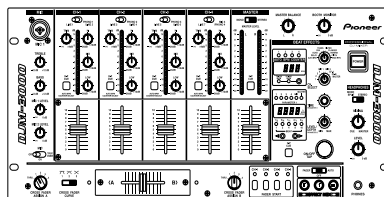


Service Manual



DJM-3000

ORDER NO.
RRV2587

DJ MIXER

DJM-3000

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Model	Type	Power Requirement	The voltage can be converted by the following method.
DJM-3000	KUCXCN	AC120V	
DJM-3000	WYXCN	AC220-240V	
DJM-3000	RLBXCN	AC110-120V/220-240V	With the voltage selector



For details, refer to "Important symbols for good services" on the next page.

SAFTY INFORMATION



This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.

Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.

Health & Safety Code Section 25249.6 – Proposition 65

NOTICE

(FOR CANADIAN MODEL ONLY)

Fuse symbols (fast operating fuse) and/or (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE

(POUR MODÈLE CANADIEN SEULEMENT)

Les symboles de fusible (fusible de type rapide) et/ou (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

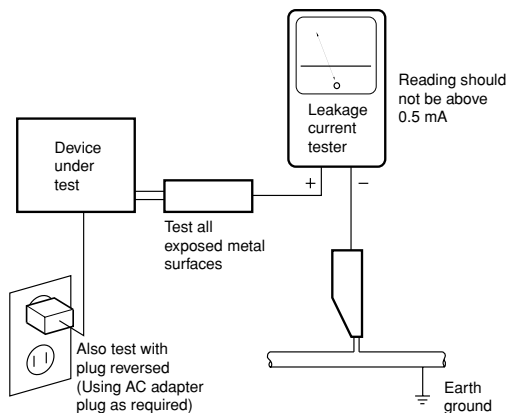
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60 Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5 mA.



AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

[Important symbols for good services]

In this manual, the symbols shown-below indicate that adjustments, settings or cleaning should be made securely. When you find the procedures bearing any of the symbols, be sure to fulfill them:

1. Product safety



You should conform to the regulations governing the product (safety, radio and noise, and other regulations), and should keep the safety during servicing by following the safety instructions described in this manual.

2. Adjustments



To keep the original performances of the product, optimum adjustments or specification confirmation is indispensable. In accordance with the procedures or instructions described in this manual, adjustments should be performed.

3. Cleaning



For optical pickups, tape-deck heads, lenses and mirrors used in projection monitors, and other parts requiring cleaning, proper cleaning should be performed to restore their performances.

4. Shipping mode and shipping screws



To protect the product from damages or failures that may be caused during transit, the shipping mode should be set or the shipping screws should be installed before shipping out in accordance with this manual, if necessary.

5. Lubricants, glues, and replacement parts



Appropriately applying grease or glue can maintain the product performances. But improper lubrication or applying glue may lead to failures or troubles in the product. By following the instructions in this manual, be sure to apply the prescribed grease or glue to proper portions by the appropriate amount. For replacement parts or tools, the prescribed ones should be used.

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1. SPECIFICATIONS

Audio Section

Input terminal (input level/impedance)

PHONO(1-4)		-54dBV (2mV)/47k Ω
MIC 1	.....	-54dBV (2mV)/3k Ω
MIC (2-3)	.....	-60dBV (1mV)/3k Ω
LINE(1-7)	.....	-14dBV (200mV)/22k Ω

Output terminal (output level/impedance)

MASTER OUT1 (RCA)	.....	0dBV (1V)/1k Ω
MASTER OUT2 (XLR)	.....	4dBm (1.23V)/600 Ω
REC OUT (RCA)	.....	-10dBV (1V)/1k Ω
BOOTH MONITOR	.....	0dBV (1V)/1k Ω
SEND	.....	-14dBV (1V)/1k Ω
PHONES	.....	0dBV (0.63V)/22 Ω
DIGITAL OUT 1(COAXIAL)	.....	0.5V/75 Ω
DIGITAL OUT 2(COAXIAL)	.....	0.5V/75 Ω

Frequency characteristics

LINE/MIC	.....	20Hz to 20kHz
PHONO(RIAA)	.....	20Hz to 20kHz

SN ratio

LINE	.....	85dB (with effects off)
PHONO		75dB
MIC		64dB

Total harmonic distortion rate

LINE/PHONO		Below 0.02%
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Cross talk(1kHz)		Over 70dB
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Channel equalizer(LINE/PHONO/MIC3)

HI		+12dB, -26dB (13kHz)
MID		+12dB, -26dB (1kHz)
LOW		+12dB, -26dB (70Hz)

Microphone equalizer(MIC1, 2)

TREBLE	.....	+12dB, -12dB (10kHz)
BASS	.....	+12dB, -12dB (100Hz)

Effector

DELAY and ECHO	.....	1 to 3500mSec
PAN, TRANS, FILTER and FLANGER	.....	10 to 16000mSec
REVERB	.....	1 to 100%
PITCH	.....	0 to $\pm$ 100%

Electrical Section, etc.

Power supply voltage

KUC model	.....	AC 120V, 60Hz
WY model	.....	AC 220- 240V 50/60Hz
RLB model	.....	AC 110-120V/220-240V 50/60Hz

Power Consumption

KUC model		41W
WY model		48W
RLB model		49W

Operating temperature		+5°C to +35°C
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Operating humidity		5% to 85%
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External dimensions		482 (W) x220 (D) x 107 (H) mm
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Weight (without package)		6.7kg
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Accessories Parts

Short-circuit pin plug		2
Operating instruction		1
Warranty		1



Note

Specifications and the design are subject to possible modifications without notice, due to improvements.

2. EXPLODED VIEWS AND PARTS LIST

NOTES: ● Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.

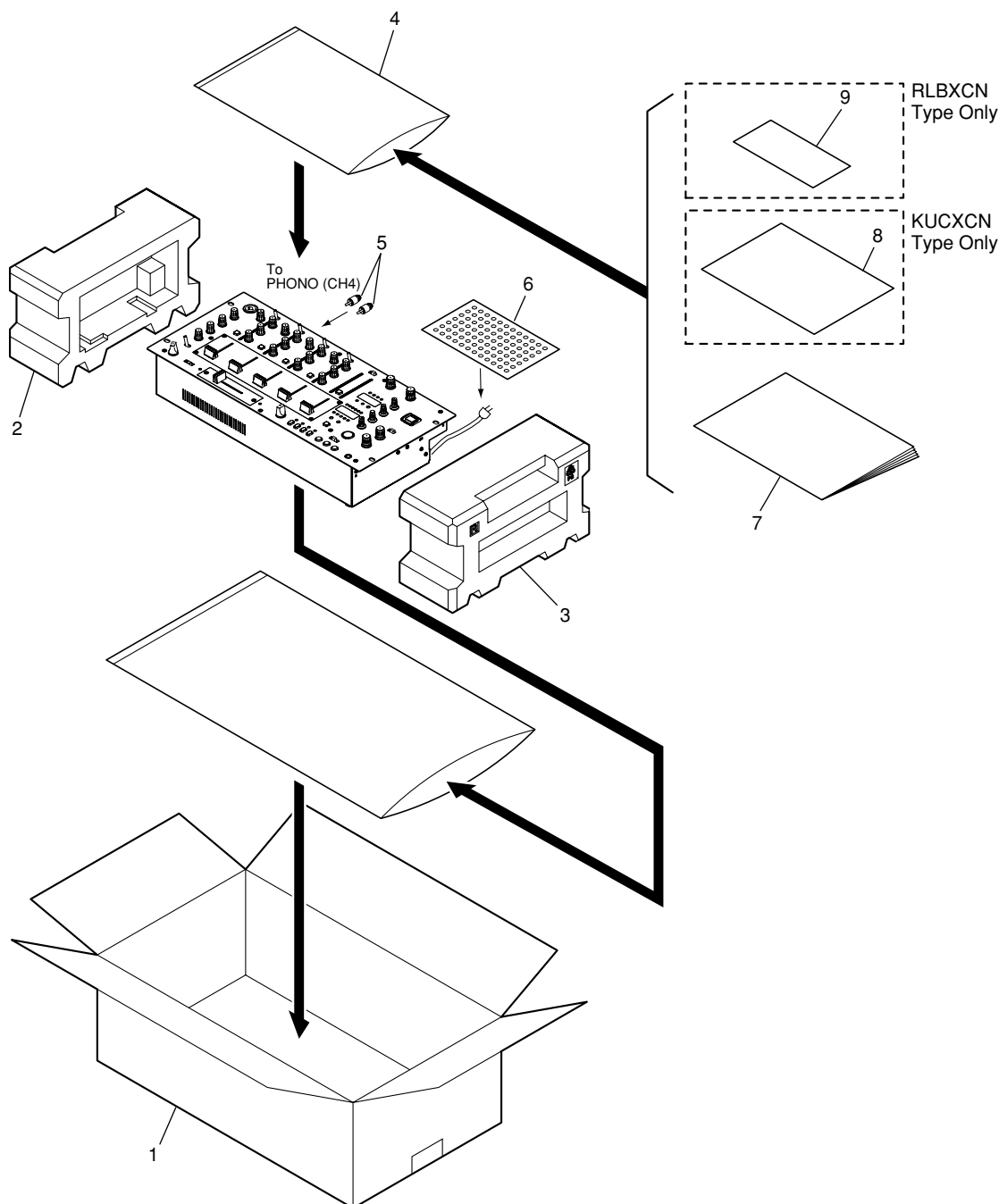
● The  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

● Screws adjacent to ▼ mark on product are used for disassembly.

● For the applying amount of lubricants or glue, follow the instructions in this manual.

(In the case of no amount instructions, apply as you think it appropriate.)

2.1 PACKING



PACKING parts List

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Packing Case	See Contrast table(2)	6	Air Cap Sheet	222402260
2	Packing L	222302090	7	Operating Instructions	See Contrast table(2)
3	Packing R	222302100	NSP 8	Warranty Card	See Contrast table(2)
4	Polyethylene Bag (340 x 230 x 0.05)	222402210	NSP 9	Caution Card 220V	See Contrast table(2)
5	Short Pin Plug	AKM7008			

(2) CONTRAST TABLE

DJM-3000/KUCXCN, RLBXCN and WYXCN type are constructed the same except for the following :

Mark	NO	Symbol and Description	DJM-3000/ KUCXCN	DJM-3000/ RLBXCN	DJM-3000/ WYXCN
	1	Packing Case	222302120	222302110	222302070
	7	Operating Instructions (English/ French)	DRB1314	Not used	Not used
	7	Operating Instructions (English/ Spanish/ Chinese)	Not used	DRB1316	Not used
	7	Operating Instructions (English/ French/ German/ Italian/ Dutch/ Spanish)	Not used	Not used	DRB1315
NSP	8	Warranty Card	ARY7043	Not used	Not used
NSP	9	Caution Card 220V	Not used	ARR7003	Not used

EXTERIOR(1/2) SECTION parts List

Mark No.	Description	Part No.	Mark No.	Description	Part No.	
1	LED Assy	226902720	NSP 36	Panel Stay	224100480	A
2	CHF1 Assy	226902860CH1	37	Detect Arm	DNK3750	
3	CHF2 Assy	226902860CH2	38	Lever SW Packing	DED1120	
4	CHF3 Assy	226902860CH3	39	Slide SW Packing B	DED1125	
5	HF4 Assy	226902860CH4	40	SW Packing A	DED1145	
6	MAF Assy	226902940	41	Lock Sheet	225402000	
7	VR Assy	226903690	42	Fader Bracket	225401690	
8		DSP Assy226902640	43	Sheet 120 x 30	DED1160	
9	HP Assy	226902760	44	Screw	IBZ30P060FMC	
10	MIC Assy	226902780	NSP 45	PCB Holder	PNW2174	
11	CFCURV Assy	226903700	46	Slider Panel	224402210	
12	EFFECT Assy	226902740	47	Slider Fitting Board	DNF1518	B
13	CF Assy	226902960	48	Control Panel	224100460	
14	Rubber Key CUE	224301330	49	Rotary VR Knob B	DAA1136	
15	Rubber Key TAP	224301340	50	Fader Knob	DAC1846	
16	Rubber Key LONG	224301360	51	Power Knob Guide	DNK3207	
17	PCB Sheet VR Assy	225300500	52	Rotary Knob	224301310	
18	Plastic Rivet	DEC1405	53	Effect SW Knob	224301510	
19	FFC Cable 28P	226404733	54	Sub Panel	224301280	
20	FFC Cable 21P	226404735	55	Rotary SW Knob	224301350	
21	FFC Cable 35P	226404742	56	Cross Fader Knob	224402230	
22	FFC Cable 31P	226404744	57	VR Knob GR	224402260	
23	Connector Assy	DKP3336	58	VR Knob GY	224402270	C
24	Blind Sheet TAP	225401850	59	VR Knob GG	224402280	
25	Blind Sheet CUE	225401900	60	VR Knob BK	224301300	
26	Rubber Holder	225401890	61	Fader Packing B	DED1100	
27	Brind Sheet	225402010	62	Fader Packing	225300460	
28	Nut M9	DBN1004	63	Display Panel A	DAH2097	
29	Screw	AMZ26P040FMC	64	Display Panel B	DAH2096	
30	Screw	VBA1039	65	Screw	AMZ30P040FMC	
31	Screw	DBA1141	66	Screw	CBZ30P080FZK	
NSP 32	PCB Holder	PNW1861	67	Select Knob	224301320	
33	Screw	BBZ30P060FMC	68	Nut	NKX2FUC	
34	Shield Plate	225401840	69	Rubber Fwt	234404450	D
35	Long Packing	225401730				

2.3 EXTERIOR(2/2) SECTION

A

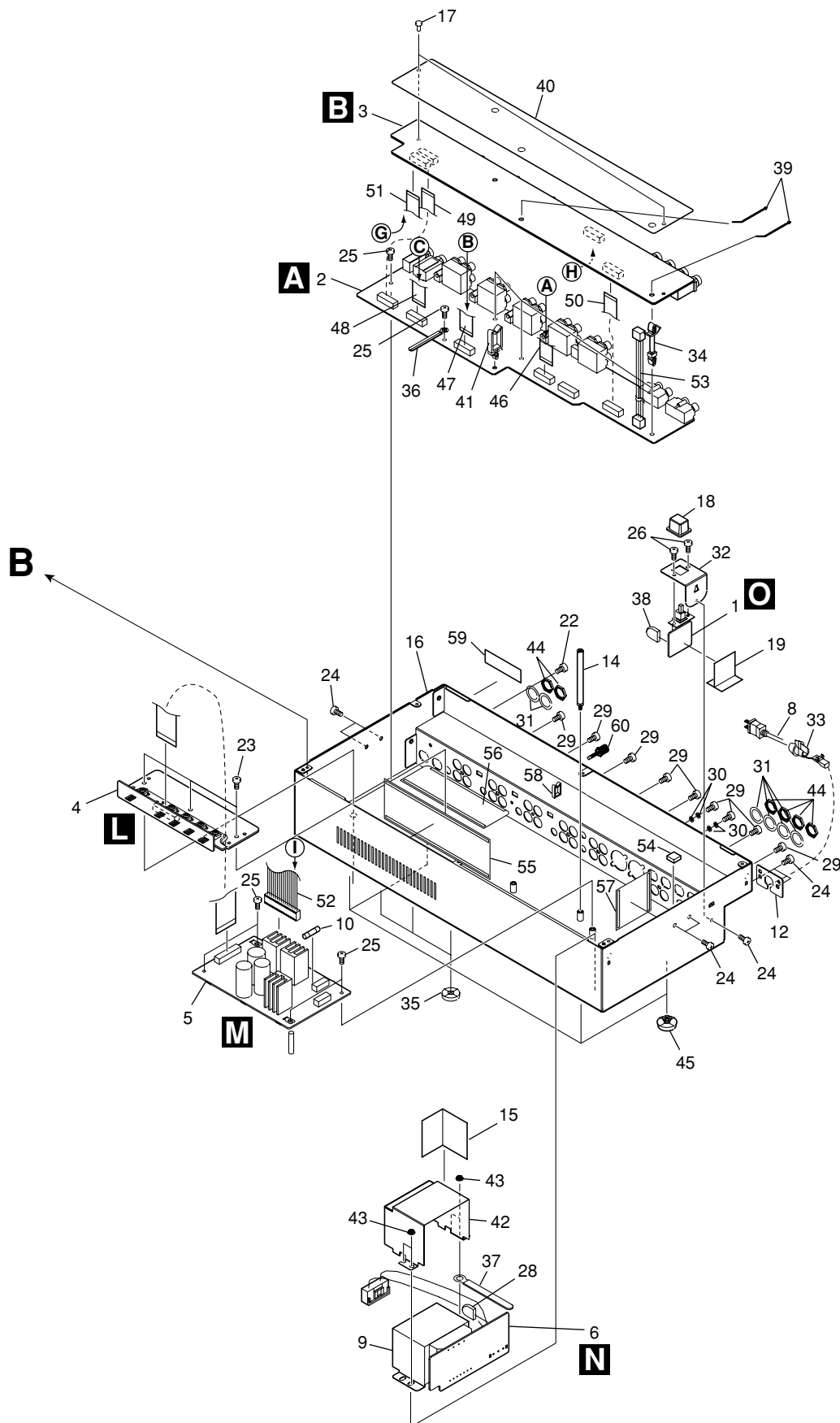
B

C

D

E

F



EXTERIOR(2/2) SECTION parts List

Mark No.	Description	Part No.	Mark No.	Description	Part No.	
1	PSW Assy	226902820	32	SW Plate	225401630	
2	TERMA Assy	226902660	33	Cord Stopper	See Contrast table (2)	A
3	TERMB Assy	226902680	NSP 34	PCB Support	REC1248	
4	REG Assy	226902840	35	Screw Guard	224402350	
5	POWER Assy	See Contrast table (2)				
6	TRANS Assy	See Contrast table (2)	36	Clamper	RNH-184	
7	.....		37	Wire Clamper	RNH1005	
⚠ 8	Power Cord	See Contrast table (2)	38	Capacitor Cover 12.5	See Contrast table (2)	
⚠ 9	Power Transformer	See Contrast table (2)	39	Binder	ZCA-SKB90BK	
⚠ 10	Fuse (1A)	See Contrast table (2)	40	PCB Sheet Rear	225300470	
11	.....		NSP 41	Wire Clip	DEC1410	
12	Power Cord Fitting Board	DNF1640	42	Trans. Shield	225300490	
13	.....		43	Nut M4	225401910	
14	Stand	225401830	44	Nut	NKX2FUC	B
15	Insulation Sheet L	225401990	45	Foot Assy	REC-434	
NSP 16	Chassis	224301490	46	FFC Cable 12P	226404730	
17	Nyron Rivet 3 x 4.5	RBM-003	47	FFC Cable 19P	226404731	
18	Power Knob	DAC1847	48	FFC Cable 24P	226404732	
19	SW Insulation Sheet	225402040	49	FFC Cable 21P	226404740	
20	.....		50	FFC Cable 15P	226404741	
21	Sheet	RHX1006	51	FFC Cable 20P	226404745	
22	Screw	PMB30P060FZK	52	Connector Assy	DKP3570	
23	Screw	BBZ30P060FMC	53	Connector Assy -DIG	226404650	
24	Screw	BBZ30P060FZK	54	Rubber Spacer	225401940	
25	Screw	BMZ30P060FMC	55	Net A	225401950	C
26	Screw	AMZ30P040FMC	56	Net B	225401960	
27	Screw	AMZ26P040FMC	57	Insulation Sheet	225401970	
28	Capacitor Cover 16	See Contrast table (2)	NSP 58	Mini Clamp	VEC1312	
29	Screw	BPZ30P080FZK	NSP 59	Serial Label	See Contrast table (2)	
30	Washer	DEC2484	60	Earth Terminal	AKE-03	
31	Washer	DBE1010				

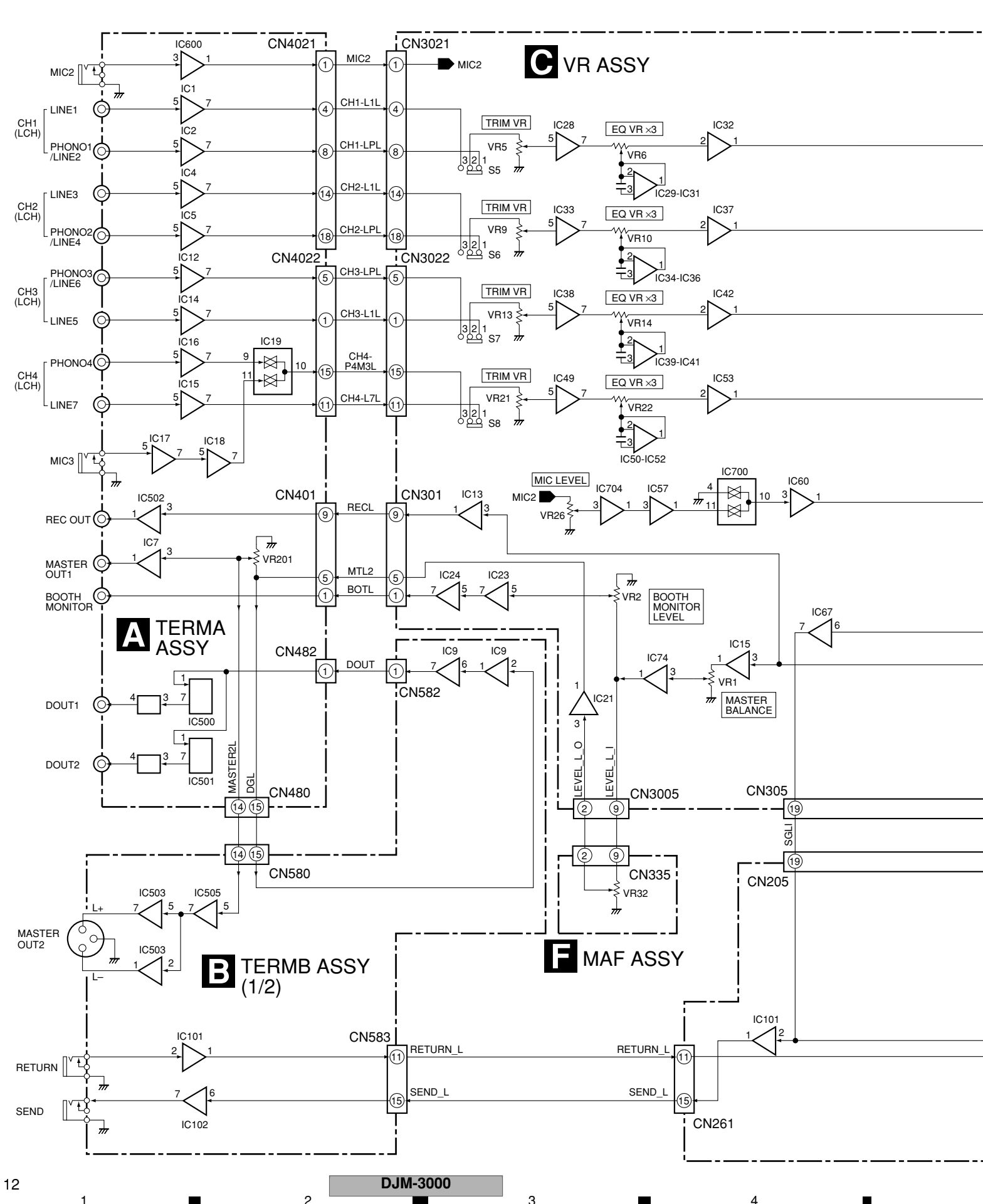
(2) CONTRAST TABLE

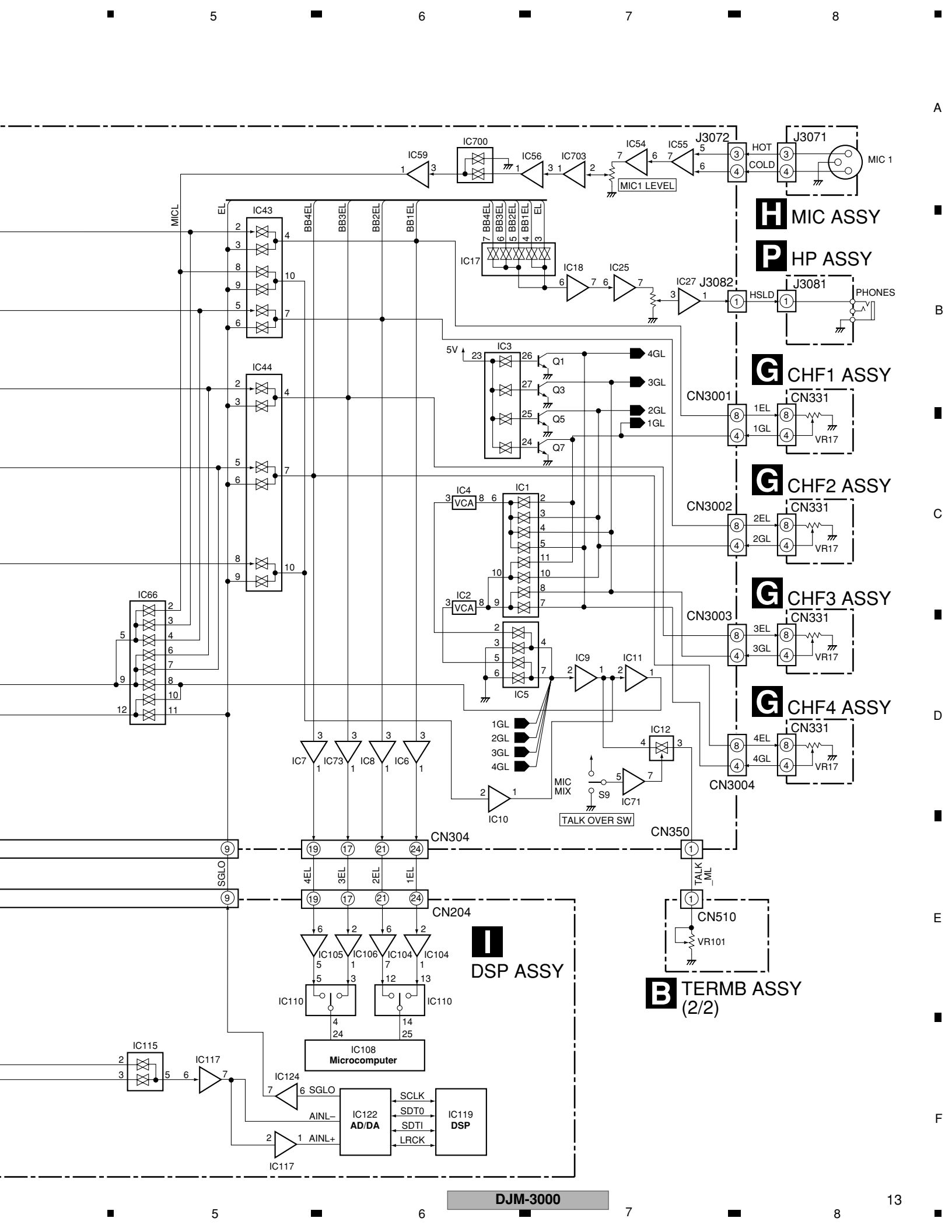
DJM-3000/KUCXCN, RLBXCN and WYXCN type are constructed the same except for the following :

Mark	NO	Symbol and Description	DJM-3000/ KUCXCN	DJM-3000/ RLBXCN	DJM-3000/ WYXCN
	5	POWER Assy	226903790	226902700	226902700
	6	TRANS Assy	226902800	226902801	226902800
⚠	8	Power Cord	ADG7024	VDG1061	VDG1061
⚠	9	Power Transformer	927001510	927001500	927001490
⚠	10	Fuse (1A)	REK1075	Not used	Not used
⚠	10	Fuse (T500MA)	Not used	AEK1051	AEK1051
NSP	16	Chassis	224301480	224301470	224301460
	33	Cord Stopper	CM-22C	CM-22B	CM-22B
	28	Capacitor Cover 16	Not used	VEC1912	VEC1912
NSP	59	Serial Label	DRW1871	RRW-168	RRW-168
	38	Capacitor Cover 12.5	Not used	225500120	225500120

3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

3.1 BLOCK DIAGRAM





4

A



C

G
CHF2 ASSY
(226902860CH2)

G
CHF3 ASSY
(226902860CH3)

G
CHF4 ASSY
(226902860CH4)

F
MAF ASSY
(226902940)

D
CF ASSY
(226902960)

C (C 1/8 - C 8/8)
VR ASSY
(226903690)

B (B 1/4- B 4/4)
TERMB ASSY
(226902680)

J
EFFECT ASSY
(226902740)

E
CFCURV ASSY
(226903700)

H MIC ASSY
(226902780)

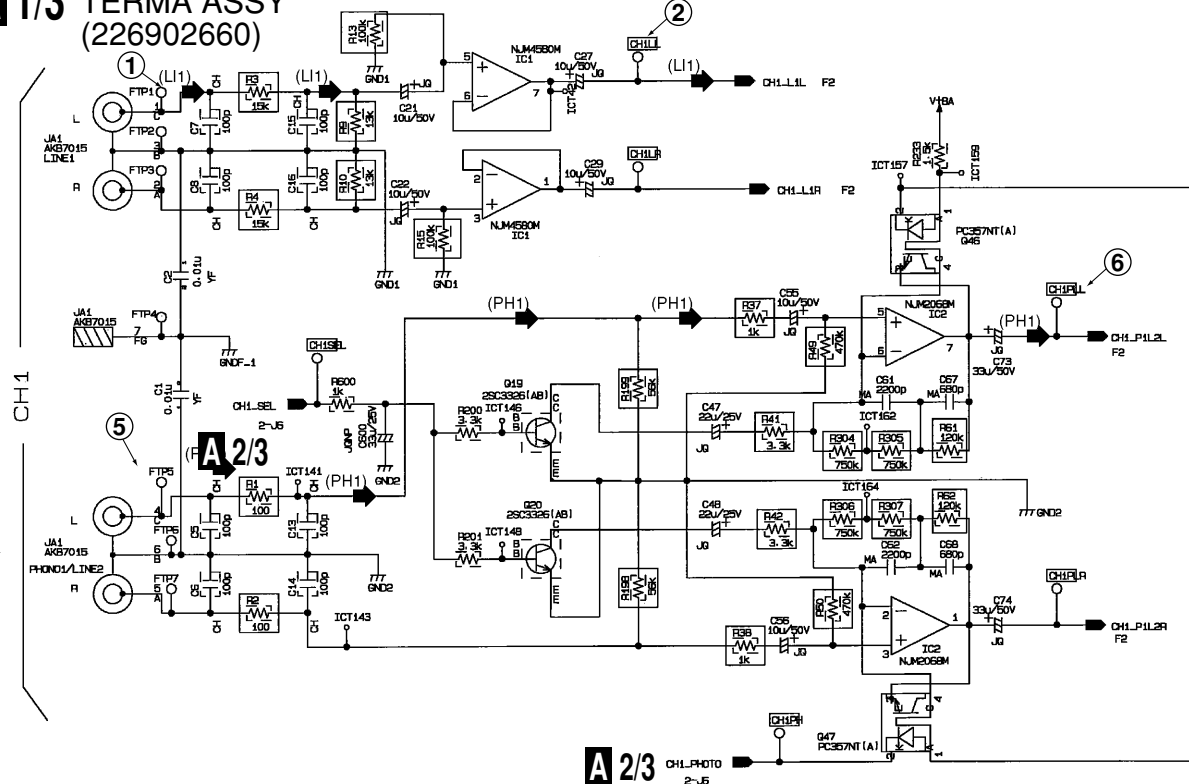
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A



3.3 TERMA(1/3) ASSY

A 1/3 TERMA ASSY (226902660)



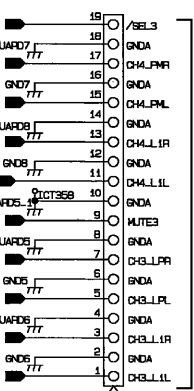
A 2/3

A 2/3

A 2/3

C 5/8
CN301

CN-C



CN-B

C 5/8 CN3022

A 1/3

A 1/3

A 2/3

C 2-17

C 2-18

C 2-19

C 2-20

C 2-21

C 2-22

C 2-23

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DJM-3000

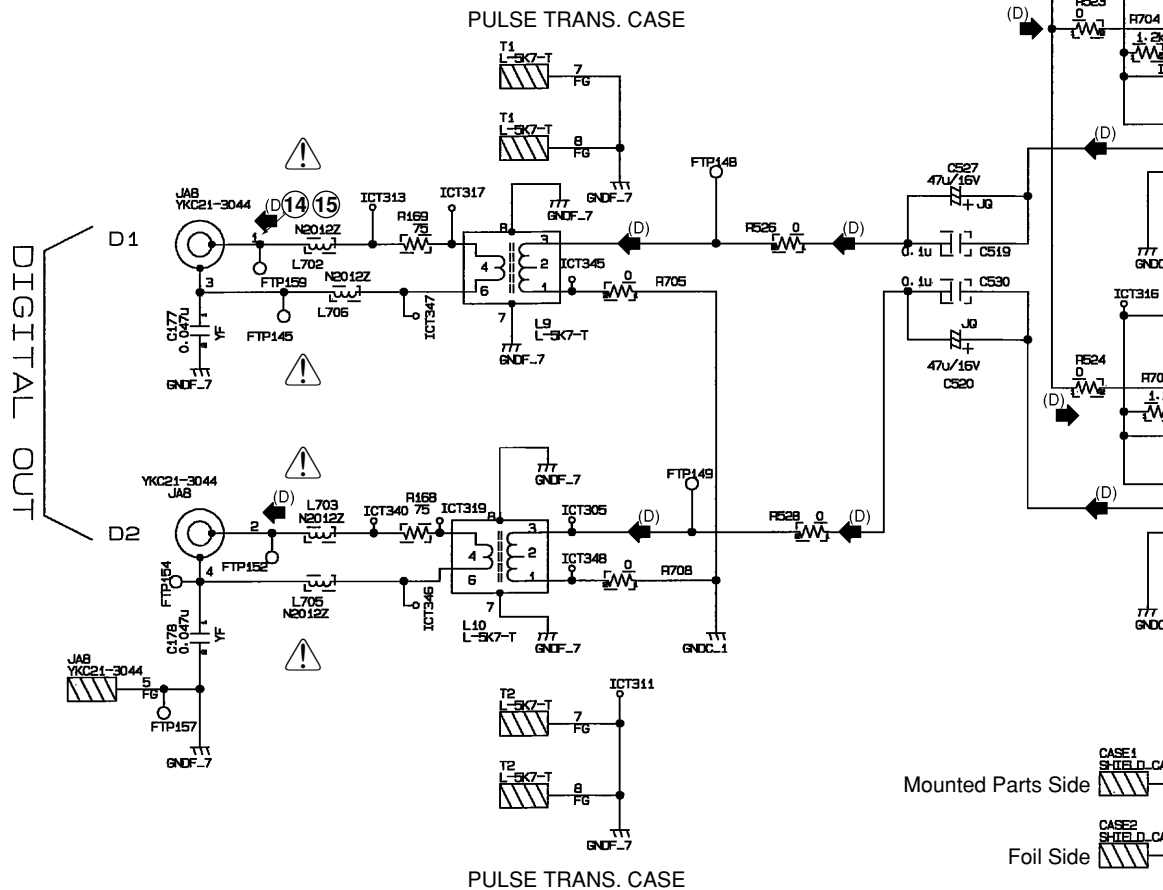
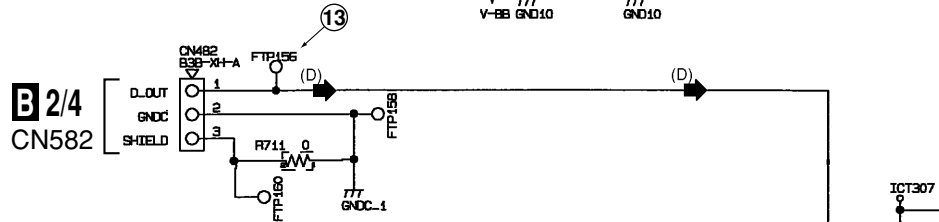
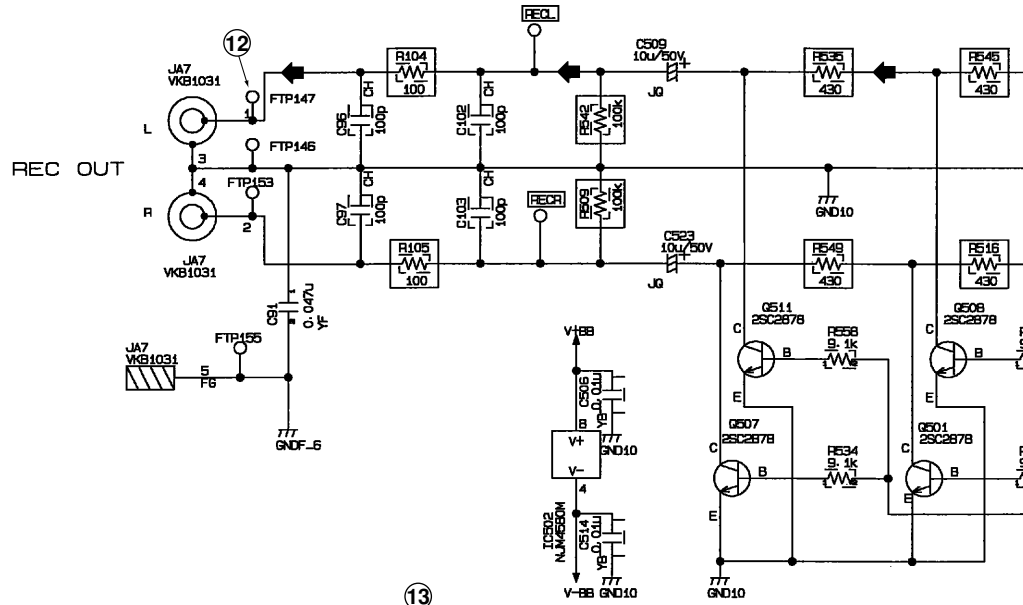
A

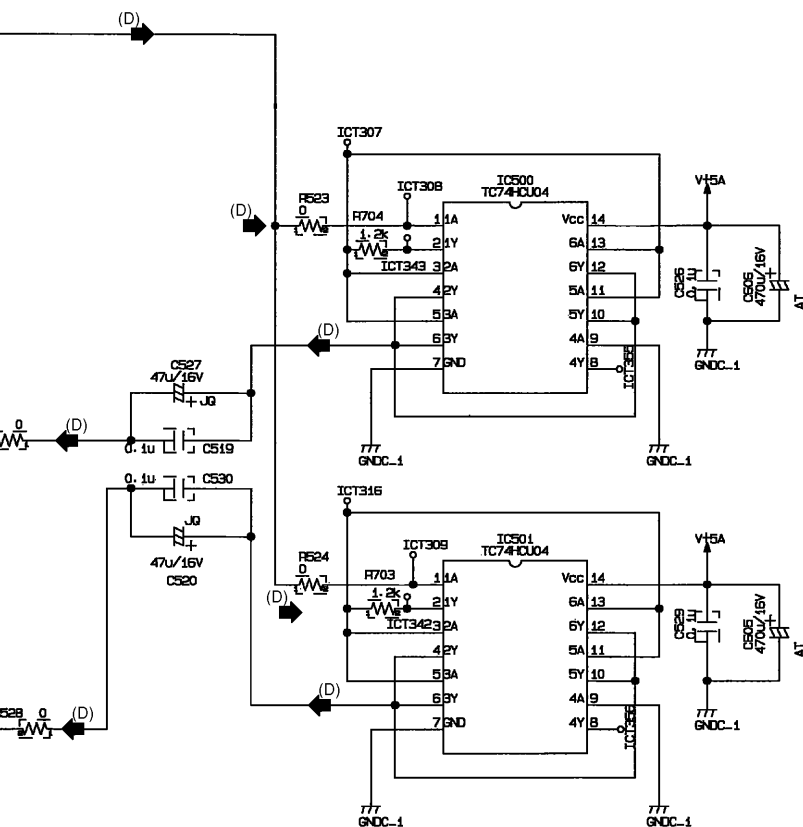
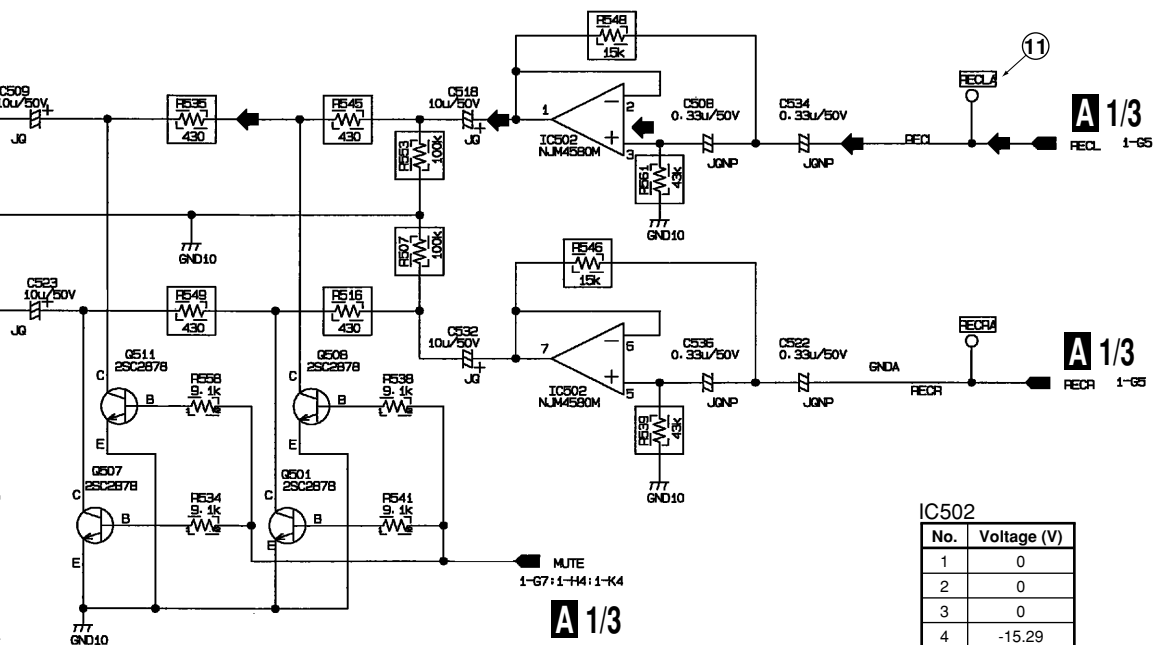




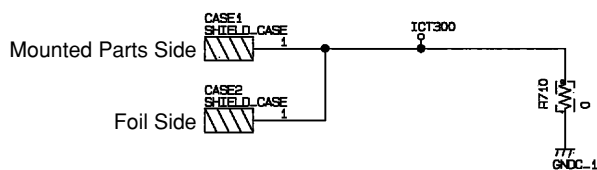
3.5 TERMA(3/3) ASSY

A 3/3 TERMA ASSY (226902660)





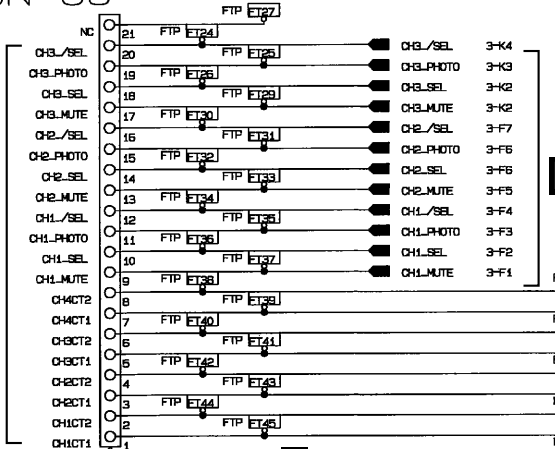
➡ : AUDIO SIGNAL ROUTE
 (D) ➡ : AUDIO SIGNAL ROUTE (DOUT)



3.6 TERMB(1/4) ASSY

B 1/4 TERMB ASSY
(226902680)

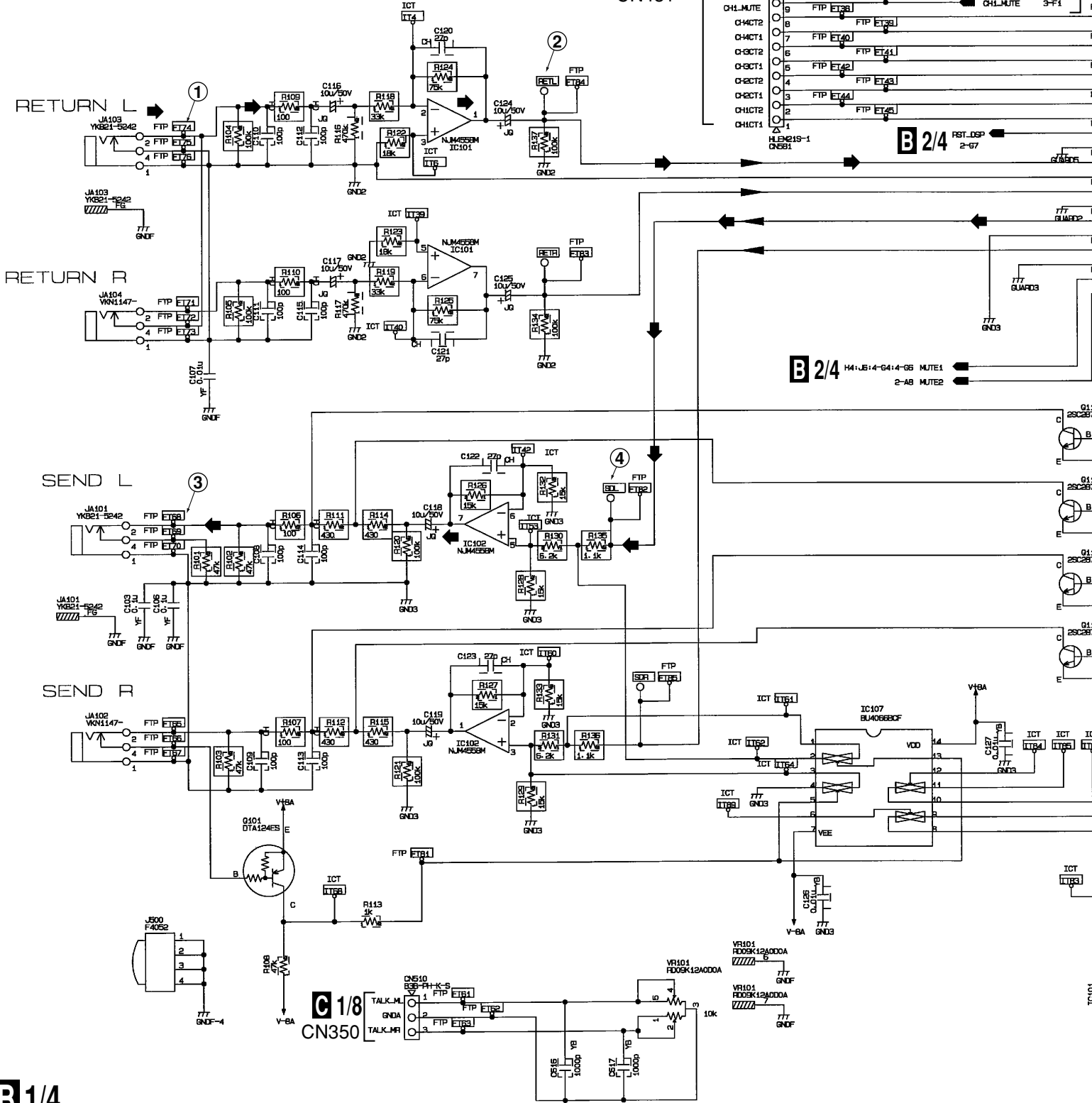
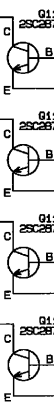
CN-GG



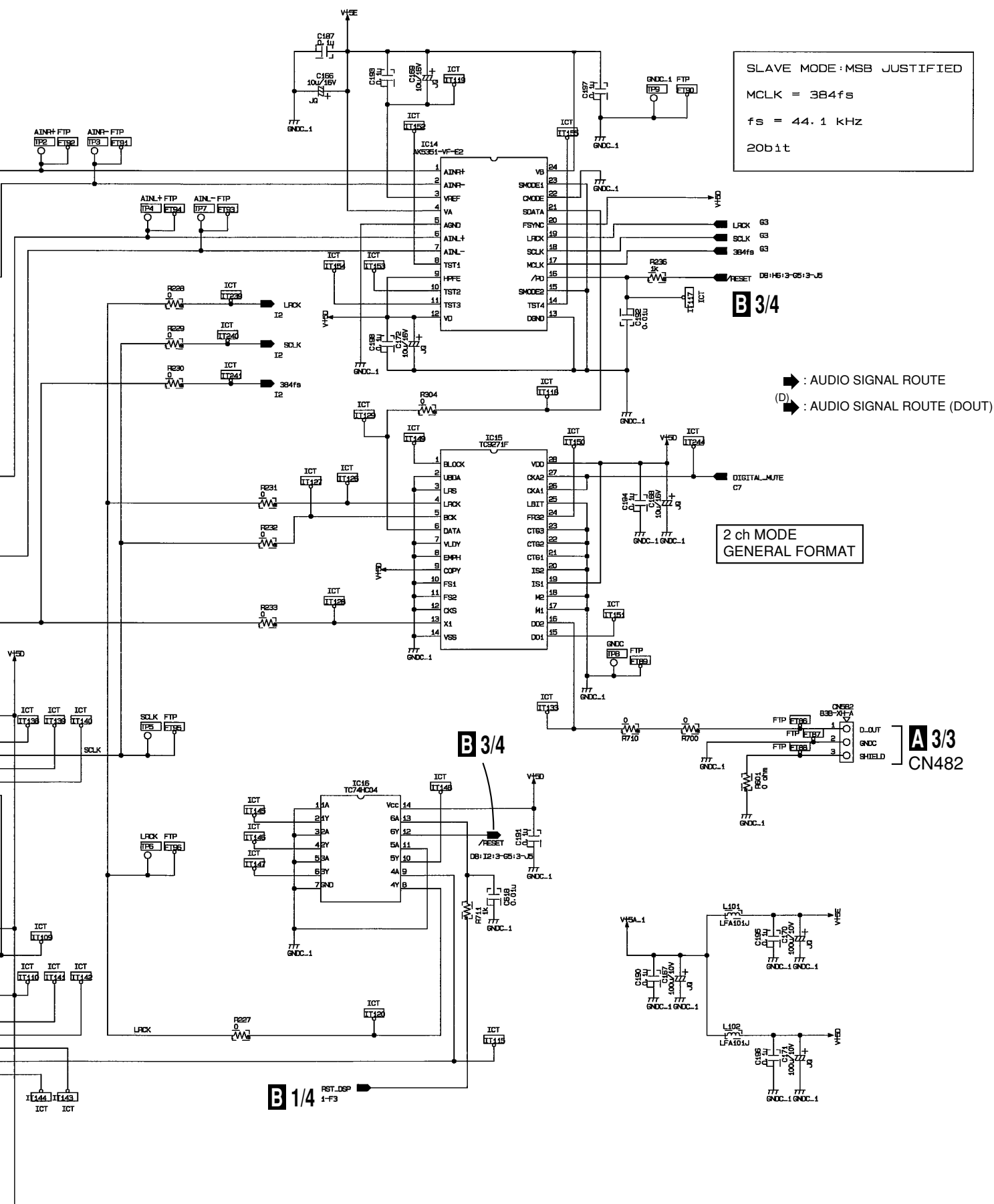
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CN481

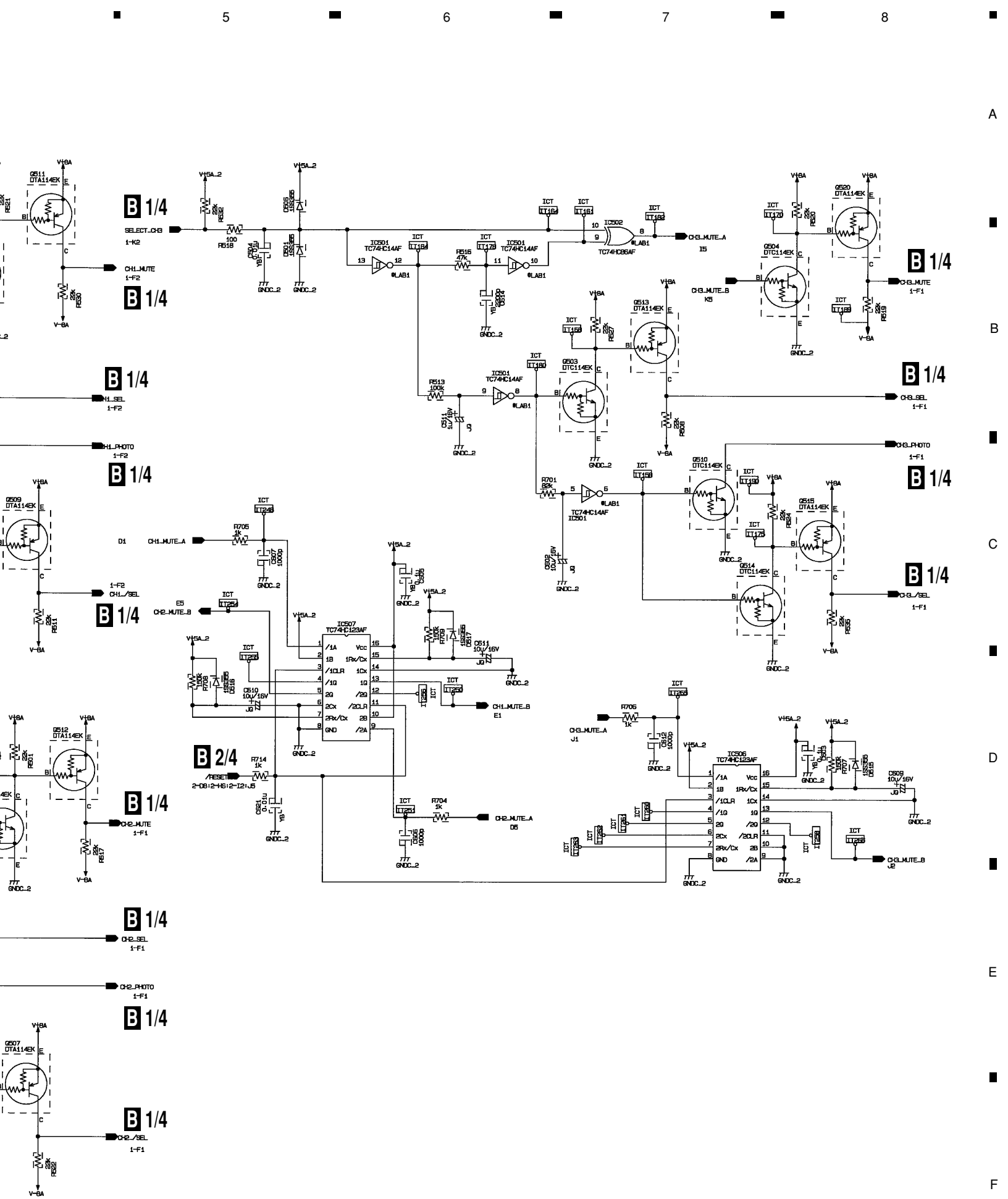
B 2/4 RST_DSP 2-67

B 2/4 H41-B1-4-G41-4-GB MUTE1 2-AB MUTE2



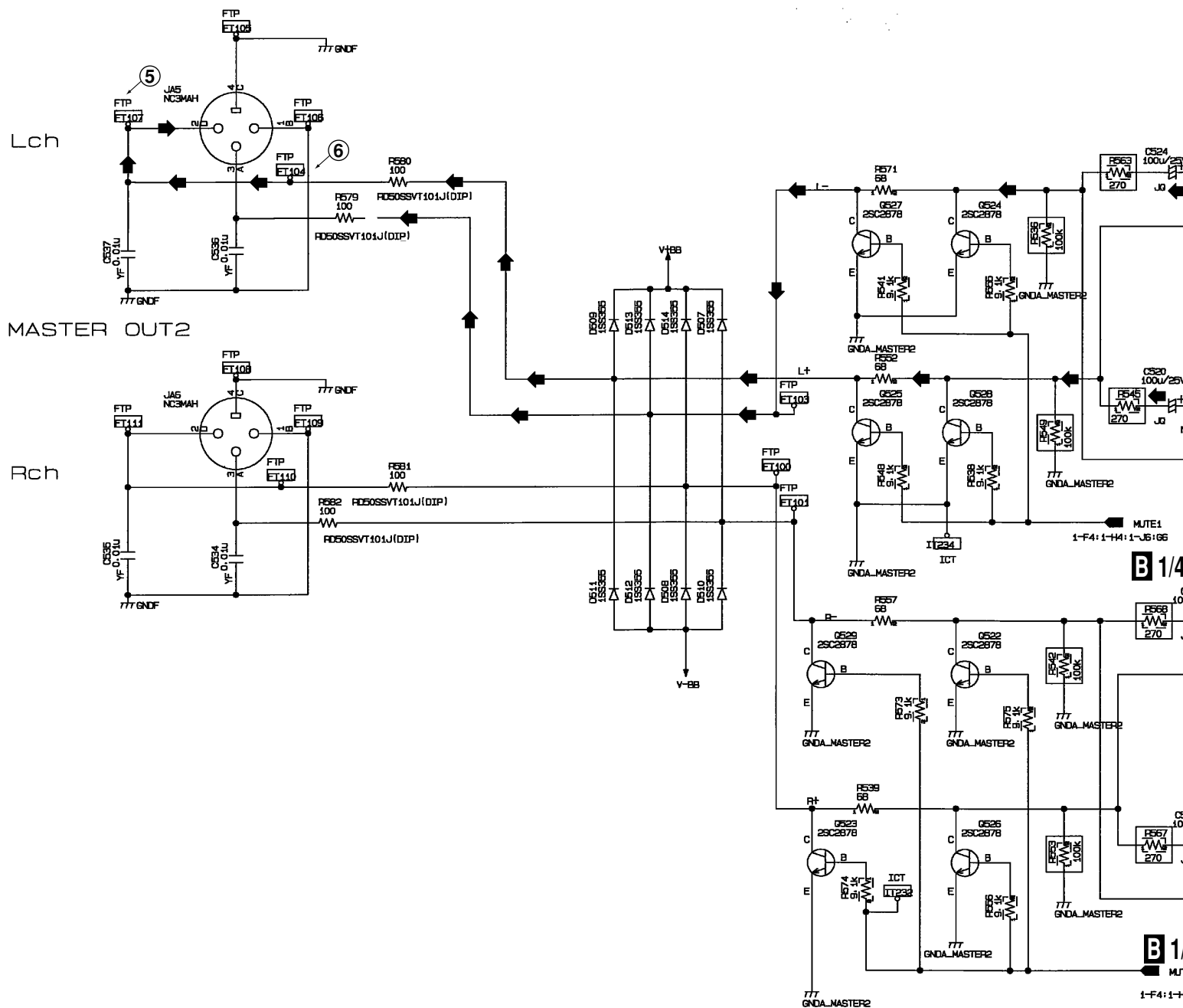
B 1/4



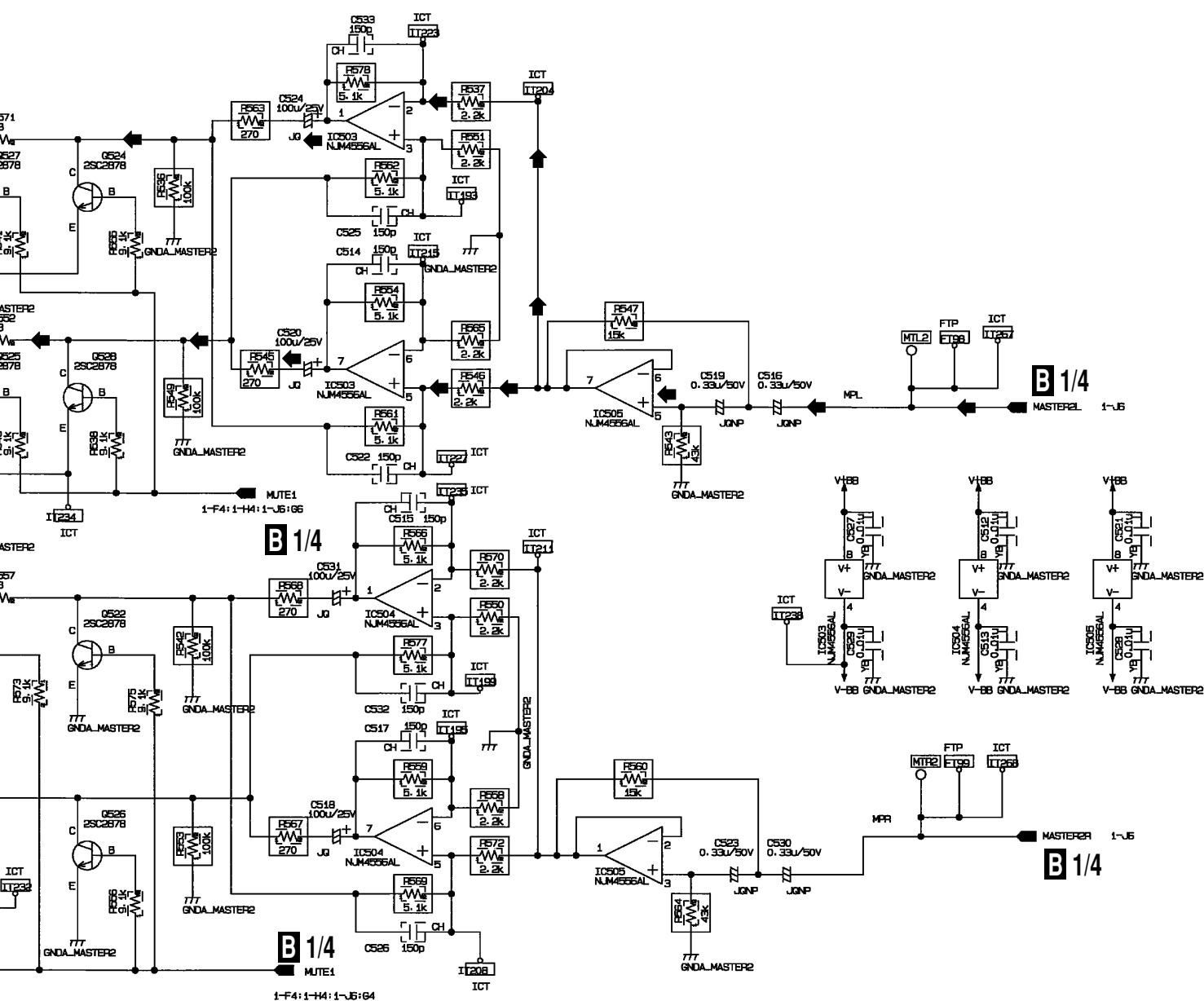


3.9 TERMB(4/4) ASSY

B 4/4 TERMB ASSY
(226902680)



➡ : AUDIO SIGNAL ROUTE



3.10 VR(1/8) ASSY

C 1/8 VR ASSY
(226903690)

C 4/8

CROSS FADER ASSIGN

CH1

ES1:4-E2 BA1GL
E7:4-E2 BA1GR

CH2

ES1:4-F4 BA2GL
E7:4-F4 BA2GR

CH3

ES1:4-E5 BA3GL
E7:4-E5 BA3GR

CH4

ES1:4-F8 BA4GL
E7:4-F7 BA4GR

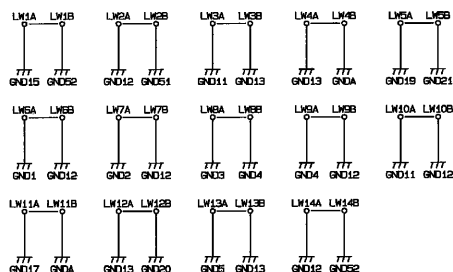
C 2/8,4/8,6/8

C 4/8,6/8

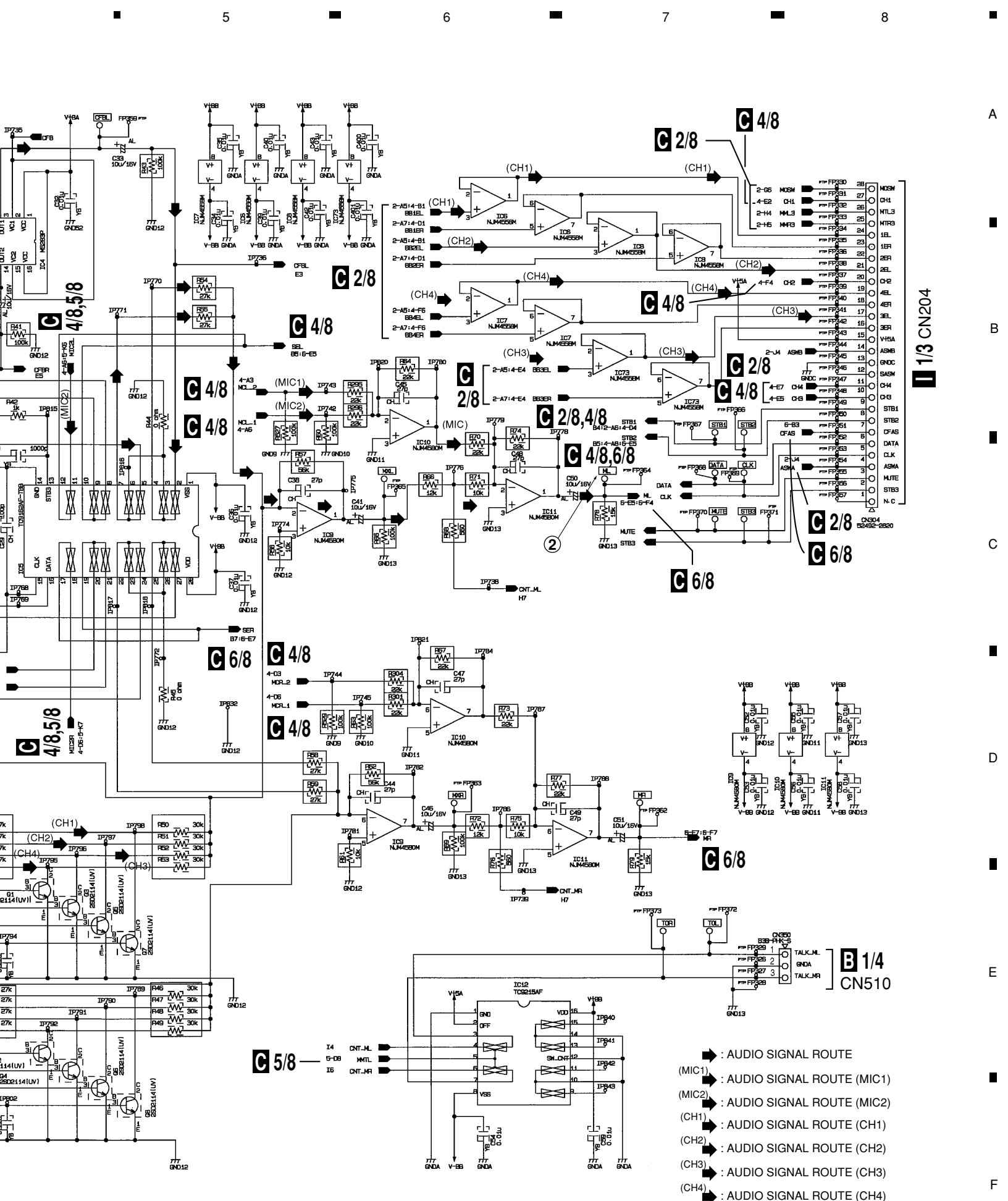
C 2/8,4/8,6/8

C 6/8

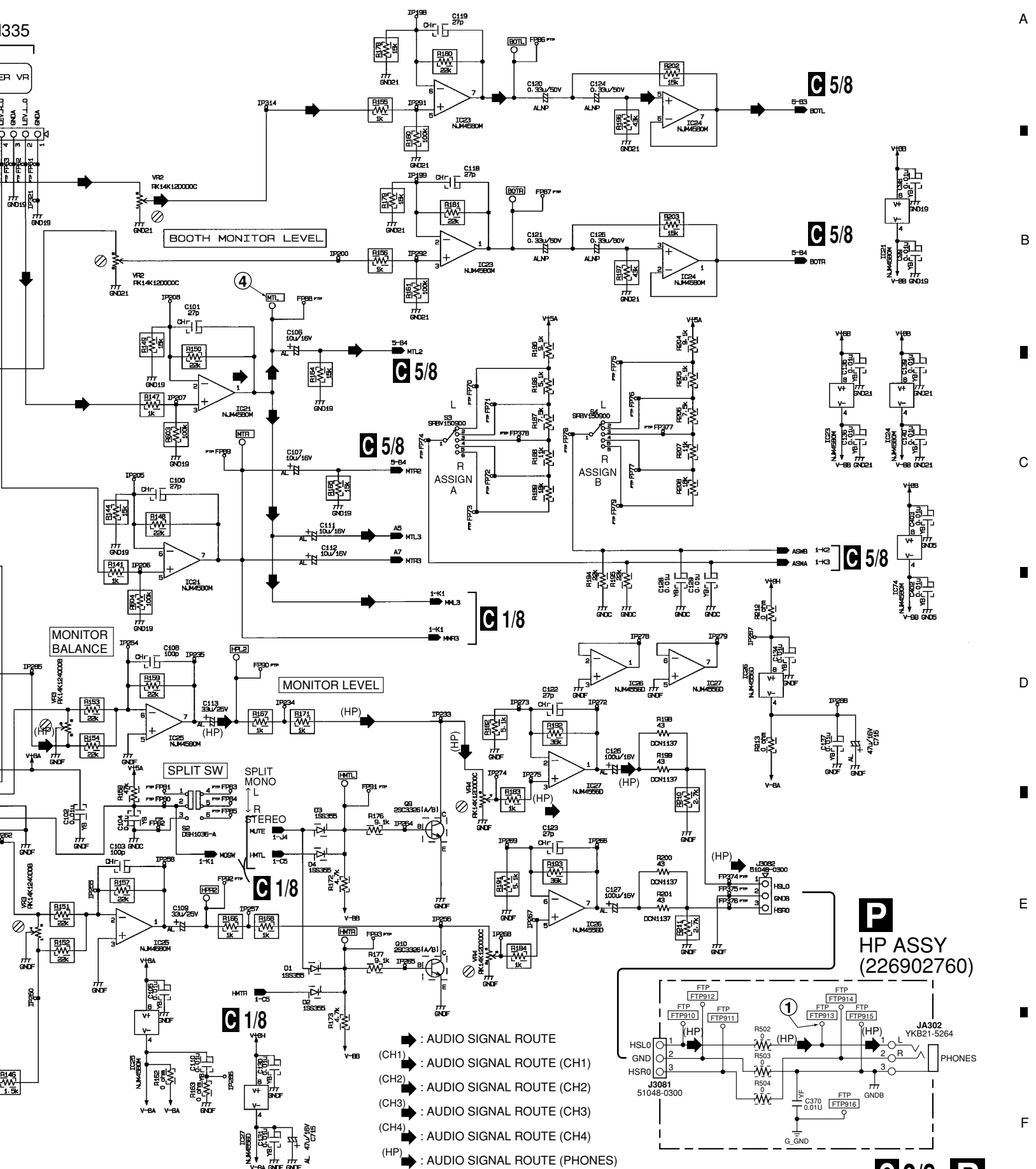
GND CONNECT POINT



DJM-3000



C 1/8



4

A



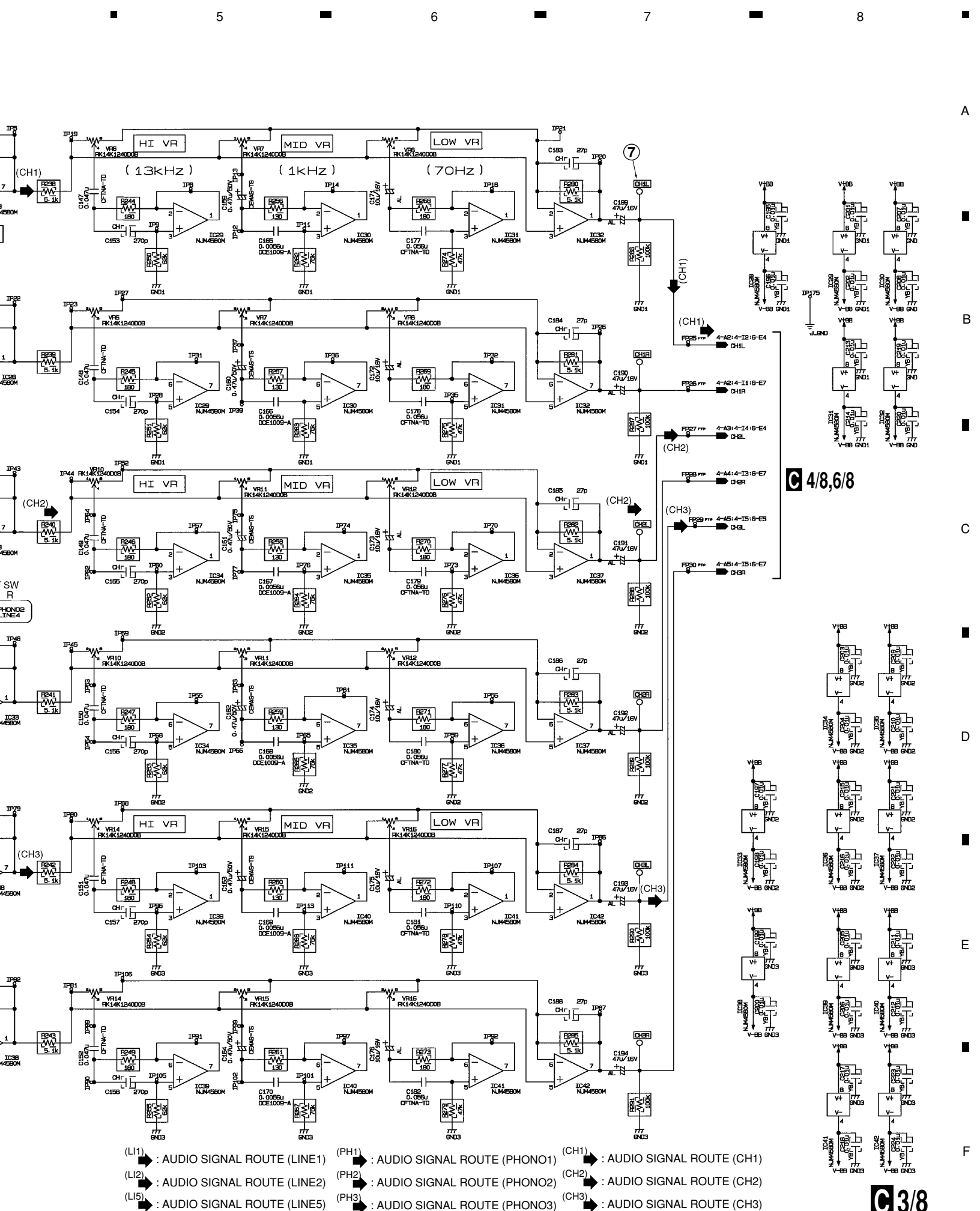
C

D

F

F

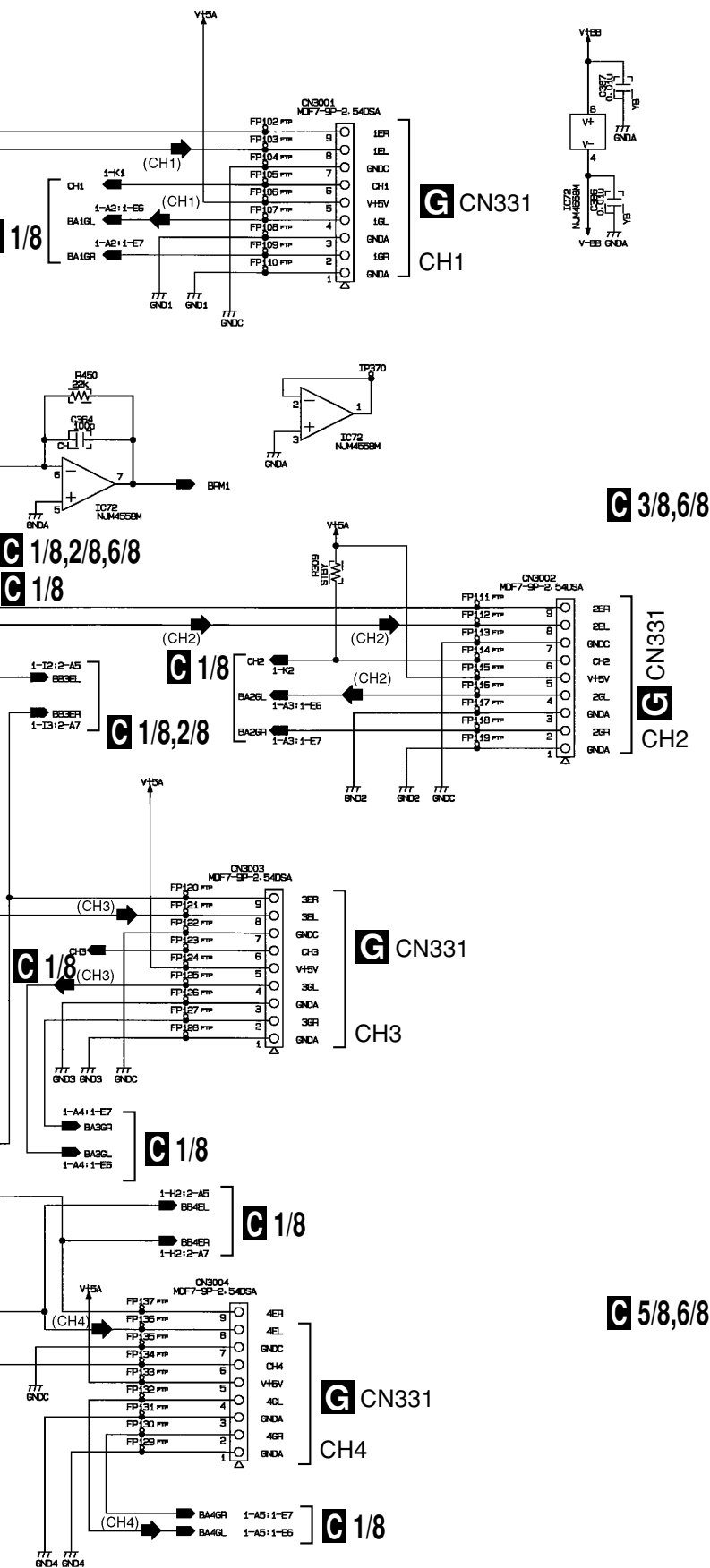
4



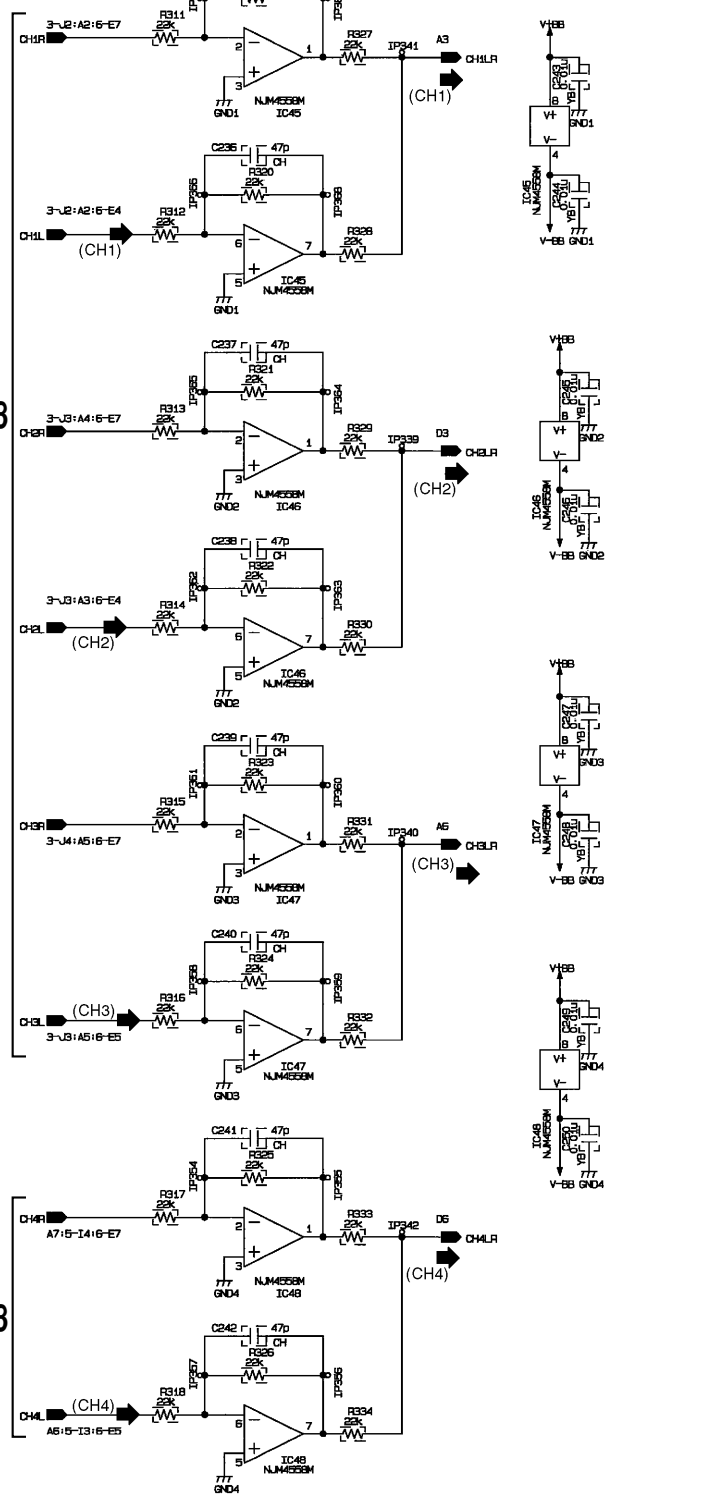
F

C 4/8





(MIC1) : AUDIO SIGNAL ROUTE (MIC1)
 (MIC2) : AUDIO SIGNAL ROUTE (MIC2)
 (CH1) : AUDIO SIGNAL ROUTE (CH1)
 (CH2) : AUDIO SIGNAL ROUTE (CH2)
 (CH3) : AUDIO SIGNAL ROUTE (CH3)
 (CH4) : AUDIO SIGNAL ROUTE (CH4)



3.14 VR(5/8) ASSY

C5/8 VR ASSY
(226903690)

A 1/3 CN4022

A 1/3 CN401

H
J3071

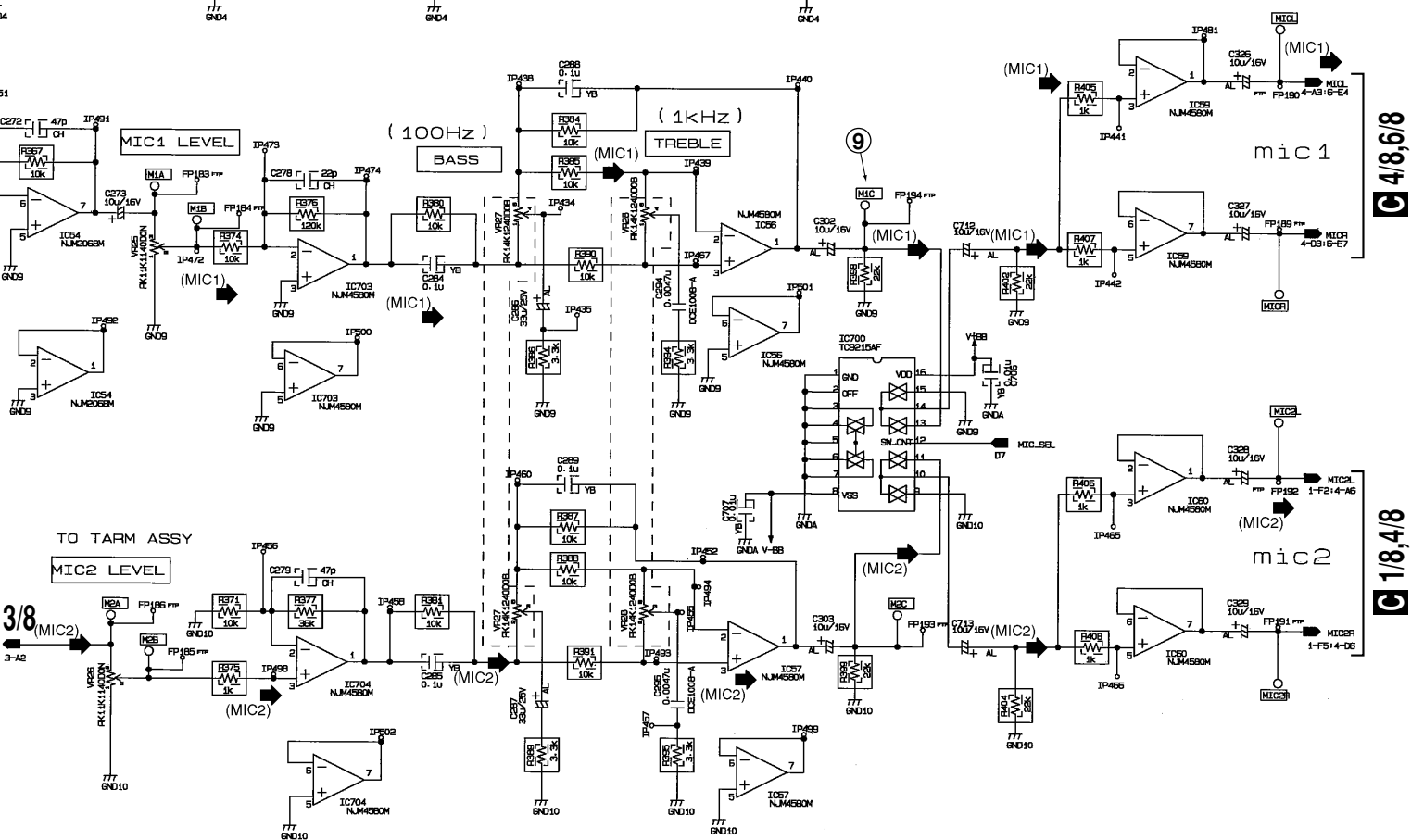
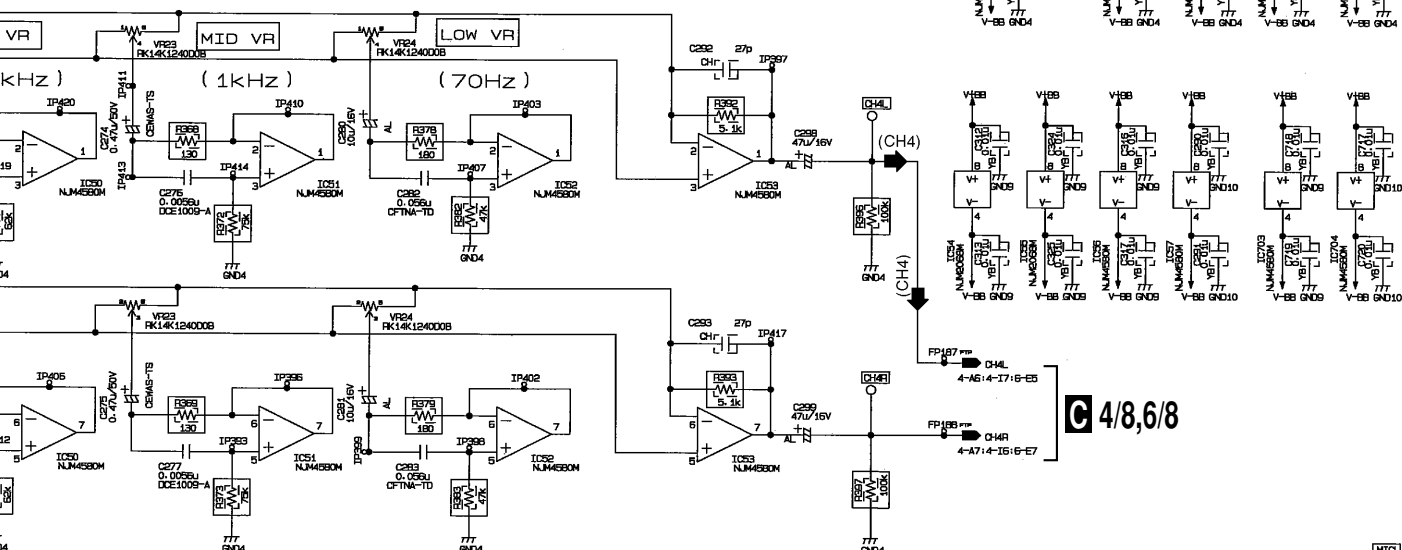
OUTPUT			
SW POSITION	Voltage	MIC_SEL	MMTL
MIC OFF	+5V	L	L
MIC ON	OPEN (2.5V)	L	H
TALK OVER	GND	H	H

C 5/8

38

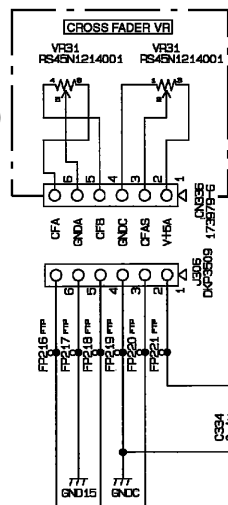
DJM-3000

Figure 1 consists of five circuit diagrams labeled (a) through (e), each representing a different interconnect topology for a 16-bit bus. In all diagrams, a 16-bit bus labeled 'V-BB' is connected to a 16-bit data bus labeled 'V-BB' via a 16-bit multiplexer labeled 'V-MUX'. The multiplexer is controlled by a 16-bit address bus labeled 'V-ADDR'.
 (a) Single bus: The 16-bit bus is connected directly to the 16-bit data bus through a single multiplexer.
 (b) 2-bus: The 16-bit bus is split into two 8-bit segments. Each segment is connected to an 8-bit data bus through an 8-bit multiplexer.
 (c) 4-bus: The 16-bit bus is split into four 4-bit segments. Each segment is connected to a 4-bit data bus through a 4-bit multiplexer.
 (d) 8-bus: The 16-bit bus is split into eight 2-bit segments. Each segment is connected to a 2-bit data bus through a 2-bit multiplexer.
 (e) 16-bus: The 16-bit bus is split into sixteen 1-bit segments. Each segment is connected to a 1-bit data bus through a 1-bit multiplexer.

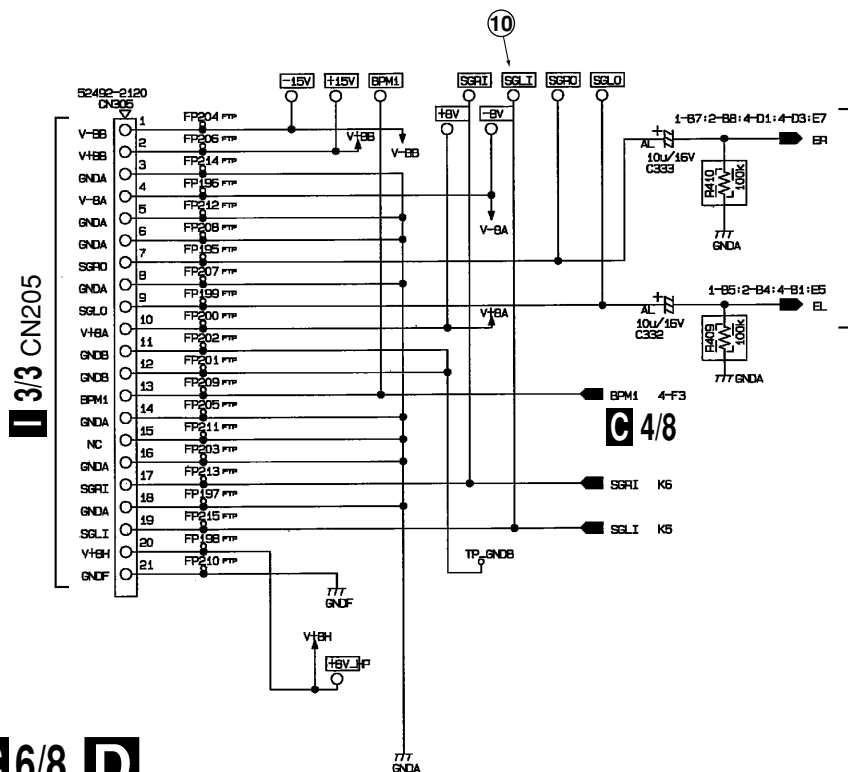
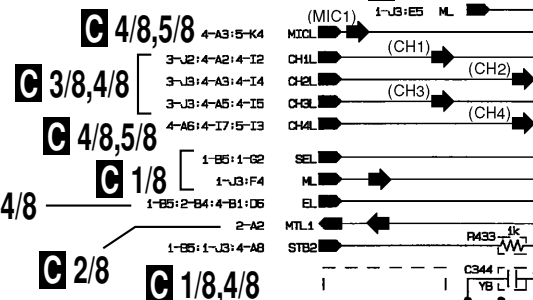
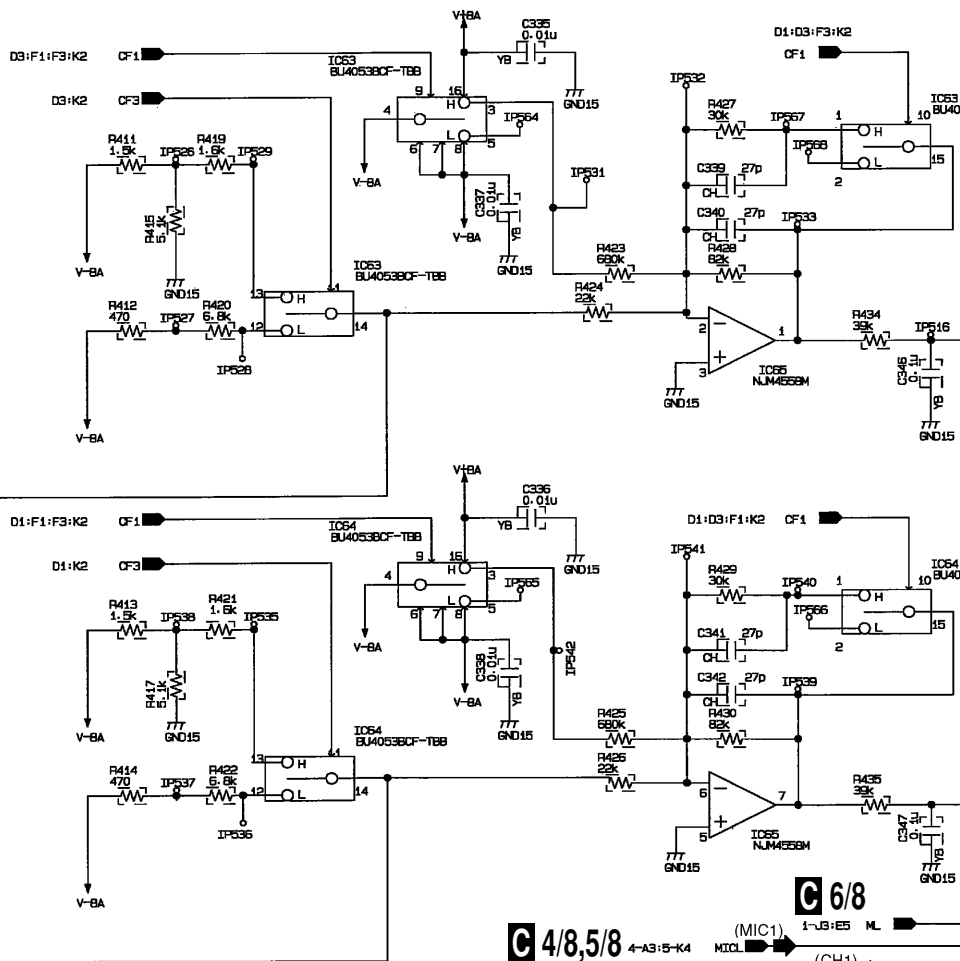


3.15 VR(6/8), CF and CFCURV ASSYS ASSY

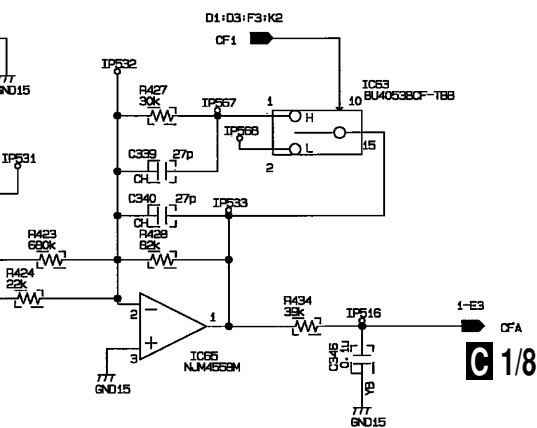
D
CF ASSY
(226902960)



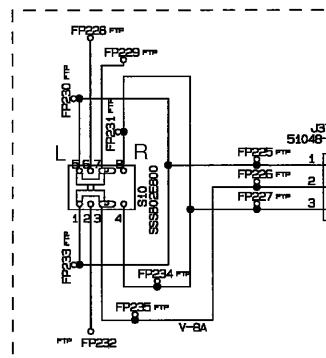
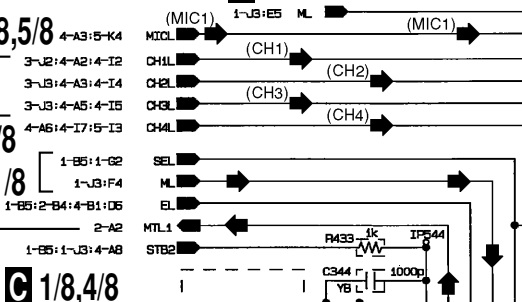
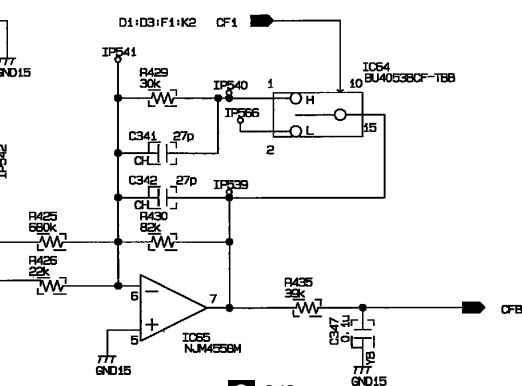
C 1/8
1-K3 CFAS



C 6/8 D



CROSS FADER CURVE

E CFCURV ASSY
(226903700)C 6/8 VR ASSY
(226903690)

C 1/8, 4/8

C 1/8, 2/8, 4/8

C 2/8

C 1/8

C 5/8

C 3/8

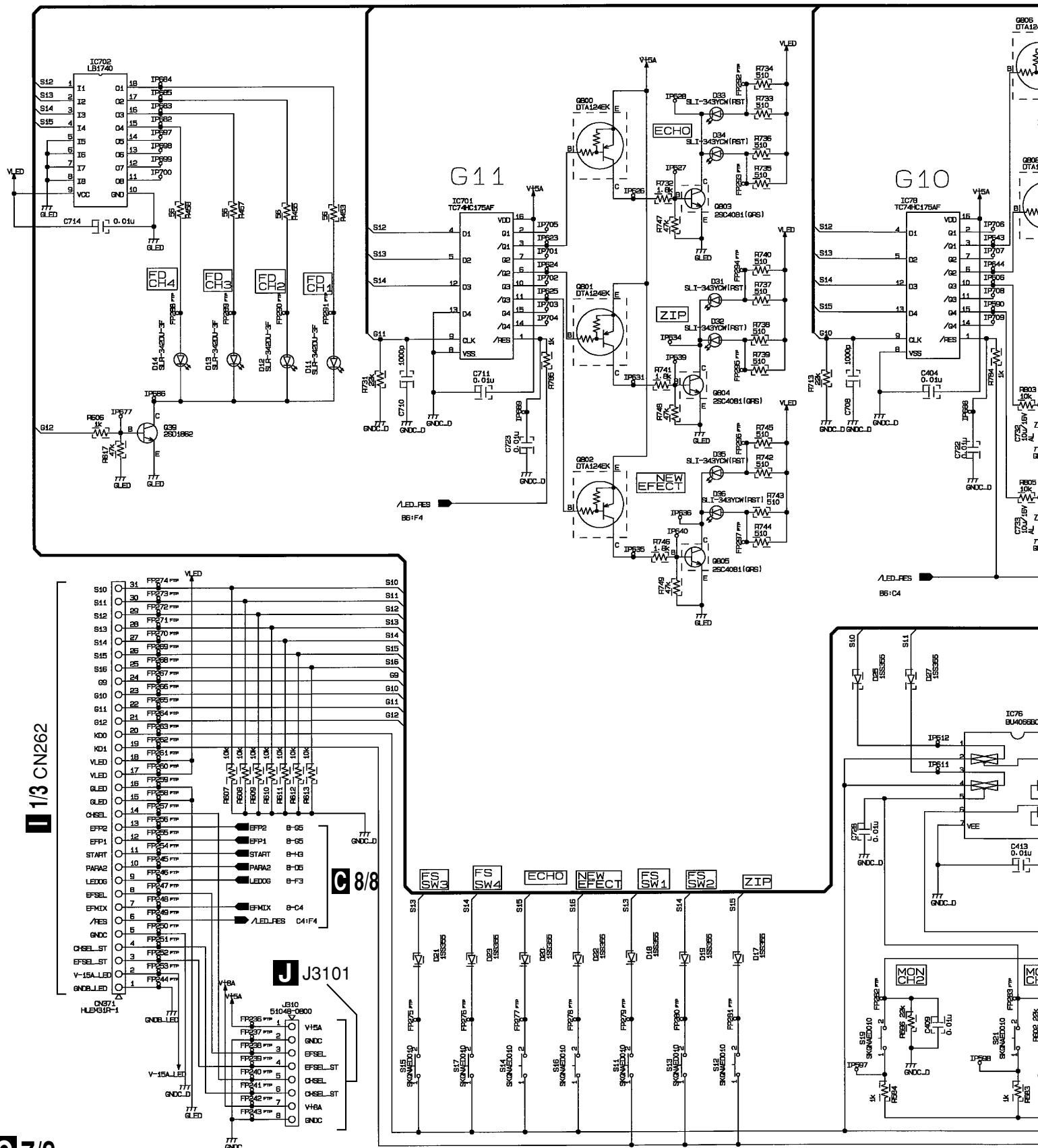
C 8, 5/8

C 1/8

C 6/8 E

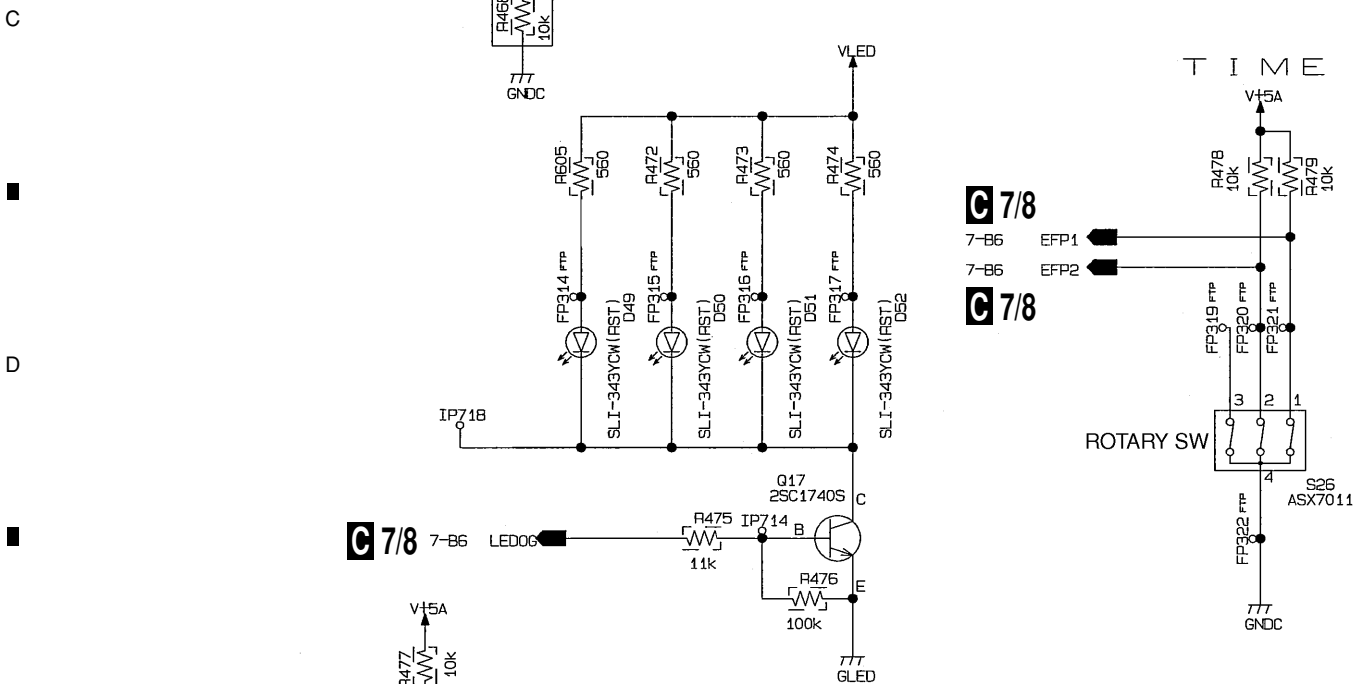
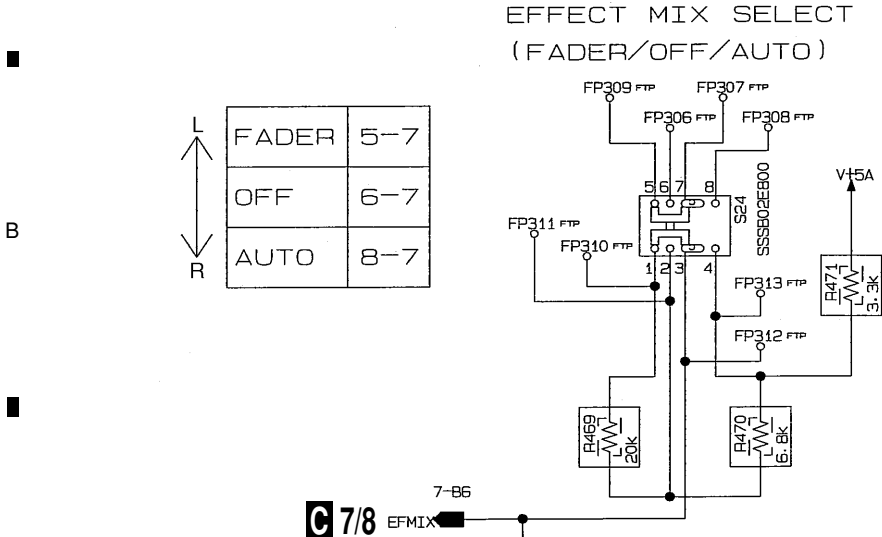
3.16 VR(7/8) ASSY

C7/8 VR ASSY (226903690)



3.17 VR(8/8) ASSY

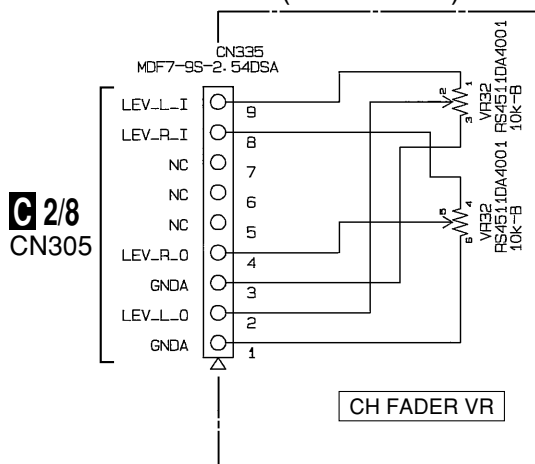
A **C 8/8** VR ASSY
(226903690)



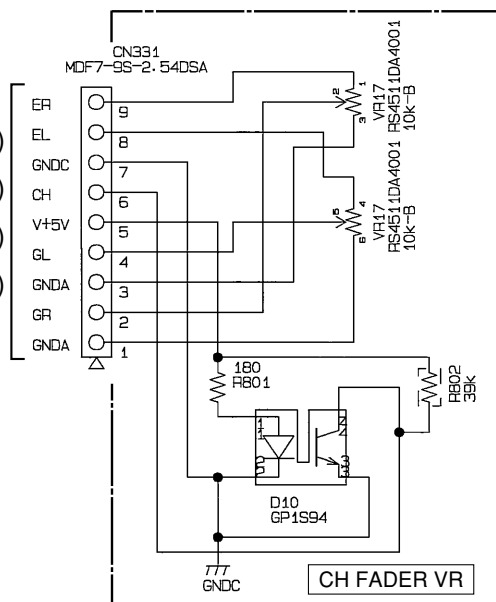
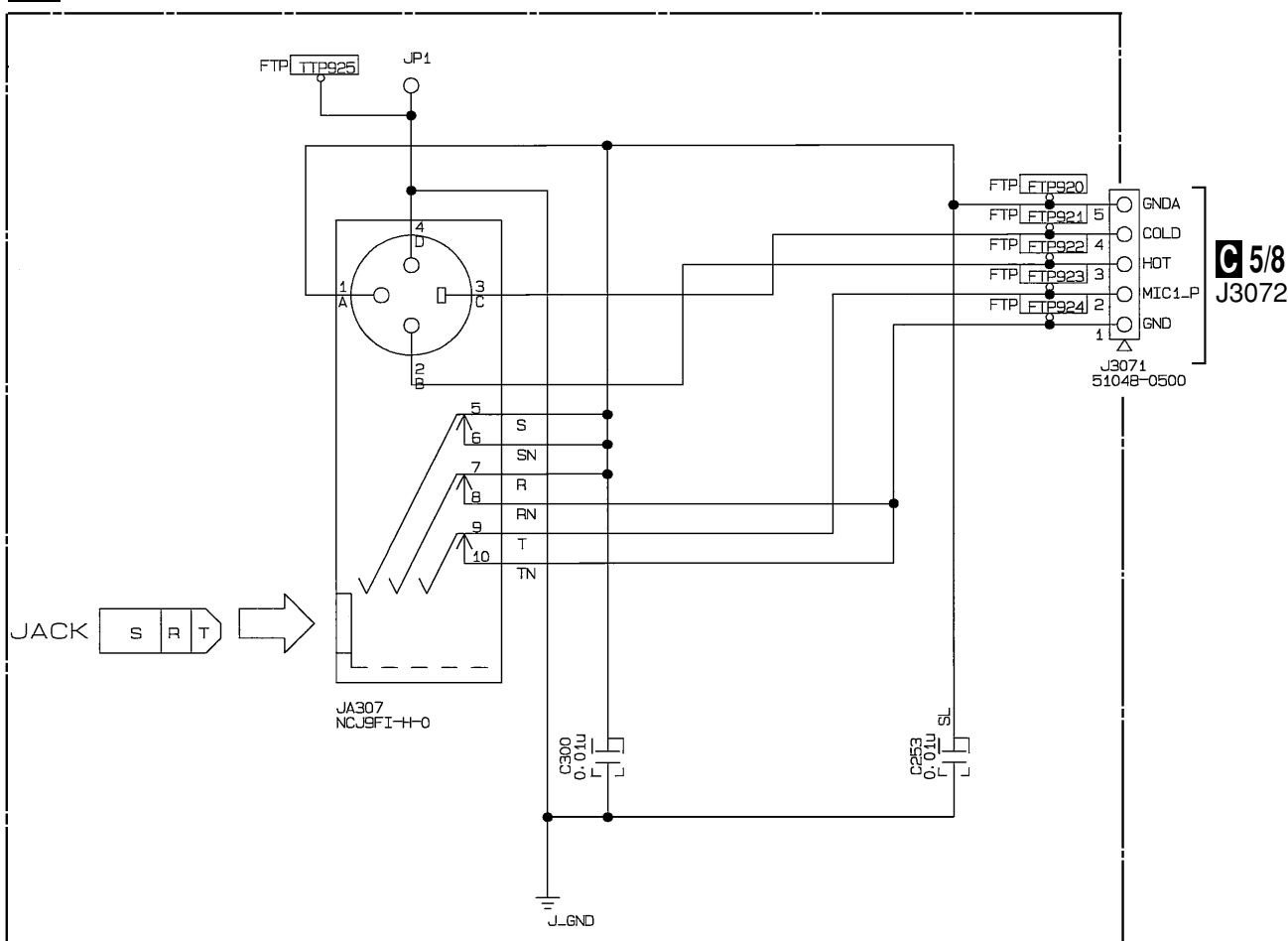
C 8/8

3.18 MAF, CHF1-4 and MIC ASSYS

F MAF ASSY
(226902940)



G CHF1 ASSY (226902860CH1)
CHF2 ASSY (226902860CH2)
CHF3 ASSY (226902860CH3)
CHF4 ASSY (226902860CH4)

**H** MIC ASSY (226902780)

3.19 DSP(1/3) ASSY

1/3 DSP ASSY (226902640)

2/3

3/3

2/3,3

7/8 CN371

4

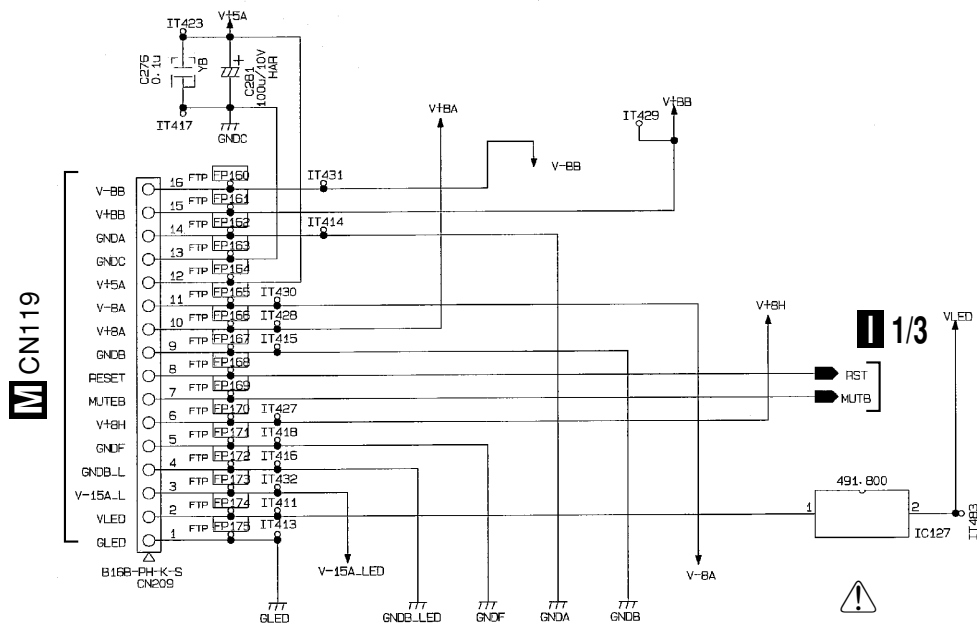
D





3.21 DSP(3/3) ASSY

A 3/3 DSP ASSY



2/3

SGR0 2-K2

2/3

SGR0 2-K2

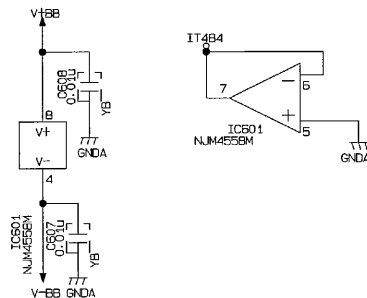
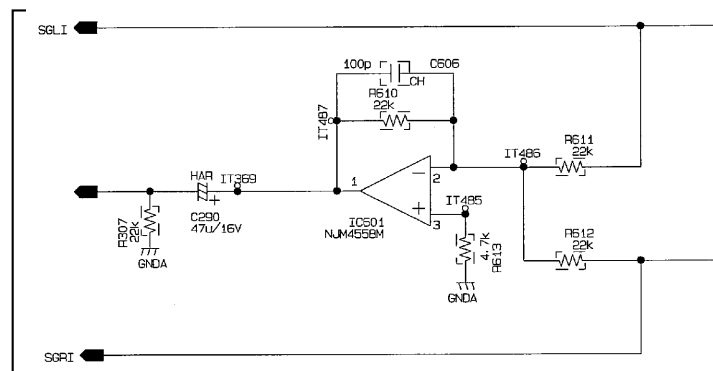
IC124

No.	Voltage (V)
1	0
2	0
3	0
4	-15.13
5	0
6	0
7	0
8	14.92

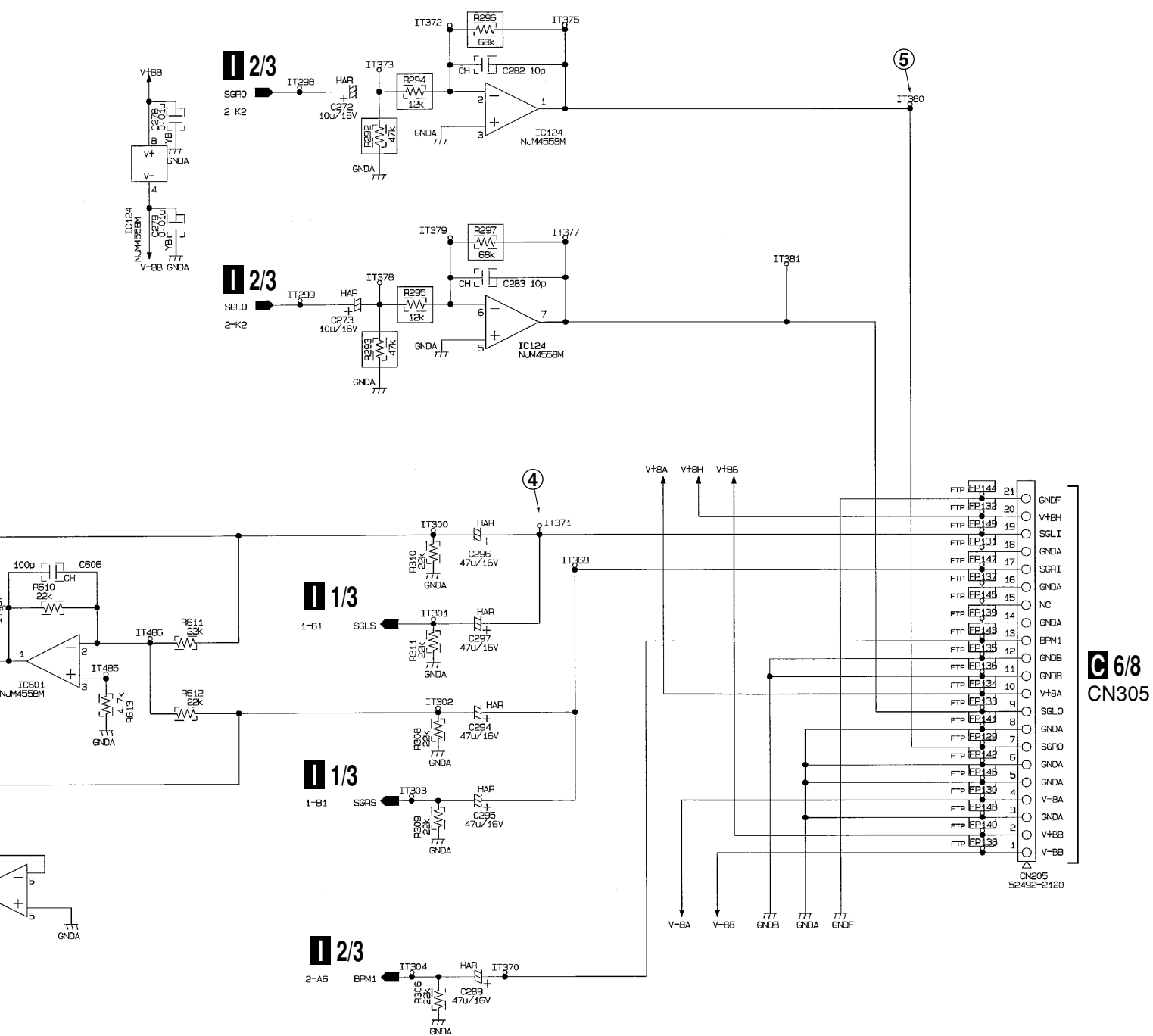
IC601

No.	Voltage (V)
1	0
2	0
3	0
4	-15.12
5	0
6	0
7	0
8	14.93

2/3



3/3

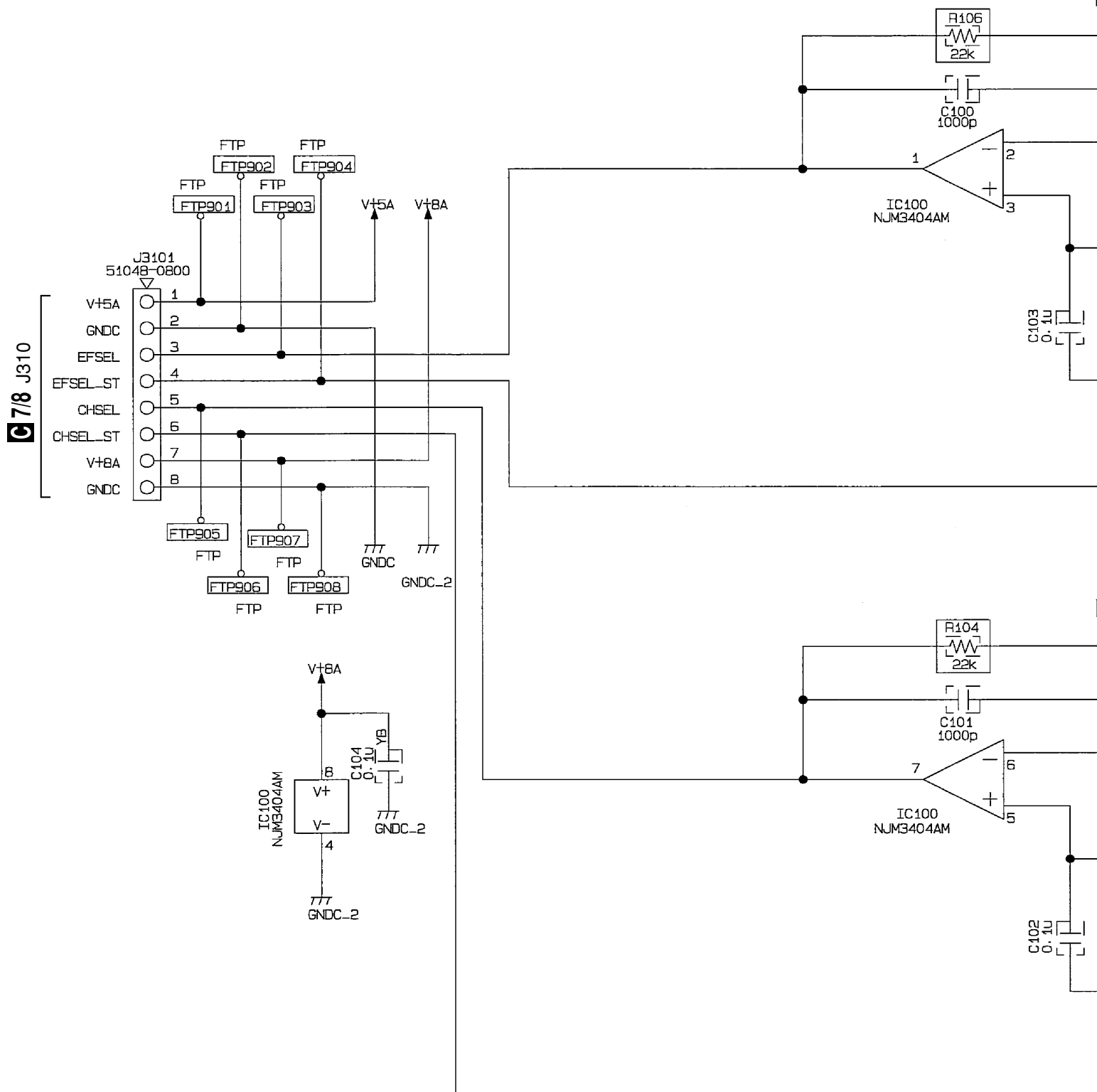


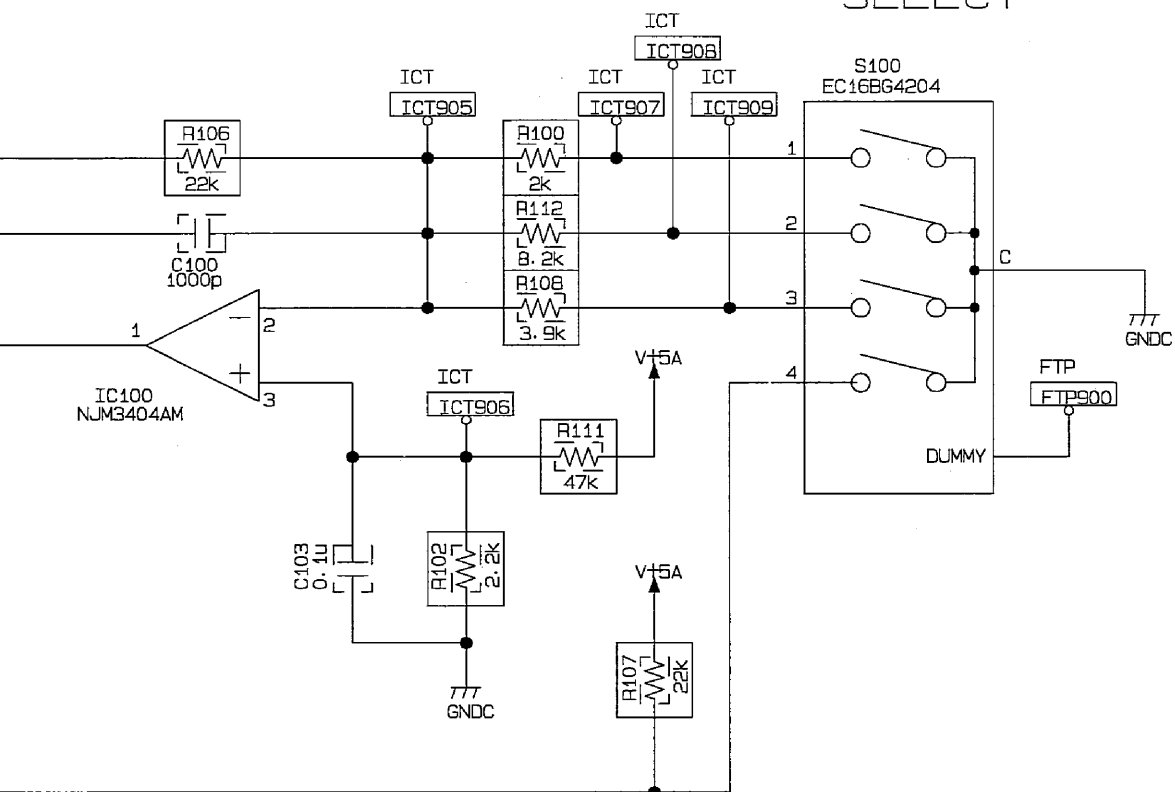
C 6/8
CN305

I 3/3

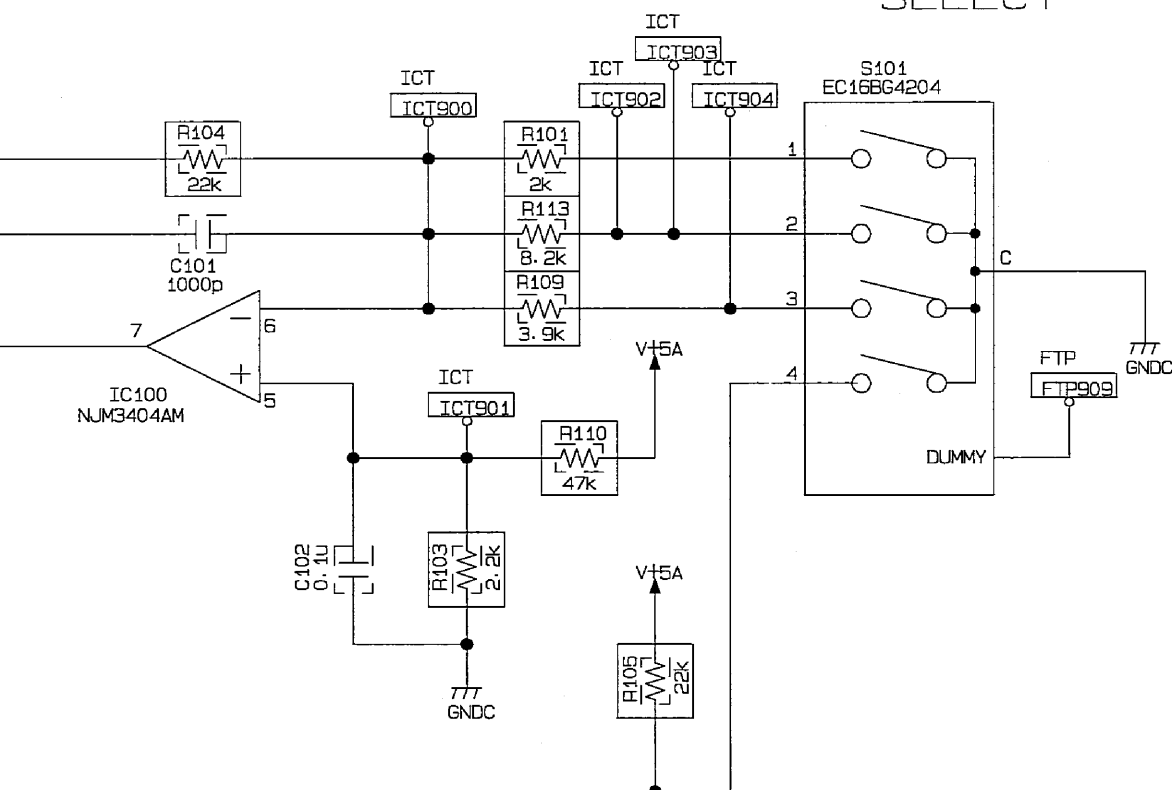
3.22 EFFECT ASSY

J EFFECT ASSY
(226902740)



EFFECTS
SELECT

AUTO BPM
DELAY
ECHO
PAN
TRANS
FILTER
FLANGER
REVERS
PITCH
SND/RTN

CH.
SELECT

1
2
3
4
MIC1
MIC2
CF. A
CF. B
MASTER

IC100

No.	Voltage (V)
1	1.48
2	0.2
3	0.2
4	0
5	0.2
6	0.2
7	1.47
8	7.9

4

A



C

D

F

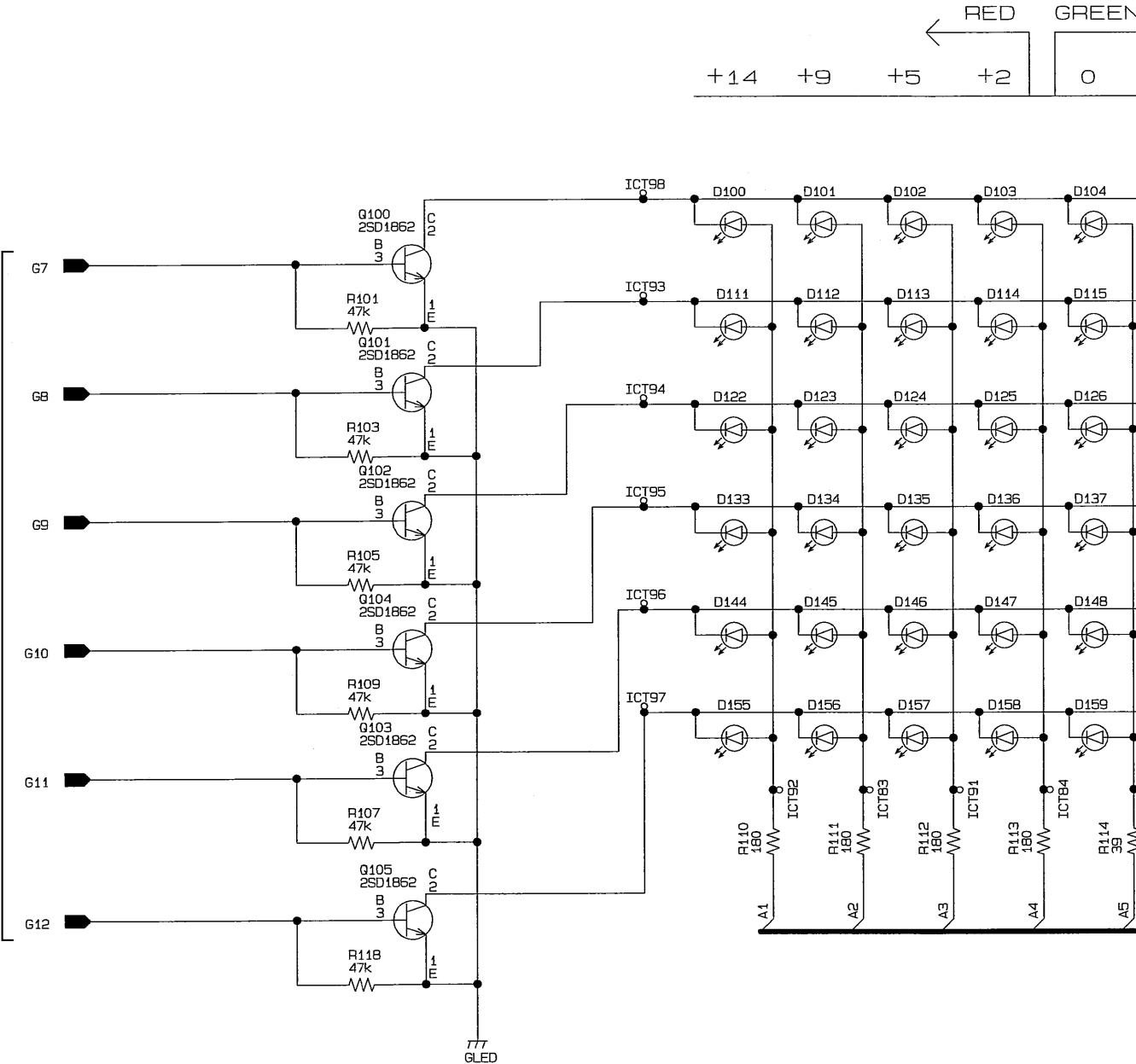
F

54

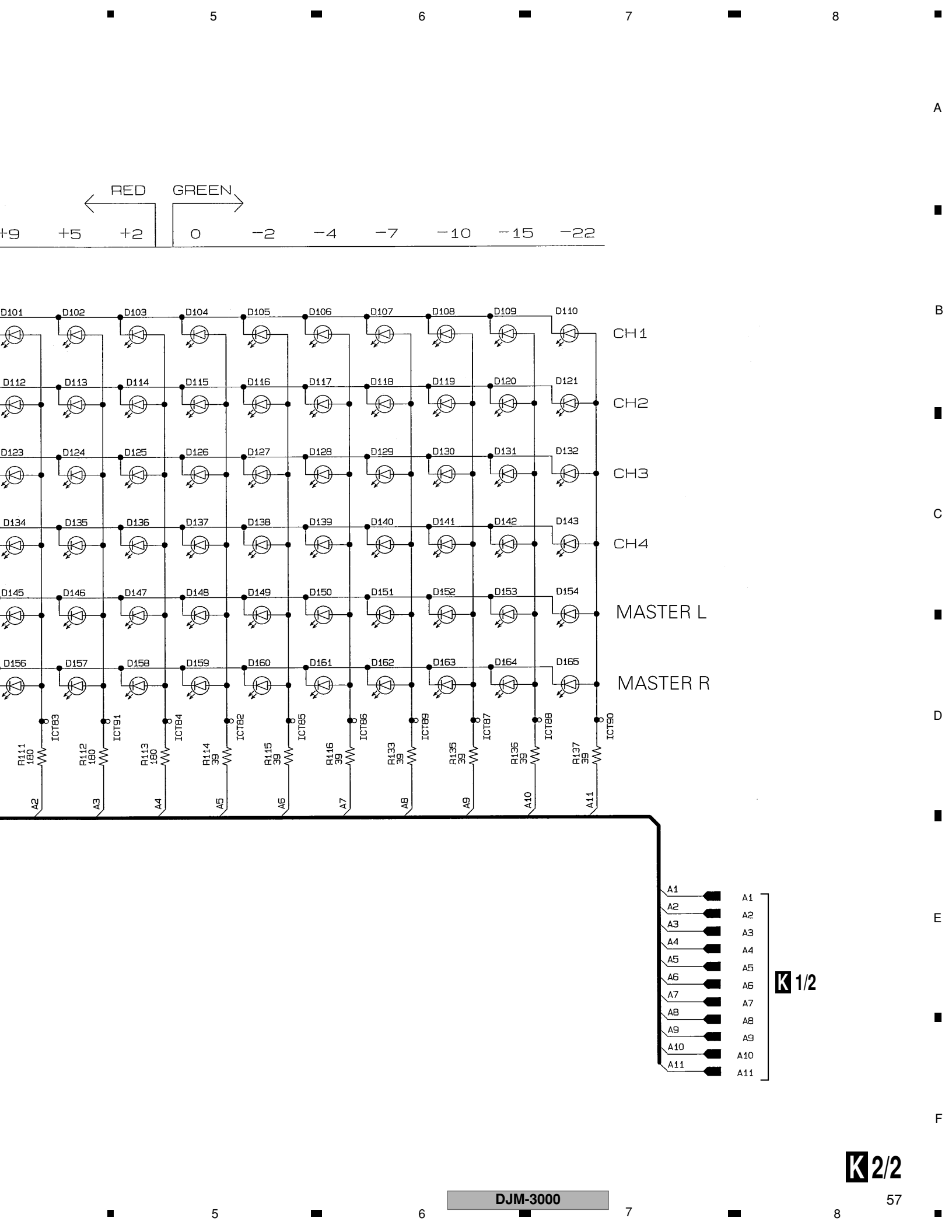


3.24 LED(2/2) ASSY

K2/2 LED ASSY
(226902720)

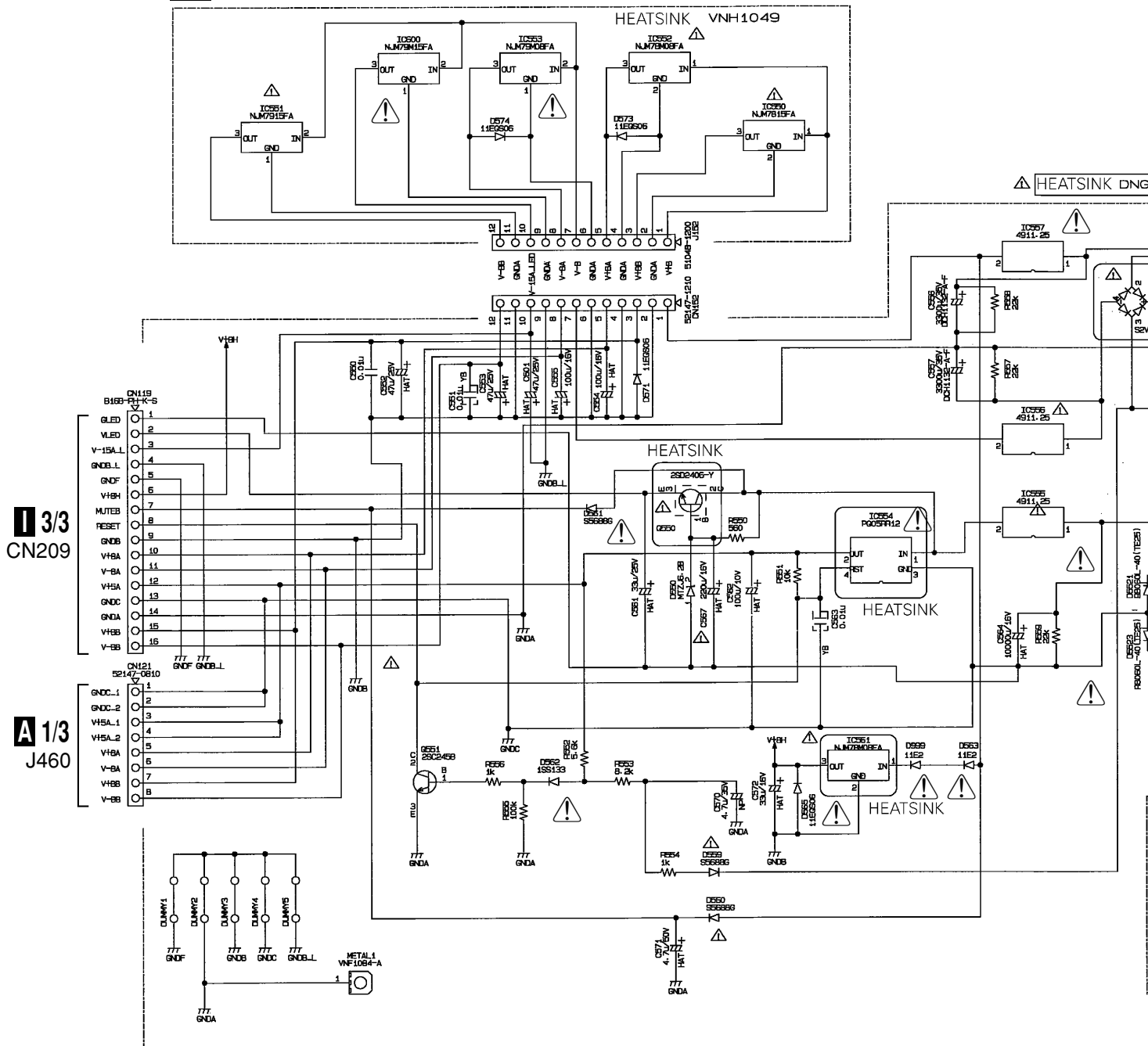


K2/2



3.25 REG, POWER, TRANS and PSW ASSYS

L REG ASSY (226902840)



M POWER ASSY
(KUCXCN : 226903790)
(WYXCN, RLBXCN : 226902700)

- NOTE FOR FUSE REPLACEMENT

CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE WITH SAME TYPE AND RATINGS ONLY.

No.	Voltage (V)	No.	Voltage (V)	No.	Voltage (V)	No.	Voltage (V)	No.	Voltage (V)
1	20.65	1	0	1	20.65	1	0	1	0
2	0	2	-20.92	2	0	2	-20.99	2	-20.92
3	14.99	3	-15.3	3	7.97	3	-8.1	3	-15.2

IC550		IC561	
No.	Voltage (V)	No.	Voltage (V)
1	8.26	1	19.3
2	5.04	2	0
3	0	3	8.03
4	5.04		

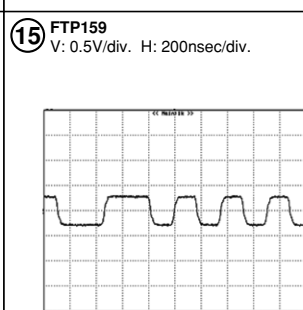
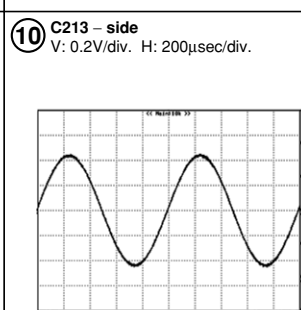
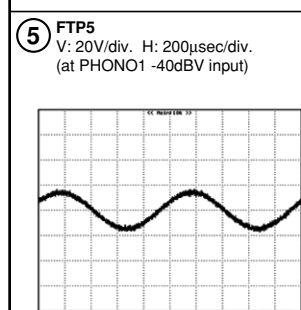
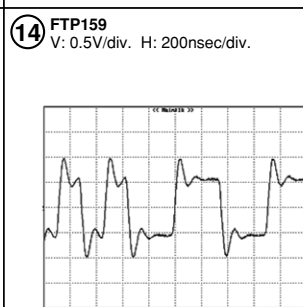
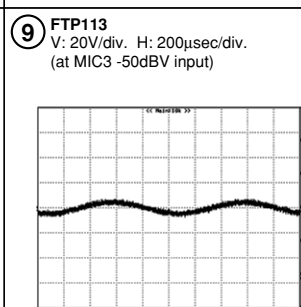
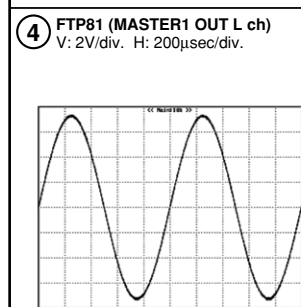
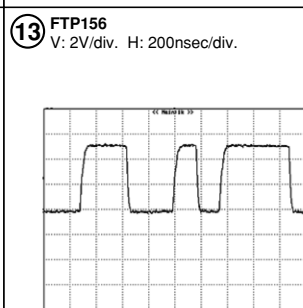
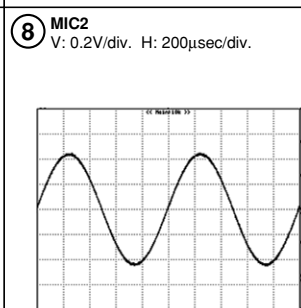
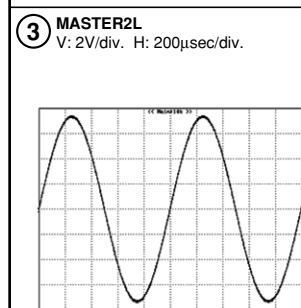
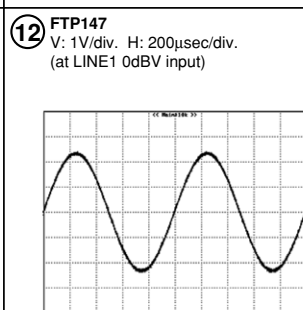
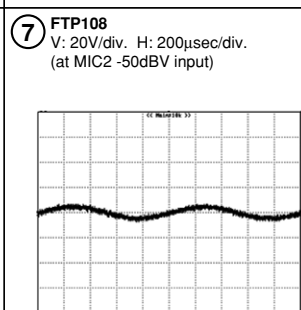
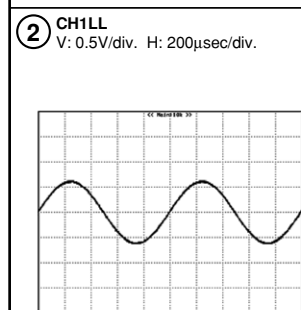
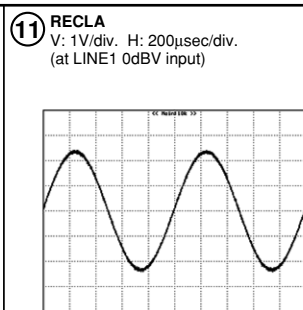
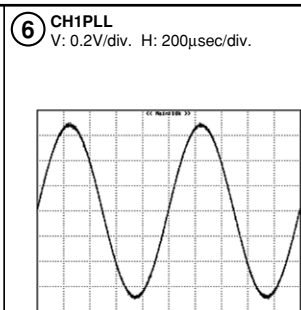
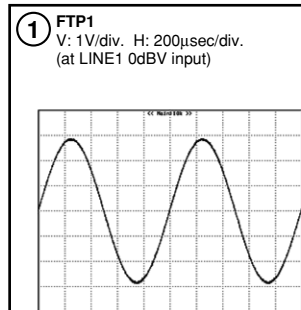
O PSW ASSY
(226902820)

RL, WY : VDG1061
J : VDG1085
KUC : ADG7024
NK : DDG1083

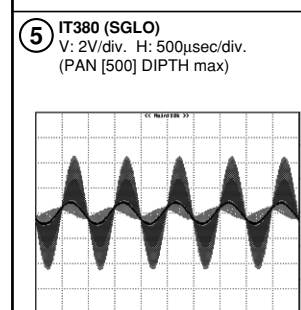
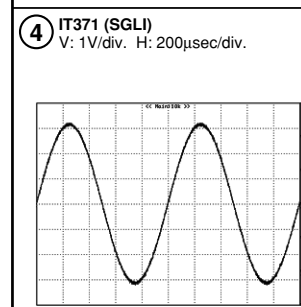
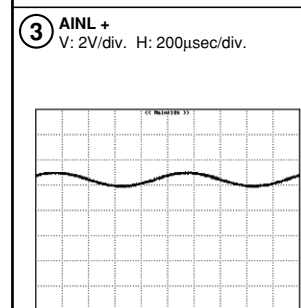
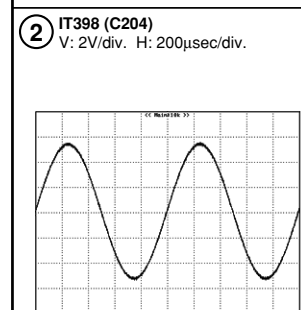
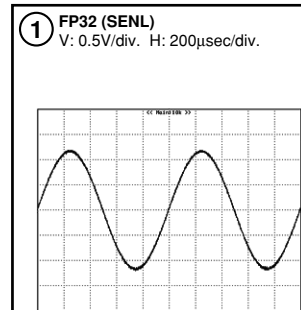
WAVEFORMS

Note : The encircled numbers denote measuring point in the schematic diagram.

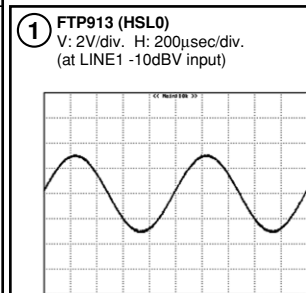
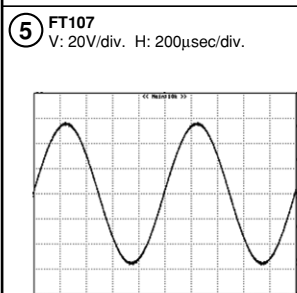
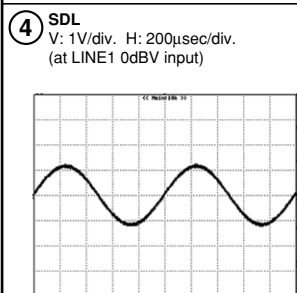
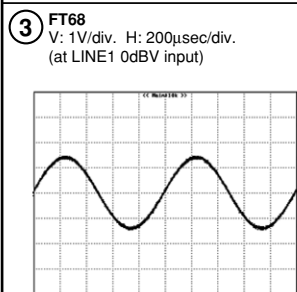
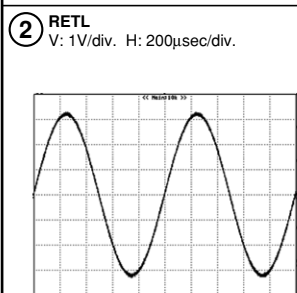
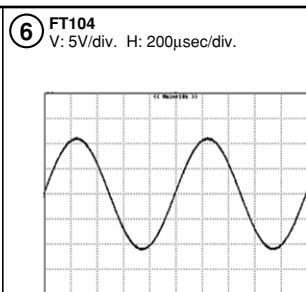
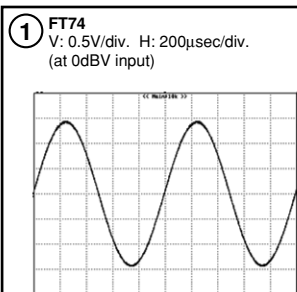
A TERMA ASSY



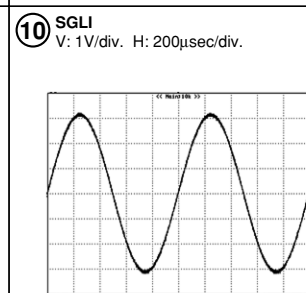
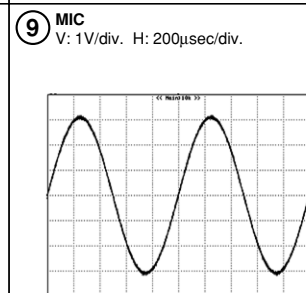
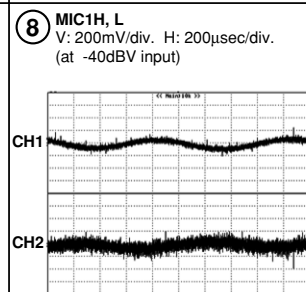
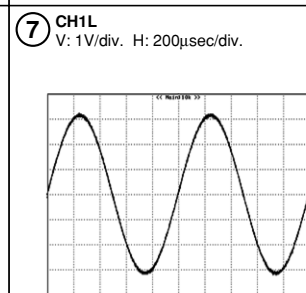
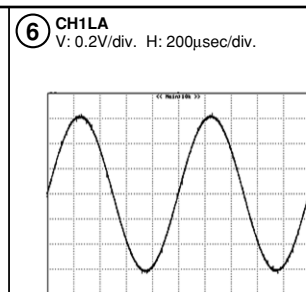
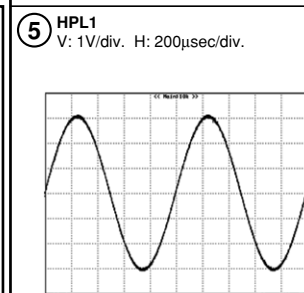
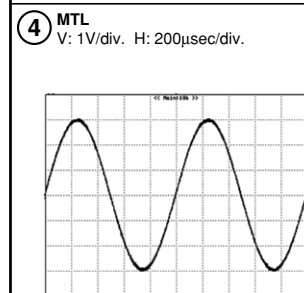
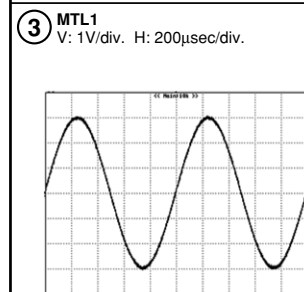
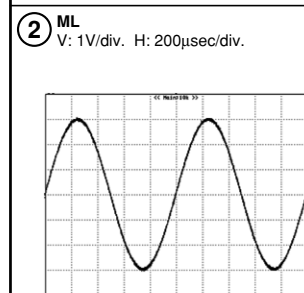
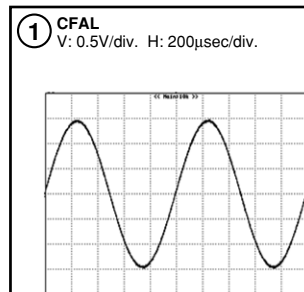
I DSP ASSY



B TERMB ASSY



C VR ASSY



P HP ASSY

VOLTAGES

A TERMA ASSY

IC1		IC19	
No.	Voltage (V)	No.	Voltage (V)
1	0	1	0
2	0	2	0
3	0	3	0
4	-8.1	4	0
5	0	5	0
6	0	6	0
7	0	7	0
8	7.95	8	-15.29

IC2		IC600	
No.	Voltage (V)	No.	Voltage (V)
1	0	1	0
2	0	2	0
3	0	3	0
4	-8.1	4	-15.29
5	0	5	0
6	0	6	0
7	0	7	0
8	7.94	8	14.96

IC7		IC600	
No.	Voltage (V)	No.	Voltage (V)
1	0	1	0
2	0	2	0
3	0	3	0
4	-15.29	4	-15.29
5	0	5	0
6	0	6	0
7	0	7	0
8	14.97	8	14.96

IC17	
No.	Voltage (V)
1	0
2	0
3	0
4	-15.29
5	0
6	0
7	0
8	14.96

IC18	
No.	Voltage (V)
1	1.55
2	1.55
3	1.55
4	-15.29
5	1.55
6	1.55
7	1.55
8	14.96

B TERMB ASSY

IC8		IC13		IC15		IC101		IC502	
No.	Voltage (V)	No.	Voltage (V)	No.	Voltage (V)	No.	Voltage (V)	No.	Voltage (V)
1	2.5	1	4.99	1	0	1	0	1	0
2	2.5	2	2.46	2	0	2	0	2	0
3	2.5	3	4.99	3	0	3	0	3	0
4	0	4	4.99	4	2.49	4	-15.28	4	0
5	2.48	5	4.99	5	2.48	5	0	5	0
6	2.48	6	4.99	6	1.58	6	0	6	0
7	2.48	7	0	7	0	7	0	7	0
8	4.99	8	0	8	0	8	14.97	8	0

IC9		IC102		IC503	
No.	Voltage (V)	No.	Voltage (V)	No.	Voltage (V)
1	2.5	1	0	1	0
2	2.5	2	0	2	0
3	2.5	3	0	3	0
4	0	4	-15.29	4	-15.29
5	2.49	5	0	5	0
6	2.49	6	0	6	0
7	2.47	7	0	7	0
8	4.99	8	14.97	8	14.96

IC14		IC107		IC505	
No.	Voltage (V)	No.	Voltage (V)	No.	Voltage (V)
1	2.46	1	0	1	0
2	2.5	2	0	2	0
3	2.35	3	0	3	0
4	4.98	4	0	4	-15.29
5	0	5	7.93	5	0
6	2.47	6	-	6	0
7	2.5	7	-8.11	7	0
8	0	8	-	8	14.96
9	4.99	9	-		
10	0	10	-		
11	0	11	-		
12	4.99	12	-		
13	0	13	7.93		
14	0	14	7.95		

IC12		IC16		IC500		IC507	
No.	Voltage (V)	No.	Voltage (V)	No.	Voltage (V)	No.	Voltage (V)
1	4.99	1	0	1	0	1	0
2	2.46	2	4.99	2	5.02	2	5.02
3	4.99	3	0	3	5	3	4.99
4	4.99	4	4.99	4	0	4	5.02
5	4.99	5	0	5	4.97	5	0
6	4.99	6	4.99	6	0	6	0
7	4.99	7	0	7	0	7	4.99
8	0	8	2.49	8	4.99	8	0
9	4.99	9	2.49	9	0	9	0
10	4.99	10	4.99	10	0	10	5.02
11	2.49	11	0	11	5	11	4.99
12	2.49	12	4.99	12	5.02	12	5.02
13	2.49	13	0	13	0	13	0
14	2.48	14	4.99	14	5.02	14	0
15	0					15	4.99
16	4.99					16	5.02

IC1	IC4	IC10	IC17	IC21	IC29	IC43	IC54																																																																																																																																																																																																																																																																																								
<table> <tr><th>No.</th><th>Voltage (V)</th></tr> <tr><td>1</td><td>-15.25</td></tr> <tr><td>2</td><td>0</td></tr> <tr><td>3</td><td>0</td></tr> <tr><td>4</td><td>0</td></tr> <tr><td>5</td><td>0</td></tr> <tr><td>6</td><td>0</td></tr> <tr><td>7</td><td>0</td></tr> <tr><td>8</td><td>0</td></tr> <tr><td>9</td><td>0</td></tr> <tr><td>10</td><td>0</td></tr> <tr><td>11</td><td>0</td></tr> <tr><td>12</td><td>0</td></tr> <tr><td>13</td><td>0</td></tr> <tr><td>14</td><td>0</td></tr> <tr><td>15</td><td>5</td></tr> <tr><td>16</td><td>0</td></tr> <tr><td>17</td><td>0</td></tr> <tr><td>18</td><td>0</td></tr> <tr><td>19</td><td>0</td></tr> <tr><td>20</td><td>0</td></tr> <tr><td>21</td><td>0</td></tr> <tr><td>22</td><td>0</td></tr> <tr><td>23</td><td>0</td></tr> <tr><td>24</td><td>0</td></tr> <tr><td>25</td><td>0</td></tr> <tr><td>26</td><td>0</td></tr> <tr><td>27</td><td>0</td></tr> <tr><td>28</td><td>14.92</td></tr> </table>	No.	Voltage (V)	1	-15.25	2	0	3	0	4	0	5	0	6	0	7	0	8	0	9	0	10	0	11	0	12	0	13	0	14	0	15	5	16	0	17	0	18	0	19	0	20	0	21	0	22	0	23	0	24	0	25	0	26	0	27	0	28	14.92	<table> <tr><th>No.</th><th>Voltage (V)</th></tr> <tr><td>1</td><td>7.94</td></tr> <tr><td>2</td><td>0.29</td></tr> <tr><td>3</td><td>0</td></tr> <tr><td>4</td><td>0</td></tr> <tr><td>5</td><td>0</td></tr> <tr><td>6</td><td>0</td></tr> <tr><td>7</td><td>-</td></tr> <tr><td>8</td><td>0</td></tr> <tr><td>9</td><td>0</td></tr> <tr><td>10</td><td>-</td></tr> <tr><td>11</td><td>0</td></tr> <tr><td>12</td><td>-8.09</td></tr> <tr><td>13</td><td>-8.09</td></tr> <tr><td>14</td><td>0</td></tr> <tr><td>15</td><td>0.29</td></tr> <tr><td>16</td><td>7.94</td></tr> </table>	No.	Voltage (V)	1	7.94	2	0.29	3	0	4	0	5	0	6	0	7	-	8	0	9	0	10	-	11	0	12	-8.09	13	-8.09	14	0	15	0.29	16	7.94	<table> <tr><th>No.</th><th>Voltage (V)</th></tr> <tr><td>1</td><td>0</td></tr> <tr><td>2</td><td>0</td></tr> <tr><td>3</td><td>0</td></tr> <tr><td>4</td><td>-15.24</td></tr> <tr><td>5</td><td>0</td></tr> <tr><td>6</td><td>0</td></tr> <tr><td>7</td><td>0</td></tr> <tr><td>8</td><td>14.92</td></tr> </table>	No.	Voltage (V)	1	0	2	0	3	0	4	-15.24	5	0	6	0	7	0	8	14.92	<table> <tr><th>No.</th><th>Voltage (V)</th></tr> <tr><td>1</td><td>-15.25</td></tr> <tr><td>2</td><td>0</td></tr> <tr><td>3</td><td>0</td></tr> <tr><td>4</td><td>0</td></tr> <tr><td>5</td><td>0</td></tr> <tr><td>6</td><td>0</td></tr> <tr><td>7</td><td>0</td></tr> <tr><td>8</td><td>0</td></tr> <tr><td>9</td><td>0</td></tr> <tr><td>10</td><td>0</td></tr> <tr><td>11</td><td>0</td></tr> <tr><td>12</td><td>0</td></tr> <tr><td>13</td><td>0</td></tr> <tr><td>14</td><td>0</td></tr> <tr><td>15</td><td>5.01</td></tr> <tr><td>16</td><td>0</td></tr> <tr><td>17</td><td>0</td></tr> <tr><td>18</td><td>0</td></tr> <tr><td>19</td><td>0</td></tr> <tr><td>20</td><td>0</td></tr> <tr><td>21</td><td>0</td></tr> <tr><td>22</td><td>0</td></tr> <tr><td>23</td><td>0</td></tr> <tr><td>24</td><td>0</td></tr> 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A

IC64

No.	Voltage (V)
1	0.3
2	-
3	-8.1
4	-8.1
5	-
6	-8.1
7	-8.1
8	-8.1
9	7.8
10	7.8
11	7.9
12	-8.09
13	0
14	0
15	0
16	7.93

IC71

No.	Voltage (V)
1	7.92
2	2.47
3	3.72
4	0
5	1.23
6	2.47
7	0
8	4.98

IC700

No.	Voltage (V)
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	-15.24
9	0
10	0
11	0
12	7.92
13	0
14	0
15	0
16	14.89

B

IC72

No.	Voltage (V)
1	0
2	0
3	0
4	-15.24
5	0
6	0
7	0
8	14.9

IC65

No.	Voltage (V)
1	4.29
2	0
3	0
4	-8.1
5	0
6	0
7	0
8	4.98

IC74

No.	Voltage (V)
1	0
2	0
3	0
4	-15.24
5	0
6	0
7	0
8	14.89

IC703

No.	Voltage (V)
1	0
2	0
3	0
4	-15.24
5	0
6	0
7	0
8	14.9

C

IC66

No.	Voltage (V)
1	-15.24
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	5
16	0
17	0
18	0
19	0
20	0
21	0
22	0
23	0
24	0
25	0
26	0
27	0
28	14.91

IC76

No.	Voltage (V)
1	1.2 to 2
2	0
3	1.2 to 2
4	0
5	0
6	0
7	0
8	1 to 2
9	0
10	0
11	0
12	0
13	0
14	4.96

IC704

No.	Voltage (V)
1	0
2	0
3	0
4	-15.24
5	0
6	0
7	0
8	14.9

D

IC78

No.	Voltage (V)
1	5.01
2	0
3	4.96
4	-
5	-
6	4.96
7	0
8	0
9	0.3
10	0
11	4.96
12	-
13	-
14	4.96
15	0
16	4.96

E

IC67

No.	Voltage (V)
1	0
2	0
3	0
4	-15.26
5	0
6	0
7	0
8	14.92

F

I DSP ASSY

IC108

No.	Voltage (V)	No.	Voltage (V)	No.	Voltage (V)	No.	Voltage (V)
1	0 to 5.06	21	0 to 5.06	41	0 to 5.06	61	0 to 5.06
2	0 to 5.06	22	0 to 5.06	42	0 to 5.06	62	0 to 5.06
3	0 to 5.06	23	0 to 5.06	43	0 to 5.06	63	0 to 5.06
4	0 to 5.06	24	0 to 5.06	44	0 to 5.06	64	0 to 5.06
5	0 to 5.06	25	0 to 5.06	45	0 to 5.06	65	0 to 5.06
6	0 to 5.06	26	0 to 5.06	46	0 to 5.06	66	0 to 5.06
7	0 to 5.06	27	0 to 5.06	47	0 to 5.06	67	0 to 5.06
8	5.06	28	0 to 5.06	48	0	68	0 to 5.06
9	0 to 5.06	29	5.06	49	0 to 5.06	69	0 to 5.06
10	0 to 5.06	30	5.06	50	0 to 5.06	70	0 to 5.06
11	0 to 5.06	31	0	51	0 to 5.06	71	0
12	0 to 5.06	32	0 to 5.06	52	5.06	72	0 to 5.06
13	0 to 5.06	33	0	53	0 to 5.06	73	0 to 5.06
14	0 to 5.06	34	0 to 5.06	54	0 to 5.06	74	0 to 5.06
15	0 to 5.06	35	0 to 5.06	55	0 to 5.06	75	0 to 5.06
16	0 to 5.06	36	0 to 5.06	56	0 to 5.06	76	0 to 5.06
17	0 to 5.06	37	0 to 5.06	57	0 to 5.06	77	0 to 5.06
18	0 to 5.06	38	0 to 5.06	58	0 to 5.06	78	0 to 5.06
19	0 to 5.06	39	0 to 5.06	59	0 to 5.06	79	0 to 5.06
20	0	40	0 to 5.06	60	0 to 5.06	80	0 to 5.06

IC119

No.	Voltage (V)	No.	Voltage (V)	No.	Voltage (V)	No.	Voltage (V)
1	3.45	26	0 to 3.45	51	0 to 3.45	76	0 to 3.45
2	0	27	0 to 3.45	52	0 to 3.45	77	0 to 3.45
3	3.45	28	0	53	0 to 3.45	78	0 to 3.45
4	0 to 3.45	29	0 to 3.45	54	0 to 3.45	79	3.45
5	0	30	0	55	3.45	80	0
6	0 to 3.45	31	3.45	56	0	81	0 to 3.45
7	0	32	0 to 3.45	57	0 to 3.45	82	0 to 3.45
8	3.45	33	0	58	0 to 3.45	83	0 to 3.45
9	0	34	3.45	59	0 to 3.45	84	0 to 3.45
10	2.5	35	3.45	60	0 to 3.45	85	0
11	3.45	36	0	61	3.45	86	0
12	0	37	3.45	62	0	87	3.45
13	0	38	0	63	3.45	88	0
14	0 to 3.45	39	0 to 3.45	64	0	89	3.45
15	3.45	40	0 to 3.45	65	0	90	0
16	0	41	0 to 3.45	66	3.45	91	0
17	0	42	3.45	67	0	92	3.45
18	0	43	0	68	0	93	0
19	0	44	0	69	0	94	0
20	0 to 3.45	45	0 to 3.45	70	0	95	0
21	3.45	46	0 to 3.45	71	3.45	96	0
22	0	47	0 to 3.45	72	0	97	0
23	5	48	3.45	73	0	98	1.7
24	0 to 3.45	49	0	74	0	99	1.7
25	0 to 3.45	50	0 to 3.45	75	0 to 3.45	100	3.45

IC101

No.	Voltage (V)
1	0
2	0
3	0
4	-15.13
5	15.12
6	0
7	0
8	14.93

IC109

No.	Voltage (V)
1	2.5
2	1.5
3	1.51
4	1.68
5	2.54
6	0
7	0
8	0
9	4.18
10	4.18
11	4.18
12	3.04
13	0
14	0
15	2.33
16	5.04

IC111

No.	Voltage (V)
1	5.05
2	0 to 5.05
3	0 to 5.05
4	5.05
5	0 to 5.05
6	0
7	0
8	0
9	0
10	5.05
11	0
12	0
13	5.05
14	5.05

IC113

No.	Voltage (V)
1	3.45
2	0
3	0
4	0
5	0
6	3.45
7	3.45
8	0
9	3.45
10	3.45
11	3.45
12	3.45
13	3.45
14	3.45
15	0
16	3.45
17	3.45
18	3.45
19	3.45
20	3.45
21	3.45
22	3.45
23	3.45
24	0
25	0
26	0
27	0
28	0

IC114

No.	Voltage (V)
1	1.72
2	2.52
3	1.72
4	2.52
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	5.04

IC115

No.	Voltage (V)
1	-15
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0.5
14	0
15	5
16	0.6
17	0
18	0
19	0
20	0
21	0
22	0
23	0
24	0
25	0
26	0
27	0
28	14.96

IC122

No.	Voltage (V)
1	4.96
2	0
3	2.48
4	2.48
5	2.48
6	2.48
7	4.96
8	0
9	0
10	4.96
11	5.06
12	5.06
13	5.06
14	0
15	2.48
16	5.06
17	0
18	0
19	0
20	0
21	5.06
22	0
23	5.06
24	5.06
25	5.06
26	4.06
27	4.06
28	2.48

IC600

No.	Voltage (V)
1	0
2	0
3	5.01
4	5.01
5	5.01
6	0
7	0
8	0
9	4.21
10	0
11	0
12	0
13	0
14	0
15	0
16	5.06

IC102

No.	Voltage (V)
1	0.35
2	0.35
3	0.35
4	-15.12
5	0.35
6	0.35
7	0.35
8	14.92

IC110

No.	Voltage (V)
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	4.2
10	4.2
11	4.2
12	0
13	0
14	0
15	0
16	5.04

IC105

No.	Voltage (V)
1	0.35
2	0.35
3	0.35
4	-15.13
5	0.35
6	0.35
7	0.35
8	14.91

IC106

No.	Voltage (V)
1	0.35
2	0.35
3	0.35
4	-15.13
5	0.35
6	0.35
7	0.35
8	14.91

1 2 3 4

4. PCB CONNECTION DIAGRAM

A

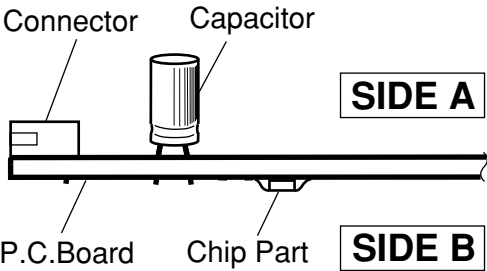
NOTE FOR PCB DIAGRAMS :

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

B

Symbol In PCB Diagrams	Symbol In Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3-terminal regulator

3. The parts mounted on this PCB include all necessary parts for several destinations.
- For further information for respective destinations, be sure to check with the schematic diagram.
4. View point of PCB diagrams.

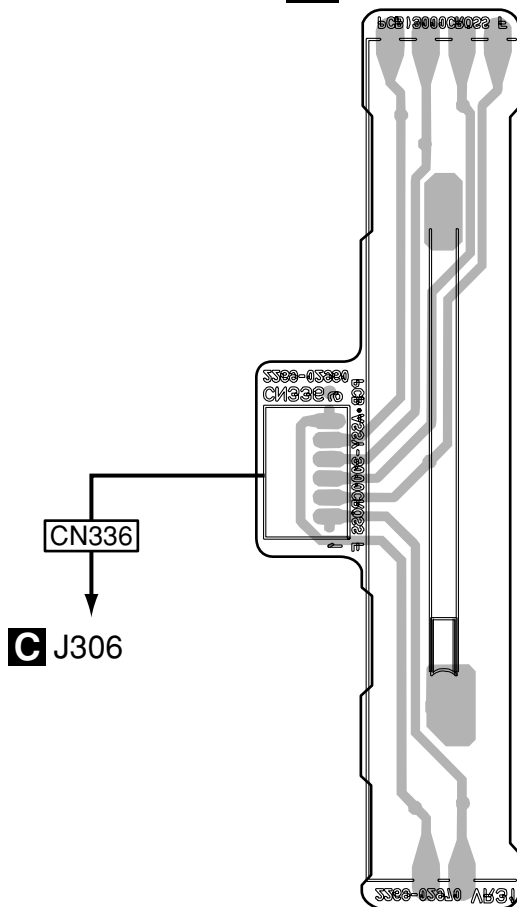


4.1 CF and MAF ASSYS

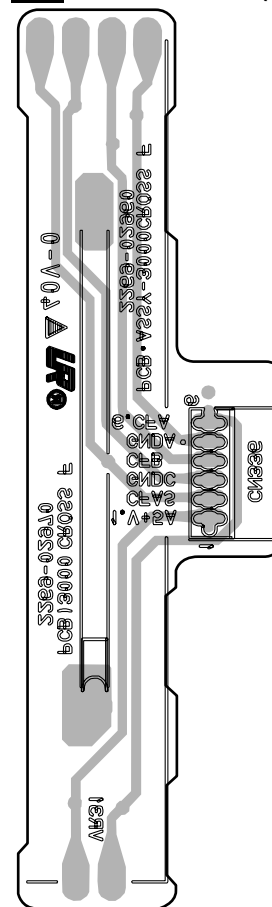
SIDE A

SIDE B

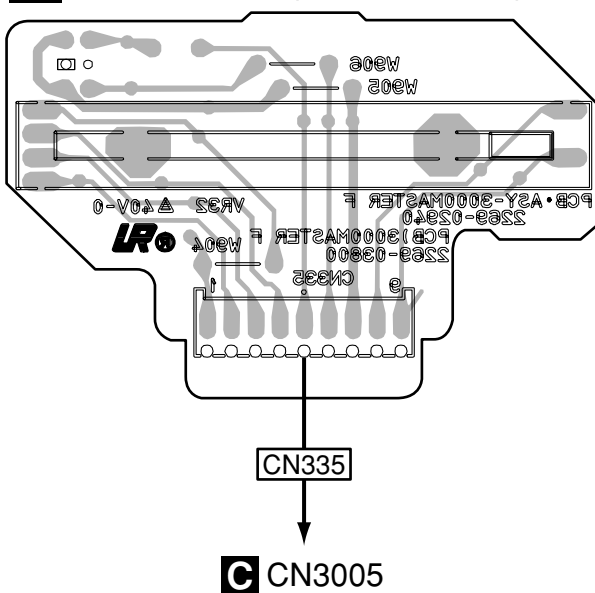
D CF ASSY(226902960)



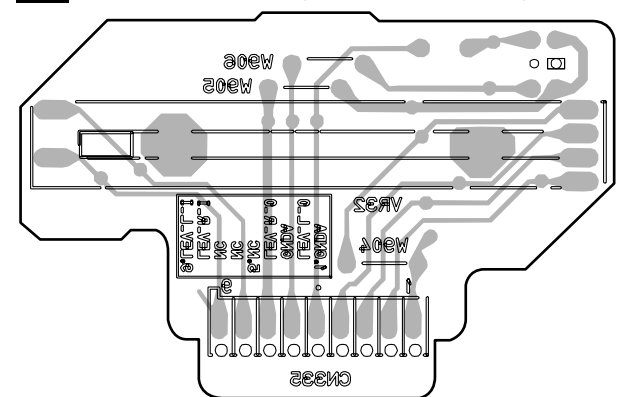
D CF ASSY(226902960)



F MAF ASSY(226902940)



F MAF ASSY(226902940)

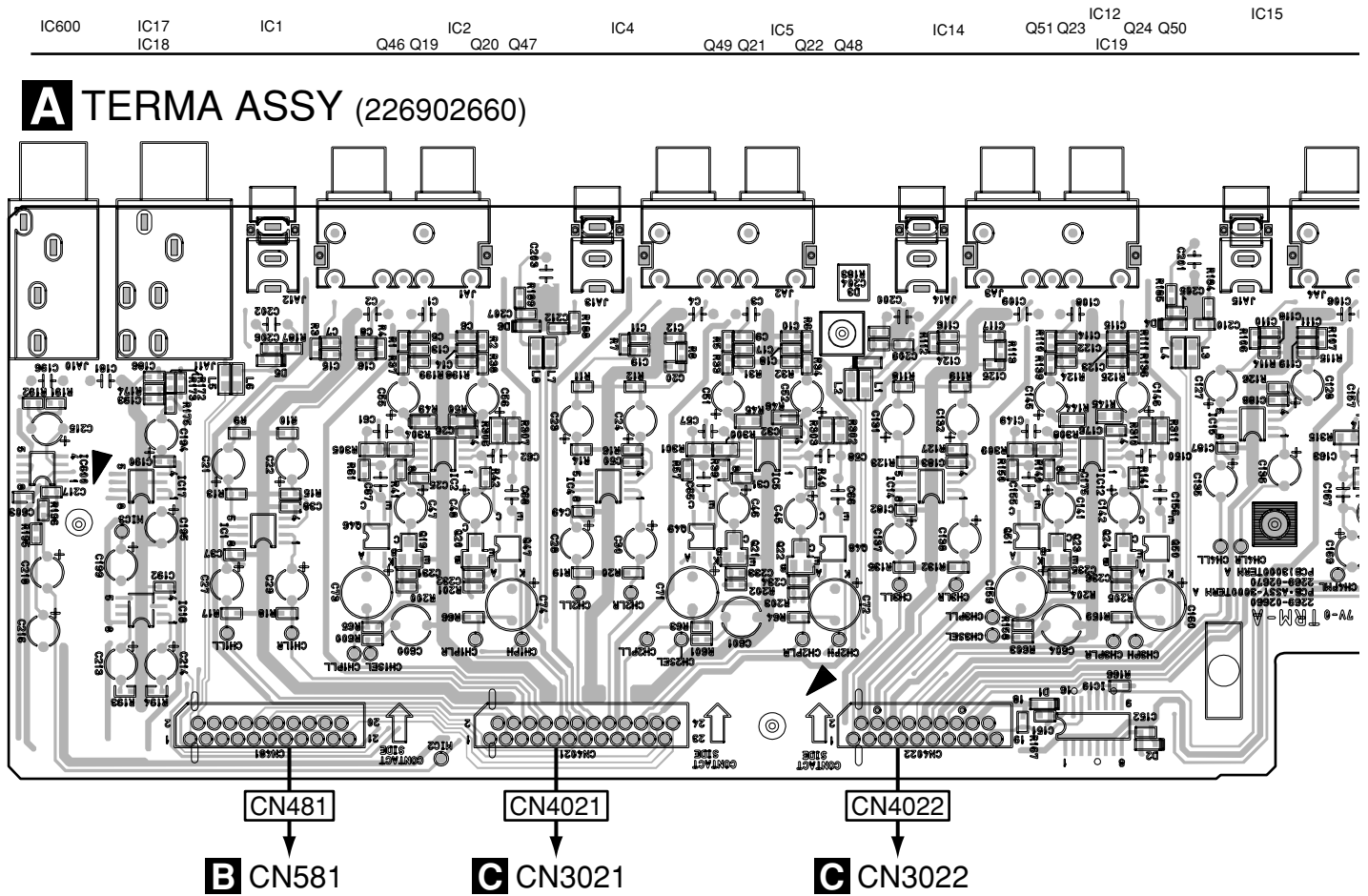


C CN3005

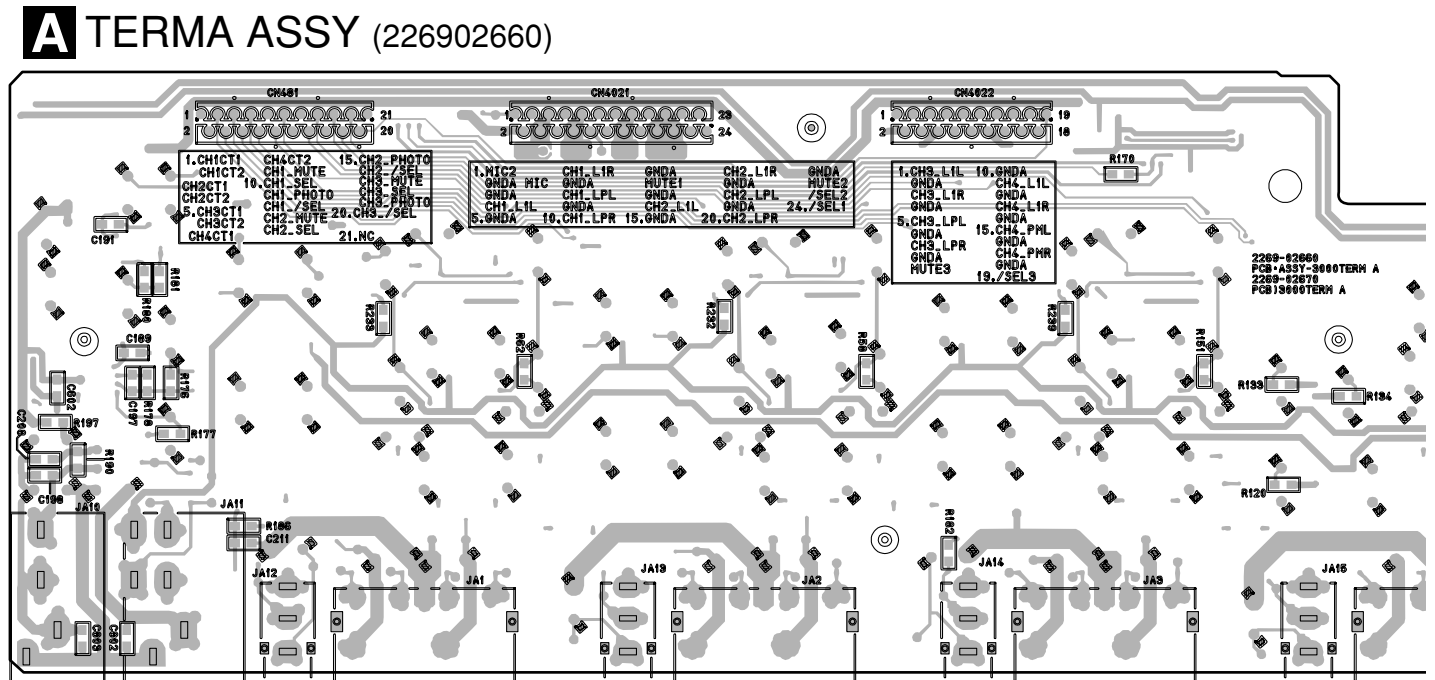
D F

4.2 TERMA ASSY

SIDE A



SIDE B



A

SIDE A

A

B

C

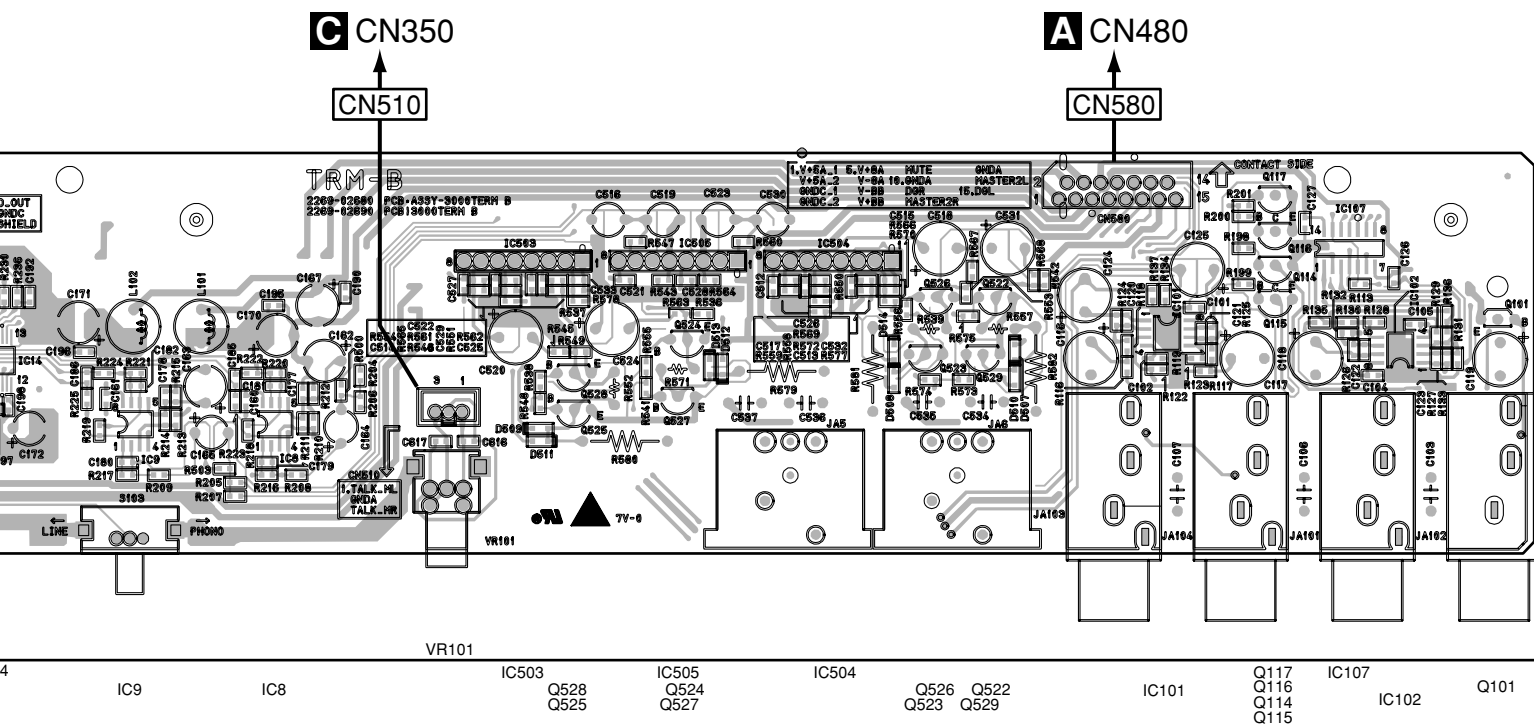
D

E

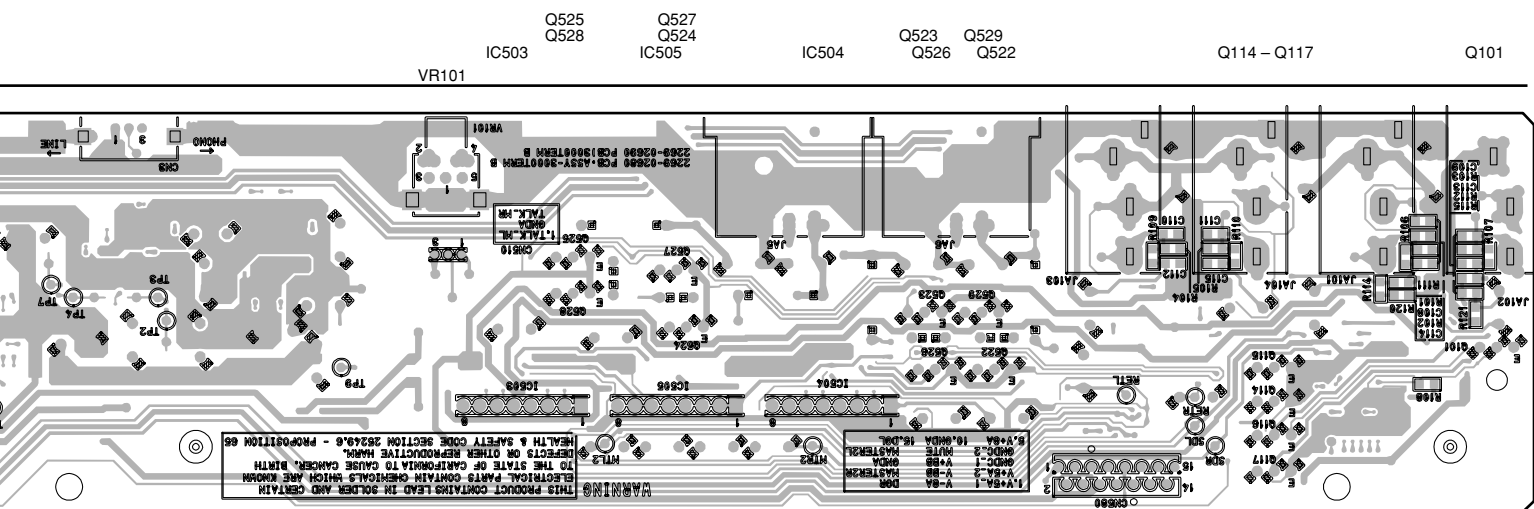
F

B

71

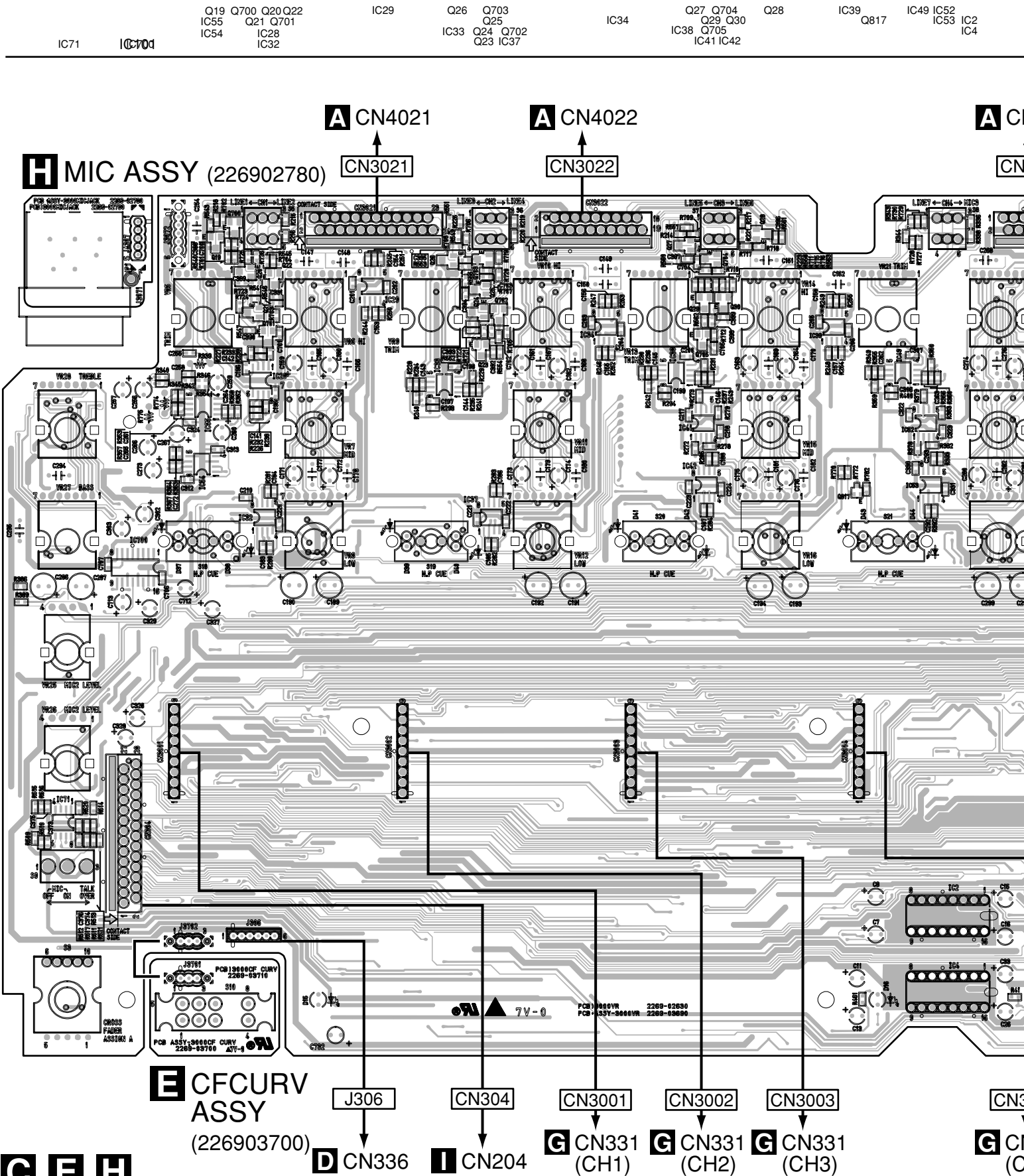


SIDE B



4.4 VR, CFCURV, MIC, EFFECT and HP ASSYS

SIDE A



SIDE A

Q28

IC39
Q817

IC49 IC52
IC53 IC2
IC4

IC50

IC13

IC16

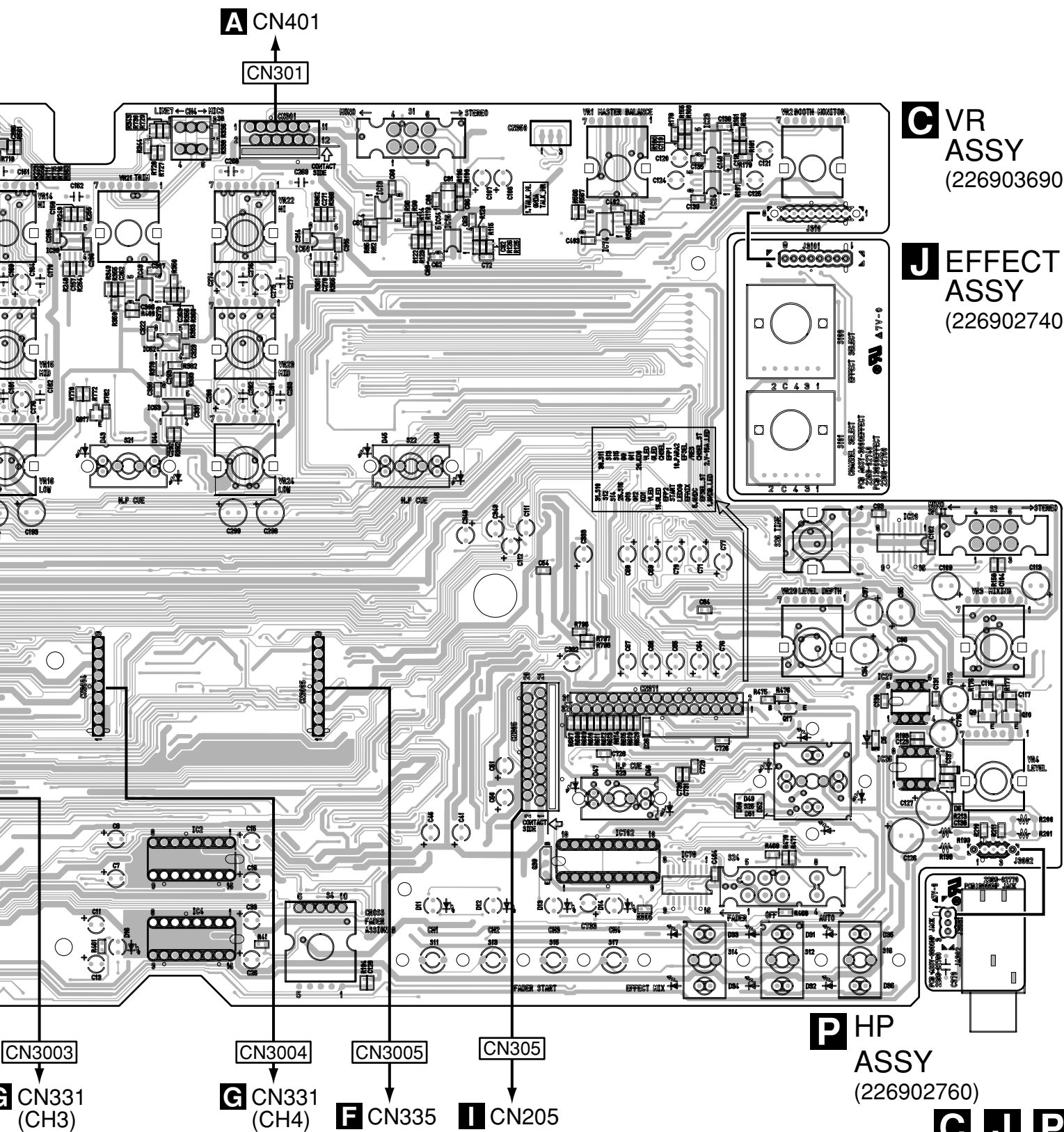
IC74
IC702

IC23
IC24
IC78

Q17

IC20
IC27
IC26

Q9 Q10



SIDE B

IC25 IC27 IC26 IC701 Q802 Q805 IC18 IC100 IC19 Q812 Q810 IC75 Q816 IC79 Q814 IC17 Q809 Q800 IC76 Q806 IC12 IC67 IC11 Q807 IC66 IC21 IC9 IC5 Q2 Q1 Q4 Q3 Q5 IC3 Q6 Q7 Q8 IC4 IC1 IC48 IC47 IC40 IC10 Q31

B CN510

CN350

C VR
ASSY
(226903690)

J EFFECT
ASSY
(226902740)

P HP
ASSY
(226902760)

CN371

I CN262

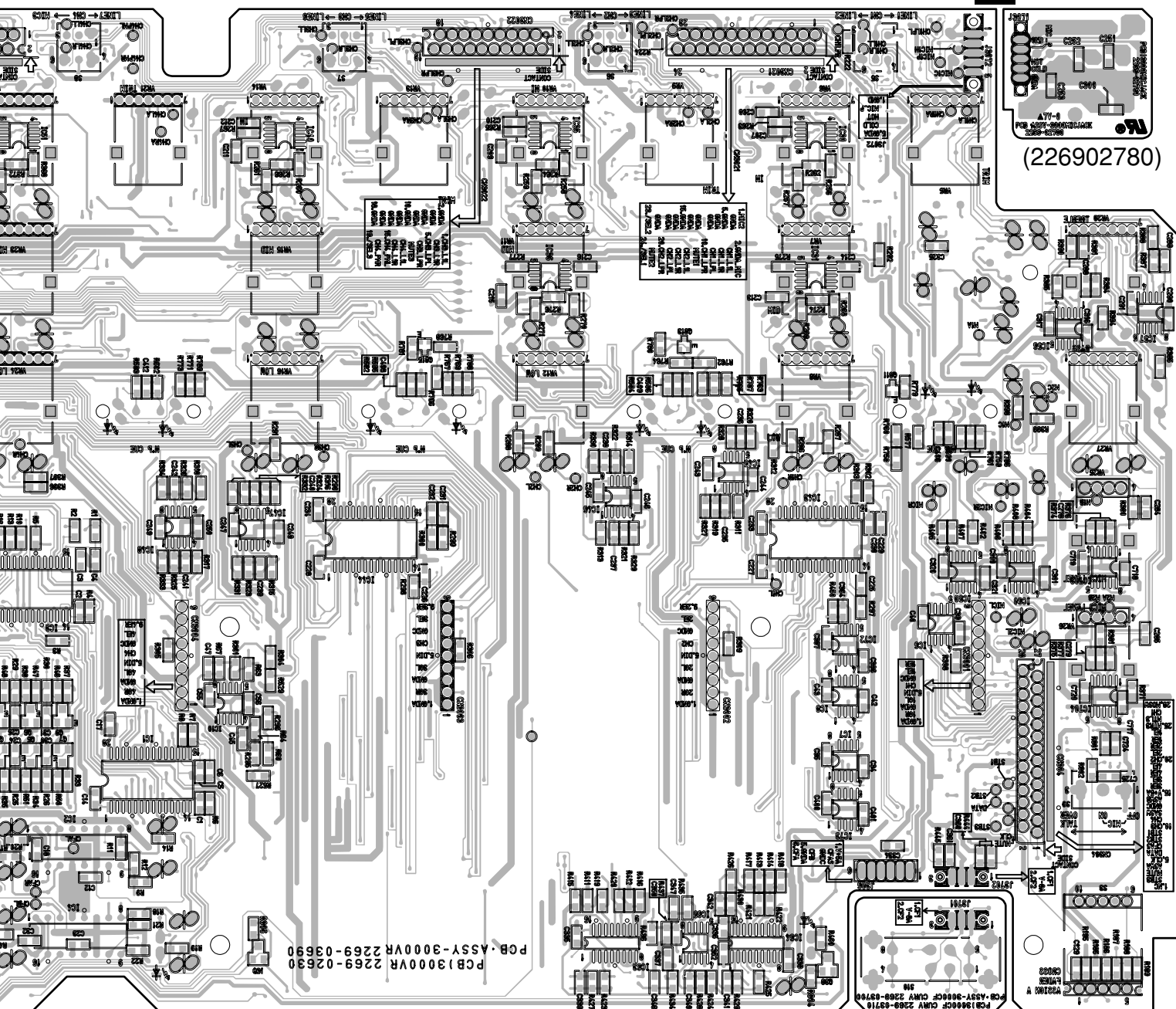
C J P

SIDE B

IC51 IC3 Q8 Q6 Q5 IC2 IC4 IC1 IC48 IC47 IC10 Q31 IC40 IC44 Q815 IC35 IC36 IC46 IC63 Q813 IC65 IC45 IC64 IC30 IC31 IC72 IC43 IC81C7 Q38 IC73 Q811 IC6 IC59 IC60 IC56 IC703 IC704 IC57

H MIC ASSY

(226902780)



E CFCURV
ASSY
(226903700)

C E H

4.5 DSP ASSY

SIDE A

DSP ASSY (226902640)

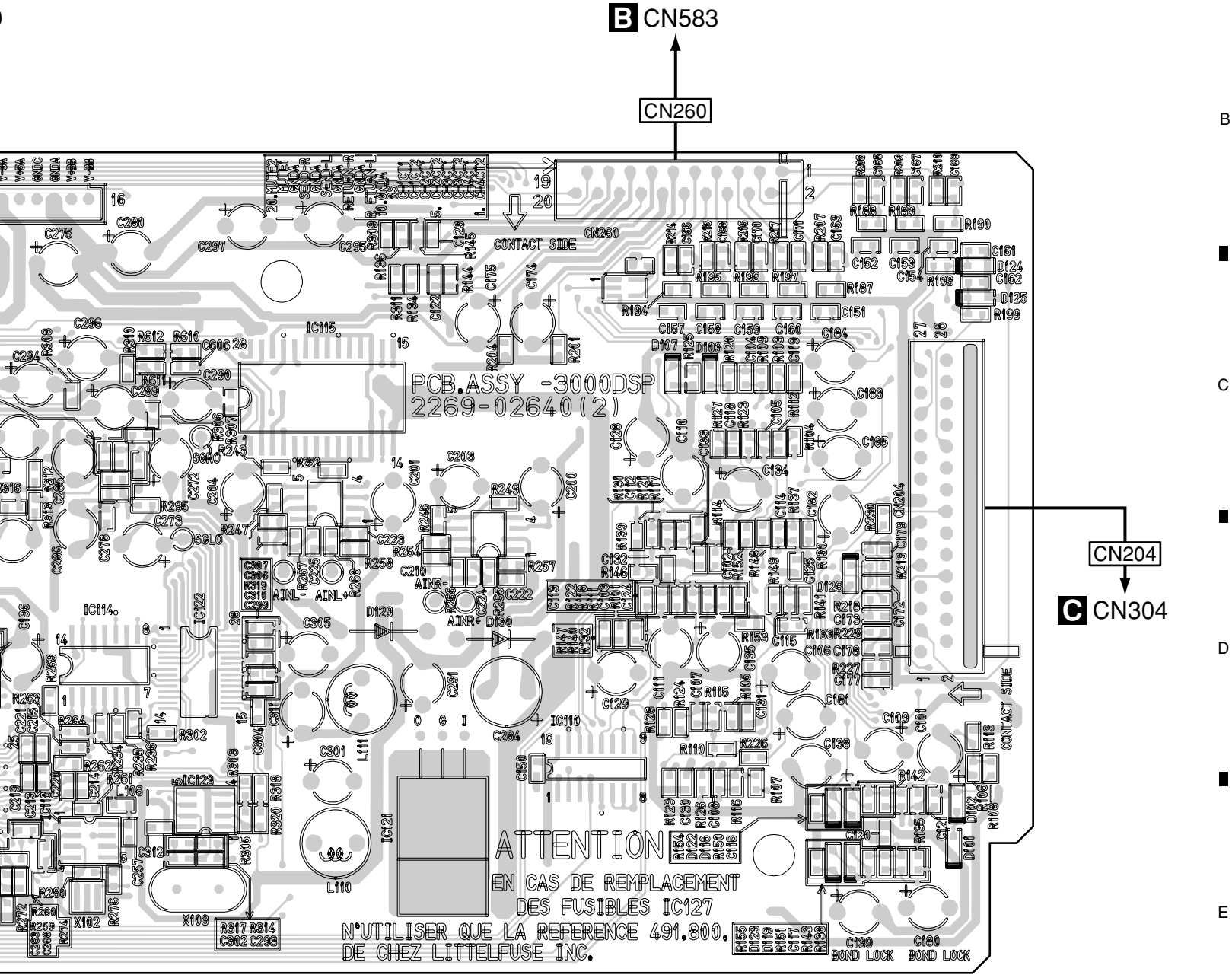
M CN119

CN209

CAUTION
REPLACE WITH SAME TYPE NO.419.800
FOR IC127 MFD. BY LITTELEUSE INC.

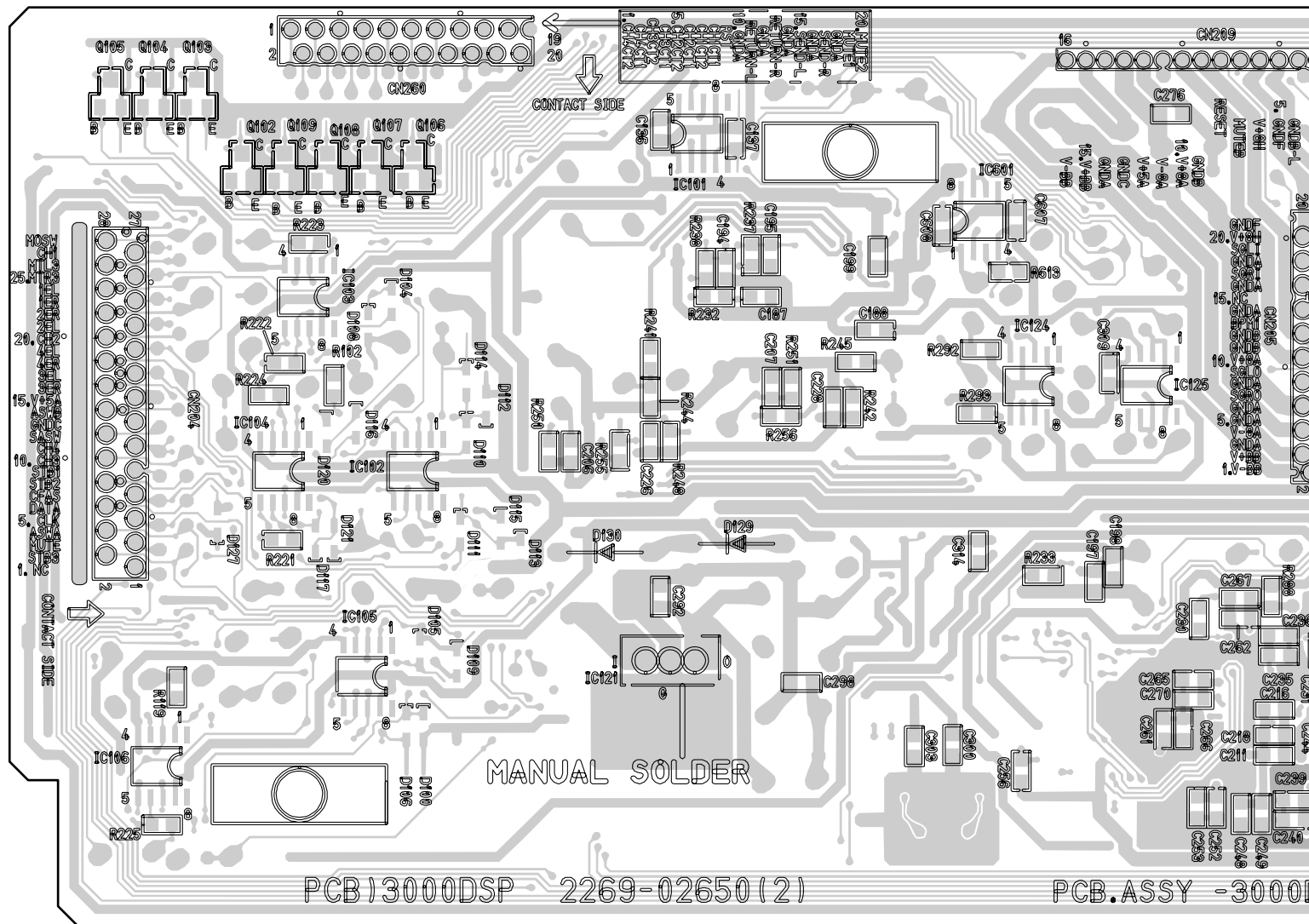
PCB13000DSP 2269-02650(2)

IC108	Q110	Q111	IC127	IC119	IC114	IC122
IC112	IC126		Q112		IC118	IC123
	IC109	IC113	IC120			



SIDE B

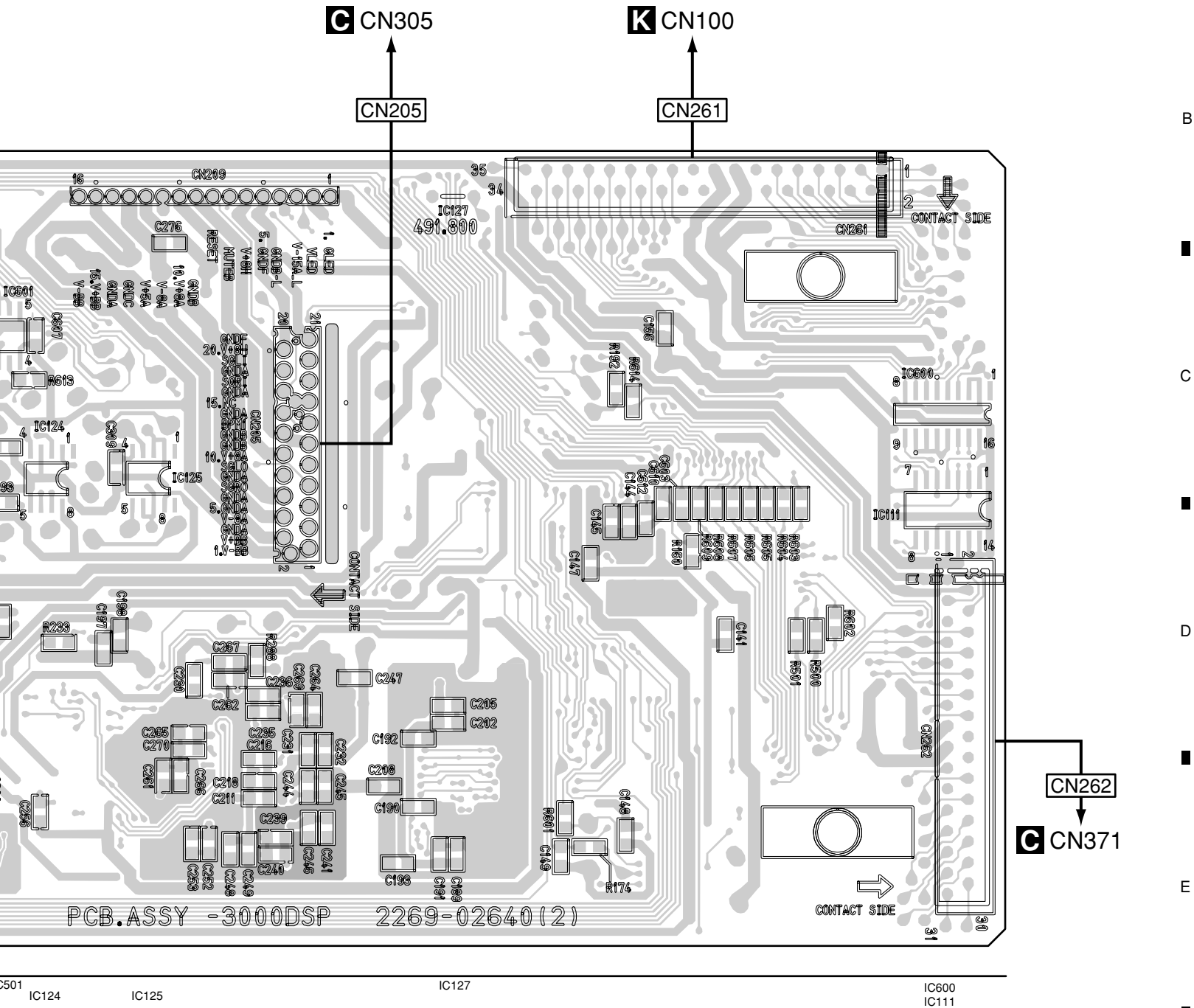
DSP ASSY (226902640)



Q105 Q104 Q103 Q102 Q109 Q108 Q107 Q106
IC106 IC103 IC105 IC102

IC101
IC121

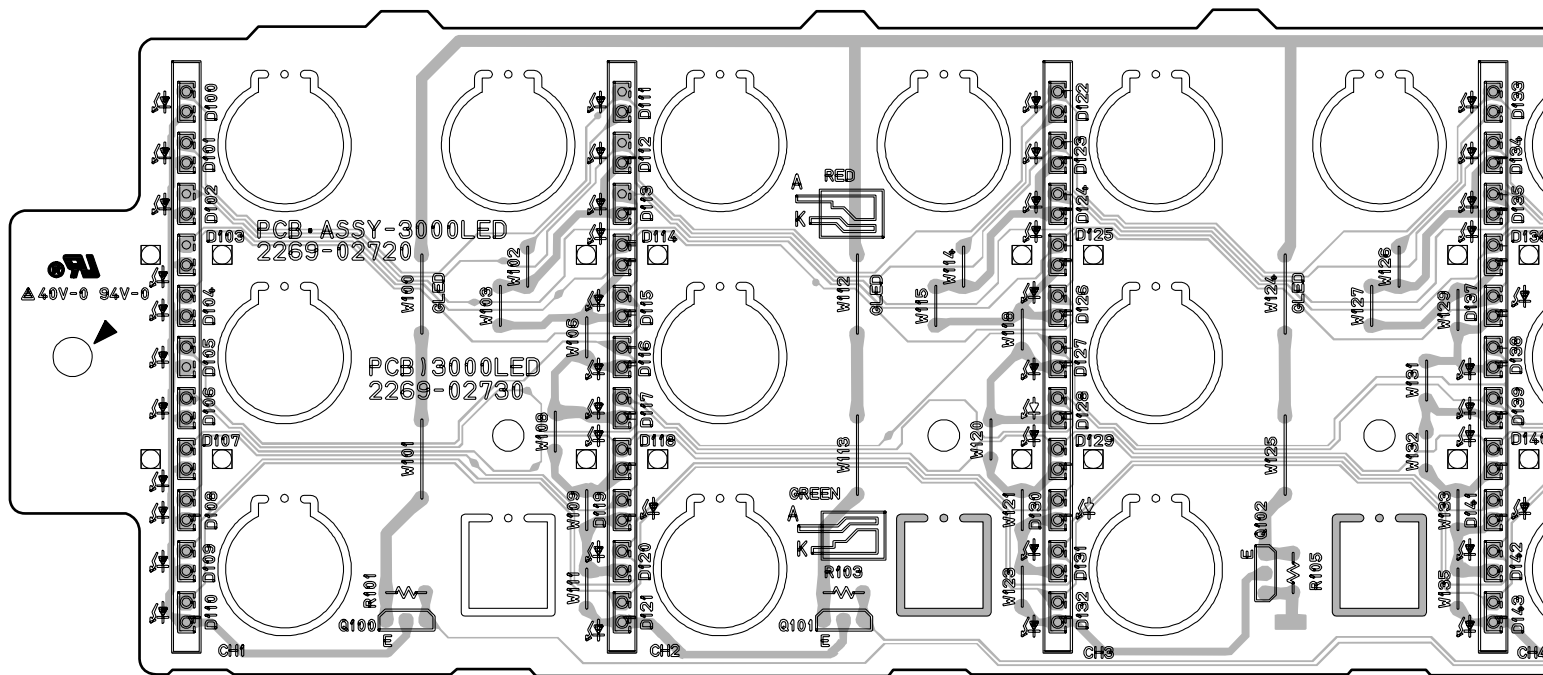
IC501
IC124 IC125



4.6 LED ASSY

SIDE A

K LED ASSY (226902720)



K

SIDE A

A

Q103
Q104

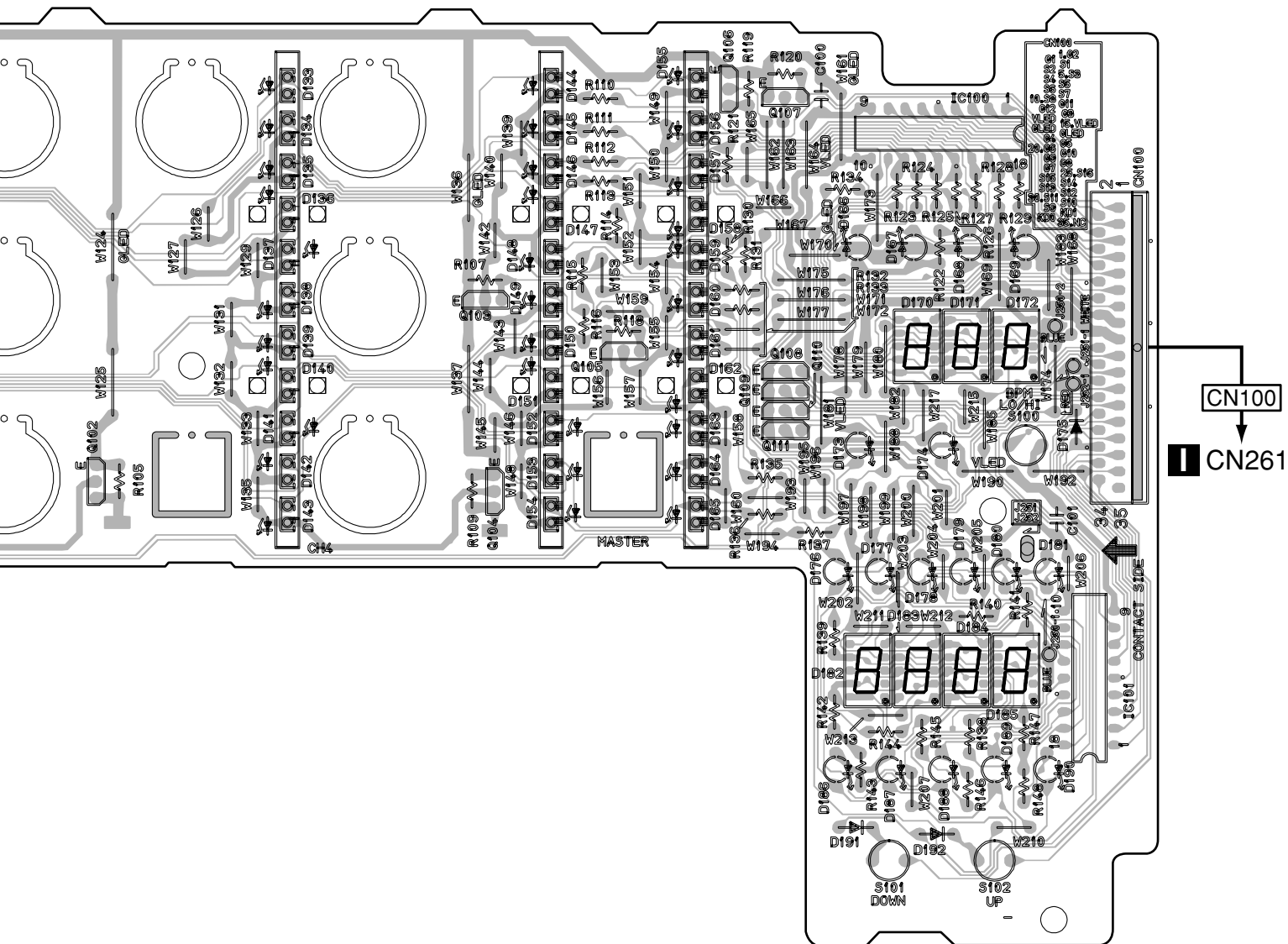
Q105

Q106
Q107
Q111

IC100

IC101

B



C

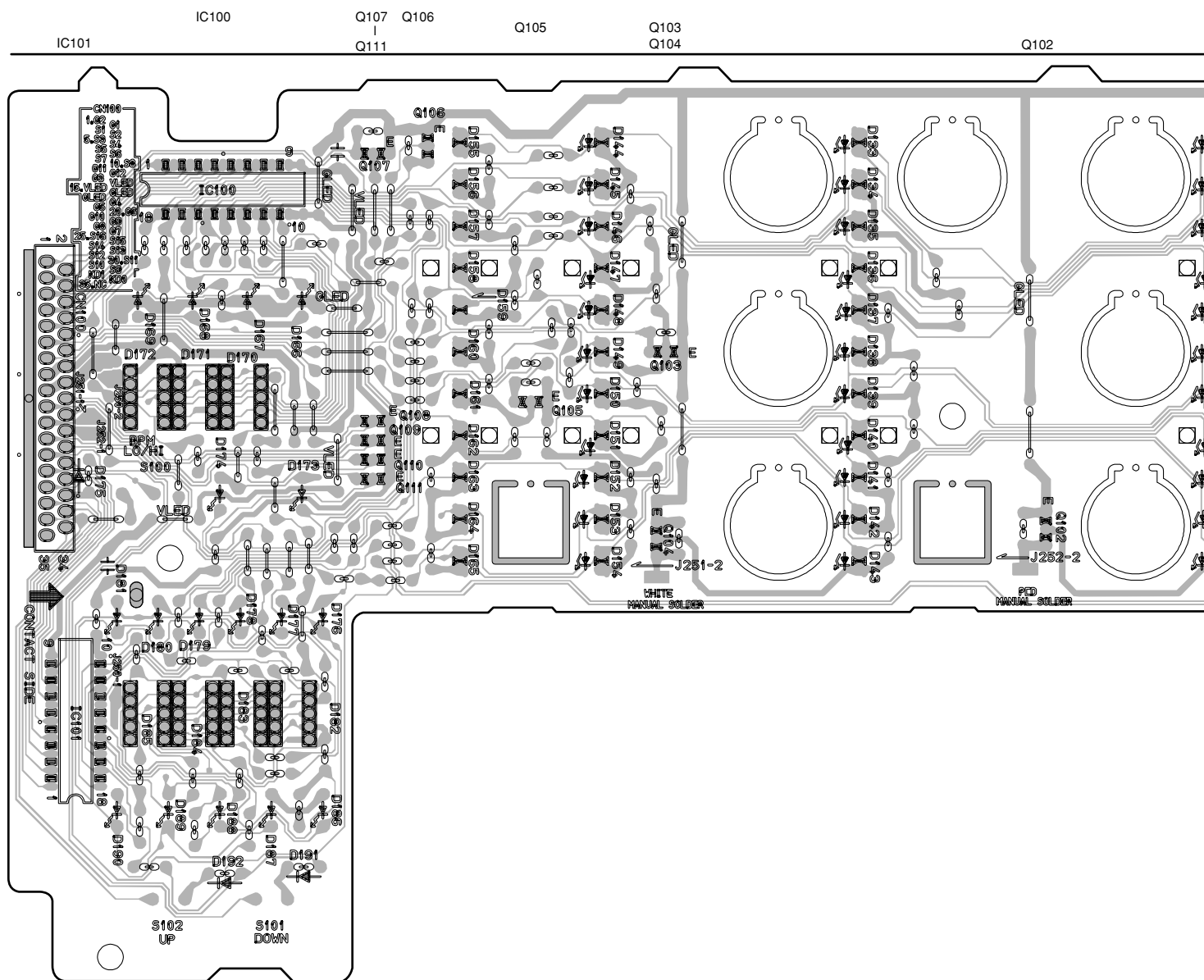
D

E

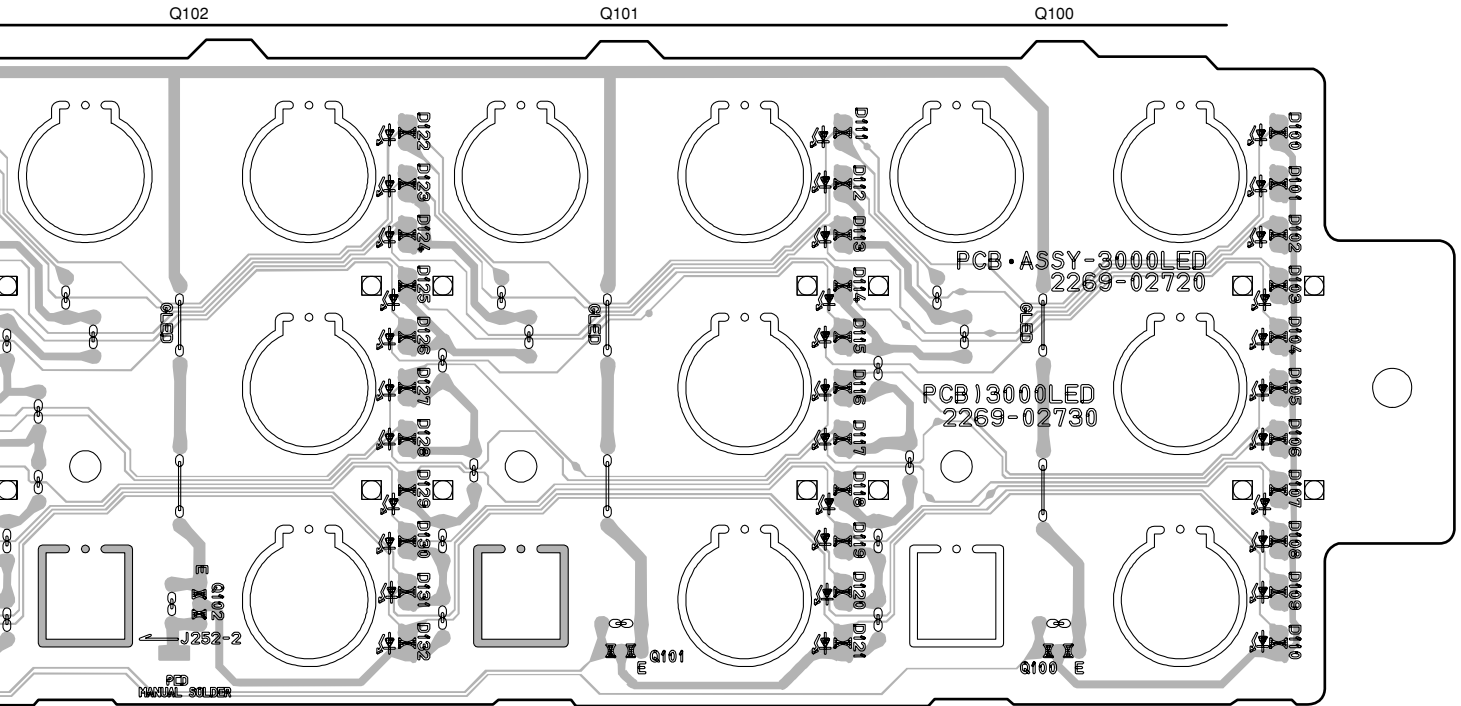
F

SIDE B

K LED ASSY (226902720)

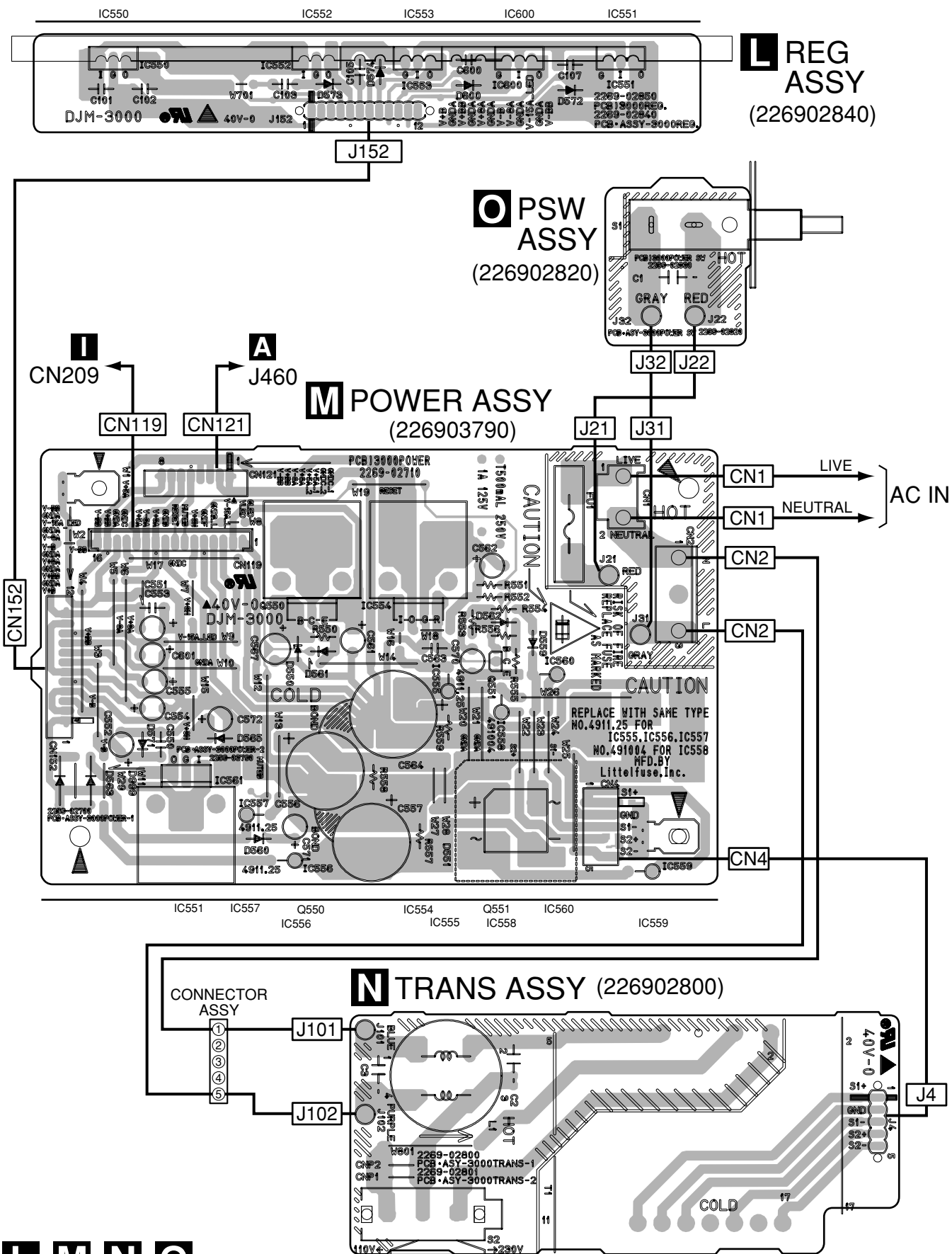


K



4.7 REG, POWER, TRANS and PSW ASSYS

SIDE A



5. PCB PARTS LIST

NOTES: ●Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.

●The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

●When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

560 Ω $\rightarrow$ 56×10^1 $\rightarrow$ 561 RD1/4PU $\begin{bmatrix} 5 & 6 & 1 \end{bmatrix} J$

47k Ω $\rightarrow$ 47×10^3 $\rightarrow$ 473 RD1/4PU $\begin{bmatrix} 4 & 7 & 3 \end{bmatrix} J$

0.5 Ω $\rightarrow$ R50 RN2H $\begin{bmatrix} R & 5 & 0 \end{bmatrix} K$

1 Ω $\rightarrow$ 1R0 RS1P $\begin{bmatrix} 1 & R & 0 \end{bmatrix} K$

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k Ω $\rightarrow$ 562×10^1 $\rightarrow$ 5621 RN1/4PC $\begin{bmatrix} 5 & 6 & 2 & 1 \end{bmatrix} F$

LIST OF WHOLE PCB ASSEMBLIES

Mark	Symbol and Description	DJM-3000/ KUCXCXN	DJM-3000/WYXCXN	DJM-3000/ RLBXCXN
	TERM ASSY	226902660	226902660	226902660
	TERMA ASSY	226902660	226902660	226902660
	TERMB ASSY	226902680	226902680	226902680
NSP	VR ASSY	226100980	226100980	226100980
	VR ASSY	226903690	226903690	226903690
NSP	CFCURV ASSY	226903700	226903700	226903700
NSP	EFFECT ASSY	226902740	226902740	226902740
NSP	MIC ASSY	226902780	226902780	226902780
NSP	HP ASSY	226902760	226902760	226902760
NSP	DSP ASSY	226902640	226902640	226902640
	SUB ASSY	226101022	226101020	226101020
	CF ASSY	226902960	226902960	226902960
	MAF ASSY	226902940	226902940	226902940
	CHF1 ASSY	226902860CH1	226902860CH1	226902860CH1
	CHF2 ASSY	226902860CH2	226902860CH2	226902860CH2
	CHF3 ASSY	226902860CH3	226902860CH3	226902860CH3
	CHF4 ASSY	226902860CH4	226902860CH4	226902860CH4
	LED ASSY	226902720	226902720	226902720
	REG ASSY	226902840	226902840	226902840
	POWER ASSY	226903790	226902700	226902700
	TRANS ASSY	226902800	226902800	226902800
	PSW ASSY	226902820	226902820	226902820

N TRANS ASSY

Mark	Symbol and Description	226902800	226902801
	S2 Voltage Selector	Not used	DSA1026

M POWER ASSY

Although 226902700 and 226903790 are different in part number, they consist of the same components.

Mark No. Description Part No.

A **TERMA ASSY SEMICONDUCTORS**

IC12,IC16,IC17,IC2,IC5 IC600 IC1,IC14,IC15,IC18,IC4 IC502,IC7 IC46-IC51	NJM2068M NJM2068M NJM4580M NJM4580M PC357N1
IC500,IC501 IC19 Q501,Q507,Q508,Q511 Q1,Q19,Q2,Q20-Q24 Q3-Q8	TC74HCU04AF TC9215AF 2SC2878 2SC3326 2SC3326
D1-D6	1SS355

COILS

⚠ L702,L703,L705,L706 L600 L9,L10 L1-L8 (Puls Trans)	922607040 LRCA101J PTL1003 VTL1105
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CAPACITORS

C198,C208 C197 C10,C102,C103,C11 C110-C119,C12,C120-C125 C13-C18,C186,C19,C193	CCSQCH101J50 CCSQCH220J50 CCSRCH101J50 CCSRCH101J50 CCSRCH101J50
C20,C5-C9,C92-C97 C217 C605,C606 C195 C127,C128,C131,C132	CCSRCH101J50 CCSRCH220J50 CEAT471M16 CEJQ100M16 CEJQ100M50
C135-C138,C145,C146 C157,C158,C169,C170,C194 C199,C21,C213-C216,C218 C22-C24,C27-C30,C509 C51,C518,C52,C523,C532	CEJQ100M50 CEJQ100M50 CEJQ100M50 CEJQ100M50 CEJQ100M50
C55,C56,C83-C90 C701 C141,C142,C153,C154 C45-C48 C159,C160,C71-C74	CEJQ100M50 CEJQ101M10 CEJQ220M25 CEJQ220M25 CEJQ330M50
C520,C527 C600,C601,C604 C508,C522,C534,C536 C75,C76,C79,C80 C1,C104-C109,C181,C196	CEJQ470M16 CEJQNP330M25 CEJQNP33M50 CEJQNP33M50 CKCYF103Z50

C2-C4 C177,C178,C200-C203,C91 C189,C191,C211,C602 C802,C803 C519,C526,C529,C530,C700	CKCYF103Z50 CKCYF473Z50 CKSQYB103K50 CKSQYB103K50 CKSQYB104K25
C151,C152,C175,C176 C182-C185,C187,C188,C190 C192,C204-C207,C209,C210 C212,C25,C26,C31,C32 C37,C38,C49,C50,C506	CKSRYB103K50 CKSRYB103K50 CKSRYB103K50 CKSRYB103K50 CKSRYB103K50

C514,C603,C69,C70 C98-C101 C57,C58,C61,C62,C149 C150,C163,C164	CKSRYB103K50 CQMA152J50 CQMA222J50 CQMA222J50
---	--

Mark No. Description Part No.

C65-C68,C155,C156,C167,C168

CQMA681J50

RESISTORS

R190 R180,R181 R120,R177,R197 R176 R151,R178,R58,R62	RN1/10SE1000D RN1/10SE1001D RN1/10SE1003D RN1/10SE1201D RN1/10SE1203D
R144,R145,R156,R157 R45,R46,R49,R50 R300-R315 R1,R104,R105,R108-R111 R173,R2,R5,R6	RN1/10SE4703D RN1/10SE4703D RN1/10SE7503D RN1/16SE1000D RN1/16SE1000D
R96-R99 R136,R139,R148,R149 R33,R34,R37,R38 R123,R126,R127,R13-R16 R507,R509,R542,R553	RN1/16SE1000D RN1/16SE1001D RN1/16SE1001D RN1/16SE1003D RN1/16SE1003D
R79-R82,R92-R95 R195 R150,R162,R163,R196,R57 R61 R10,R11,R114,R115	RN1/16SE1003D RN1/16SE1201D RN1/16SE1203D RN1/16SE1203D RN1/16SE1302D
R118,R119,R12,R9 R106,R107,R112,R113,R174 R191,R3,R4,R546,R548 R7,R71,R72,R8 R164,R165,R193,R194	RN1/16SE1302D RN1/16SE1502D RN1/16SE1502D RN1/16SE1502D RN1/16SE2002D
R140,R141,R152,R153,R175 R192,R39-R42 R516,R535,R545,R549 R83-R90 R539,R561,R75,R76	RN1/16SE3301D RN1/16SE3301D RN1/16SE4300D RN1/16SE4300D RN1/16SE4302D
R116,R117,R124,R125 R198,R199,R31,R32 R523,R524,R526,R528,R705 R708,R710,R711 R170	RN1/16SE5602D RN1/16SE5602D RS1/10S0R0J RS1/10S0R0J RS1/10S102J
R703,R704 R232,R233,R239 R182,R186 R168,R169 R100,R101,R67,R68	RS1/10S122J RS1/10S152J RS1/10S471J RS1/10S750J RS1/10S912J
VR201 (10kΩ) Other Resistors	DCS1056 RS1/16S###J

OTHERS

J460 JA10 JA11 CN1-CN4,CN9 4P PIN JACK CN482	CONNECTOR ASSY YKB CONNECTOR YKB CONNECTOR 4P PIN JACK CONNECTOR	226404700 950001790 950001800 AKB7015 B3B-XH-A
JA8 CN401 CN480 CN4022 CN481	2P PIN JACK (ORG) FFC CONNECTOR 12P FFC CONNECTOR 15P FFC CONNECTOR 19P FFC CONNECTOR 21P	DKB1027 HLEM12S-1 HLEM15S-1 HLEM19S-1 HLEM21S-1
CN4021 JA12-JA15 JA7	FFC CONNECTOR 24P REMOTE CON. JACK 2P PIN JACK	HLEM24S-1 RKN1004 VKB1031

Mark No. Description**Part No.****B TERMB ASSY
SEMICONDUCTORS**

IC14	AK5351-VF
IC107	BU4066BCF
IC12,IC16,IC17,IC2,IC5	NJM2068M
IC600	NJM2068M
IC8,IC9	NJM2100M
IC503-IC505	NJM4556AL
IC101,IC102	NJM4558M
IC1,IC14,IC15,IC18,IC4	NJM4580M
IC502,IC7	NJM4580M
IC506,IC507	TC74HC123AF
IC500,IC501	TC74HC14AF
IC12,IC13	TC74HC163AF
IC502	TC74HC86AF
IC500,IC501	TC74HCU04AF
IC10	TC7WU04F
IC19	TC9215AF
IC15	TC9271F
Q500	2SC1740S
Q114-Q117,Q501,Q507,Q508	2SC2878
Q511,Q522-Q529	2SC2878
Q1,Q19,Q2,Q20-Q24	2SC3326
Q3-Q8	2SC3326
Q506-Q509,Q511-Q513,Q515	DTA114EK
Q520	DTA114EK
Q101	DTA124ES
Q501-Q505,Q510,Q514	DTC114EK
Q516-Q519,Q521	DTC114EK
D504	1SS133
D1-D5,D500-D503	1SS355
D505-D517,D6	1SS355

SWITCH

S101	945001240
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COILS

L101,L102,L600,L600	LRCA101J
L1-L8 (Chip Beads BK2125LM252)	VTL1105

CAPACITORS

C108-C115,C198,C208	CCSQCH101J50
C197	CCSQCH220J50
C10,C102,C103,C11	CCSRCH101J50
C110-C119,C12,C120-C125	CCSRCH101J50
C13-C18,C186,C19,C193	CCSRCH101J50
C20,C5-C9,C92-C97	CCSRCH101J50
C173,C174	CCSRCH150J50
C514,C515,C517,C522	CCSRCH151J50
C525,C526,C532,C533	CCSRCH151J50
C217	CCSRCH220J50
C120-C123,C179-C182	CCSRCH270J50
C605,C606	CEAT471M16
C164-C166,C168,C169,C172	CEJQ100M16
C195,C602,C604,C608-C611	CEJQ100M16
C116-C119,C124,C125	CEJQ100M50
C127,C128,C131,C132	CEJQ100M50
C135-C138,C145,C146	CEJQ100M50
C157,C158,C169,C170,C194	CEJQ100M50
C199,C21,C213-C216,C218	CEJQ100M50
C22-C24,C27-C30,C509	CEJQ100M50

Mark No. Description**Part No.**

C51,C518,C52,C523,C532	CEJQ100M50
C55,C56,C83-C90	CEJQ100M50
C167,C170,C171,C601,C701	CEJQ101M10
C518,C520,C524,C531	CEJQ101M25
C501,C503,C511	CEJQ1R0M50
C141,C142,C153,C154	CEJQ220M25
C45-C48	CEJQ220M25
C162,C163	CEJQ221M6R3
C159,C160,C71-C74	CEJQ330M50
C520,C527	CEJQ470M16
C600,C601,C604	CEJQNP330M25
C508,C516,C519,C522,C523	CEJQNP33M50
C530,C534,C536,C75,C76	CEJQNP33M50
C79,C80	CEJQNP33M50
C103,C106	CGCYX104K25
C1,C104-C107,C107-C109	CKCYF103Z50
C181,C196,C2-C4	CKCYF103Z50
C534-C537	CKCYF103Z50
C177,C178,C200-C203,C91	CKCYF473Z50
C189,C191,C211,C602,C618	CKSQYB103K50
C620,C621,C802,C803	CKSQYB103K50
C502,C519,C526,C529,C530	CKSQYB104K25
C700	CKSQYB104K25
C613,C614	CKSQYB222K50
C606,C607,C612,C616,C617	CKSRYB102K50
C101,C102,C104,C105	CKSRYB103K50
C126,C127,C151,C152	CKSRYB103K50
C160,C161,C175,C176	CKSRYB103K50
C182-C185,C187,C188,C190	CKSRYB103K50
C192,C192,C204-C207	CKSRYB103K50
C209,C210,C212,C25,C26	CKSRYB103K50
C31,C32,C37,C38	CKSRYB103K50
C49,C50,C504,C506,C506	CKSRYB103K50
C508,C512-C514,C521	CKSRYB103K50
C527-C529,C603,C619	CKSRYB103K50
C69,C70	CKSRYB103K50
C175,C177,C178,C183,C184	CKSRYB104K25
C187,C190,C191,C193-C198	CKSRYB104K25
C509,C510,C600,C603,C605	CKSRYB104K25
C185,C186	CKSRYB152K50
C615	CKSRYB222K50

RESISTORS

R579-R582	RD1/2PM101J
R539,R552,R557,R571	RD1/4PU680J
R106,R107,R109,R110,R190	RN1/10SE1000D
R180,R181	RN1/10SE1001D
R104,R105,R120,R120,R121	RN1/10SE1003D
R177,R197	RN1/10SE1003D
R176	RN1/10SE1201D
R151,R178,R58,R62	RN1/10SE1203D
R111,R112,R114,R115	RN1/10SE4300D
R101-R103	RN1/10SE4702D
R144,R145,R156,R157	RN1/10SE4703D
R45,R46,R49,R50	RN1/10SE4703D
R300-R315	RN1/10SE7503D
R1,R104,R105,R108-R111	RN1/16SE1000D
R173,R2,R5,R6	RN1/16SE1000D
R96-R99	RN1/16SE1000D

Mark No. Description**Part No.**

R136,R139,R148,R149
R33,R34,R37,R38
R208,R209,R216-R221
R123,R126,R127,R13,R134
R137,R14-R16,R507,R509

RN1/16SE1001D
RN1/16SE1001D
RN1/16SE1002D
RN1/16SE1003D
RN1/16SE1003D

R536,R542,R542,R549,R553
R553,R79-R82,R92-R95
R135,R136
R195
R150,R162,R163,R196,R57

RN1/16SE1003D
RN1/16SE1003D
RN1/16SE1101D
RN1/16SE1201D
RN1/16SE1203D

R61
R10,R11,R114,R115
R118,R119,R12,R9
R106,R107,R112,R113
R126-R129,R132,R133,R174

RN1/16SE1203D
RN1/16SE1302D
RN1/16SE1302D
RN1/16SE1502D
RN1/16SE1502D

R191,R3,R4,R546-R548
R560,R7,R71,R72,R8
R122,R123
R500,R503
R164,R165,R193,R194

RN1/16SE1502D
RN1/16SE1502D
RN1/16SE1802D
RN1/16SE2001D
RN1/16SE2002D

R537,R546,R550,R551,R558
R565,R570,R572
R204,R205
R545,R563,R567,R568
R222-R225

RN1/16SE2201D
RN1/16SE2201D
RN1/16SE2202D
RN1/16SE2700D
RN1/16SE3300D

R140,R141,R152,R153,R175
R192,R39-R42
R118,R119
R516,R535,R545,R549
R83-R90

RN1/16SE3301D
RN1/16SE3301D
RN1/16SE3302D
RN1/16SE4300D
RN1/16SE4300D

R539,R543,R561,R564
R75,R76
R554,R559,R561,R562,R566
R569,R577,R578
R116,R117,R124,R125

RN1/16SE4302D
RN1/16SE4302D
RN1/16SE5101D
RN1/16SE5101D
RN1/16SE5602D

R198,R199,R31,R32
R130,R131
R124,R125
R523,R524,R526,R528,R705
R708,R710,R711

RN1/16SE5602D
RN1/16SE6201D
RN1/16SE7502D
RS1/10S0R0J
RS1/10S0R0J

R170,R711,R713,R714
R513,R526,R534
R703,R704
R232,R233,R239
R182,R186

RS1/10S102J
RS1/10S104J
RS1/10S122J
RS1/10S152J
RS1/10S471J

R108,R512,R516
R168,R169
R701,R703
R100,R101,R67,R68
VR101,VR201 (10k-B)

RS1/10S473J
RS1/10S750J
RS1/10S823J
RS1/10S912J
DCS1056

Other Resistors

RS1/16S###J

OTHERS

JA5 NC3MAH-C
J500 PCB TERMINAL F4052
460 8P CABLE HOLDER
X1 LP-3.5 (11.2896MHz)
JA101 YKB CONNECTOR

099820430
226500260
51048-0800
937006850
950001790

CN510 3P CONNECTOR
CN482,CN582 3P CONNECTOR

B3B-PH-K
B3B-XH-A

Mark No. Description**Part No.**

CN401 12P CONNECTOR
CN480,CN580 15P CONNECTOR
CN4022 19P CONNECTOR

HLEM12S-1
HLEM15S-1
HLEM19S-1

CN583 20P CONNECTOR
CN481,CN581 21P CONNECTOR
CN4021 24P CONNECTOR
JA102

HLEM20S-1
HLEM21S-1
HLEM24S-1
VKN1147

**VR ASSY
SEMICONDUCTORS**

IC63,IC64
IC76,IC79
IC702
IC2,IC4
IC54,IC55

BU4053BCF
BU4066BCF
LB1740
M5283P
NJM2068M

IC71
IC26,IC27
IC45-IC48,IC6,IC65,IC67
IC7,IC72,IC73,IC8
IC10,IC11,IC13,IC16

NJM2903M
NJM45556AD
NJM4558M
NJM4558M
NJM4580M

IC18,IC19,IC21,IC23-IC25
IC28-IC42,IC49-IC53
IC56,IC57,IC59,IC60
IC703,IC704,IC74,IC9
IC14

NJM4580M
NJM4580M
NJM4580M
NJM4580M
TC4S66F

IC701,IC75,IC78
IC43,IC44,IC5
IC17,IC66
IC1,IC3
IC12,IC20,IC700

TC74HC175AF
TC9162AF
TC9163AF
TC9164AF
TC9215AF

Q17
Q10,Q19-Q30,Q700-Q705
Q9
Q31,Q38,Q803-Q805,Q807
Q809,Q811,Q813,Q815,Q817

2SC1740S
2SC3326
2SC3326
2SC4081
2SC4081

Q39
Q1-Q8
Q800-Q802,Q806,Q808,Q810
Q812,Q814,Q816
D1,D17-D19,D2

2SD1862
2SD2114K
DTA124EK
DTA124EK
1SS355

D20-D29,D3,D4
D31-D52
D11-D16

1SS355
SLI-343YCW(RST)
SLR-342DU3F

SWITCHES

S3,S4
S9
S11-S23,S25
S26
S1,S2

947000640
947000660
ASG7005
ASX7011
DSH1036

S24
S5-S8

DSH1050
DSK1010

CAPACITORS

C103,C108,C229-C232,C27
C29,C3,C343,C345
C358,C359,C364,C4-C6
C74,C75
C278

CCSQCH101J50
CCSQCH101J50
CCSQCH101J50
CCSQCH101J50
CCSQCH220J50

C100,C101,C122,C339-C342

CCSQCH270J50

Mark No. Description**Part No.**

C38,C44,C45,C47-C49
C87,C88,C90,C91
C235-C242,C279
C255,C258

CCSQCH270J50
CCSQCH270J50
CCSQCH470J50
CCSRCH101J50

C118,C119,C123,C141-C146
C183-C188,C261-C265
C292,C293,C89,C92
C153-C158,C270,C271
C272

CCSRCH270J50
CCSRCH270J50
CCSRCH270J50
CCSRCH271J50
CCSRCH470J50

C106,C107,C11,C111,C112
C13,C15,C16,C171-C176
C256,C257,C259,C26
C266,C267,C273,C280,C281
C302,C303,C326-C329,C33

CEAL100M16
CEAL100M16
CEAL100M16
CEAL100M16
CEAL100M16

C332,C333,C348,C349,C41
C46,C50,C51,C64-C69
C7,C70,C71,C712,C713
C732,C733,C76,C77,C8
C126,C127

CEAL100M16
CEAL100M16
CEAL100M16
CEAL100M16
CEAL101M16

C109,C113,C286,C287
C94-C97
C189-C194,C298,C299
C715,C716
C120,C121,C124,C125

CEAL330M25
CEAL330M25
CEAL470M16
CEAL470M16
CEALNPR33M50

C147-C152,C268,C269
C177-C182,C282,C283
C1,C2,C225,C226,C28
C344,C708-C710,C73
C10,C105,C110,C12,C129

CFTNA473J50
CFTNA563J50
CKSQYB102K50
CKSQYB102K50
CKSQYB103K50

C134,C14,C17,C18
C207-C216,C227,C228,C23
C233,C234,C243-C250
C290,C291,C300,C301
C316-C319,C32,C320,C321

CKSQYB103K50
CKSQYB103K50
CKSQYB103K50
CKSQYB103K50
CKSQYB103K50

C325,C335-C338,C34,C35
C350-C355,C36,C37
C386,C387,C39,C40
C400,C401,C405-C410
C412-C414,C42,C43

CKSQYB103K50
CKSQYB103K50
CKSQYB103K50
CKSQYB103K50
CKSQYB103K50

C52,C53,C55-C59,C711
C714,C717-C723,C78,C79
C82,C83,C85,C9
C98,C99
C284,C285,C288,C289,C334

CKSQYB103K50
CKSQYB103K50
CKSQYB103K50
CKSQYB103K50
CKSQYB104K25

C346,C347,C725
C19-C22,C24,C25
C30,C31
C102,C128,C130,C131
C135-C137,C139,C140

CKSQYB104K25
CKSQYB224K16
CKSQYB224K16
CKSRYB103K50
CKSRYB103K50

C195-C206,C217-C224
C306,C307,C312-C315
C322-C324,C330,C331
C373-C376,C402-C404,C54
C60-C63,C706,C707,C726

CKSRYB103K50
CKSRYB103K50
CKSRYB103K50
CKSRYB103K50
CKSRYB103K50

C728-C731,C80,C84,C86
C93
C104
C294,C295 (4700pF-50v)
C165-C170,C276,C277 (5600pF-50v)

CKSRYB103K50
CKSRYB103K50
CKSRYB104K25
DCE1008
DCE1009

C159-C164,C274,C275 (0.47mF-50v)

DCH1158

Mark No.**Description****Part No.**

C254 (0.01mF-50v)

DCH1159

RESISTORS

R198-R201 (430)
R339
R774,R775
R141,R147,R166-R168,R171
R183,R184,R375,R405-R408

DCN1137
RD1/4PU101J
RD1/4PU332J
RN1/10SE1001D
RN1/10SE1001D

R222,R224,R371,R374
R380,R381,R384,R385
R387,R388,R390,R391,R56
R61,R71,R75
R105,R112,R17,R20

RN1/10SE1002D
RN1/10SE1002D
RN1/10SE1002D
RN1/10SE1002D
RN1/10SE1003D

R286-R291,R396,R397
R409,R410,R43,R438,R439
R527,R529,R60,R603,R604
R63,R65,R69,R83
R89-R95,R97,R98

RN1/10SE1003D
RN1/10SE1003D
RN1/10SE1003D
RN1/10SE1003D
RN1/10SE1003D

R66,R72
R376
R256-R261,R368,R369
R133,R134,R137,R146
R144,R149,R164,R165

RN1/10SE1202D
RN1/10SE1203D
RN1/10SE1300D
RN1/10SE1501D
RN1/10SE1502D

R202,R203,R78,R79
R268-R271
R129-R131,R136
R101-R104,R107-R109,R11
R110,R111,R113,R12,R121

RN1/10SE1502D
RN1/10SE1800D
RN1/10SE1801D
RN1/10SE2202D
RN1/10SE2202D

R124,R127,R128,R14,R148
R150-R154,R157,R159
R18,R19,R21,R22
R295,R296,R301,R304
R398,R399,R402,R404

RN1/10SE2202D
RN1/10SE2202D
RN1/10SE2202D
RN1/10SE2202D
RN1/10SE2202D

R440-R443,R64,R67,R70
R73,R74,R77,R9
R33-R40,R54,R55
R58,R59
R138,R142

RN1/10SE2202D
RN1/10SE2202D
RN1/10SE2702D
RN1/10SE2702D
RN1/10SE3001D

R116-R118,R46-R53
R394,R395
R192,R377
R196
R274-R277,R747-R750,R756

RN1/10SE3002D
RN1/10SE3301D
RN1/10SE3602D
RN1/10SE4302D
RN1/10SE4702D

R758,R762,R766
R182,R191
R68,R76
R3,R5,R57,R62
R132,R135,R139,R143

RN1/10SE4702D
RN1/10SE5101D
RN1/10SE5600D
RN1/10SE5602D
RN1/10SE7501D

R262-R267,R372,R373
R716,R718,R720,R722,R724
R726
R155,R156,R564,R566
R214-R221,R223,R225,R336

RN1/10SE7502D
RN1/16SE1000D
RN1/16SE1000D
RN1/16SE1001D
RN1/16SE1002D

R338,R363,R364,R367,R468
R160,R161,R354,R41,R565
R567
R85,R99
R178,R179,R340,R342,R345

RN1/16SE1002D
RN1/16SE1003D
RN1/16SE1003D
RN1/16SE1102D
RN1/16SE1502D

R244-R249,R272,R273
R361,R362,R378,R379

RN1/16SE1800D
RN1/16SE1800D

Mark No.	Description	Part No.
A	R232-R237,R355,R356 R343,R344,R469 R114,R115,R119,R120	RN1/16SE1802D RN1/16SE2002D RN1/16SE2202D
	R122,R123,R125,R126 R180,R181 R210,R211 R346,R352,R386,R389,R471 R193	RN1/16SE2202D RN1/16SE2202D RN1/16SE2701D RN1/16SE3301D RN1/16SE3602D
	R82,R96 R226-R231,R349,R350 R197 R278,R279,R382,R383 R543,R545,R549,R551	RN1/16SE3902D RN1/16SE4301D RN1/16SE4302D RN1/16SE4702D RN1/16SE5100D
B	R557,R558,R702,R704,R706 R708,R709,R711,R727-R730 R238-R243,R280-R285 R359,R360,R392,R393 R250-R255,R353,R357,R358	RN1/16SE5100D RN1/16SE5100D RN1/16SE5101D RN1/16SE5101D RN1/16SE6202D
	R365,R366 R470 R715,R717,R719,R721,R723 R725 R100,R213	RN1/16SE6202D RN1/16SE6801D RN1/16SE7500D RN1/16SE7500D RS1/16S0R0J
	R511 R514,R517 R510,R512,R513,R516 R607-R613,R805 R476	RS1/16S101J RS1/16S102J RS1/16S103J RS1/16S103J RS1/16S104J
C	R475 R782 R772 R194,R520,R521 R509	RS1/16S113J RS1/16S153J RS1/16S182J RS1/16S223J RS1/16S303J
	R515,R540,R541,R546,R547 R552-R555,R560-R563,R701 R703,R705,R707,R710,R712 R158,R770 R461	RS1/16S332J RS1/16S332J RS1/16S332J RS1/16S473J RS1/16S561J
	R176,R177 VR29 RK14K1240036 VR25,VR26 (10KB) VR10-VR12,VR14-VR16 (10KB) VR22-VR24,VR27,VR28,VR3 (10KB)	RS1/16S912J 942001370 DCS1050 DCS1053 DCS1053
D	VR6-VR8 (10KB) VR13,VR2,VR21,VR4,VR5 (10KB) VR9 (10KB) VR1 (10KB) Other Resistors	DCS1053 DCS1054 DCS1054 DCS1055 RS1/10S###J
	OTHERS 11-16 LEDS-LH-5-6 306 CONNECTOR ASSY-CF 3P CABLE HOLDER 5P CABLE HOLDER 8P CABLE HOLDER	225500220 226404660 51048-0300 51048-0500 51048-0800
	CN301 CONNECTOR 12P CN3022 CONNECTOR 19P CN305 CONNECTOR 21P CN3021 CONNECTOR 24P CN304 CONNECTOR 28P	52492-1220 52492-1920 52492-2120 52492-2420 52492-2820

Mark No.	Description	Part No.
CN350	CONNECTOR POST	B3B-PH-K
CN3001-CN3005	B TO B CONNECTOR 9P	DKP3576
CN371	CONNECTOR	HLEM31R-1

D CF ASSY RESISTOR

VR31 (10k-B Slide VR)

DCV1006

OTHERS

CN336 MT CONNECTOR 6P

173979-6

E CFCURV ASSY SWITCH

S10

DSH1050

OTHERS

J3701 CONNECTOR ASSY3-L60

226404680

3701 3P CABLE HOLDER

51048-0300

F MAF ASSY RESISTOR

VR32 (10k-B Slide VR)

DCV1010

OTHERS

CN335 B TO B CONNECTOR 9P

DKP3598

G CHF1-CHF4 ASSYS SEMICONDUCTOR

D10

GP1S94

RESISTOR

R801

RD1/4PU181J

R802

RS1/10S393J

VR17 (10k-B Slide VR)

DCV1010

OTHERS

CN331 B TO B CONNECTOR 9P

DKP3598

H MIC ASSY CAPACITORS

C370

CKCYF103Z50

C253,C300

CKSQYB103K50

OTHERS

J3071 CONNECTOR ASSY5-L60

226404690

3071 5P CABLE HOLDER

51048-0500

307 NCJ9FI-H-0

951001640

J1 EARTH LAGU ASSY

DDX1170

I DSP ASSY SEMICONDUCTORS

⚠ IC127 (800mA)

AEK7008

IC122

AK4520A

IC109,IC110,IC600

BU4053BCF

IC113

K4F160812D-FC60

Mark No. Description**Part No.**

IC120

M5237ML

IC116,IC117

NJM2100M

IC101-IC106,IC124,IC601

NJM4558MD

△ IC121

NJM78M05FA

IC108

PE5312B

IC111

TC74HC74AF

IC114

TC74HCT7007AF

IC112,IC602

TC7S04F

IC118,IC123

TC7WU04F

IC115

TC9163AF

IC119

XCB56364

Q112

2SB1132

Q111

2SC1740S

Q110

2SC2458

Q102-Q109

DTC124EK

D129,D130

11E2

D101-D106,D110,D111

1SS355

D114-D128,D600,D601

1SS355

D100,D107-D109,D112,D113

UDZS5.6B

COILS

L108 CHIP SOLID INDUCTOR

ATL7002

L109 CHIP COIL (4.7)

DTL1024

L110,L111

LRCA101J

L105,L106 CHIP SOLID INDUC.

QTL1013

CAPACITORS

C194,C195,C239,C244,C249

CCSQCH101J50

C253,C261,C262,C264,C265

CCSQCH101J50

C191,C198,C202

CCSQCH221J50

C282,C283

CCSRCH100D50

C217,C219-C221,C233,C238

CCSRCH101J50

C243,C250,C254,C263,C606

CCSRCH101J50

C112,C113,C293,C302

CCSRCH150J50

C257

CCSRCH221J50

C209,C210,C222,C223

CCSRCH270J50

C104,C105,C107,C108

CCSRCH470J50

C114-C117,C122,C123

CCSRCH470J50

C106,C109,C174,C175

CEHAR100M16

C180-C185,C203,C204

CEHAR100M16

C272,C273,C305

CEHAR100M16

C284

CEHAR100M50

C155,C186,C196,C229,C260

CEHAR101M10

C277,C281,C301

CEHAR101M10

C601,C602

CEHAR1R0M50

C101,C128,C129,C134,C135

CEHAR2R2M50

C138,C139

CEHAR2R2M50

C289,C290,C294-C297,C311

CEHAR470M16

C258

CEHAR4R7M50

C200,C201,C291

CEHAT221M6R3

C604,C605

CEHAT471M16

C187

CKSQYB102K50

C136,C137,C144,C145,C148

CKSQYB103K50

C188,C197,C199,C226,C228

CKSQYB103K50

C292,C300,C303,C607,C608

CKSQYB103K50

C141,C147,C156,C189

CKSQYB104K25

C205-C207,C240,C245,C248

CKSQYB104K25

C252,C256,C266,C267

CKSQYB104K25

C269,C270,C276,C298,C314

CKSQYB104K25

C230

CKSQYB562K50

C271

CKSRYB102K50

Mark No.**Description****Part No.**

C118-C121,C124,C125

CKSRYB103K50

C130-C133,C140,C142,C150

CKSRYB103K50

C163-C171,C176-C179,C227

CKSRYB103K50

C278,C279,C299,C600,C609

CKSRYB103K50

C143,C151-C154,C157-C162

CKSRYB104K25

C172,C173,C212-C215,C234

CKSRYB104K25

C237,C242,C251,C255,C259

CKSRYB104K25

C268,C274,C306,C307,C310

CKSRYB104K25

C312

CKSRYB104K25

C224,C225

CKSRYB152K50

C102,C103

CKSRYB473K25

C110,C111 (10mF-10v)

DCH1160

RESISTORS

R282-R286

RAB4C0R0J

R170,R171,R175,R176,R178

RAB4C102J

R180,R182

RAB4C102J

R231

RAB4C473J

R255,R256

RN1/10SE1002D

R241

RN1/10SE2202D

R292,R293

RN1/10SE4702D

R244,R245

RN1/10SE8201D

R106

RN1/16SE1001D

R144,R145,R246,R247

RN1/16SE1002D

R253,R254,R257,R258

RN1/16SE1002D

R294,R295

RN1/16SE1202D

R243

RN1/16SE2202D

R134,R136

RN1/16SE2702D

R265-R268

RN1/16SE3300D

R296,R297

RN1/16SE6802D

R113

RN1/16SE9101D

R102,R174,R288,R614

RS1/10S0R0J

R233

RS1/10S101J

R232,R237,R238,R500,R501

RS1/10S102J

R602-R609

RS1/10S102J

R601

RS1/10S103J

R192

RS1/10S104J

R160

RS1/10S221J

R242,R248,R250,R251,R613

RS1/10S472J

R119,R221-R225

RS1/10S752J

R290

RS1/16S4301F

R289

RS1/16S7501F

Other Resistors

RS1/16S####J

OTHERS

X101 CERA. RESONATOR (4.9MHz)

DSS1105

X102 CERA. RESONATOR20MHz

DSS1110

X103 XTAL RES (OSC)(16.9MHz)

PSS1008

CN205 FCC CONNECTOR 21P

52492-2120

CN204 CONNECTOR 28P

52492-2820

CN209 CONNECTOR

B16B-PH-K

CN260 CONNECTOR 20P

HLEM20S-1

CN262 CONNECTOR 31P

HLEM31S-1

CN261 CONNECTOR 35P

HLEM35S-1

**J EFFECT ASSY
SEMICONDUCTOR**

IC100

NJM3404AM

SWITCHES

Mark No.	Description	Part No.
S100,S101		DSG1067
<u>CAPACITORS</u>		
C100,C101		CKSQYB102K50
C102-C104		CKSQYB104K25

RESISTORS

R100,R101	RN1/10SE2001D
R102,R103	RN1/10SE2201D
R104-R107	RN1/10SE2202D
R108,R109	RN1/10SE3901D
R110,R111	RN1/10SE4702D
R112,R113	RN1/10SE8201D

OTHERS

J3101 CONNECTOR ASSY8-L30	226404701
3101 8P CABLE HOLDER	51048-0800

K LED ASSY SEMICONDUCTORS

IC100,IC101	LB1740
IC100	NJM3404AM
Q100-Q111	2SD1862
D175,D191,D192	1SS133
D104-D110,D115-D121	DEL1034

D126-D132,D137-D143	DEL1034
D148-D154,D159-D165	DEL1034
D100-D103,D111-D114	DEL1035
D122-D125,D133-D136	DEL1035
D144-D147,D155-D158	DEL1035

D170-D172,D182-D185	NKR131S
D166-D169,D176-D181	SLR-342DUTB7
D173,D174,D186-D190	SLR-342VRTB7

SWITCHES

S102	948000450
S100,S101	DSG1067

CAPACITORS

C370	CKCYF103Z50
C100,C101	CKSQYB102K50
C253,C300	CKSQYB103K50
C102-C104	CKSQYB104K25
C100,C101 (0.01/50v)	DCH1159

RESISTORS

R110-R113	RD1/4PU181J
R114-R116,R133,R135-R137	RD1/4PU390J
R101,R103,R105,R107,R109	RD1/4PU473J
R118-R120	RD1/4PU473J
R121,R122,R130-R132,R134	RD1/4PU560J

R143,R146,R148	RD1/4PU560J
R123-R129,R138-R142,R144	RD1/4PU620J
R145,R147	RD1/4PU620J
R100,R101	RN1/10SE2001D
R102,R103	RN1/10SE2201D

R104-R107	RN1/10SE2202D
R108,R109	RN1/10SE3901D
R110,R111	RN1/10SE4702D
R112,R113	RN1/10SE8201D
Other Resistors	RS1/10S###J

OTHERS

Mark No.	Description	Part No.
	LEVEL METER HOLDER	224301290
J250	1007C26BL55	226404790
J251	1007C26WH140	226404800
J252	1007C26RD190	226404810
3081	3P CABLE HOLDER	51048-0300
3071	5P CABLE HOLDER	51048-0500
3101	8P CABLE HOLDER	51048-0800
CN100	CONNECTOR 35P	52492-3520
J1		DDX1170

L REG ASSY SEMICONDUCTORS

⚠ IC550	NJM7815FA
⚠ IC552	NJM78M08FA
⚠ IC553	NJM79M08FA
⚠ IC600	NJM79M15FA
⚠ IC551	NJM7915FA

⚠ D573,D574	11EQS06
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RESISTORS

All Resistors

RS1/10S###J

OTHERS

HEATSINK VR	225300450
J152 CONNECTOR ASSY	226404710
152 12P CABLE HOLDER	51048-1200
SCREW	BBZ30P060FMC

M POWER ASSY SEMICONDUCTORS

⚠ IC555-IC557 (1.25A)	AEK7010
⚠ IC558 (4A)	AEK7018
⚠ IC561	NJM78M08FA
⚠ IC554	PQ05RR12
Q551	2SC2458

⚠ Q550	2SD2406
D563,D999	11E2
D565,D571	11EQS06
D562	1SS133
⚠ D550	MTZJ6.2B

⚠ D5521-D5524	RB060L-40
⚠ D551	S2VB20-F1
⚠ D559-D561	S5688G

CAPACITORS

C570	CEHANP4R7M50
C562	CEHAT101M10
C554,C555	CEHAT101M16
C564	CEHAT103M16
C567	CEHAT221M16

C561,C572	CEHAT330M25
C552,C553,C601	CEHAT470M25
C571	CEHAT4R7M50
C550,C551,C563	CKCYF103Z50
C558-C560,C565,C566	CKSQYB103K50

C568,C569,C602	CKSQYB103K50
C556,C557 (3300/35)	DCH1132

RESISTORS

R554,R556

RD1/4PU102J

<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>
R551		RD1/4PU103J
R555		RD1/4PU104J
R557-R559		RD1/4PU223J
R550		RD1/4PU561J
R552		RD1/4PU562J
R553		RD1/4PU822J

OTHERS

	TUBE	225401930
CN121	8P CONNECTOR	52147-0810
CN152	12P CONNECTOR	52147-1210
CN119	KR CONNECTOR	B16B-PH-K
⚠ CN2	3P-VH CONNECTOR	B3P5-VH
	SCREW	BMZ30P060FMC
	HEAT SINK	DNG1066
	HEAT SINK	DNG1085
CN4	5P CONNECTOR	KPC5
	SCREW	PMH26P120FMC
⚠ CN1	AC CORD SOCKET	RKP1751
	H1,H2 FUSE HOLDER	RKR1003
	KN1,KN2	VNF1084

N TRANS ASSY SWITCH

⚠ S1	DSA1028
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COIL

⚠ L1	LINE FILTER	VTL-004
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CAPACITORS

⚠ C1	(3300P/250V)	ACG7030
⚠ C2,C3	(10000P/250V)	ACG7033

OTHERS

J4	5-L125	226404720
J101	CONNECTOR ASSY	226404750
4	5P CABLE HOLDER	51052-0500

O PSW ASSY SWITCH

⚠ S1	AC SWITCH	DSA1028
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CAPACITOR

⚠ C1	(3300P/AC250V)	ACG7030
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RESISTORS

All Resistors	RS1/10S###J
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OTHERS

⚠ J22	CONNECTOR ASSY	226404670
⚠ J32	CONNECTOR ASSY	226404671

P HP ASSY RESISTORS

R502-R504	RS1/10S0R0J
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OTHERS

J3081	CONNECTOR ASSY	226404680
JA302	YKB CONNECTOR	950001700
3081	3P CABLE HOLDER	51048-0300

6. ADJUSTMENT

There is no information to be shown in this chapter.

7. GENERAL INFORMATION

7.1 DIAGNOSIS

How to Enter the Test Mode

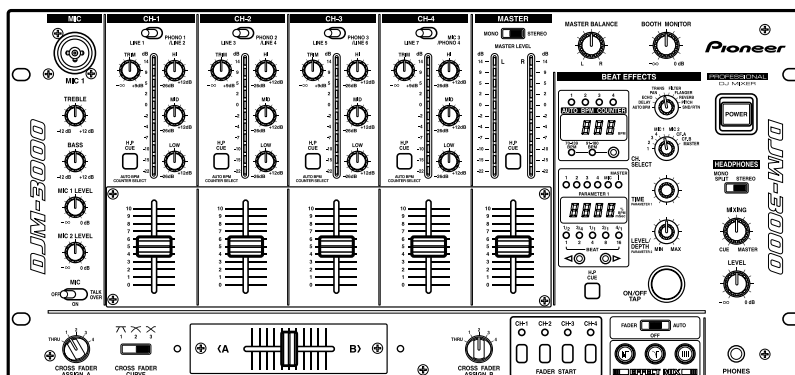
1. Power supply OFF
2. EFFECT MIX: OFF
3. Turn ON the power while pressing the EFFECT Key and ROLL Key.

When entered the test mode, [F] is displayed on the lower 7 seg and test mode starts when releases the Key. Then the LED indication (lighting) will change when presses the EFFECT key as follows.

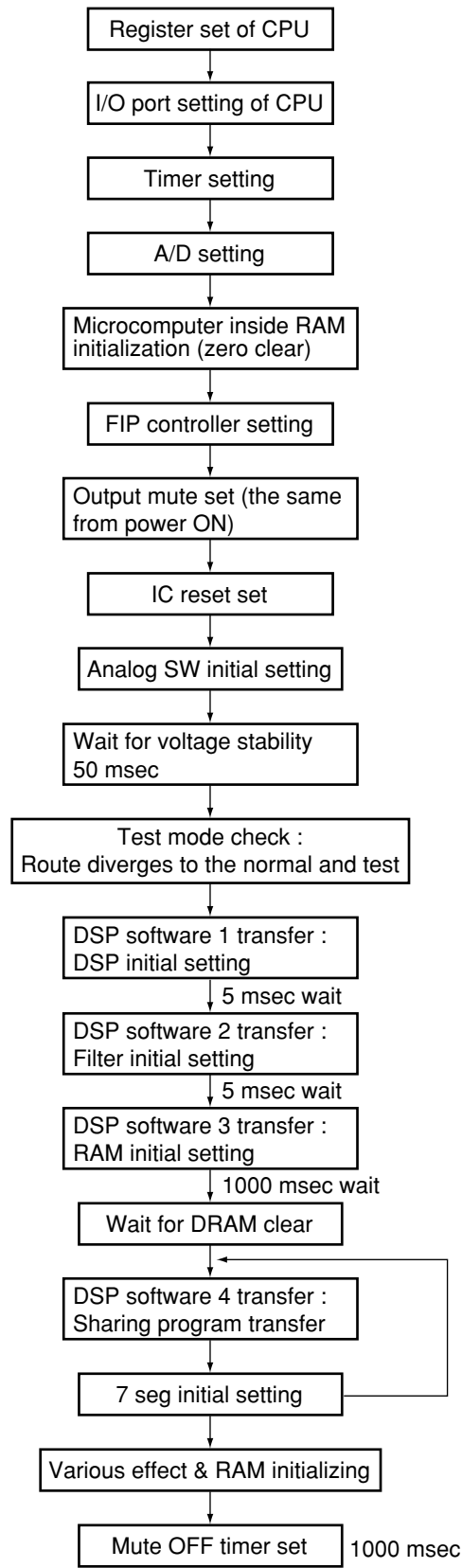
	Level Meter	7 SEG	BPM CH	BPM H/L	EFFECT CH	BEAT LED
①	Lights out	All "0" display	Lights out	Lights out	CH-1 lighting	1/2 LED lighting
②	-15 lighting	All "1" display	CH-1 lighting	LowLED lighting	CH-2 lighting	2/3 LED lighting
③	-10 lighting	All "2" display	CH-2 lighting	HighLED lighting	CH-3 lighting	1/1 LED lighting
④	-7 lighting	All "3" display	CH-3 lighting	Repeat ① to ③ afterward	CH-4 lighting	2/1 LED lighting
⑤	-4 lighting	All "4" display	CH-4 lighting		MIC lighting	4/1 LED lighting
⑥	-2 lighting	All '5' display	Repeat ① to ⑤ afterward		Master lighting	Repeat ① to ⑤ afterward
⑦	0 lighting	All "6" display			Repeat ① to ⑥ afterward	
⑧	2 lighting	All "7" display				
⑨	5 lighting	All "8" display				
⑩	9 lighting	All "9" display				
⑪	14 lighting	Repeat ① to ⑩ afterward				
⑫	-22 lighting					
	Repeat ② to ⑫ afterward					

	Indication A/B	FADER START	EFFECT MIX Key	CH Monitor	EFFECT Key
①	Lights out	Lights out	Lights out	Lights out	Lighting
②	Indication A lighting	CH1 lighting	ECHO lighting	CH-1 monitor lighting	Lighting
③	Indication B lighting	CH2 lighting	ZIP lighting	CH-2 monitor lighting	Lights out
④	Repeat ① to ③ afterward	CH3 lighting	ROLL lighting	CH-3 monitor lighting	Repeat ① to ③ afterward
⑤		CH4 lighting	Repeat ② to ④ afterward	CH-4 monitor lighting	
⑥		Repeat ② to ⑤ afterward		Master monitor lighting	
⑦				Effect monitor lighting	
				Repeat ② to ⑦ afterward	

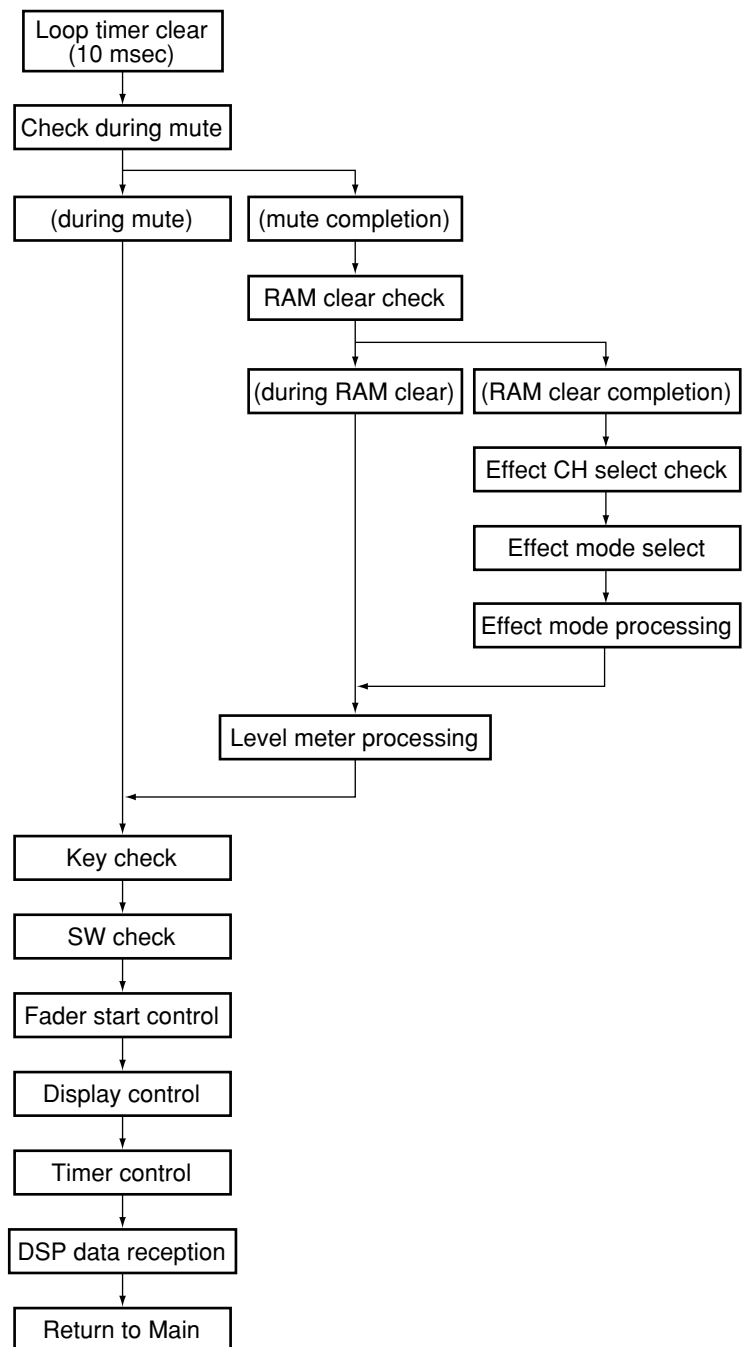
4. When release from the test mode, return to normal mode by turn on the power once again in the status that nothing presses.



■ Power ON

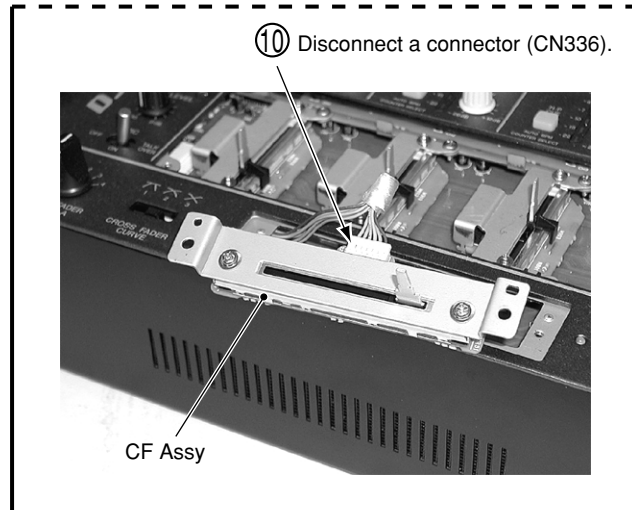
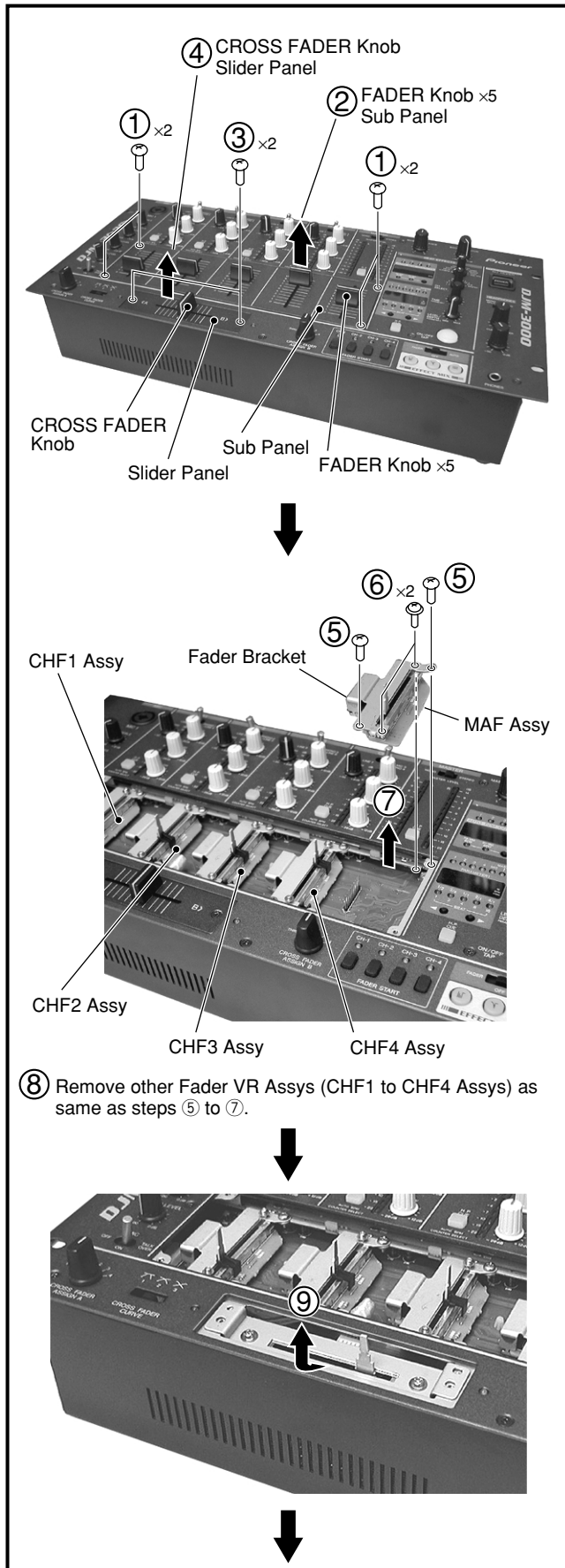


■ Main Start

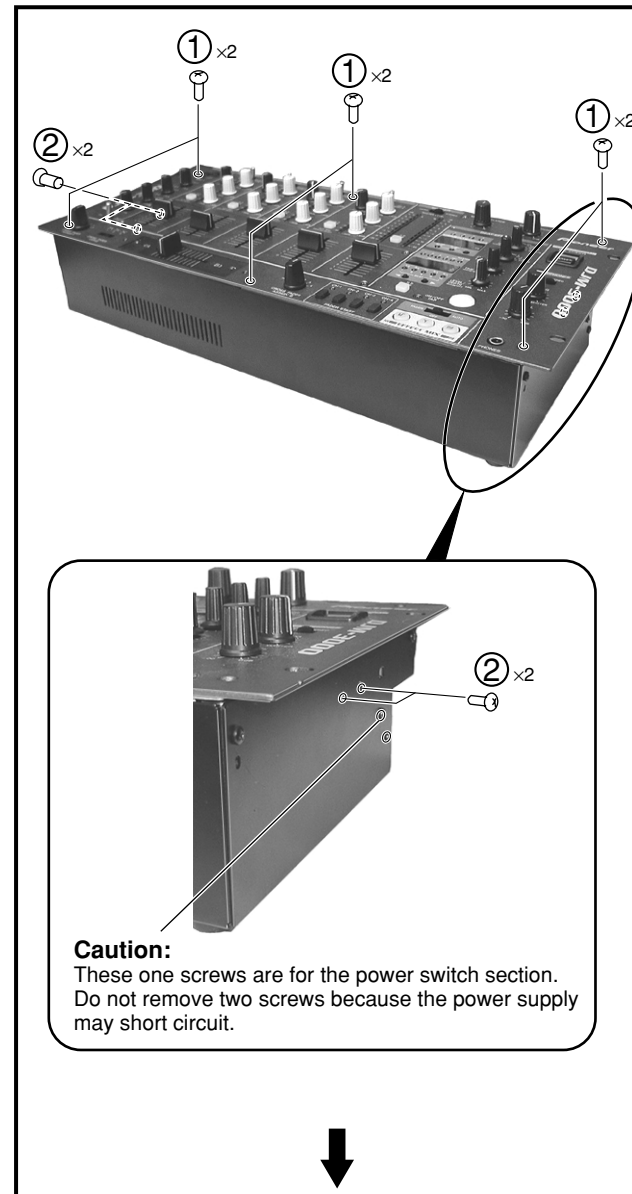


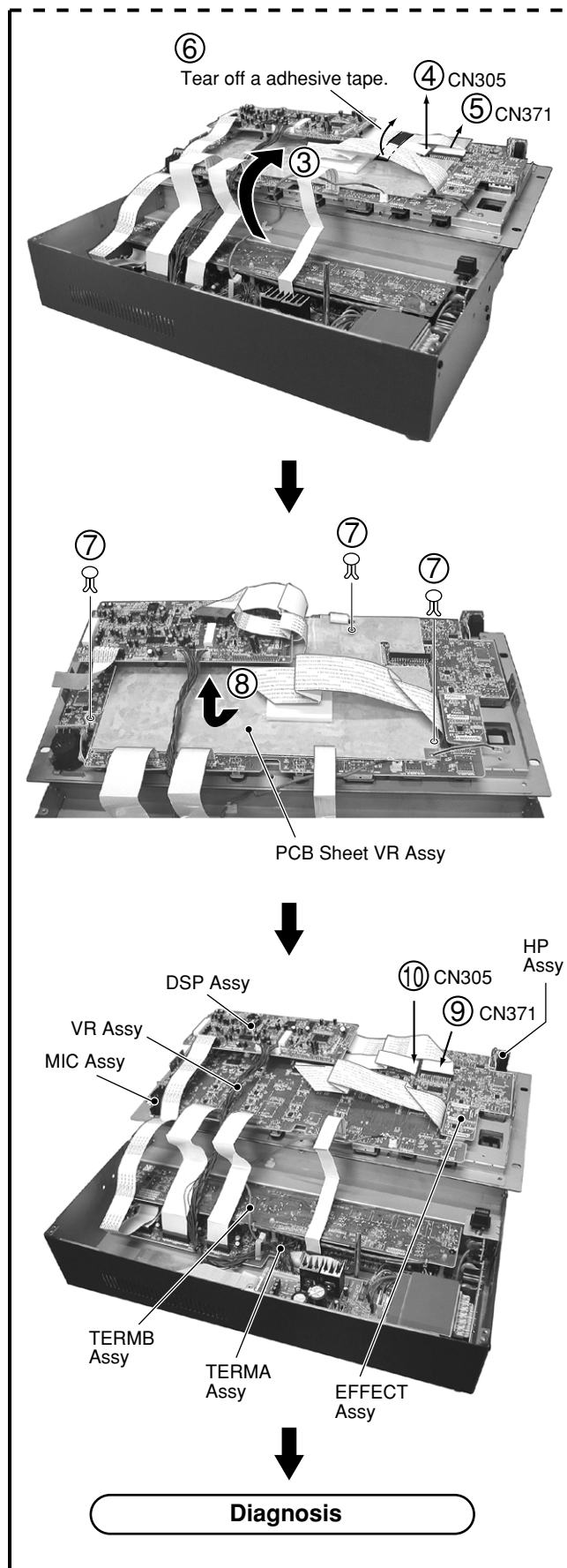
7.1.1 DISASSEMBLY

Fader VR Section

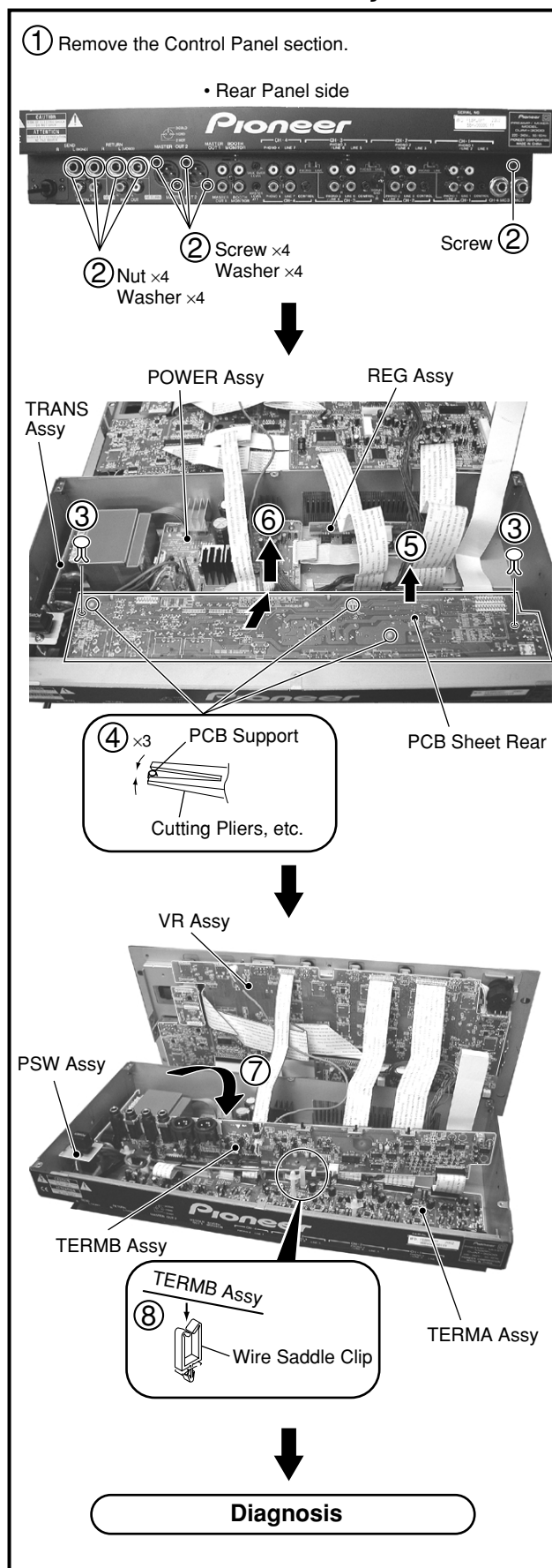


Control Panel Section





TERMA and TERMB Assys



7.2 PARTS

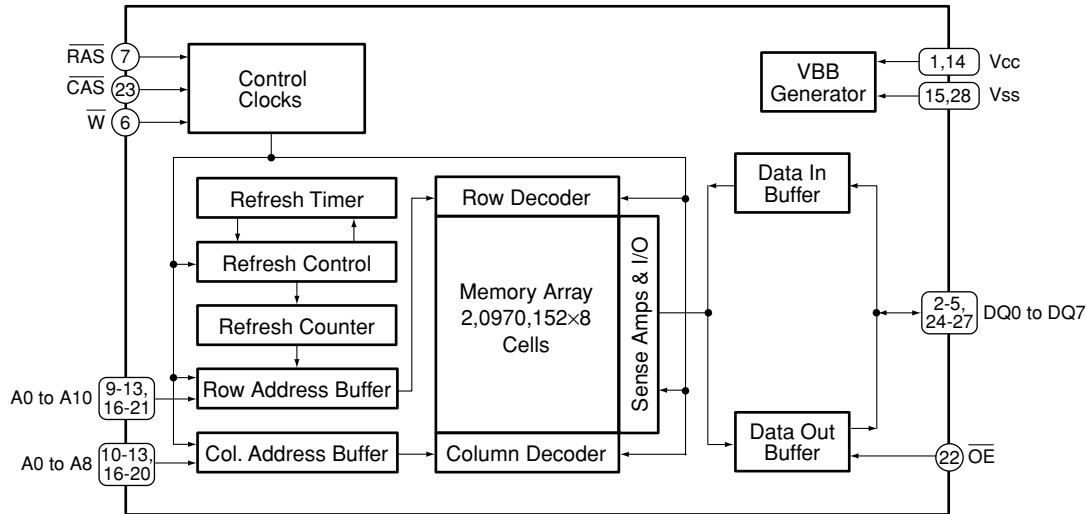
7.2.1 IC

- The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

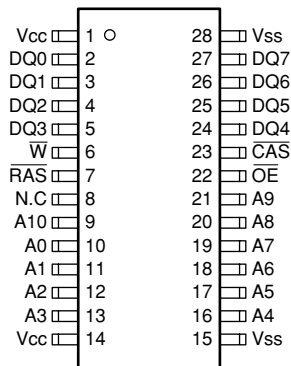
■ K4F160812D-FC60 (DSP ASSY: IC113)

• CMOS DRAM

● Block Diagram



● Pin Arrangement (Top View)



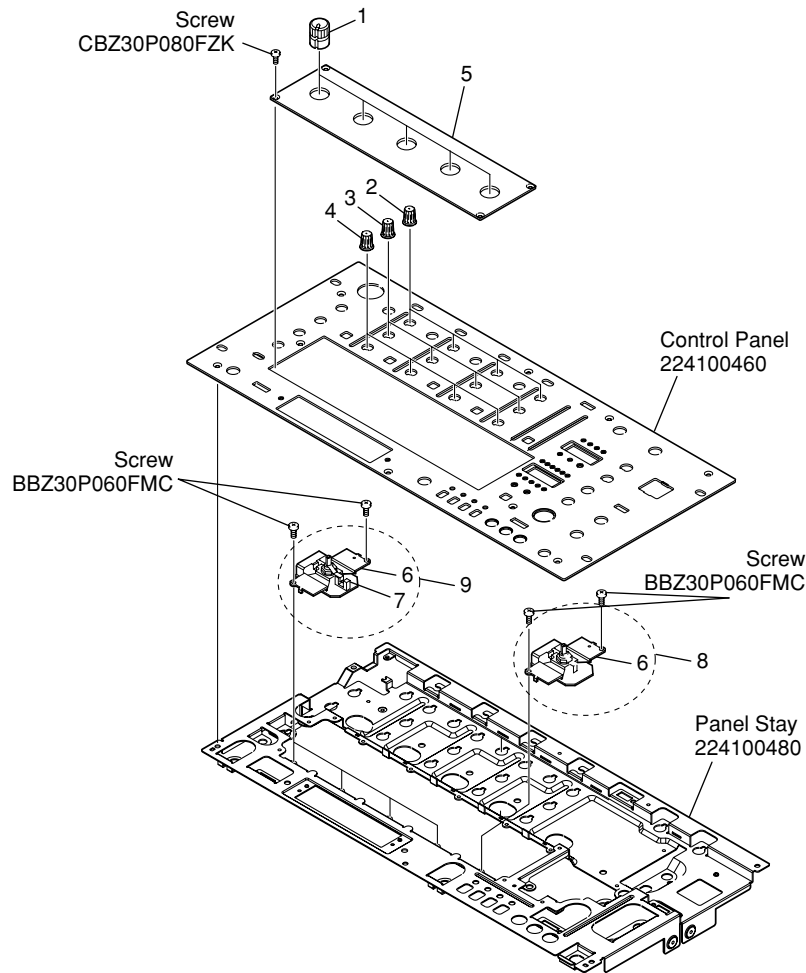
● Pin Function

No.	Pin Name	Pin Function
1	Vcc	Power supply (+3.3V)
2	DQ0	Data In/Out
3	DQ1	
4	DQ2	
5	DQ3	
6	W	Read/Write input
7	RAS	Row address Strobe
8	N.C	No connection
9	A10	Address inputs
10	A0	
11	A1	
12	A2	
13	A3	
14	Vcc	Power supply (+3.3V)
15	Vss	Ground
16	A4	Address input
17	A5	
18	A6	
19	A7	
20	A8	
21	A9	
22	OE	Data output enable
23	CAS	Column address strobe
24	DQ4	Data In/Out
25	DQ5	
26	DQ6	
27	DQ7	
28	Vss	Ground

7.3 OPTIONAL PARTS

OPTIONAL (DJC-3000RV Rotary Volume Kit)

7-3-1. EXPLODED VIEWS and PARTS LIST

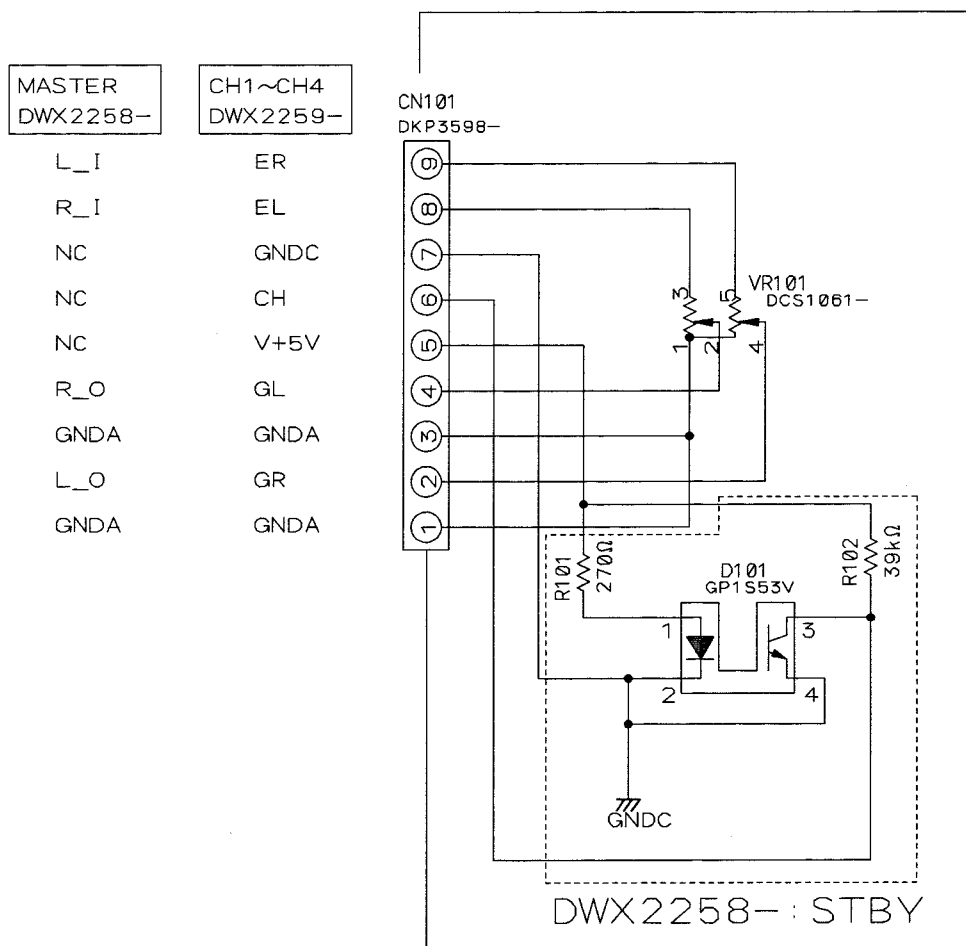


OPTIONAL PARTS LIST

Mark No.	Description	Part No.
1	Fader Knob (AL) Assy	DXA1931
2	VR Knob (SR)	DAA1159
3	VR Knob (SY)	DAA1160
4	VR Knob (SG)	DAA1161
5	Sub Panel (RV)	DAH2136
6	Fader Bracket(RV)	DNF1673
7	Detect Arm (RV)	DNK4029
8	MF VR ASSY-S	DXX2517
9	CHF VR ASSY-S	DXX2518

7-3-2. SCHEMATIC DIAGRAM and PARTS LIST

UNIT No.	MASTER ASSY	CH1 to CH4 ASSY
ASSY NAME	DWX2258	DWX2259
PCB No.	MF VR ASSY	CHF VR ASSY
	DNP2031	DNP2032



PCB PARTS LIST (DWX2258)

Mark No.	Description	Part No.
VR101	Volume	DXA1931
CN101	B TO B Connector	DKP3598

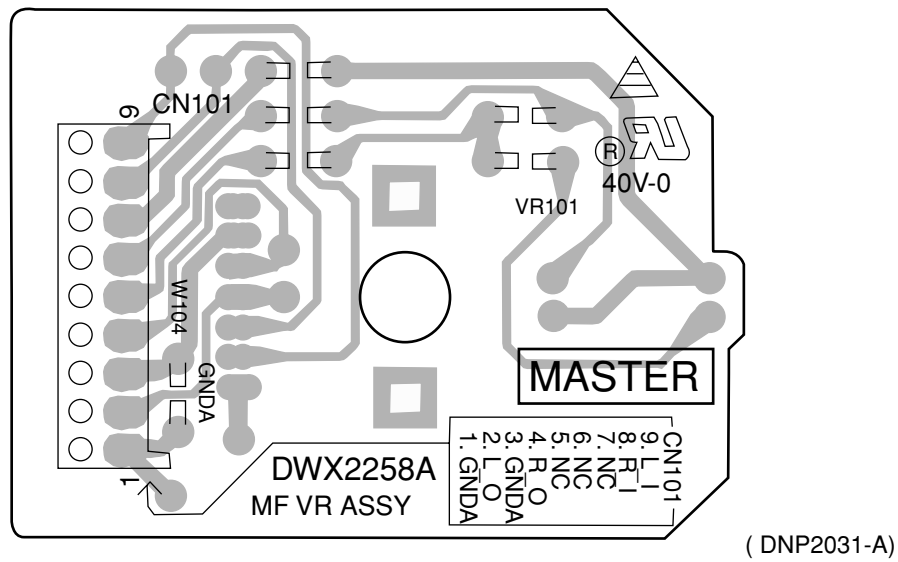
PCB PARTS LIST (DWX2259)

Mark No.	Description	Part No.
D101	Phot interrupter	GP1S53V
CN101	B TO B Connector	DKP3598
R101	Resistor	RD1/4PU271J
R102	Resistor	RD1/4PU393J
VR101	Volume	DXA1931

7-3-3. PCB DIAGRAM

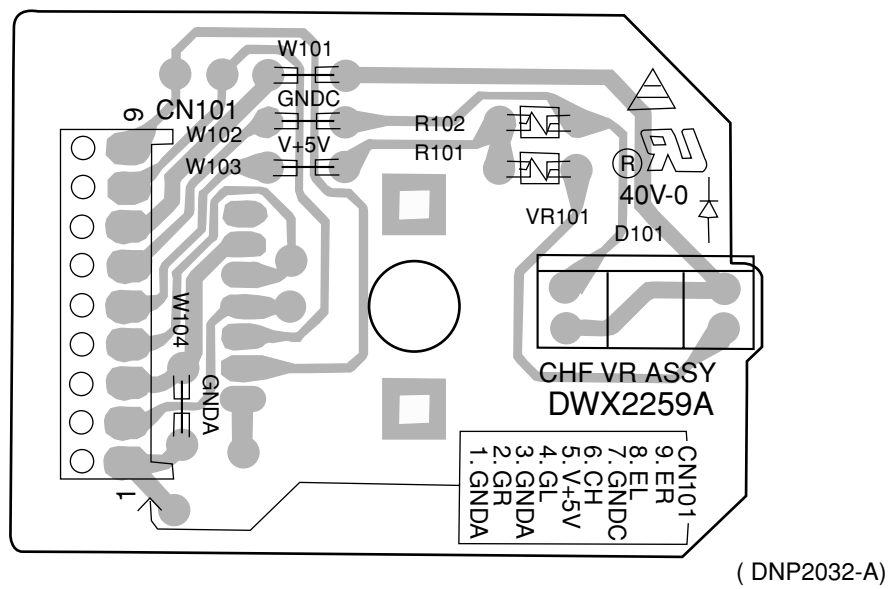
MF VR ASSY

SIDE A



CHF VR ASSY

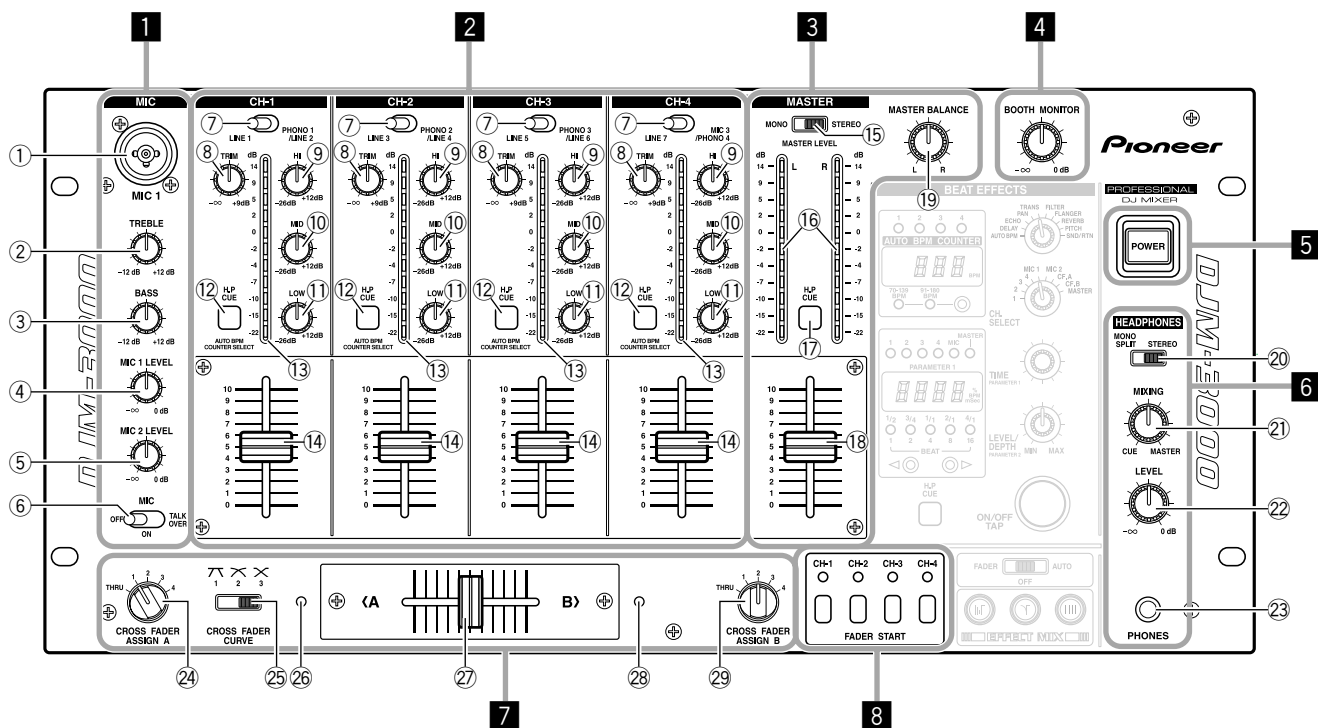
SIDE A



8. PANEL FACILITIES

8.1 PANEL FACILITIES

Control Panel



1 MIC (Microphone Controls)

- ① MIC 1 input jack
Use to connect a microphone with either XLR or PHONE type jack.
- ② TREBLE control
Adjusts high-range frequencies on microphone 1 and 2. Center click position is provided for flat response. Rotate the knob clockwise to augment treble response (to +12dB), and rotate counterclockwise to diminish treble response (to -12 dB).
- ③ BASS control
Adjusts low-range frequencies on microphone 1 and 2. Center click position is provided for flat response. Rotate the knob clockwise to augment bass response (to +12dB), and rotate counterclockwise to diminish base response (to -12 dB).
- ④ MIC 1 LEVEL
Controls sound volume on microphone 1 (attenuation: $-\infty$ to 0 dB)
- ⑤ MIC 2 LEVEL
Controls sound volume on microphone 2 (attenuation: $-\infty$ to 0 dB)
- ⑥ MIC switch
Use to select microphone input.
OFF: Disables microphone 1 and 2
ON: Enables microphone 1 and 2
TALK OVER: Enables microphone 1 and 2 while attenuating other sound levels. The amount of attenuation can be controlled by setting the rear-panel TALK OVER LEVEL, within the range -4 dB to -20 dB.

2 CH-1 to CH-4 (Channel Input Controls)

- ⑦ Input selector switches
Use to select an input source from among the components connected to the various channels.
CH-1: Switches between LINE 1 and PHONO 1/LINE 2
CH-2: Switches between LINE 3 and PHONO 2/LINE 4
CH-3: Switches between LINE 5 and PHONO 3/LINE 6
CH-4: Switches between LINE 7 and MIC 3/PHONO 4
● On CH-1 to CH-3, the rear panel PHONO/LINE switches are used to switch between PHONO 1, 2, 3 and LINE 2, 4, and 6.
● On CH-4, switching between MIC 3 and PHONO 4 is based on the presence/absence of a plug in the MIC 3 connector (when a plug is inserted, MIC 3 is selected).
- ⑧ TRIM control
Use to control the input signal level. Rotate clockwise to increase the level (to +9 dB); rotate counterclockwise to decrease the level (to $-\infty$)
- ⑨ HI control (high-range equalizer)
Use to adjust high-range frequency of input. When the dial is set to the center click setting, flat response is provided. Rotate clockwise to increase response (to +12 dB), and rotate counterclockwise to decrease response (to -26 dB).
- ⑩ MID control (mid-range equalizer)
Use to adjust mid-range frequency of input. When the dial is set to the center click setting, flat response is provided. Rotate clockwise to increase response (to +12 dB), and rotate counterclockwise to decrease response (to -26 dB).
- ⑪ LOW control (low-range equalizer)
Use to adjust low-range frequency of input. When the dial is set to the center click setting, flat response is provided.

Rotate clockwise to increase response (to +12 dB), and rotate counterclockwise to decrease response (to -26 dB).

⑫ **H.P CUE (Headphones cue switch)**

When this switch is pressed it lights orange and the corresponding channel is output to headphones. When the switch is pressed again the light goes out and the channel's output to the headphones is cut.

When the beat effector function is set to AUTO BPM, this switch functions to select the BPM display channel.

⑬ **Peak level meter**

Peak levels are displayed as they occur and maintained for 2 seconds.

Displays output level before channel fader adjustment.

Displayable range is from -22 dB to +14 dB.

⑭ **Channel fader lever**

Use to adjust the sound level at each channel.

3 MASTER (Master Controls)

⑮ **MONO/STEREO selector switch**

Use to select whether the master output and booth monitor output are monaural or stereo.

⑯ **MASTER LEVEL meter**

Displays output level following adjustment of the MASTER fader lever, and holds the display for 2 seconds. Displayable range is from -22 dB to +14 dB.

⑰ **H.P CUE (Headphones cue switch)**

When this switch is pressed it lights orange and the master output is heard in the headphones. When the switch is pressed again the light goes out and the master output to the headphones is cut.

⑱ **MASTER fader lever**

Use to control the master output level.

The rear panel MASTER LEVEL ATT. control can also be used to reduce the output level.

⑲ **MASTER BALANCE control**

Use to adjust the balance of right-left channels for master output and booth monitor output.

4 BOOTH MONITOR Control

Use to adjust the output at the BOOTH MONITOR connectors on the rear panel. Not affected by the MASTER fader lever (⑱).

5 POWER Switch

6 HEADPHONES Controls

⑳ **MONO SPLIT/STEREO selector switch**

Use to select whether to split monitor sound on the left and right of the headphones or to keep sound in stereo form.

When set to MONO SPLIT, the headphones output is set to 2-channel monaural; the Left channel becomes the source selected with the H.P CUE switch, while the Right channel becomes the master output sound (only when MASTER H.P CUE switch is set to ON).

㉑ **MIXING control**

Use to adjust the headphones monitor sound.

When rotated fully clockwise, the master output sound only is heard (only when MASTER H.P CUE switch is set to ON).

When rotated fully counterclockwise, only the channel selected with the H.P CUE switch (other than MASTER) is heard.

At the center click position, the master output and source selected with the H.P CUE switch are at equal levels.

㉒ **LEVEL control**

Use to control the headphones monitor level. When one of CH-1 to CH-4 is selected, this control is not affected by the MASTER fader lever (⑱) and the MASTER BALANCE control (⑲).

㉓ **PHONES (headphones jack)**

7 Cross Fader Controls

㉔ **CROSS FADER ASSIGN A switch**

When using the cross fader with two sources (A, B), this switch selects the source assigned to A.

THRU: When cross fader is not used, sets to THRU.

1-4: Use to select the channel (CH-1 to CH-4) assigned to A.

Channels other than those assigned to A and B can be output without passing through the cross fader.

㉕ **CROSS FADER CURVE selector switch**

Use to select one of three rising curve patterns for the cross fader function.

㉖ **Fader display A**

During the effect mix mode, displays the output of sounds from the channel selected with the CROSS FADER ASSIGN A switch.

㉗ **Cross fader lever**

Use to adjust the mix of sounds from the sources assigned to A and B by the ASSIGN switches (㉔) and (㉕).

㉘ **Fader display B**

During the effect mix mode, displays the output of sounds from the channel selected with the CROSS FADER ASSIGN B switch.

㉙ **CROSS FADER ASSIGN B switch**

When using the cross fader with two sources (A, B), this switch selects the source assigned to B.

THRU: When cross fader is not used, sets to THRU.

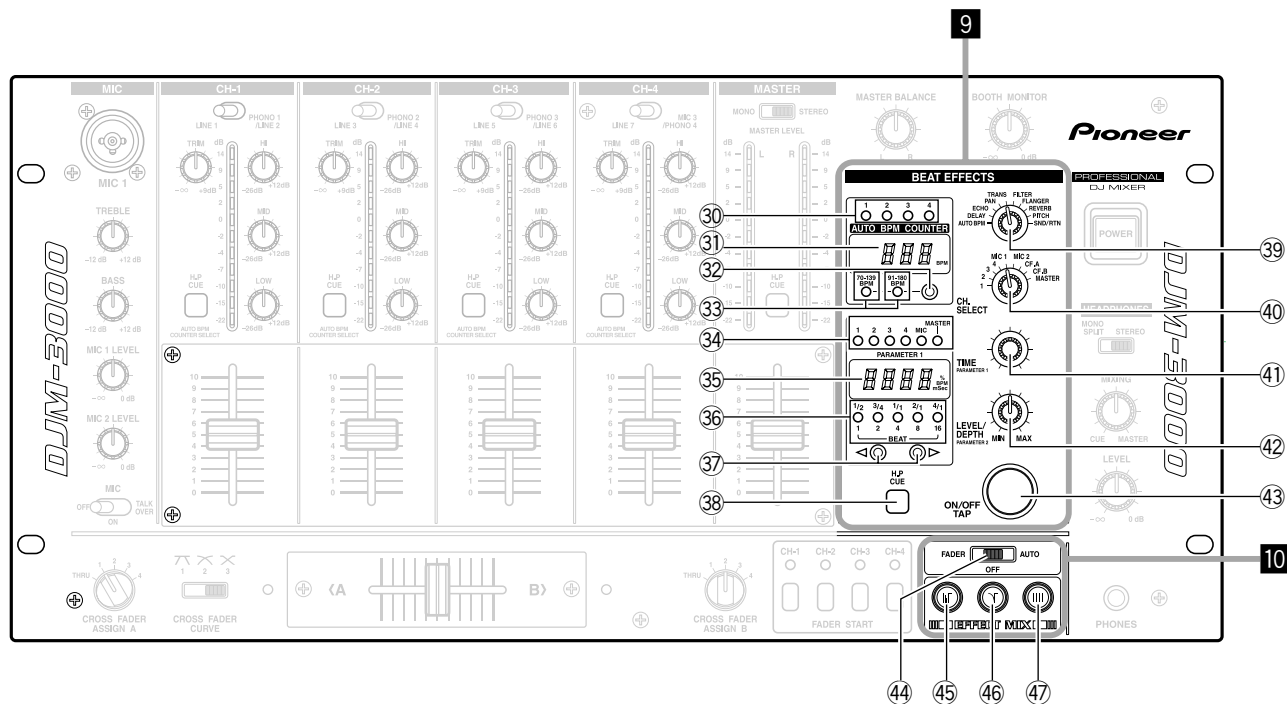
1-4: Use to select the channel (CH-1 to CH-4) assigned to B.

Channels other than those assigned to A and B can be output without passing through the cross fader.

8 FADER START Switches

CH-1, CH-2, CH-3, CH-4

When a CD player (CMX-3000, CMX-5000, CDJ-1000, CDJ-100S, CDJ-700S or CDJ-500II) is connected to one of the above channels of this unit via a control cord, the CD player's CUE START/STOP operation will start when the channel fader is moved from "0" upwards, and will stop (back cue) when the channel fader is returned to "0". The indicator of the selected channel will light orange during this operation. Also, if a channel is assigned to the cross fader, the cross fader is given priority; when the Cross fader lever begins moving from the A side toward B side, the CD player assigned to the B side will start, and when the lever reaches the B side, the A side source will stop (back cue).



9 BEAT EFFECTS Controls

30 1-4 (Channel displays)

Displays the channel selected for BPM count.

31 AUTO BPM COUNTER

When AUTO BPM is selected with the Effect selector switch (39), displays the BPM of the channel (CH-1 to CH-4) selected with the H.P CUE switch (12). The indicator flashes during counting, or if it is unable to count BPM.

32 BPM counter range selector switch

- BPM can be selected in one of the ranges 70-139, 91-180, 70-180 or manual mode. Set the range best matching the track you are measuring.

33 BPM counter range displays

- Displays the BPM count range selected. When BPM count range 70-180 is selected, both indicators 70-139 BPM and 91-180 BPM light.

- If both indicators are out, it indicates manual mode. For more information about manual mode, see the item "BPM COUNTING".

If the Effect selector switch (39) is set to DELAY, ECHO, PAN, TRANS, FILTER or FLANGER, the indicator will display the BPM of the source selected with the Effect CH. SELECT switch (40).

34 1-4, MIC, MASTER (Source displays)

Displays the source selected with the Effect CH. SELECT switch (40).

- If the Effect CH. SELECT switch is used to select "CF.A" or "CF.B", the channel that lights will be the one (1-4) selected with the respective ASSIGN switch (24), (29).

35 PARAMETER 1 (Parameter 1 / BPM counter)

The display contents change in accordance with the setting of the Effect selector switch (39).

- When AUTO BPM is selected, the display shows the BPM of the source selected with the Effect CH. SELECT switch (40). The indicator flashes during BPM counting, or when it is unable to count BPM.

- When SND/RTN is selected, nothing is displayed.

- When a setting other than AUTO BPM or SND/RTN is selected, the display shows the value of the effect set with Effect PARAMETER 1 control (41).

36 BEAT (Effect synchronous displays / Beat displays)

This display's contents differ depending on the setting of the Effect selector switch (39).

- When DELAY, ECHO, PAN, or TRANS are selected, the display shows the equivalent parameter 1 value for the BPM of the selected source. The display lights when the beat is in the range 1/2 to 4/1. If the beat value is below 1/2, pressing the Effect beat selector switch (<) causes the value to become 1/4, and all display indicators go out. If the beat value is above 4/1, pressing the Effect beat selector switch (>) causes the value to become 8/1, and all display indicators go out.

If the value does not match the number of beats, the indicator for the nearest beat value will flash.

- When FILTER or FLANGER are selected, the display shows the equivalent parameter 1 value for the BPM of the selected source. The display lights when the beat is in the range 1 to 16. If the beat value is below 1, pressing the Effect beat selector switch (<) causes the value to become 1/2, and all display indicators go out. If the value is above 16, pressing the Effect beat selector switch (>) causes the value to become 32, and all display indicators go out. If the value does not match the number of beats, the indicator for the nearest beat value will flash.

- When REVERB is selected, the display shows the amount of reverberation applied.

- When PITCH is selected, the display shows the amount of pitch modification applied.

- No display appears when AUTO BPM or SND/RTN are selected.

③⑦ Effect beat selector switches (<1, >1)

Use this switch to change the value of Effect PARAMETER 1 control (④①) in accordance with the BPM of the source selected with the Effect CH. SELECT switch (④⑩). The setting value of this switch differs depending on the setting of the Effect selector switch (③⑨).

- When DELAY, ECHO, PAN, or TRANS are selected, the parameter 1 value for the BPM of the selected source can be set to 1/4 beat, 1/2 beat, 1/1 beat, 2/1 beat, 4/1 beat, or 8/1 beat.
- When DELAY or ECHO are selected, values can be set to 1/4x, 1/2x, 1/1x, 2/1x, 4/1x or 8/1x, within a range such that the parameter 1 value does not exceed 3500 ms.
- When FILTER or FLANGER are selected, the parameter 1 value for the BPM of the selected source can be set to 1/2 beat, 1 beat, 2 beats, 4 beats, 8 beats, 16 beats, or 32 beats.
- When PITCH is selected, the value can be set to -100%, -50%, -33%, 0%, 33%, 50%, or 100%.
- When REVERB is selected, the value can be set to 10%, 20%, 35%, 50%, 65%, 80%, or 90%.
- This control is disabled when AUTO BPM or SND/RTN are selected.

③⑧ H.P CUE (Headphones cue switch)

When this switch is pressed it lights orange, and beat effects are output to the headphones. Pressing the switch again disconnects the beat effect to the headphones and turns off the switch lamp.

③⑨ Effect selector switch

Use to select desired effects.

④⑩ CH. SELECT (Effect channel selector switch)

Use to select the source you wish to apply effects to.

④① TIME (PARAMETER 1)

(Effect parameter 1 control)

This control is used to set the time parameter for the onboard effector.

④② LEVEL/DEPTH (PARAMETER 2)

(Effect parameter 2 control)

This control is used to set quantitative parameters for the onboard effector.

④③ ON/OFF, TAP (Effect ON/OFF switch, TAP switch)

This switch produces different operations depending on the setting of the Effect selector switch (③⑨)

- When DELAY, ECHO, PAN, TRANS, FILTER, FLANGER, REVERB, PITCH, or SND/RTN are selected, the switch operates to turn the selected effect ON/OFF.
OFF: the orange lamp lights; ON: orange lamp flashes.
- When AUTO BPM is selected the switch becomes a "TAP" switch; by tapping the switch together with the source beat, the BPM can be input manually.
When tapping the TAP switch to count the BPM, both BPM counter range displays (70-139 BPM and 91-180 BPM) go out, and the manual mode is enabled.

10 EFFECT MIX Controls

④④ FADER/OFF/AUTO (EFFECT MIX selector switch)

Use to select the cross fader effect mode.

FADER: Selects Effect Mix Fader mode. When this is selected, the Cross fader lever (②⑦) can be used to control effects and perform cue start and back cue.

OFF: Normal mode

AUTO: The Effect Mix Auto mode. When this is selected, the Effect select/start switches (④⑤, ④⑥, ④⑦) can be used to control effects, perform cue start and back cue.

④⑤, ④⑥, ④⑦ Effect select/start switches

Use to select the type of Effect Mix desired (default is ECHO)

- The switch for the selected function flashes.

④⑤ ECHO switch

④⑥ ZIP switch

④⑦ ROLL switch