

GT-8

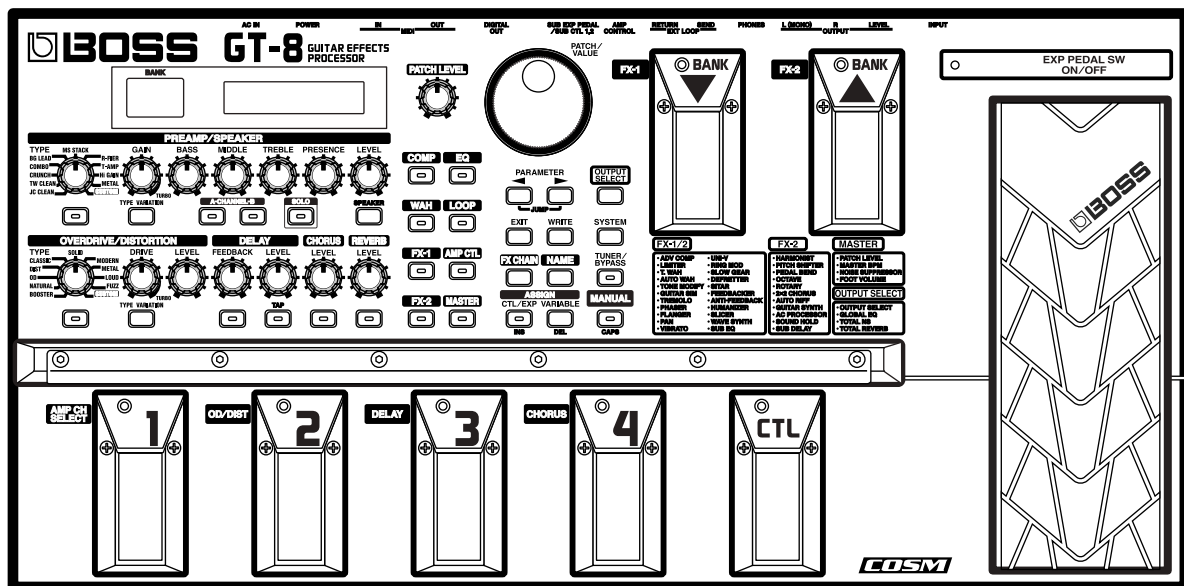
GUITAR EFFECTS PROCESSOR

SERVICE NOTES

Issued by RJA

TABLE OF CONTENTS

CAUTIONARY NOTES.....	2	FACTORY RESET INSTRUCTIONS	18
SPECIFICATIONS.....	2	SYSTEM SOFTWARE UPDATING INSTRUCTIONS....	19
LOCATION OF CONTROLS.....	4	TEST MODE.....	19
LOCATION OF CONTROLS PARTS LIST	6	BLOCK DIAGRAM	24
EXPLODED VIEW	8	CIRCUIT BOARD (MAIN SHEET)	26
EXPLODED VIEW PARTS LIST	10	CIRCUIT DIAGRAM (MAIN SHEET 1/3) (Power)	30
WIRING DIAGRAM.....	11	CIRCUIT DIAGRAM (MAIN SHEET 2/3) (Jack)	32
WIRING DIAGRAM PARTS LIST.....	11	CIRCUIT DIAGRAM (MAIN SHEET 2/3) (Digital)	34
PARTS LIST.....	12	CIRCUIT BOARD (SW SHEET).....	36
CHECKING THE VERSION NUMBER.....	17	CIRCUIT DIAGRAM (SW SHEET)	38
USERS DATA SAVE AND LOAD.....	17	ERROR MESSAGES.....	40



Copyright © 2004 ROLAND CORPORATION

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

CAUTIONARY NOTES

User data status

User data status after each of the following processes is described below. Whenever carrying out procedures that involve deleting or erasing user data, always be sure to back up the user data to some form of external media (refer to Saving and Loading Data).

Process	User Data
Checking Version number	Preserved
Factory Reset	Deleted
System Update	Preserved
Test Mode	Preserved

* Executing Test Mode during Factory Reset deletes the user data.

PARTS LIST

Due to one or more of the following reasons, parts with parts code ***** cannot be supplied as service parts.

- Part supplied only as a component in a complete assembly
- Copyright does not permit the part to be supplied
- Part is sold commercially

CIRCUIT BOARD

NIU meant that "NOT IN USE" there don't set any contents in the Circuit Diagram.

There has silk-screen only in the Circuit Board.

SPECIFICATIONS

GT-8: 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 Ω

RETURN: 220 Ω

Nominal Output Level

OUTPUT: 0 dBu

SEND: -10 dBu

Output Impedance

OUTPUT: 2 k Ω

SEND: 2 k Ω

Digital Output

EIAJ CP1201, S/P DIF

Dynamic Range

100 dB or greater (IHF-A)

Controls

< Front Panel >

PATCH LEVEL knob

(PREAMP/SPEAKER)

TYPE knob

GAIN knob

BASS knob

MIDDLE knob

TREBLE knob

PRESENCE knob

LEVEL knob

On/Off button

TYPE VARIATION button

CHANNEL button

SOLO button

SPEAKER 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

(COMP)

On/Off button

(EQ)

On/Off button

(WAH)

On/Off button

(LOOP)

On/Off button

(FX-1)

On/Off button

(AMP CTL)

On/Off button

(FX-2)

On/Off button

(MASTER)

MASTER button

PATCH/VALUE dial

PARAMETER buttons

OUTPUT SELECT button

EXIT button

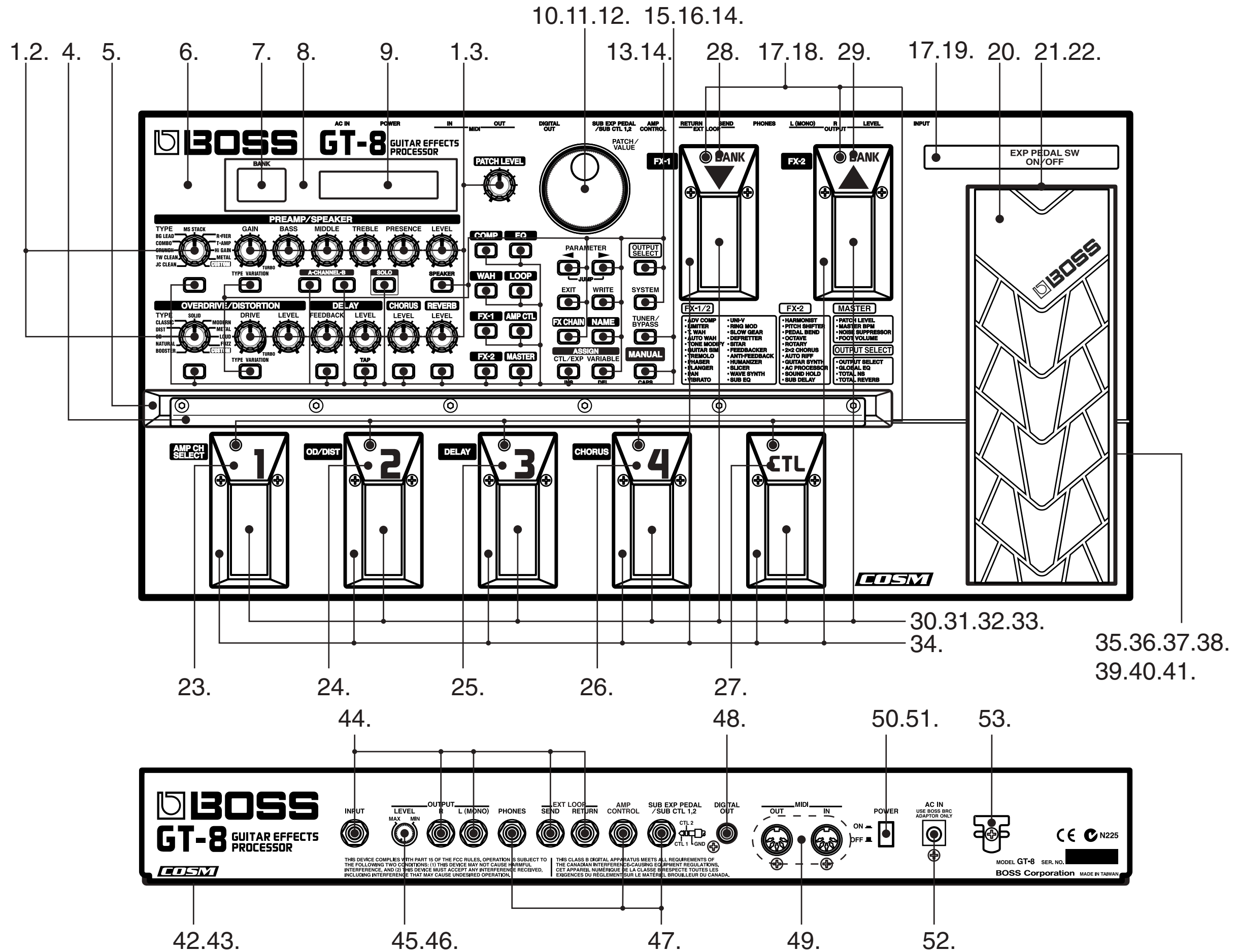
WRITE button

SYSTEM button

EFFECT CHAIN button

NAME button

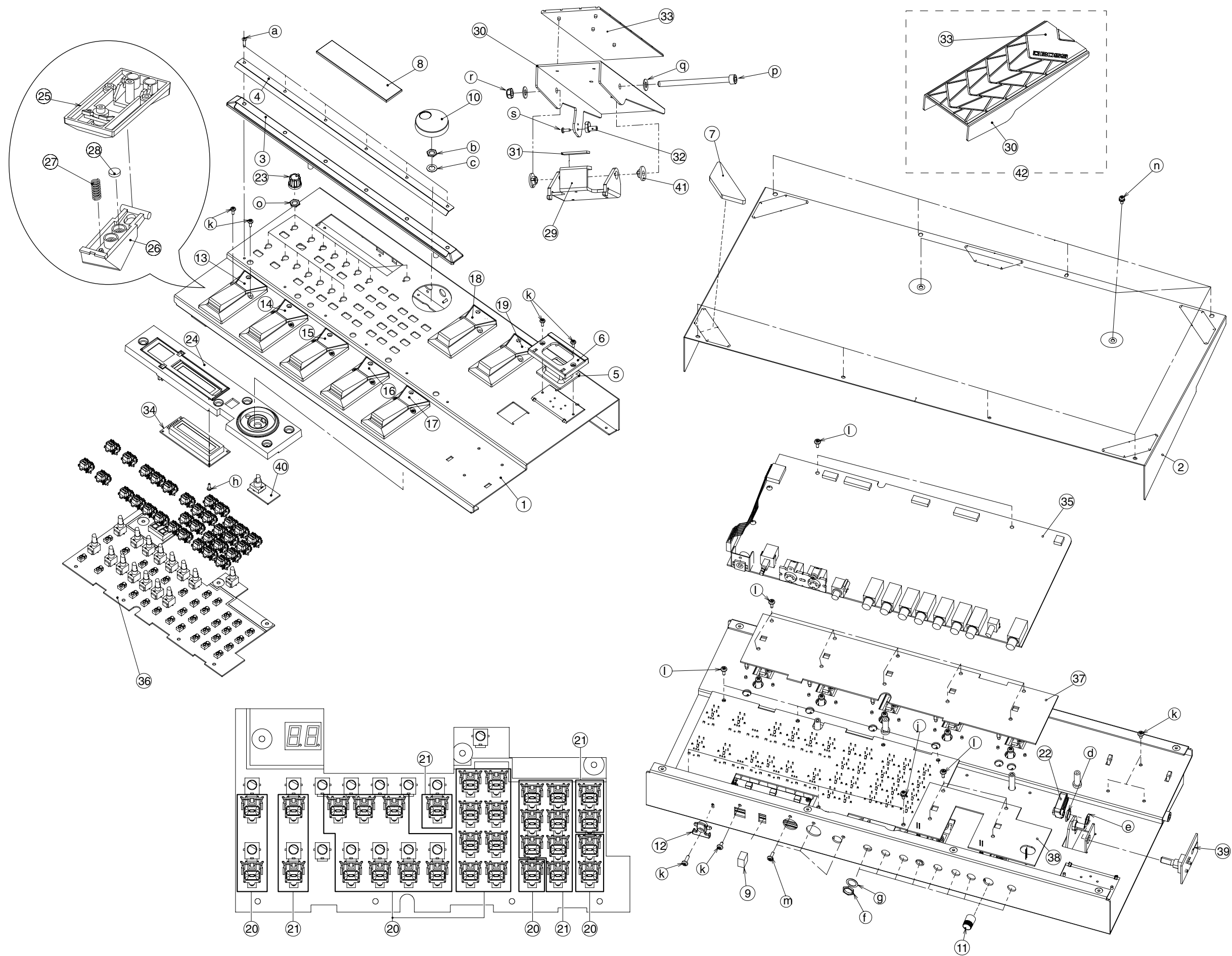
LOCATION OF CONTROLS



LOCATION OF CONTROLS PARTS LIST

No.	PART CODE	CATEGORY	PART NAME	DESCRIPTION	QTY
1	G2477122	KNOB,BUTTON	R-KNOB		15
2	F3279803	POTENTIOMETER	POTENTIOMETER 11 CLICKS 50KB	RD901-40-125F-B54-11D	2
3	F3279802	POTENTIOMETER	POTENTIOMETER NO CLICK 50KB	RD901-40-125F-B54-00D	13
4	G2237113	MISCELLANEOUS	GUARD PLATE		1
5	G2237112	MISCELLANEOUS	GUARD		1
6	75D912C000	CASING	TOP COVER		1
7	F5029412	DISPLAY UNIT	7SEG LED	A-552SR BW	1
8	G2567119	MISCELLANEOUS	DISPLAY COVER		1
9	F5029405	DISPLAY UNIT	LCD	LMC-SSC2K16DLNY-H01	1
10	F2477101	KNOB,BUTTON	DR-KNOB		1
11	01905467	ENCODER	ROTARY ENCODER	EVE GC1 F20 24B	1
12	G2567118	MISCELLANEOUS	ESCUTCHEON		1
13	G247751301	KNOB,BUTTON	VGA KEYPOT S WITHOUT LENS		12
14	F3129306	SWITCH	SWITCH	SKQKAB	32
15	G247751001	KNOB,BUTTON	VGA KEYPOT S BLACK WITH LENS		20
16	F5029117	DIODE	LED	L-312LRD	20
17	1502928100	DIODE	LED (RED)	L-34HDSL	8
18	H2369401	MISCELLANEOUS	SPACER 3X6X10		7
19	H2369431	MISCELLANEOUS	LED SPACER	3-2	1
20	G2357112	MISCELLANEOUS	VR PLATE		1
21	G2637107	MISCELLANEOUS	RUBBER SW		1
22	G2567121	MISCELLANEOUS	RUBBER SW ESCUTCHEON		1
23	G2217138	MISCELLANEOUS	PEDAL LABEL(1)		1
24	G2217139	MISCELLANEOUS	PEDAL LABEL(2)		1
25	G2217140	MISCELLANEOUS	PEDAL LABEL(3)		1
26	G2217143	MISCELLANEOUS	PEDAL LABEL(4)		1
27	G2217144	MISCELLANEOUS	PEDAL LABEL(CTL)		1
28	G2217142	MISCELLANEOUS	PEDAL LABEL(DOWN)		1
29	G2217141	MISCELLANEOUS	PEDAL LABEL(UP)		1
30	G2187602	CASING	SWITCH PEDAL		7
31	G2357109	CASING	PEDAL FOOT		7
32	G2177103	MISCELLANEOUS	SUPPORT SPRING		7
33	03344723	SWITCH	TACT SWITCH	SKQKAKD010	7
34	G2227301	CASING	PEDAL ESCUTCHEON		7
35	75D9122S000	CASING	VR PEDAL UNIT	INC. VR PLATE	1
36	G2187904	MISCELLANEOUS	PEDAL HOLDER		1
37	F3279782	POTENTIOMETER	POTENTIOMETER	RK11K1140(10K SPECIAL B-CURVE)	1
38	G2357111	MISCELLANEOUS	CUSHION R		1
39	G1889117	MISCELLANEOUS	PIN STAY		1
40	G2147806	MISCELLANEOUS	STAY		1
41	G2147874	MISCELLANEOUS	BOLT HOLDER		2
42	G2357120	CASING	FOOT	H=5	5
43	75D912E000	CASING	BOTTOM COVER		1
44	13449155MF	JACK,EXT TERMINAL	PHONE JACK (MONO)	HTJ-064-12I	5
45	01340412	KNOB,BUTTON	P R-KNOB	SF-A BLK/LCG	1
46	F3229161	POTENTIOMETER	9M/M ROTARY POT.	RK09K12A0 (50KAX2)	1
47	13449150MF	JACK,EXT TERMINAL	JACK (STEREO)	HTJ-064-12D	3
48	F3449121	JACK,EXT TERMINAL	YKC21-3117	RCA (PIN) JACK	1
49	13429825	JACK,EXT TERMINAL	MIDI CONNECTOR	YKF51-5054 2PZ	1
50	12499175	KNOB,BUTTON	BUTTON	JSPUE001A	1
51	F3129307	SWITCH	PUSH SWITCH	SDKLA1-B	1
52	13449728	JACK,EXT TERMINAL	ADAPTOR JACK	HEC0740-010010	1
53	F2367103	MISCELLANEOUS	CORD HOOK		1

EXPLODED VIEW



EXPLODED VIEW PARTS LIST

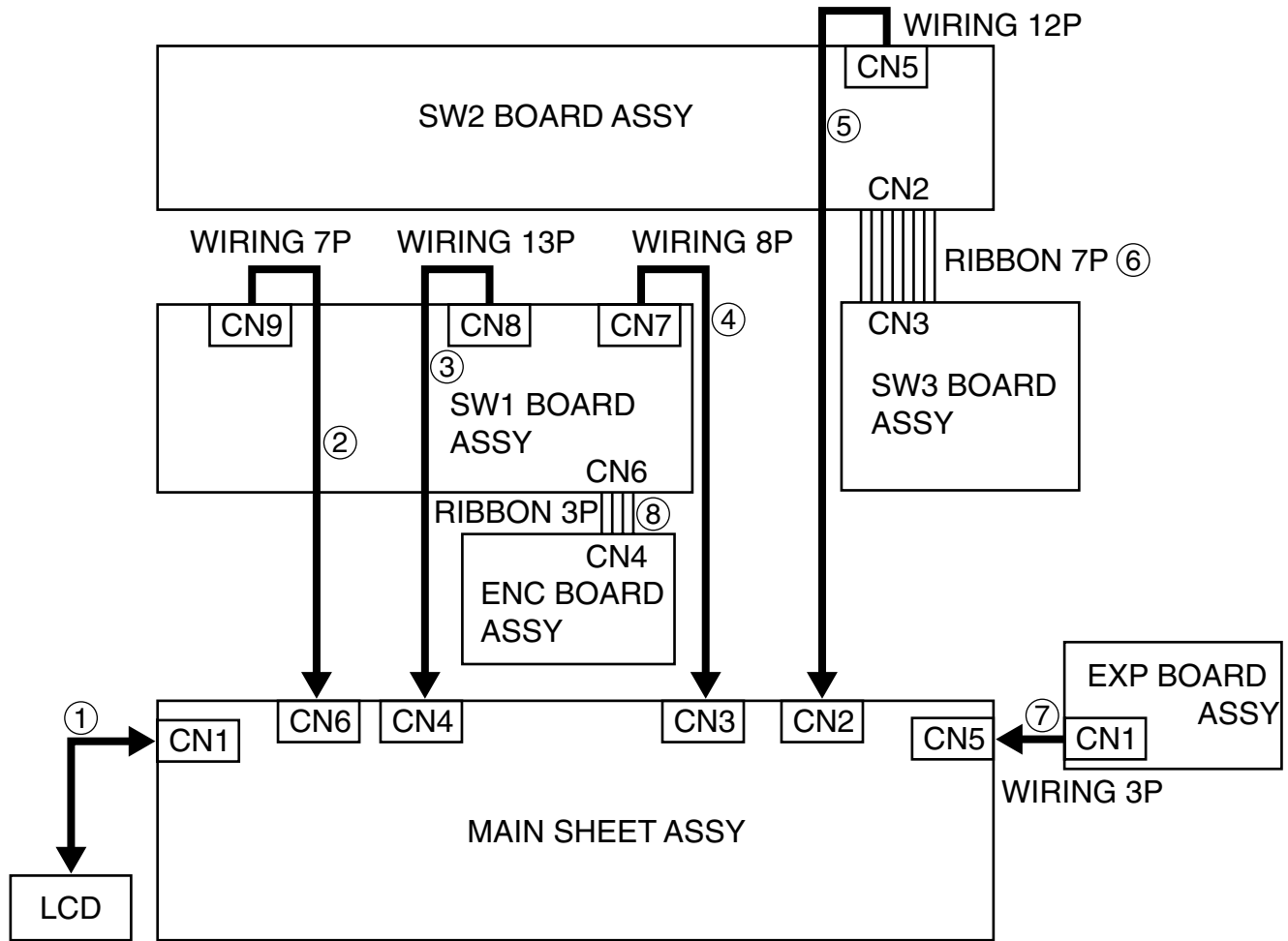
[Parts]

No.	PART CODE	PART NAME	DESCRIPTION	Q'TY
1	75D912C000	TOP COVER		1
2	75D912E000	BOTTOM COVER		1
3	G2237112	GUARD		1
4	G2237113	GUARD PLATE		1
5	G2637107	RUBBER SW		1
6	G2567121	RUBBER SW ESCUTCHEON		1
7	G2357120	FOOT	H=5	5
8	G2567119	DISPLAY COVER		1
9	12499175	BUTTON	JSPUE001A	1
10	F2477101	DR-KNOB		1
11	01340412	P R-KNOB	SF-A BLK/LCG	1
12	F2367103	CORD HOOK		1
13	G2217138	PEDAL LABEL(1)		1
14	G2217139	PEDAL LABEL(2)		1
15	G2217140	PEDAL LABEL(3)		1
16	G2217143	PEDAL LABEL(4)		1
17	G2217144	PEDAL LABEL(CTL)		1
18	G2217141	PEDAL LABEL(UP)		1
19	G2217142	PEDAL LABEL(DOWN)		1
20	G247751001	VGA KEYPAD S BLACK WITH LENS		20
21	G247751301	VGA KEYPAD S WITHOUT LENS		12
22	G2147806	STAY		1
23	G2477122	R-KNOB		15
24	G2567118	ESCUTCHEON		1
25	G2227301	PEDAL ESCUTCHEON		7
26	G2187602	SWITCH PEDAL		7
27	G2177103	SUPPORT SPRING		7
28	G2357109	PEDAL FOOT		7
29	G2187904	PEDAL HOLDER		1
31	G2357111	CUSHION R		1
32	G1889117	PIN STAY		1
34	F5029405	LCD	LMC-SSC2K16DLNY-H01	1
35	75D913M000	MAIN SHEET ASSY		1
36	75D913S000	SW SHEET ASSY		1
37	75D913S000	SW SHEET ASSY		1
38	75D913S000	SW SHEET ASSY		1
39	75D913S000	SW SHEET ASSY		1
40	75D913S000	SW SHEET ASSY		1
41	G2147874	BOLT HOLDER		2
42	75D9122S00	VR PEDAL UNIT	INC. VR PLATE	1
NOTE: `VR PEDAL UNIT` includes the following parts.				
30	*****	VR PEDAL		1
33	G2357112	VR PLATE		1

[Screw]

No.	PART CODE	PART NAME	DESCRIPTION	Q'TY
a	H5029854	BOLT M3X12	HEX BUTTON FENI	6
b	*****	NUT M9 (with ENCODER)		1
c	*****	WASHER M9 (with ENCODER)		1
d	*****	NUT M9 (with POT.)		1
e	*****	WASHER M9 (with POT.)		1
f	H5039510	NUT M9X12X2 (with PHONE JACK)	FENI	8
g	H5039112	WASHER M9 (with PHONE JACK)		8
h	H5029843	SCREW 2.3X8	BINDING TAPTITE P ZC	1
I	H5019803	SCREW 3X8	BINDING P-TIGHT FECM	20
j	H5019130	SCREW M3X6	PAN MACHINE W/SW+PW ZC	5
k	H5029331	SCREW 3X8	BINDING S-TIGHT FEBZC	21
m	H5029330	SCREW M3X8	BINDING TAPTITE P BZC	3
n	H5019428	SCREW M3X6	PAN MACHINE W/SW+SMALL PW BZC	10
o	H5039520	M9 NUT		15
p	H5030008	HEX BOLT M6X85	BZC	1
q	H5039122	PLAIN WASHER	6X13X1 BZC	2
r	H5039515	NUT M6	U BZC	1
s	H5019434	SCREW M2.6X8	BINDING TAPTITE P BZC	1

WIRING DIAGRAM



WIRING DIAGRAM PARTS LIST

NO	PART CODE	PART NAME	DESCRIPTION	Q'TY
1	G3467180	LCD WIRING	16P L=160MM	1
2	G3467176	WIRING	7P P=2MM L=115MM	1
3	F3467039	WIRING	13P P=2MM L=65MM	1
4	G3467178	WIRING	8P P=2MM L=65MM	1
5	F3467038	WIRING	12P P=2MM L=120MM	1
6	G3477156	RIBBON CABLE	7P P=2MM L=140MM	1
7	G3467175	WIRING	3P P=2MM L=115MM	1
8	G3477146	RIBBON CABLE	3P L=40X5X5 MM P=2MM	1

PARTS LIST

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

Due to one or more of the following reasons, parts with parts code ***** cannot be supplied as service parts.

- Part supplied only as a component in a complete assembly
- Copyright does not permit the part to be supplied
- Part is sold commercially

NOTE: The parts marked # are new. (initial parts) The description "Q'TY" means a necessary number of the parts per one product.

CASING

	G2357120	FOOT	H=5		5
#	75D912E000	BOTTOM COVER			1
	G2227301	PEDAL ESCUTCHEON			7
	G2357109	PEDAL FOOT			7
	G2187602	SWITCH PEDAL			7
#	75D912C000	TOP COVER			1
	75D9122S00	VR PEDAL UNIT	INC. VR PLATE		1
		NOTE: `VR PEDAL UNIT` includes the following parts.			
#	*****	VR PEDAL			1
	G2357112	VR PLATE			1

KNOB,BUTTON

	01340412	P R-KNOB	SF-A BLK/LCG		1
	12499175	BUTTON	JSPUE001A		1
	F2477101	DR-KNOB			1
	G2477122	R-KNOB			15
	G247751001	VGA KEYPOT S BLACK WITH LENS			20
	G247751301	VGA KEYPOT S WITHOUT LENS			12

SWITCH

	03344723	TACT SWITCH	SKQKAKD010	SW1,SW2,SW3,SW4,SW5,SW6,SW7 on SW	7
	F3129306	SWITCH	SKQKAB	SW8,SW9,SW10,SW11,SW12,SW13,SW14,S W15,SW16,SW17,SW18,SW19,SW20,SW21, SW22,SW23,SW24,SW25,SW26,SW27,SW28 ,SW29,SW30,SW31,SW32,SW33,SW34,SW3 5,SW36,SW37,SW38,SW39 on SW	32
	F3129307	PUSH SWITCH	SDKLA1-B	SW1 on MAIN	1

JACK,EXT TERMINAL

#	13429825	MIDI CONNECTOR	YKF51-5054 2PZ	JK7 on MAIN	1
	F3449121	YKC21-3117	RCA (PIN) JACK	JK9 on MAIN	1
	13449155MF	PHONE JACK (MONO)	HTJ-064-12I	JK1,JK3,JK4,JK5,JK6 on MAIN	5
	13449150MF	JACK (STEREO)	HTJ-064-12D	JK2,JK8,JK10 on MAIN	3
	13449728	ADAPTOR JACK	HEC0740-010010	JK11 on MAIN	1

DISPLAY UNIT

	F5029405	LMC-SSC2K16DLNY-H01	LCD		1
	F5029412	A-552SR BW	7SEG LED	LED31 on SW	1

PWB ASSY

#	75D913M000	MAIN SHEET ASSY			1
#	75D913S000	SW SHEET ASSY			1

IC

	F5199520	S-812C33AY-Z-G	REGULATOR	IC31 on MAIN	1
	F5199108	NJM2374AM-TE1	IC(SWITCHING REGULATOR)	IC32 on MAIN	1
#	03785378	UPD442012AGY-BB85X-MJH	IC (SRAM)	IC19 on MAIN	1
	15289123	M51953AFP-600C	IC (RESET)	IC34 on MAIN	1
#	F5199109	BA17805FP	IC (REGULATOR)	IC30 on MAIN	1
#	03785134	TLP172A	IC (PHOTO RELAY)	IC37 on MAIN	1
#	F5229704	PC400T	IC (PHOTO COUPLER)	IC16 on MAIN	1
	F5289102	NJM2100M 8P SOP	IC (OP.AMP)	IC2,IC8 on MAIN	2
#	F5189105	TC75S51F	IC (OP AMP)	IC23 on MAIN	1
#	F5289104	M5238FP	IC (JFET OP AMP)	IC1 on MAIN	1
#	*****	BM29LV800BA-70PFTN-SFKE1	IC (FLASH MEMORY/BLANK)	IC25 on MAIN	1
	02231767	RA0A-101 (TC223C080AF-101)	IC (DSP)	IC21,IC20 on MAIN	2
	03347056	LC32V4265CT-25-TLM-E	IC (DRAM)	IC24 on MAIN	1
#	03784256	CS8406-CZ.ZR	IC (DIF/TRANSMITTER)	IC27 on MAIN	1

IC					
#	F5249101	HD74HC4051P	IC (CMOS)	IC4,IC6	2
#	F5249134	TC74HC08AF	IC (CMOS)	IC26 on MAIN	1
#	F5279720	TC74VHC138F	IC (CMOS)	IC13 on MAIN	1
#	F5249128	TC74VHC574FT(EL)	IC (CMOS)	IC11,IC14 on MAIN	2
#	F5249129	TC74VHCT574AF	IC (CMOS)	IC12,IC15 on MAIN	2
#	F5279311	TC7SH04F	IC (CMOS)	IC28 on MAIN	1
#	F5249135	TC7SH04FU	IC (CMOS)	IC35,IC39 on MAIN	2
#	F5279315	TC7SH32FU	IC (CMOS)	IC33,IC36 on MAIN	2
#	F5279307	TC7W04F	IC (CMOS)	IC18 on MAIN	1
#	F5289106	M5216FP	IC (BIPOLAR OP AMP)	IC6 on MAIN	1
	15189261	M5218AFP-600E	IC (BIPOLAR OP AMP)	IC7,IC5 on MAIN	2
	02451434	AK4552VT	IC (AD/DA)	IC3,IC9 on MAIN	2
	03342312	HD6412312SVF	IC (16BIT CPU)	IC22 on MAIN	1
	02678945	BU2090	IC	IC1,IC2,IC3,IC5	4
TRANSISTOR					
	G3467176	7P P=2MM L=115MM	WIRING	CN9 on SW	1
	F5309115	2SA1241-Y	TRANSISTOR	Q10 on MAIN	1
	15309104	2SA1586-GR(TE85R)	TRANSISTOR	Q6,Q5 on MAIN	2
	F5309602	2SB1182	TRANSISTOR	Q12 on MAIN	1
	15319107	2SC4116-GR(TE85R)	TRANSISTOR	Q8 on MAIN	1
#	F5129405	2SC4738GR	TRANSISTOR	Q9 on MAIN	1
	F5319602	2SD1758	TRANSISTOR	Q11 on MAIN	1
	F5329529	RN1441	TRANSISTOR	Q1,Q2,Q3,Q4,Q7,Q13,Q14,Q15 on MAIN	8
DIODE					
	F5339318	RD13ESAB2	ZENER DIODE	D12,D11 on MAIN	2
	15019126	1SS133 T-77	SWITCHING DIODE	D1,D2,D3,D4,D5,D6,D7,D8,D9,D10,D11,D12,D13,D14,D15,D16,D17,D18,D19,D20,D21,D22,D23,D24,D25,D26,D27,D28,D29,D30,D31,D32,D33,D34,D35,D36,D37,D38,D39 on SW	39
	1502928100	L-34HDSL	LED (RED)	LED1,LED2,LED3,LED4,LED5,LED6,LED7,LED8	8
	F5029117	L-312LRD	LED	LED10,LED11,LED12,LED13,LED14,LED15,LED16,LED18,LED19,LED20,LED21,LED22,LED23,LED24,LED25,LED26,LED27,LED28,LED29,LED30	20
	F5019203	1N4004	DIODE	D7,D8,D10,D13 on MAIN	4
	15339119	1SS-352	DIODE	D1,D2,D3,D4,D6,D14 on MAIN	6
	15339120	1SS302	DIODE	DA4,DA5 on MAIN	2
	02783023	RB500V-40	DIODE	D5 on MAIN	1
	F5339137	SS14 VF=0.45V	DIODE	D9 on MAIN	1
RESISTOR					
	F5419707	CRN34101J	RESISTOR ARRAY	RA3,RA4,RA6,RA9,RA15,RA18 on MAIN	6
	F5419705	CRN34103J	RESISTOR ARRAY	RA1,RA2,RA7,RA14,RA17,RA21,RA22,RA26 on MAIN	8
	F5419706	CRN34104J	RESISTOR ARRAY	RA5,RA8 on MAIN	2
#	F5399909	0.68 (1/2W) RL2010JR-070R68	RESISTOR	R122 (1.00 ~ 1.99Lot),R120 (2.00Lot ~)	1
	F5399127	1.2K J	RESISTOR	R43,R1 on MAIN	2
	F5399912	1.8K (F-RANK)	RESISTOR	R125 on MAIN	1
#	F5429395	10 (0805SIZE 1/10W)	RESISTOR	R118,R126,R129 on MAIN	3
	F5399115	100 J	RESISTOR	R73,R86 on MAIN	2
#	F5399916	100K (F-RANK)	RESISTOR	R5,R48 on MAIN	2
#	F5399918	12K (F-RANK)	RESISTOR	R4,R8,R47,R55 on MAIN	4
	F5399150	18K J	RESISTOR	R46,R3 on MAIN	2
	F5399919	1M(F-RANK)	RESISTOR	R90 on MAIN	1
	F5399917	22 (1/2W)	RESISTOR	R77 on MAIN	1
	F5399111	22 J	RESISTOR	R79 on MAIN	1
	F5399913	3K (F-RANK)	RESISTOR	R124 on MAIN	1
	F5399133	4.7K J	RESISTOR	R78,R81,R95,R96,R100,R101,R102 on MAIN	7
	F5399920	4.7M(F-RANK)	RESISTOR	R91 on MAIN	1
	F5399119	470J	RESISTOR	R69,R115 on MAIN	1
	F5399195	470K J	RESISTOR	R44,R94 on MAIN	2
	F5399158	47K J	RESISTOR	R18,R21,R29,R32,R37,R38,R39,R114,R117 on MAIN	9
	F5399914	6.8KF	RESISTOR	R9,R58 on MAIN	2
	F5399116	82K J	RESISTOR	R71 on MAIN	1
	F5399166	82K J	RESISTOR	R27,R16 on MAIN	2
#	F5399139	1.8K	MTL.FLM RESISTOR	R128 on MAIN	1
#	F5399120	150	MTL.FLM RESISTOR	R111 on MAIN	1
	F5399129	1.5K J	MTL.FILM RESISTOR	R119,R127 on MAIN	2
	F5399104	10 J	MTL.FILM RESISTOR	R10,R59,R93 on MAIN	3
	F5399170	100K J	MTL.FILM RESISTOR	R24,R35,R63,R64,R85,R116 on MAIN	6
	F5399140	10K J	MTL.FILM RESISTOR	R2,R6,R12,R14,R17,R20,R25,R28,R31,R36,R41,R42,R45,R49,R52,R53,R57,R66,R72,R76,R82,R83,R87,R88,R89,R134,R141,R142,R148,R149,R153,R154,R155,R156 on MAIN	34

RESISTOR					
	F5399128	1K J	MTL.FILM RESISTOR	R22,R23,R33,R34,R60,R61,R80,R84,R110,R121,R160,R161,R162 on MAIN	13
	F5399200	1M J	MTL.FILM RESISTOR	R7 on MAIN	1
	F5399130	2.2K J	MTL.FILM RESISTOR	R70,R123 on MAIN	2
	F5399190	220K J	MTL.FILM RESISTOR	R50 on MAIN	1
	F5399118	330	MTL.FILM RESISTOR	R26,R40,R75 on MAIN	3
	F5399107	75	MTL.FILM RESISTOR	R113 on MAIN	1
	F5429374	33K OHM F RANK (1%)	CHIP RESISTOR (1608 TYPE)	R56,R62 on MAIN	2
	F5429375	47K OHM F RANK (1%)	CHIP RESISTOR	R54,R65 on MAIN	2
	F3829254	47OHM(2W)	CARBON RESISTOR	R13,R15 on MAIN	2
#	13749787	390 (1/6W)	CARBON RESISTER	R1,R2,R3,R4,R5,R6,R7,R8,R10,R11,R12,R13,R14,R15,R16,R18,R19,R20,R21,R22,R23,R24,R25,R26,R27,R28,R29,R30	28
#	13749789	470 (1/6W)	CARBON RESISTER	R31,R32,R33,R34,R35,R36,R37,R38,R39,R40,R41,R42,R43,R44 on SW	14
POTENTIOMETER					
	F3279802	RD901-40-125F-B54-00D	POTENTIOMETER NO CLICK 50KB	VR3,VR4,VR5,VR6,VR7,VR8,VR9,VR11,VR12,VR13,VR14,VR15,VR16 on SW	13
	F3279803	RD901-40-125F-B54-11D	POTENTIOMETER 11 CLICKS 50KB	VR2,VR10 on SW	2
	F3279782	RK11K1140(10K SPECIAL B-CURVE	POTENTIOMETER	VR1 on SW	1
#	F3229161	RK09K12A0 (50KAX2)	9M/M ROTARY POT.	VR1 on MAIN	1
CAPACITOR					
	F3587451	ERZVA7V330	VARISTOR CAPACITOR	C157 on MAIN	1
#	13649101	1/50	NON POLAR CHEMICAL CAPACITOR	C200, C201 on MAIN	2
	02341489	ECPU1C474MA5	MYLAR CAPACITOR(SUBMICRON)	C5 on MAIN	1
	13519694	RPE132-901F104Z50	MLT.LAY.CERAMIC CAPACITOR	C1,C2,C3,C4,C5,C7 on SW	6
	F5359732	GRM39B102J50PT	CHIP CAPACITOR (1608 TYPE)	C21,C33,C55,C67,C130 on MAIN	5
	F5359780	GRM39B103K50PT	CHIP CAPACITOR (1608 TYPE)	C1,C46,C134,C135,C187,C188 on MAIN	6
	F5359373	GRM39CH271J50PT	CHIP CAPACITOR (1608 TYPE)	C197 on MAIN	1
	F5359725	ECJ1VC1H151J 150P J	CHIP CAPACITOR	C32,C43,C161 on MAIN	3
#	F3629275	0.33UF/50V	CHEMICAL CAPACITOR	C189 on MAIN	1
	13629550KM	100/16V	CHEMICAL CAPACITOR	C17,C29,C41,C164,C165,C167,C169 on MAIN	7
	F3629680	47/16V	CHEMICAL CAPACITOR	C4,C18,C25,C26,C27,C36,C38,C39,C49,C51,C53,C58,C146,C153 on MAIN	14
#	F3639555	470/6.3	CHEMICAL CAPACITOR	C45,C160 on MAIN	2
	F535970601	10P	CERAMIC CAPACITOR	C3,C7,C23,C24,C34,C35,C48,C52,C54,C68,C172 on MAIN	11
	F5359707	15P	CERAMIC CAPACITOR	C125,C123 on MAIN	2
#	F5359801	ECJ1VF1E104Z 0.1Z	CERAMIC CAPACITOR	C9,C10,C11,C13,C16,C19,C20,C22,C31,C57,C61,C63,C66,C69,C70,C71,C72,C74,C75,C76,C77,C79,C80,C83,C84,C85,C86,C87,C88,C89,C90,C91,C93,C94,C95,C96,C97,C98,C99,C100,C101,C102,C103,C104,C105,C106,C107,C108,C109,C110,C111,C112,C113,C114,C115,C116,C117,C120,C121,C122,C124,C126,C127,C128,C132,C133,C136,C138,C139,C140,C143,C144,C145,C147,C150,C151,C154,C155,C163,C168,C185,C186,C190,C191,C198 on MAIN	85
	13639195	2200/35	CAPACITOR (ELECTROLYTIC)	C158 on MAIN	1
	F3629678TS	10/16V	CAPACITOR	C12,C14,C15,C28,C37,C40,C44,C50,C59,C60,C62,C64,C65,C81,C82,C92,C118,C119,C129,C131,C137,C141,C142 on MAIN	23
	F3639637	470UF/35V	CAPACITOR	C149,C162,C166 on MAIN	3
INDUCTOR,COIL,FILTER					
	F2449220	TSL1112SRA-471KR72	INDUCTOR	L17 on MAIN	1
	F5409102	N1608Z601T02	FERRITE-BEAD	L10,L11 on MAIN	2
	13529246	DSS310-91D223S-50ATL12-134	EMI FILTER	FL1,FL2 on MAIN	2
	12449386	SBT-0180W	EMI FILTER	L15 on MAIN	1
CRYSTAL,RESONATOR					
	00891801	MA-406 24.000MHZ TE24	CRYSTAL	X2 on MAIN	1
	02672401	SG-8002JC 67.7376MHZ PC	CRYSTAL	X1 on MAIN	1
ENCODER					
	01905467	EVE GC1 F20 24B	ROTARY ENCODER	EN1 on SW	1
CONNECTOR					
	F3439123	A2001WR2-3P	CONNECTOR 3P	CN5 on MAIN	1
	F3439121	A2541WR2-2A16NP	CONNECTOR 16P	CN1 on MAIN	1
#	F3439231	A2001WR2-12P	CONNECTOR 12P	CN2 on MAIN	1
#	F3439232	A2001WR2-13P	CONNECTOR 13P	CN4 on MAIN	1
	F3439179	A2001WR2-7P	CONNECTOR 7P	CN6 on MAIN	1

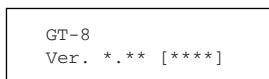
CONNECTOR					
	F3439164	A2001WR2-8P	CONNECTOR 8P	CN3 on MAIN	1
WIRING, CABLE					
#	F3467038	WIRING	12P P=2MM L=120MM	CN5 on SW	1
#	F3467039	WIRING	13P P=2MM L=65MM	CN8 on SW	1
	G3467178	WIRING	8P P=2MM L=65MM	CN7 on SW	1
	G3477156	RIBBON CABLE	7P P=2MM L=140MM	CN3,CN2 on SW	1
	G3467175	WIRING	3P P=2MM L=115MM	CN1 on SW	1
	G3477146	RIBBON CABLE	3P L=40X5X5 MM P=2MM	CN4,CN6 on SW	1
	G3467180	LCD WIRING	16P L=160MM		1
	G3467176	WIRING	7P P=2MM L=115MM	CN9 on SW,CN6 on MAIN	1
TRANSFORMER					
	02563501	PT-10 (2280-T008)	PULSE TRANS	TR1 on MAIN	1
SCREWS					
	H5039515	NUT M6	U BZC		1
#	H5019428	SCREW M3X6	PAN MACHINE W/SW+SMALL PW BZC		10
	H5019130	SCREW M3X6	PAN MACHINE W/SW+PW ZC		5
	H5029854	BOLT M3X12	HEX BUTTON FENI		6
	H5039510	NUT M9X12X2	FENI	for Phone Jack	8
#	H5030008	HEX BOLT M6X85	BZC		1
#	H5029843	SCREW 2.3X8	BINDING TAPTITE P ZC		1
#	H5019434	SCREW M2.6X8	BINDING TAPTITE P BZC		1
	H5029330	SCREW M3X8	BINDING TAPTITE P BZC		3
	H5029331	SCREW 3X8	BINDING S-TIGHT FEBZC		21
	H5019803	SCREW 3X8	BINDING P-TIGHT FECM		20
	H5039122	PLAIN WASHER	6X13X1 BZC		2
	40016523	INSULOK TIE 100M/M T-18R	((1000 PCS ORDERING PER))		2
	H5039520	M9 NUT		for VR	15
	H5039112	WASHER M9		for Phone Jack	8
PACKING					
#	G2607117	COLOR SLEEVE			1
#	G2617305	OUTER PACKING CASE			0.5
#	G2607116	PACKING CASE			1
	G2237620	PAD L			1
	G2237616	PAD R			1
MISCELLANEOUS					
#	△	F2569105	CR2032 220MAH/3V	LITHIUM BATTERY	1
		02567267	BATRY HOLDER	BCR20H4	1
		H2369431	LED SPACER	3-2	1
		G2147118	AC JACK HOLDER	on MAIN	1
#		G2147874	BOLT HOLDER		2
		F2367103	CORD HOOK		1
		G2357111	CUSHION R		1
		G2567119	DISPLAY COVER		1
		G2567118	ESCUTCION		1
		G2237112	GUARD		1
		G2237113	GUARD PLATE		1
		G2257203	JACK COVER	on MAIN	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
#		G1889117	PIN STAY		1
#		G2637107	RUBBER SW		1
		G2567121	RUBBER SW ESCUTCHEON		1
		H2369401	SPACER 3X6X10	LED1,LED2,LED3,LED4,LED5,LED6,LED7 on SW	7
		G2147806	STAY		1
		G2177103	SUPPORT SPRING		7
ACCESSORIES (Standard)					
	△	G2457142	AC ADAPTOR	BRC-240AT	1
	△	G245714101	AC ADAPTOR	BRC-230T	1
	△	G2457144	AC ADAPTOR	BRC-120T	1
	△	G2457143	AC ADAPTOR	BRC-100T	1
		00905234	EURO CONVERTER PLUG	ECP01-5A (PLUG for 230V)	1

ACCESSORIES (Standard)

#	G6047001	OWNER'S MANUAL	JAPANESE	1
#	G6047002	OWNER'S MANUAL	ENGLISH	1
#	G6027107	PRESET PATCH LIST	JAPANESE/ENGLISH	1
#	G6047005	READ ME FIRST	JAPANESE/ENGLISH	1
#	G6027108	USER PATCH LIST	JAPANESE/ENGLISH	1
#	40232389	WARRANTY CARD	FOR BOSS JAPAN ONLY	1

CHECKING THE VERSION NUMBER

1. Simultaneously hold down the [OUTPUT SELECT], [TUNER] and [MANUAL] buttons and turn on the power to the GT-8.
2. The version number and checksum appear in the lower row of the LCD display.



USERS DATA SAVE AND LOAD

Transmitting and Receiving MIDI Data

On the GT-8, you can use Exclusive messages to provide another GT-8 with identical settings, and save effect settings on a MIDI sequencer or other device. Transmitting data this way is called "Bulk Dump," while receiving such data is referred to as "Bulk Load."

Transmitting Data to an External MIDI Device (Bulk Dump)

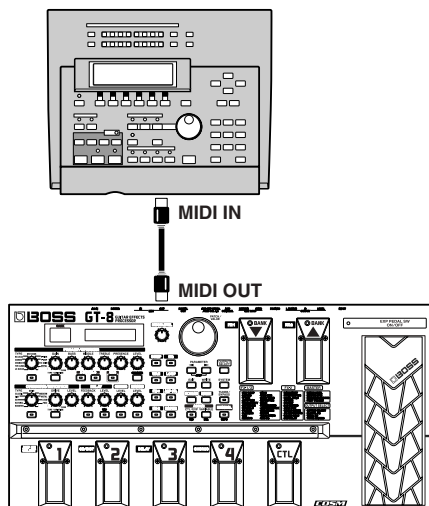
The following types of data can be transmitted. You can transmit data by specifying the range from the start to the end of transmission.

Displayed	Data Transmitted
System	System Parameters, Harmonist scales, Auto Riff phrases, and Preamp/Speaker, Overdrive/Distortion, and Wah Custom Edit parameter settings
#1-1-#35-4	Settings for Patch Number 1-1 through 35-4
Temp	Settings for the patch the is currently called up

Making the Connections

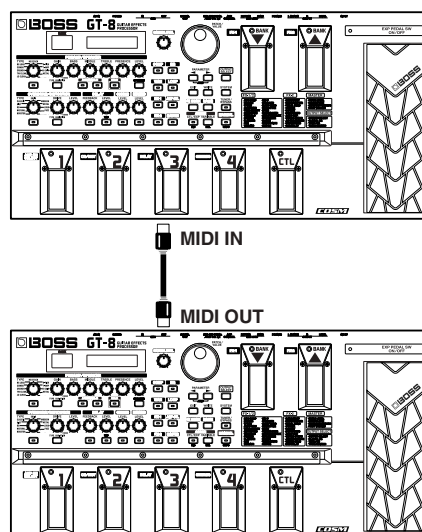
When Saving to a MIDI Sequencer

Connect as shown in the figure below, and put the sequencer in the state where it is ready to receive Exclusive messages.

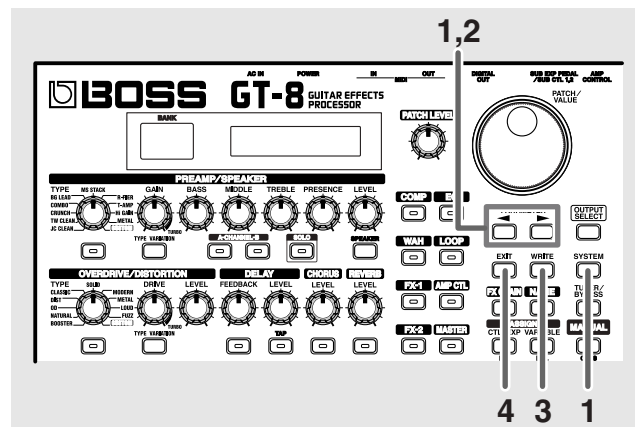


When Transmitting Data to Another GT-8

Connect as shown in the figure below, and match the Device ID for the transmitting and receiving devices.



Transmitting



1. Press [SYSTEM] twice, then press PARAMETER [◀][▶] so that "MIDI: Bulk Dump" is displayed.



2. Press PARAMETER [◀][▶] 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]. The data is transmitted.



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

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

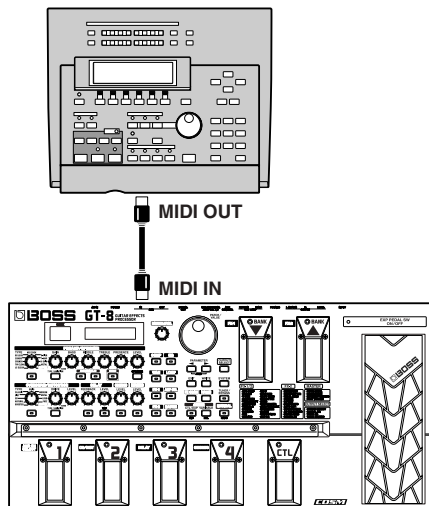
* For instructions on operating the sequencer, refer to the owner's manual for the sequencer you are using.

Receiving Data from an External MIDI Device (Bulk Load)

Making the Connections

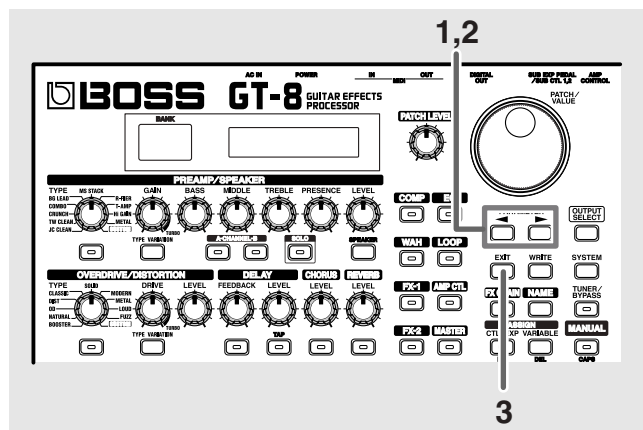
When Receiving Data Saved on a MIDI Sequencer

Connect as shown below. Set the GT-8's Device ID to the same number that was used when the data was transmitted to the MIDI sequencer.

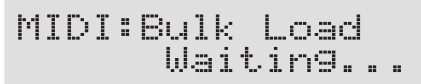


* For instructions on operating the sequencer, refer to the owner's manual for the sequencer you are using.

Receiving



1. Press [SYSTEM] twice, then press PARAMETER [◀||▶] so that "MIDI: Bulk Load" is displayed.



2. Transmit the data from the external MIDI device. The following appears in the display when the GT-8 receives the data.



The following appears in the display when the GT-8 finishes receiving the data.



At this stage, even more data can be received.

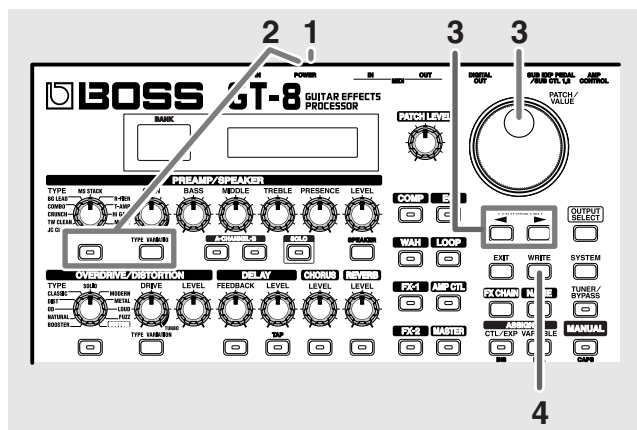
3. Press [EXIT] to quit Bulk Load. After you press [EXIT], "Checking..." appears in the display, indicating that the GT-8 is checking the received data. When the check is completed, the Play screen returns to the display.

FACTORY RESET INSTRUCTIONS

Restoring the Factory Settings (Factory Reset)

Restoring the GT-8 to the settings made at the factory is referred to as "Factory Reset."

Not only can you return all of the settings to the values in effect when the GT-8 was shipped from the factory, you can also specify the range of settings to be 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 range setting screen appears in the display.



The range of data you wish to factory reset

* To cancel Factory Reset, press [EXIT].

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

value	Explanation
System	System parameters, Harmonist scales, Auto Riff phrases, and Preamp/Speaker, Overdrive/Distortion, and Wah Custom Edit parameter settings
Quick	Content of the Settings Made with User Quick Setting
#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]. The specified range of data will be returned, and return to the Play screen.

SYSTEM SOFTWARE UPDATING INSTRUCTIONS

Required Equipment

- Sequencer (MC-80 or other)
- MIDI cable
- Update disk (#17041564)



Cautionary Note

Do not turn off the power to the GT-8 during writing of the system software. This will prevent the system from being written properly to the flash ROM, and as a result, the GT-8 will not operate.



Cautionary Note

Carry out Factory Reset after completing the update.

Updating the System with SMFs

The GT-8 system is provide in Standard MIDI File (SMF) format. The disk contains the following SMF data; transfer the files to the GT-8 in sequence, starting from GT8_01.mid.

GT-8 System Ver.** SMF Disk:

GT8_01.mid GT8_02.mid GT8_03.mid GT8_04.mid GT8_05.mid GT8_06.mid
GT8_07.mid GT8_08.mid GT8_09.mid GT8_10.mid GT8_11.mid GT8_12.mid
GT8_13.mid GT8_14.mid GT8_15.mid GT8_16.mid

Update the GT-8 system using the following procedure.

1. Connect the sequencer's MIDI OUT connector and the GT-8's MIDI IN connector with a MIDI cable.
2. Hold down the ASSIGN [CTL/EXP], [NAME], and [MANUAL] buttons and turn on the power to the GT-8.

```
FJ: Waiting SMF
    [GT8_01.mid]
```

appears in the LCD display, indicating the GT-8 is in standby mode.

3. Transmit the SMF data in GT8_01.mid from the sequencer to the GT-8. When MIDI signals are received by the GT-8, the write address and checksum appear in the LCD display.

```
GT8_01.mid  SUM
*****    ****
```

When reception of GT8_01.mid is completed,

```
Now Updating...
*****    ****
```

appears in the GT-8's LCD display. Subsequently, the following is displayed.

```
FJ: Waiting SMF
    [GT8_02.mid]
```

Transmit the SMF data in GT8_02.mid from the sequencer.

In the same manner, continue to play back the SMF data in the remaining files until the data in GT8_16.mid is loaded.

4. After the GT-8 has received all of the SMF data, a checksum (4-digit number) of the system software is run; confirm the checksum value.

```
All Completed.
    Sum=****
```

TEST MODE



If the GT-8 contains any user data, be sure to back up the data to a sequencer (MC-80 or other) before servicing (for instructions on holding user data, refer to "Saving Data" and "Loading Data").

Test Categories

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

Required Equipment

- Expression Pedal (Roland EV-5)
- MIDI cable
- Oscilloscope
- Audio instrument which has DIGITAL in and Analog out.
- Guitar amp (equipped with jacks for switching channels/channel-switching jack)
- Oscillator
- 2 monitor amps
- Noise meter
- Blank plug

Entering Test Mode

Simultaneously hold down the [DELAY] and [REVERB] buttons and turn on the power to the GT-8.

The version number and checksum appear in the lower row of the LCD display.

```
GT-8    Build***
Ver. *.* [****]
```

Press the PARAMETER [>] button to proceed to "1. DSP Check."

Quitting Test Mode

Power off the unit.

1. DSP Check

Press [WRITE]; the DSP is checked, and the results of the check are displayed. If an error has occurred, the type of error is indicated; if the DSP is operating properly, "OK" is displayed.

If operating properly

```
1.DSP Check
--- OK ! ---
```

If an error has occurred (NG: No Good)

```
1.DSP Check          1.DSP Check
PRAM:NG  ERAM:      PRAM:--  ERAM:NG
```

Press the [EXIT] button, then press the PARAMETER [>] button to proceed to "2. Display."

2. Display

Press [WRITE]; all of the LCD segments light up, and all LED indicators and seven-segment LEDs remain lit.

Press [EXIT] to proceed to "3. LCD Contrast."

3. LCD Contrast

```
3.LCD Contrast
Contrast=15
```

Rotate the [PATCH/VALUE dial] in the following procedure to confirm the corresponding changes in the LCD contrast.

- 1) Rotate the dial counterclockwise; the contrast decreases and the screen darkens. Rotate the dial until the contrast reaches 0.
- 2) Rotate the dial clockwise; the contrast increases and the screen brightens. Rotate the dial until the contrast reaches 15.

Press the [EXIT] button, then press the PARAMETER [>] button to proceed to "4. Switch."

4. Switch

Press the [WRITE] button; all of the LEDs light up, and the name of the button being checked appears in the lower row of the LCD.

```
4.Switch
PREAMP
```

Press the switch corresponding to the indicated button.

"Wrong Switch" appears in the display if the incorrect switch is pressed.

For buttons with LEDs, confirm the following.

- 1) The LED is lit before the button is pressed.
- 2) The LED is off after the button is pressed.

Press the switches in the following sequence.

[1] Check of the effect select buttons and edit buttons:

```
[PREAMP] -> [PRE VARIATION] -> [PRE Ch A] -> [PRE Ch B] -> [PRE SOLO] -> [PRE SPEAKER] -> [OD/DS] -> [OD/DS VARIATION] -> [DELAY] -> [DELAY TAP] -> [CHORUS] -> [REVERB] -> [FX-2] -> [FX-1] -> [WAH] -> [COMP] -> [EQ] -> [LOOP] -> [AMP CTL] -> [MASTER] -> [ASSIGN CTL/EXP] -> [FX CHAIN] -> [EXIT] -> [PARAMETER (<)] -> [PARAMETER (>)] -> [WRITE] -> [NAME] -> [ASSIGN VARIABLE] -> [MANUAL] -> [TUNER/BYPASS] -> [SYSTEM] -> [OUTPUT SELECT]
```

[2] Check of the pedal switches and expression switches:

```
[BANK DOWN] -> [BANK UP] -> [BANK UP(EXP)] -> [CTL PEDAL] -> [PEDAL 4] -> [PEDAL 3] -> [PEDAL 2] -> [PEDAL 1]
```

[3] Seven-Segment LEDs

Confirm that the segments in the seven-segment LEDs go off one at a time each time [WAH] is pressed.

All of the segments should be off after the [WAH] button is pressed 14 times.

Press the PARAMETER [>] button to proceed to "5. VR Check."

5. VR Check

Confirm that all of the VRs are turned down to the MIN position.

Press the [WRITE] button; the name of the VR being checked appears in the bottom row of the LCD. Rotate the indicated display.

```
5.VR Check
PRE TYPE
```

[1] Clicking VRs

[PRE TYPE] -> [OD/DS TYPE]

Rotate the knob from MIN to MAX and back to MIN, and confirm that the value indicated in the seven-segment LEDs matches the corresponds notch position.

[2] Non-clicking VRs

[PATCH LEVEL] -> [PRE LEVEL] -> [PRE PRESENCE] -> [PRE TREBLE] -> [PRE MIDDLE] -> [PRE BASS] -> [PRE GAIN] ->

[OD/DS DRIVE] -> [OD/DS LEVEL] -> [DELAY FEEDBACK] -> [DELAY LEVEL] -> [CHORUS LEVEL] -> [REVERB LEVEL]

Rotate the knob from MIN to MAX, and confirm that the segments in the seven-segment LEDs light in sequence from the bottom in correspondence with the change in knob position. After all have been checked, "OK" appears in the display.

Press the PARAMETER [>] button to proceed to "6. EXP PEDAL."

6. EXP PEDAL

Confirm the changes in the GT-8's EXP pedal as an expression pedal connected to the [SUB EXP PEDAL/SUB CTL 1,2] jack. Connect an EV-5 to the [SUB EXP PEDAL/SUB CTL 1,2] jack.

Press the [WRITE] button. The display changes to the following.

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

Press the GT-8 EXP pedal and confirm that content shown in the LCD changes as described below.

1) When the pedal is position approximately midway:

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

2) When the pedal is pressed fully forward:

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

3) When the pedal is brought back fully:

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

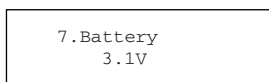
If the pedal is functioning properly, the display changes to the following; use the same procedures to check the EV-5.

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

Press the PARAMETER [>] button to proceed to "7. Battery."

7. Battery

Press the [WRITE] button; the voltage of the memory backup battery is displayed.



Error indications:

“*.V Low”: When the battery voltage is 2.0-2.6 V.

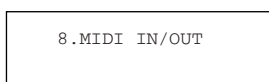
“No Battery!!”: When there is no battery, or when the battery voltage is below 2.0 V.



If the above occurs, supply the unit with a new lithium battery.

Press the [EXIT] button and then press the PARAMETER [>] button to proceed to “8. MIDI IN/OUT.”

8. MIDI IN/OUT



Connect the MIDI IN and MIDI out connectors with a MIDI cable.

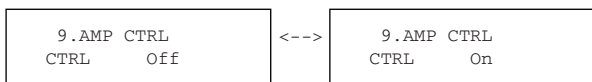
Press the [WRITE] button. If the two connectors are not connected by the MIDI cable, “No Connect” appears in the bottom row of the LCD display. If the two connectors are properly connected, “Verify OK!” is displayed.

Press the PARAMETER [>] button to proceed to “9. AMP CTRL.”

9. AMP CTRL

Connect the AMP CTRL jack and the channel switching jack on the guitar amp.

Press the [WRITE] button; AMP CTRL automatically switches on/off.



Confirm that the guitar amp channels are switched.

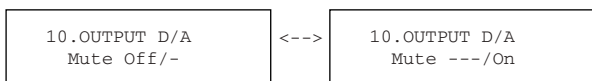
Press the [EXIT] button and then press the PARAMETER [>] button to proceed to “10. OUTPUT D/A.”

10. OUTPUT D/A

Set the oscilloscope as follows.

1.0 V/DIV, 0.5 ms/DIV

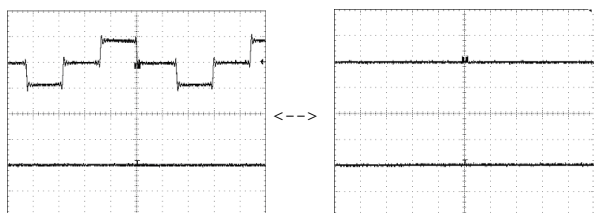
Press the [WRITE] button; a rectangular wave is output from the OUTPUT jack, and Mute is switched on/off.



Set the OUTPUT VR to MAX.

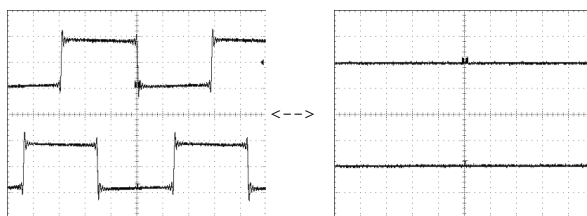
Connect only the OUTPUT L(MONO) jack to the oscilloscope (Channel 1), and confirm that the waveform alternately changes as shown below.

Do not connect anything to OUTPUT R.



Connect only the OUTPUT R jack to the oscilloscope (Channel 2), and confirm

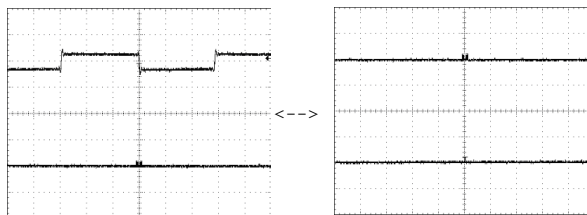
that the waveform alternately changes as shown below.



Connect the oscilloscope (Channel 1 and 2) to the PHONES jack, and use the same procedure to confirm the waveform output.

Connect the oscilloscope (Channel 1 and 2) to the digital to analog converter, and use the same procedure to confirm the waveform output.

Connect the oscilloscope (Channel 1) to the SEND jack, and confirm that the waveform alternately changes as shown below.

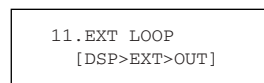


Press the [EXIT] button and then press the PARAMETER [>] button to proceed to “11. EXT LOOP.”

11. EXT LOOP

Connect the OUTPUT L/R jacks to the oscilloscope (Channel 1 and 2).

Press the [WRITE] button.



Confirm that the following type of waveform is output.



Insert the blank plug in the RETURN jack, and confirm that there is no waveform.

After confirming this, remove the blank plug from the RETURN jack.

Press the [EXIT] button and then press the PARAMETER [>] button to proceed to “12. INPUT A/D.”

12. INPUT A/D

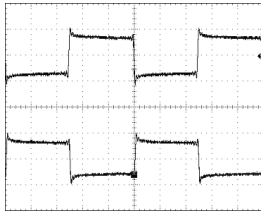
Input a rectangular wave, and observe the output waveform with the oscilloscope.

INPUT: Rectangular wave, 400 Hz, 40 mVp-p

Press the [WRITE] button.

```
12.INPUT A/D
[IN----->OUT]
```

Confirm that the following type of waveform is output.



Rotate the OUTPUT VR from MAX to MIN and to MAX again, and confirm that the amplitude of the waveform changes smoothly as the knob is turned. Press the [EXIT] button and then press the PARAMETER [>] button to proceed to "13. DSP INTO."

13. DSP INTO

Press the [WRITE] button; the DSP's internal oscillator-generated pitch interrupt signal is checked.

If an error occurs, the type of error is indicated in the display, and if operation is normal, "OK!" is displayed.

If OK:

```
13.DSP INTO
--- OK ! ---
```

If an error occurs:

```
13.DSP INTO
---ERROR!---
```

Press the PARAMETER [>] button to proceed to "14. Noise(IN->OUT)."

14. Noise(IN->OUT)

INPUT -> A/D -> DSP -> D/A -> OUTPUT
(Connect noise meter and observe)



Note: Check with both L(MONO) and R jacks.

When the OUTPUT jacks are used individually, the left and right channel signals are mixed internally, so be sure to insert a blank plug in the R channel output when measuring the L(MONO) channel; when checking the R channel, insert the blank plug in the L(MONO) channel jack.

Press the [WRITE] button.

```
14.Noise (IN>OUT)
[IN----->OUT]
```

OUTPUT Level:MAX

Confirm that the residual noise is no more than -86.0 dB (JIS-A).

Press the [EXIT] button and then press the PARAMETER [>] button to proceed to "15. Noise(LOOP)."

15. Noise(LOOP)

INPUT -> A/D -> DSP -> D/A -> SEND -> RETURN -> A/D -> DSP -> D/A -> OUTPUT

(Connect noise meter and observe)



Note: Check with both L(MONO) and R jacks.

When the OUTPUT jacks are used individually, the left and right channel signals are mixed internally, so be sure to insert a blank plug in the R channel output when measuring the L(MONO) channel; when checking the R channel, insert the blank plug in the L(MONO) channel jack.

Press the [WRITE] button.

```
15.Noise (LOOP)
[RETURN->OUT]
```

OUTPUT Level:MAX

Confirm that the residual noise is no more than -84.0 dB (JIS-A).

Press the [EXIT] button and then press the PARAMETER [>] button to proceed to "16. Calibrate EXP."

16. Calibrate EXP

Set the EXP pedal minimum and maximum values and the EXP pedal switch threshold.

Press the [WRITE] button.

```
16.Calibrate EXP Set Pedal to MIN <--> 16.Calibrate EXP
press [WRITE]
```

Bring the EXP pedal back completely, release, and press the [WRITE] button.

When set, "OK!" appears in the display, which subsequently shows the following.

If operating properly:

```
16.Calibrate EXP Set Pedal to MAX <--> 16.Calibrate EXP
press [WRITE]
```

If an error occurs:

```
16.Calibrate EXP
- Area Over ! -
```

Press the EXP pedal fully forward, release, and press the [WRITE] button.

When set, "OK!" appears in the display, which subsequently shows the following.

```
16.Calibrate EXP
Threshold: 6
```

Rotate the [PATCH/VALUE] dial to "6" and press the [WRITE] button.

When set, "OK!" appears in the display.

This completes Test mode.

Press the PARAMETER [>] button to proceed to "17. Factory Load."

Press the [EXIT] button to quit Test mode.

17. Factory Load

Press the [WRITE] button; the following is displayed.

```
17.Factory Load
  press [WRITE]
```

Press the [WRITE] button again.

```
17.Factory Load
  sure?
```

Press the [WRITE] button again to execute Factory Reset.

```
Now writing...
```

When Factory Reset is completed, the following is displayed.

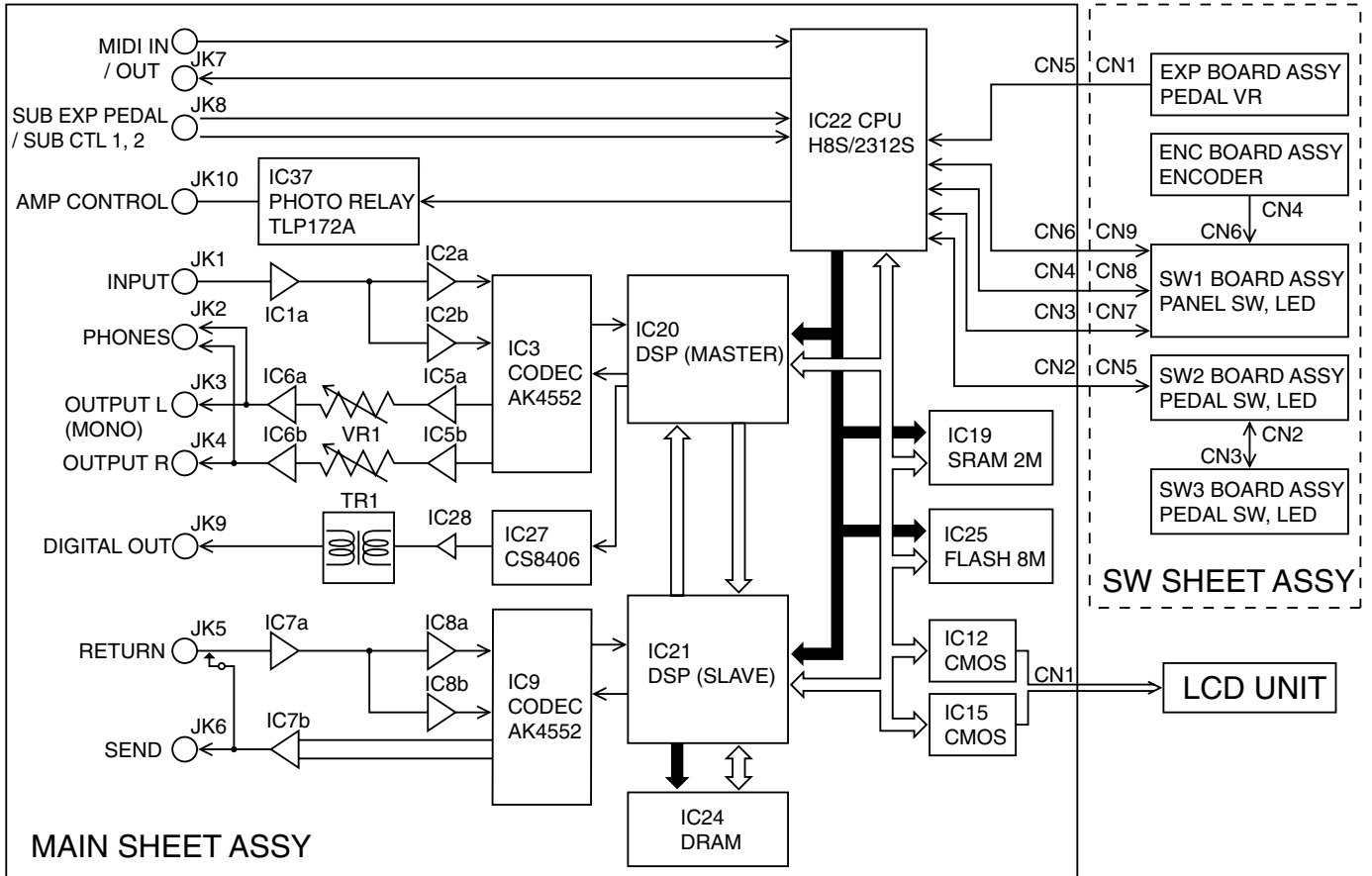
```
17.Factory Load
```

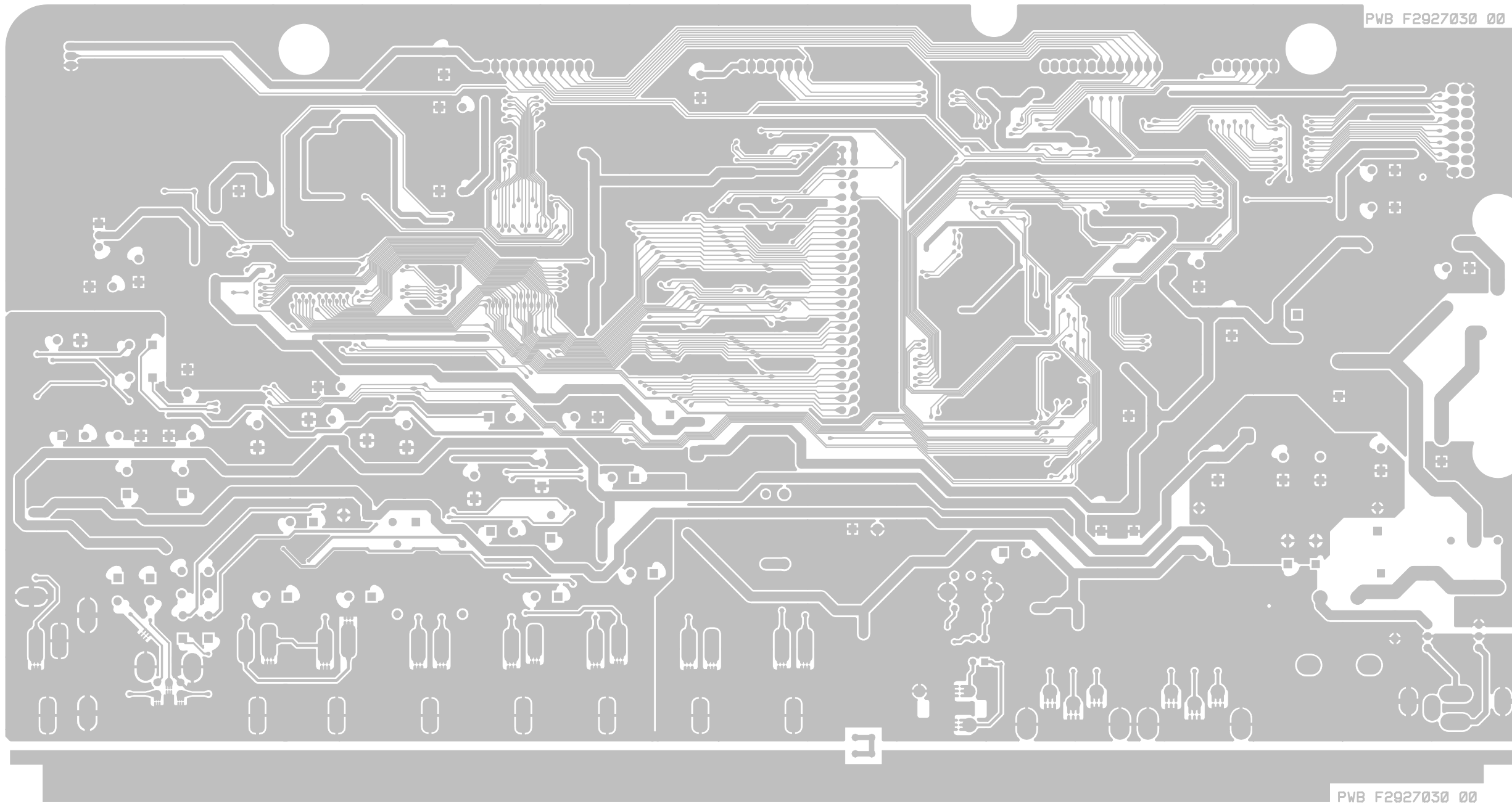
Press the [EXIT] button to return to the normal operating mode.

If no battery has been placed in the unit, "No Battery!" is indicated in the display.

Place a new lithium battery in the unit.

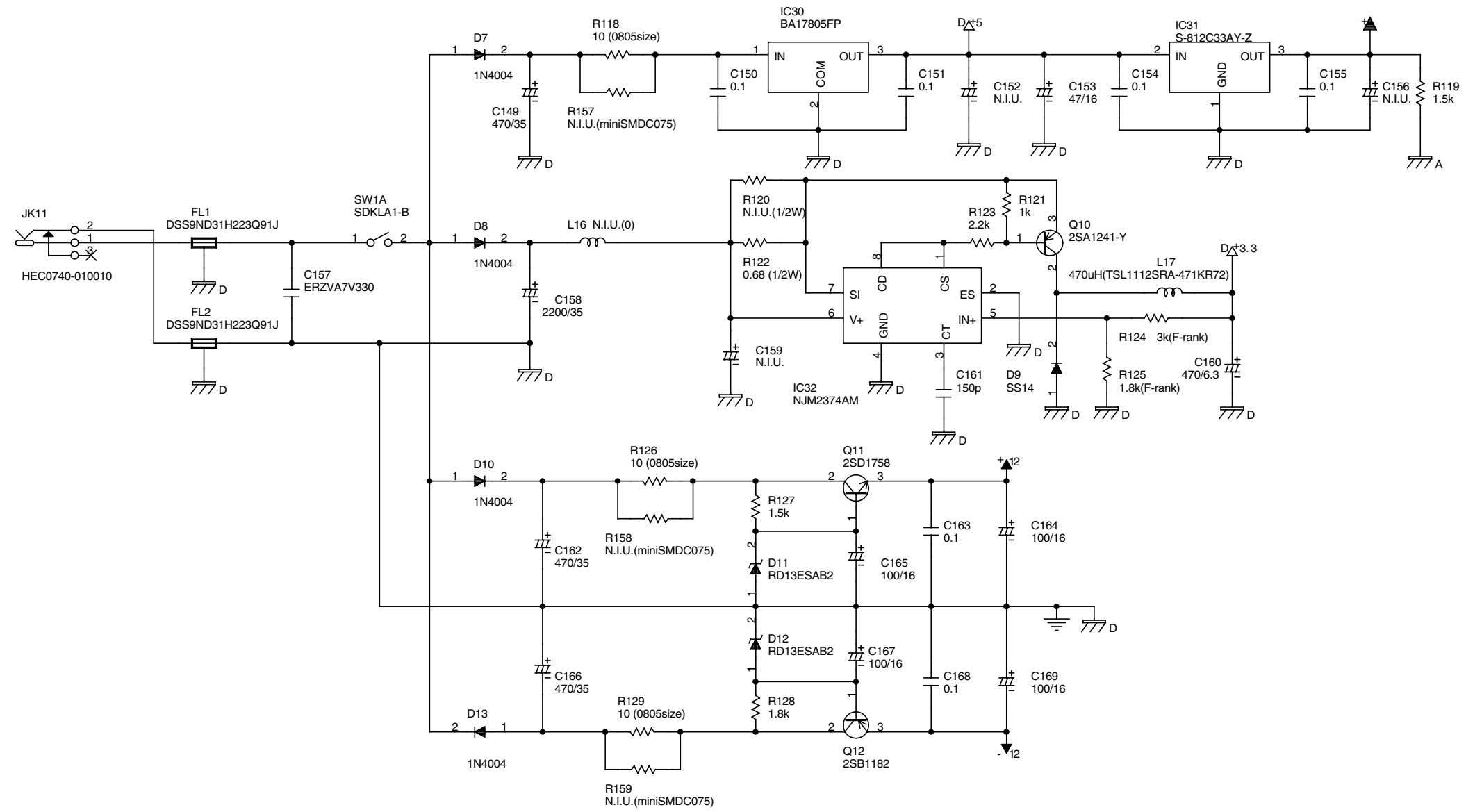
BLOCK DIAGRAM



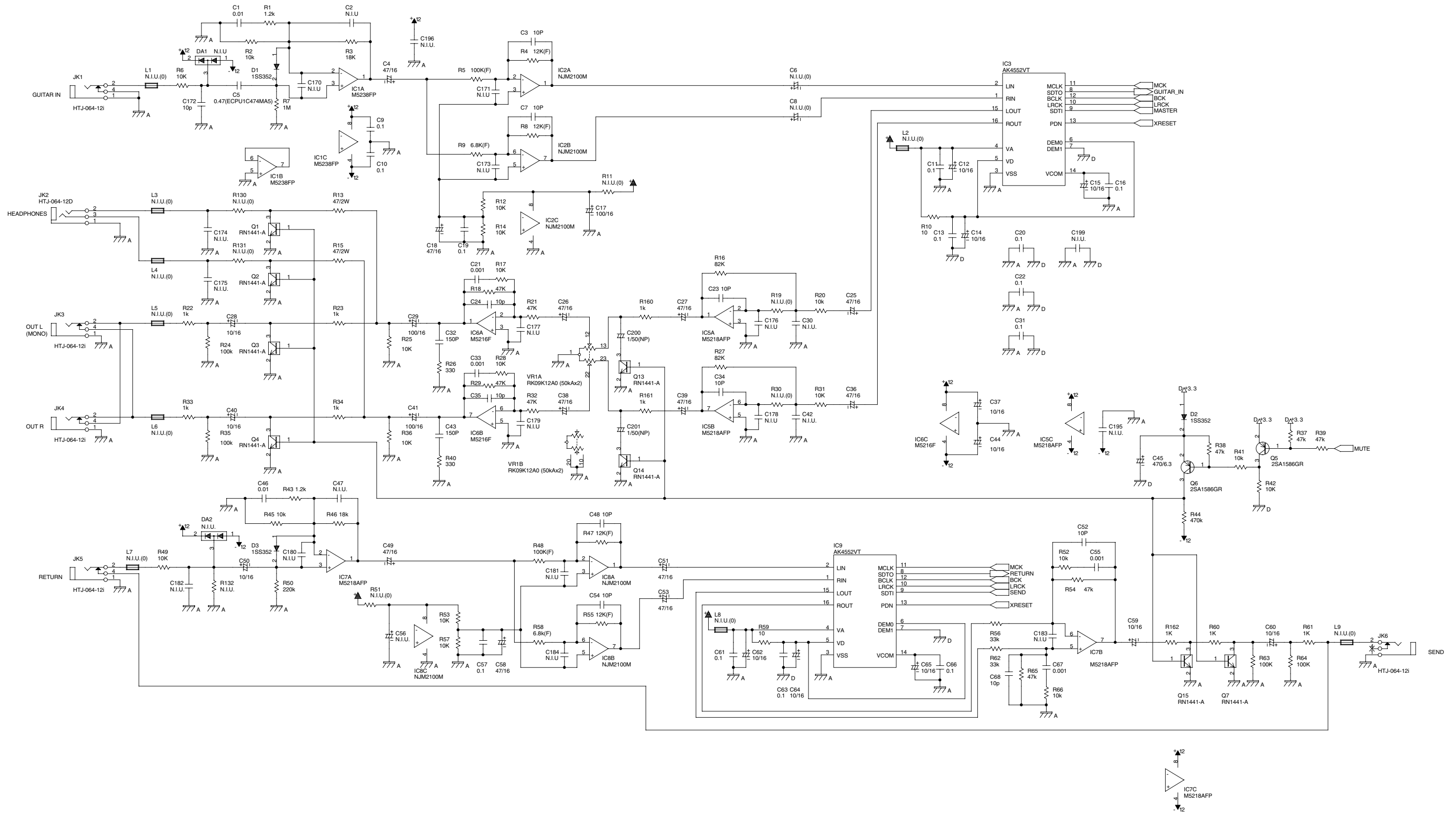


View from foil side

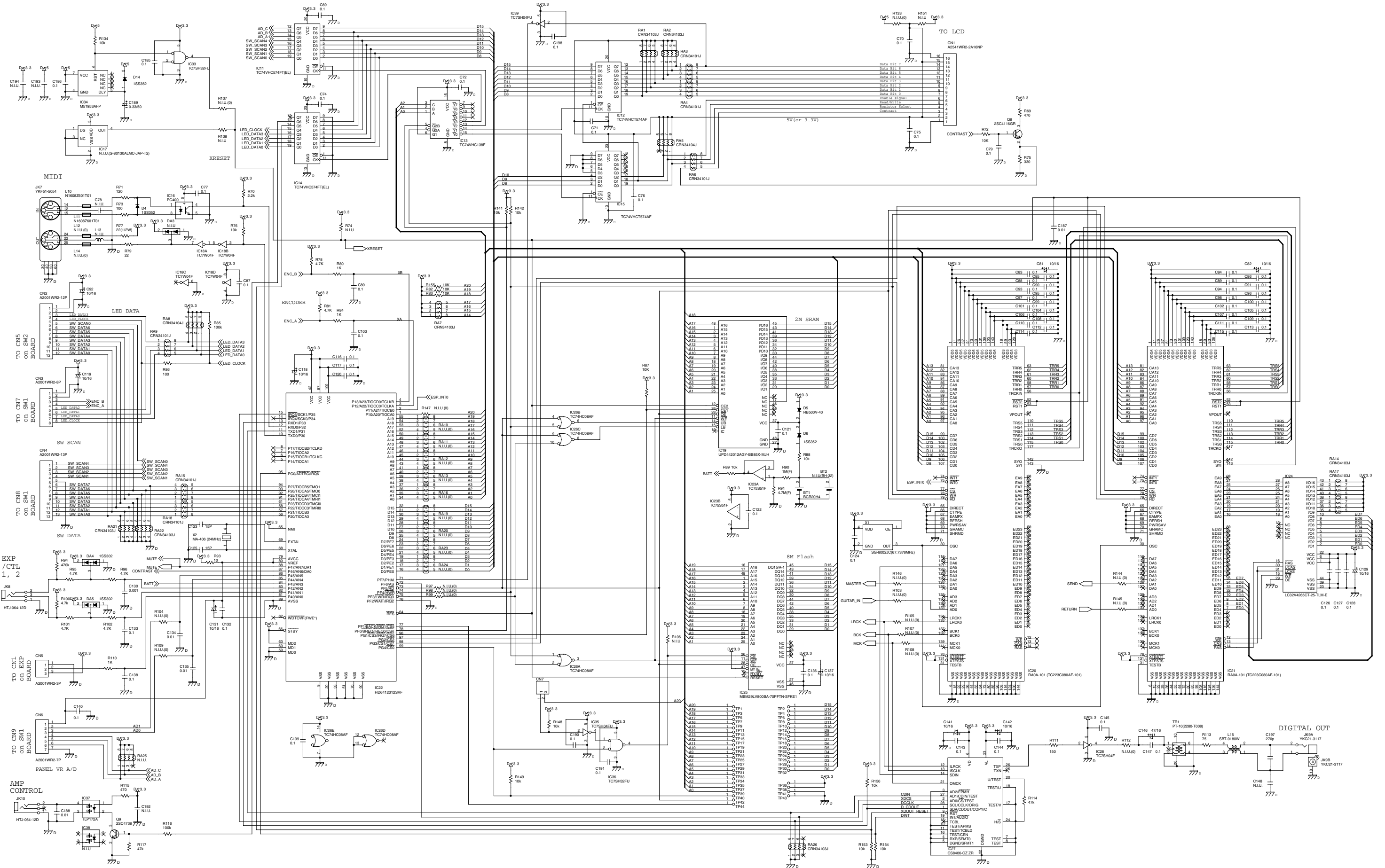
CIRCUIT DIAGRAM (MAIN SHEET 1/3) (Power)



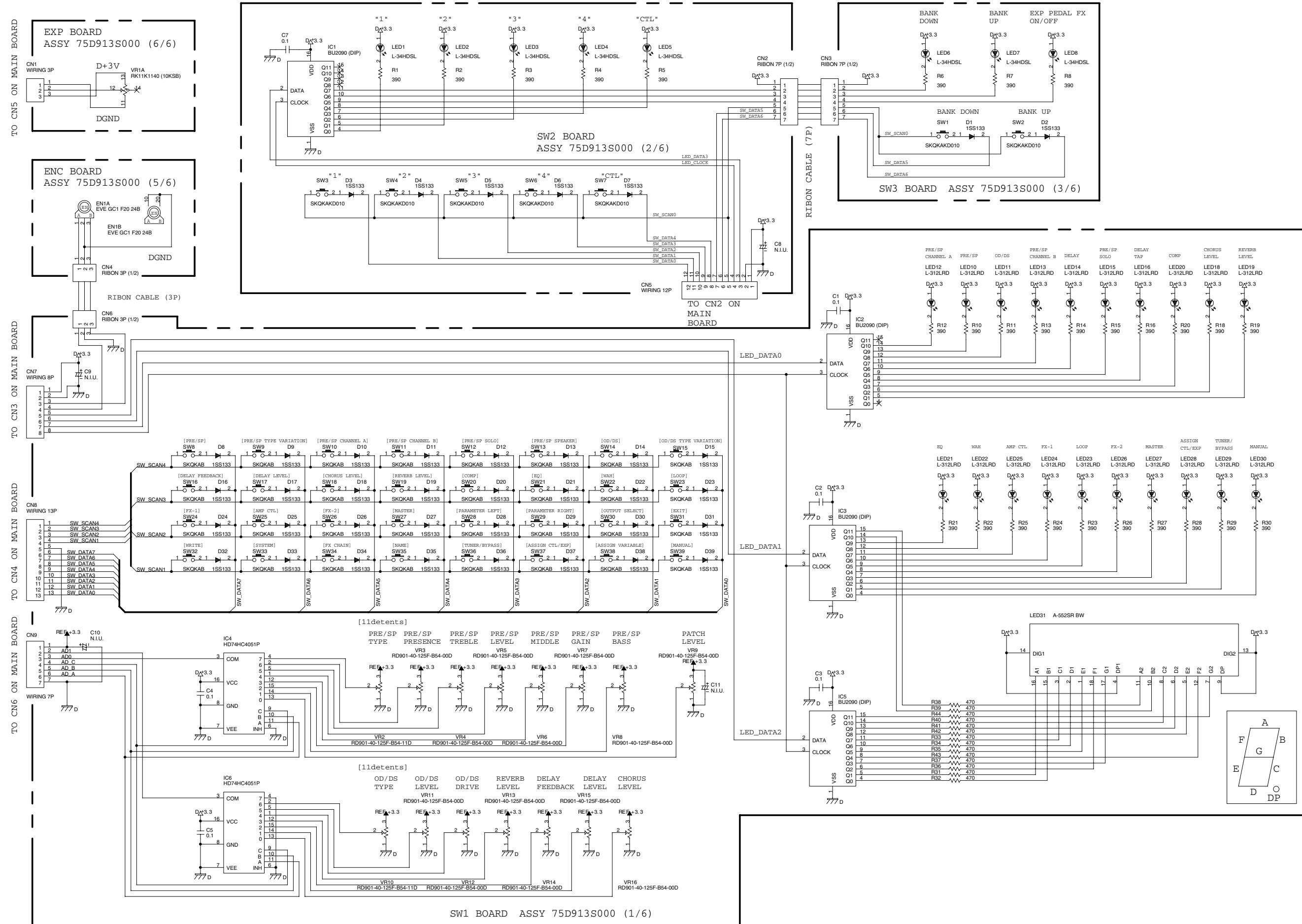
CIRCUIT DIAGRAM (MAIN SHEET 2/3) (Jack)



CIRCUIT DIAGRAM (MAIN SHEET 2/3) (Digital)



CIRCUIT DIAGRAM (SW SHEET)



ERROR MESSAGES

If you attempt an incorrect operation or if an operation could not be executed, the display will indicate an error message. Refer to this list and take the appropriate action.

Battery Low !

- The memory backup battery inside the GT-8 has run down. (This message will appear when the power is turned on.)
- Replace the battery as soon as possible.

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. 73) 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.

No Battery !!

- When memory back up battery is not installed in GT-8, the display will indicate "No Battery!!".
- Please install the new Lithium Battery.