

GT-6

SERVICE NOTES

First Edition

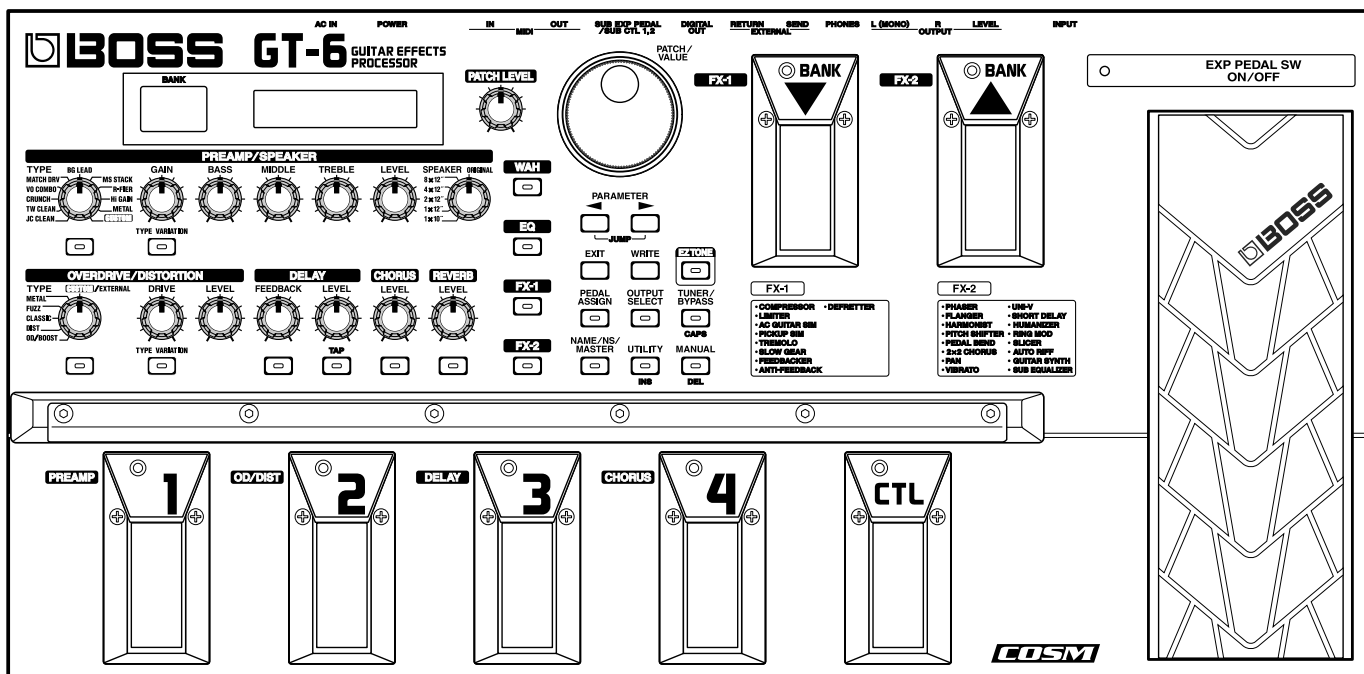
Issued by RJA

Guitar Effects Processor

TABLE OF CONTENTS

TABLE OF CONTENTS	1
SPECIFICATIONS.....	2
LOCATION OF CONTROLS PARTS LIST	4
LOCATION OF CONTROLS	4
EXPLODED VIEW PARTS LIST	6
EXPLODED VIEW	6
WIRING DIAGRAM.....	8
PARTS LIST.....	9
IDENTIFYING THE VERSION NUMBER	14
TRANSMITTING / RECEIVING DATA VIA MIDI.....	14
BULK DUMP	14
BULK LOAD	14

TEST MODE.....	14
RESTORING THE FACTORY SETTINGS (FACTORY RESET).....	19
HOW TO UPDATE SYSTEM SOFTWARE	19
BLOCK DIAGRAM.....	21
CIRCUIT BOARD (MAIN)	22
CIRCUIT BOARD (MAIN)	24
CIRCUIT DIAGRAM (MAIN 1/2)	26
CIRCUIT DIAGRAM (MAIN 2/2)	28
CIRCUIT BOARD (SW SHEET)	30
CIRCUIT DIAGRAM (SW SHEET)	32
ERROR MESSAGE	34



Copyright © 2002 ROLAND CORPORATION

All rights reserved. No part of this publication may be reproduced in any form without the written permission of ROLAND CORPORATION.

SPECIFICATIONS

GT-6: Guitar Effects Processor

- AD Conversion
24 bit + AF method
- DA Conversion
24 bit
- Sampling Frequency
44.1 kHz
- Program Memories
340: 140 (User) + 200 (Preset)
- Nominal Input Level
INPUT: -10 dBu
RETURN: -10 dBu
- Input Impedance
INPUT: 1 M ohms
RETURN: 220 k ohms
- Nominal Output Level
OUTPUT: 0 dBu
SEND: -10 dBu
- Output Impedance
OUTPUT: 2 k ohms
SEND: 2 k ohms
- Digital Output
EIAJ CP1201, S/P DIF
- Dynamic Range
100 dB or greater (IHF-A)
- Controls
< Front Panel >
(PREAMP/SPEAKER)
TYPE knob
GAIN knob
BASS knob
MIDDLE knob
TREBLE knob
LEVEL knob
SPEAKER knob
On/Off button
TYPE VARIATION button
(OVERDRIVE/DISTORTION)
TYPE knob
DRIVE knob
LEVEL knob
On/Off button
TYPE VARIATION button
(DELAY)
FEEDBACK knob
LEVEL knob
On/Off button
TAP button
(CHORUS)
LEVEL knob
On/Off button
(REVERB)
LEVEL knob
On/Off button
(WAH)
On/Off button
(EQ)
On/Off button
(FX-1)
On/Off button
(FX-2)
On/Off button
(MASTER)
PATCH LEVEL knob
PARAMETER buttons L/R
- EXIT button
- WRITE button
- EZ TONE button
- PEDAL ASSIGN button
- OUTPUT SELECT button
- TUNER/BYPASS button
- NAME/NS/MASTER button
- UTILITY button
- MANUAL button
- Number pedals 1-4
- BANK pedals (Up/Down)
- CTL pedal
- Expression pedal
- Expression pedal switch
- PATCH/VALUE dial
- < Rear Panel >
OUTPUT LEVEL knob
POWER switch
Display
16 characters, 2 lines (backlit LCD)
2 characters, 7 segment LED
Connectors
INPUT jack
OUTPUT jacks L (MONO)/R
PHONES jack
SEND jack
RETURN jack
DIGITAL OUT connector (coaxial)
SUB EXP PEDAL/SUB CTL PEDAL 1,2 jack
MIDI connectors IN/OUT
AC Adaptor jack
- Power Supply
AC 14 V; Supply AC adaptor (BOSS BRC series)
- Current Draw
800 mA
- Dimensions
515 (W) x 261 (D) x 75 (H) mm
20-5/16 (W) x 10-5/16 (D) x 3 (H) inches
- Weight
4.7 kg/10 lbs 6 oz (excluding AC Adaptor)
- Accessories
Owner's Manual English (#G6017298)
AC Adaptor BRC-120V (#01786223)
AC Adaptor BRC-230V (#01786234)
AC Adaptor BRC-240V (#01786245)
EURO CONVERTER PLUG ECP01-5A (PLUG for 230V) (#00905234)
- Options
MIDI Implementation English (#17041119)
Foot Switch: FS-5U, FS-5L
Expression Pedal: EV-5 (Roland), FV-300L + PCS-33 (Roland)
Foot Switch Cable: PCS-31 (Roland)
(1/4 inches Phone Plug (stereo) - 1/4 inches Phone Plug (mono) x 2)

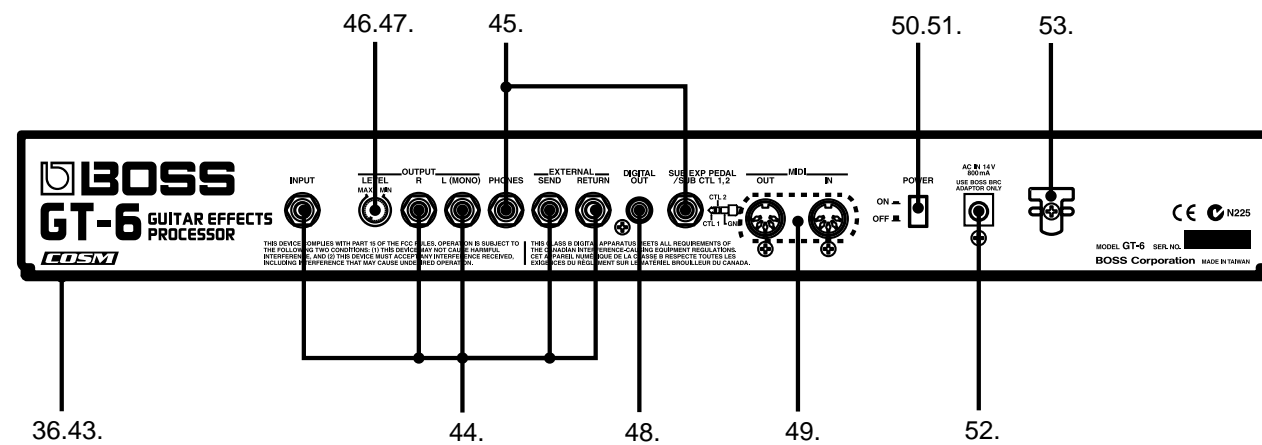
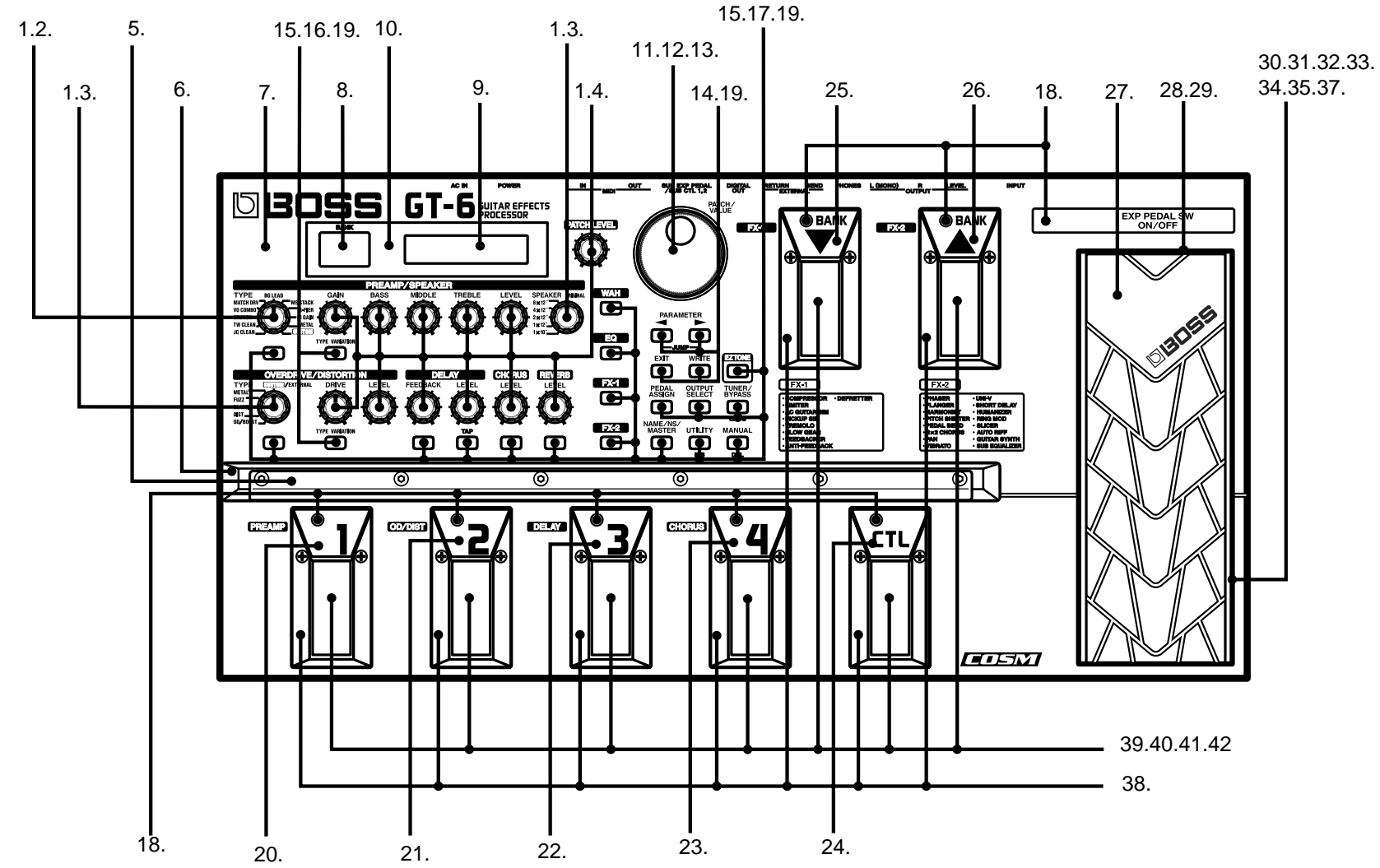
* 0 dBu = 0.775 Vrms

* In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.

LOCATION OF CONTROLS PARTS LIST

LOCATION OF CONTROLS

No.	Part Code	Part Name	Q'ty
1	G2477122	R-KNOB	15
2	F3279803	POTENTIOMETER RD901-40-125F-B54-11D (11 click)	1
3	F3279804	POTENTIOMETER RD901-40-125F-B54-06D (6 click)	2
4	F3279802	POTENTIOMETER RD901-40-125F-B54-00D	12
5	G2237113	GUARD PLATE	1
6	G2237112	GUARD	1
7	G2017152	TOP COVER	1
8	F5029412	LED (RED) A-552SR BW	1
9	F5029405	LMC-SSC2K16DLNY-H01	1
10	G2567119	DISPLAY COVER	1
11	22485303	D R-KNOB L BLK 248-303	1
12	01905467	ROTARY ENCODER EVE GC1 F20 24B	1
13	G2567118	ESCUTCHEON (for PANEL)	1
14	G247751301	KEYTOP S WITHOUT LENS	4
15	G247751001	KEYTOP S BLACK WITH LENS	19
16	F5029111	LED (RED/GREEN) L-3WSRSGW-CC	2
17	F5029117	LED (RED) L-312LRD	17
18	1502928100	LED (RED) L-34HDSL	8
19	01780101	TACT SWITCH SKQKAB	23
20	G2217138	PEDAL LABEL(1)	1
21	G2217139	PEDAL LABEL(2)	1
22	G2217140	PEDAL LABEL(3)	1
23	G2217143	PEDAL LABEL(4)	1
24	G2217144	PEDAL LABEL(CTL)	1
25	G2217142	PEDAL LABEL(DOWN)	1
26	G2217141	PEDAL LABEL(UP)	1
27	G2357112	VR PLATE	1
28	G2567121	RUBBER SW ESCUTCHEON	1
29	G2567120	RUBBER SW	1
30	G2187533	VR PEDAL	1
31	G2187904	PEDAL HOLDER	1
32	01016167	11M/M ROTARY POT. RK11K1140(10K SP B)	1
33	G2357111	CUSHION R	1
34	G2147117	PIN STAY	1
35	G2147119	BOLT HOLDER	2
36	G2357120	FOOT H=5	5
37	G2147116	SHAFT STAY	1
38	G2227301	PEDAL ESCUTCHEON	7
39	G2187602	SWITCH PEDAL	7
40	G2177103	SUPPORT SPRING	7
41	G2357109	PEDAL FOOT	7
42	13129778	TACT SWITCH SKQKAH	7
43	G2017150	BOTTOM COVER	1
44	13449155MF	PHONE JACK (MONO) HTJ-064-12I	5
45	13449150MF	PHONE JACK (STEREO) HTJ-064-12D	2
46	01340412	P R-KNOB SF-A BLK/LCG	1
47	01676523	9M/M ROTARY POT. RK09K12A0 10KAX2	1
48	01343723	RCA(PIN) JACK YKC21-3117	1
49	13429825	MIDI CONNECTOR YKF51-5054	1
50	12499175	G S-BUTTON SIH BLK	1
51	01676512	PUSH SWITCH SDKLA1-B	1
52	13449728	ADAPTOR JACK HEC0740-010010	1
53	22360712	CORD HOOK 236-712	1

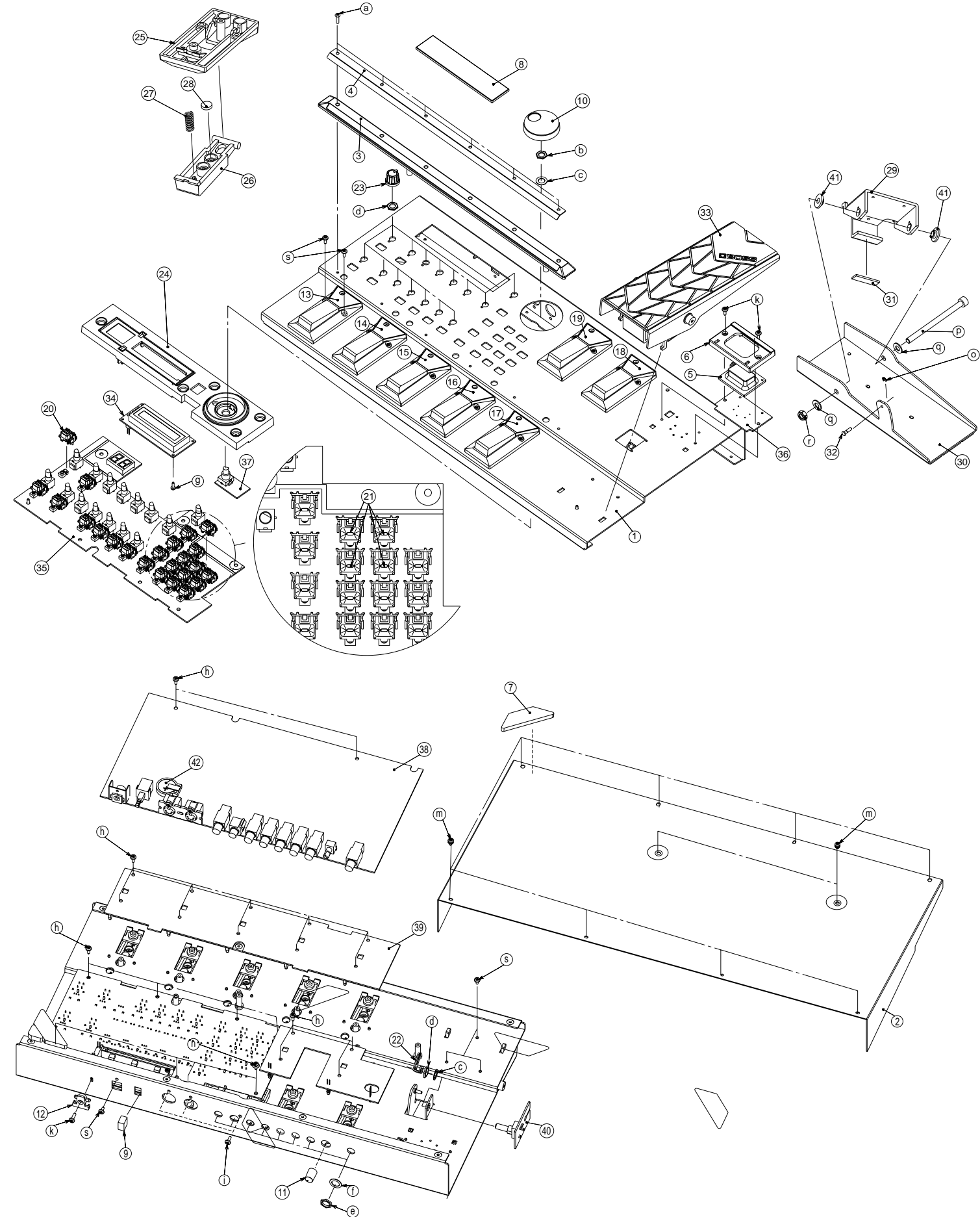


EXPLODED VIEW PARTS LIST

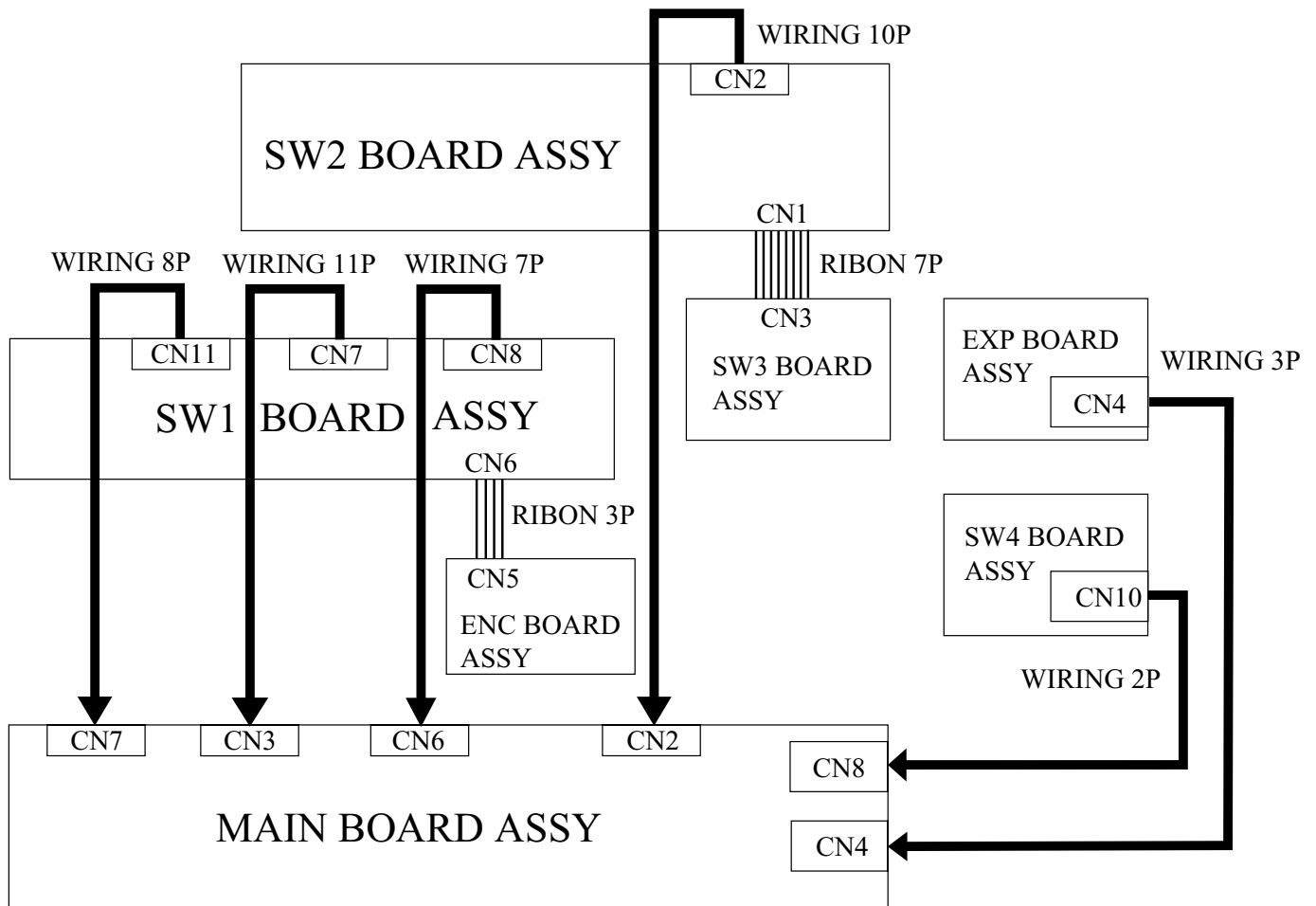
EXPLODED VIEW

[Parts]		
No.	Part Code	Part Name
1	G2017152	TOP COVER
2	G2017150	BOTTOM COVER
3	G2237112	GUARD
4	G2237113	GUARD PLATE
5	G2567120	RUBBER SW
6	G2567121	RUBBER SW ESCUTCHEON
7	G2357120	FOOT H=5
8	G2567119	DISPLAY COVER
9	12499175	G S-BUTTON SIH BLK
10	22485303	D R-KNOB L BLK
11	01340412	P R-KNOB SF-A BLK/LCG
12	22360712	CORD HOOK 236-712
13	G2217138	PEDAL LABEL(1)
14	G2217139	PEDAL LABEL(2)
15	G2217140	PEDAL LABEL(3)
16	G2217143	PEDAL LABEL(4)
17	G2217144	PEDAL LABEL(CTL)
18	G2217141	PEDAL LABEL(UP)
19	G2217142	PEDAL LABEL(DOWN)
20	G247751001	KEYTOP S BLACK WITH LENS
21	G247751301	KEYTOP S WITHOUT LENS
22	G2147116	SHAFT STAY
23	G2477122	R-KNOB
24	G2567118	ESCUTCHEON (ABS,for PANEL)
25	G2227301	PEDAL ESCUTCHEON
26	G2187602	SWITCH PEDAL
27	G2177103	SUPPORT SPRING
28	G2357109	PEDAL FOOT
29	G2187904	PEDAL HOLDER
30	G2187533	VR PEDAL
31	G2357111	CUSHION R
32	G2147117	PIN STAY
33	G2357112	VR PLATE
34	F5029405	LCD
35	75D523S000	SW1 BOARD
36	75D523S000	SW2 BOARD
37	75D523S000	SW3 BOARD
38	75D523M000	MAIN BOARD
39	75D523S000	SW4 BOARD
40	75D523S000	SW5 BOARD
41	G2147119	BOLT HOLDER
42	12569249S0	LITHIUM BATTERY CR2032

[Screws]		
No.	Part Code	Part Name
a	H5029854	HEX BUTTON BOLT M3x12 FeNi
b	*****	M9 NUT (with ENCODER)
c	H5039126	M9 WASHER (with ENCODER)
d	H5039520	M9 NUT (VR)
e	H5039510	NUT M9x11x2 FeNi (for Phone Jack)
f	H5039112	WASHER M9 (for Phone Jack)
g	40342701	SCREW 2.3x8 BINDING TAPTITE P ZC
h	40011278	SCREW 3x8 BINDING TAPTITE P ZC
i	40011312	SCREW 3x8 BINDING TAPTITE P BZC
k	40127689	SCREW M3x10 BINDING TAPTITE S BZC
m	H5019124	SCREW M3x6 BINDING W/PW+SW ZC (Small Washer)
n	H5019130	SCREW M3x6 BINDING W/PW+SW ZC (Normal Washer)
o	40015901	E-RING M2.5 SUS
p	40342690	HEX BOLT M6x85 HALF THREAD BZC
q	40016067	PLAIN WASHER 6x13x1 BZC
r	40016001	NUT M6 U BZC
s	40019123	SCREW 3x8 BINDING TAPTITE S BZC



WIRING DIAGRAM



PARTS LIST

SAFETY PRECAUTIONS:
The parts marked Δ have safety-related characteristics. Use only listed parts for replacement.

SAFETY PRECAUTIONS:
The parts marked Δ have safety-related characteristics. Use only listed parts for replacement.

QTY	PART NUMBER	DESCRIPTION	MODEL NUMBER
Ex. 10	22575241	Sharp Key	C-20/50
15	2247017300	Knob (orange)	DAC-15D

Failure to completely fill the above items with correct number and description will result in delayed or even undelivered replacement.

NOTE: The parts marked # are new. (initial parts)

NOTE: Consider about the natural environment carefully before through the old lithium battery away when you exchange to the new one.

MB -> MAIN BOARD ASSY, SW -> SW SHEET ASSY

CASING					Q'ty
#	G2017150	BOTTOM COVER			1
#	G2357120	FOOT	H=5		5
	G2227301	PEDAL ESCUTCHEON			7
	G2357109	PEDAL FOOT			7
	G2187602	SWITCH PEDAL			7
#	G2017152	TOP COVER			1
#	G2187533	VR PEDAL			1
KNOB, BUTTON					
	01340412	P R-KNOB	SF-A BLK/LCG		1
	12499175	G S-BUTTON	S1H BLK 249-175		1
	22485303	D R-KNOB	L BLK 248-303	for ALPHA-DIAL	1
	G2477122	R-KNOB			15
	G247751001	KEYTOP S BLACK WITH LENS		for SW	19
	G247751301	KEYTOP S WITHOUT LENS		for SW	4
SWITCH					
#	G2567120	RUBBER SW			1
	01676512	SDKLA1-B	PUSH SWITCH	SW1 on MB	1
	01780101	SKQKAB	TACT SWITCH	SW9,SW10,SW11,SW12,SW13,SW14,SW15,SW16,SW17,SW18,SW19,SW20,SW21,SW22,SW23,SW24,SW25,SW26,SW27,SW28,SW29,SW30,SW31 on SW	23
	13129778	SKQKAH	TACT SWITCH	SW1,SW2,SW3,SW4,SW5,SW6,SW7 on SW	7
JACK, EXT TERMINAL					
	13449155MF	HTJ-064-12I	PHONE JACK (MONO)	JK1,JK3,JK4,JK5,JK6 on MB	5
	13449150MF	HTJ-064-12D	PHONE JACK (STEREO)	JK2,JK11 on MB	2
	01343723	YKC21-3117(ORANGE)	RCA(PIN) JACK	JK9 on MB	1
	13429825	YKF51-5054 2PZ	MIDI CONNECTOR	JK8 on MB	1
	13449728	HEC0740-010010	ADAPTOR JACK	JK7 on MB	1
DISPLAY UNIT					
#	F5029405	LMC-SSC2K16DLNY-H01	LCD		1
#	F5029412	A-552SR BW	7SEG LED	LED29 on SW	1
PCB ASSY					
#	75D523M000	MAIN BOARD ASSY			1
#	75D523S000	SW SHEET ASSY			1
IC					
#	02676190	HD6412312VF	IC (CPU)	IC21 on MB	1
	02231767	RA0A-101 (TC223C080AF-101)	IC (DSP)	IC20 on MB	1
	02451434	AK4552VT	IC (AD/DA)	IC3,IC8 on MB	2
	*****	LH28F400BVE-BL85	IC (FLASH MEMORY/ BLANK)	IC26 on MB	1
	01785178	TC9271FS	IC (DIF/TRANS MITTER)	IC19 on MB	1
	02453389	LC32V4265T-25	IC (DRAM)	IC24 on MB	1
#	02672378	UPD431000AGW-A10	IC (SRAM)	IC22 on MB	1
	15289109	M5216FP-600D	IC (BIPOlar OP AMP)	IC5 on MB	1
	15189261	M5218AFP-600E	IC (BIPOlar OP AMP)	IC6,IC4 on MB	2
	00346445	NJM2100M(TE3)	IC (BIPOlar OP AMP)	IC7,IC2 on MB	2
	15259769T0	TC74HC238AF(EL)	IC (CMOS)	IC29 on MB	1
	15169596	TC74HC4051AP	IC (CMOS)	IC4,IC5 on SW	2
	01901623	TC74LVXC3245FS	IC (CMOS)	IC14 on MB	1

IC					
	01670745	TC74VHCT541AF	IC (CMOS)	IC18 on MB	1
	02232834	TC7SH04F(TE85L)	IC (CMOS)	IC27,IC17 on MB	2
	15249121	TC7W04F(TE12L)	IC (CMOS)	IC16 on MB	1
	02340756	TC7WH32FU(TE12L)	IC (CMOS)	IC28 on MB	1
	00458034	TC75S51F TE85R	IC (OP AMP)	IC25 on MB	1
	15289106	M5238AFP-600C	IC (JFET OP AMP)	IC1 on MB	1
	02453056	BU2090F-E2	IC (LED DRIVER)	IC1 on SW	1
#	02678945	BU2090	IC (LED DRIVER)	IC2,IC3,IC6 on SW	3
	15289124	PC-400	IC (PHOTO COUPLER)	IC13 on MB	1
	02012789	BA17805FP-E2	IC (REGULATOR)	IC10 on MB	1
#	02786678	S-81233SGY	IC (REGULATOR)	IC31 on MB	1
	02563467	NJM2374AM-TE1	IC (SWITCHING REGULA-TOR)	IC9 on MB	1
	15289123	M51953AFP-600C	IC (RESET)	IC15 on MB	1
TRANSISTOR					
#	F5309115	2SA1241-Y	TRANSISTOR	Q12 on MB	1
	15309104	2SA1586-GR(TE85R)	TRANSISTOR	Q5,Q15 on MB	2
#	F5309601	2SB1132	TRANSISTOR	Q14 on MB	1
#	F5309602	2SB1182	TRANSISTOR	Q8 on MB	1
	15319107	2SC4116-GR(TE85R)	TRANSISTOR	Q9 on MB	1
#	F5319601	2SD1664	TRANSISTOR	Q13 on MB	1
#	F5319602	2SD1758	TRANSISTOR	Q7 on MB	1
	15329501	DTA143EKA T146	DIGITAL TRANSISTOR	Q11 on MB	1
	02340645	RN1441-A(TE85L)	DIGITAL TRANSISTOR	Q1,Q2,Q3,Q4,Q6 on MB	5
	15129215	RN2207-TPE4	DIGITAL TRANSISTOR	Q1,Q2,Q3,Q4 on SW	4
DIODE					
	15019126	ISS133 T-77	SWITCHING DIODE	D1,D2,D3,D4,D5,D6,D7,D9,D10,D11,D12,D13,D14,D15,D16,D17,D18,D19,D20,D21,D22,D23,D24,D25,D26,D27,D28,D29,D30,D31 on SW	30
	15339119T0	ISS352(TPH3)	SWITCHING DIODE	D1,D6,D8,D10,D11,D16,D17 on MB	7
	F5019209RT	1N4004	DIODE	D2,D4,D5,D12 on MB	4
	02783023	RB500V-40	DIODE	D9 on MB	1
	F5339137	SS14 VF=0.45V	DIODE	D3 on MB	1
	F5339310	RD10ESAB2	ZENER DIODE	D13,D14 on MB	2
	F5029117	L-312LRD	LED (RED)	LED9,LED10,LED11,LED12,LED13,LED14,LED15,LED16,LED17,LED18,LED19,LED20,LED21,LED22,LED23,LED24,LED25 on SW	17
	1502928100	L-34HDSL	LED (RED)	LED1,LED2,LED3,LED4,LED5,LED6,LED7,LED8 on SW	8
	F5029111	L-3WSRSGW-CC	LED (RED/GREEN)	LED27,LED28 on SW	2
	15339120T0	ISS302(TE85R)	DIODE ARRAY	DA3,DA4 on MB	2
RESISTOR					
	F3829254	47 OHM(2W)	CARBON RESISTOR	R11,R14 on MB	2
	13749775T0	SR25TRE 121 J	CARBON RESISTOR	R23,R21 on SW	2
	13749789T0	SR25TRE 471 J	CARBON RESISTOR	R31,R32,R33,R34,R35,R36,R37,R38,R39,R40,R41,R42,R43,R44 on SW	14
	00566867	RPC05T 100 J	MTL.FILM RESISTOR	R9,R54,R109 on MB	3
	00567023	RPC05T 101 J	MTL.FILM RESISTOR	R69,R108 on MB	2
	00567156	RPC05T 102 J	MTL.FILM RESISTOR	R21,R22,R32,R33,R55,R56,R100,R104,R107,R113 on MB	10
	00567289	RPC05T 103 J	MTL.FILM RESISTOR	R2,R6,R12,R13,R16,R19,R24,R27,R30,R35,R37,R38,R41,R45,R47,R48,R52,R61,R72,R76,R80,R82,R102,R105,R119,R120,R130,R132,R133,R134,R137 on MB	31
	00567412	RPC05T 104 J	MTL.FILM RESISTOR	R23,R34,R58,R59,R116 on MB	5
	00567556	RPC05T 105 J	MTL.FILM RESISTOR	R39,R7 on MB	2
	00567034	RPC05T 121 J	MTL.FILM RESISTOR	R67 on MB	1
	00567167	RPC05T 122 J	MTL.FILM RESISTOR	R40,R1 on MB	2
	00567178	RPC05T 152 J	MTL.FILM RESISTOR	R65,R142 on MB	2
	00567189	RPC05T 182 J	MTL.FILM RESISTOR	R66 on MB	1
	00567312	RPC05T 183 J	MTL.FILM RESISTOR	R42,R3 on MB	2
	00566912	RPC05T 220 J	MTL.FILM RESISTOR	R77 on MB	1
	00567190	RPC05T 222 J	MTL.FILM RESISTOR	R112,R68 on MB	2
	00567456	RPC05T 224 J	MTL.FILM RESISTOR	R46 on MB	1
	00567089	RPC05T 331 J	MTL.FILM RESISTOR	R25,R36,R74 on MB	3
	00567345	RPC05T 333 J	MTL.FILM RESISTOR	R51,R57 on MB	2
	00567112	RPC05T 471 J	MTL.FILM RESISTOR	R70 on MB	1
	00567245	RPC05T 472 J	MTL.FILM RESISTOR	R85,R91,R94,R103,R106,R110,R111,R114,R115 on MB	9
	00567378	RPC05T 473 J	MTL.FILM RESISTOR	R17,R20,R28,R31,R49,R60,R122,R123,R124 on MB	9
	00567501	RPC05T 474 J	MTL.FILM RESISTOR	R84 on MB	1
	00567001	RPC05T 750 J	MTL.FILM RESISTOR	R71 on MB	1
	00567401	RPC05T 823 J	MTL.FILM RESISTOR	R26,R15 on MB	2
	15399349	RPC10T 100 J 1/10W	MTL.FILM RESISTOR	R139,R140,R141 on MB	3
	01905012	RR0816P-123-D	MTL.FILM RESISTOR	R4,R8,R43,R50 on MB	4

RESISTOR					
	01909734	RR0816P-682-D	MTL.FILM RESISTOR	R10,R53 on MB	2
	02122623	RR0816R-104-D	MTL.FILM RESISTOR	R5,R44 on MB	2
#	F5399911	0.68 (1/2W)	RESISTOR	R62 on MB	1
#	F5399912	1.8K (F-RANK)	RESISTOR	R64 on MB	1
#	F5399919	1M(F-RANK)	RESISTOR	R81 on MB	1
#	F5399917	22 (1/2W)	RESISTOR	R75 on MB	1
#	F5399913	3K (F-RANK)	RESISTOR	R63 on MB	1
#	F5399920	4.7M(F-RANK)	RESISTOR	R121 on MB	1
#	13749787T0	SR25TRE 391J 1/6W	RESISTOR	R1,R2,R3,R4,R5,R6,R7,R8,R9,R10,R11,R12,R13,R14,R15,R16,R17,R18,R19,R20,R22,R24,R25,R26,R27,R28,R29 on SW	27
	F5419707	CRN34101J	RESISTOR ARRAY	RA1,RA2,RA4,RA6,RA12,RA15 on MB	6
	F5419705	CRN34103J	RESISTOR ARRAY	RA11,RA14,RA18,RA19,RA28 on MB	5
	F5419706	CRN34104J	RESISTOR ARRAY	RA5,RA3 on MB	2
POTENTIOMETER					
	F3279802	RD901-40-125F-B54-00D 50KB	9M/M ROTARY POT. W/ CLICK	VR2,VR4,VR6,VR7,VR8,VR9,VR10,VR11,VR12,VR13,VR15,VR16 on SW	12
	F3279804	RD901-40-125F-B54-06D 50KB	9M/M ROTARY POT. 6 CLICKS	VR3,VR14 on SW	2
	F3279803	RD901-40-125F-B54-11D 50KB	9M/M ROTARY POT. 11 CLICKS	VR5 on SW	1
	01676523	RK09K12A0 10Kx2	9M/M ROTARY POT.	VR1 on MB	1
	01016167	RK11K1140(10K SP B) 10Kx1	11M/M ROTARY POT.	VR1 on SW	1
CAPACITOR					
	01674167	ECJ1VC1H100D	CERAMIC CAPACITOR	C3,C6,C16,C25,C38,C41,C42,C145,C146,C154 on MB	10
	01674701	ECJ1VF1E104Z 0.1UF/16VK	CERAMIC CAPACITOR	C7,C9,C12,C14,C44,C48,C50,C53,C58,C59,C77,C78,C79,C80,C83,C84,C86,C87,C88,C89,C91,C92,C93,C95,C96,C98,C99,C100,C101,C102,C103,C105,C106,C107,C108,C109,C110,C111,C112,C114,C115,C118,C120,C123,C124,C125,C128,C131,C132,C134,C135,C136,C138,C139,C140,C141,C142,C147,C148,C149,C159,C160,C162,C163 on MB	64
	01674356	ECUV1H151JCV	CERAMIC CAPACITOR	C23,C33,C62 on MB	3
	00567823	GRM39B102K50PT	CERAMIC CAPACITOR	C15,C24,C43,C54,C127 on MB	5
	00567945	GRM39B103K50PT	CERAMIC CAPACITOR	C1,C36,C129,C130 on MB	4
	01672412	GRM39CH150J50PT	CERAMIC CAPACITOR	C121,C119 on MB	2
	13639550S0	16MV100HW+T 100UF/16V	CHEMICAL CAPACITOR	C21,C31,C66,C68,C69,C72,C157 on MB	7
	13639546S0	16MV10HW+T	CHEMICAL CAPACITOR	C4,C8,C10,C11,C17,C18,C19,C20,C26,C27,C28,C29,C30,C34,C39,C40,C46,C47,C49,C51,C52,C94,C97,C104,C113,C116,C122,C126,C133,C143,C150,C151,C152,C153 on MB	34
	13639549S0	16MV47HW+T	CHEMICAL CAPACITOR	C13,C45,C76,C81 on MB	4
#	13639582S0	35MV100HW+T	CHEMICAL CAPACITOR	C64,C67,C70,C74 on MB	4
	13639195S0	35MV2200HW(SME35VB2200)	CHEMICAL CAPACITOR	C56 on MB	1
#	13639598	35MV220HW+T	CHEMICAL CAPACITOR	C144 on MB	1
	13639599S0	35MV470HW+T	CHEMICAL CAPACITOR	C65,C71 on MB	2
#	13609111	50MVR33HW+T	CHEMICAL CAPACITOR	C90 on MB	1
	13639113S0	6MV470HW	CHEMICAL CAPACITOR	C61,C35 on MB	2
	13519694	RPE132-901F104Z50	MLT.LAY.CERAMIC CAPACITOR	C1,C2,C3,C4,C5 on SW	5
	13549279M0	ECQ-M1H104JF3	POLYEST. CAPACITOR	C5 on MB	1
	01128045	ERZVA7V330	VARISTOR CAPACITOR	C55 on MB	1
INDUCTOR, COIL, FILTER					
	13529246	DSS310-91D223S-50ATL12-134	EMI FILTER	FL1,FL2 on MB	2
	12449386	SBT-0180W	EMI FILTER	L15 on MB	1
#	F2449220	TSL1112SRA-471KR72	INDUCTOR	L11 on MB	1
CRYSTAL, RESONATOR					
#	02672401	SG-8002JC 67.7376MHZ PC	CRYSTAL	X1 on MB	1
	00894023	MA-406 20.000MHZ TE24	CRYSTAL	X2 on MB	1
ENCODER					
	01905467	EVE GC1 F20 24B	ROTARY ENCODER	EN1 on SW	1
CONNECTOR					
#	F3439160	53015-0210	CONNECTOR	CN8 on MB	1
	F3439166	A2001WR2-11P	CONNECTOR	CN3 on MB	1
#	F3439179	A2001WR2-7P	CONNECTOR	CN6 on MB	1
	F3439164	A2001WR2-8P	CONNECTOR	CN7 on MB	1
	F3439165	A2001WV2-10P P=2MM	CONNECTOR	CN2 on MB	1
#	F3439178	A2541WV2-2A16NP	CONNECTOR		1

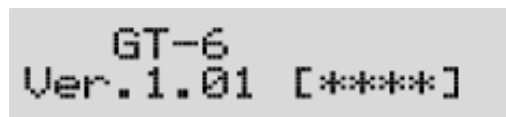
CONNECTOR					
	F3439121	A2541WR2-2A16NP	CONNECTOR 16P	CN1 on MB	1
	F3439123	A2001WR2-3P	CONNECTOR 3P	CN4 on MB	1
WIRING, CABLE					
#	G3467180	16P L=160MM	LCD WIRING		1
	G3477146	3P L=40X5X5 MM P=2MM	RIBBON CABLE	CN5,CN6 on SW	1
#	G3477156	7P P=2MM L=140MM	RIBBON CABLE	CN1,CN3 on SW	1
#	G3467179	10P P=2MM L=120MM	WIRING	CN2 on SW	1
#	G3467177	11P P=2MM L=65MM	WIRING	CN7 on SW	1
#	G3467174	2P P=2MM L=150MM	WIRING	CN10 on SW	1
#	G3467175	3P P=2MM L=115MM	WIRING	CN4 on SW	1
#	G3467176	7P P=2MM L=115MM	WIRING	CN8 on SW	1
#	G3467178	8P P=2MM L=65MM	WIRING	CN11 on SW	1
TRANSFORMER					
	02563501	PT-10 (2280-T008)	PULSE TRANS	TR1 on MB	1
SCREWS					
	40342701	SCREW M2.3x8	BINDING TAP TIGHT P ZC		1
#	H5019130	SCREW M3x6	PAN MACHINE W/SW+PW ZC		5
	H5019124	SCREW M3x6	PAN MACHINE W/SW+SMALL PW ZC		10
	40011312	SCREW 3x8	BINDING TAPTITE P BZC		3
	40011278	SCREW 3x8	BINDING TAPTITE P FE ZC		20
	40019123	SCREW 3x8	BINDING TAPTITE S BZC		18
	40127689	SCREW M3x10	BINDING TAPTIGHT S TYPE FE BZC		3
#	H5029854	BOLT M3x12	HEX BUTTON FENI		6
	40342690	HEX BOLT M6x85	HALF THREAD BZC		1
	40016001	LOCK NUT M6	U BZC		1
#	*****	M9 NUT		(for ENCODER)	1
#	H5039520	M9 NUT		(for VR)	15
#	H5039510	NUT M9x12x2	FENI	(for Phone Jack)	7
	40015901	E-RING	M2.5 SUS		1
#	H5039126	M9 WASHER		(for ENCODER)	1
#	H5039112	M9 WASHER		(for Phone Jack)	7
	40016067	PLAIN WASHER 6x13x1	BZC		2
PACKING					
#	G2607214	PACKING CASE			1
#	G2237620	PAD L			1
#	G2237616	PAD R			1
#	G2617273	OUTER PACKING CASE			1
MISCELLANEOUS					
	G2147118	AC JACK HOLDER		on MB	1
	G2147119	BOLT HOLDER			2
#	G2607215	COLOR SLEEVE			1
	22360712	CORD HOOK	236-712		1
	G2357111	CUSHION R			1
#	G2567119	DISPLAY COVER			1
#	G2567118	ESCUTCHEON		(ABS,for PANEL)	1
#	G2237112	GUARD			1
#	G2237113	GUARD PLATE			1
	40016523	INSULOK TIE 100M/M T-18R	<<1000 PCS ORDERING PER>>		2
	G2257203	JACK COVER		on MB	1
#	H2369431	LED SPACER	3-2	for SW	1
	12569249S0	LITHIUM BATTERY	CR2032 220MAH/3V	BT1 for MB	1
	12189815	LITHIUM BATTERY HOLDER	BH-32	BT1 on MB	1
#	G2187904	PEDAL HOLDER			1
#	G2217138	PEDAL LABEL(1)			1
#	G2217139	PEDAL LABEL(2)			1
#	G2217140	PEDAL LABEL(3)			1
#	G2217143	PEDAL LABEL(4)			1
#	G2217144	PEDAL LABEL(CTL)			1
#	G2217142	PEDAL LABEL(DOWN)			1
#	G2217141	PEDAL LABEL(UP)			1
	G2147117	PIN STAY			1
#	G2567121	RUBBER SW ESCUTCHEON			1
	G2147116	SHAFT STAY			1
	H2369401	SPACER 3X6X10		for SW	7
	G2177103	SUPPORT SPRING			7
	G2357112	VR PLATE			1

ACCESSORIES (STANDARD)

#	G6017297	OWNER'S MANUAL	JAPANESE	1
#	G6017298	OWNER'S MANUAL	ENGLISH	1
△	01786212	AC ADAPTOR	BRC-100T	1
△	01786223	AC ADAPTOR	BRC-120T	1
△	01786234	AC ADAPTOR	BRC-230T	1
△	01786245	AC ADAPTOR	BRC-240AT	1
△	00905234	EURO CONVERTER PLUG	ECP01-5A (PLUG for 230V)	1
#	H5279511	READ ME FIRST	JAPANESE/ENGLISH	1
	40232389	WARRANTY CARD	(JAPAN ONLY)	1

IDENTIFYING THE VERSION NUMBER

1. Turn the power off.
2. While pressing [NAME/NS/MASTER],[UTILITY] and [MANUAL] button, turn on power.
3. The version number is displayed.



TRANSMITTING / RECEIVING DATA VIA MIDI

The GT-6 can use exclusive messages to set another GT-6 to the same settings, or to transmit its settings to a device such as a sequencer for storage. The process of transmitting such data is called bulk dump, and the process of receiving such data is called bulk load.

BULK DUMP

1. Press [UTILITY] button, then press PARAMETER [<] [>] button so that "Bulk Dump" is displayed.



2. Press PARAMETER [<] [>] button to move the cursor, and rotate the [PATCH/VALUE] dial to select the start and end of the data to be transmitted.
3. When the data to be sent has been determined, press [WRITE] button. The data is transmitted.



When the transmission is completed, the screen prior to transmission returns to the display.

4. Press [EXIT] button to return to the Play screen.

BULK LOAD

1. Press [UTILITY] button, then press PARAMETER [<] [>] button so that "Bulk Load" is displayed.



2. Transmit the data from the external MIDI device. The following appears in the display when the GT-6 receives the data.



The following appears in the display when the GT-6 finishes receiving the data.



At this stage, even more data can be received.

3. Press [EXIT] button to quit Bulk Load. After you press [EXIT] button, "Checking..." appears in the display, indicating that the GT-6 is checking the received data. When the check is completed, the Play screen returns to the display.

TEST MODE

* *Note: When user data is present, always back it up on the sequencer (MC-80, etc.) before repair.*
(Refer to "Saving data" and "Loading data" for the user data storage procedures).

Individual inspection items

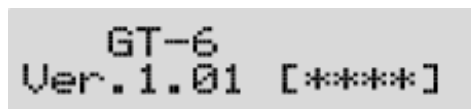
- 1.DSP Check
- 2.Display
- 3.LCD Contrast
- 4.Switch
- 5.VR Check
- 6.EXP PEDAL
- 7.Battery
- 8.MIDI IN/OUT
- 9.OUTPUT D/A
- 10.EXT OD/DS
- 11.INPUT A/D
- 12.DSP INTO
- 13.Noise (IN -> OUT)
- 14.Noise (EXT)
- 15.Calibre EXP
- 16.Factory Load

Required items

- Expression Pedal (Roland EV-5)
- MIDI Cable
- Noise Meter
- Oscilloscope
- Oscillator
- Equipment with digital input
- Empty plug

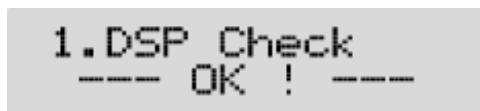
How to enter test mode:

- **Starting from "1.DSP Check".**
Turn on the unit while pressing the [DELAY] and [DELAY TAP] buttons simultaneously.
The ROM version and the checksum will be displayed first. Proceed to "1.DSP Check" by pressing the [EXIT] button.



- **Starting from "9.OUTPUT D/A".**
Turn on the unit while pressing the [CHORUS] and [REVERB] buttons simultaneously.
"1.DSP Check" result is displayed first, then it proceeds to "9.OUTPUT D/A".

1. DSP Check



DSP (IC20) and DRAM (IC24) are automatically checked and their results displayed.

If an error occurs, its contents will be displayed, and if no problems exist, "OK" is displayed.

After the inspection completes, it will automatically proceed to the next inspection.

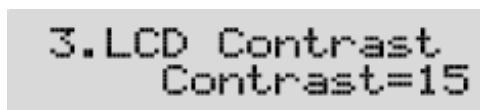
2. Display



All of the LCD and LED segments will be on.

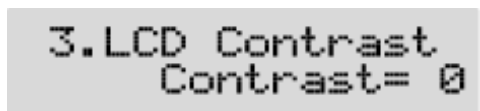
Press the [EXIT] button to proceed to the next inspection.

3. LCD Contrast



Turn the [VALUE] encoder knob in the following order and confirm that the LCD contrast changes.

1) Turning the knob anti-clockwise dims the contrast.



2) Turning the knob clockwise brightens the contrast.



Change the LCD contrast from '15 -> 0 -> 15', and it will automatically proceed to the next inspection.

4. Switch



The button names to be inspected are displayed on the lower part of the LCD.

Press the displayed button switches.

"Wrong switch!" is displayed when a wrong button is pressed.

Also, for buttons with LEDs confirm that:

1) All the LEDs that are on are red prior to pressing them.

2) The LEDs go out after the buttons are pressed.

However, for [PREAMP/SPEAKER TYPE VARIATION] and [OD/DS TYPE VARIATION], the color changes from red to green.

Confirm the following two points.

Press the switches in the following order.

[1] Effect select button/Edit button group inspection Press according to the LCD display.

[PREAMP/SPEAKER] -> [PREAMP/SPEAKER TYPE VARIATION]->[OD/DS] -> [OD/DS TYPE VARIATION] -> [DELAY] -> [DELAY TAP] ->[CHORUS] -> [REVERB] -> [FX-2] -> [FX-1] -> [EQ] -> [WAH] -> [PARAMETER (<)] -> [EXIT] -> [PEDAL ASSIGN] -> [NAME/NS/MASTER] -> [UTILITY] -> [OUTPUT SELECT] -> [WRITE] -> [PARAMETER (<)] -> [EZ TONE] -> [TUNER/BYPASS] -> [MANUAL]

[2] The pedal switch group and expression switch inspection

[BANK DOWN] -> [BANK UP] -> [EXP PEDAL SW] -> [CTL PEDAL] -> [PEDAL 4] -> [PEDAL 3] -> [PEDAL 2] -> [PEDAL 1]

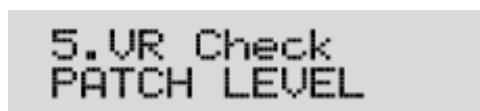
[3] 7 seg LED

Confirm that the 7 seg LED segments go out one by one each time [WAH] is pressed.

Pressing the [WAH] switch 14 times turns all the segments off.

After the [3] 7seg LED inspection completes, it will automatically proceed to the next inspection.

5. VR Check



Turn all the VRs anti-clockwise all the way (set to MIN position).

The names of the VRs to be inspected are displayed on the lower part of the LCD.

Turn the displayed VR.

[PATCH LEVEL]->[SPEAKER]->[PRE LEVEL]->[PRE TREBLE]->[PRE MIDDLE]->[PRE BASS]->[PRE GAIN]->[PRE TYPE]->[OD/DS TYPE]->[OD/DS DRIVE]->[OD/DS LEVEL]->[DELAY FEEDBACK]->[DELAY LEVEL]->[CHORUS]->[REVERB]

1) Without click - the 7 seg LED segments come on from the bottom according to the positions of the VR knobs, except for the "SPEAKER", "PREAMP/SPEAKER TYPE" and "OVERDRIVE/DISTORTION TYPE" VRs.

To proceed to the next VR inspection, turn the knob all the way to the right ([MIN] -> [MAX]).

2) With click - the numbers are displayed for the 7 seg LED segments according to the clicked position, except for the "SPEAKER", "PREAMP/SPEAKER TYPE" and "OVERDRIVE/DISTORTION TYPE" VRs.

"SPEAKER" : [1x10] -> [ORIGINAL]

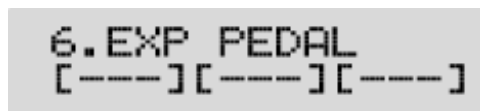
"PREAMP/SPEAKER TYPE" : [JC CLEAN] -> [CUSTOM]

"OVERDRIVE/DISTORTION TYPE" : [OD/BOOST] -> [CUSTOM/EXTERNAL]

To proceed to the next VR inspection, turn the knob all the way to the right ([MIN] -> [MAX]).

After the [REVERB LEVEL] VR inspection completes, it will automatically proceed to the next inspection.

6. EXP PEDAL

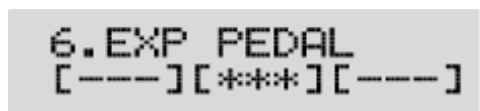


Confirm the changes on the EXP pedal of this unit and the EXP pedal (SUB EXP PEDAL) connected to the [SUB EXP PEDAL/SUB CTL 1,2] jack.

Connect the EV-5 to the [SUB EXP PEDAL/SUB CTL 1,2] jack.

The EXP pedal of this unit is inspected first, then the SUB EXP PEDAL.

1) Bringing the pedal's tilt to the center (middle value) will display "****" in the center display.



or

```
6.SUB EXP PEDAL
[---][***][---]
```

2) Pressing further (maximum value) displays "****" on the right display.

```
6.EXP PEDAL
[---][***][***]
```

or

```
6.SUB EXP PEDAL
[---][***][***]
```

3) Finally, returning the pedal forward (minimum value) displays "****" on the left display, and the inspection for that pedal is complete.

```
6.EXP PEDAL
[***][***][***]
```

or

```
6.SUB EXP PEDAL
[***][***][***]
```

After the EXP PEDAL inspection completes, it will automatically proceed to the next inspection.

7. Battery

```
7.Battery
3.2V
```

The voltage of the memory backup battery is displayed.

To proceed to the next inspection, press the [EXIT] button.

8. MIDI IN/OUT

```
8.MIDI IN/OUT
No Connect
```

Connect the MIDI IN connector and the MIDI OUT connector with a MIDI cable.

"No Connect" is displayed if the connectors are not connected with a MIDI cable.

If the connectors are properly connected, "Verify OK !" is displayed.

After the MIDI IN/OUT inspection completes, it will automatically proceed to the next inspection.

```
8.MIDI IN/OUT
Verify OK !
```

9. OUTPUT D/A

Note : Check both L(MONO) and R.

Also, when the OUTPUT jack is used for a single channel, the L and R signals will be internally mixed, therefore, empty plugs must be inserted in the R channel for L(MONO) channel measurement and in the L(MONO) channel for R channel measurement, respectively.

```
9.OUTPUT D/A
Mute Off/--
```

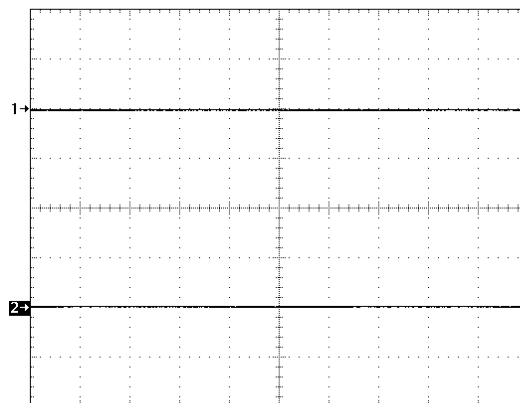
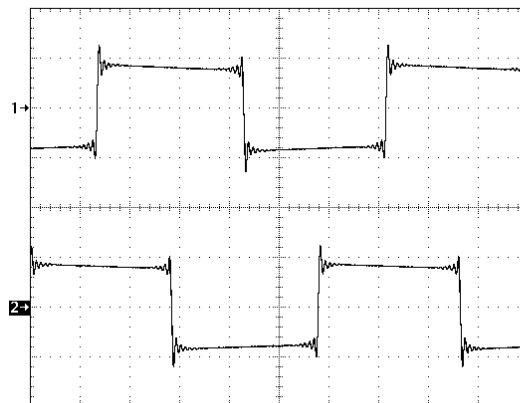
Confirm these three points.

- A) Using an oscilloscope, observe that a short wave is obtained from OUTPUT .
- B) Since output mute is automatically made 'On/Off', make sure that it is on.
- C) Confirm that the level changes when the OUTPUT knob is turned.

```
9.OUTPUT D/A
Mute ---/On
```

Oscilloscope : 1.0 V/DIV, 0.5 ms/DIV

Mute = Off Mute = On

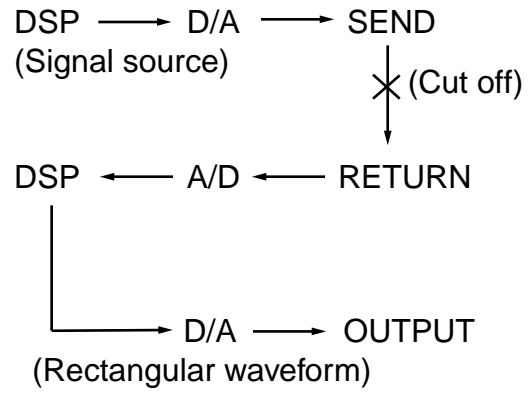
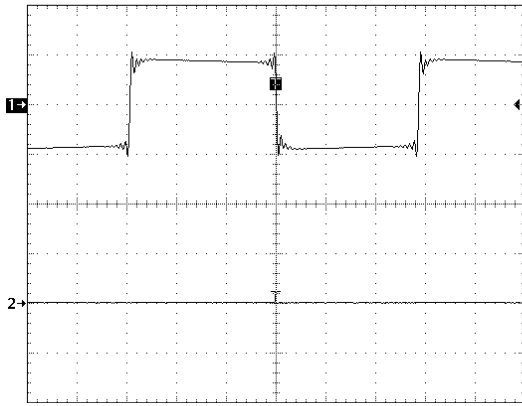


D) Confirm that a same waveform as that from OUTPUT is obtained from Phones.

E) Confirm that a short wave is obtained from Send and that mute is effective.

Oscilloscope : 1.0 V/DIV, 0.5 ms/DIV

Mute = Off Mute = On



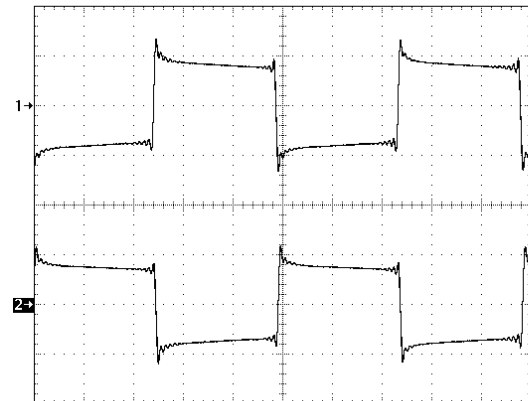
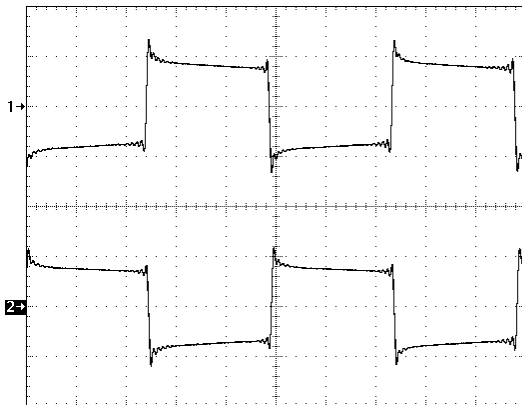
Note: Check both L(MONO) and R.

Also, when the OUTPUT jack is used for a single channel, the L and R signals will be internally mixed, therefore, empty plugs must be inserted in the R channel for L(MONO) channel measurement and in the L(MONO) channel for R channel measurement, respectively.

OUTPUT Level Control : MAX

Oscilloscope : 1.0 V/DIV, 0.5 ms/DIV

Insert an empty plug in RETURN



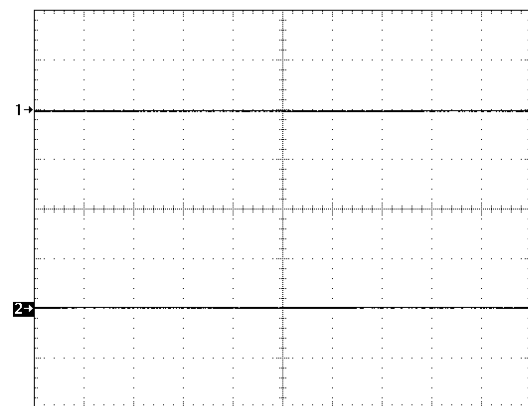
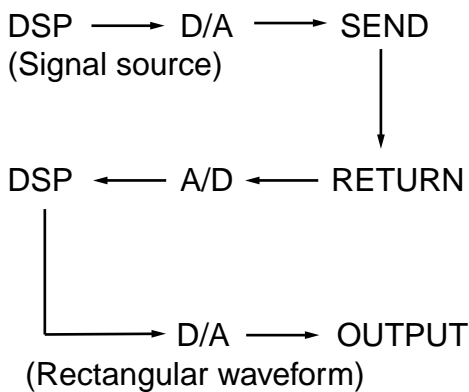
To proceed to the next inspection, press the buttons in [EXIT] -> [PARAMETER (>)] sequence.

10. EXT OD/DS

10.EXT OD/DS
[DSP→EXT→OUT]

Confirm the following two points.

A) Using an oscilloscope, observe that a short wave is obtained from OUTPUT.



To proceed to the next inspection, press the [EXIT] button.

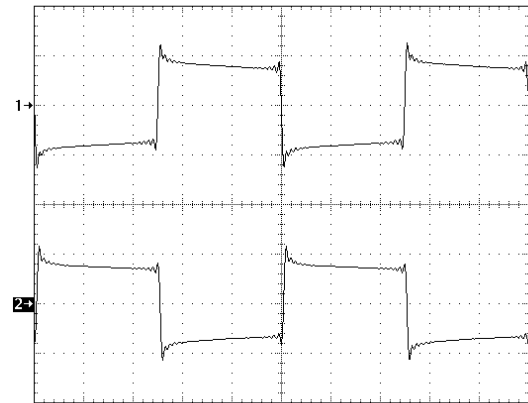
B) Insert an open plug in the RETURN jack and confirm that there is no output.

11. INPUT A/D



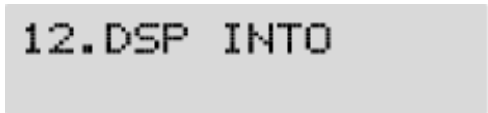
Input a short wave, and observe the output waveform using an oscilloscope.
 Note: Check both L(MONO) and R.
 Also, when the OUTPUT jack is used for a single channel, the L and R signals will be internally mixed, therefore, empty plugs must be inserted in the R channel for L(MONO) channel measurement and in the L(MONO) channel for R channel measurement, respectively.

INPUT : Rectangular Waveform, 400 Hz, 40 mVp-p
OUTPUT Level Control : MAX
Oscilloscope : 1.0 V/DIV, 0.5 ms/DIV



To proceed to the next inspection, press the [EXIT] button.

12. DSP Pitch interruption signal



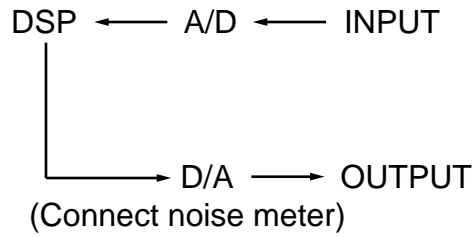
Confirm the pitch interruption signal generated from the DSP's internal oscillation.
 If an error occurs, its contents will be displayed.
 If no error occurs, it will automatically proceed to the next inspection.

13. Noise (IN -> OUT)



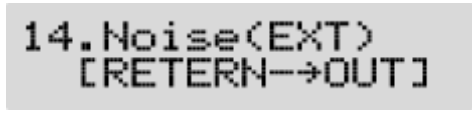
Note: Check both L(MONO) and R.
 Also, when the OUTPUT jack is used for a single channel, the L and R signals will be internally mixed, therefore, empty plugs must be inserted in the R channel for L(MONO) channel measurement and in the L(MONO) channel for R channel measurement, respectively.

OUTPUT Level Control: MAX
Confirm that the residual noise is -74 dBm (JIS-A) or lower.



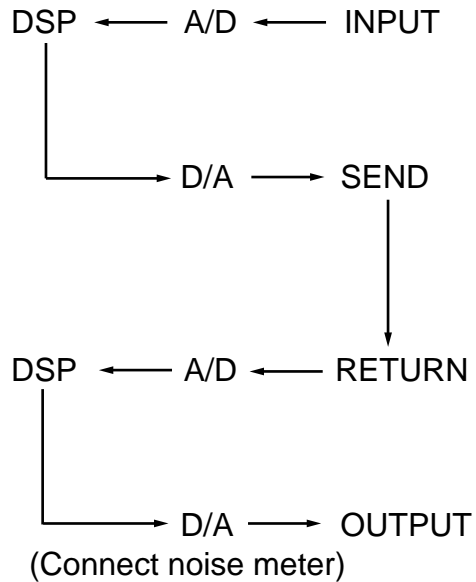
To proceed to the next inspection, press the [EXIT] button.

14. Noise (EXT)



Note: Check both L(MONO) and R.
 Also, when the OUTPUT jack is used for a single channel, the L and R signals will be internally mixed, therefore an empty plug must be inserted in the R channel for L(MONO) channel measurement, and an empty plug must be inserted in the L(MONO) channel for R channel measurement.

OUTPUT Level Control: MAX
Confirm that the residual noise is -64 dBm (JIS-A) or lower.



To proceed to the next inspection, press the [EXIT] button.

15. Calibrate EXP

```
15.Calibrate EXP
Press [WRITE]
```

1) The maximum and minimum values of the EXP pedal are set up.

```
15.Calibrate EXP
Set Pedal to MIN
```



```
15.Calibrate EXP
Press [WRITE]
```

2) To set up the minimum value, press the [WRITE] button.

```
15.Calibrate EXP
Set Pedal to MAX
```



```
15.Calibrate EXP
Press [WRITE]
```

3) Fully press the EXP pedal and release your hands.

4) To set up the maximum value, press the [WRITE] button.

When the calibration setup is completed, will automatically proceed to the next inspection.

16. Factory load

```
16.Factory Load
Press [WRITE]
```

To overwrite the factory preset data, press the [WRITE] button three times.

```
Test Completed !
Turn Power OFF
```

This ends test mode.

When the following displayed appears, turn off the power.

17. DIGITAL OUT

After the test mode is completed, connect external equipment that has a DIGITAL IN terminal to DIGITAL OUT, and confirm that the sound is properly output from DIGITAL OUT of the GT-6.

RESTORING THE FACTORY SETTINGS (FACTORY RESET)

1. Turn off the power.
2. While holding down PREAMP/SPEAKER On/Off button and [TYPE VARIATION], turn on the power.
The Factory Reset setting screen appears in the display.

```
Factory Reset
System# #35-4
```

The area of data you wish to factory reset.

* To cancel Factory Reset, press [EXIT] button.

3. Press PARAMETER [<] [>] button to move the cursor, and rotate the PATCH/VALUE dial to specify the range of settings you want to restore to factory settings.

System:

System parameters, Harmonist scales, Auto Riff phrases, and Preamp, Overdrive/Distortion, and Wah Custom Edit parameter settings

#1-1-#35-4:

Settings for Patch Number 1-1 through 35-4

4. If you want to proceed with the factory reset, press [ENTER] button.
The specified range of data will be returned, and return to the Play screen.

HOW TO UPDATE SYSTEM SOFTWARE

Required items

- Sequencer (MC-80, etc.)
- MIDI cable
- Update Disk (#17041087)

* Notes

Do not turn the GT-6 unit's power off while writing the system software. The GT-6 will not operate because the system will not be properly written into the flash ROM.

* Notes

After updating, execute "TEST:15.Calibrate EXP" and "TEST:16.Factory Load" while in the test mode.

The System Update Via SMF

The GT-6 system is supplied in standard MIDI file (SMF) format.

The following SMF data is stored on the disk. Starting with GT6_01.mid, transfer all data to the GT-6 in the respective order.

GT-6 System Ver.** SMF Disk : GT6_01.mid, GT6_02.mid, GT6_03.mid, GT6_04.mid, GT6_05.mid, GT6_06.mid, GT6_07.mid, GT6_08.mid

Update the GT-6's system in the following order.

1. Using a MIDI cable, connect the MIDI OUT connector of the sequencer to the MIDI IN connector of the GT-6.
2. Turn the GT-6's power on while pressing the [FX-2] and [PEDAL ASSIGN] and [UTILITY] buttons simultaneously.
The unit is in reception standby status if the LCD displays "Flash Update ALL BLOCK" then displays "Waiting SMF Data [GT6_01.mid]".

3. The GT6_01.mid SMF data will be sent from the sequencer to the GT-6. When the GT-6 receives the MIDI signal, the write address and the checksum will be displayed on the LCD.

When all the GT6_01.mid SMF data has been received, the GT-6 writes the received data to the flash ROM.

When it finishes writing, the GT-6 displays "Waiting SMF Data [GT6_02.mid]" on the LCD display.

Next, the GT6_02.mid SMF data is sent from the sequencer.

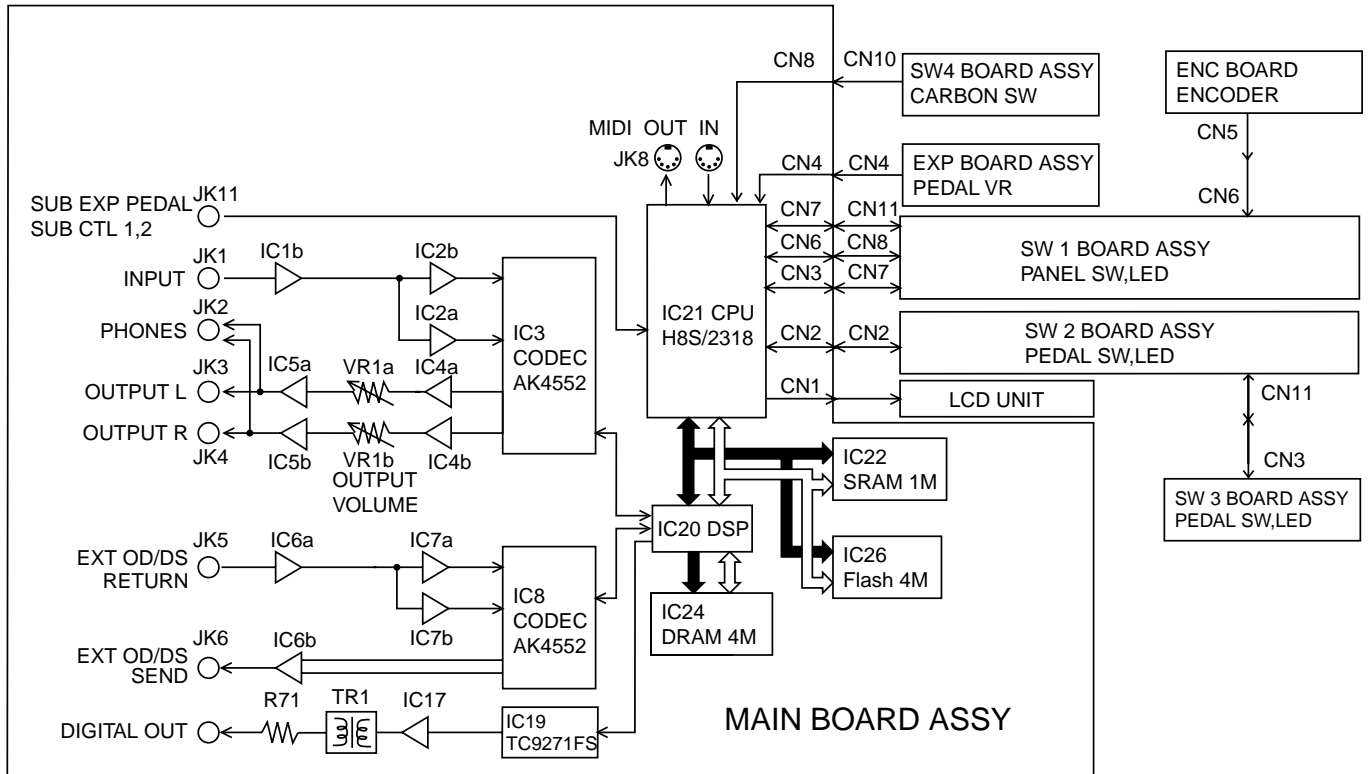
When the sequencer receives the MIDI signal, the write address and the checksum will be displayed on the LCD.

Play the SMF data in the manner stated above one by one in the respective sequence up to GT6_08.mid.

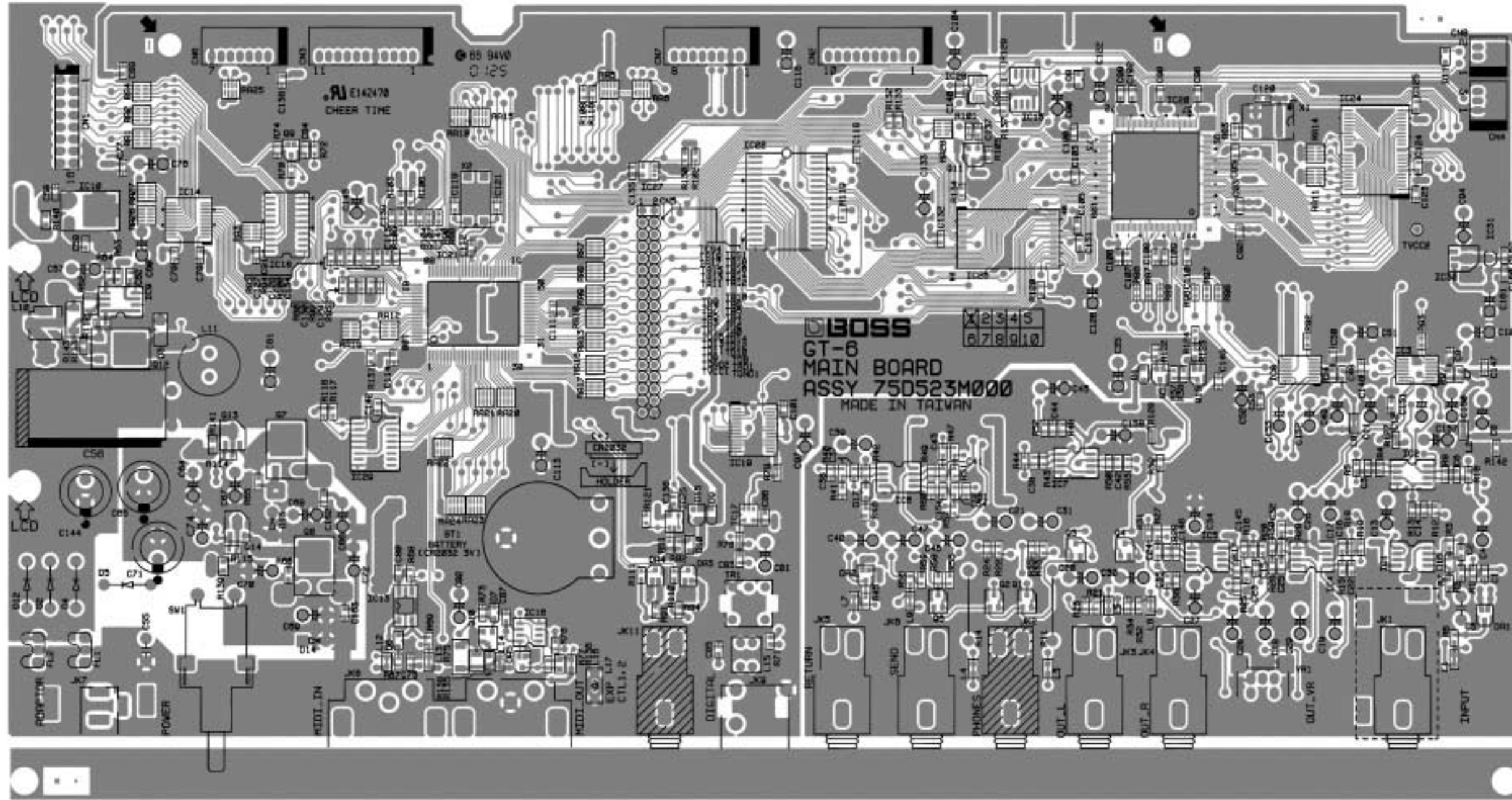
3-1.GT-6 : "Waiting SMF Data [GT6_01.mid]" -> MC-80 : GT6_01.mid play
3-2.GT-6 : "Waiting SMF Data [GT6_02.mid]" -> MC-80 : GT6_02.mid play
3-3.GT-6 : "Waiting SMF Data [GT6_03.mid]" -> MC-80 : GT6_03.mid play
3-4.GT-6 : "Waiting SMF Data [GT6_04.mid]" -> MC-80 : GT6_04.mid play
3-5.GT-6 : "Waiting SMF Data [GT6_05.mid]" -> MC-80 : GT6_05.mid play
3-6.GT-6 : "Waiting SMF Data [GT6_06.mid]" -> MC-80 : GT6_06.mid play
3-7.GT-6 : "Waiting SMF Data [GT6_07.mid]" -> MC-80 : GT6_07.mid play
3-8.GT-6 : "Waiting SMF Data [GT6_08.mid]" -> MC-80 : GT6_08.mid play

4. After the GT-6 receives all the SMF data, it will display the checksum (4-digit number) of the system software on the LCD display, so confirm it.
5. Execute "TEST:15.Calibrate EXP" and "TEST:16.Factory Load" while in the test mode.
Updating is now completed.

BLOCK DIAGRAM

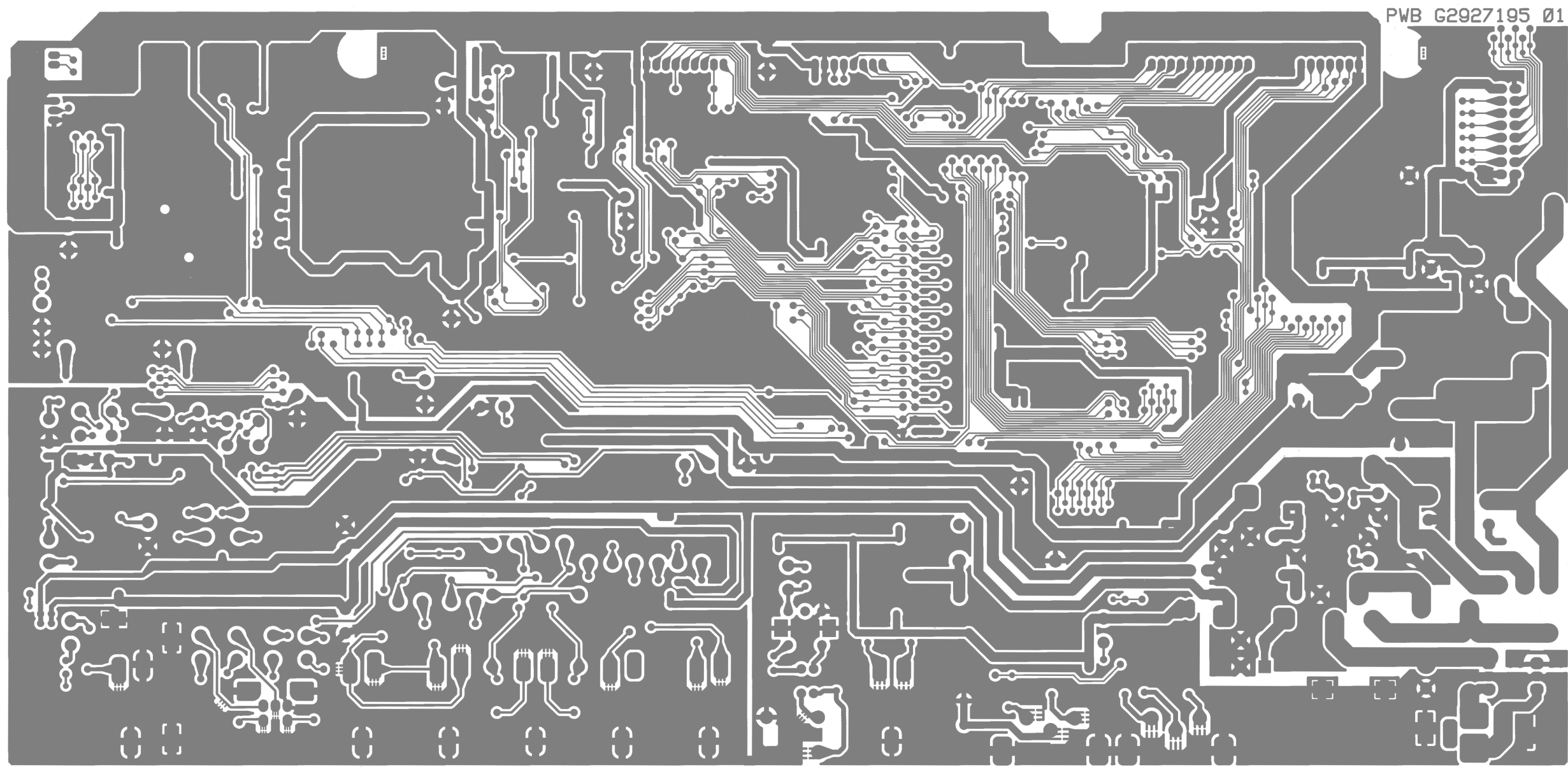


CIRCUIT BOARD (MAIN)



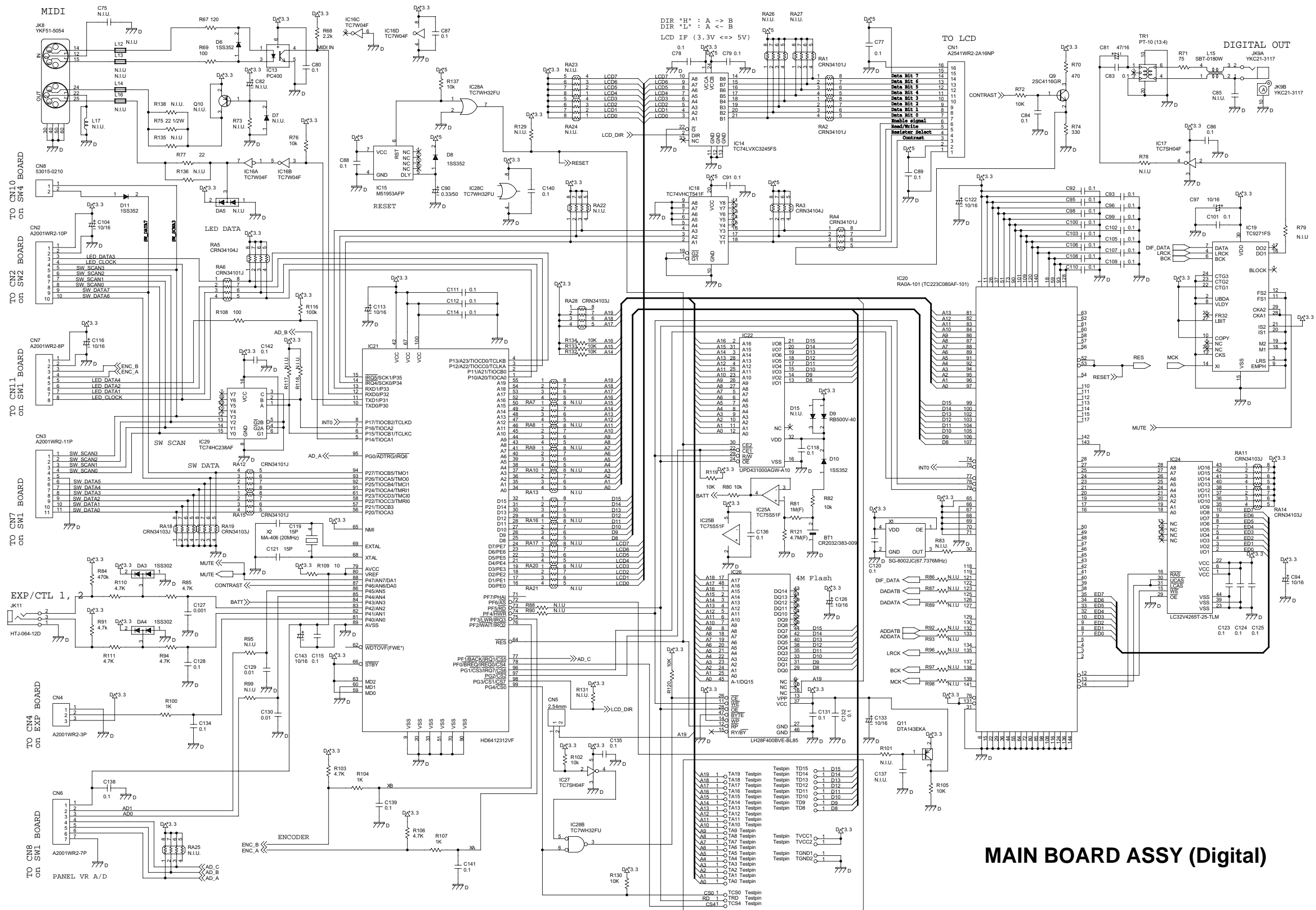
View from components side

CIRCUIT BOARD (MAIN)



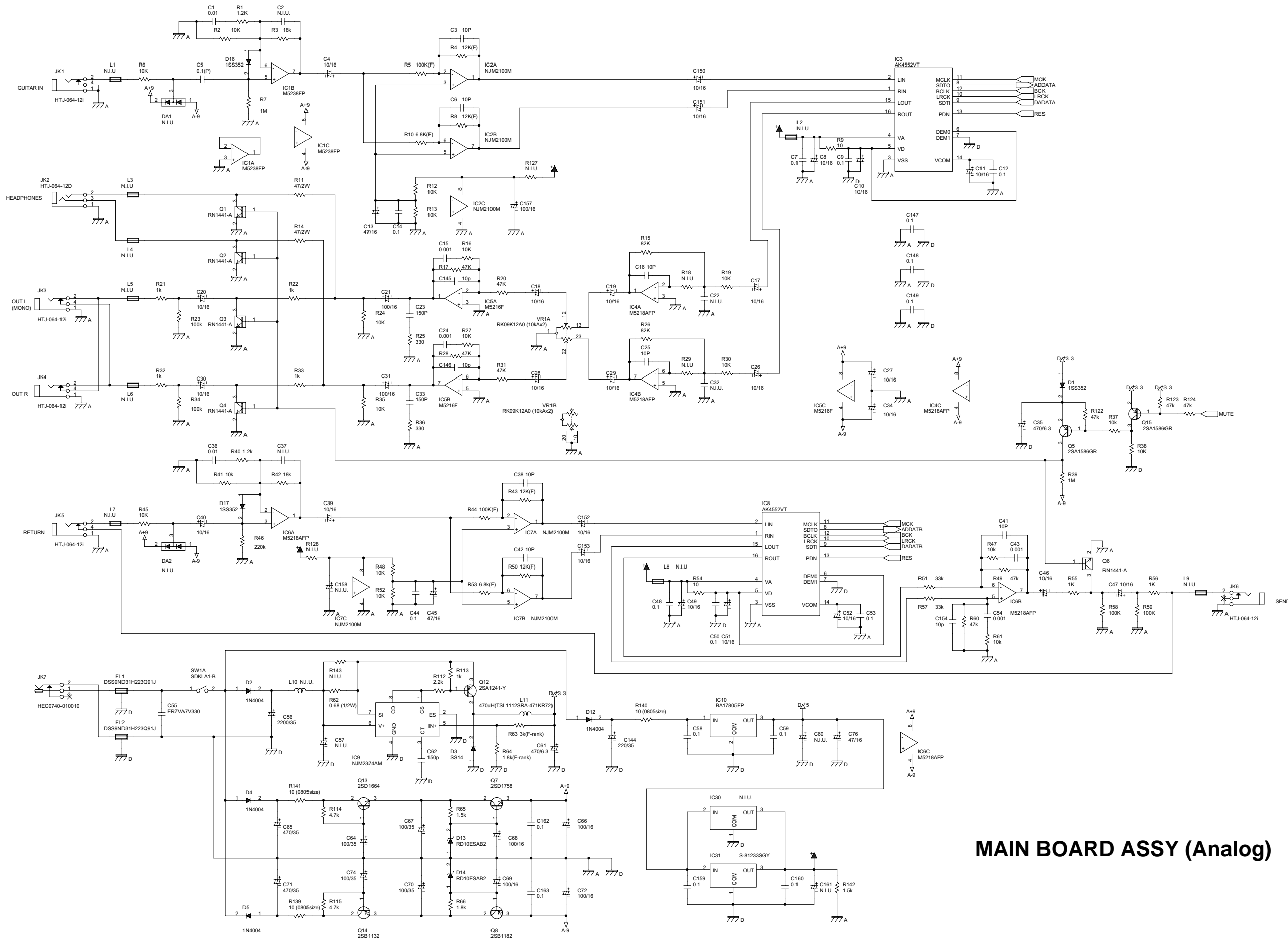
View from foil side

CIRCUIT DIAGRAM (MAIN 1/2)



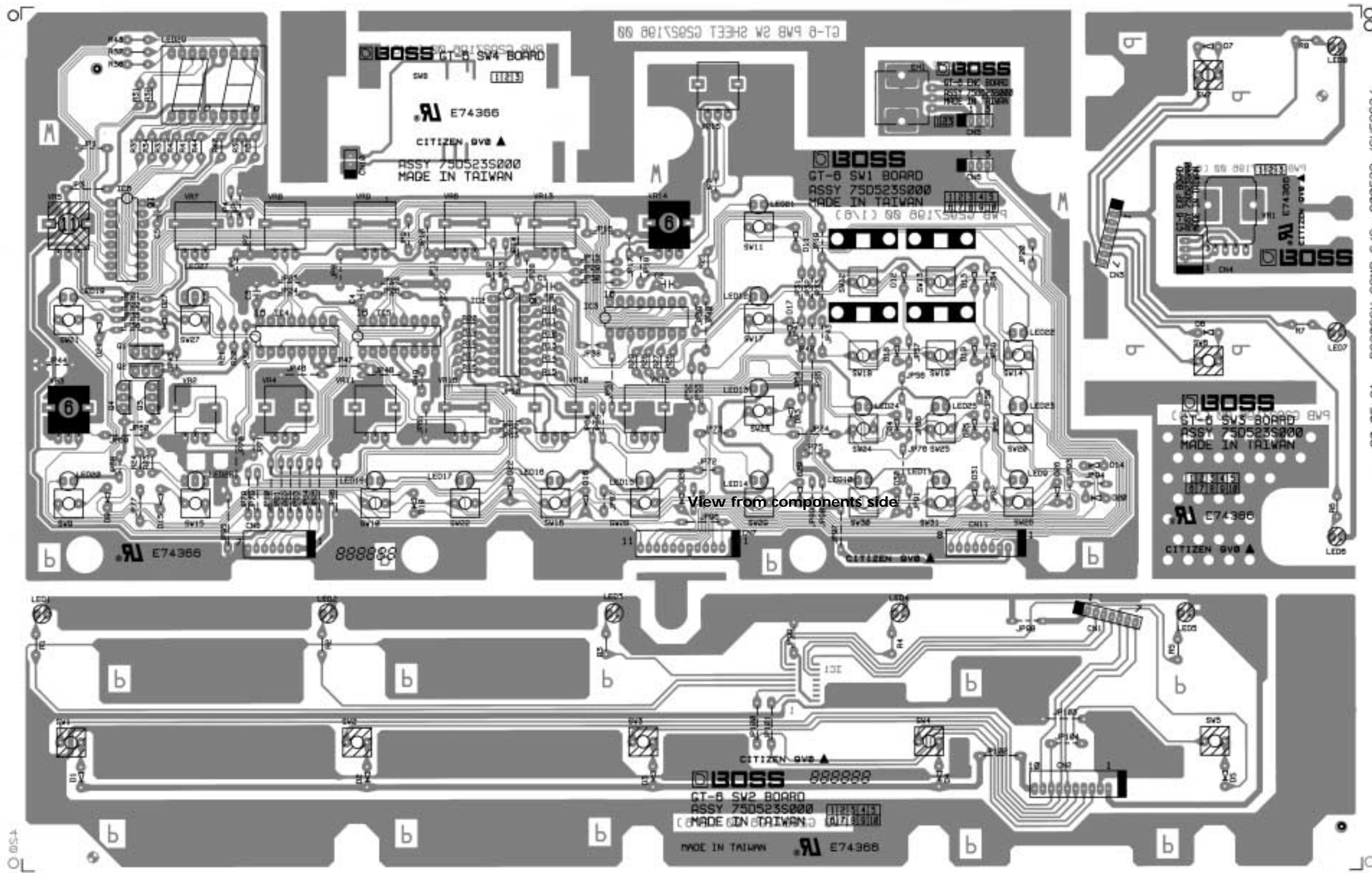
MAIN BOARD ASSY (Digital)

CIRCUIT DIAGRAM (MAIN 2/2)



MAIN BOARD ASSY (Analog)

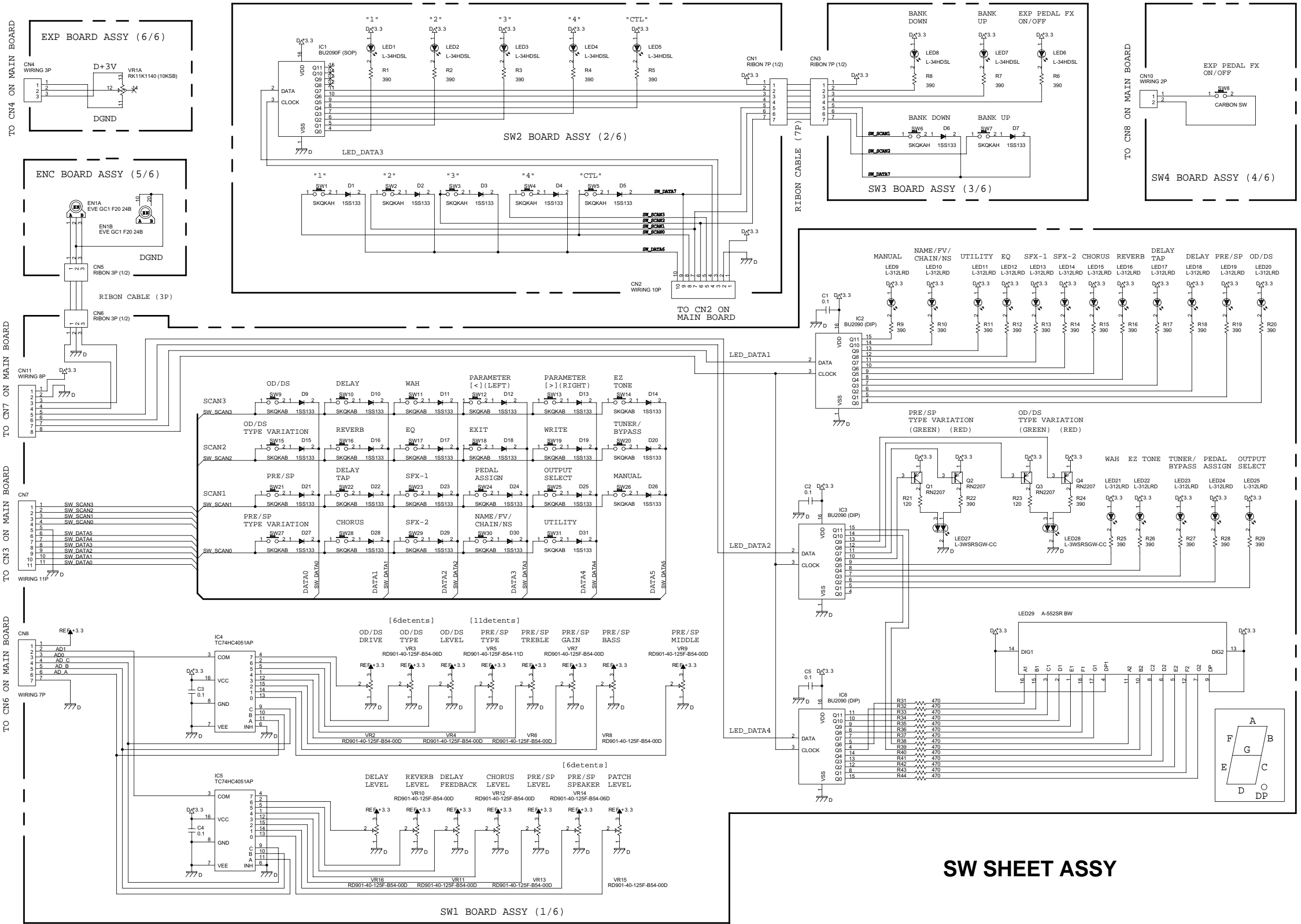
CIRCUIT BOARD (SW SHEET)



90.05.31 BG3065W COMP S/S 900529 /CH5863/

View from components side

CIRCUIT DIAGRAM (SW SHEET)



SW SHEET ASSY

ERROR MESSAGE

Normal Error Message

Battery Low !

The memory backup battery inside the GT-6 has run down. (This message will appear when the power is turned on.)

Replace the battery as soon as possible. For battery replacement, please contact a nearby Roland service center or your dealer.

MIDI Off Line !

There is a problem with the MIDI cable connection.
Check to make sure the cable has not been pulled out or is not shorted.

VALUE Locked !

You've attempted to switch patches by rotating the [PATCH/VALUE] dial, but the Dial function (p. **) is set to "VALUE Only."

If you want to be able to switch patches using the [PATCH/VALUE] dial, set the Dial function to "PATCH No.& VALUE."

MIDI Buffer Full

More MIDI messages were received in a short time than could be processed correctly.

Error messages in test mode

DSP check

1.DSP Check PRAM : NG ERAM : --

Problem : The data written in the DSP (IC8) PROM and the data read do not match.

* Check the following parts and wiring.

DSP(IC20): pins 77-79, 81-84, 86-89, 91-92, 94-97, 99-100, 102-107

1.DSP Check PRAM : -- ERAM : NG

Problem : The data written to the DRAM (IC24) via the DSP (IC20) and the data read do not match.

* Check the following parts and wiring.

DSP(IC20): pins 7-10, 12-14, 16, 17, 19-21, 23-25, 27, 32-35

DRAM(IC24): pins 1-44

BATTERY check

7.Battery 2.5 V LOW

"LOW" is displayed when 2.7 V or lower.

7.Battery No Battery !!

"No Battery !!" is displayed when a battery is not inserted.

* Insert a new lithium battery.

If an error message continues to appear when a new lithium battery is inserted, check the following parts and wiring.

CPU(IC21):pin 84

OP.Amp(IC25):pins 1-5

Resistor(R80, R81, R82, R121)

Diode(D9, D10)

Capacitor(C118, C136)

MIDI Check

8.MIDI IN/OUT No Connect

Problem : No MIDI cables are connected.

8.MIDI IN/OUT Verify ERROR

Problem : The data sent (MIDI OUT) and the data received (MIDI IN) do not match.

* Check the following parts and wiring.

• MIDI IN

CPU(IC21):pin 12

Resistor(R67-R69)

Capacitor(C80)

Photo Coupler(IC13)

Diode(D6)

• MIDI OUT

CPU(IC21):pins 10

Resistor(R76,R77,R138)

Gate IC(IC16)

DSP Pitch interruption signal check

12. DSP INTO --- ERROR ! ---

Problem : The interruption signal generated from DSP (IC8) internal oscillation is not recognized.

* Check the following parts and wiring.

CPU(IC21):pin 8

DSP(IC20):pin 75