.1 J			
-321	RG005560	Carbon Resistor(chip)	560 0.1 J			
R322	RG005820	Carbon Resistor(chip)	820 0.1 J			
-345	RG005820	Carbon Resistor(chip)	820 0.1 J			
R346	RG007100	Carbon Resistor(chip)	10K 0.1 J			
-360	RG007100	Carbon Resistor(chip)	10K 0.1 J			
R361	RG006100	Carbon Resistor(chip)	1.0K 0.1 J			

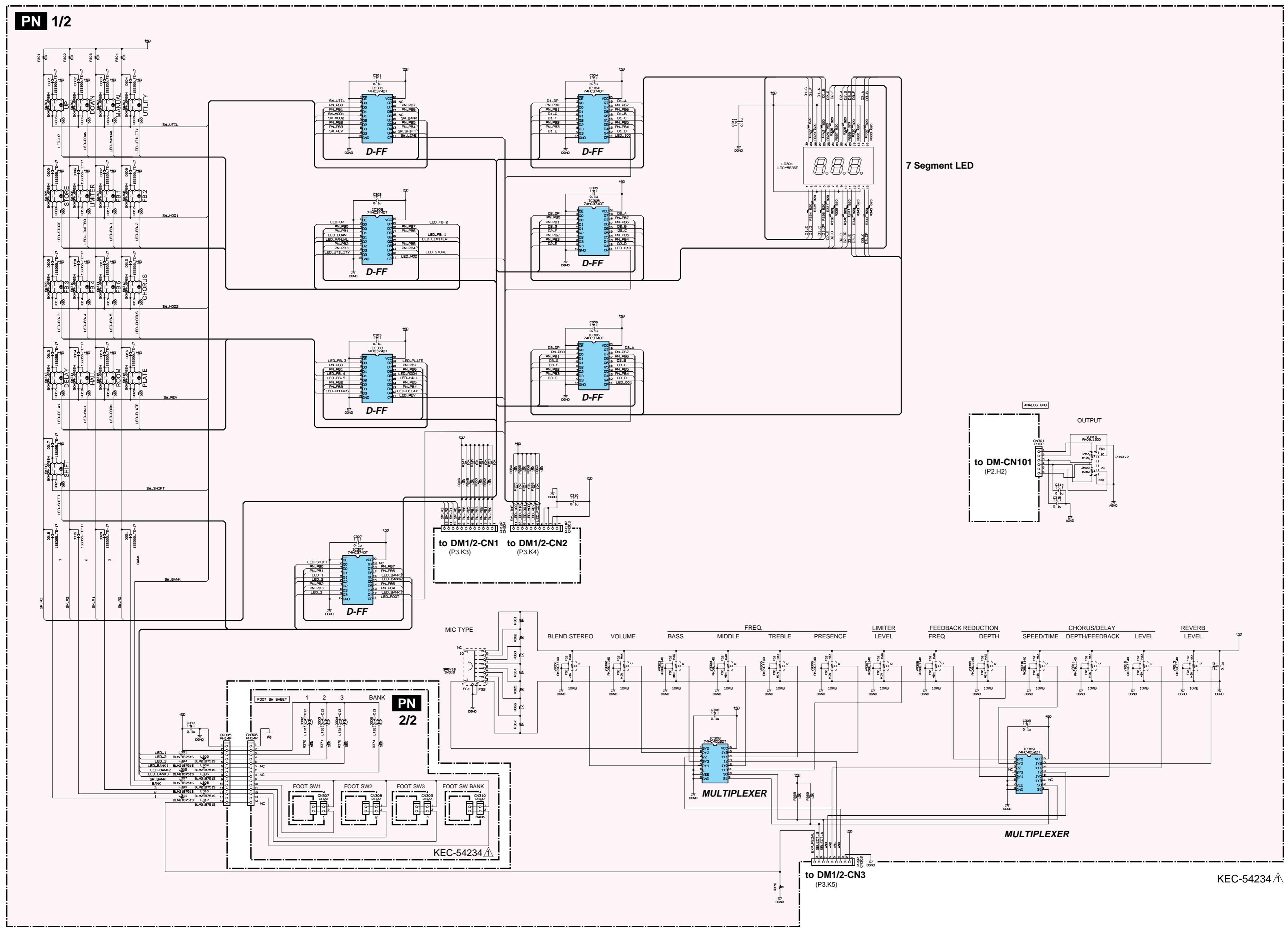
*: New Parts

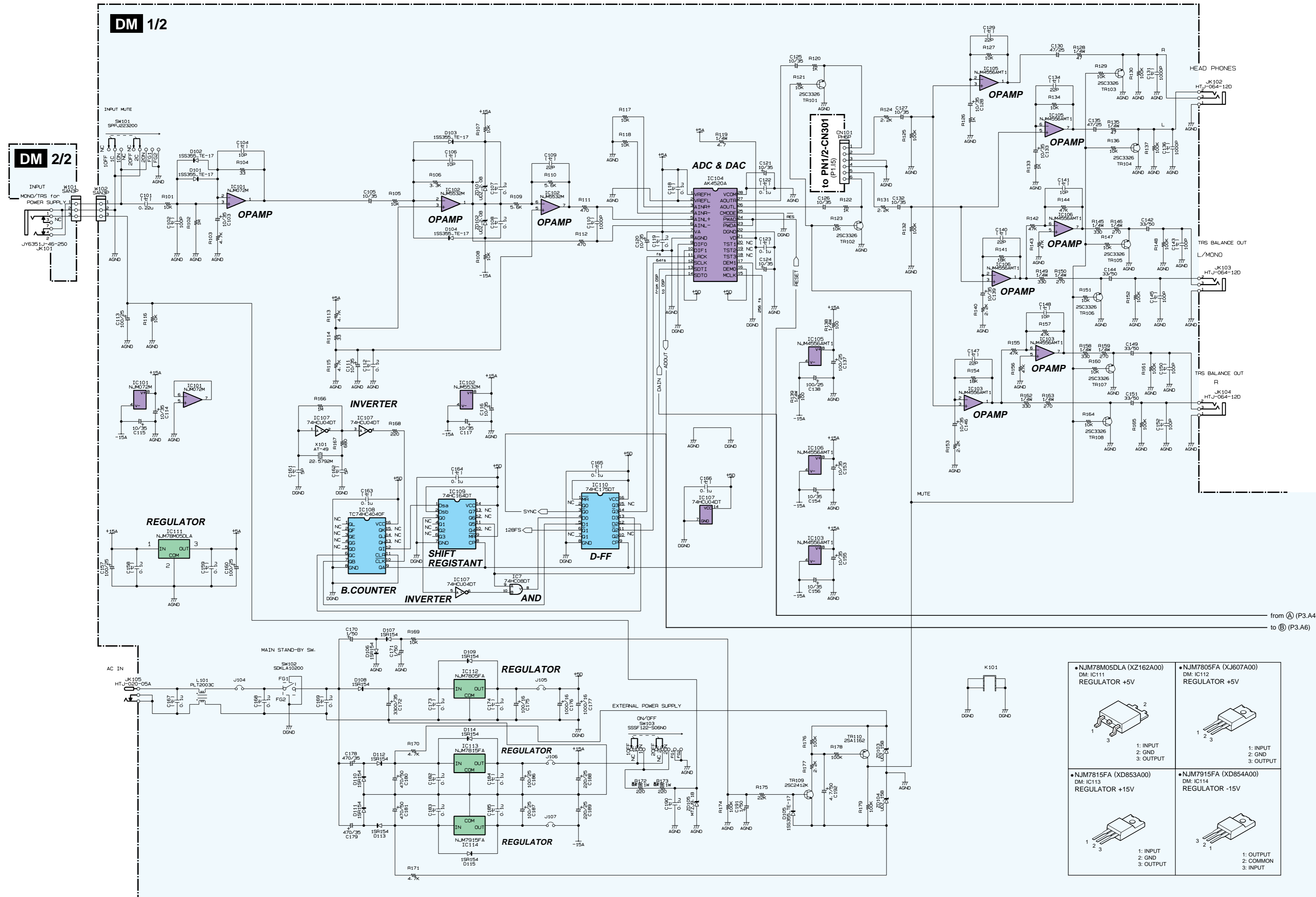
RANK: Japan only

REF NO.	PART NO.	DESCRIPTION		REMARKS	QTY	RANK
-367	RG006100	Carbon Resistor(chip)	1.0K 0.1 J			
R368	RG007100	Carbon Resistor(chip)	10K 0.1 J			
R369	RG007100	Carbon Resistor(chip)	10K 0.1 J			
R370	RG005560	Carbon Resistor(chip)	560 0.1 J			
-374	RG005560	Carbon Resistor(chip)	560 0.1 J			
R376	RG000000	Carbon Resistor(chip)	0 0.1 J			
SW301	VK701100	Push Switch	SKHQFN GREEN	UP,DOWN,MANUAL,UTILITY, STORE,LIMITER, FB REDU.(1,2,3,4,5), CHORUS,DELAY,REV.(HALL, ROOM,PLATE),SHIFT		02
-317	VK701100	Push Switch	SKHQFN GREEN			02
SW318	V3633800	Rotary Switch	SRBV18 1C8S	MIC TYPE		07
VR301	V5264800	Rotary Variable Resistor	RK09L1140 10KB	BLEND STEREO,VOLUME,BASS, MIDDLE,TREBLE,PRESENCE, LIMITER LEVEL, FB REDU.(FREQ,DEPTH), CHORUS/DELAY(SPEED TIME, DEPTH FB,LEVEL), REV. LEVEL		03
-313	V5264800	Rotary Variable Resistor	RK09L1140 10KB			03
VR314	V5265100	Rotary Variable Resistor	RK09L12D0 20KA X2	OUTPUT		03

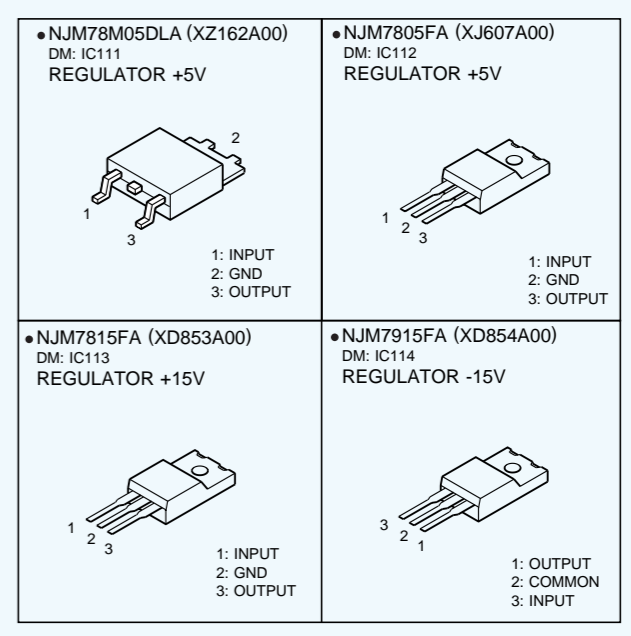
*: New Parts

RANK: Japan only





from (A) (P3.A4)
to (B) (P3.A6)



(τ) : Ceramic Capacitor

Note : See parts list for details of circuit board component parts.

DM 1/2

