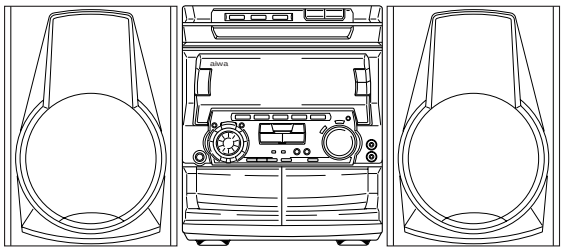
aiwa
SERVICE

NSX-AK772 HC



SERVICE MANUAL

COMPACT DISC STEREO
CASSETTE RECEIVER

BASIC TAPE MECHANISM: 2ZM-3MK2YPR4N
BASIC CD MECHANISM: 4ZG-1 VOS1DSH

SYSTEM	CD-CASSEIVER	SPEAKER
NSX-AK772	CX-NAK772	SX-NAV704 SX-CR675

If requiring information about the CD mechanism, see Service Manual of 4ZG-1, S/M Code No.09-985-249-8OT.

aiwa

S/M Code No. 09-989-293-9OT

TABLE OF CONTENTS

SPECIFICATIONS

＜FM Tuner section＞

Tuning range	87.5 MHz to 108 MHz
Usable sensitivity(IHF)	13.2 dBf
Antenna terminals	75 ohms (unbalanced)

＜MW Tuner section＞

Tuning range	531 kHz to 1602 kHz (9 kHz step) 530 kHz to 1710 kHz (10 kHz step)
Usable sensitivity	350 uV/m
Antenna	Loop antenna

＜SW Tuner section＞

Tuning range	5.900 MHz to 17.900 MHz
Antenna	Wire antenna

＜Amplifier section＞

Power output	**Front** Rated : 80 W + 80 W (6 ohms, THD 1%, 1 kHz) Reference : 100 W + 100 W (6 ohms, THD 10%, 1 kHz) **Rear (Surround)** Rated : 33 W + 33 W (8 ohms, THD 1%, 1 kHz) Reference : 40 W + 40 W (8 ohms, THD 10%, 1 kHz) **Center** Rated : 33 W (8 ohms, THD 1%, 1 kHz) Reference : 40 W (8 ohms, THD 10%, 1 kHz)
Total harmonic distortion	0.05% (50 W, 1 kHz, 6 ohms, DIN AUDIO / Front)
Inputs	VIDEO/AUX : 210 mV (adjustable) MD : 210mV (adjustable) MIC1, MIC2 : 1.4mV (10 kohms) 5.1 CH INPUT FRONT (L,R) : 560 mV REAR (L,R) : 320 mV CENTER : 300 mV SUB WOOFER : 400 mV
Outputs	LINE OUT: 280mV VIDEO OUT: 1.0 Vp-p (75 ohms) SUB WOOFER : 1 V SPEAKERS: accept speakers of 6 ohms or more SURROUND SPEAKERS: accept speakers of 8 ohms to 16 ohms CENTER SPEAKER: accept speakers of 8 ohms or more PHONES (stereo jack) : accepts headphones of 32 ohms or more

＜Cassette deck section＞

Track format	4 tracks, 2 channels stereo
Frequency response	CrO_2 tape : 50 Hz – 16000 Hz Normal tape : 50 Hz – 15000 Hz
Recording system	AC bias
Heads	Deck 1 : Playback head x 1 Deck 2 : Recording/playback head x 1/ erase head x 1

＜Compact disc player section＞

Laser	Semiconductor laser (λ = 780 nm)
D-A converter	1 bit dual
Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Harmonic distortion	0.05 % (1 kHz, 0 dB)
Wow and flutter	Unmeasurable
Video signal	NTSC/PAL color format (selectable)
Video data	MPEG 1
Audio data	MPEG 1, LAYER 2

＜Speaker system＞ SX–NAV704

Cabinet type	2 way, bass reflex (magnetic shielded type)
Speakers	Woofer : 160 mm cone type Tweeter : 80 mm cone type
Impedance	6 ohms
Output sound pressure level	87 dB/W/m
Dimensions (W x H x D)	235 x 324 x 260 mm
Weight	5.4 kg

＜General＞

Power requirements	120 V/220 - 230 V/240 V AC switchable, 50/60 Hz
Power consumption	210 W
Dimensions of main unit	260 x 324 x 348 mm
Weight of main unit	8.9 kg

- Design and specifications are subject to change without notice.

- The word "BBE"and the "BBE symbol" are trademarks of BBE Sound, Inc.
  Under license from BBE Sound,Inc.

- DOLBY NR / DOLBY PRO LOGIC
  Manufactured under license from Dolby Laboratories Licensing Corporation.
  "DOLBY", and the double-D symbol ◨◧ and "PRO LOGIC" are trademarks of Dolby Laboratories Licensing Corporation.

NOTE ON BEFORE STARTING REPAIR

1. Forced discharge of electrolytic capacitor of power supply block

When repair is going to be attempted in the set that uses relay circuit in the power supply block, electric potential is kept charged across the electrolytic capacitors (C101, 102) even though AC power cord is removed. If repair is attempted in this condition, the secondary defect can occur.
In order to prevent the secondary trouble, perform the following measures before starting repair work.

Discharge procedure

① Remove the AC power cord.
② Connect a discharging resistor at an end of lead wire that has clips at both ends. Connector the other end of the lead wire to metal chassis.
③ Contact the other end of the discharging resistor to the positive (+) side (+VH) of C101. (For two seconds)
④ Contact the same end of the discharging resistor as step 3 to the negative (-) side (-VH) of C102 in the same way. (For two seconds)
⑤ Check that voltage across C101 and C102 has decreased 1 V or less using a multimeter or an oscilloscope.

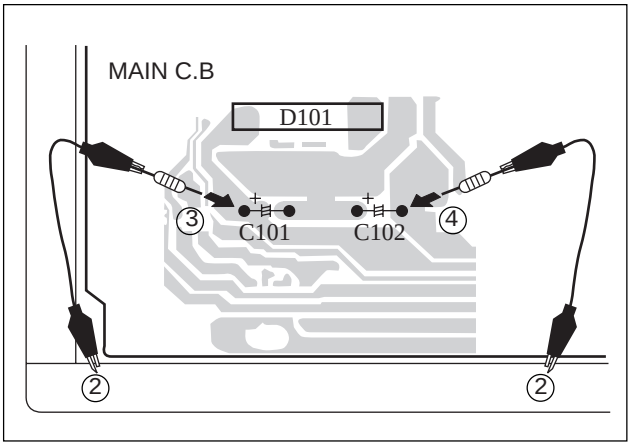


Fig-1

Select a discharging resistor referring to the following table.

Charging voltage (V) (C101, 102)	Discharging resistor (ohm)	Rated power (W)	Parts number
25-48	100	3	87-A00-247-090
49-140	220	5	87-A00-232-090

Note: The reference numbers (C101, C102) of the electrolytic capacitors can change depending on the models. Be sure to check the reference numbers of the charging capacitor on schematic diagram before starting the discharging work.

2. Check items before exchanging the MICROCOMPUTER

Be sure to check the following items before exchanging the MICROCOMPUTER. Exchange the MICROCOMPUTER after confirming that the MICROCOMPUTER is surely defective.

2-1. Regarding the HOLD terminal of the MICROCOMPUTER

When the HOLD terminal (INPUT) of the MICROCOMPUTER is "H", the MICROCOMPUTER is judged to be operating correctly. When this terminal is "L", the main power cannot be turned on. Therefore, be sure to check the terminal voltage of the HOLD terminal before exchange.
When the MICROCOMPUTER is not defective, the HOLD terminal can also go "L" when the POWER AMPLIFIER has any abnormalities that triggers the abnormality detection circuit on the MAIN C. B. that sets the HOLD terminal to "L".

- Good or no good judgment of the MICROCOMPUTER

① Turn on the AC main power.
② Confirm that the main power is turned on and the HOLD terminal of the MICROCOMPUTER keeps the "H" level or not.
③ When the HOLD terminal is "L" level, the abnormality detection circuit is judged to be working correctly and the MICROCOMPUTER is judged to be good.

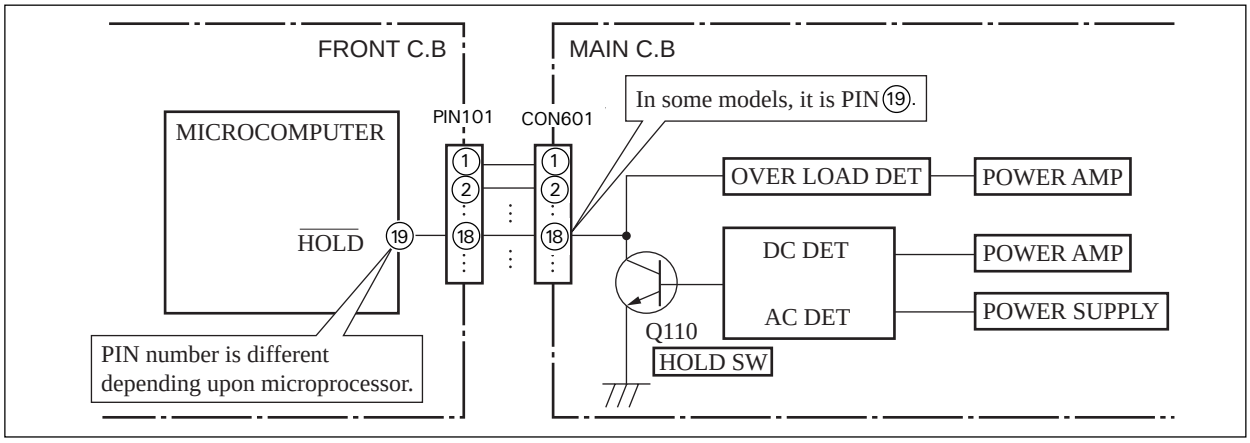


Fig-2-1

In such a case, check also if the POWER AMPLIFIER circuit or power supply circuit has any abnormalities or not.

2-2. Regarding reset

There are cases that the machine does not work correctly because the MICROCOMPUTER is not reset even though the AC power cord is re-inserted, or the software reset (pressing the STOP key + POWER key) is performed.

When the above described phenomenon occurs, it can leads to wrong judgment as if the MICROCOMPUTER is defective and to exchange the MICROCOMPUTER. In such a case, perform the forced-reset by the following procedure and check good or no good of the MICROCOMPUTER.

① Remove the AC power cord.

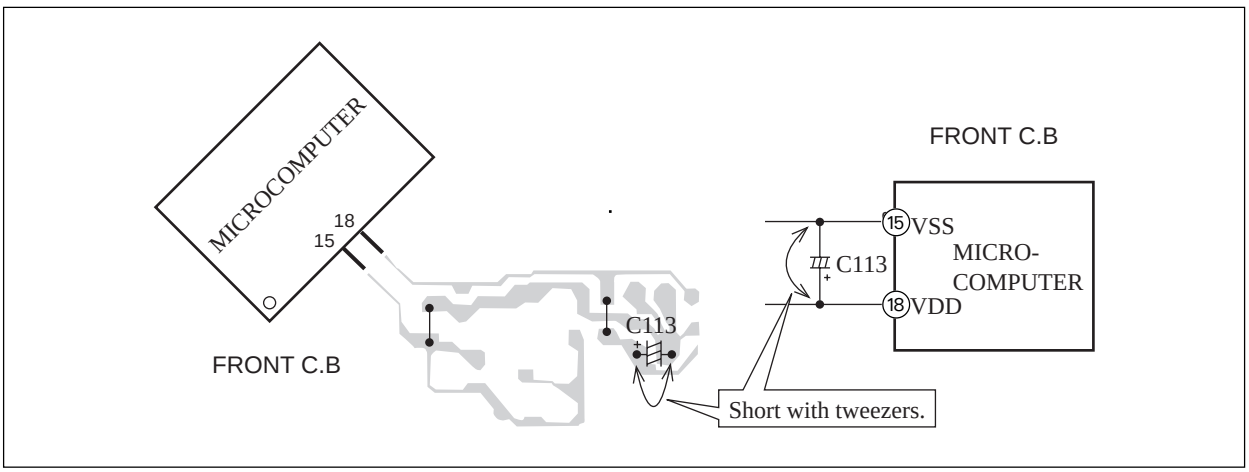


Fig-2-2

② Short the both ends of the electrolytic capacitor C113 that is connected to VDD of the MICROCOMPUTER with tweezers.

③ Connect the AC power cord again. If the MICROCOMPUTER returns to the normal operation, the MICROCOMPUTER is good.

Note: The reference number or MICROCOMPUTER pin number of transistor (Q110) and electrolytic capacitor (C113) can change depending on the models. Be sure to check the reference numbers on schematic diagram before starting the discharging work.

2-3. Confirmation of soldering state of MICROCOMPUTER

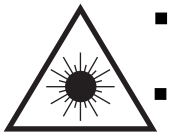
Check the soldering state of the MICROCOMPUTER in addition to the above described procedures. Be sure to exchange the MICROCOMPUTER after surely confirming that the trouble is not caused by poor soldering but the MICROCOMPUTER itself.

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserståling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saataa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herin may result in hazardous radiation exposure.

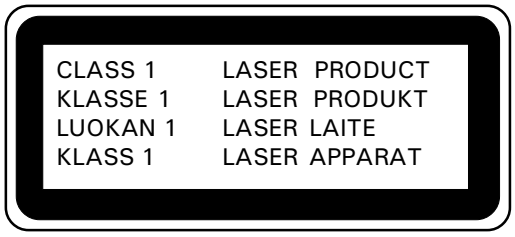
ATTENTION

L'utillisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL

Usynlig laserståling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

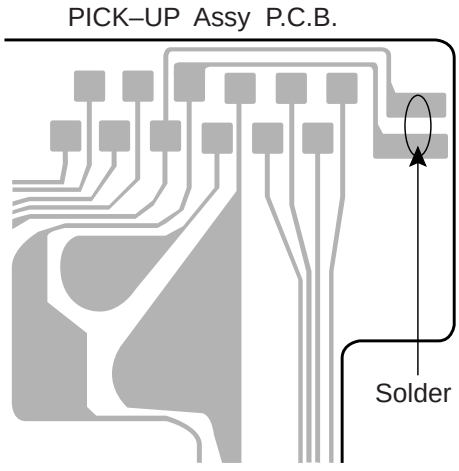


Precaution to replace Optical block

(KSS-213F)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use the clothes do not touch the diode.

1) After the connection, remove solder shown in right figure.



ELECTRICAL MAIN PARTS LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	88-NF5-615-040		C-IC,MSM6654A-521GS-KR1
	88-NH7-630-010		C-IC,LC866560W-5J08
	87-070-083-010		IC,GP1U281X
	87-A20-783-040		C-IC,BA7762AFS
	87-A20-083-010		IC,BA3835S
	87-A20-804-040		C-IC,NJM2152M
	87-017-915-080		IC,BU4094BCF
	87-A21-011-040		C-IC,M62445FP-600D
	87-017-888-080		IC,NJM4558MD
	87-070-127-110		IC,LC72131D
	87-020-454-010		IC,DN6851
	87-070-289-040		C-IC,BU2092F
	87-A20-913-010		IC,LA1837 NL
	87-A20-715-010		IC,M62439SP
	87-A20-853-010		C-IC,M62463FP
	87-017-726-080		C-IC,BU4052BCF
	87-017-917-080		C-IC,BU4066BCF
	87-A20-561-040		C-IC,M65847AFP
TRANSISTOR			
	87-A30-087-080		C-FET,2SK2158
	89-213-702-010		TR,2SB1370 (1.8W)
	87-026-263-080		C-TR,RN1410
	87-A30-071-080		C-TR,RT1N 144C
	87-026-610-080		TR,KTC3198GR
	87-A30-076-080		C-TR,2SC3052F
	87-A30-234-080		TR,CSC4115BC
	87-A30-075-080		C-TR,2SA1235F
	87-026-609-080		TR,KTA1266GR
	87-A30-107-070		C-TR,CMBT5401
	87-A30-190-080		TR,CC5551
	87-A30-097-010		TR,FN 1016
	87-A30-098-010		TR,FP 1016
	87-A30-106-070		C-TR,CMBT5551
	87-A30-072-080		C-TR,RT1P 144C
	87-A30-074-080		C-TR,RT1P 141C
	87-026-232-080		C-TR,DTA 144WK
	87-A30-073-080		C-TR,RT1N 141C
	87-A30-105-080		C-TR,RT1P 441C
	89-112-965-080		TR,2SA1296 (0.75W)
	87-A30-159-080		C-TR,KTA1298Y
	89-327-143-080		TR,2SC2714 (0.1W)
	87-026-463-080		TR,2SA933SRS
	87-A30-162-010		FET,2SK2937
	87-026-580-080		C-TR,DTA123JK
	87-A30-221-040		C-TR,DTA114WK
	87-A30-086-070		C-TR,CSD1306E
	89-505-434-540		C-FET,2SK543-TB(4/5)
	87-A30-137-010		TR,2SD2494
	87-A30-138-010		TR,2SB1625
	87-A30-142-040		C-TR,DTA123EKA
	87-A30-108-010		TR,2SB1626
	87-A30-109-010		TR,2SD2495
	87-A30-214-010		TR,2SB1344
	87-A30-215-010		TR,2SD2025
	87-A30-104-080		C-TR,RT1N441C
	87-026-223-080		C-TR,DTC143TK
DIODE			
	87-A40-470-080		DIODE,1SS254
	87-017-654-060		DIODE,GBU6JL 6131
	87-A40-505-040		C-DIODE,KDS181
	87-A40-509-080		ZENER,MTZJ6.8C
	87-070-136-080		ZENER,MTZJ5.1B
	87-A40-504-040		C-DIODE,KDS184
	87-070-274-080		DIODE,1N4003 SEM
	87-A40-341-080		ZENER,MTZJ 36 A
	87-A40-004-080		ZENER,MTZJ16A
	87-A40-488-080		DIODE,1SS244
	87-A40-345-080		ZENER,MTZJ10C
	87-A40-184-090		DIODE,RF34
	87-A40-002-080		ZENER,MTZJ5.1C
	87-A40-438-080		ZENER,MTZJ4.7A
	87-A40-234-080		ZENER,MTZJ5.6A
	87-A40-115-060		DIODE,RS603M
	87-017-931-080		ZENER,MTZJ5.6B
	87-A40-370-090		DIODE,RK46-P20
	87-017-178-090		DIODE,IN5402-BD54
	87-A40-116-060		DIODE,RS403L-D-51
	87-A40-348-080		ZENER,MTZJ3.3A
	87-A40-442-080		ZENER,MTZJ9.1A
	87-A40-269-080		C-DIODE,MC2836
	87-A40-270-080		C-DIODE,MC2838
MAIN C.B			
C103	87-016-658-090		CAP,E 4700-35 SMG
C104	87-016-658-090		CAP,E 4700-35 SMG
C105	87-012-368-080		C-CAP,S 0.1-50 F
C106	87-012-368-080		C-CAP,S 0.1-50 F
C107	87-012-368-080		C-CAP,S 0.1-50 F
C108	87-012-368-080		C-CAP,S 0.1-50 F
C109	87-010-196-080		CHIP CAPACITOR,0.1-25
C110	87-010-196-080		CHIP CAPACITOR,0.1-25
C111	87-010-196-080		CHIP CAPACITOR,0.1-25
C112	87-010-196-080		CHIP CAPACITOR,0.1-25
C113	87-010-385-080		CAP, ELECT 220-25V
C114	87-010-385-080		CAP,E 220-25V
C115	87-010-385-080		CAP,E 220-25V
C116	87-010-385-080		CAP, ELECT 220-25V
C117	87-010-430-080		CAP, ELECT 100-63
C118	87-010-263-080		CAP, ELECT 100-10V
C119	87-010-260-080		CAP, ELECT 47-25V
C120	87-010-403-080		CAP, ELECT 3.3-50V
C121	87-012-140-080		CAP 470P
C123	87-010-247-080		CAP, ELECT 100-50V
C124	87-010-112-080		CAP, ELECT 100-16V
C125	87-010-235-080		CAP,E 470-16 SME
C151	87-016-520-090		CAP,E 3300-65
C152	87-016-520-090		CAP,E 3300-65
C204	87-016-299-080		CAP, E 100-10 SME
C205	87-010-805-080		CAP,S 1-16
C206	87-010-805-080		CAP,S 1-16
C209	87-010-546-080		CAP, ELECT 0.33-50V
C210	87-010-546-080		CAP, ELECT 0.33-50V
C211	87-010-182-080		C-CAP,S 2200P-50 B
C212	87-010-182-080		C-CAP,S 2200P-50 B
C213	87-010-186-080		CAP,CHIP 4700P
C214	87-010-186-080		CAP,CHIP 4700P
C215	87-010-403-080		CAP, ELECT 3.3-50V
C216	87-010-403-080		CAP, ELECT 3.3-50V
C217	87-A10-899-080		CAP, ELECT 47-25V BP
C218	87-A10-899-080		CAP, ELECT 47-25V BP
C219	87-010-805-080		CAP,S 1-16
C220	87-010-805-080		CAP,S 1-16
C223	87-010-197-080		CAP,CHIP 0.01 DM
C224	87-010-197-080		CAP,CHIP 0.01 DM
C229	87-A10-812-080		C-CAP,S 220P-200 J CH
C230	87-A10-812-080		C-CAP,S 220P-200 J CH
C233	87-010-544-080		CAP, ELECT 0.1-50V
C234	87-010-544-080		CAP, ELECT 0.1-50V
C235	87-010-196-080		CHIP CAPACITOR,0.1-25
C237	87-012-368-080		C-CAP,S 0.1-50 F
C238	87-012-368-080		C-CAP,S 0.1-50 F
C239	87-012-368-080		C-CAP,S 0.1-50 F
C240	87-012-368-080		C-CAP,S 0.1-50 F

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C247	87-010-178-080		C-CAP,S 1000P-50 CH
C248	87-010-178-080		C-CAP,S 1000P-50 CH
C280	87-010-188-080		C-CAP,S 6800P-50 B
C301	87-010-318-080		C-CAP,S 47P-50 CH
C302	87-010-318-080		C-CAP,S 47P-50 CH
C303	87-012-157-080		C-CAP,S 330P-50 CH
C304	87-012-157-080		C-CAP,S 330P-50 CH
C305	87-012-145-080		CAP, CHIP S 270P CH
C306	87-012-145-080		CAP, CHIP S 270P CH
C307	87-010-196-080		CHIP CAPACITOR,0.1-25
C309	87-010-196-080		CHIP CAPACITOR,0.1-25
C310	87-010-196-080		CHIP CAPACITOR,0.1-25
C311	87-010-198-080		CAP, CHIP 0.022
C312	87-010-198-080		CAP, CHIP 0.022
C313	87-010-178-080		CHIP CAP 1000P
C314	87-010-178-080		CHIP CAP 1000P
C315	87-010-178-080		CHIP CAP 1000P
C316	87-010-178-080		CHIP CAP 1000P
C321	87-016-492-080		C-CAP,S 0.33-16 FZ
C322	87-016-492-080		C-CAP,S 0.33-16 FZ
C324	87-010-260-080		CAP, ELECT 47-25V
C325	87-010-370-080		CAP,E 330-6.3 SME
C327	87-010-404-080		CAP, ELECT 4.7-50V
C328	87-010-404-080		CAP, ELECT 4.7-50V
C332	87-010-196-080		CHIP CAPACITOR,0.1-25
C335	87-010-401-080		CAP, ELECT 1-50V
C336	87-010-401-080		CAP, ELECT 1-50V
C337	87-010-196-080		CHIP CAPACITOR,0.1-25
C339	87-010-196-080		CHIP CAPACITOR,0.1-25
C340	87-010-196-080		CHIP CAPACITOR,0.1-25
C351	87-012-140-080		CAP 470P
C352	87-012-140-080		CAP 470P
C354	87-010-175-080		CAP 560P
C355	87-012-349-080		C-CAP,S 1000P-50 CH
C356	87-010-260-080		CAP, ELECT 47-25V
C357	87-010-197-080		CAP, CHIP 0.01 DM
C358	87-010-183-080		C-CAP,S 2700P-50 B
C359	87-010-183-080		C-CAP,S 2700P-50 B
C360	87-010-183-080		C-CAP,S 2700P-50 B
C370	87-010-196-080		CHIP CAPACITOR,0.1-25
C373	87-016-083-080		C-CAP,S 0.15-16 RK
C374	87-016-083-080		C-CAP,S 0.15-16 RK
C378	87-010-196-080		CHIP CAPACITOR,0.1-25
C379	87-010-382-080		CAP, ELECT 22-25V
C380	87-010-382-080		CAP, ELECT 22-25V
C381	87-010-197-080		CAP, CHIP 0.01 DM
C382	87-010-312-080		C-CAP,S 15P-50 CH
C383	87-010-197-080		CAP, CHIP 0.01 DM
C384	87-010-402-080		CAP, ELECT 2.2-50V
C386	87-010-196-080		CHIP CAPACITOR,0.1-25
C387	87-012-145-080		CAP, CHIP S 270P CH
C391	87-010-319-080		C-CAP,S 56P-50 CH
C392	87-010-319-080		C-CAP,S 56P-50 CH
C393	87-010-319-080		C-CAP,S 56P-50 CH
C394	87-010-319-080		C-CAP,S 56P-50 CH
C401	87-010-401-080		CAP, ELECT 1-50V
C402	87-010-401-080		CAP, ELECT 1-50V
C403	87-010-182-080		C-CAP,S 2200P-50 B
C404	87-010-182-080		C-CAP,S 2200P-50 B
C405	87-010-193-080		CHIP CAPACITOR,0.033
C406	87-010-193-080		CHIP CAPACITOR,0.033
C407	87-010-404-080		CAP, ELECT 4.7-50 M SME
C408	87-010-404-080		CAP, ELECT 4.7-50 M SME
C409	87-010-380-080		CAP, ELECT 47-16V
C410	87-010-380-080		CAP, ELECT 47-16V
C411	87-010-405-080		CAP, ELECT 10-50V
C412	87-010-381-080		CAP, ELECT 330-16 SME
C415	87-010-185-080		CHIP CAPACITOR 3900P (K)
C416	87-010-185-080		CHIP CAPACITOR 3900P (K)
C457	87-010-404-080		CAP, ELECT 4.7-50V
C458	87-010-404-080		CAP, ELECT 4.7-50V
C501	87-A10-060-080		C-CAP,S 0.18-16 KB
C502	87-A10-060-080		C-CAP,S 0.18-16 KB
C503	87-012-154-080		C-CAP,S 150P-50 CH
C504	87-012-154-080		C-CAP,S 150P-50 CH
C505	87-012-145-080		CAP,CHIP S 270P CH
C506	87-012-145-080		CAP,CHIP S 270P CH
C507	87-010-183-080		C-CAP,S 2700P-50 B
C509	87-010-196-080		CHIP CAPACITOR,0.1-25
C510	87-010-177-080		C-CAP,S 820P-50 SL
C511	87-010-177-080		C-CAP,S 820P-50 SL
C512	87-010-196-080		CHIP CAPACITOR,0.1-25
C513	87-010-374-080		CAP, ELECT 47-10V
C514	87-010-196-080		CHIP CAPACITOR,0.1-25
C515	87-010-263-080		CAP, ELECT 100-10V
C517	87-010-183-080		C-CAP,S 2700P-50 B
C521	87-016-460-080		C-CAP,S 0.22-16 B
C522	87-016-460-080		C-CAP,S 0.22-16 B
C523	87-016-460-080		C-CAP,S 0.22-16 B
C527	87-010-196-080		CHIP CAPACITOR,0.1-25
C551	87-010-401-080		CAP, ELECT 1-50V
C552	87-010-263-080		CAP, ELECT 100-10V
C553	87-010-380-080		CAP, ELECT 47-16V
C601	87-010-180-080		C-CER 1500P
C602	87-010-180-080		C-CER 1500P
C613	87-016-081-080		C-CAP,S 0.1-16 RK
C614	87-016-081-080		C-CAP,S 0.1-16 RK
C619	87-010-185-080		C-CAP,S 3900P-50 B
C620	87-010-185-080		C-CAP,S 3900P-50 B
C621	87-010-401-080		CAP, ELECT 1-50V
C622	87-010-401-080		CAP, ELECT 1-50V
C625	87-010-405-080		CAP, ELECT 10-50V
C626	87-010-405-080		CAP, ELECT 10-50V
C629	87-010-405-080		CAP, ELECT 10-50V
C630	87-010-213-080		CAP, CHIP 0.015-25 KB GRM
C631	87-010-992-080		CHIP-CAP,S 0.047-25B
C632	87-010-263-080		CAP, ELECT 100-10V
C633	87-010-263-080		CAP, ELECT 100-10V
C634	87-010-196-080		CHIP CAPACITOR,0.1-25
C635	87-010-196-080		CHIP CAPACITOR,0.1-25
C636	87-010-194-080		CAP, CHIP 0.047
C637	87-010-183-080		C-CAP,S 2700P-50 B
C641	87-010-196-080		CHIP CAPACITOR,0.1-25
C651	87-010-197-080		CHIP CAPACITOR,0.01 DM
C667	87-010-196-080		CHIP CAPACITOR,0.1-25
C701	87-010-381-080		CAP, ELECT 330-16V
C702	87-010-404-080		CAP, ELECT 4.7-50V
C703	87-010-197-080		CAP, CHIP 0.01 DM
C704	87-010-197-080		CAP, CHIP 0.01 DM
C709	87-010-322-080		C-CAP,S 100P-50 CH
C711	87-010-263-080		CAP, ELECT 100-10V
C712	87-010-196-080		CHIP CAPACITOR,0.1-25
C713	87-010-197-080		CAP, CHIP 0.01 DM
C714	87-010-197-080		CAP, CHIP 0.01 DM
C721	87-010-312-080		C-CAP,S 15P-50 CH
C722	87-010-312-080		C-CAP,S 15P-50 CH
C723	87-010-178-080		CHIP CAP 1000P
C725	87-010-178-080		CHIP CAP 1000P
C727	87-010-196-080		CHIP CAPACITOR,0.1-25
C728	87-010-248-080		CAP, ELECT 220-10V
C755	87-010-197-080		CAP, CHIP 0.01 DM
C756	87-010-197-080		CAP, CHIP 0.01 DM
C757	87-010-318-080		C-CAP,S 47P-50 CH
C758	87-010-149-080		C-CAP,S 5P-50 CH
C759	87-012-154-080		C-CAP,S 150P-50 CH
C760	87-012-154-080		C-CAP,S 150P-50 CH
C761	87-010-196-080		CHIP CAPACITOR,0.1-25
C762	87-010-197-080		CAP, CHIP 0.01 DM
C763	87-010-194-080		CAP, CHIP 0.047
C764	87-010-319-080		C-CAP,S 56P-50 CH

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C765	87-010-197-080		CAP, CHIP 0.01 DM
C766	87-010-197-080		CAP, CHIP 0.01 DM
C767	87-010-405-080		CAP, ELECT 10-50V
C768	87-010-197-080		CAP, CHIP 0.01 DM
C769	87-010-408-080		CAP, ELECT 47-50V
C770	87-015-821-080		C-CAP 0.047
C771	87-010-407-080		CAP, ELECT 33-50V
C772	87-010-194-080		CAP, CHIP 0.047
C773	87-010-196-080		CHIP CAPACITOR,0.1-25
C774	87-010-263-080		CAP, ELECT 100-10V
C775	87-010-404-080		CAP, ELECT 4.7-50V
C776	87-010-197-080		CAP, CHIP 0.01 DM
C777	87-010-400-080		CAP, ELECT 0.47-50V
C778	87-010-401-080		CAP, ELECT 1-50V
C779	87-010-401-080		CAP, ELECT 1-50V
C780	87-010-196-080		CHIP CAPACITOR,0.1-25
C781	87-010-405-080		CAP, ELECT 10-50V
C782	87-010-405-080		CAP, ELECT 10-50V
C783	87-015-819-080		CAPACITOR,0.01
C784	87-010-197-080		CAP, CHIP 0.01 DM
C785	87-010-403-080		CAP, ELECT 3.3-50V
C786	87-010-403-080		CAP, ELECT 3.3-50V
C789	87-010-179-080		CAP,CHIP S B1200P
C790	87-010-179-080		CAP,CHIP S B1200P
C791	87-010-405-080		CAP, ELECT 10-50V
C793	87-010-177-080		C-CAP,S 820P-50 SL
C794	87-010-406-080		CAP, ELECT 22-50
C795	87-010-596-080		CAP, S 0.047-16
C796	87-010-403-080		CAP, ELECT 3.3-50V
C797	87-010-179-080		C-CAP,S 1200P BK
C798	87-010-179-080		C-CAP,S 1200P BK
C799	87-010-194-080		CAP, CHIP 0.047
C812	87-010-197-080		CAP, CHIP 0.01 DM
C814	87-010-197-080		CAP, CHIP 0.01 DM
C820	87-010-408-080		CAP, ELECT 47-50V
C821	87-010-197-080		CAP, CHIP 0.01 DM
C822	87-010-197-080		CAP, CHIP 0.01 DM
C823	87-010-197-080		CAP, CHIP 0.01 DM
C828	87-010-196-080		CHIP CAPACITOR,0.1-25
C829	87-010-196-080		CHIP CAPACITOR,0.1-25
C940	87-010-197-080		C-CAP,S 0.01 BK
C941	87-010-314-080		C-CAP,S 22P-50V
C943	87-010-197-080		C-CAP,S 0.01 BK
C944	87-014-051-080		CAP,PP 560P
C945	87-010-197-080		C-CAP,S 0.01 BK
C947	87-010-197-080		C-CAP,S 0.01 BK
C950	87-014-073-080		CAP,PP 4700P-100J
C952	87-010-197-080		C-CAP,S 0.01 BK
C953	87-010-197-080		C-CAP,S 0.01 BK
C954	87-010-400-080		CAP,E 0.47-50V
C956	87-010-263-080		CAP,E 100-10V
C959	87-010-196-080		CHIP CAPACITOR,0.1-25
C960	87-010-196-080		CHIP CAPACITOR,0.1-25
C962	87-010-401-080		CAP,E 1-50V
CF801	87-008-261-010		FILTER, SFE10.7MA5-A
CF802	87-008-261-010		FILTER, SFE10.7MA5-A
CN301	87-099-827-010		CONN,3P S2M-3W
CN351	87-099-832-010		CONN,8P S2M-8W
CN551	87-A60-109-010		CONN,2P V S2M-2W
CN601	87-099-719-010		CONN,30P TYK-B (X)
CN602	87-A60-131-010		CONN,6P V FE
FB601	87-A50-190-080		C-COIL,S BLM21A102S
FC602	88-906-241-110		FF-CABLE,6P 1.25
FFE801	A8-8ZA-193-070		8ZA-1 YFEUNC
J201	87-A60-483-010		JACK,DIA6.3 BLK ST W/S KM
J203	87-033-240-010		TERMINAL,SP 4P32SV1-05
J601	87-A60-426-010		JACK,PIN 6P YKC21-3835
J801	87-033-239-010		TERMINAL,HSP-154V-2
J940	81-754-629-010		CONNECTOR XH 2P (UL)
L201	87-003-383-010		COIL,1UH-S
L202	87-003-383-010		COIL,1UH-S
L301	87-A50-049-010		COIL,TRAP 85K(COI)
L302	87-A50-049-010		COIL,TRAP 85K(COI)
L351	87-007-342-010		COIL,OSC 85K BIAS
L771	87-A50-266-010		COIL,FM DET-2N(TOK)
L772	87-A90-052-010		FLTR,CFMT-450A (TOK)
L781	87-005-847-080		COIL,2.2UH(CECS)
L832	86-NFZ-694-080		COIL,2.2UH K CECS
L941	87-A50-022-010		COIL,ANT SW (COI)7.96MHZ
L942	87-A50-173-010		COIL,OSC SW-N(COI)
L943	87-005-372-080		COIL,S 1MHM
L944	87-A50-159-010		COIL,10MH K C2B
L981	88-NF8-625-010		COIL,AM PACK 3N(TOK)
M451	87-A90-796-010		FAN,F614R-12MC-15-30MM
R237	87-A00-262-080		RES,M/F 0.15-2W J
R238	87-A00-262-080		RES,M/F 0.15-2W J
R239	87-A00-262-080		RES,M/F 0.15-2W J
R240	87-A00-262-080		RES,M/F 0.15-2W J
RY101	87-A90-464-010		RELAY, DG12D2-0(M)
SFR351	87-A90-433-080		SFR,50K H NVZ6TLTA
SFR352	87-A90-433-080		SFR,50K H NVZ6TLTA
TC941	87-011-220-080		TRIMMER,CAP 20P VTC
TC943	87-011-221-080		CAP,TRIMMER 30P
TH201	87-A90-221-080		C-THMS,100K
TH202	87-A90-221-080		C-THMS,100K
W102	87-A90-460-010		HLDR,WIRE 2.5-7P
W104	85-NF5-628-010		F-CABLE 7P-2.5
WH102	87-A90-460-010		HLDR,WIRE 2.5-7P
X721	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309
X771	87-030-354-010		VIB,CER 450.0KHZ BFU C

FRONT C.B

C101	87-010-075-040		CAP,E 10-16 5L
C102	87-010-196-080		CHIP CAPACITOR,0.1-25
C103	87-010-196-080		CHIP CAPACITOR,0.1-25
C104	87-010-494-040		CAP,E 1-50 GAS
C105	87-010-178-080		CHIP CAP 1000P
C106	87-A10-189-040		CAP,E 220-10
C107	87-010-197-080		CAP, CHIP 0.01 DM
C108	87-010-196-080		CHIP CAPACITOR,0.1-25
C109	87-010-194-080		CAP, CHIP 0.047
C110	87-012-157-080		C-CAP,S 330P-50 CH
C111	87-010-320-080		CHIP CAP 68P
C112	87-010-312-080		C-CAP,S 15P-50 CH
C113	87-010-316-080		C-CAP,S 33P-50 CH
C114	87-010-182-080		C-CAP,S 2200P-50 B
C115	87-010-182-080		C-CAP,S 2200P-50 B
C116	87-010-405-040		CAP,E 10-50
C117	87-012-157-080		C-CAP,S 330P-50 CH
C118	87-010-196-080		CHIP CAPACITOR,0.1-25
C119	87-010-196-080		CHIP CAPACITOR,0.1-25
C120	87-010-196-080		CHIP CAPACITOR,0.1-25
C121	87-010-194-080		CAP, CHIP 0.047
C122	87-010-194-080		CAP, CHIP 0.047
C125	87-010-196-080		CHIP CAPACITOR,0.1-25
C151	87-010-197-080		CAP, CHIP 0.01 DM
C201	87-010-178-080		CHIP CAP 1000P
C202	87-010-194-080		CAP, CHIP 0.047
C203	87-010-408-040		CAP,E 47-50 SME
C204	87-010-404-040		CAP,E 4.7-50 SME
C205	87-010-404-040		CAP,E 4.7-50 SME
C211	87-012-140-080		C-CAP,S 470P
C219	87-012-157-080		C-CAP,S 330P-50 CH
C220	87-012-157-080		C-CAP,S 330P-50 CH
C221	87-012-157-080		C-CAP,S 330P-50 CH
C222	87-012-157-080		C-CAP,S 330P-50 CH
C225	87-012-157-080		C-CAP,S 330P-50 CH
C371	87-010-196-080		CHIP CAPACITOR,0.1-25
C372	87-010-196-080		CHIP CAPACITOR,0.1-25

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C373	87-010-196-080		CHIP CAPACITOR,0.1-25
C375	87-010-196-080		CHIP CAPACITOR,0.1-25
C376	87-012-158-080		C-CAP,S 390P-50 CH
C377	87-010-196-080		CHIP CAPACITOR,0.1-25
C378	87-010-196-080		CHIP CAPACITOR,0.1-25
C402	87-010-196-080		CHIP CAPACITOR,0.1-25
C404	87-010-196-080		CHIP CAPACITOR,0.1-25
C406	87-010-196-080		CHIP CAPACITOR,0.1-25
C408	87-010-196-080		CHIP CAPACITOR,0.1-25
C601	87-010-405-040		CAP,E 10-50
C602	87-010-186-080		CAP,CHIP 4700P
C603	87-010-405-040		CAP,E 10-50
C604	87-010-406-040		CAP,E 22-50 SME
C605	87-010-196-080		CHIP CAPACITOR,0.1-25
C606	87-010-322-080		C-CAP,S 100P-50 CH
C607	87-010-315-080		C-CAP,S 27P-50 CH
C608	87-010-196-080		CHIP CAPACITOR,0.1-25
C609	87-010-545-040		CAP,E 0.22-50 SME
C611	87-010-177-080		C-CAP,S 820P-50 SL
C614	87-010-248-040		CAP,E 220-10 SME
C651	87-010-401-040		CAP,E 1-50 SME
C652	87-010-196-080		CHIP CAPACITOR,0.1-25
C653	87-010-196-080		CHIP CAPACITOR,0.1-25
C901	87-010-263-040		CAP,E 100-10
C902	87-010-196-080		CHIP CAPACITOR,0.1-25
C903	87-010-313-080		CAP, CHIP 18P
C904	87-012-155-080		C-CAP 180P-50CH
C905	87-010-400-040		CAP,E 0.47-50
CN101	87-099-720-010		CONN,30P TYK-B(P)
CN301	87-A60-131-010		CONN,6P V FE
CN501	87-A60-143-010		CONN,18P V FE
CN701	87-A60-140-010		CONN,15P V FE
CN801	87-A60-138-010		CONN,13P V FE
FB601	87-008-372-080		FILTER, EMI BL OIRNI
FC301	85-NF5-617-010		CABLE,FFC 6P-1.25
FC501	88-915-221-110		FF-CABLE,15P-1.25 220MM
FC502	88-918-251-110		FF-CABLE,18P-1.25 250MM
FC801	85-NF5-618-010		CABLE,FFC 13P-1.25
FL201	88-NF6-611-010		FL,BJ610GK
J601	87-A60-651-010		JACK,3.5MONO
J602	87-A60-651-010		JACK,3.5MONO
L901	87-007-340-010		COIL,CLOCK 4.19MHZ
LED401	87-070-197-080		LED,SLP7118C-51-S-T1
LED402	87-070-197-080		LED,SLP7118C-51-S-T1
LED403	87-070-197-080		LED,SLP7118C-51-S-T1
LED404	87-070-197-080		LED,SLP7118C-51-S-T1
LED405	87-070-197-080		LED,SLP7118C-51-S-T1
LED406	87-070-197-080		LED,SLP7118C-51-S-T1
LED407	87-070-197-080		LED,SLP7118C-51-S-T1
LED408	87-070-197-080		LED,SLP7118C-51-S-T1
LED409	87-070-197-080		LED,SLP7118C-51-S-T1
LED410	87-070-197-080		LED,SLP7118C-51-S-T1
LED411	87-070-201-080		LED,SLP9118C-51-S-T1
LED412	87-070-201-080		LED,SLP9118C-51-S-T1
LED413	87-070-201-080		LED,SLP9118C-51-S-T1
LED414	87-070-201-080		LED,SLP9118C-51-S-T1
LED415	87-070-201-080		LED,SLP9118C-51-S-T1
LED417	87-070-281-080		LED,SLZ736A-25-S-T1
LED419	87-070-281-080		LED,SLZ736A-25-S-T1
LED421	87-070-281-080		LED,SLZ736A-25-S-T1
LED423	87-070-281-080		LED,SLZ736A-25-S-T1
LED425	87-070-281-080		LED,SLZ736A-25-S-T1
LED427	87-070-281-080		LED,SLZ736A-25-S-T1
LED428	87-A40-448-080		LED,SLR-56PTT31 GRN
LED429	87-A40-448-080		LED,SLR-56PTT31 GRN
LED430	87-A40-448-080		LED,SLR-56PTT31 GRN
LED431	87-A40-448-080		LED,SLR-56PTT31 GRN
LED432	87-A40-448-080		LED,SLR-56PTT31 GRN
LED433	87-A40-448-080		LED,SLR-56PTT31 GRN
LED434	87-A40-448-080		LED,SLR-56PTT31 GRN
LED435	87-A40-448-080		LED,SLR-56PTT31 GRN
LED436	87-A40-448-080		LED,SLR-56PTT31 GRN
LED437	87-A40-448-080		LED,SLR-56PTT31 GRN
LED444	87-070-278-010		LED,SLZ-738A-24-S
LED445	87-070-290-010		LED,SLZ 936-30-S
LED446	87-070-278-010		LED,SLZ-738A-24-S
LED447	87-070-278-010		LED,SLZ-738A-24-S
LED448	87-070-290-010		LED,SLZ 936-30-S
LED449	87-070-278-010		LED,SLZ-738A-24-S
LED450	87-A90-825-040		LED,SLP-9131C-81H-S-T1 RED
LED451	87-A90-825-040		LED,SLP-9131C-81H-S-T1 RED
LED452	87-A90-825-040		LED,SLP-9131C-81H-S-T1 RED
LED453	87-A90-825-040		LED,SLP-9131C-81H-S-T1 RED
LED454	87-A90-825-040		LED,SLP-9131C-81H-S-T1 RED
LED455	87-A90-825-040		LED,SLP-9131C-81H-S-T1 RED
LED456	87-A90-825-040		LED,SLP-9131C-81H-S-T1 RED
LED457	87-A90-825-040		LED,SLP-9131C-81H-S-T1 RED
LED458	87-A90-825-040		LED,SLP-9131C-81H-S-T1 RED
S101	87-A90-894-010		SW,RTRY EC12E12244 ENCODER
S102	87-A90-535-010		SW,RTRY EC16B24304
S301	87-A90-095-080		SW,TACT EVQ11G04M
S302	87-A90-095-080		SW,TACT EVQ11G04M
S303	87-A90-095-080		SW,TACT EVQ11G04M
S304	87-A90-095-080		SW,TACT EVQ11G04M
S305	87-A90-095-080		SW,TACT EVQ11G04M
S306	87-A90-095-080		SW,TACT EVQ11G04M
S307	87-A90-095-080		SW,TACT EVQ11G04M
S308	87-A90-095-080		SW,TACT EVQ11G04M
S309	87-A90-095-080		SW,TACT EVQ11G04M
S310	87-A90-095-080		SW,TACT EVQ11G04M
S311	87-A90-095-080		SW,TACT EVQ11G04M
S312	87-A90-095-080		SW,TACT EVQ11G04M
S313	87-A90-095-080		SW,TACT EVQ11G04M
S321	87-A90-095-080		SW,TACT EVQ11G04M
S322	87-A90-095-080		SW,TACT EVQ11G04M
S323	87-A90-095-080		SW,TACT EVQ11G04M
S324	87-A90-095-080		SW,TACT EVQ11G04M
S325	87-A90-095-080		SW,TACT EVQ11G04M
S326	87-A90-095-080		SW,TACT EVQ11G04M
S327	87-A90-095-080		SW,TACT EVQ11G04M
S328	87-A90-095-080		SW,TACT EVQ11G04M
S329	87-A90-095-080		SW,TACT EVQ11G04M
S330	87-A90-095-080		SW,TACT EVQ11G04M
S333	87-A90-095-080		SW,TACT EVQ11G04M
S334	87-A90-095-080		SW,TACT EVQ11G04M
S341	87-A90-095-080		SW,TACT EVQ11G04M
S342	87-A90-095-080		SW,TACT EVQ11G04M
S343	87-A90-095-080		SW,TACT EVQ11G04M
S344	87-A90-095-080		SW,TACT EVQ11G04M
S345	87-A90-095-080		SW,TACT EVQ11G04M
S346	87-A90-095-080		SW,TACT EVQ11G04M
S347	87-A90-095-080		SW,TACT EVQ11G04M
S348	87-A90-095-080		SW,TACT EVQ11G04M
S349	87-A90-095-080		SW,TACT EVQ11G04M
S350	87-A90-095-080		SW,TACT EVQ11G04M
X101	87-A70-070-080		VIB,CER 5.76MHZ CRHF

SW C.B

CN302	87-A60-131-010		CONN,6P V FE
LED438	87-070-197-080		LED,SLP7118C-51-S-T1
LED439	87-070-197-080		LED,SLP7118C-51-S-T1
LED440	87-070-197-080		LED,SLP7118C-51-S-T1
LED441	87-070-197-080		LED,SLP7118C-51-S-T1
LED442	87-070-197-080		LED,SLP7118C-51-S-T1
LED443	87-070-197-080		LED,SLP7118C-51-S-T1
S351	87-A90-095-080		SW,TACT EVQ11G04M
S352	87-A90-095-080		SW,TACT EVQ11G04M
S353	87-A90-095-080		SW,TACT EVQ11G04M

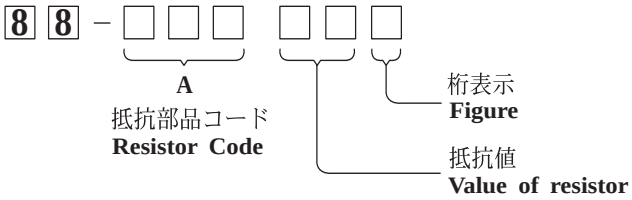
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
S354	87-A90-095-080		SW,TACT EVQ11G04M
S355	87-A90-095-080		SW,TACT EVQ11G04M
PRO C.B			
C101	87-012-368-080		C-CAP,S 0.1-50 Z F
C102	87-012-368-080		C-CAP,S 0.1-50 Z F
C103	87-010-917-090		CAP,E 3300-50 M SMG
C104	87-010-917-090		CAP,E 3300-50 M SMG
C105	87-010-196-080		C-CAP,S 0.1-25 Z F
C106	87-010-196-080		C-CAP,S 0.1-25 Z F
C109	87-010-188-080		C-CAP,S 6800P-50 K B
C112	87-012-368-080		C-CAP,S 0.1-50 FZ
C113	87-012-368-080		C-CAP,S 0.1-50 FZ
C207	87-010-402-080		CAP,E 2.2-50 M SME
C208	87-010-402-080		CAP,E 2.2-50 M SME
C209	87-010-183-080		C-CAP,S 2700P-50 K B
C210	87-010-183-080		C-CAP,S 2700P-50 K B
C211	87-010-404-080		CAP,E 4.7-50 M SME
C212	87-010-404-080		CAP,E 4.7-50 M SME
C215	87-010-322-080		C-CAP,S 100P-50 J CH GRM
C216	87-010-322-080		C-CAP,S 100P-50 J CH GRM
C217	87-010-408-080		CAP,E 47-50 M SME
C218	87-010-408-080		CAP,E 47-50 M SME
C219	87-A10-596-080		C-CAP,S 100P-100 J CH
C220	87-A10-596-080		C-CAP,S 100P-100 J CH
C221	87-A10-899-080		CAP,E 47-25 M BP
C222	87-A10-899-080		CAP,E 47-25 M BP
C223	87-010-544-080		CAP,E 0.1-50 M SME
C224	87-010-544-080		CAP,E 0.1-50 M SME
C225	87-010-993-080		C-CAP,S 0.056-25 K B
C226	87-010-993-080		C-CAP,S 0.056-25 K B
C227	87-010-196-080		C-CAP,S 0.1-25 Z F
C228	87-010-196-080		C-CAP,S 0.1-25 Z F
C233	87-010-263-080		CAP,E 100-10 SME
C234	87-010-263-080		CAP,E 100-10 SME
C307	87-010-402-080		CAP,E 2.2-50 M SME
C309	87-010-183-080		C-CAP, 2700P-50 K B
C311	87-010-404-080		CAP,E 4.7-50 M SME
C315	87-010-322-080		C-CAP,S 100P-50 J CH GRM
C317	87-010-406-080		CAP,E 22-50 M SME
C319	87-A10-812-080		C-CAP,S 220P-200 J C
C321	87-A10-899-080		CAP,E 47-25 M BP
C323	87-010-544-080		CAP,E 0.1-50 M SME
C325	87-010-993-080		C-CAP,S 0.056-25 K B
C327	87-010-196-080		C-CAP,S 0.1-25 Z F
C333	87-010-263-080		CAP,E 100-10 SME
C400	87-010-378-080		CAP,E 10-16 M SME
C401	87-010-374-080		CAP,E 47-10 M SME
C402	87-010-196-080		C-CAP,S 0.1-25 Z F
C403	87-010-154-080		C-CAP,S 10P-50 D CH
C404	87-010-374-080		CAP,E 47-10 M SME
C405	87-010-196-080		C-CAP,S 0.1-25 Z F
C407	87-010-154-080		C-CAP,S 10P-50 D CH
C408	87-010-545-080		CAP,E 0.22-50 M SME
C410	87-010-546-080		CAP,E 0.33-50 SME
C413	87-010-196-080		C-CAP,S 0.1-25 Z F
C415	87-010-400-080		CAP,E 0.47-50 M SME
C416	87-010-400-080		CAP,E 0.47-50 M SME
C418	87-010-401-080		CAP,E 1-50 M SME
C419	87-010-260-080		CAP,E 47-25 SME
C421	87-010-378-080		CAP,E 10-16 M SME
C422	87-010-378-080		CAP,E 10-16 M SME
C501	87-010-176-080		C-CAP,S 680P-50 J SL
C502	87-010-176-080		C-CAP,S 680P-50 J SL
C503	87-A10-804-080		C-CAP,S 0.1-25 J B
C504	87-A10-804-080		C-CAP,S 0.1-25 J B
C505	87-A10-804-080		C-CAP,S 0.1-25 J B
C506	87-A10-804-080		C-CAP,S 0.1-25 J B
C509	87-010-112-080		CAP,E 100-16 M SME
C510	87-010-221-080		CAP,E 470-10 M SME
C511	87-A10-891-080		CAP,E 4.7-25 SME(K)
C512	87-A10-800-080		C-CAP,S 6800P-16 J B
C513	87-010-374-080		CAP,E 47-10 M SME
C514	87-010-196-080		C-CAP,S 0.1-25 Z F
C515	87-010-401-080		CAP,E 1-50 M SME
C516	87-010-401-080		CAP,E 1-50 M SME
C518	87-010-546-080		CAP,E 0.33-50 SME
C519	87-010-400-080		CAP,E 0.47-50 M SME
C520	87-010-546-080		CAP,E 0.33-50 SME
C521	87-010-546-080		CAP,E 0.33-50 SME
C522	87-018-209-080		CAP,TC U 0.1-50 Z F
C524	87-010-374-080		CAP,E 47-10 M SME
C526	87-010-196-080		C-CAP,S 0.1-25 Z F
C530	87-010-544-080		CAP,E 0.1-50 M SME
C531	87-010-546-080		CAP,E 0.33-50 SME
C532	87-010-971-080		C-CAP,S 4700P-50 J B
C533	87-012-349-080		C-CAP,S 1000P-50 J CH
C538	87-010-971-080		C-CAP,S 4700P-50 J B
C539	87-012-349-080		C-CAP,S 1000P-50 J CH
C540	87-010-401-080		CAP,E 1-50 M SME
C541	87-010-401-080		CAP,E 1-50 M SME
C542	87-A10-799-080		C-CAP,S 5600P-16 J B
C543	87-A10-802-080		C-CAP,S 0.047-16 J B
C544	87-A10-229-080		C-CAP,S 0.68-10 K
C545	87-012-393-080		C-CAP,S 0.22-16 K
C546	87-012-393-080		C-CAP,S 0.22-16 K
C547	87-010-404-080		CAP,E 4.7-50 M SME
C548	87-010-404-080		CAP,E 4.7-50 M SME
C549	87-012-393-080		C-CAP,S 0.22-16 K
C550	87-012-393-080		C-CAP,S 0.22-16 K
C551	87-016-081-080		C-CAP,S 0.1-16 K R
C552	87-A10-802-080		C-CAP,S 0.047-16 J B
C553	87-A10-802-080		C-CAP,S 0.047-16 J B
C554	87-016-081-080		C-CAP,S 0.1-16 K R
C555	87-016-081-080		C-CAP,S 0.1-16 K R
C556	87-A10-801-080		C-CAP,S 0.022-16 J B
C557	87-A10-801-080		C-CAP,S 0.022-16 J B
C558	87-016-081-080		C-CAP,S 0.1-16 K R
C579	87-010-402-080		CAP,E 2.2-50 M SME
C580	87-010-402-080		CAP,E 2.2-50 M SME
C581	87-010-196-080		C-CAP,S 0.1-25 ZF
C601	87-010-196-080		C-CAP,S 0.1-25 Z F
C602	87-010-196-080		C-CAP,S 0.1-25 Z F
C603	87-010-196-080		C-CAP,S 0.1-25 Z F
C604	87-010-196-080		C-CAP,S 0.1-25 Z F
J201	87-A60-561-010		JACK,PIN 4P W/R,B/O
J601	87-A60-562-010		JACK,PIN 6P W/R
L201	87-003-383-010		COIL,1UH K
L202	87-003-383-010		COIL,1UH K
L301	87-003-383-010		COIL,1UH K
R243	87-A00-258-080		RES,M/F 0.22-1W J
R244	87-A00-258-080		RES,M/F 0.22-1W J
R245	87-A00-258-080		RES,M/F 0.22-1W J
R246	87-A00-258-080		RES,M/F 0.22-1W J
R343	87-A00-258-080		RES,M/F 0.22-1W J
R345	87-A00-258-080		RES,M/F 0.22-1W J
R509	87-022-214-080		C-RES,S 100K-1/10W F
AC1 C.B			
⚠ F101	87-035-368-010		FUSE,4A 250V
⚠ F102	87-035-368-010		FUSE,4A 250V
⚠ FC1	87-033-147-010		FUSE CLAMP,MT-20
⚠ FC2	87-033-147-010		FUSE CLAMP,MT-20
⚠ FC3	87-033-147-010		FUSE CLAMP,MT-20
⚠ FC4	87-033-147-010		FUSE CLAMP,MT-20
⚠ PT101	88-NFT-622-010		PT,8NF-26 HR
⚠ SW101	87-A90-165-010		SW,SL 1-2-3 SWS2301
⚠ T1	87-A60-317-010		TERMINAL, 1P MSC

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
⚠ T2	87-A60-317-010		TERMINAL, 1P MSC
AC2 C.B			
⚠ PR101	87-026-682-080		PROTECTOR,10A 60V491
⚠ PR102	87-026-682-080		PROTECTOR,10A 60V491
⚠ PR103	87-026-682-080		PROTECTOR,10A 60V491
⚠ PR104	87-026-682-080		PROTECTOR,10A 60V491
⚠ PR105	87-A90-195-080		PROTECTOR,7A 491 SERIES 60V
⚠ PR106	87-A90-195-080		PROTECTOR,7A 491 SERIES 60V
WH101	87-A90-460-010		HLDR,WIRE 2.5-7P
DECK C.B			
CON105	87-099-756-019		CONN, 15P 9604 S F
SFR1	87-024-581-019		SFR,3.3K DIA 6H
SOL1	82-ZM1-618-410		SOL ASSY, 27
SOL2	82-ZM1-618-410		SOL ASSY, 27
SW1	87-A90-248-019		SW,MICRO ESE11SH2CXQ
SW2	87-A90-248-019		SW,MICRO ESE11SH2CXQ
SW3	87-A90-248-019		SW,MICRO ESE11SH2CXQ
SW4	87-036-110-010		SW,MICRO SPPB62
SW5	87-036-110-010		SW,MICRO SPPB62
SW6	87-036-110-010		SW,MICRO SPPB62
SW8	87-A90-248-019		SW,MICRO ESE11SH2CXQ
SW9	87-A90-248-019		SW,MICRO ESE11SH2CXQ
W001	82-ZM3-601-019		RBN,CORD,4P-75
HEAD-1 C.B			
	85-ZM3-602-010		PWB,FLEX A
HEAD-2 C.B			
	85-ZM3-602-010		PWB,FLEX A
CON351	87-NF6-616-010		CONN ASSY,8P-RPB

○チップ抵抗部品コード／**CHIP RESISTOR PART CODE**

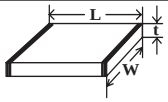
チップ抵抗部品コードの成り立ち

Chip Resistor Part Coding

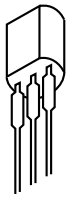


チップ抵抗

Chip resistor

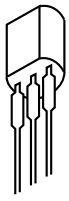
容量 **Wattage**	種類 **Type**	許容誤差 **Tolerance**	記号 **Symbol**	寸法／**Dimensions** 外形／**Form**	**L**	**W**	**t**	抵抗コード **Resistor** :A
1/16W	1608	±5%	CJ		1.6	0.8	0.45	108
1/10W	2125	±5%	CJ		2	1.25	0.45	118
1/8W	3216	±5%	CJ		3.2	1.6	0.55	128

TRANSISTOR ILLUSTRATION

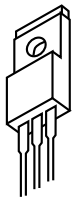


KTA1266GR
KTC3198GR

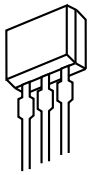
CC5551



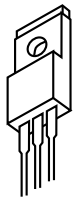
2SA1296
CSC4115



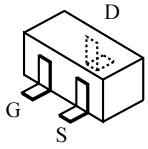
2SB1370
2SB1344
2SB1625
2SB1626
2SD2025
2SD2494
2SD2495
FN1016
FP1016



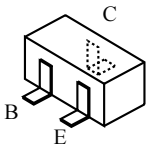
2SA933



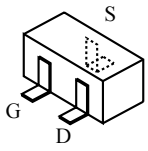
2SK2937



2SK2158

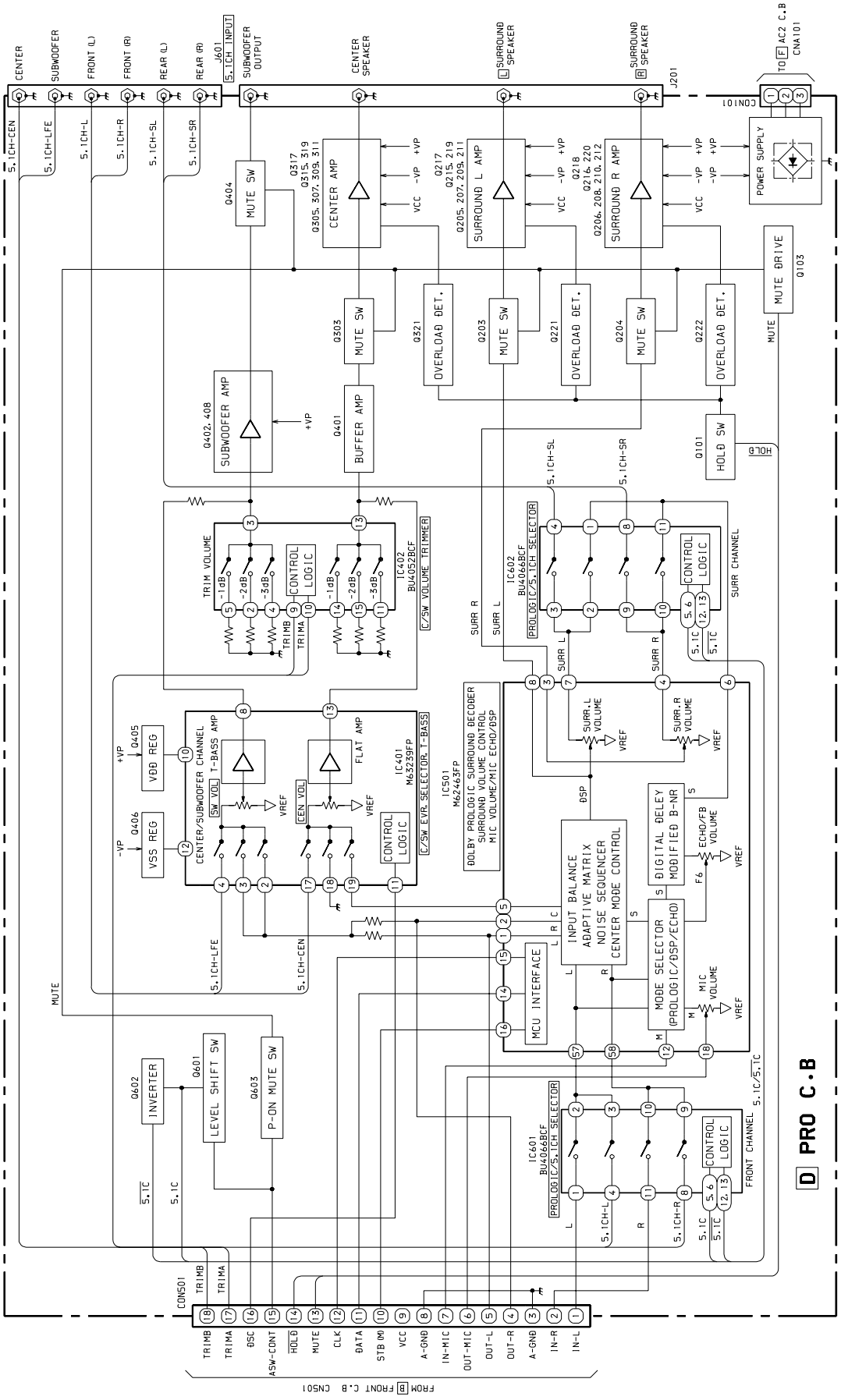


2SA1235F
2SC2714
2SC3052F
CMBT5401
CMBT5551
CSD1306E
DTA114WK
DTA123EKA
DTA123JK
DTA144WK
DTC143TK
KTA1298Y
RN1410
RT1N141C
RT1N144C
RT1N441C
RT1P141C
RT1P144C
RT1P441C

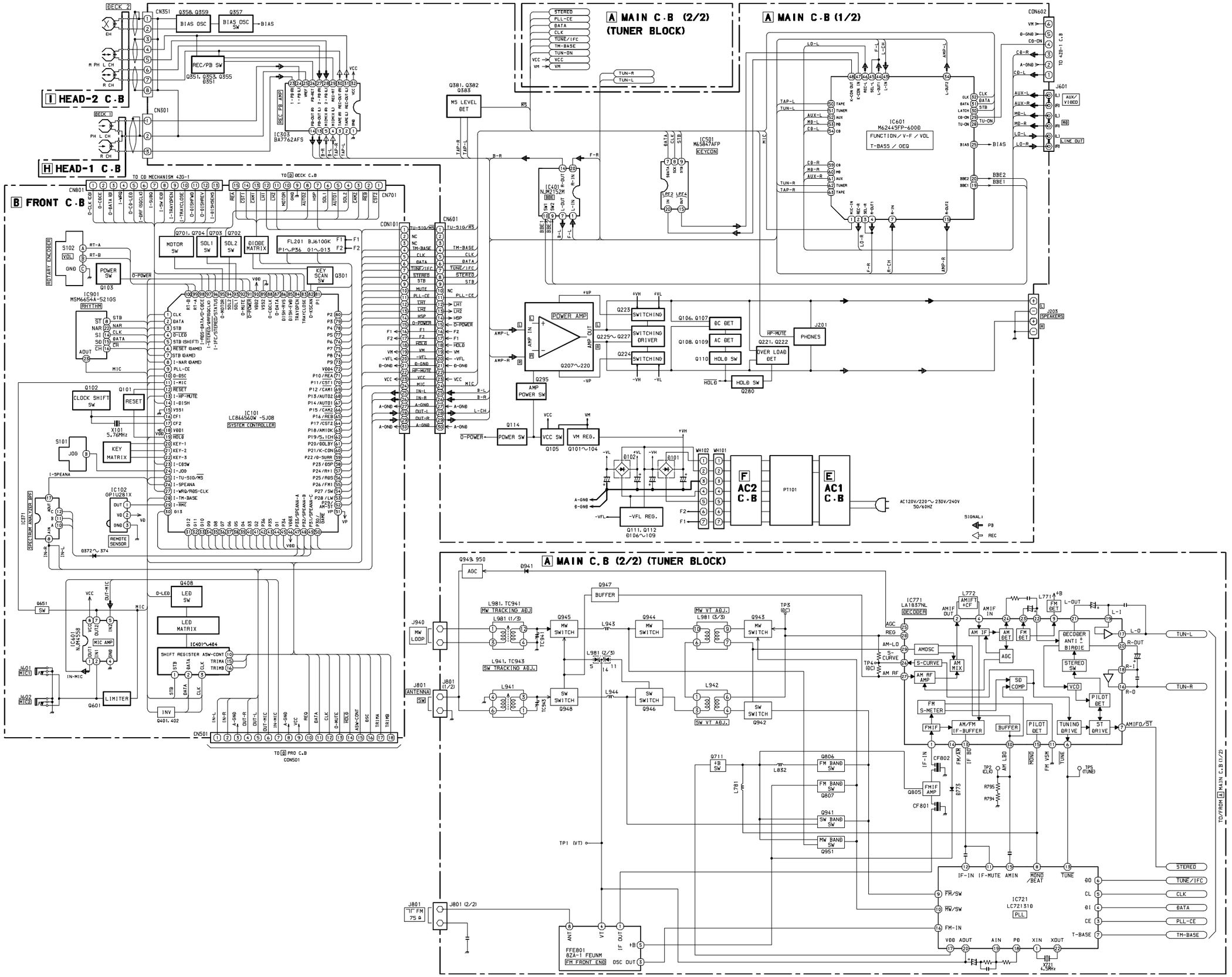


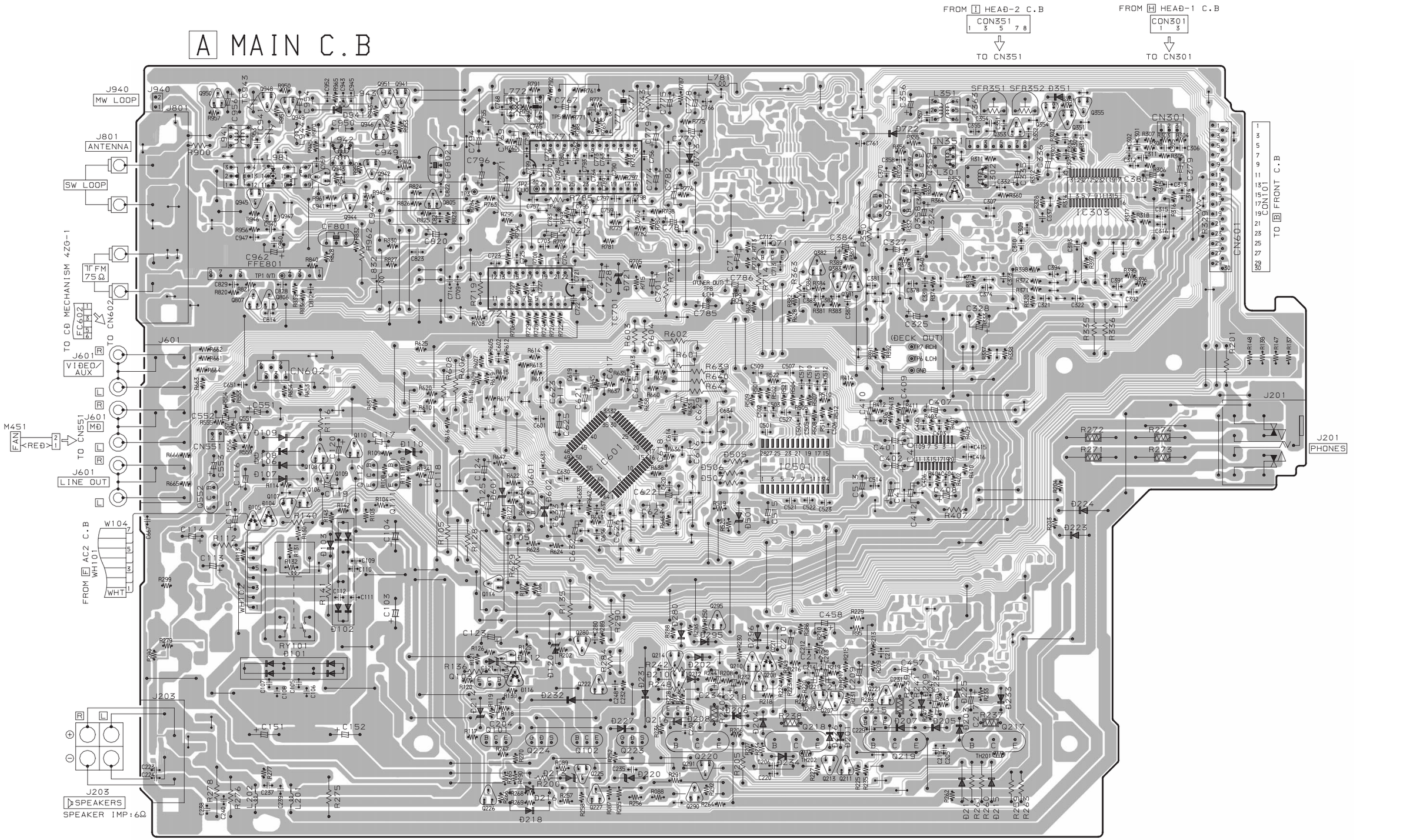
2SK543-TB(4/5)

BLOCK DIAGRAM - 1 (PRO)

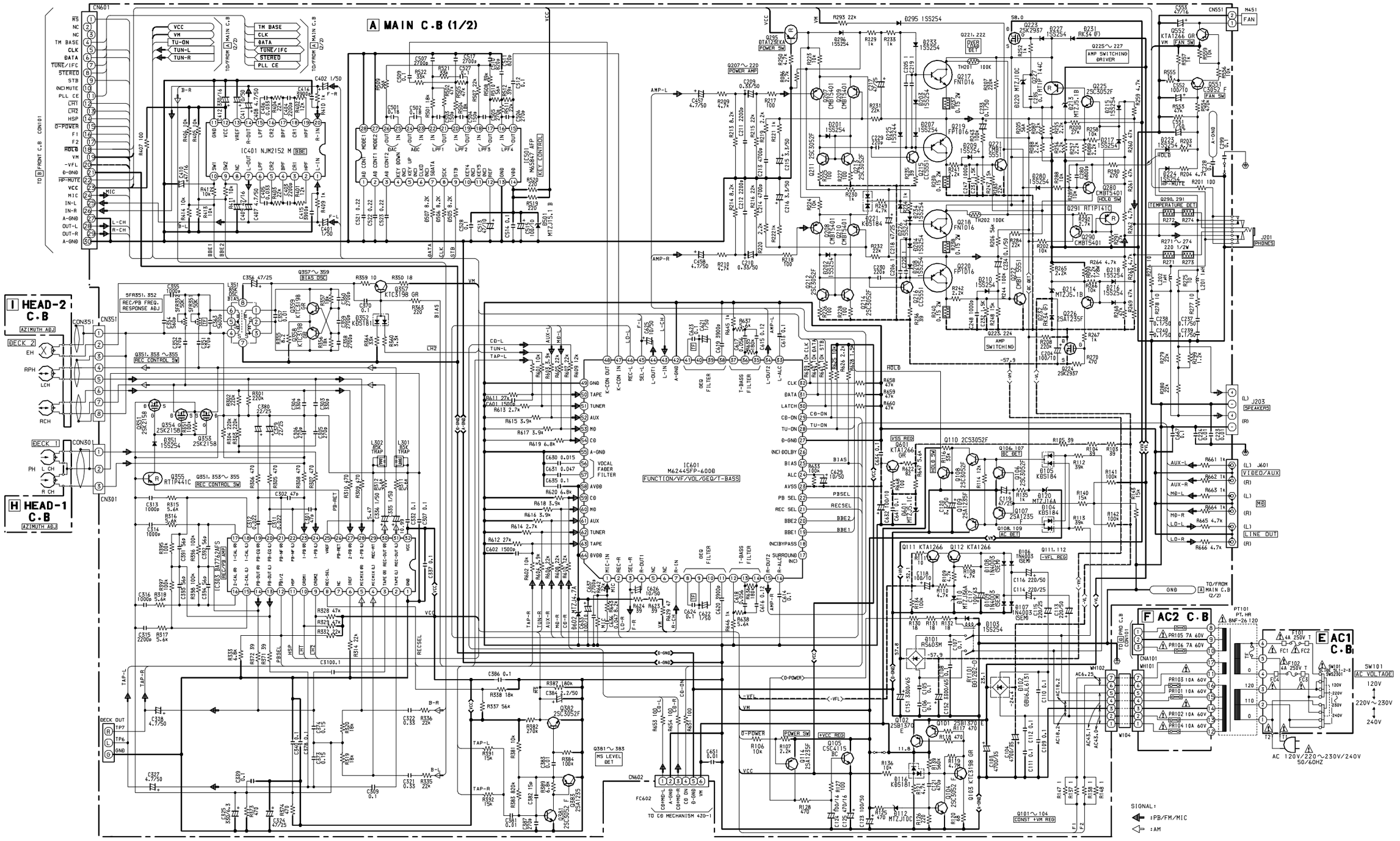


BLOCK DIAGRAM - 1 (MAIN / FRONT)

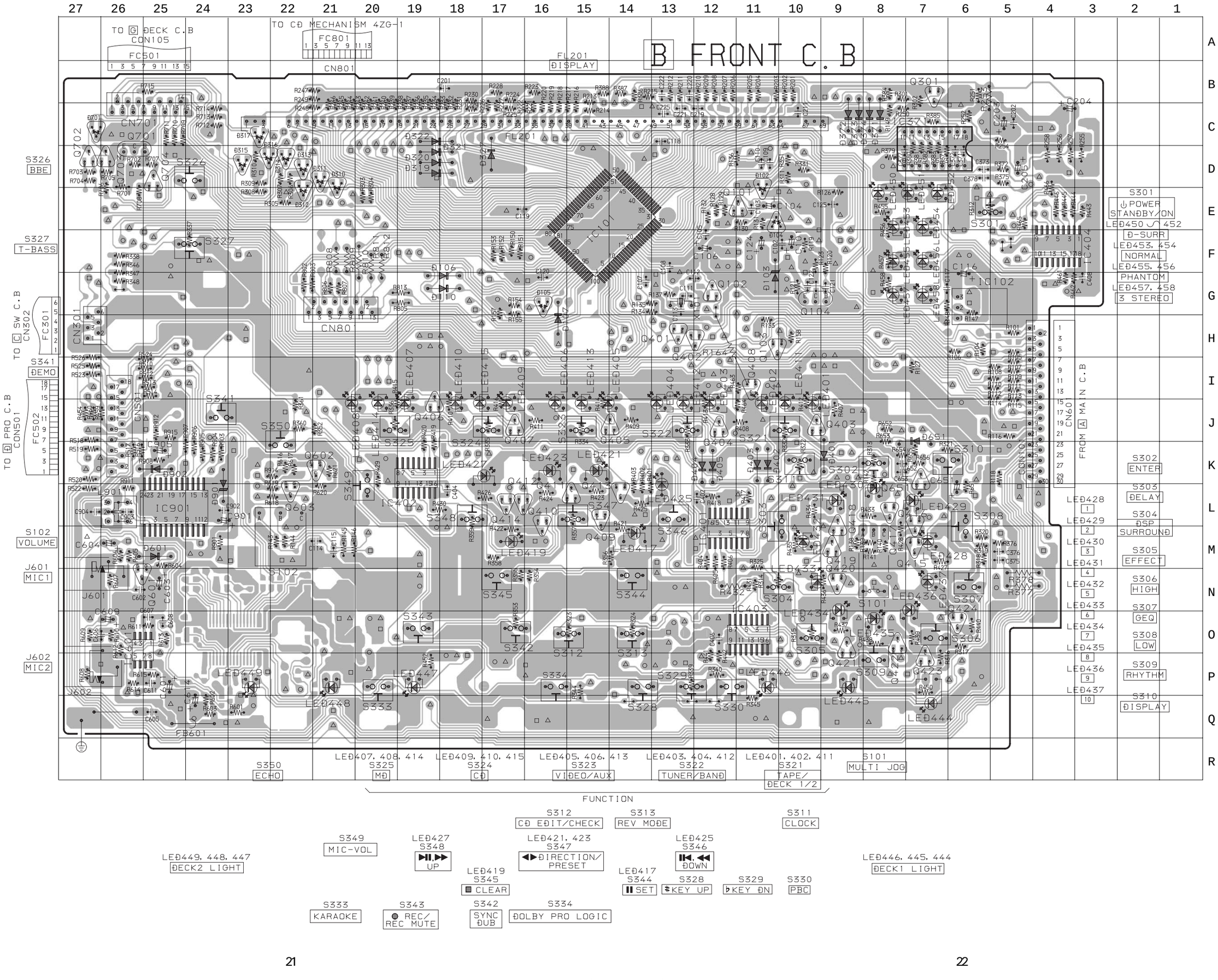



A MAIN C.B
FROM I HEAD-2 C.B
CON351
1 3 5 7 8
TO CN351
FROM H HEAD-1 C.B
CON301
1 3
TO CN301
TO B FRONT C.B
CON101
TO CB MECHANISM 4ZG-1
FC602
TO CN602
J940
MW LOOP
J801
ANTENNA
SW LOOP
FM 75Ω
J601
VIDEO/AUX
J601
MD
J601
LINE OUT
M451
FAN
<RED>
TO CN551
FROM E AC2 C.B
WH101
WHT
J203
SPEAKERS
SPEAKER IMP:6Ω
J201
PHONES
(DECK OUT)
(TUNER OUT)
IC303
IC601
IC050-1
CN301
CN351
CN601
CN602
CN551
SFR351 SFR352 D351
TP1 (VT)
TP2 RCH
TP3 LCH
TP4 GND

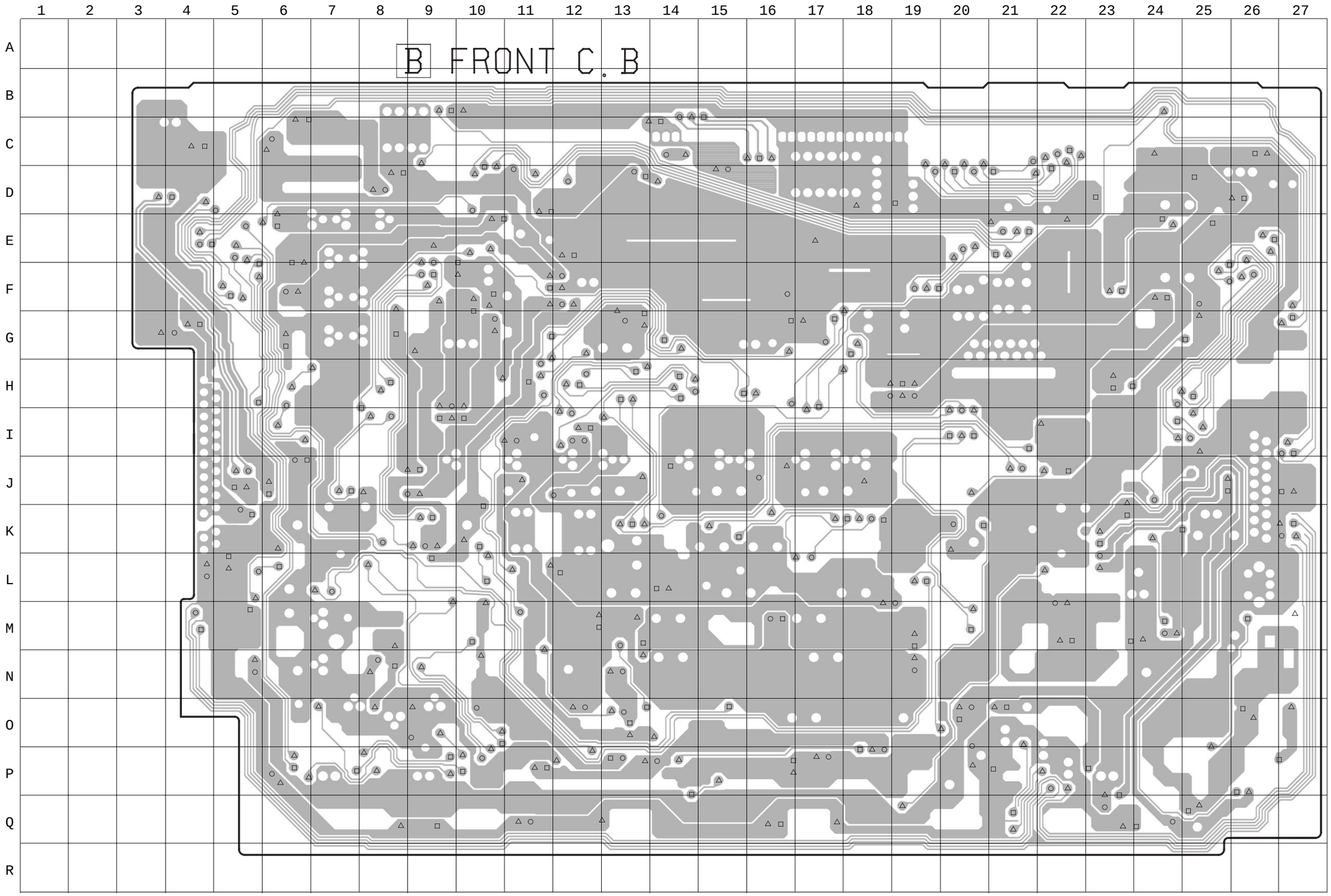
SCHEMATIC DIAGRAM - 1 (MAIN 1/2)



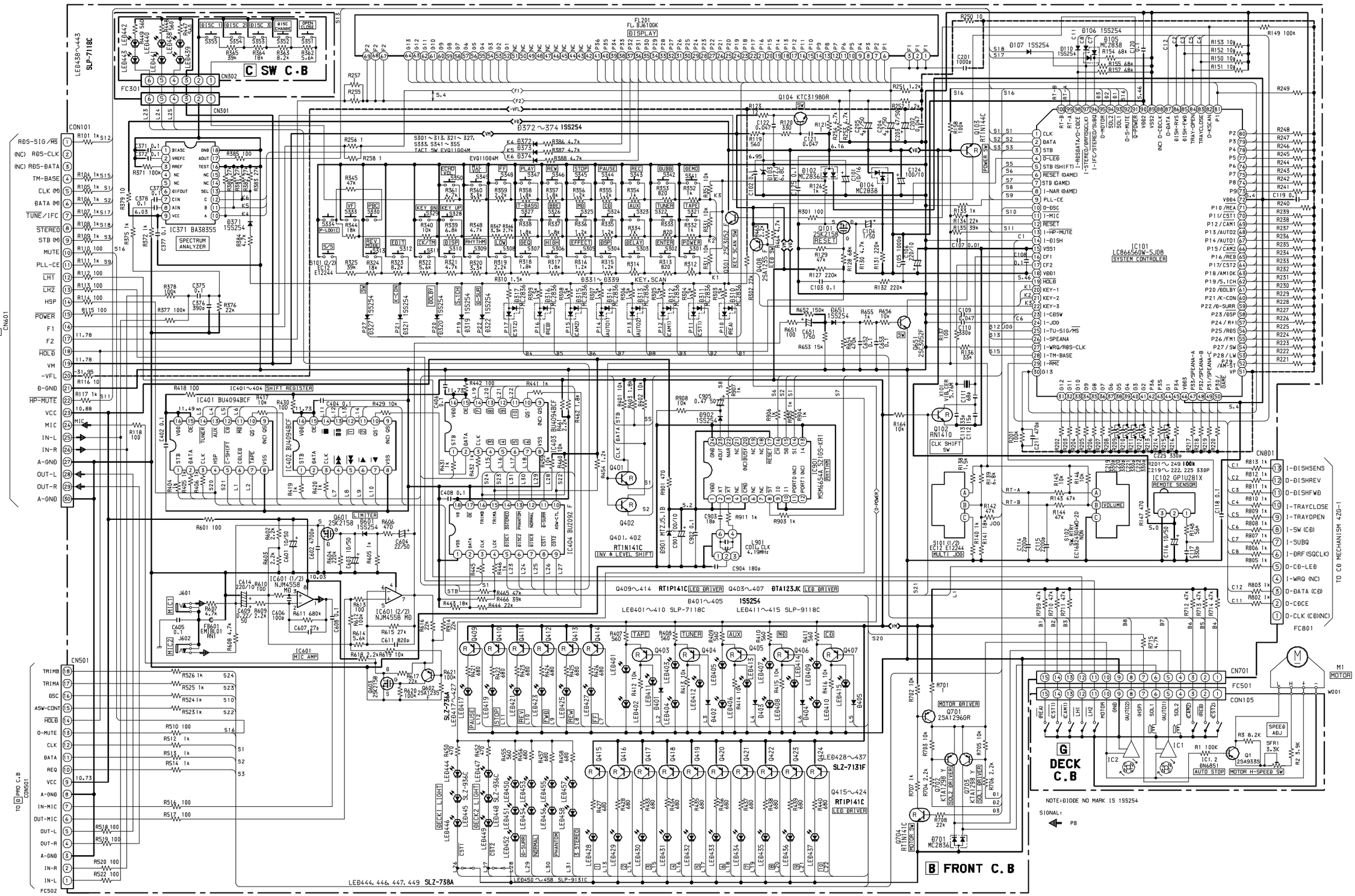
WIRING - 2.1 (FRONT)

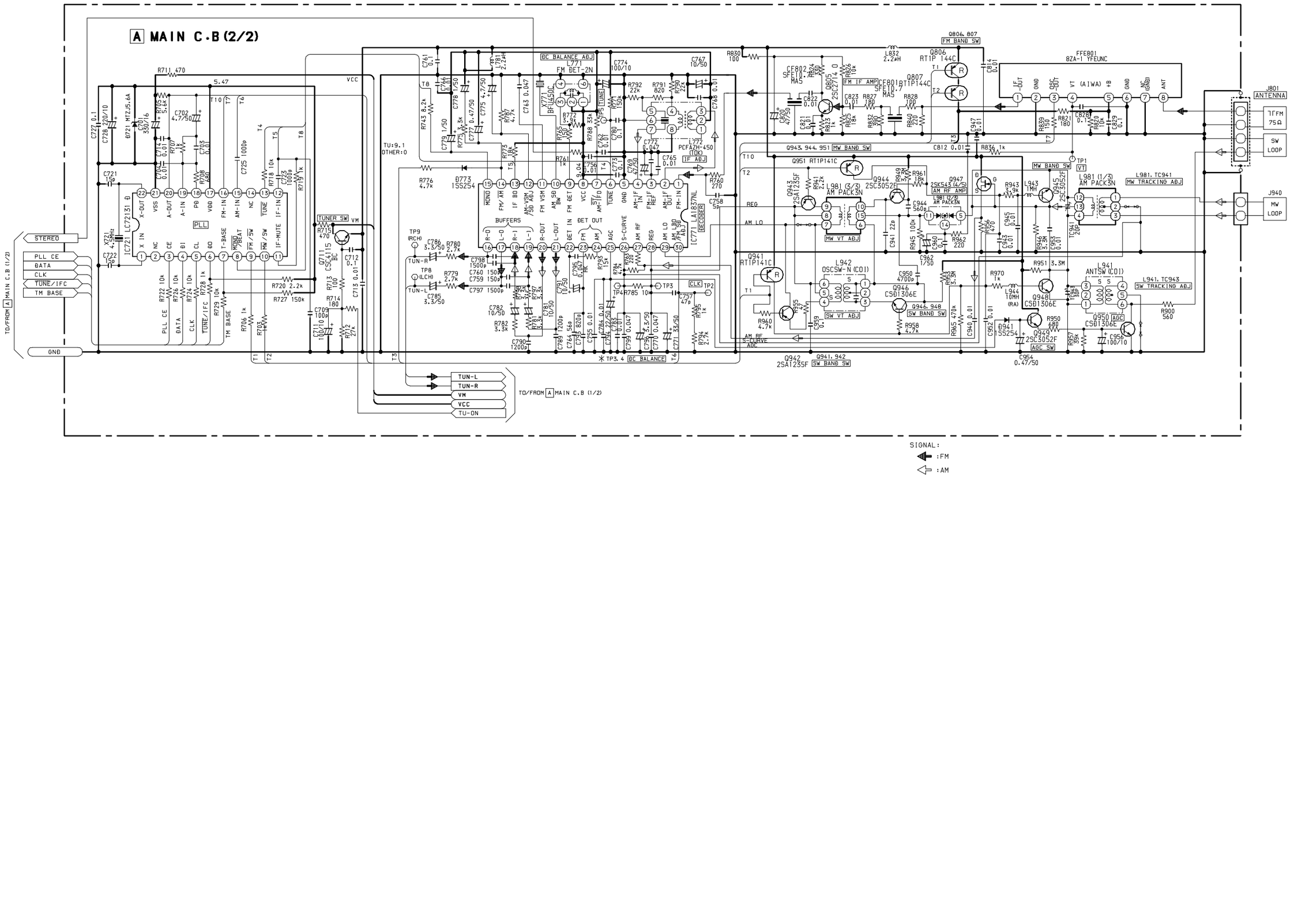


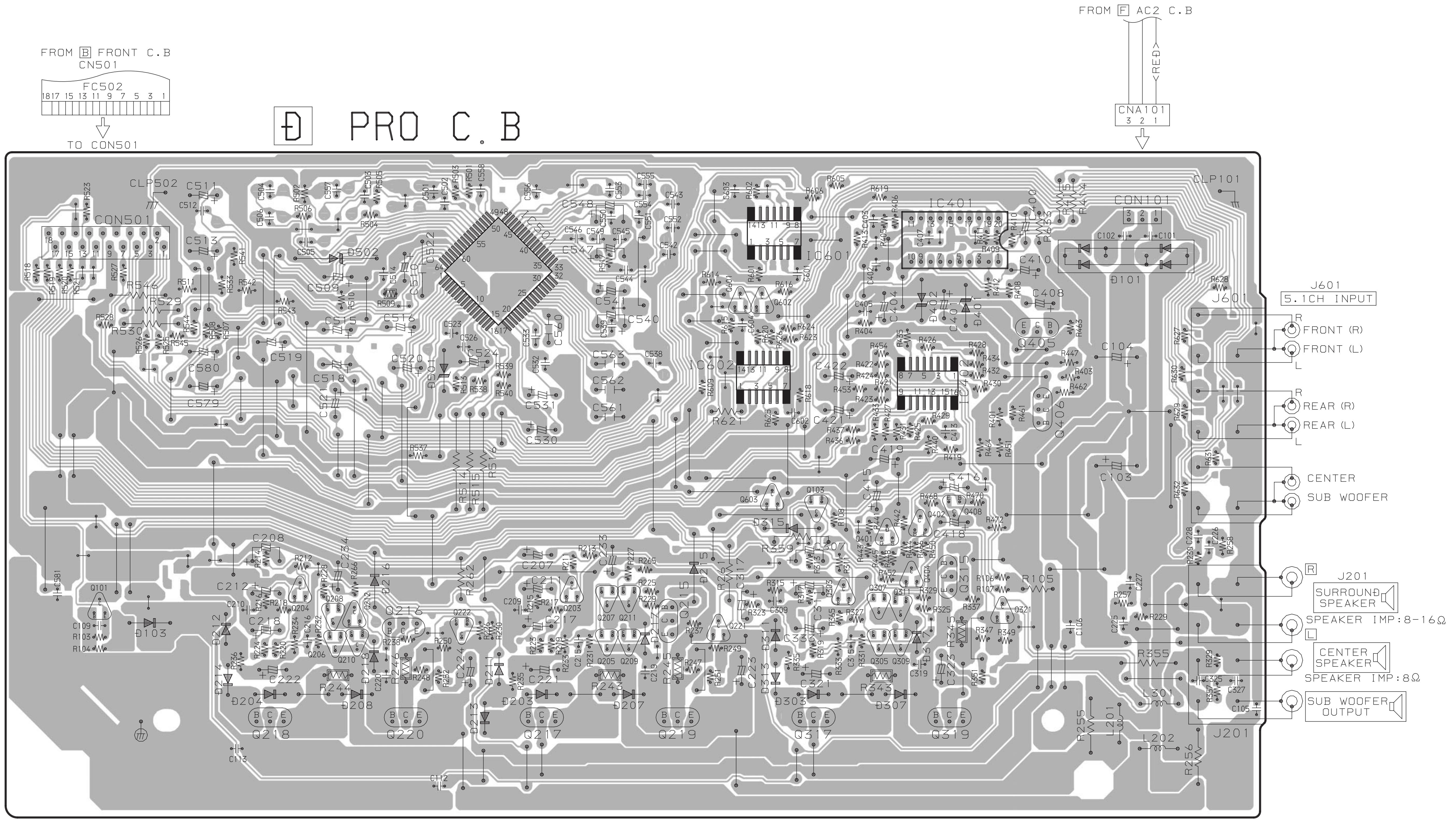
WIRING - 2.2 (FRONT)



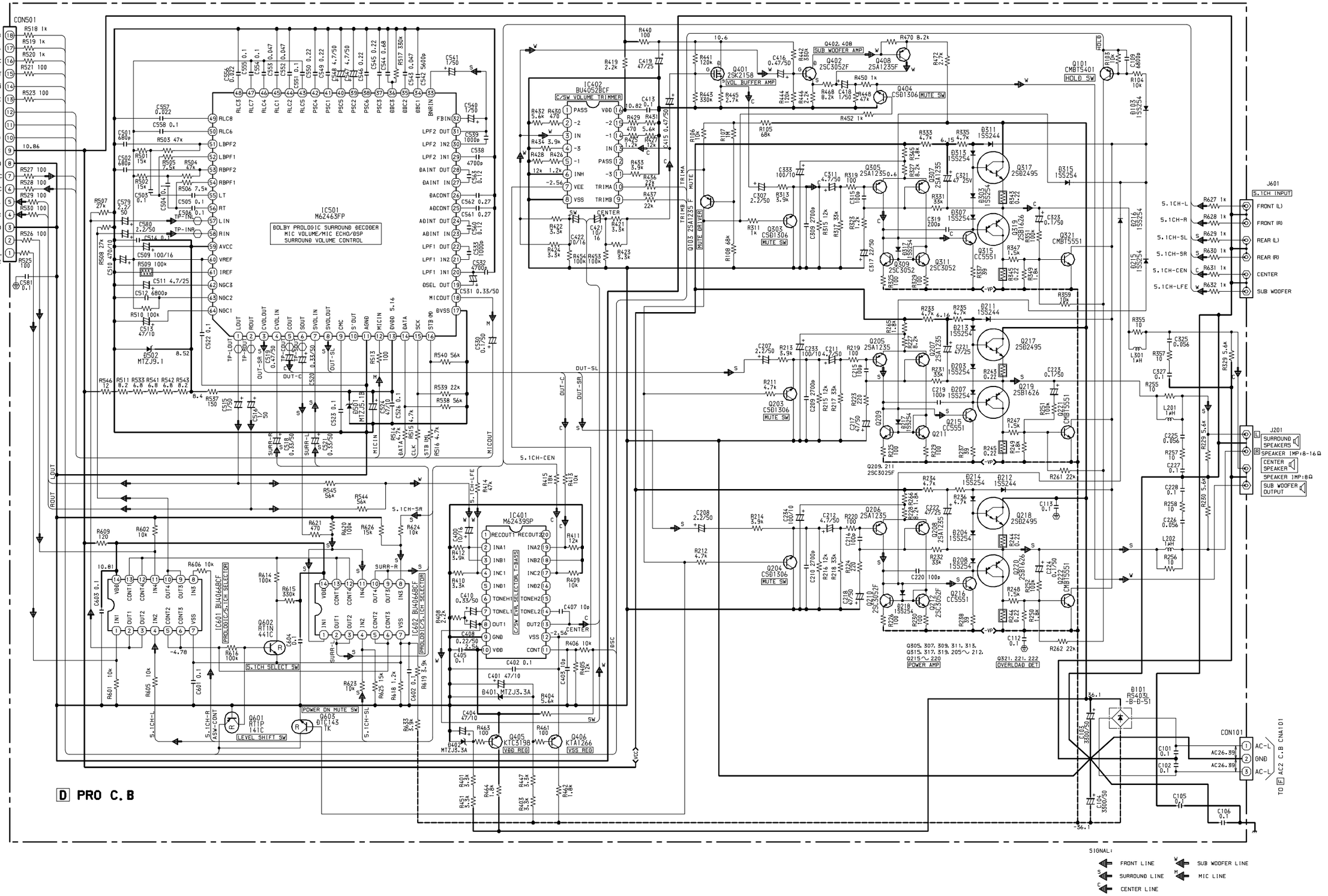
SCHEMATIC DIAGRAM - 2 (FRONT)



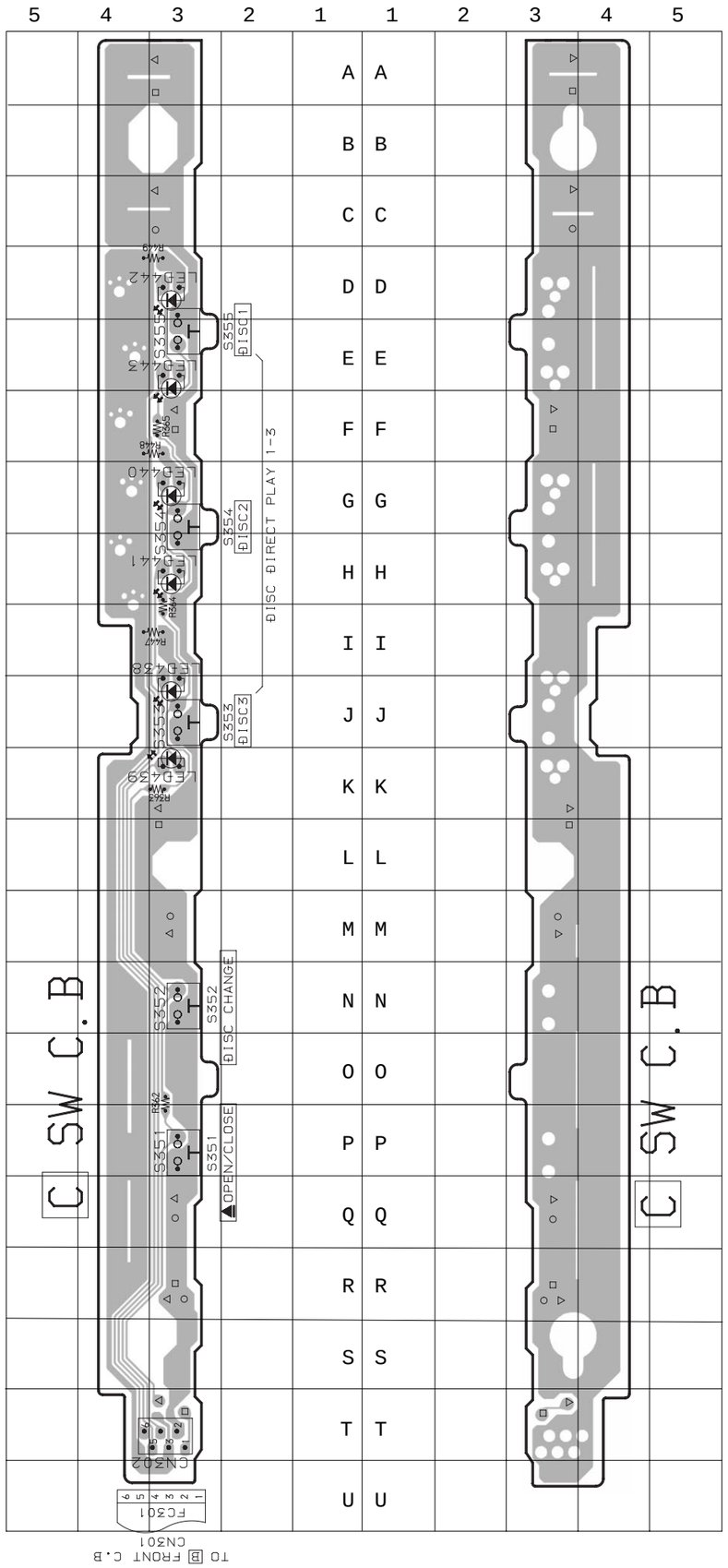

A MAIN C.B (2/2)
STEREO
PLL CE
DATA
CLK
TUNE/IFC
TM BASE
GND
TO/FROM A MAIN C.B (1/2)
TUNER SW
VM
VCC
TU:9.1
OTHER:0
BC BALANCE ADJ
IF ADJ
MW BAND SW
SW BAND SW
AM RF AMP
MW VT ADJ
SW VT ADJ
MW TRACKING ADJ
SW TRACKING ADJ
AGC SW
AM RF S-CURVE AGC
TUN-L
TUN-R
VM
VCC
TU-ON
J801 ANTENNA
75Ω
SW LOOP
J940 MW LOOP
SIGNAL:
:FM
:AM


FROM B FRONT C.B
CN501
FC502
TO CON501
Đ PRO C.B
FROM F AC2 C.B
<RED>
CNA101
J601
5.1CH INPUT
FRONT (R)
FRONT (L)
REAR (R)
REAR (L)
CENTER
SUB WOOFER
J201
SURROUNDĐ SPEAKER
SPEAKER IMP:8-16Ω
CENTER SPEAKER
SPEAKER IMP:8Ω
SUB WOOFER OUTPUT

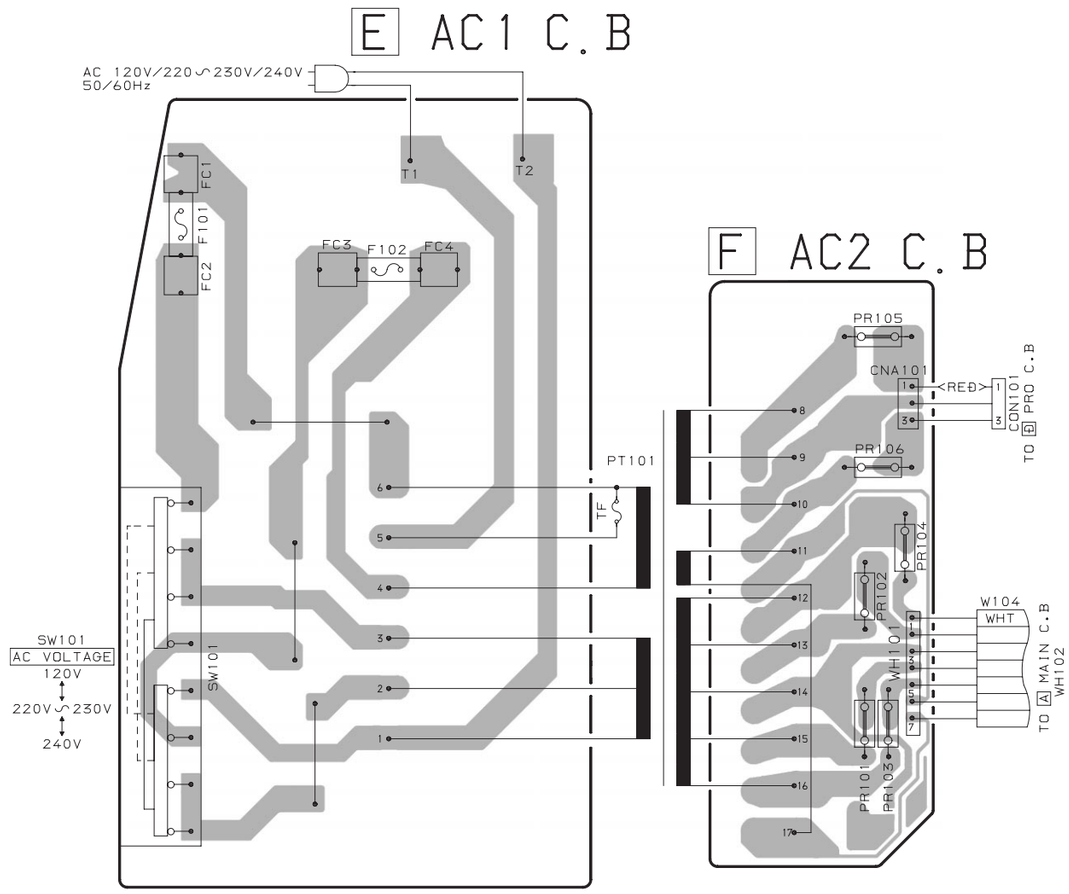
SCHEMATIC DIAGRAM - 4 (PRO)

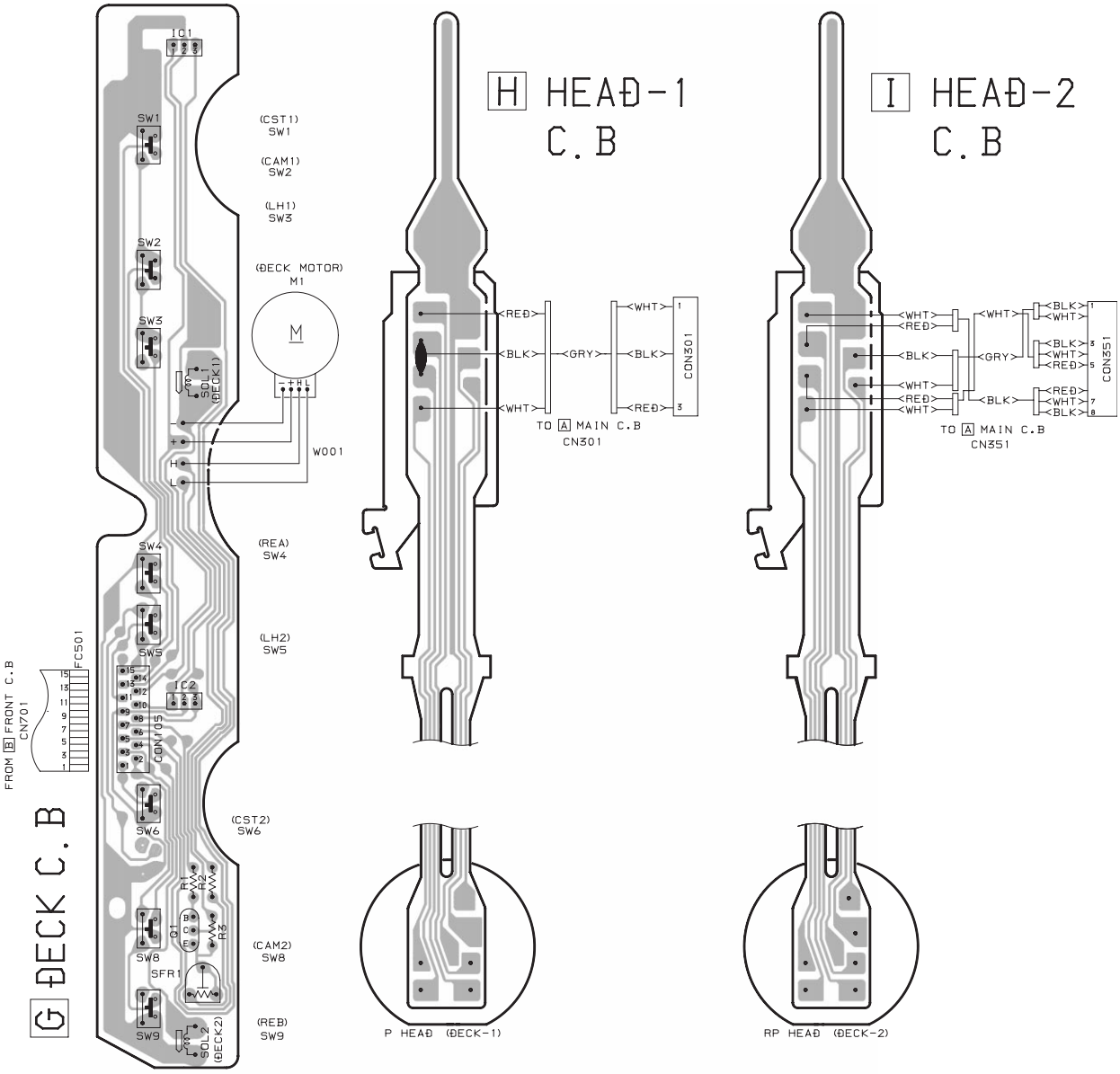


WIRING - 4 (SW)

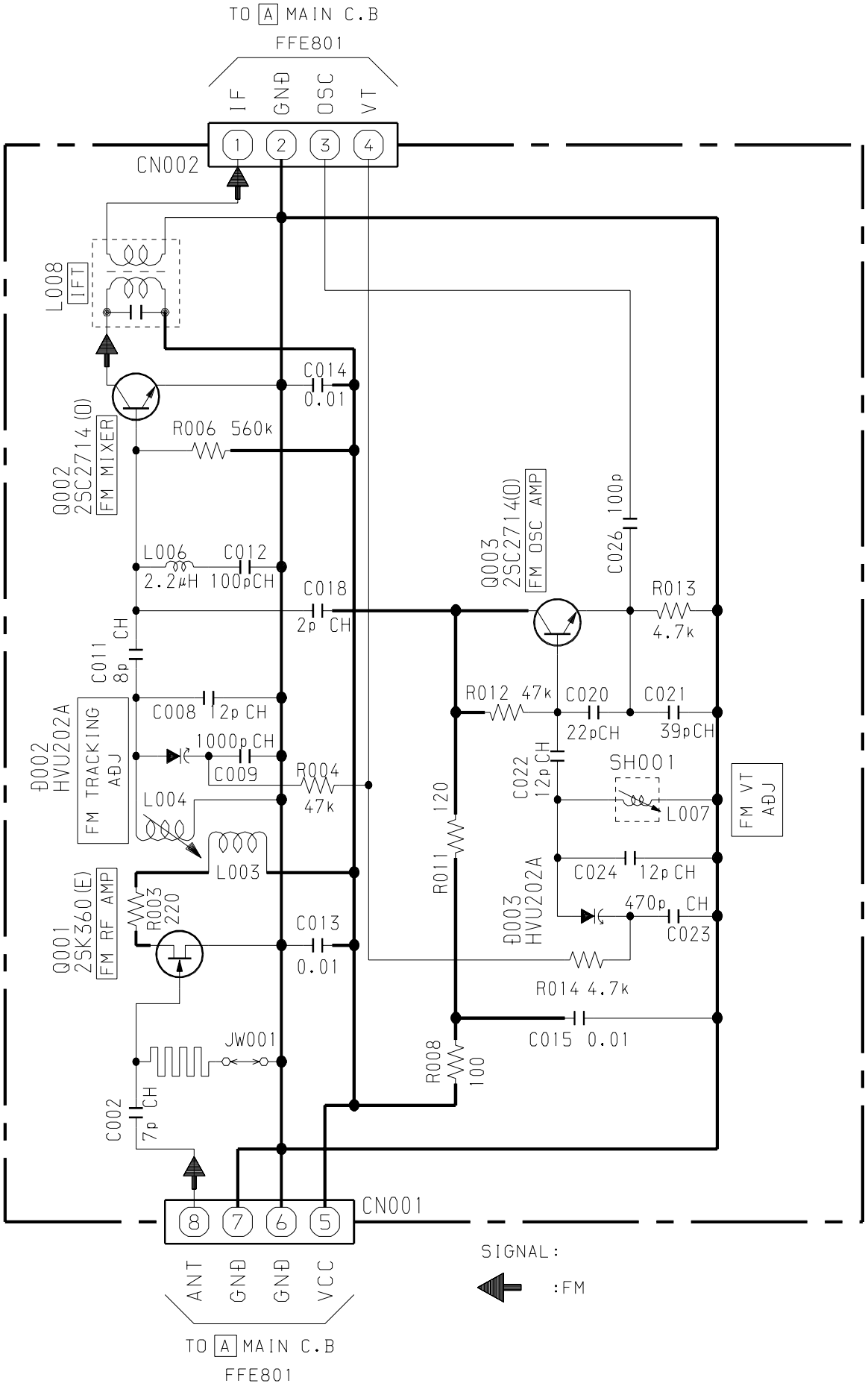


WIRING - 5 (AC1 /AC2)



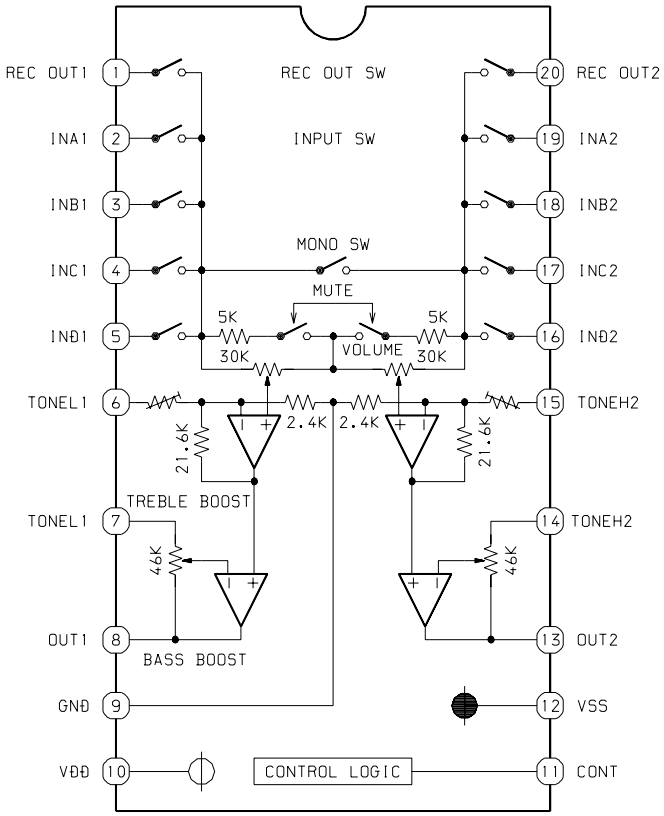

G DECK C.B
IC1
SW1
(CST1)
SW1
(CAM1)
SW2
(LH1)
SW3
SW2
SW3
(DECK MOTOR)
M1
M
SDL1
(DECK1)
W001
SW4
(REA)
SW4
SW5
(LH2)
SW5
IC2
CON705
FC501
FROM B FRONT C.B
CN701
SW6
(CST2)
SW6
R1
R2
R3
Q1
SW8
(CAM2)
SW8
SFR1
SW9
(REB)
SW9
SDL2
(DECK2)
H HEAD-1
C.B
RED
BLK
WHT
GRY
CON301
TO A MAIN C.B
CN301
P HEAD (DECK-1)
I HEAD-2
C.B
CON351
TO A MAIN C.B
CN351
RP HEAD (DECK-2)

SCHEMATIC DIAGRAM - 5 (TUNER FRONT END)

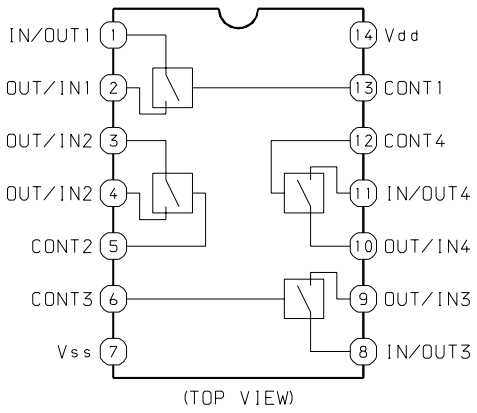


IC BLOCK DIAGRAM

IC M62439SP



IC BU4066BCF

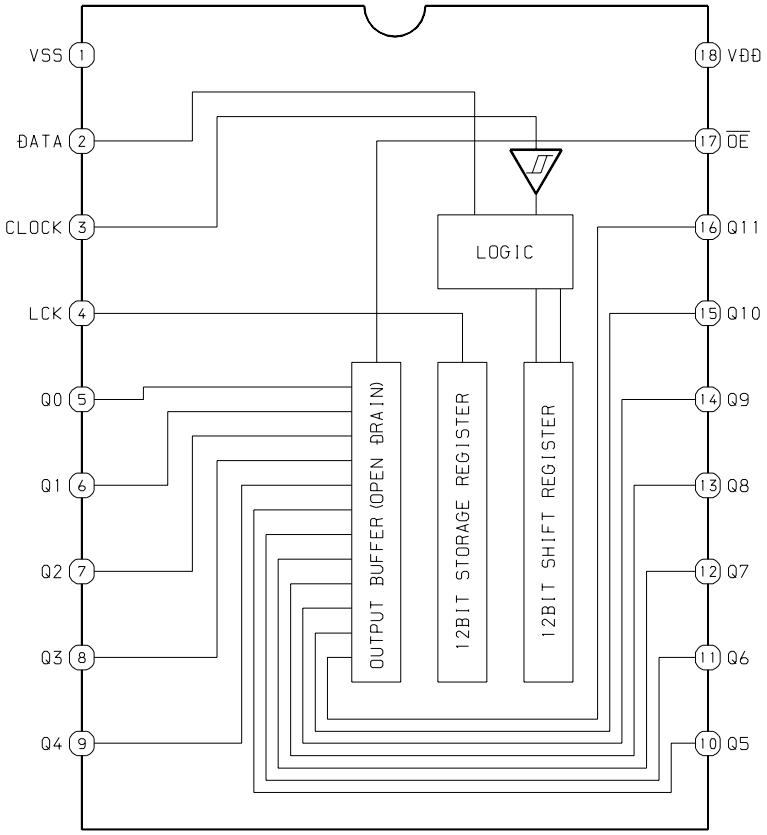


(TOP VIEW)

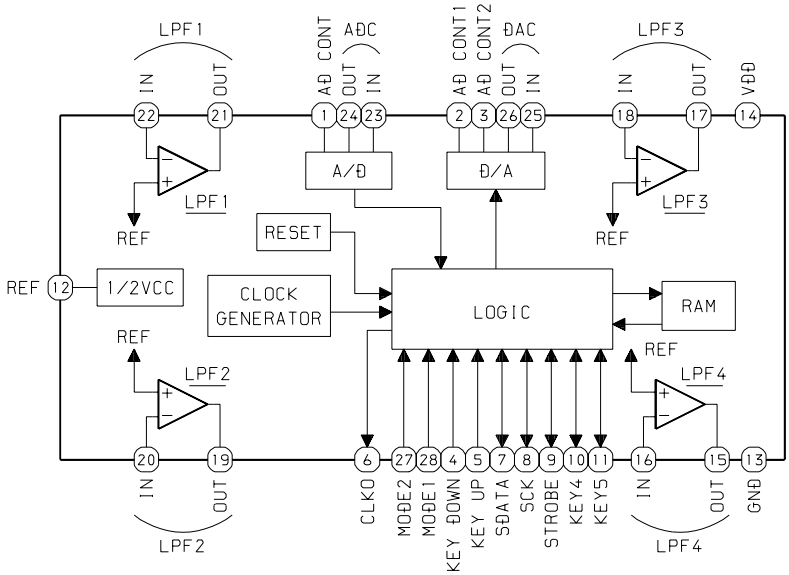
TRUTH TABLE

CONTROL	Impedance Between IN/OUT-OUT/IN
H	$0.5\sim5\times10^2\Omega$
L	$> 10^2\Omega$

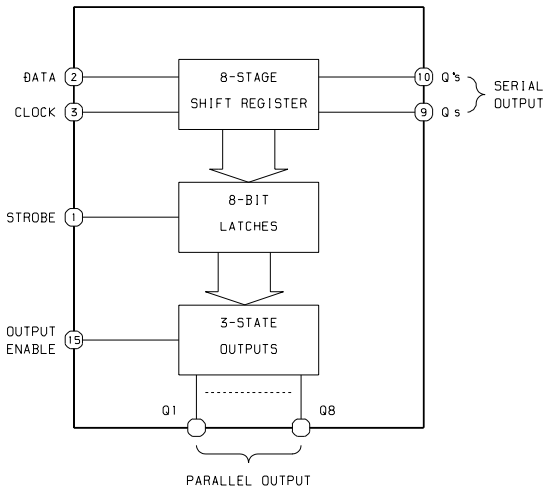
IC BU2092F



IC M65847AFP



IC BU4094BCF



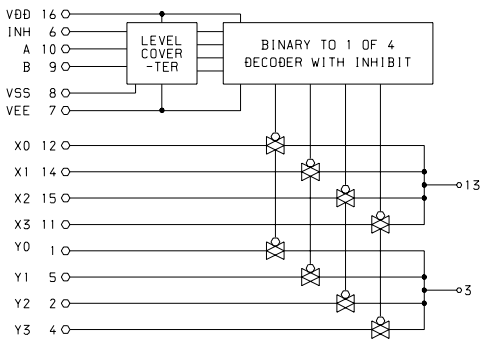
TRUTH TABLE

CLOCK	OUTPUT ENABLE	STROBE	DATA	PARALLEL OUTPUTS		SERIAL OUTPUTS	
				Q1	Qn	Qs	Q's
↑	L	×	×	Z	Z	Q7	NO Chg.
↓	L	×	×	Z	Z	No Chg.	Qs
↑	H	L	×	No Chg.	No Chg.	Q7	No Chg.
↑	H	H	L	L	Qn-1	Q7	No Chg.
↑	H	H	H	H	Qn-1	Q7	No Chg.
↓	H	×	×	No Chg.	No Chg.	No Chg.	Qs

Z=High Impedance

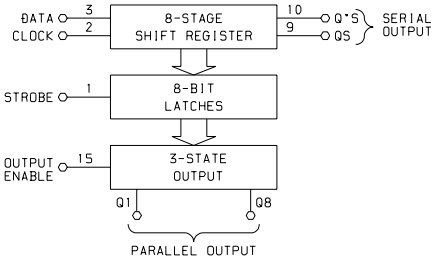
X=Don't Care

IC BU4052BCF

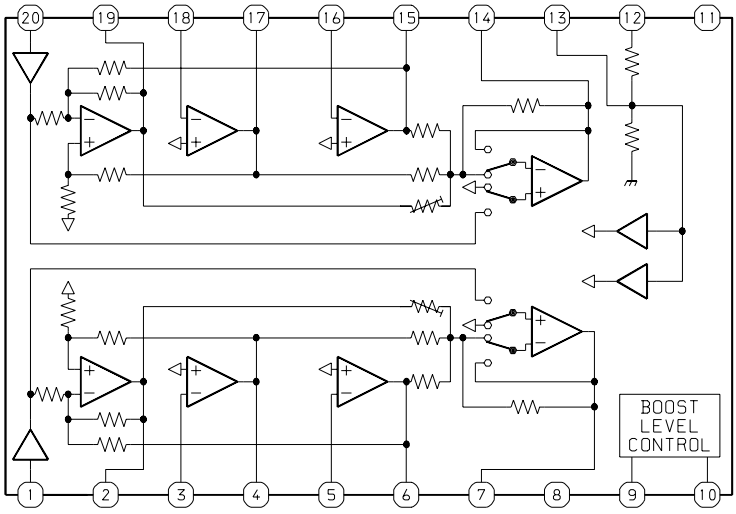


TRUTH TABLE

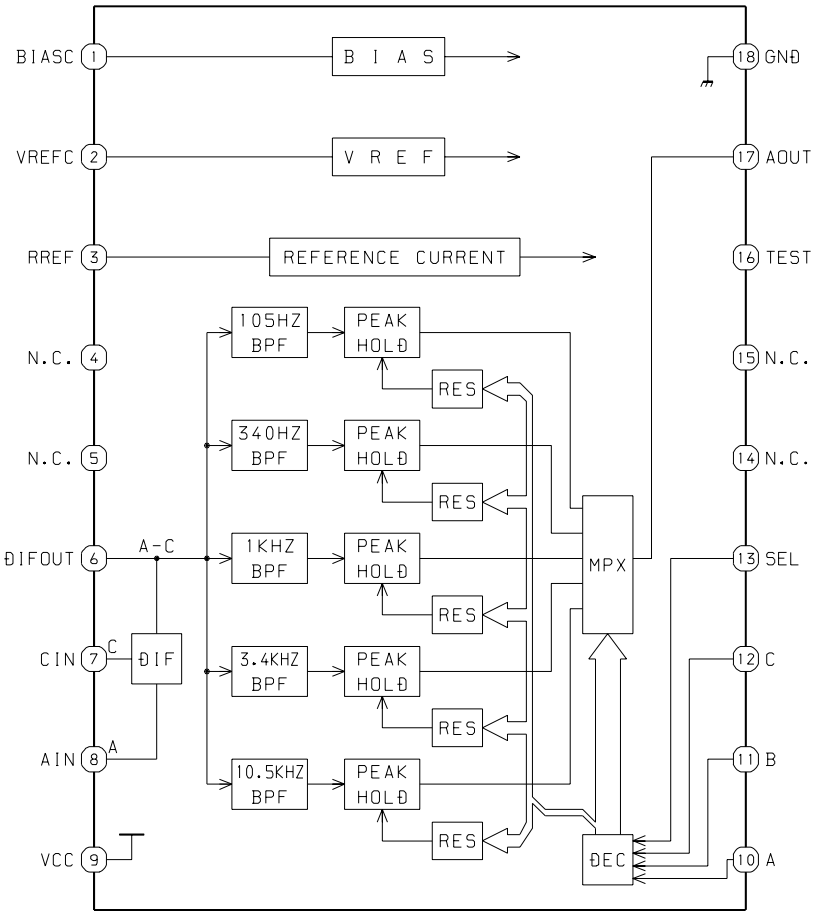
INHIBIT	A	B	ON SWITCH
L	L	L	X0 Y0
L	H	L	X1 Y1
L	L	H	X2 Y2
L	H	H	X3 Y3
H	X	X	NONE



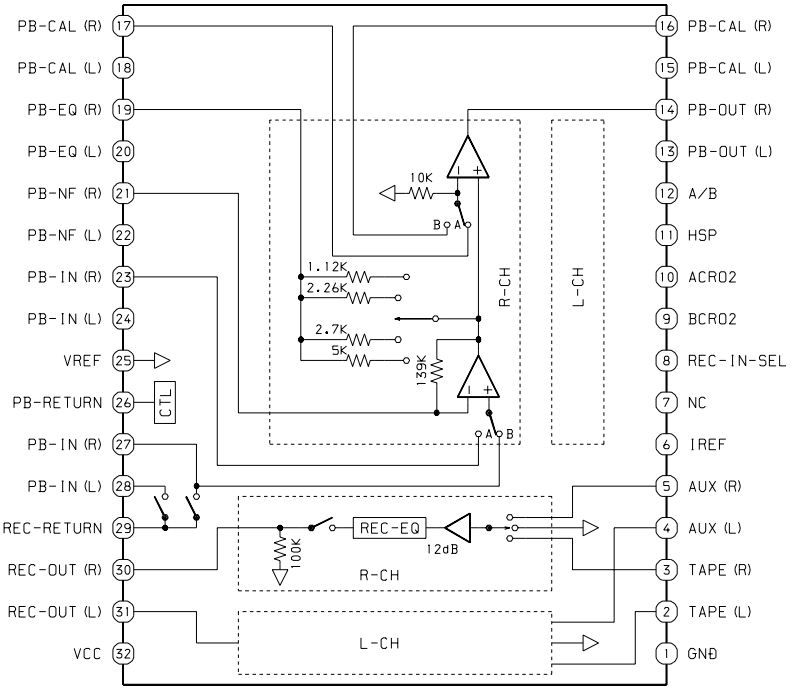
IC NJM2152M



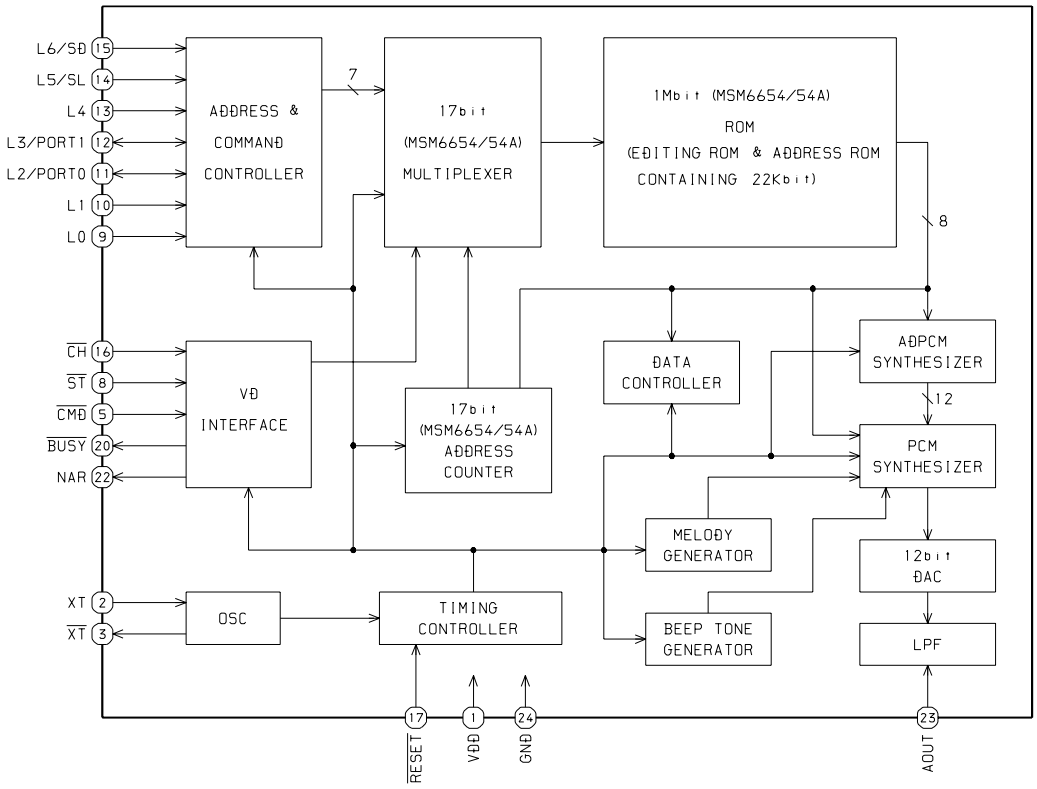
IC BA3835S



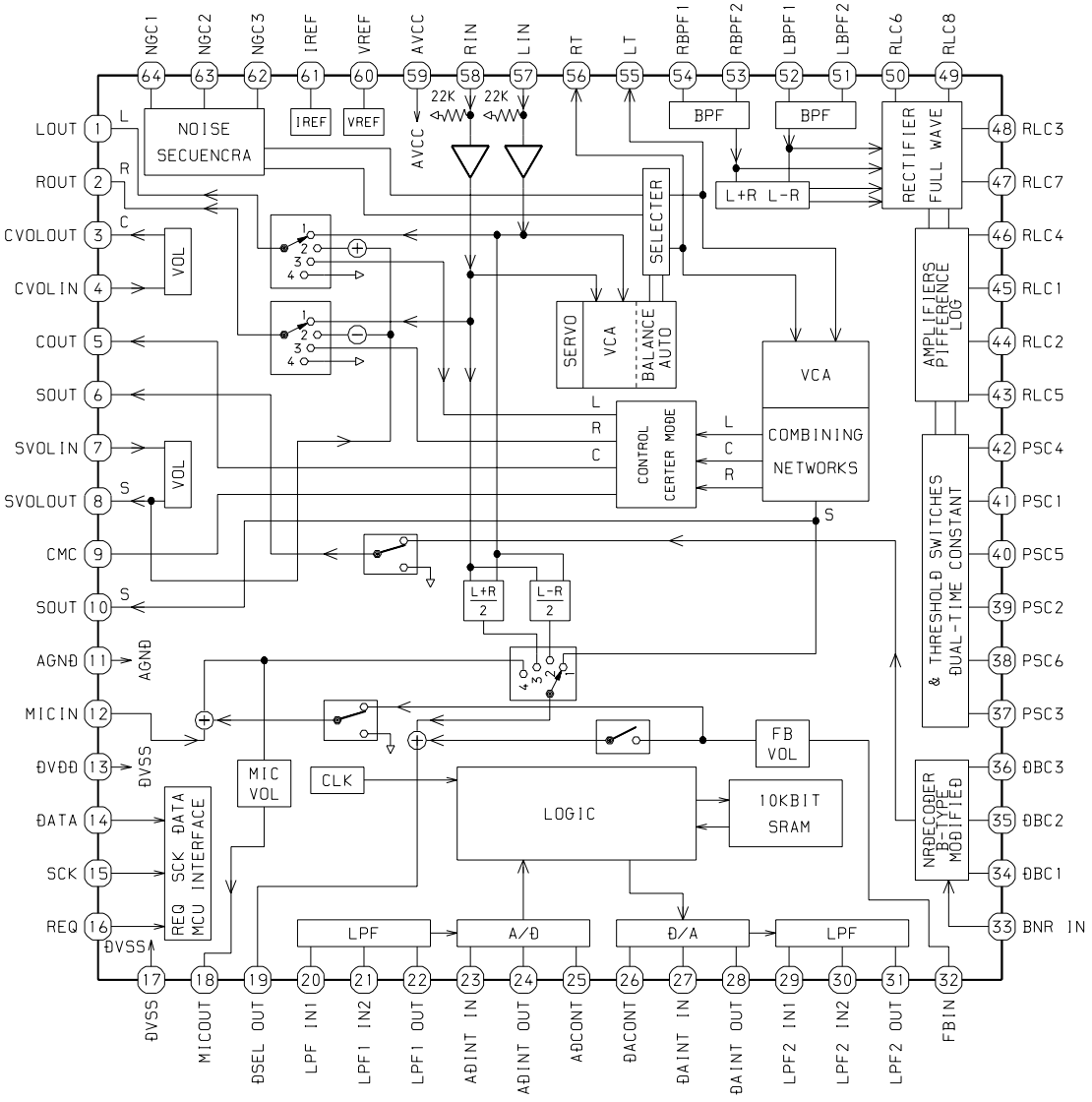
IC BA7762AFS



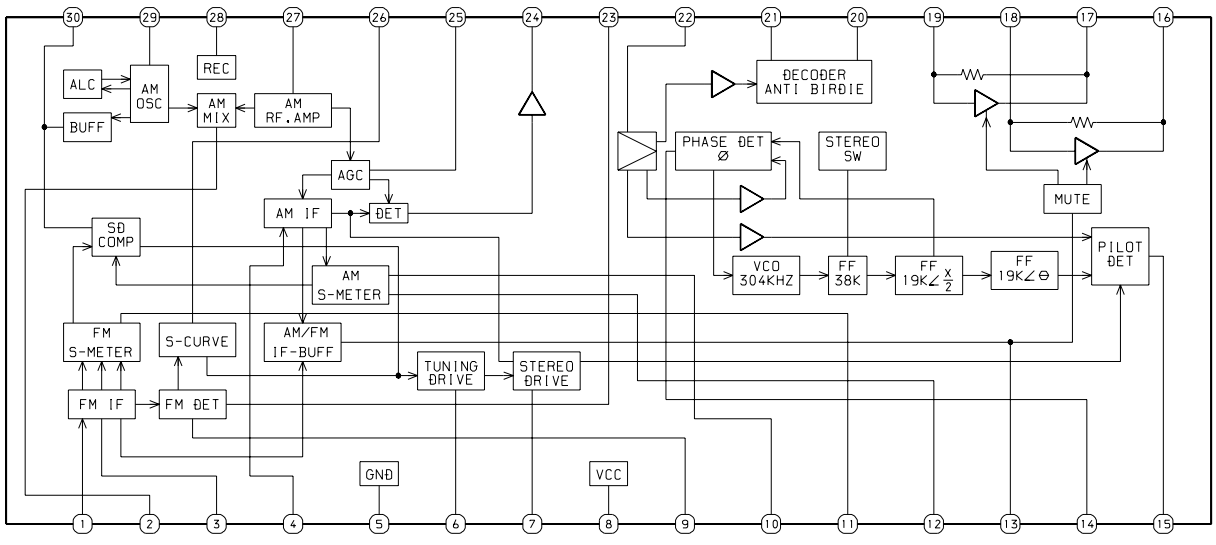
IC MSM6654A-521GS-KR1



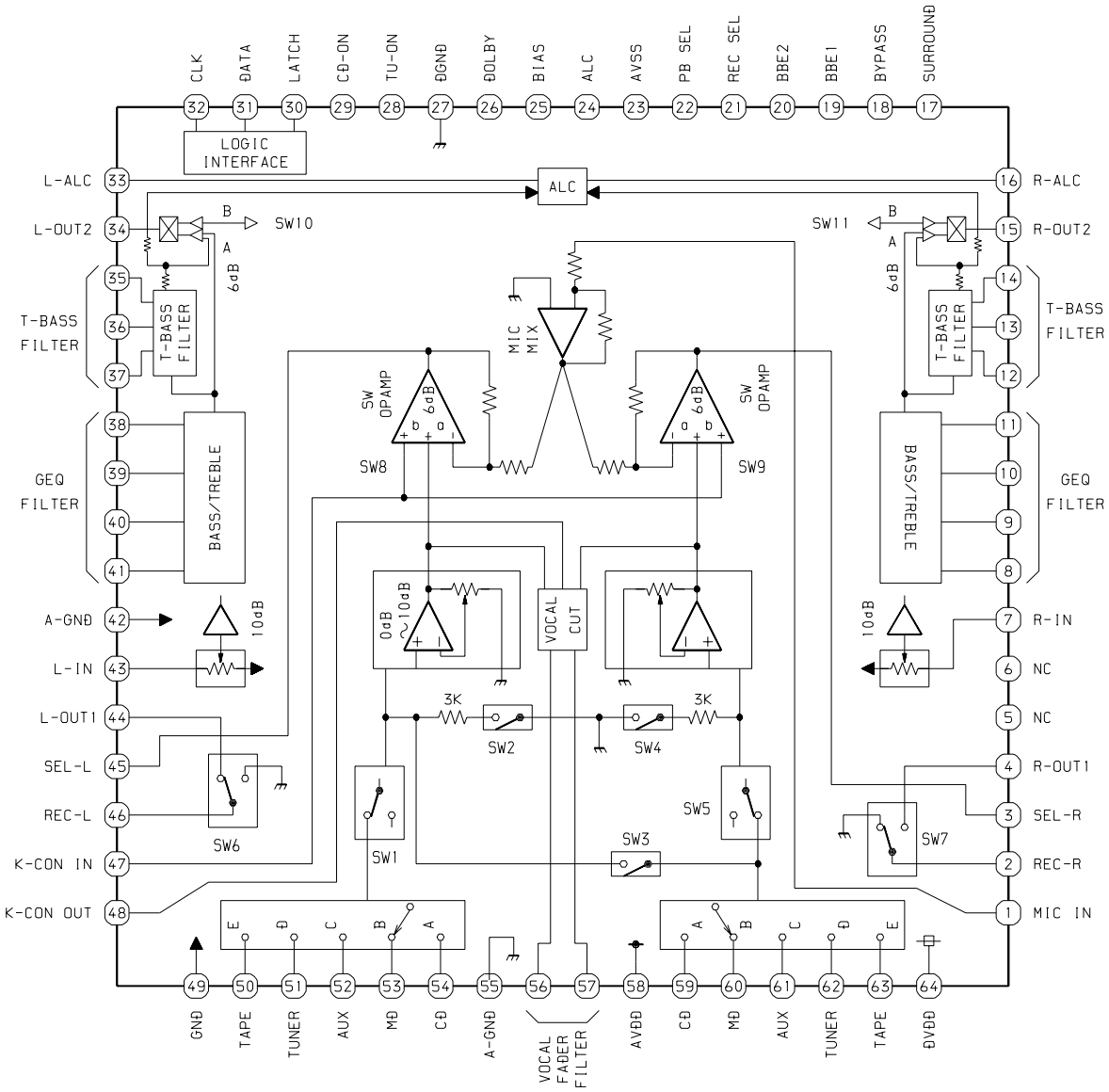
IC M62463FP



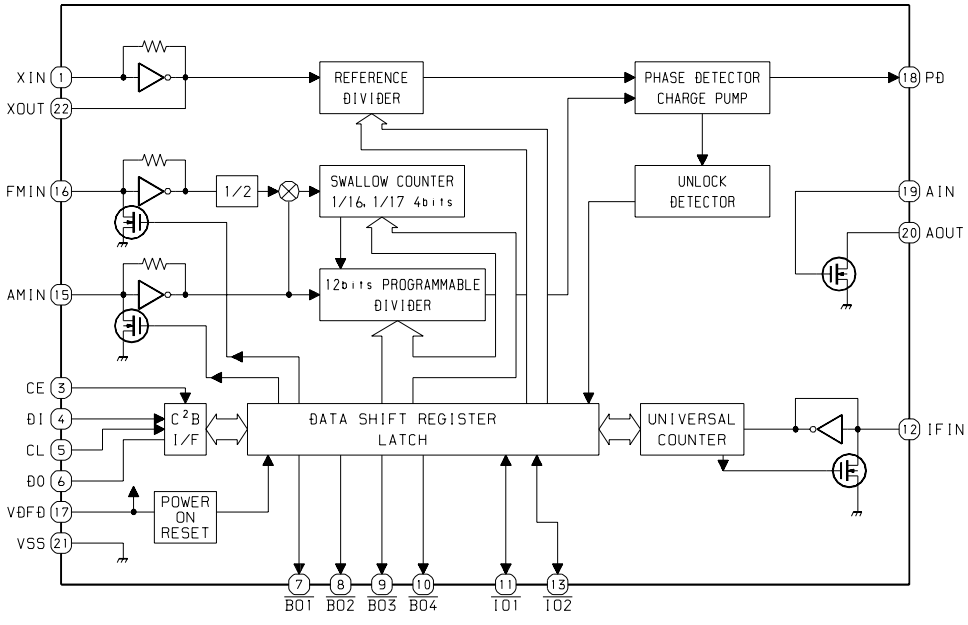
IC LA1837NL



IC M62445FP-600D



IC LC72131D



IC DESCRIPTION

IC, LC866560W-5J08

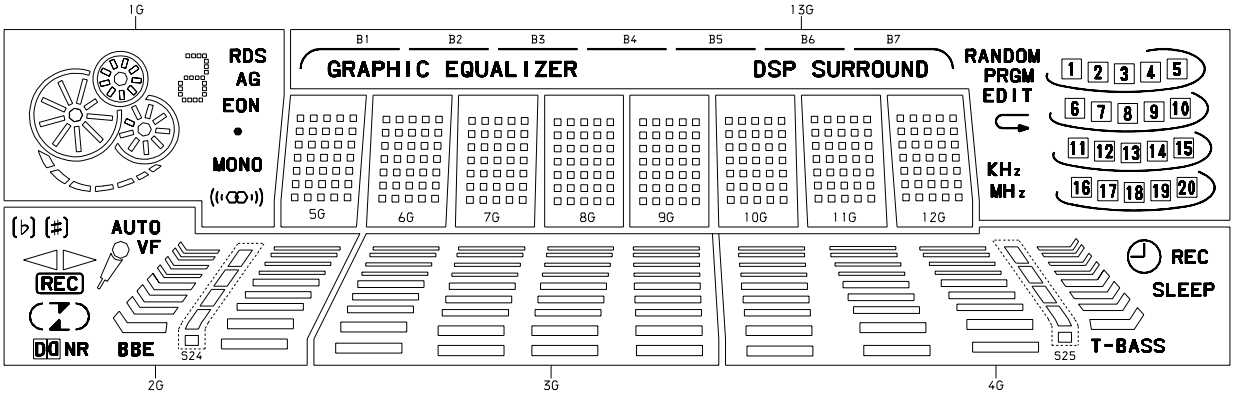
Pin No.	Pin Name	I/O	Description
1	CLK	O	CLOCK output for MAIN,FRONT PWB.
2	DATA	O	DATA output for MAIN, FRONT PWB.
3	STB	O	Latch strobe output for MAIN PWB.
4	$\overline{\text{O-LED}}$	O	LED $\overline{\text{ON}}$/OFF output.
5	STB (SHIFT)	O	Latch strobe output for FRONT shift register.
6	$\overline{\text{RESET}}$ (GAME)	I	Reset input for Sound IC.
7	STB (GAME)	O	Latch strobe output for Sound IC.
8	I-NAR (GAME)	I	Sound IC NAR input.
9	PLL-CE	O	PLL IC chip enable output.
10	O-DSC	O	Serial data output for PROLOGIC PWB. (Not connected)
11	$\overline{\text{I-MIC}}$	I	Microphone input for AUTO VF display.
12	$\overline{\text{RESET}}$	I	Reset input.
13	I-$\overline{\text{HP-MUTE}}$	I	Headphone input for MUTE by PROLOGIC.
14	I-DISH	I	CD turntable photo sensor A/D converter input.
15	VSS 1	–	GND.
16, 17	CF 1, 2	–	5.76MHz oscillator circuit.
18	VDD 1	–	Power supply input.
19	$\overline{\text{HOLD}}$	I	Power failure detection input. "H" normal operation. "L" main power cannot be turned on.
20 ~ 22	KEY-1 ~ 3	I	KEY input.(A/D)
23	I-CD SW	I	CD mechanical switch A/D converter input.
24	I-JOG	I	JOG dial A/D level input.
25	I-TU-SIG/$\overline{\text{MS}}$	I	Tuner signal and deck music sensor signal input.
26	I-SPEANA	I	A/D input for spectrum analyzer display.
27	I-WRQ/RDS-CLK	I	CD WRQ input. TUNER RDS CLOCK input.
28	I-TM-BASE	I	REFERENCE CLOCK input for timer watch.
29	I-$\overline{\text{RMC}}$	I	System remote control signal input.
30~41	G13~G2	O	FL GRID output G2~G13.
42, 43	P36, P35	O	FL SEGMENT output P35, P36.
44	G1	O	FL GRID output G1.
45	P34	O	FL SEGMENT output P34.
46	VDD3	–	Power supply input.
47	P33/SPEANA-A	O	Spectrum analyzer band switching output /FL segment P33 output.
48	P32/SPEANA-B	O	Spectrum analyzer band switching output /FL segment P32 output.
49	P31/SPEANA-C	O	Spectrum analyzer band switching output /FL segment P31 output.
50	P30/$\overline{\text{GAME}}$	I/O	FL segment P30 output / GAME input diode.
51	VP	–	Power supply input for FL display.
52	P29/AM-ST	O	FL segment P29 output.
53	P28/LW	O	FL segment P28 output.
54	P27/SW	I/O	FL segment P27 output / SW input diode.

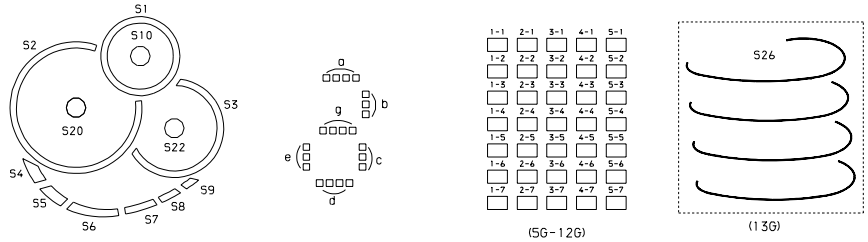
Pin No.	Pin Name	I/O	Description
55	P26/FM 1	O	FL segment P26 output.
56	P25/RDS	O	FL segment P25 output.
57	P24/R+1	O	FL segment P24 output.
58	P23/$\overline{\text{DSP}}$	O	FL segment P23 output.
59	P22/D-SURR	I/O	FL segment P22 output / SURR input diode.
60	P21/K-CON	I/O	FL segment P21 output / K-CON input diode.
61	P20/$\overline{\text{DOLBY}}$	I/O	FL segment P20 output / DOLBY input diode.
62	P19/5.1CH	I/O	FL segment P19 output / 5.1CH input diode.
63	P18/AM10K	O	FL segment P18 output.
64	P17/$\overline{\text{CST 2}}$	I/O	FL segment P17 output / DECK2 cassette detect switch data input.
65	P16/$\overline{\text{REB}}$	I/O	FL segment P16 output / DECK2 side-B record OK switch data input.
66	P15/$\overline{\text{CAM 2}}$	I/O	FL segment P15 output / DECK2 CAM switch data input.
67	P14/AUTO 1	I/O	FL segment P14 output / DECK1 AUTO stop signal input.
68	P13/AUTO 2	I/O	FL segment P13 output / DECK2 AUTO stop signal input.
69	P12/$\overline{\text{CAM 1}}$	I/O	FL segment P12 output / DECK1 CAM switch data input.
70	P11/$\overline{\text{CST 1}}$	I/O	FL segment P11 output / DECK1 cassette detect switch data input.
71	P10/$\overline{\text{REA}}$	I/O	FL segment P10 output / DECK2 side A record OK switch data input.
72	VDD 4	–	Power supply input.
73 ~ 81	P9 ~ P1	O	FL segment P1 ~ P9 output.
82	O-KSCAN	O	Switch SCAN timing output.
83	$\overline{\text{TRAY-CLS}}$	O	CD TRAY CLOSE data output.
84	$\overline{\text{TRAY-OPEN}}$	O	CD TRAY OPEN data output.
85	DISH-FWD	O	CD turntable forward rotation output.
86	DISH-RVS	O	CD turntable reverse rotation output.
87	O-DATA	O	CD data output.
88	O-CDCLK	O	CD clock output.
89	VSS2	-	GND.
90	VDD2	-	Power supply input.
91	$\overline{\text{O-POWER}}$	O	System power supply ON/$\overline{\text{OFF}}$ output.
92	O-MUTE	O	System mute ON/$\overline{\text{OFF}}$ output.
93	$\overline{\text{SOL 1}}$	O	DECK 1 solenoid output.
94	$\overline{\text{SOL 2}}$	O	DECK 2 solenoid output.
95	O-MOTOR	O	DECK MOTOR ON/$\overline{\text{OFF}}$ output.
96	I-IFC/$\overline{\text{STEREO}}$/SUBQ	I	Tune IF count serial data input /CD SUBQ data input.
97	I-$\overline{\text{STEREO}}$/ DRF(SQCLK)	I/O	Tuner stereo detected input / CD SQ CLOCK output.
98	I-RDS-DATA/ O-CDCE	I/O	RDS data input / CD chip enable output.
99	RT-A	I	Rotary encoder A input.
100	RT-B	I	Rotary encoder B input.

FL GRID ASSIGNMENT & ANODE CONNECTION

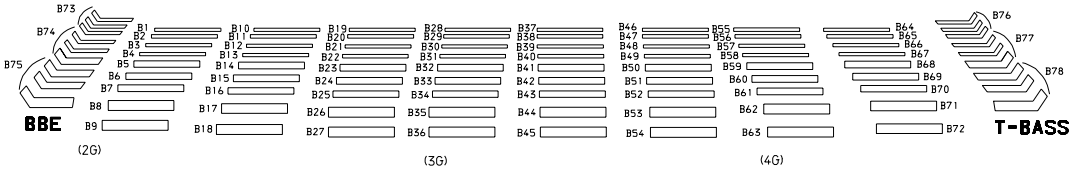
FL, BJ610GK

GRID ASSIGNMENT





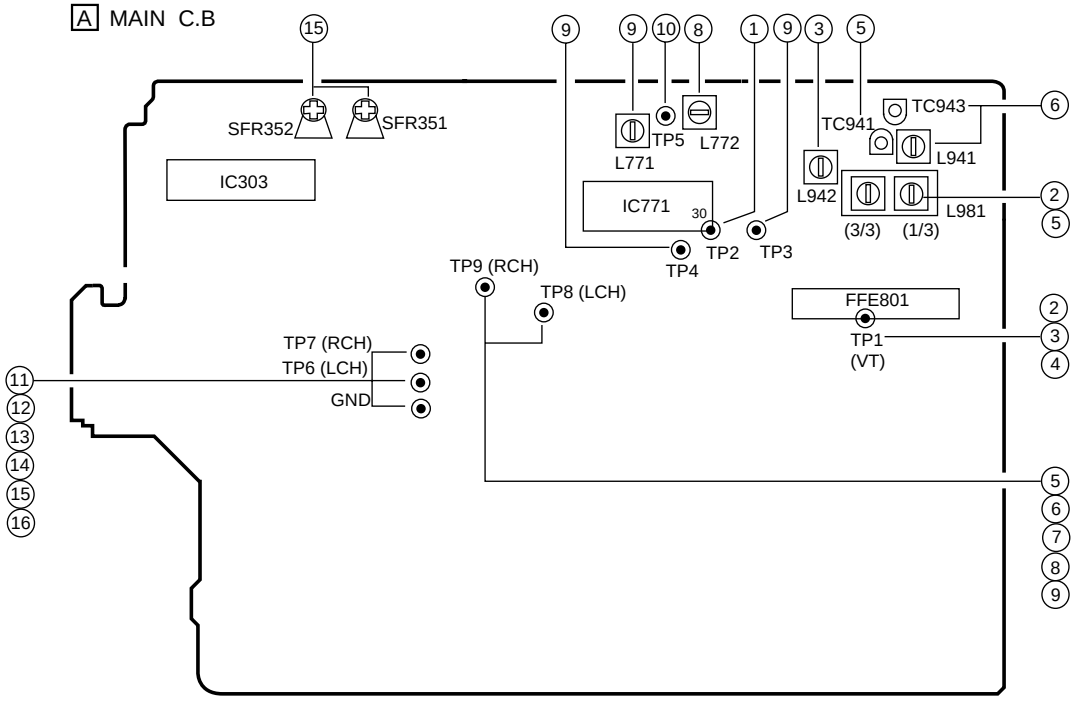
GRIÐ ASSIGNMENT

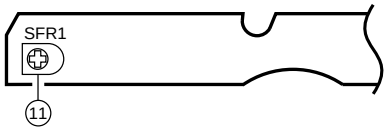


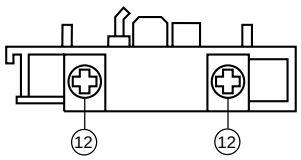
ANODE CONNECTION

	1G	2G	3G	4G	5G-12G	13G
P1	EON	B9	B45	REC	1-1	DSP SURROUND
P2	AG	DC NR	B36	B72	2-1	GRAPHIC EQUALIZER
P3	◉	BBE	B27	B63	3-1	B7
P4	MONO	S24	B18	B54	4-1	B6
P5	((∞))	B8	B44	◴	5-1	B5
P6	RDS	☾	B35	B71	1-2	B4
P7	b	⚑	B26	B62	2-2	B3
P8	c	☽	B17	B53	3-2	B2
P9	a, d, g	B7	B43	SLEEP	4-2	B1
P10	e	REC	B34	B70	5-2	RANDOM
P11	S1	◁	B25	B61	1-3	PRGM
P12	S11	▷	B16	B52	2-3	EDIT
P13	S12	B6	B42	T-BASS	3-3	⊂
P14	S19	♭ ♯	B33	B69	4-3	KHz
P15	S13	(♭)	B24	B60	5-3	MHz
P16	S10	(♯)	B15	B51	1-4	S26
P17	S18	B5	B41	B78	2-4	16
P18	S14	B75	B32	B68	3-4	11

	1G	2G	3G	4G	5G-12G	13G
P19	S17	B74	B23	B59	4-4	6
P20	S15	B73	B14	B50	5-4	1
P21	S16	B4	B40	B77	1-5	17
P22	S3	VF	B31	B67	2-5	12
P23	S23	AUTO	B22	B58	3-5	7
P24	S22	—	B13	B49	4-5	2
P25	S9	B3	B39	B76	5-5	18
P26	S8	—	B30	B66	1-6	13
P27	S7	—	B21	B57	2-6	8
P28	S6	—	B12	B48	3-6	3
P29	S5	B2	B38	S25	4-6	19
P30	S4	—	B29	B65	5-6	14
P31	S2	—	B20	B56	1-7	9
P32	S21	—	B11	B47	2-7	4
P33	S20	B1	B37	—	3-7	20
P34	—	—	B28	B64	4-7	15
P35	—	—	B19	B55	5-7	10
P36	—	—	B10	B46	—	5







<TUNER SECTION>

1. Clock Frequency Check
   Settings : • Test point : TP2
   Method : Set to AM 1602kHz and check that the test point is 2052kHz ± 45Hz.

2. MW VT Adjustment
   Settings : • Test point : TP1 (VT)
   • Adjustment location : L981 (3/3)
   Method : Set to MW 1710kHz and adjust L981 (3/3) so that the test point becomes 7.5V ± 0.05V. Then check that the test point is more than 0.3V (530kHz).

3. SW VT Adjustment
   Settings : • Test point : TP1 (VT)
   • Adjustment location : L942
   Method : Set to SW 17.9MHz, 5.9MHz and adjust L942 so that the test point becomes 6.0V ± 0.05V. Then check that the test point is more than 0.3V (5.9MHz).

4. FM VT Check
   Settings : • Test point : TP1 (VT)
   Method : Set to FM 87.5MHz, 108.0MHz and check that the test point is more than 0.5V (87.5MHz) and less than 8.0V (108.0MHz).

5. MW Tracking Adjustment
   Settings : • Test point : TP8(Lch), TP9(Rch)
   • Adjustment location :
   L981 (1/3) 603kHz
   TC941 ..... 1404kHz
   Method : Set up TC941 to center before adjustment, the level at 603kHz is adjust to maximum by L981 (1/3). Then the level at 1404kHz is adjust to maximum by TC941.

6. SW Tracking Adjustment
   Settings : • Test point : TP8(Lch), TP9(Rch)
   • Adjustment location :
   L941 ..... 5.9MHz
   TC943 ..... 17.9MHz
   Method : Set up TC943 to center before adjustment. The level at 5.9MHz is adjust to maximum by L941. Then the level at 17.9MHz is adjust to maximum by TC943.

7. FM Tracking Check
   Settings : • Test point : TP8(Lch), TP9(Rch)
   Method : Set to FM 98.0MHz and check that the test point is less than 9dB.

8. AM IF Adjustment
   Settings : • Test point : TP8(Lch), TP9(Rch)
   • Adjustment location :
   L772 ..... 450kHz

9. DC Balance / Mono Distortion Adjustment
   Settings : • Test point : TP3, TP4 (DC Balance)
   : TP8(Lch), TP9(Rch) (Distortion)
   • Adjustment location : L771
   • Input level : 54dB
   Method : Set to FM 98.0MHz and adjust L771 so that the voltage between TP3 and TP4 becomes 0V ± 0.04V. Next, check that the distortion is less than 1.3%.

10. Auto Stop Level Check

   MW
   • Input level : 52dB
   • Test point : TP5
   Method : Check auto stop at MW 999kHz and the level is 52 +10/-15dB.

   FM
   • Input level : 25dB
   • Test point : TP5
   Method : Check auto stop at FM 98.0MHz and the level is 25 dB ± 10 dB.

<DECK SECTION>

11. Tape Speed Adjustment (DECK1, DECK2)
   Settings : • Test tape : TTA–100
   • Test point : TP6(Lch), TP7(Rch)
   • Adjustment location : SFR1
   Method : Play back the test tape and adjust SFR1 so that the frequency counter reads 3000Hz ± 5Hz. Next, check that the REV speed is ±45Hz with respect to FWD speed.

12. Head Azimuth Adjustment (DECK1, DECK2)
   Settings : • Test tape : TTA–330
   • Test point : TP6(Lch), TP7(Rch)
   • Adjustment location : Head azimuth adjustment screw
   Method : Play back (FWD) the 8kHz signal of the test tape and adjust screw so that the output becomes maximum. Next, perform on REV PLAY mode.

13. PB Frequency Response Check (DECK1, DECK2)
   Settings : • Test tape : TTA–330
   • Test point :TP6(Lch), TP7(Rch)
   Method : Play back the 315Hz and 8kHz signals of the test tape and check that the output ratio of the 8kHz signal with respect to that of the 315Hz signal is within 5dB.

14. PB Sensitivity Check (DECK1, DECK2)
   Settings : • Test tape : TTA–200
   • Test point : TP6(Lch), TP7(Rch)
   Method : Play back the test tape and check that the output level of the test point is 120mV ± 3dB.

15. REC/PB Frequency Response Adjustment (DECK2)
   Settings : • Test tape : TTA–602
   • Test point : TP6(Lch), TP7(Rch)
   • Input signal : 1kHz / 10kHz (LINE IN)
   • Adjustment location : SFR351 (Lch)
   SFR352 (Rch)
   Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP6, TP7 becomes (-20VU) -36.5dBV. Record and play back the 1kHz and 10kHz signals and adjust SFRs so that the output of the 10kHz signals becomes 0dB ± 0.5dB with respect to that of the 1kHz signal.

16. REC/PB Sensitivity Check (DECK2)
   Settings : • Test tape : TTA–602
   • Test point : TP6(Lch), TP7(Rch)
   • Input signal : 1kHz (LINE IN)
   Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at TP6, TP7 becomes 0VU (-16.5dBV). Record and play back the 1kHz signals and check that the output is 0dB ± 3.5dB.

PRACTICAL SERVICE FIGURE

<TUNER SECTION>

<FM SECTION>

IHF Sensitivity :	Less than 10 / 9 / 9dB
(THD 3%)	[at 87.5 / 98.0 / 108.0MHz]
S/N 50dB Quieting sensitivity :	
	Less than 35dB [at 98.0MHz]
Signal to noise ratio :	Mono : More than 72dB
	Stereo : More than 66dB
	[at 98.0MHz]
Distortion :	Mono : Less than 1.2%
	Stereo : Less than 2.0%
	[at 98.0MHz]
Auto stop level :	25dB ± 10dB [at 98.0MHz]
Stereo separation :	More than 30dB [at 98.0MHz]
Intermediate frequency :	10.7MHz

<MW SECTION>

Sensitivity :	Less than 60dB [at 603kHz]
	Less than 58dB [at 999kHz]
	Less than 58dB [at 1404kHz]
Signal to noise ratio :	More than 36dB [at 999kHz]
Distortion :	Less than 1.5% [at 999kHz]
Auto stop level :	52dB +10/-15dB [at 999kHz]
Intermediate frequency :	450kHz

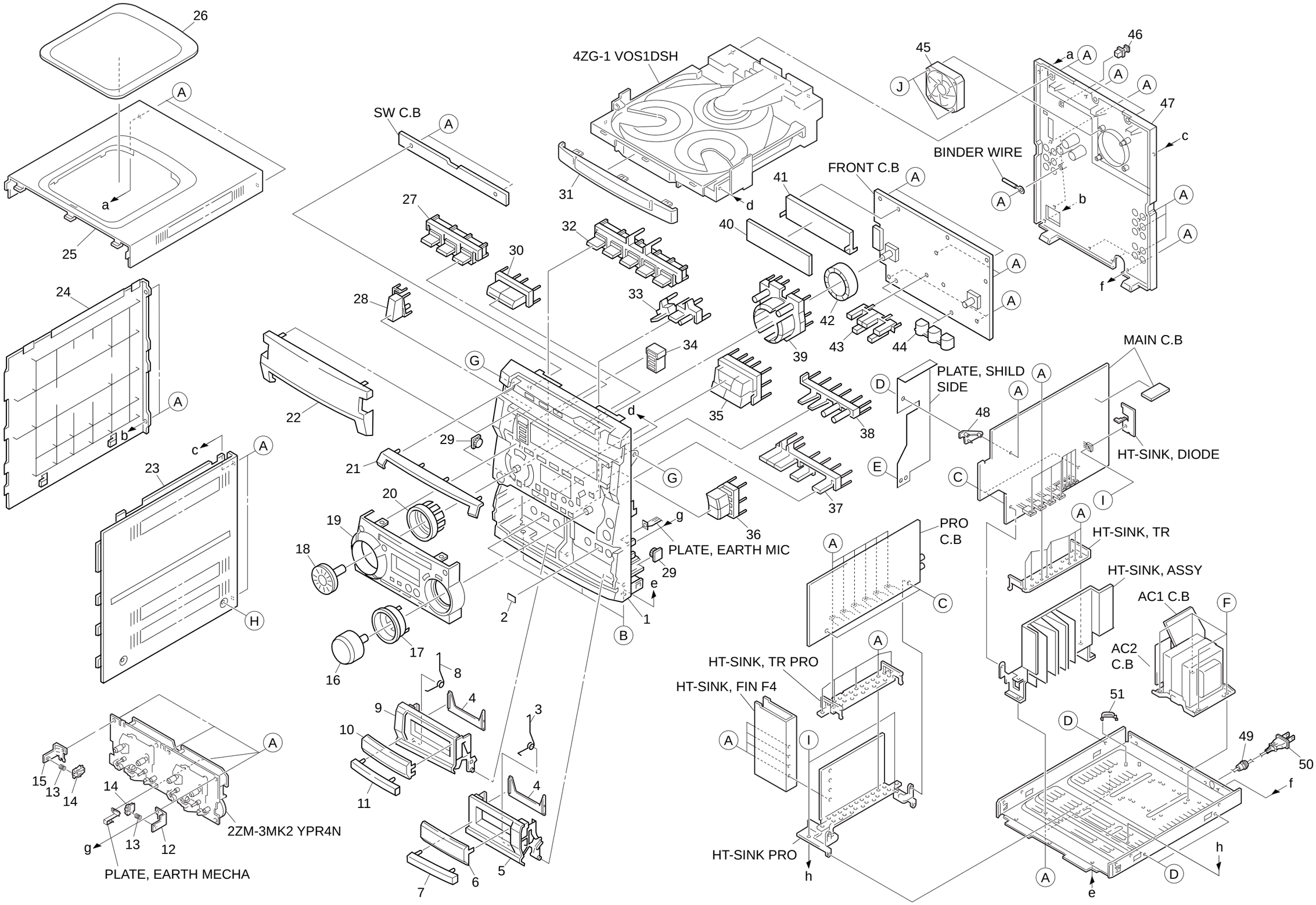
<SW SECTION>

Sensitivity :	Less than 51dB [at 5.9MHz]
	Less than 45dB [at 12.0 MHz]
	Less than 44dB [at 17.9MHz]
Overload signal Distortion :	
	Less than 10.0% [at 12.0MHz]
Intermediate frequency :	450kHz

<DECK SECTION>

Tape speed :	3000Hz ± 45Hz
Wow & flutter :	Less than 0.21% (W.R.M.S)
Take-up torque :	30 ~ 55g-cm (FWD, REV)
F.F & REW torque :	75 ~ 160g-cm
Back tension :	2 ~ 7g-cm (FWD, REV)
PB output level :	300mV ± 3.0dB (SP OUT 2V)
REC/PB output level :	0dB ± 3.0dB (SP OUT 2V,NORM)
Distortion (REC/PB) :	Less than 2.0% (NORM)
Noise level (PB) :	Less than 2.0mV (NORM, SP OUT 2V)
Noise level (REC/PB) :	Less than 3.0mV (NORM, SP OUT 2V)
Erasing ratio :	More than 60dB (at 125Hz, +10VU)
Test tape :	TTA–100
	TTA–200
	TTA–602 (NORMAL)

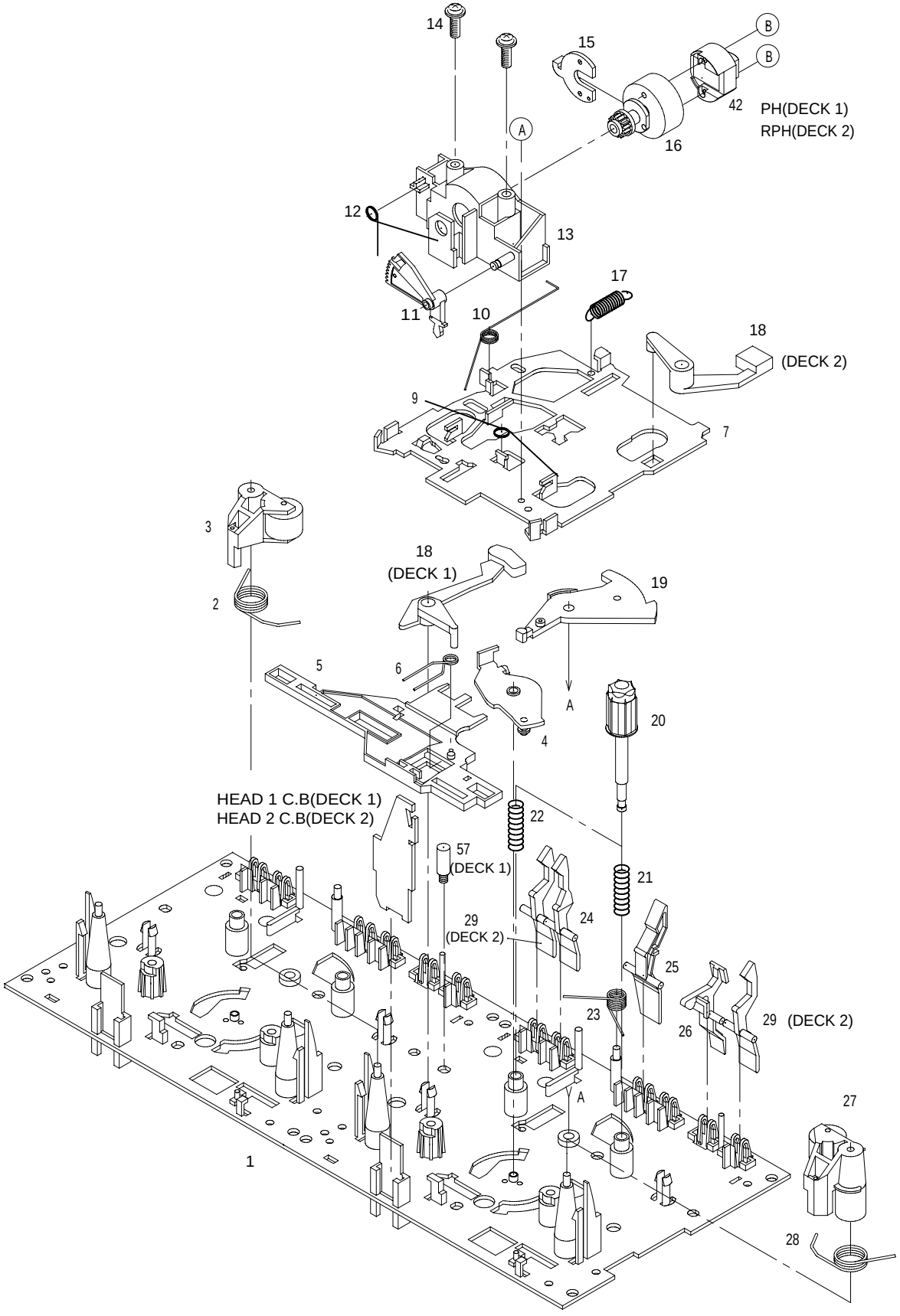
MECHANICAL EXPLODED VIEW 1 / 1

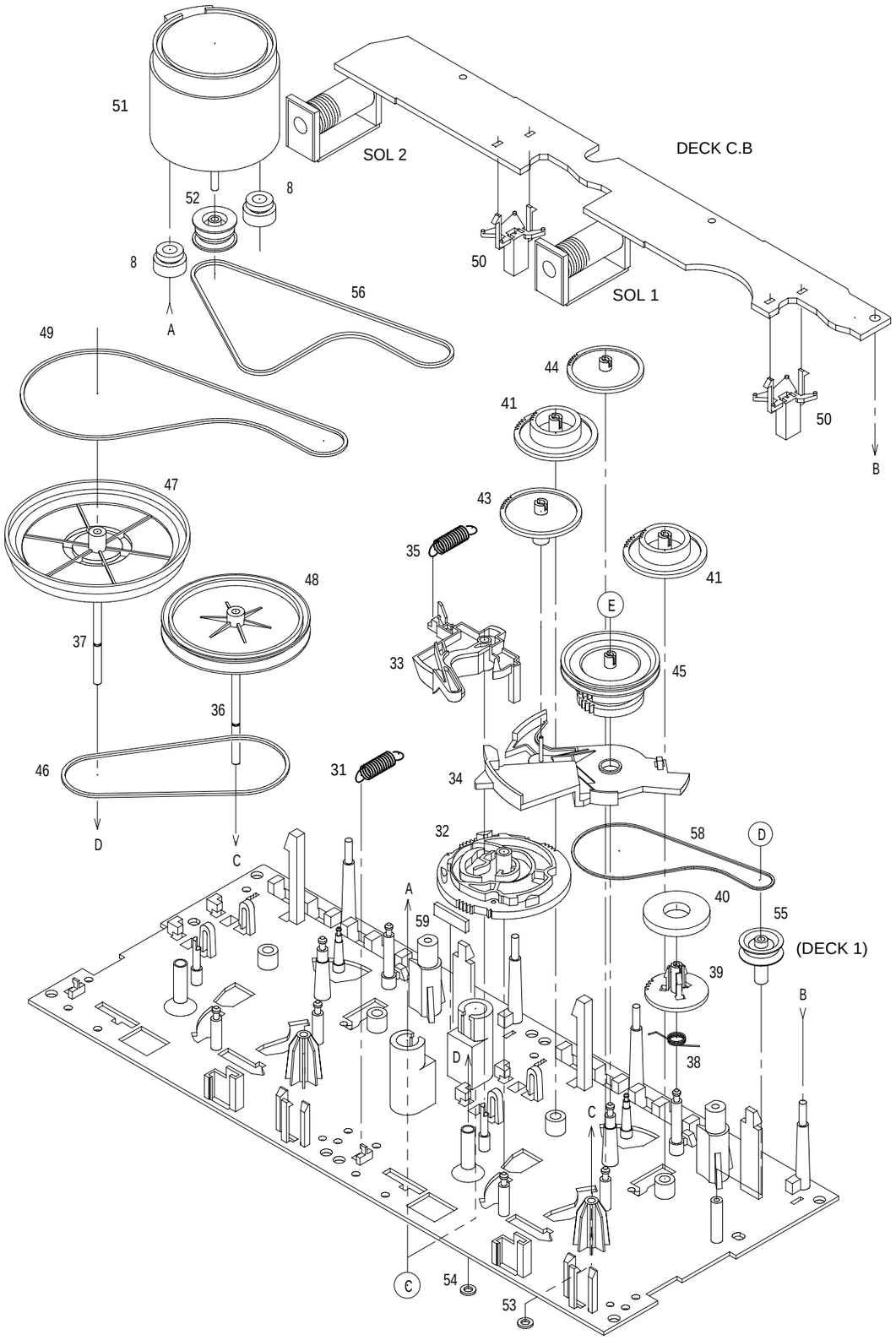


MECHANICAL PARTS LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	88-NF6-018-210		CABI,FR H
2	81-532-080-010		LABEL, CASS. COMPT
3	82-NF5-219-010		SPR-T,EJECT 2 (SIN)
4	86-NF6-061-010		REFLECTOR,CASS
5	88-NF6-004-010		BOX,CASS 2
6	88-NF6-014-010		WINDOW,CASS 2
7	88-NF6-009-010		PLATE,CASS 2
8	82-NF5-218-010		SPR-T,EJECT 1 (SIN)
9	88-NF6-003-010		BOX,CASS 1
10	88-NF6-013-010		WINDOW,CASS 1
11	88-NF6-008-010		PLATE,CASS 1
12	87-NF4-217-010		HLDR,LOCK 2
13	86-NF9-224-010		SPR-C,LOCK
14	82-NF5-229-010		PLATE,LOCK
15	87-NF4-216-010		HLDR,LOCK 1
16	88-NF6-015-110		KNOB,RTRY VOL
17	88-NF6-017-010		RING,VOL
18	88-NF6-016-110		KNOB,RTRY JOG
19	88-NHT-003-010		PANEL,FR H 772
20	88-NF6-050-010		REFLECTOR,JOG
21	88-NF6-007-010		PANEL,CD
22	88-NHT-002-010		WINDOW,DISPLAY H 772
23	88-NF8-047-010		PANEL,RIGHT 2
24	87-NB8-005-010		PANEL,LEFT
25	87-NF6-021-010		PANEL,TOP
26	86-NF6-007-010		WINDOW,TOP
27	88-NF6-021-010		KEY,ASSY DISC
28	88-NF6-026-010		KEY,POWER
29	87-NF8-220-010		DMPR,150
30	88-NF6-025-010		KEY,OPEN
31	88-NH6-004-010		PANEL,TRAY H6
32	88-NF6-030-010		KEY,ASSY FUN
33	88-NF6-036-010		KEY,MIC
34	88-NFT-201-010		GUIDE,LED PRLGC
35	88-NH6-012-010		KEY,ASSY OPE H6
36	88-NF6-027-010		KEY,BBE
37	88-NHT-004-010		KEY,PBC H26
38	88-NF6-037-010		KEY,REC
39	88-NF6-029-110		KEY,JOG
40	88-NF6-611-010		FL,BJ610GK
41	88-NF6-205-010		GUIDE,FL 40-150- 9
42	88-NF6-203-010		GUIDE,LED JOG
43	88-NF6-204-110		GUIDE,LED OPE
44	87-NF5-210-010		GUIDE,LED
45	87-A90-796-010		FAN,F614R-12MC-19
46	84-ZG1-245-210		CAP,OPTICAL
47	88-NHT-001-010		CABI,REAR HCST 772
48	88-NF5-208-010		HLDR,PWB-M N
49	87-085-185-010		BUSHING, AC CORD (E)
⚠ 50	87-A80-083-010		AC CORD,HC BLK
51	87-NF4-221-010		HLDR,CABLE
A	87-067-703-010		TAPPING SCREW, BVT2+3-10
B	87-067-688-010		BVTT+3-6
C	87-NF4-224-010		S-SCREW,IT3B+3-8 CU
D	87-721-096-410		QT2+3-10 GLD
E	87-591-094-410		TAPPING SCREW, QIT+3-6
F	87-078-019-010		S-SCREW,IT+4-6
G	87-721-097-410		QT2+3-12 GLD
H	87-067-641-010		UTT2+3-8(W/O SLOT)BL
I	87-067-579-010		TAPPING SCREW, BVT2+3-8
J	87-B10-190-010		BVT2+3-22 W/O SLOT

TAPE MECHANISM EXPLODED VIEW 1 / 1

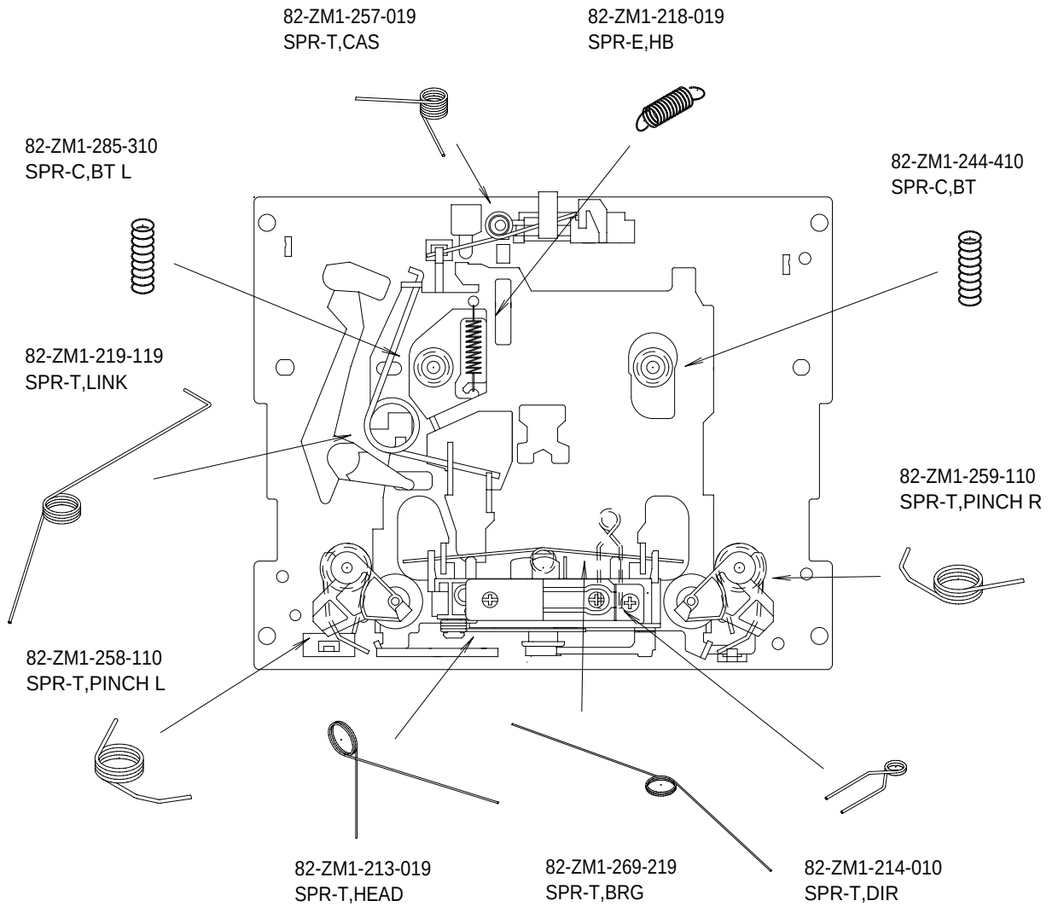


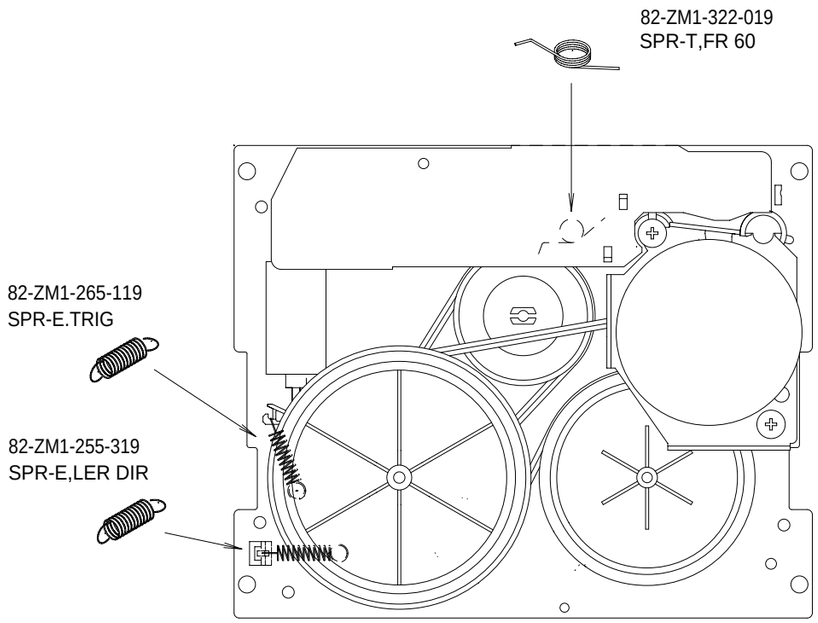


TAPE MECHANISM PARTS LIST 1 / 1

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	82-ZM3-301-519		CHAS ASSY,M2
2	82-ZM1-258-110		SPR-T,PINCH L
3	82-ZM1-341-110		LVR ASSY,PINCH L2
4	82-ZM1-333-010		PLATE,LINK 2
5	82-ZM1-266-11K		LVR,DIR
6	82-ZM1-214-010		SPR-T,DIR
7	82-ZM1-206-81K		CHAS,HEAD
8	82-ZM3-307-019		CUSH-G,DIA3.7-8-3.2
9	82-ZM1-269-219		SPR-T,BRG
10	82-ZM1-219-119		SPR-T,LINK
11	82-ZM1-210-119		GEAR,H T
12	82-ZM1-213-019		SPR-T,HEAD
13	82-ZM1-207-619		GUIDE,TAPE
14	86-ZM4-206-010		S-SCREW,AZIMUTH
15	82-ZM1-314-119		PLATE,HEAD
16	82-ZM1-208-119		HLDR,HEAD
17	82-ZM1-218-019		SPR-E,HB
18	82-ZM1-263-110		LVR,EJECT L (DECK 1)
18	82-ZM1-264-010		LVR,EJECT R (DECK 2)
19	82-ZM1-222-21K		LVR,PLAY
20	82-ZM1-217-319		REEL TABLE
21	82-ZM1-244-510		SPR-C,BT
22	82-ZM1-285-310		SPR-C,BT L
23	82-ZM1-257-019		SPR-T,CAS
24	82-ZM1-241-319		LVR,MC
25	82-ZM1-242-019		LVR,CAS
26	82-ZM1-243-019		LVR,STOP
27	82-ZM1-344-110		LVR ASSY,PINCH R2
28	82-ZM1-259-110		SPR-T,PINCH R
29	82-ZM1-240-11K		LVR,REC (DECK 2)
31	82-ZM1-255-319		SPR-E,LVR DIR
32	82-ZM3-305-01K		GEAR,CAM M2
33	82-ZM1-227-21K		LVR,TRIG
34	82-ZM3-306-11K		LVR,FR M2
35	82-ZM1-265-119		SPR-E,TRIG
36	82-ZM1-236-019		CAPSTAN N 2-41.5
37	82-ZM1-239-019		CAPSTAN N 2.2-41.7
38	82-ZM1-322-019		SPR-T,FR60
39	82-ZM1-220-219		GEAR,IDLER
40	82-ZM3-616-019		RING MAGNET 4
41	82-ZM1-216-31K		GEAR,REEL
42	87-A90-319-010		HEAD,PH HADKH2 FPC
42	87-A90-320-010		HEAD,RPH HADKH5 FPC
43	82-ZM1-225-21K		GEAR,FR
44	82-ZM1-226-019		GEAR,REW
45	82-ZM3-333-310		SLIP DISK ASSY 2
46	82-ZM1-338-010		BELT FR4
47	82-ZM1-349-110		FLY-WHL,R W(DECK 2)
47	82-ZM3-338-110		FLY-WHL,R3 W(DECK 1)
48	82-ZM1-348-010		FLY-WHL,L W(DECK 2)
48	82-ZM1-348-010		FLY-WHL,L W(DECK 1)
49	82-ZM3-329-210		BELT,SBU R2
50	82-ZM1-245-210		HLDR,IC
51	87-045-347-019		MOT,SHU2L 70(M1)
52	82-ZM3-221-010		PULLEY,MOT 2M
53	82-ZM1-288-019		SH,1.63-3.2-0.5 SLT
54	80-ZM6-243-019		SH,1.75-3.6-0.5 SLT
55	82-ZM3-335-210		PULLEY,COUPLER M3(DECK 1)
56	82-ZM3-337-010		BELT,SBU MOT 2
57	82-ZM3-339-010		SHAFT,COUPLER N3(DECK 1)
58	86-ZM1-206-010		BELT,MAIN L
59	82-ZM3-340-010		SH,BELT D2
A	85-ZM3-202-010		S-SCREW,TG
B	80-ZM6-207-019		V+1.6-7
C	82-ZM3-318-019		S-SCRW MOTOR M2
D	87-B10-043-010		W-P,0.99-4-0.25 SLT
E	82-ZM3-334-010		PW,2.16-6-0.4

SPRING APPLICATION POSITION

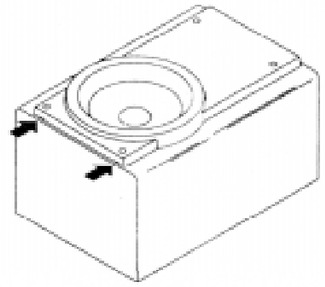




SPEAKER DISASSEMBLY INSTRUCTIONS

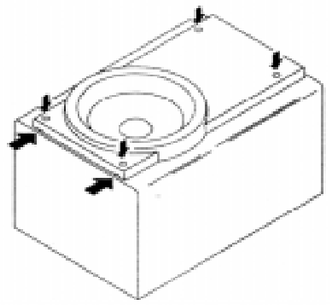
Type.1

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.



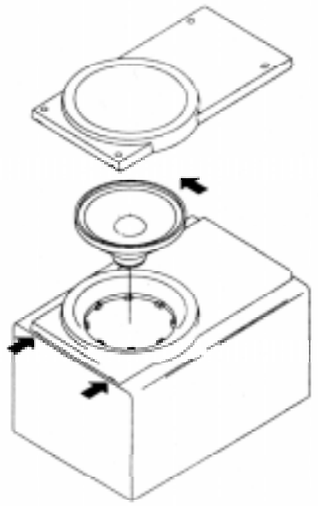
Type.2

Remove the grill frame and four pieces of rubber caps by pulling out with a flat-bladed screwdriver. Remove the screws from hole where installed rubber caps. Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.

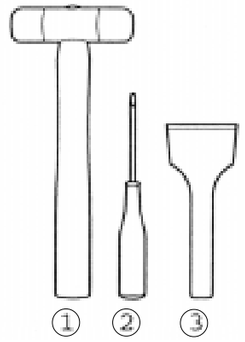


Type.3

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Turn the speaker unit to counterclockwise direction while inserting a flat-bladed screwdriver into one of the hollows around speaker unit, and then remove the speaker unit. After replacing the speaker unit, install it turning to clockwise direction untill "click" sound comes out.



Type.4



TOOLS

① Plastic head hammer
② (-) flat head screwdriver
③ Cut chisel

How to Remove the PANEL, FR

1. Insert the (-) flat head screwdriver tip into the gap between the PANEL, FR and the PANEL, SPKR. Tap the head of the (-) flat head screwdriver with the plastic hammer head, and create the clearance as shown in Fig-1.

2. Insert the cut chisel in the clearance, and tap the head of the cut chisel with plastic hammer as shown in Fig-2, to remove the PANEL, FR.

3. Place the speaker horizontally. Tap head of the cut chisel with plastic hammer as shown in Fig-3, and remove the PANEL, FR completely.

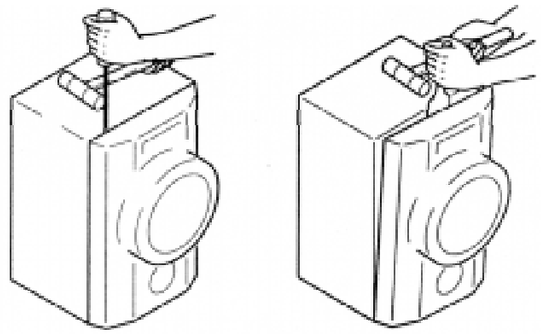


Fig-1 Fig-2

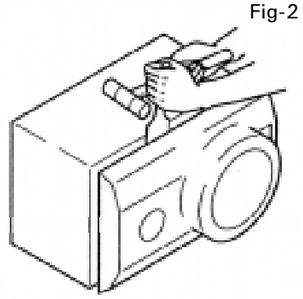


Fig-3

How to Attach the PANEL, FR

Attach the PANEL, FR to the PANEL, SPKR. Tap the four corners of the PANEL, FR with the plastic hammer to fit the PANEL, FR into the PANEL, SPKR completely.

SPEAKER PARTS LIST <SX-NAV704 (YJBNL)>

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	88-NST-002-010		PANEL,FR
2	88-NST-006-010		GRILLE,FRAME ASSY
3	83-096-614-010		SPEAKER CODE ASSY (YB)
4	88-NST-601-010		TERMINAL,ASSY
5	88-NST-009-010		PANEL,TW ASSY
6	87-NSS-602-010		SPKR,W 160
7	87-NSR-604-010		SPKR,T 80
8	88-NST-014-010		PROTECTOR,TW

SPEAKER PARTS LIST <SX-CR675 (YJB,YJST,YB,YST,YJ7B,Y1ST)>

NOTE: This SX-CR675 speaker contains SX-C605 (center speaker) and SX-R275 (rear speaker).

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	87-YS3-001-010		PANEL,FRONT ST(C605)<YJST,YST>
1	87-YS7-001-010		PANEL,FRONT B(C605)<YJB,YB,YJ7B,Y1ST>
2	87-YS3-003-010		GRILLE,FRAME ASSY(C605)
3	83-NSM-010-010		SPEAKER CORD(C605)
4	87-YS7-602-010		SPKR,100(C605)
5	87-YS1-001-010		CABI,REAR(R275)<YJST,YST>
5	87-YS6-001-010		CABI,REAR B(R275)<YJB,YB,YJ7B,Y1ST>
6	87-YS1-004-010		GRILLE FRAME ASSY(R275)
7	87-YS1-002-010		GRILLE,FRAME(R275)
8	81-VSA-009-010		CORD BUSH(R275)
9	87-YS6-002-010		SPKR, CORD Y(R275)
10	87-YS6-601-010		SPKR, 100(R275)
11	87-010-384-010		CAP,E 100-25 SME(R275)
12	87-YS8-901-010		IB,YJ(ECA)O(R275)<YJBNCC,YJSTNC,YJSTNCC>
12	87-YS8-906-010		IB,Y(9L)O(R275)<YJBNC,YSTNC,YBNCC,YSTNCC>
12	87-YS8-911-010		IB,YJ(ECA)T(R275)<YJ7BNL,Y1STNL>

ACCESSORIES / PACKAGE LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	88-NHT-901-010		IB,H(EC-K)I
2	87-006-269-010		AM LOOP ANT
3	87-043-115-010		FEEDER-ANT,FM
⚠ 4	87-099-724-010		PLUG,CONVERSION IR39
5	88-MGM-701-010		RC UNIT,RC-8AS03
6	87-043-095-010		ANT,WIRE
7	87-050-103-010		CORD,PIN 1PY 1.5M

L▶

A4▶

サービス技術データ	
番号	連絡内容
G	
G－ー	
G	

アイワ株式会社 〒110-8710 東京都台東区池之端1-2-11 ☎03(3827)3111 （代表）
AIWA CO.,LTD. 2-11, IKENOHATA 1-CHOME, TAITO-KU, TOKYO 110, JAPAN TEL:03 (3827) 3111

931261 9301978 Printed in Singapore