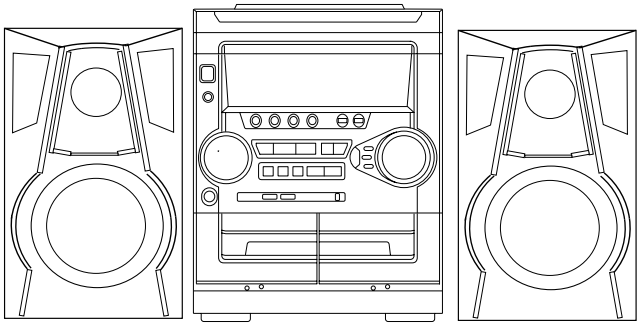
aiwa SERVICE

NSX-DP25 LH
NSX-HMT25 U



SERVICE MANUAL

COMPACT DISC
STEREO SYSTEM

BASIC TAPE MECHANISM : ZZM-3 PR1NM
BASIC CD MECHANISM : AZG-1 ZD8RDM

SYSTEM	CD CASSEIVER	SPEAKER	REMOTE CONTROLLER
NSX-DP25	CX-NDP25	SX-NSZ52 SX-R277 SX-C607	RC-ZAS10
NSX-HMT25	CX-NHMT25	SX-NAJ22 SX-R275 SX-C605	

- This Service Manual is the “Revision Publishing” and replaces “Simple Manual” CX-NHMT25 (U), (S/M Code No. 09-002-428-0T1) and CX-NDP25 (LH), (S/M Code No. 09-003-428-0T2).
- If requiring information about the CD mechanism, see Service Manual of AZG-1, (S/M Code No. 09-001-335-3N6).

aiwa

S/M Code No. 09-004-428-0R1

REVISION DATA

SPECIFICATIONS

<FM tuner section>

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

<AM tuner section>

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

<Amplifier section>

Power output	**Front** **LH:** Rated: 50 W + 50 W (6 ohms, THD 1%, 1 kHz) Reference: 60 W + 60 W (6 ohms, THD 10%,1 kHz) **U:** 50 W + 50 W (50 Hz – 20 kHz, THD less than 1%, 6 ohms) **Rear (Surround)** **LH:** Rated: 20 W + 20 W (8 ohms, THD 1%, 1 kHz) Reference: 25 W + 25 W (8 ohms, THD 10%, 1 kHz) **U:** 20 W + 20 W (1 kHz, THD less than 1%, 8 ohms) **Center** **LH:** Rated: 20 W (8 ohms, THD 1%, 1 kHz) Reference: 25 W (8 ohms, THD 10%, 1 kHz) **U:** 20 W (1 kHz, THD less than 1%, 8 ohms)
Total harmonic distortion	**LH:** 0.1% (30 W, 1 kHz, 6 ohms, DIN AUDIO/Front) **U:** 0.1% (25 W, 1 kHz, 6 ohms, DIN AUDIO/Front)
Inputs	VIDEO/AUX : 300 mV (adjustable)
Outputs	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 SUBWOOFER : 1.6 V PHONES (stereo jack) : accepts headphones of 32 ohms or more

<Cassette deck section>

Track format	4 tracks, 2 channels stereo
Frequency response	50 Hz – 15 kHz
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)

<Speaker system SX–NSZ52, SX–NAJ22>

Speaker system	3 way, bass reflex (magnetic shielded type)
Speaker units	Woofer: 140 mm (5 $^5/_8$ in.) cone type Tweeter: (2 $^3/_8$ in.) 60mm cone type Super tweeter: 20 mm ($^{13}/_{16}$ in.) ceramic type
Impedance	6 ohms
Output sound pressure level	87 dB/W/m
Dimensions (W x H x D)	**SX-NSZ52:** 240 x 324 x 270 mm **SX-NAJ22:** 240 x 324 x 256 mm (9 $^1/_8$ x 12 $^7/_8$ x 10 $^1/_8$ in.)
Weight	**SX-NSZ52:** 4.0 kg **SX-NAJ22:** 3.8 kg (8 lbs 6 oz.)

<General>

Power requirements	**U:** 120 V AC, 60 Hz **LH:** 120 V/220 - 230 V/240 V AC switchable, 50/60 Hz
Power consumption	**U:** 110 W **LH:** 125 W
Power consumption in standby mode	with power-economizing mode off **LH:** 19 W **U:** 20 W with power-economizing mode on 0.9 W
Dimensions of main unit (W x H x D)	260 x 328 x 357.5 mm (10 $^1/_4$ x 13 x 14 $^1/_8$ in.)
Weight of main unit	8.7 kg (19 lbs 3 oz.)

- Design and specifications are subject to change without notice.

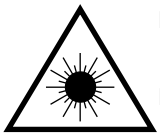
- The word “BBE” and the “BBE symbol” are trademarks of BBE Sound, Inc.
  Under license from BBE Sound, Inc.

- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
  “DOLBY” and the double-D symbol ▯◯ are trademarks of Dolby Laboratories Licensing Corporation.

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

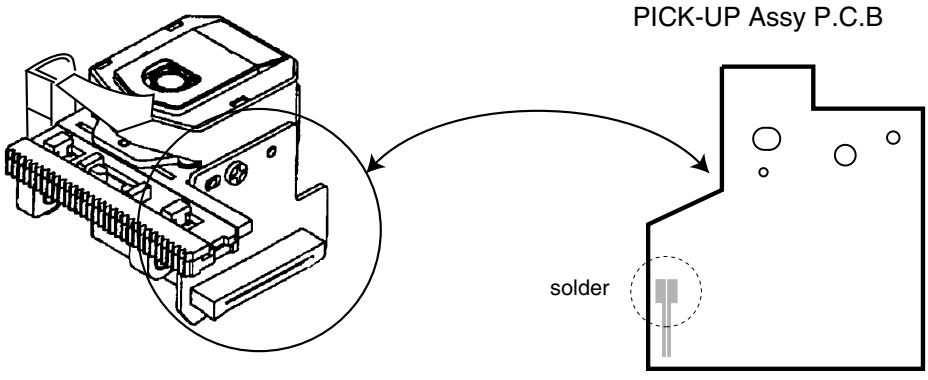
This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

CLASS 1	LASER PRODUCT
KLASSE 1	LASER PRODUKT
LUOKAN 1	LASER LAITE
KLASS 1	LASER APPARAT

Precaution to replace Optical block (KSM-880CAB)

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

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



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, 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. Connect 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 to 1 V or less using a multimeter or an oscilloscope.

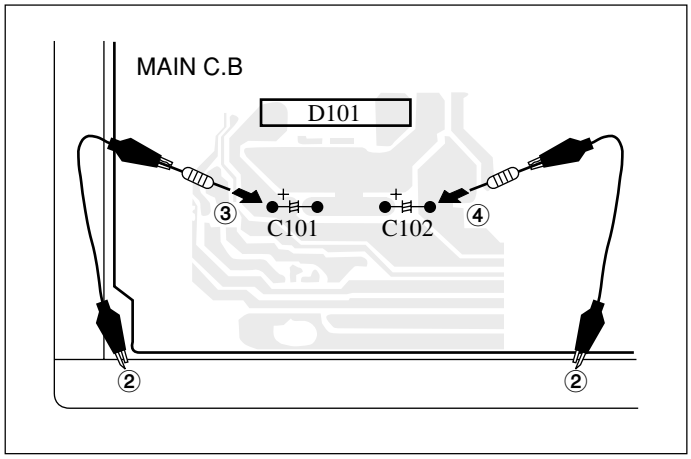


Fig-1

Select a discharging resistor referring to the following table.

Charging voltage (V) (C101, 102)	Discharging resistor (Ω)	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 capacitors 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 judgement 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.

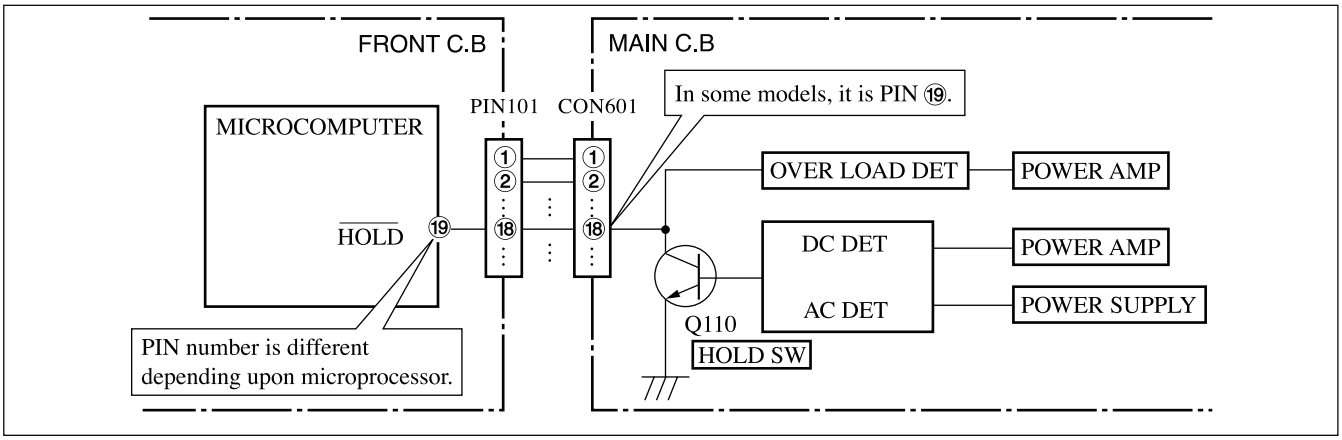


Fig-2-1

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 lead to wrong judgement 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.

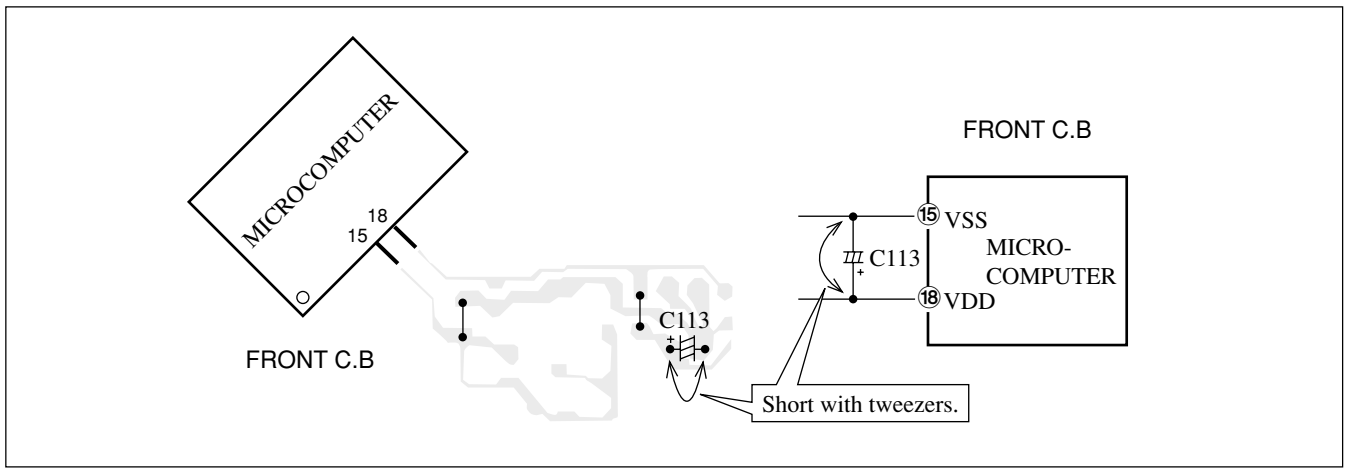


Fig-2-2

② Short 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.

ELECTRICAL MAIN PARTS LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-A21-398-010		IC,STK490-110
	87-A20-783-040		C-IC,BA7762AFS
	87-A21-097-040		C-IC,M62463AFP
	87-A21-452-030		C-IC,BD3876KS2
	87-A21-415-010		IC,LA1843
	8A-NFW-601-010		C-IC,UPD780228GF-060-3BA
	87-A21-482-010		IC,RPM6938-H4
	87-070-127-110		IC,LC72131 D
	87-A21-269-010		IC,EW732
TRANSISTOR			
	87-026-245-080		TR,DTC114ES
	87-026-609-080		TR,KTA1266GR
	87-A30-198-080		TR,KTC3199GR
	89-213-702-010		TR,2SB1370 (1.8W)
	87-026-610-080		TR,KTC3198GR
	87-A30-076-080		C-TR,2SC3052F
	87-A30-075-080		C-TR,2SA1235F
	87-A30-318-080		TR,CSA952K
	87-A30-107-070		C-TR,CMBT5401
	87-A30-074-080		C-TR,RT1P 141C
	87-A30-468-080		C-TR,KRC102S-RTK
	87-A30-106-080		C-TR,CMBT5551
	87-A30-087-080		C-FET,2SK2158
	87-A30-063-080		C-TR,KRA104S
	87-A30-086-040		C-TR,CSD1306E
	87-A30-329-080		TR,CD1585BC
	89-327-143-080		TR,2SC2714 (0.1W)
	87-A30-072-080		C-TR,RT1P 144C
	87-A30-234-080		TR,CSC4115BC
DIODE			
	87-A40-548-090		DIODE,D3SBA20
	87-017-447-010		DIODE,GBU4DL
	87-A40-553-080		DIODE,1N4003 LES
	87-A40-776-080		ZENER,UZ27BSD
	87-A40-764-080		ZENER,UZ10BSC
	87-070-274-080		DIODE,1N4003 SEM
	87-A40-313-080		C-DIODE,MC 2840
	87-A40-270-080		C-DIODE,MC2838
	87-A40-269-080		C-DIODE,MC2836
	87-A40-854-080		ZENER, UZ15BSA<LH>
	87-020-465-080		DIODE,1SS133
	87-A40-752-080		ZENER,UZ6.2BSC
	87-A40-760-080		ZENER,UZ9.1BSA
	87-A40-747-080		ZENER,UZ5.1BSB
	87-A40-745-080		ZENER,UZ4.7BSA
	87-017-149-080		ZENER,HZS6A2L
MAIN C.B			
C3	87-012-368-080		C-CAP,S 0.1-50 F
C4	87-012-368-080		C-CAP,S 0.1-50 F
C21	87-016-495-000		CAP,E 3300-25 M SMG
C22	87-016-495-000		CAP,E 3300-25 M SMG
C25	87-010-382-080		CAP, ELECT 22-25V
C26	87-010-382-080		CAP, ELECT 22-25V
C27	87-010-382-080		CAP, ELECT 22-25V
C28	87-010-382-080		CAP, ELECT 22-25V
C31	87-010-263-080		CAP, ELECT 100-10V
C32	87-010-197-080		CAP, CHIP 0.01 DM
C33	87-010-263-080		CAP, ELECT 100-10V<U>
C34	87-010-260-080		CAP, ELECT 47-25V
C35	87-010-380-080		CAP, ELECT 47-16V
C36	87-010-381-080		CAP, ELECT 330-16V
C38	87-010-384-080		CAP, ELECT 100-25V
C39	87-010-384-080		CAP, ELECT 100-25V
C40	87-010-197-080		CAP, CHIP 0.01 DM
C60	87-010-403-080		CAP, ELECT 3.3-50V
C115	87-010-404-080		CAP, ELECT 4.7-50V<LH>
C116	87-010-404-080		CAP, ELECT 4.7-50V<LH>
C163	87-010-196-080		CHIP CAPACITOR,0.1-25
C171	87-012-368-080		C-CAP,S 0.1-50 F
C172	87-012-368-080		C-CAP,S 0.1-50 F
C173	87-012-368-080		C-CAP,S 0.1-50 F
C174	87-012-368-080		C-CAP,S 0.1-50 F
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	87-012-157-080		C-CAP,S 330P-50 CH
C306	87-012-157-080		C-CAP,S 330P-50 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	87-010-180-080		C-CER 1500P
C314	87-010-180-080		C-CER 1500P
C315	87-010-182-080		C-CAP,S 2200P-50 B
C316	87-010-182-080		C-CAP,S 2200P-50 B
C321	87-012-142-080		CAP, S 0.33-16
C322	87-012-142-080		CAP, S 0.33-16
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-A11-475-080		C-CAP,S 1000P-50 J CG<U>
C355	87-012-349-080		C-CAP,S 1000P-50 J CH GRM<LH>
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
C388	87-012-156-080		C-CAP,S 220P-50 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	87-010-176-080		C-CAP,S 680P-50 SL
C402	87-010-176-080		C-CAP,S 680P-50 SL
C403	87-010-958-080		CHIP -CAP,S 0.01-25BJ
C404	87-010-958-080		CHIP -CAP,S 0.01-25BJ
C405	87-010-958-080		CHIP -CAP,S 0.01-25BJ
C406	87-010-958-080		CHIP -CAP,S 0.01-25BJ

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C407	87-010-401-080		CAP, ELECT 1-50V
C408	87-010-401-080		CAP, ELECT 1-50V
C409	87-010-196-080		CHIP CAPACITOR,0.1-25
C410	87-010-112-080		CAP, ELECT 100-16V
C411	87-010-400-080		CAP, ELECT 0.47-50V
C412	87-010-400-080		CAP, ELECT 0.47-50V
C413	87-010-400-080		CAP, ELECT 0.47-50V
C414	87-010-401-080		CAP, ELECT 1-50V
C417	87-010-221-080		CAP, ELECT 470-10V
C418	87-A10-891-080		CAP,E 4.7-25 SME(K)
C419	87-A10-800-080		C-CAP,S 6800P-16 J B CM
C420	87-010-374-080		CAP, ELECT 47-10V
C421	87-010-196-080		CHIP CAPACITOR,0.1-25
C422	87-A10-804-080		C-CAP,S 0.1-25 J B<LH>
C422	87-A11-537-080		C-CAP,S 0.1-25 J B<U>
C424	87-010-374-080		CAP, ELECT 47-10V
C425	87-010-196-080		CHIP CAPACITOR,0.1-25
C430	87-012-142-080		CAP, S 0.33-16<U>
C430	87-A10-201-080		CAP, S 0.33-16 K B<LH>
C431	87-010-971-080		C-CAP,S 4700P-50 B J
C432	87-A11-475-080		C-CAP,S 1000P-50 J CG<U>
C432	87-012-349-080		C-CAP,S 1000P-50 J CH<LH>
C433	87-A11-183-080		C-CAP,S 0.12-16 J B<LH>
C433	87-A11-538-080		C-CAP,S 0.12-25 J B<U>
C434	87-A11-182-080		C-CAP,S 0.27-16 J B
C435	87-A11-182-080		C-CAP,S 0.27-16 J B
C436	87-A11-183-080		C-CAP,S 0.12-16 J B<LH>
C436	87-A11-538-080		C-CAP,S 0.12-25 J B<U>
C437	87-010-971-080		C-CAP,S 4700P-50 B J
C438	87-A11-475-080		C-CAP,S 1000P-50 J CG<U>
C438	87-012-349-080		C-CAP,S 1000P-50 J CH<LH>
C439	87-A11-733-080		C-CAP,S 1-16 Z F
C440	87-010-401-080		CAP, ELECT 1-50V
C441	87-A10-799-080		C-CAP,S 5600P-16 J B CM
C442	87-A10-802-080		C-CAP,S 0.047-16 J B CM
C443	87-A10-229-080		C-CAP,S 0.68-10 K W5
C444	87-012-393-080		C-CAP,S 0.22-16 R K
C445	87-012-393-080		C-CAP,S 0.22-16 R K
C446	87-010-404-080		CAP, ELECT 4.7-50V
C447	87-010-404-080		CAP, ELECT 4.7-50V
C448	87-012-393-080		C-CAP,S 0.22-16 R K
C449	87-012-393-080		C-CAP,S 0.22-16 R K
C450	87-016-669-080		C-CAP,S 0.1-25 K B
C451	87-A10-802-080		C-CAP,S 0.047-16 J B CM
C452	87-A10-802-080		C-CAP,S 0.047-16 J B CM
C453	87-016-669-080		C-CAP,S 0.1-25 K B
C454	87-016-669-080		C-CAP,S 0.1-25 K B
C455	87-A10-801-080		C-CAP,S 0.022-16 J B<LH>
C455	87-A11-532-080		C-CAP,S 0.022-50 J B<U>
C456	87-A10-801-080		C-CAP,S 0.022-16 J B<LH>
C456	87-A11-532-080		C-CAP,S 0.022-50 J B<U>
C457	87-016-669-080		C-CAP,S 0.1-25 K B
C489	87-010-545-080		CAP, ELECT 0.22-50V
C492	87-010-402-080		CAP, ELECT 2.2-50V
C609	87-010-181-080		CAP,CHIP S 1800P
C610	87-010-181-080		CAP,CHIP S 1800P
C611	87-010-598-080		C-CAP,S 0.068-16VRK
C612	87-016-369-080		C-CAP,S 0.033-25 B K
C613	87-010-197-080		CAP, CHIP 0.01 DM
C614	87-016-669-080		C-CAP,S 0.1-25 K B
C618	87-010-401-080		CAP, ELECT 1-50V
C619	87-010-263-080		CAP, ELECT 100-10V
C620	87-016-669-080		C-CAP,S 0.1-25 K B
C621	87-010-197-080		CAP, CHIP 0.01 DM
C623	87-010-401-080		CAP, ELECT 1-50V
C624	87-010-401-080		CAP, ELECT 1-50V
C626	87-010-596-080		CAP, S 0.047-16
C627	87-010-400-080		CAP, ELECT 0.47-50V
C628	87-010-400-080		CAP, ELECT 0.47-50V
C629	87-010-596-080		CAP, S 0.047-16
C630	87-010-263-080		CAP, ELECT 100-10V
C631	87-010-185-080		C-CAP,S 3900P-50 B
C632	87-010-185-080		C-CAP,S 3900P-50 B
C634	87-010-196-080		CHIP CAPACITOR,0.1-25
C635	87-A10-307-080		CAP,M 0.1-50 J
C636	87-A10-307-080		CAP,M 0.1-50 J
C637	87-A10-307-080		CAP,M 0.1-50 J
C638	87-A10-307-080		CAP,M 0.1-50 J
C639	87-010-405-080		CAP, ELECT 10-50V
C644	87-010-401-080		CAP, ELECT 1-50V
C671	87-010-322-080		C-CAP,S 100P-50 CH
C672	87-010-322-080		C-CAP,S 100P-50 CH
C673	87-010-197-080		CAP, CHIP 0.01 DM
C679	87-010-196-080		CHIP CAPACITOR,0.1-25
C680	87-010-197-080		CAP, CHIP 0.01 DM
C682	87-010-196-080		CHIP CAPACITOR,0.1-25
C771	87-010-263-080		CAP, ELECT 100-10V
C772	87-010-197-080		CAP, CHIP 0.01 DM
C773	87-010-184-080		CHIP CAPACITOR 3300P(K)<U>
C774	87-010-184-080		CHIP CAPACITOR 3300P(K)<U>
C779	87-010-426-080		C-CAP,S 0.012-25 KB<LH>
C779	87-A10-679-080		C-CAP,S 3300P-50 JR<U>
C780	87-010-426-080		C-CAP,S 0.012-25 KB<LH>
C780	87-A10-679-080		C-CAP,S 3300P-50 JR<U>
C782	87-010-197-080		CAP, CHIP 0.01 DM
C783	87-010-197-080		CAP, CHIP 0.01 DM
C784	87-010-197-080		CAP, CHIP 0.01 DM
C785	87-010-197-080		CAP, CHIP 0.01 DM
C786	87-010-197-080		CAP, CHIP 0.01 DM
C788	87-010-149-080		C-CAP,S 5P-50 CH
C789	87-A10-592-080		C-CAP,S 0.015-50 J B
C790	87-A10-592-080		C-CAP,S 0.015-50 J B
C791	87-010-196-080		CHIP CAPACITOR,0.1-25
C792	87-010-197-080		CAP, CHIP 0.01 DM
C793	87-010-404-080		CAP, ELECT 4.7-50V
C795	87-010-197-080		CAP, CHIP 0.01 DM
C796	87-010-197-080		CAP, CHIP 0.01 DM
C797	87-010-405-080		CAP, ELECT 10-50V
C798	87-010-197-080		CAP, CHIP 0.01 DM
C799	87-010-407-080		CAP, ELECT 33-50V
C800	87-010-194-080		CAP, CHIP 0.047
C801	87-010-403-080		CAP, ELECT 3.3-50V
C802	87-010-194-080		CAP, CHIP 0.047
C803	87-010-198-080		CAP, CHIP 0.022
C804	87-010-263-080		CAP, ELECT 100-10V
C807	87-010-400-080		CAP, ELECT 0.47-50V
C808	87-010-401-080		CAP, ELECT 1-50V
C809	87-010-401-080		CAP, ELECT 1-50V
C810	87-010-196-080		CHIP CAPACITOR,0.1-25
C811	87-010-403-080		CAP, ELECT 3.3-50V
C812	87-010-403-080		CAP, ELECT 3.3-50V
C814	87-010-197-080		CAP, CHIP 0.01 DM
C815	87-010-400-080		CAP, ELECT 0.47-50V
C816	87-010-400-080		CAP, ELECT 0.47-50V
C819	87-010-179-080		CAP,CHIP S B1200P<U>
C820	87-010-179-080		CAP,CHIP S B1200P<U>
C821	87-010-405-080		CAP, ELECT 10-50V
C823	87-010-177-080		C-CAP,S 820P-50 SL
C824	87-010-405-080		CAP, ELECT 10-50V
C825	87-010-596-080		CAP, S 0.047-16
C842	87-010-197-080		CAP, CHIP 0.01 DM
C843	87-010-197-080		CAP, CHIP 0.01 DM
C844	87-010-197-080		CAP, CHIP 0.01 DM
C845	87-010-197-080		CAP, CHIP 0.01 DM
C846	87-010-197-080		CAP, CHIP 0.01 DM
C847	87-010-197-080		CAP, CHIP 0.01 DM
C848	87-010-197-080		CAP, CHIP 0.01 DM
C849	87-010-197-080		CAP, CHIP 0.01 DM
C850	87-010-260-080		CAP, ELECT 47-25V
C851	87-010-197-080		CAP, CHIP 0.01 DM

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C852	87-010-197-080		CAP, CHIP 0.01 DM
C853	87-010-197-080		CAP, CHIP 0.01 DM
C858	87-010-196-080		CHIP CAPACITOR,0.1-25
C859	87-010-196-080		CHIP CAPACITOR,0.1-25
C860	87-010-197-080		CAP, CHIP 0.01 DM
C959	87-010-196-080		CHIP CAPACITOR,0.1-25
C960	87-010-196-080		CHIP CAPACITOR,0.1-25
C961	87-010-152-080		C-CAP,S 8P-50 CH
C963	87-015-785-080		CHIP CAPACITOR, 0.1FZ-25Z
C971	87-010-381-080		CAP, ELECT 330-16V
C972	87-010-404-080		CAP, ELECT 4.7-50V
C973	87-010-197-080		CAP, CHIP 0.01 DM
C974	87-010-197-080		CAP, CHIP 0.01 DM
C979	87-010-322-080		C-CAP,S 100P-50 CH
C981	87-010-260-080		CAP, ELECT 47-25V
C982	87-010-196-080		CHIP CAPACITOR,0.1-25
C983	87-010-197-080		CAP, CHIP 0.01 DM
C984	87-010-197-080		CAP, CHIP 0.01 DM
C987	87-010-197-080		CAP, CHIP 0.01 DM
C991	87-010-312-080		C-CAP,S 15P-50 CH
C992	87-010-312-080		C-CAP,S 15P-50 CH
C993	87-010-178-080		CHIP CAP 1000P
C995	87-010-178-080		CHIP CAP 1000P
C997	87-010-196-080		CHIP CAPACITOR,0.1-25
C998	87-010-260-080		CAP, ELECT 47-25V
C999	87-A11-155-080		CAP,TC U 0.01-16 Z F
CF831	87-008-261-010		FILTER, SFE10.7MA5-A
CF832	87-008-261-010		FILTER, SFE10.7MA5-A
CN1	87-A60-996-010		CONN,13P V BLK TAC-L13X-A3
CN101	87-A60-996-010		CONN,13P V BLK TAC-L13X-A3
CN301	87-A60-620-010		CONN,3P V 2MM JMT
CN351	87-A60-625-010		CONN,8P V 2MM JMT
CN601	87-099-719-010		CONN,30P TYK-B(X)
CN602	87-A60-131-010		CONN,6P V FE
CNA1	8A-NF8-653-010		CONN ASSY,9P TID-A(480)
FFE831	A8-8ZA-190-030		8ZA-1 FEUNM
J102	87-A60-238-010		TERMINAL,SP 4P (MSC)
J103	87-A60-483-010		JACK,DIA6.3 BLK ST W/S KM
J604	87-A60-881-010		JACK,PIN 2P MSP 242V05 PBSN
J831	87-A60-202-010		TERMINAL,ANT 4P MSP-154V-02
L101	87-A50-610-010		COIL,1UH K(MDEC)
L102	87-A50-610-010		COIL,1UH K(MDEC)
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
L801	87-A50-266-010		COIL,FM DET-2N(TOK)
L802	87-A91-110-010		FLTR,PCFJZH-450 (TOK)
L811	87-005-847-080		COIL,2.2UH(CECS)
L832	87-005-847-080		COIL,2.2UH(CECS)
L951	8Z-ZA1-650-010		COIL,AM PACK4C (TOK)
R161	87-A00-440-050		RES,220-1/2W J RP
R162	87-A00-440-050		RES,220-1/2W J RP
R163	87-A00-440-050		RES,220-1/2W J RP
R164	87-A00-440-050		RES,220-1/2W J RP
R790	87-010-197-080		CAP, CHIP 0.01 DM
R991	87-010-322-080		C-CAP,S 100P-50 CH
R993	87-010-322-080		C-CAP,S 100P-50 CH
R995	87-010-322-080		C-CAP,S 100P-50 CH
SFR351	87-A90-433-080		SFR,50K H NVZ6TLTA
SFR352	87-A90-433-080		SFR,50K H NVZ6TLTA
WH1	87-A90-510-010		HLDR,WIRE 2.5-9P
X991	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309

FRONT C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C101	87-010-196-080		CHIP CAPACITOR,0.1-25
C102	87-010-196-080		CHIP CAPACITOR,0.1-25
C103	87-010-498-040		CAP,E 10-16 GAS
C104	87-010-196-080		CHIP CAPACITOR,0.1-25
C107	87-010-493-040		CAP,E 0.47-50 GAS
C108	87-012-393-080		C-CAP,S 0.22-16 R K
C153	87-010-198-080		CAP, CHIP 0.022
C154	87-010-246-040		CAP,E 47-35 SME
C155	87-010-404-040		CAP,E 4.7-50 SME
C156	87-010-404-040		CAP,E 4.7-50 SME
C361	87-010-178-080		CHIP CAP 1000P
C362	87-010-178-080		CHIP CAP 1000P
C371	87-010-178-080		CHIP CAP 1000P
C372	87-010-178-080		CHIP CAP 1000P
C601	87-010-382-040		CAP,E 22-25 SME
C801	87-010-195-080		C-CAP,S 0.068-25 F
C802	87-010-195-080		C-CAP,S 0.068-25 F
C803	87-010-402-040		CAP,E 2.2-50 SME
C804	87-010-402-040		CAP,E 2.2-50 SME
C805	87-010-196-080		CHIP CAPACITOR,0.1-25
C806	87-010-196-080		CHIP CAPACITOR,0.1-25
C901	87-010-322-080		C-CAP,S 100P-50 CH
C902	87-010-322-080		C-CAP,S 100P-50 CH
C903	87-010-322-080		C-CAP,S 100P-50 CH
C904	87-010-322-080		C-CAP,S 100P-50 CH
C905	87-010-322-080		C-CAP,S 100P-50 CH
C906	87-010-322-080		C-CAP,S 100P-50 CH
C907	87-010-322-080		C-CAP,S 100P-50 CH
C908	87-010-322-080		C-CAP,S 100P-50 CH
C909	87-010-322-080		C-CAP,S 100P-50 CH
C910	87-010-322-080		C-CAP,S 100P-50 CH
C911	87-010-178-080		CHIP CAP 1000P
C912	87-010-196-080		CHIP CAPACITOR,0.1-25
C913	87-010-248-040		CAP,E 220-10 SME
C914	87-010-248-040		CAP,E 220-10 SME
C915	87-010-196-080		CHIP CAPACITOR,0.1-25
C916	87-010-196-080		CHIP CAPACITOR,0.1-25
C917	87-010-196-080		CHIP CAPACITOR,0.1-25
C919	87-010-197-080		CAP, CHIP 0.01 DM
C920	87-012-369-080		C-CAP,S 0.047-50F
C921	87-010-186-080		CAP,CHIP 4700P
C951	87-010-312-080		C-CAP,S 15P-50 CH
C952	87-012-155-080		C-CAP 180P-50CH
C953	87-012-140-080		CAP 470P
C961	87-010-378-040		CAP,E 10-16
C962	87-012-157-080		C-CAP,S 330P-50 CH
C963	87-010-196-080		CHIP CAPACITOR,0.1-25
CN104	87-A60-057-010		CONN,11P V 9604S-11C
CN701	87-099-720-010		CONN,30P TYK-B(P)
CN731	87-099-015-010		CONN,13P 6216V
FL901	8A-NF9-605-010		FL,HNA-10SS12
L951	87-A50-434-010		COIL,CLK 4.19M(TOKO)
LED201	87-A40-619-040		LED,SLR-56PT-T31-W GRN
LED202	87-A40-619-040		LED,SLR-56PT-T31-W GRN
LED204	87-A40-619-040		LED,SLR-56PT-T31-W GRN
LED205	87-A40-619-040		LED,SLR-56PT-T31-W GRN
LED207	87-A40-266-080		LED,SLH-56VCT31 RED
LED208	87-A40-266-080		LED,SLH-56VCT31 RED
LED209	87-A40-317-080		LED,SLR-342VCT31 RED
LED210	87-A40-619-040		LED,SLR-56PT-T31-W GRN
S301	87-A90-164-080		SW,TACT SKQAB(N)
S302	87-A90-164-080		SW,TACT SKQAB(N)
S303	87-A90-164-080		SW,TACT SKQAB(N)
S304	87-A90-164-080		SW,TACT SKQAB(N)
S305	87-A90-164-080		SW,TACT SKQAB(N)
S306	87-A90-164-080		SW,TACT SKQAB(N)
S307	87-A90-164-080		SW,TACT SKQAB(N)
S308	87-A90-164-080		SW,TACT SKQAB(N)
S309	87-A90-164-080		SW,TACT SKQAB(N)
S310	87-A90-164-080		SW,TACT SKQAB(N)
S321	87-A90-164-080		SW,TACT SKQAB(N)
S322	87-A90-164-080		SW,TACT SKQAB(N)
S323	87-A90-164-080		SW,TACT SKQAB(N)
S324	87-A90-164-080		SW,TACT SKQAB(N)
S325	87-A90-164-080		SW,TACT SKQAB(N)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
S326	87-A90-164-080		SW,TACT SKQAB(N)
S341	87-A90-164-080		SW,TACT SKQAB(N)
S342	87-A90-164-080		SW,TACT SKQAB(N)
S343	87-A90-164-080		SW,TACT SKQAB(N)
S344	87-A90-164-080		SW,TACT SKQAB(N)
S345	87-A90-164-080		SW,TACT SKQAB(N)
S346	87-A90-164-080		SW,TACT SKQAB(N)
S347	87-A90-164-080		SW,TACT SKQAB(N)
S348	87-A90-164-080		SW,TACT SKQAB(N)
S349	87-A90-164-080		SW,TACT SKQAB(N)
S350	87-A90-164-080		SW,TACT SKQAB(N)
S361	87-A91-633-010		SW,RTRY XRE012103PVB25FINA 1-2
S371	87-A91-632-010		SW,RTRY XRE012103PVB25FINB 1-2

AMP 1F C.B

C101	87-010-185-080		C-CAP,S 3900P-50 B
C102	87-010-185-080		C-CAP,S 3900P-50 B
C103	87-010-545-080		CAP, ELECT 0.22-50V
C104	87-010-545-080		CAP, ELECT 0.22-50V
C105	87-010-188-080		CAP,CHIP 6800P
C106	87-010-188-080		CAP,CHIP 6800P
C107	87-010-404-080		CAP, ELECT 4.7-50V
C108	87-010-404-080		CAP, ELECT 4.7-50V
C113	87-010-405-080		CAP, ELECT 10-50V
C114	87-010-405-080		CAP, ELECT 10-50V
C115	87-010-405-080		CAP, ELECT 10-50V
C116	87-010-405-080		CAP, ELECT 10-50V
C119	87-010-197-080		CAP, CHIP 0.01 DM
C120	87-010-197-080		CAP, CHIP 0.01 DM
C133	87-010-186-080		CAP,CHIP 4700P
C153	87-010-183-080		C-CAP,S 2700P-50 B
C205	87-010-183-080		C-CAP,S 2700P-50 B
C206	87-010-183-080		C-CAP,S 2700P-50 B
C207	87-010-545-080		CAP, ELECT 0.22-50V
C208	87-010-545-080		CAP, ELECT 0.22-50V
C209	87-010-178-080		CHIP CAP 1000P
C210	87-010-178-080		CHIP CAP 1000P
C211	87-010-403-080		CAP, ELECT 3.3-50V
C212	87-010-403-080		CAP, ELECT 3.3-50V
C215	87-012-140-080		CAP 470P-50 J CH
C216	87-012-140-080		CAP 470P-50 J CH
C217	87-010-405-080		CAP, ELECT 10-50V
C218	87-010-405-080		CAP, ELECT 10-50V
C221	87-010-405-080		CAP, ELECT 10-50V
C222	87-010-405-080		CAP, ELECT 10-50V
C223	87-010-197-080		CAP, CHIP 0.01 DM
C224	87-010-197-080		CAP, CHIP 0.01 DM
C251	87-010-993-080		C-CAP,S 0.056-25 B
C252	87-010-993-080		C-CAP,S 0.056-25 B
C253	87-010-196-080		CHIP CAPACITOR,0.1-25
C254	87-010-196-080		CHIP CAPACITOR,0.1-25
C259	87-010-190-080		S CHIP F 0.01
C260	87-010-190-080		S CHIP F 0.01
C401	87-010-260-080		CAP, ELECT 47-25V
CN101	87-A61-011-010		CONN,13P H BLK TAC-L13P-A3
CN102	87-A61-011-010		CONN,13P H BLK TAC-L13P-A3
CNA101	8A-NF8-656-010		CONN ASSY,5P TID-A 400
J201	87-A61-159-010		JACK,PIN 4P R/W/B/0 KM
L251	87-A50-610-010		COIL,1UH K(MDEC)
L252	87-A50-610-010		COIL,1UH K(MDEC)
R129	87-A00-669-080		RES,M/F 0.22-2W J RA
R130	87-A00-669-080		RES,M/F 0.22-2W J RA
R181	87-A00-669-080		RES,M/F 0.22-2W J RA
R182	87-A00-669-080		RES,M/F 0.22-2W J RA
R231	87-A00-258-080		RES,M/F 0.22-1W J
R232	87-A00-257-080		RES,M/F 0.15-1W J
WH101	87-A90-459-010		HLDR,WIRE 2.5-5P

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION

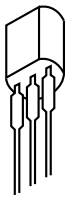
PT C.B

C1	87-010-387-080		CAP,E 470-25 SME
C4	87-A11-148-080		CAP,TC U 0.1-50 Z F
C5	87-A11-148-080		CAP,TC U 0.1-50 Z F
C6	87-A10-627-090		CAP,E 2200-50 M SMG
C7	87-A10-627-090		CAP,E 2200-50 M SMG
C8	87-A11-148-080		CAP,TC U 0.1-50 Z F
C9	87-A11-148-080		CAP,TC U 0.1-50 Z F
C10	87-A11-148-080		CAP,TC U 0.1-50 Z F
C11	87-A11-148-080		CAP,TC U 0.1-50 Z F
C12	87-A12-036-000		CAP,E 2200-63 SMG
C13	87-A12-036-000		CAP,E 2200-63 SMG
C14	87-A11-148-080		CAP,TC U 0.1-50 Z F
C15	87-A11-148-080		CAP,TC U 0.1-50 Z F
C16	87-010-403-080		CAP, ELECT 3.3-50V
CN1	87-A61-110-010		CONN,9P V TID-A
CN2	87-A61-108-010		CONN,5P V TID-A
⚠ PT1	8A-NFW-612-010		PT,ANF-29 U<U>
⚠ PT1	8A-NFW-615-010		PT,ANF-29 LH<LH>
⚠ PT2	8A-NF8-673-010		PT,SUB ANF-8 (H)KAMI<LH>
⚠ PT2	8A-NF8-661-010		PT,SUB ANF-8 (U)<U>
⚠ RY1	87-A91-339-010		RELAY,AC DC12V G5PA-2<LH>
⚠ RY2	87-A91-418-010		RELAY,AC12V G5PA-1-M<U>
⚠ S1	87-A90-165-010		SW,SL 1-2-3 SWS2301<LH>
⚠ T1	87-A60-317-010		TERMINAL, 1P MSC
⚠ T2	87-A60-317-010		TERMINAL, 1P MSC

DECK C.B

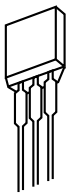
CN1	87-099-753-010		CONN,11P H 9604
HL1	8Z-ZM3-214-010		HLDR,IC
SFR1	87-024-581-010		SFR,3.3K DIA6V K0A
SW1	87-A90-673-010		SW,MICRO ESE11SH1C
SW2	87-A91-500-010		SW,MICRO MPU11470MLB0
SW3	87-A91-500-010		SW,MICRO MPU11470MLB0
SW4	87-A91-500-010		SW,MICRO MPU11470MLB0
SW5	87-A90-673-010		SW,MICRO ESE11SH1C

TRANSISTOR ILLUSTRATION



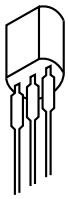
E C B

CD1585BC
CSA952K
KTA1266GR
KTC3198GR



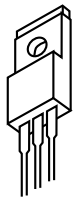
E C B

DTC114ES
KTC3199GR



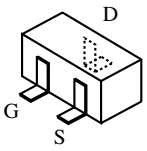
E C B

CSC4115BC

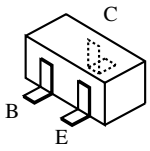


B C E

2SB1370



2SK2158

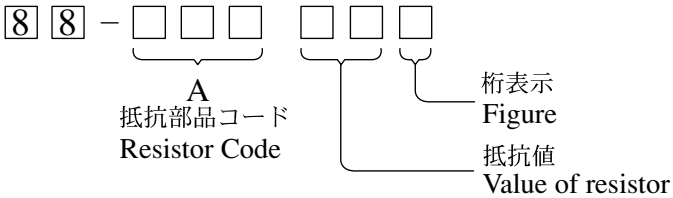


2SA1235F
2SC2714
2SC3052F
CMBT5401
CMBT5551

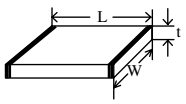
CSD1306E
KRA104S
KRC102S-RTK
RT1P141C
RT1P144C

○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

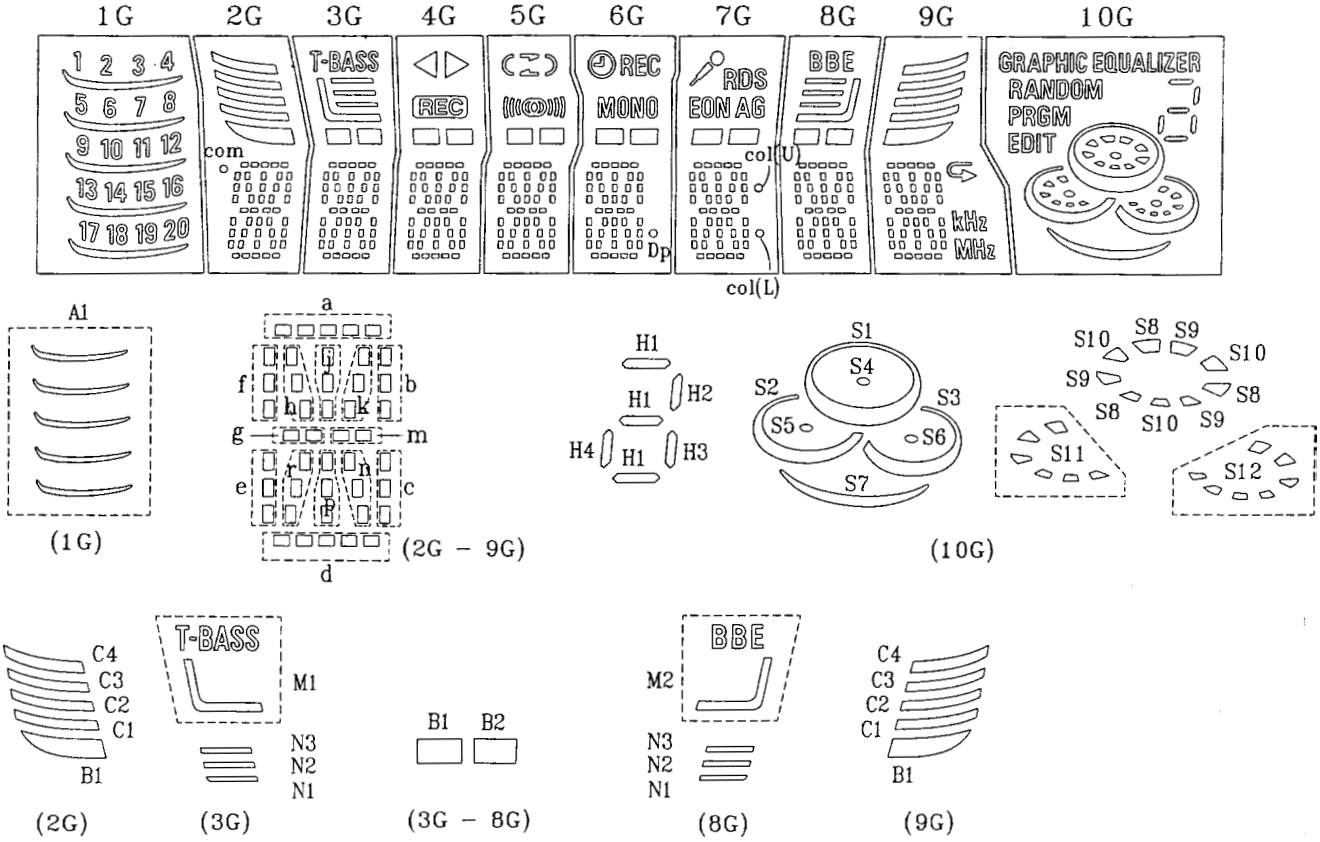


チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm)				抵抗コード　：A Resistor Code：A
				外形／Form	L	W	t	
1/16W	1005	±5%	CJ		1.0	0.5	0.35	104
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

FL (HNA-10SS12) GRID ASSIGNMENT AND ANODE CONNECTION

GRID ASSIGNMENT

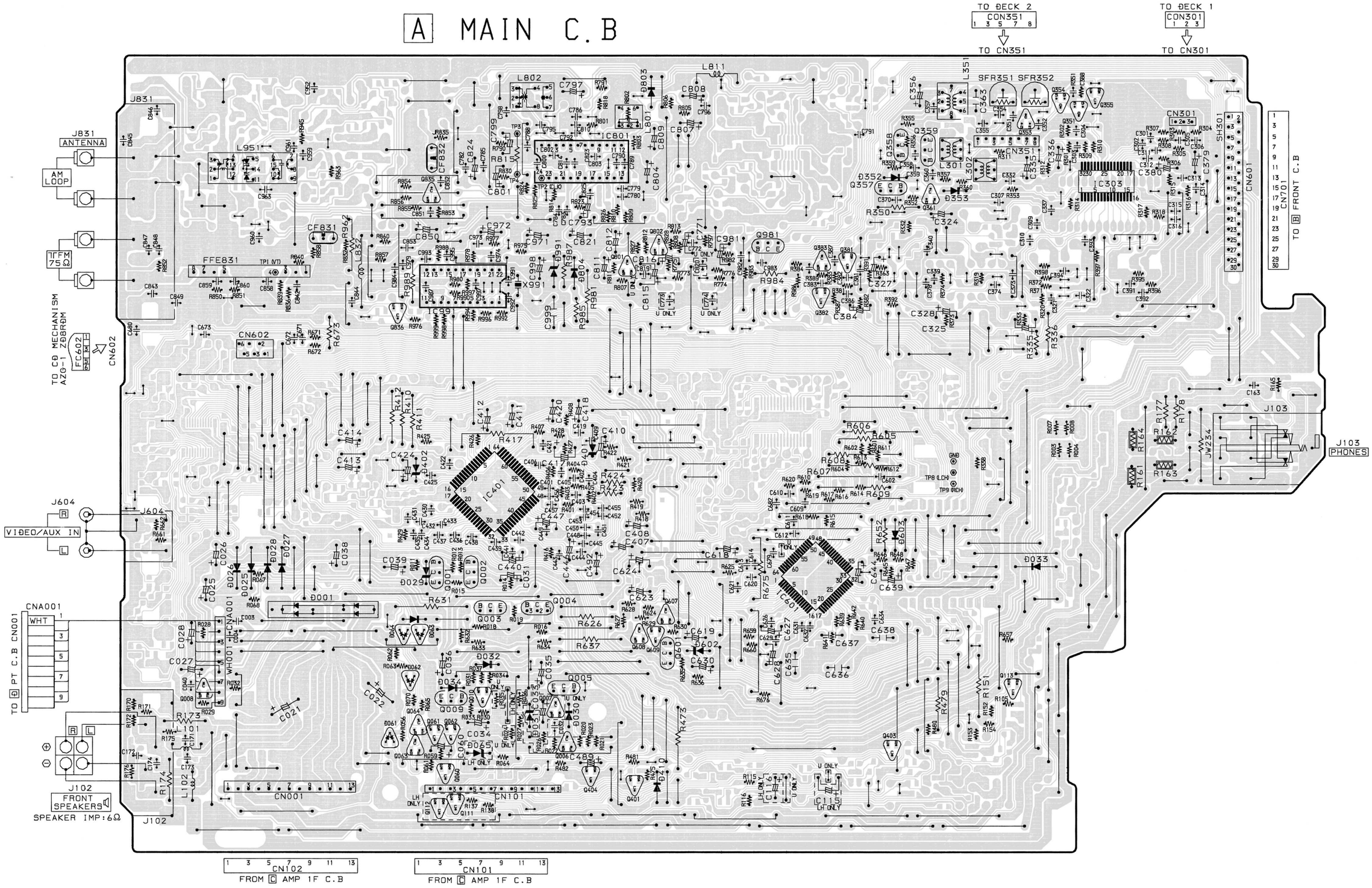


ANODE CONNECTION

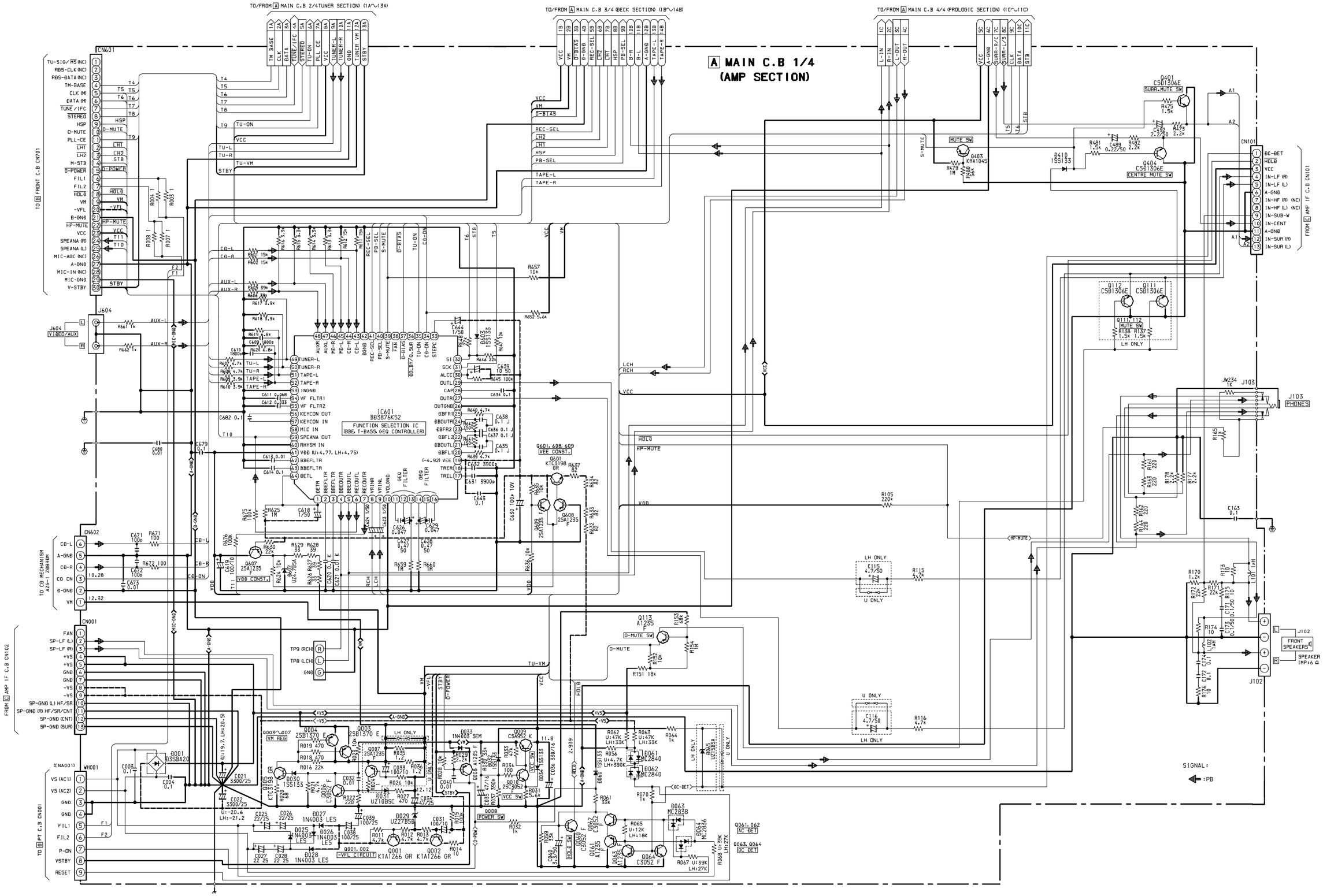
	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G
P1	20	d	d	d	d	d	d	d	d	S1
P2	19	n	n	n	n	n	n	n	n	S2
P3	18	p	p	p	p	p	p	p	p	S3
P4	17	r	r	r	r	r	r	r	r	S4
P5	16	e	e	e	e	e	e	e	e	S5
P6	15	c	c	c	c	c	c	c	c	S6
P7	14	g	g	g	g	g	g	g	g	S7
P8	13	m	m	m	m	m	m	m	m	S8
P9	12	f	f	f	f	f	f	f	f	S9
P10	11	b	b	b	b	b	b	b	b	S10
P11	10	k	k	k	k	k	k	k	k	S11
P12	9	j	j	j	j	j	j	j	j	S12
P13	8	h	h	h	h	h	h	h	h	EDIT
P14	7	a	a	a	a	a	a	a	a	PRGM
P15	6	B1	B1	B1	B1	B1	B1	B1	B1	RANDOM
P16	5	C1	B2	B2	B2	B2	B2	B2	C1	GRAPHIC EQUALIZER
P17	4	C2	M1	REC		Dp	col(U)	M2	C2	H1
P18	3	C3	N1	◁		MONO	col(L)	N1	C3	H2
P19	2	C4	N2	▷		REC	EON	N2	C4	H3
P20	1	com	N3				AG	N3		H4
P21	A1						RDS		kHz	
P22									MHz	

32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

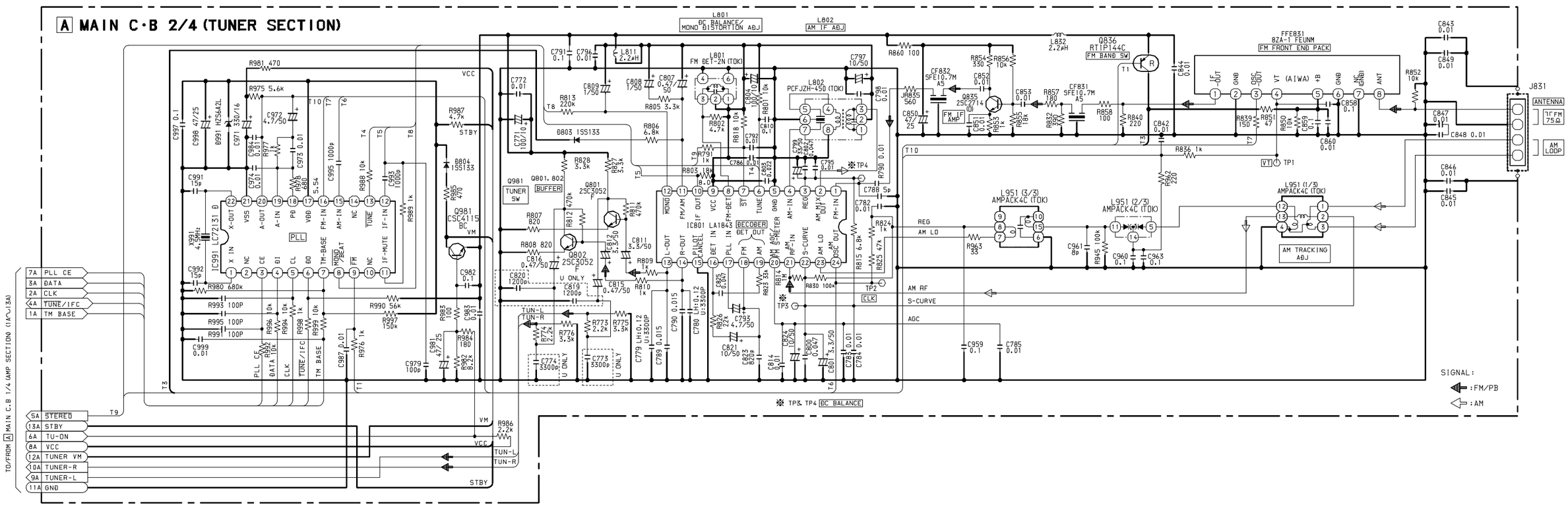
A B C D E F G H I J K L M N O P Q R S T U

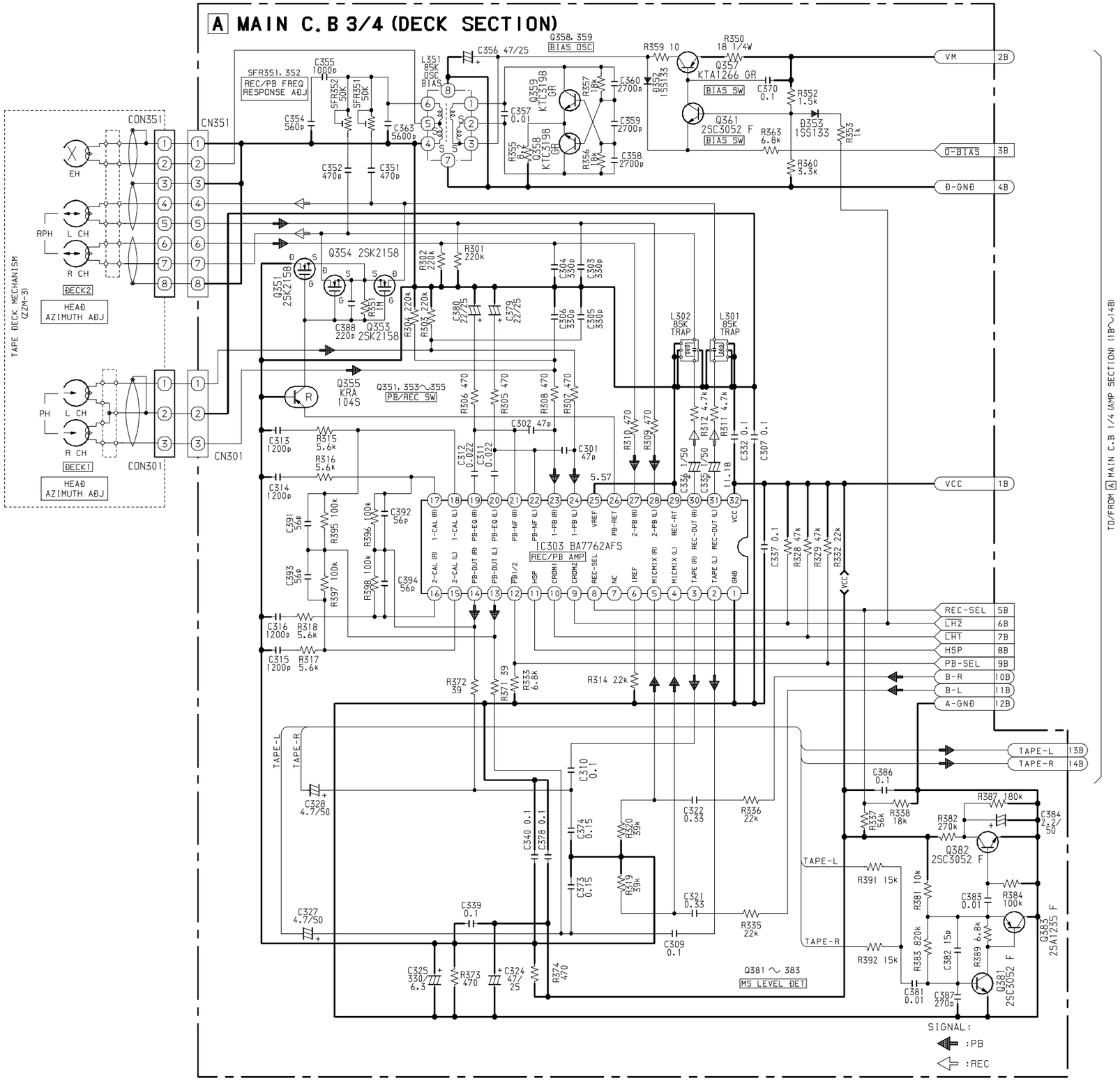


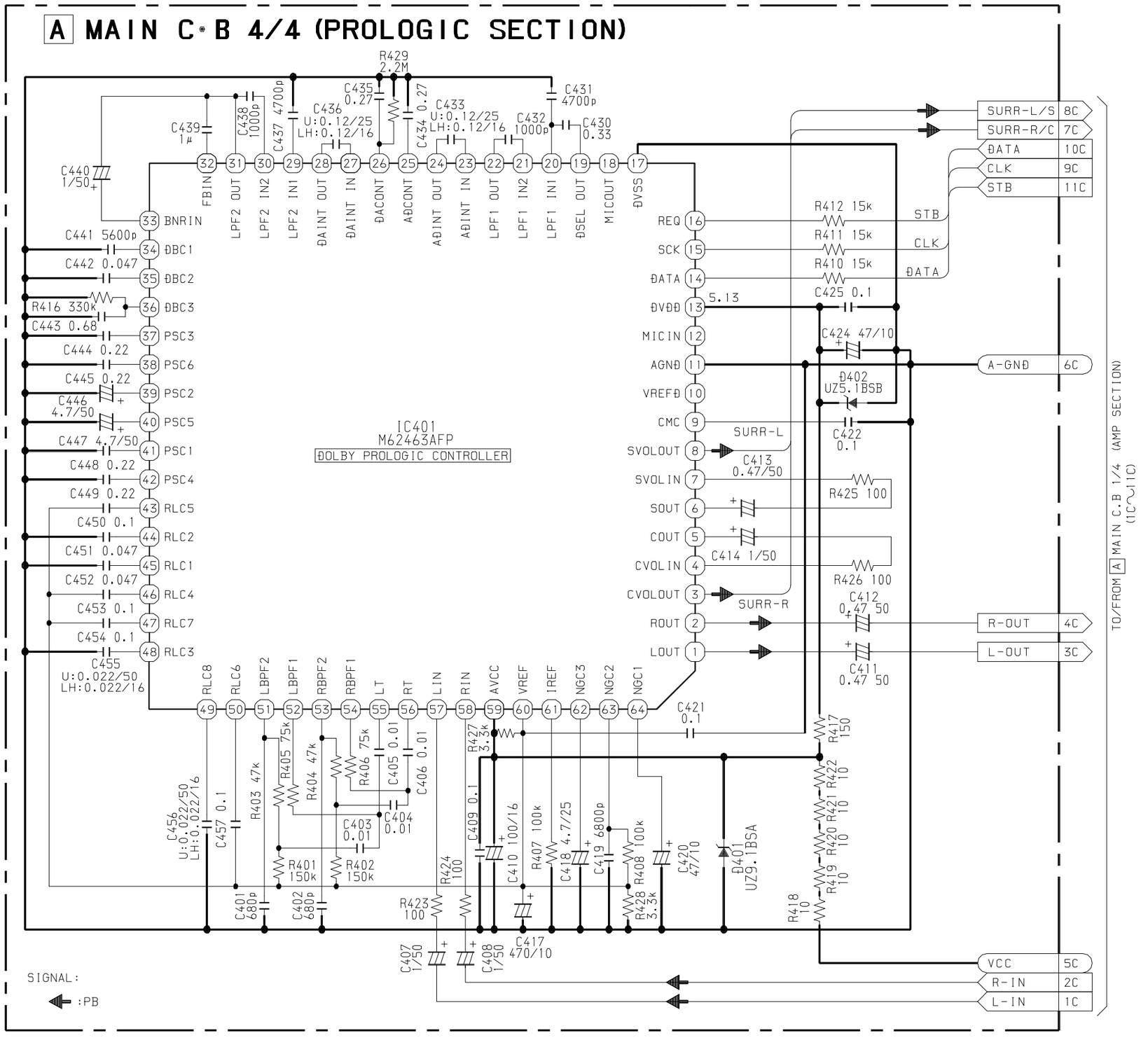
SCHEMATIC DIAGRAM – 1 (MAIN 1 / 4 : AMP)



SCHEMATIC DIAGRAM – 2 (MAIN 2/4 : TUNER)




A MAIN C.B 3/4 (DECK SECTION)
TAPE DECK MECHANISM (ZZM-5)
CON351
CN351
CON301
CN301
EH
RPH L CH
R CH
PH L CH
R CH
ĐECK2
HEAĐ AZIMUTH AĐJ
ĐECK1
HEAĐ AZIMUTH AĐJ
SFR351, 352 REC/PB FREQ RESPONSE AĐJ
Q358, 359 BIAS OSC
Q354 2SK2158
Q351 2SK2158
Q353 2SK2158
Q355 KRA 104S
Q351, 353~355 PB/REC SW
L302 85K TRAP
L301 85K TRAP
IC303 BA7762AFS
REC/PB AMP
Q357 KTA1266 GR
Q361 2SC3052 F
BIAS SW
Q382 2SC3052 F
Q383 2SA1235 F
Q381 2SC3052 F
Q381 ~ 383 MS LEVEL ĐET
VM 2B
Ō-BIAS 3B
Đ-GNĐ 4B
VCC 1B
REC-SEL 5B
LH2 6B
LH1 7B
HSP 8B
PB-SEL 9B
B-R 10B
B-L 11B
A-GNĐ 12B
TAPE-L 13B
TAPE-R 14B
SIGNAL:
:PB
:REC
TO/FROM A MAIN C.B 1/4 (AMP SECTION) (1B~14B)


A MAIN C.B 4/4 (PROLOGIC SECTION)
IC401
M62463AFP
DOLBY PROLOGIC CONTROLLER
FBIN
LPF2 OUT
LPF2 IN2
LPF2 IN1
DAINT OUT
DAINT IN
DACONT
ADCONT
ADINT OUT
ADINT IN
LPF1 OUT
LPF1 IN2
LPF1 IN1
DSEL OUT
MICOUT
DVSS
BNRIN
DBC1
DBC2
DBC3
PSC3
PSC6
PSC2
PSC5
PSC1
PSC4
RLC5
RLC2
RLC1
RLC4
RLC7
RLC3
REQ
SCK
DATA
DVDD
MICIN
AGND
VREFD
CMC
SVOLOUT
SVOLIN
SOUT
COUT
CVOLIN
CVOLOUT
ROUT
LOUT
RLC8
RLC6
LBPF2
LBPF1
RBPF2
RBPF1
LT
RT
LIN
RIN
AVCC
VREF
IREF
NGC3
NGC2
NGC1
R429 2.2M
C435 0.27
C436 U:0.12/25 LH:0.12/16
C433 U:0.12/25 LH:0.12/16
C434 0.27
C437 4700p
C438 1000p
C439 1µ
C440 1/50
C431 4700p
C432 1000p
C430 0.33
C441 5600p
C442 0.047
R416 330k
C443 0.68
C444 0.22
C445 0.22
C446 4.7/50
C447 4.7/50
C448 0.22
C449 0.22
C450 0.1
C451 0.047
C452 0.047
C453 0.1
C454 0.1
C455 U:0.022/50 LH:0.022/16
R412 15k
R411 15k
R410 15k
5.13
C425 0.1
C424 47/10
D402 UZ5.1BSB
C422 0.1
C413 0.47/50
R425 100
C414 1/50
R426 100
C412 0.47 50
C411 0.47 50
C421 0.1
R427 3.3k
R417 150
R422 10
R421 10
R420 10
R419 10
R418 10
C456 U:0.022/50 LH:0.022/16
C457 0.1
R403 47k
R405 75k
R404 47k
R406 75k
C405 0.01
C406 0.01
C403 0.01
C404 0.01
C409 0.1
C410 100/16
R407 100k
C418 4.7/25
C419 6800p
R408 100k
C420 47/10
D401 UZ9.1BSA
R428 3.3k
R424 100
R423 100
C401 680p
C402 680p
C407 1/50
C408 1/50
C417 470/10
SURR-L
SURR-R
STB
CLK
DATA
A-GND
VCC
R-IN
L-IN
R-OUT
L-OUT
SURR-L/S 8C
SURR-R/C 7C
DATA 10C
CLK 9C
STB 11C
A-GND 6C
VCC 5C
R-IN 2C
L-IN 1C
R-OUT 4C
L-OUT 3C
SIGNAL:
:PB
TO/FROM A MAIN C.B 1/4 (AMP SECTION)
(IC∼IIC)

32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

A B C D E F G H I J K L M N O P Q R S T U

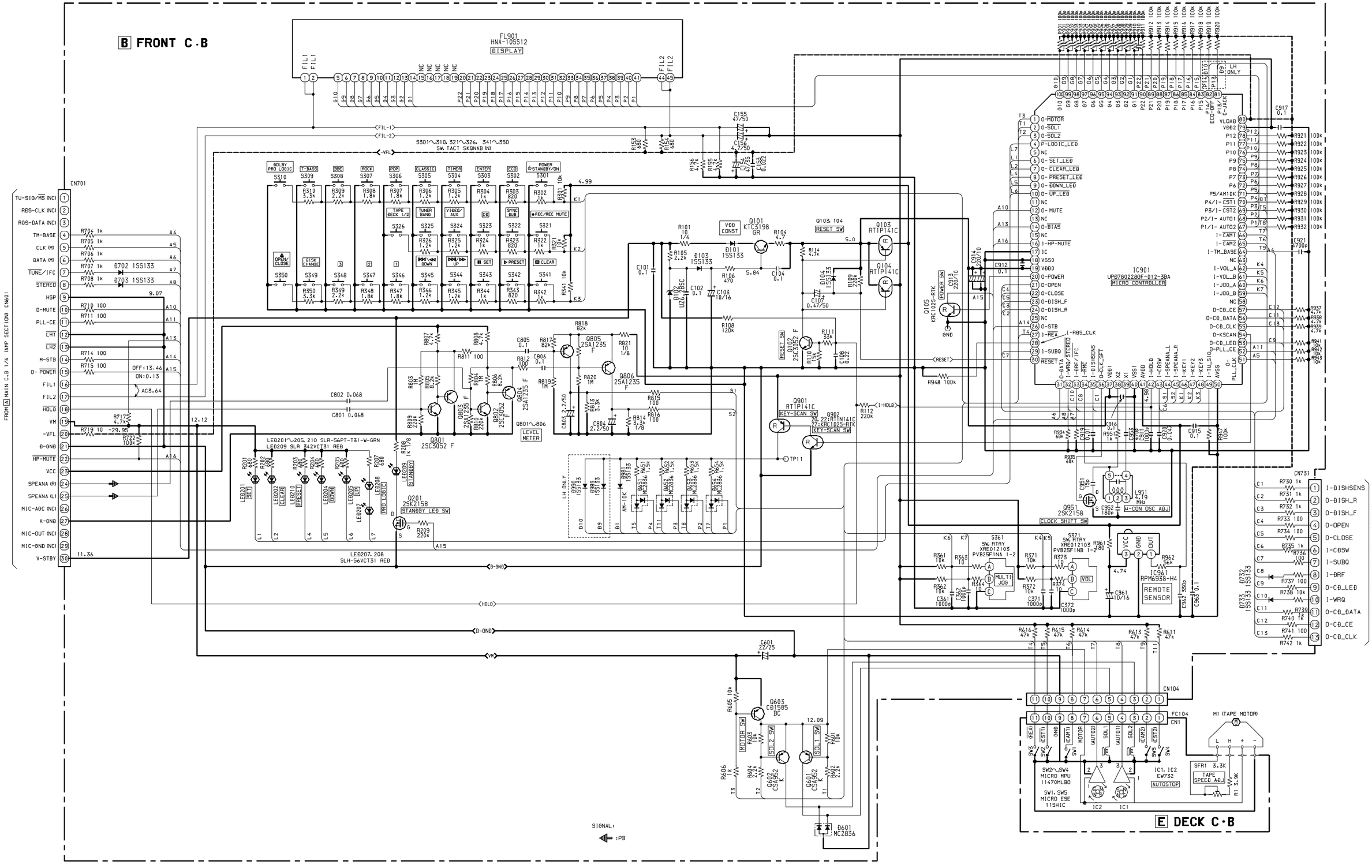
B FRONT C.B

IC961 (REMOTE SENSOR)
S308 BBE
S309 T-BASS
S310 ĐOLBY PRO LOGIC
FL901 (ĐISPLAY)
S323 CĐ
S324 VIĐEO/AUX
S325 TUNER BANĐ
S326 TAPE ĐECK 1/2
LEĐ209 (STANĐBY)
LEĐ207, 208 (PRO LOGIC)
S302 ECO
S301 POWER ⏻STANĐBY/ON

TO CĐ MECHANISM (AZG-1)
FC731
CN731
TO CN104
FC104
TO E ĐECK C.B
CN1
CN104
CN601
FROM A MAIN C.B
CN701

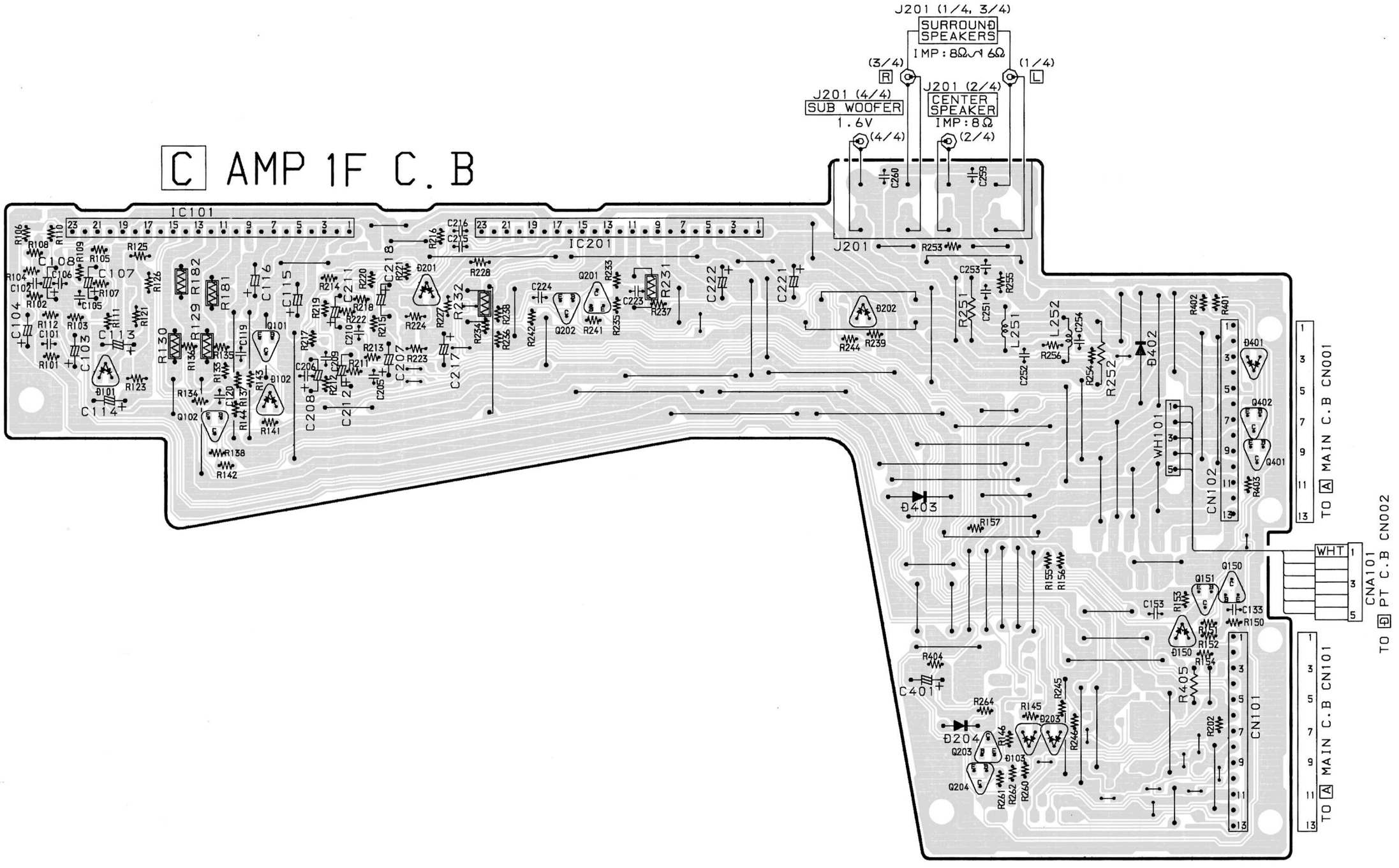
S361 MULTI JOG
GRAPHIC EQUALIZER
S307 ROCK
S306 POP
S305 CLASSIC
S303 ENTER
TUNING
LEĐ205 S344 ▶▶|/▶▶ UP
LEĐ204 S345 |◀◀/◀◀ ĐOWN
S304 TIMER
S350 ▲OPEN/CLOSE
S349 ĐISC CHANGE
LEĐ210 S342 ▶PRESET
LEĐ202 S341 ■CLEAR
LEĐ201 S343 ❚❚SET
ĐISC ĐIRECT PLAY
S348 3
S347 2
S346 1
S321 ●REC/REC MUTE
S322 SYNC ĐUB
S371 VOLUME

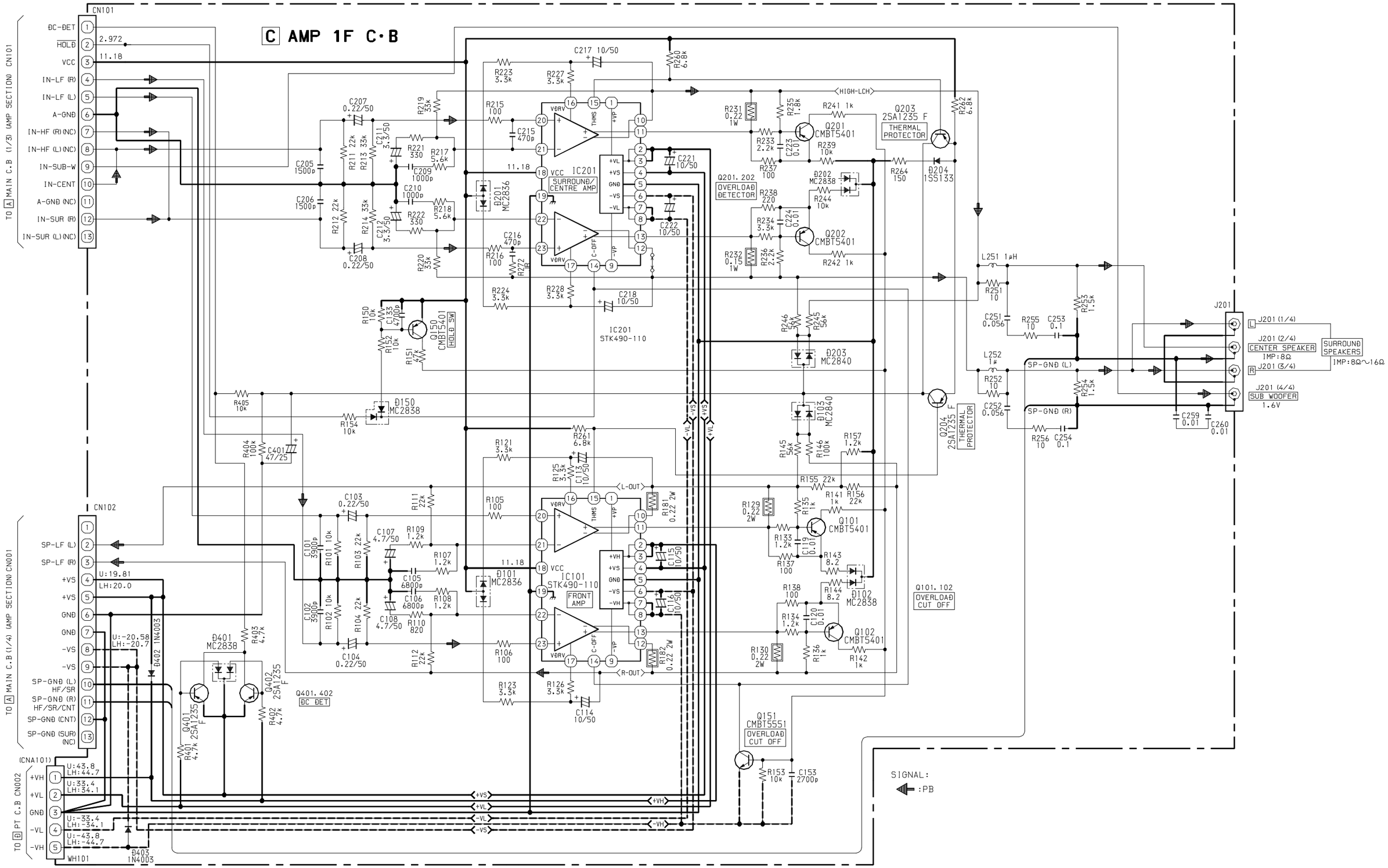
SCHEMATIC DIAGRAM – 5 (FRONT)

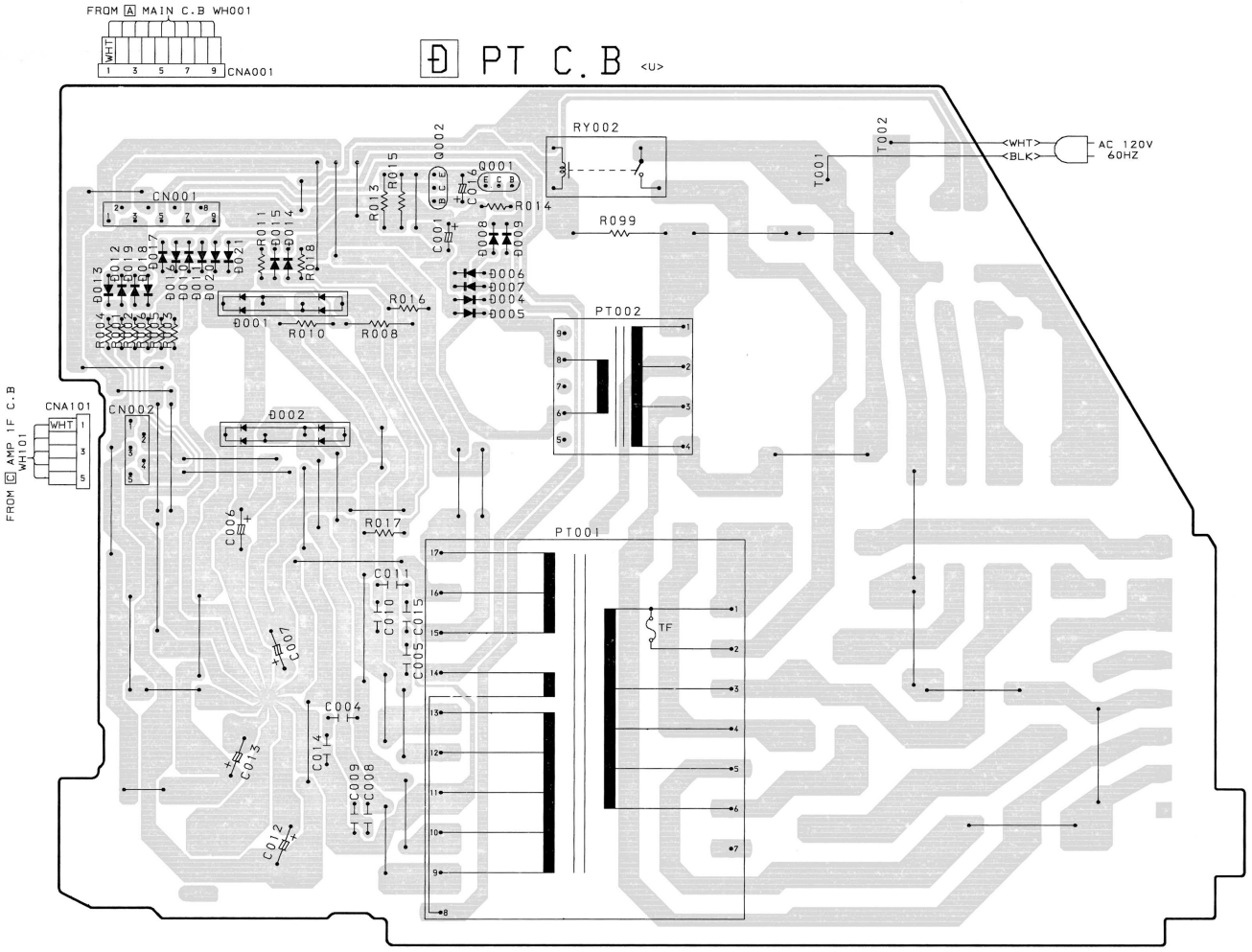


32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

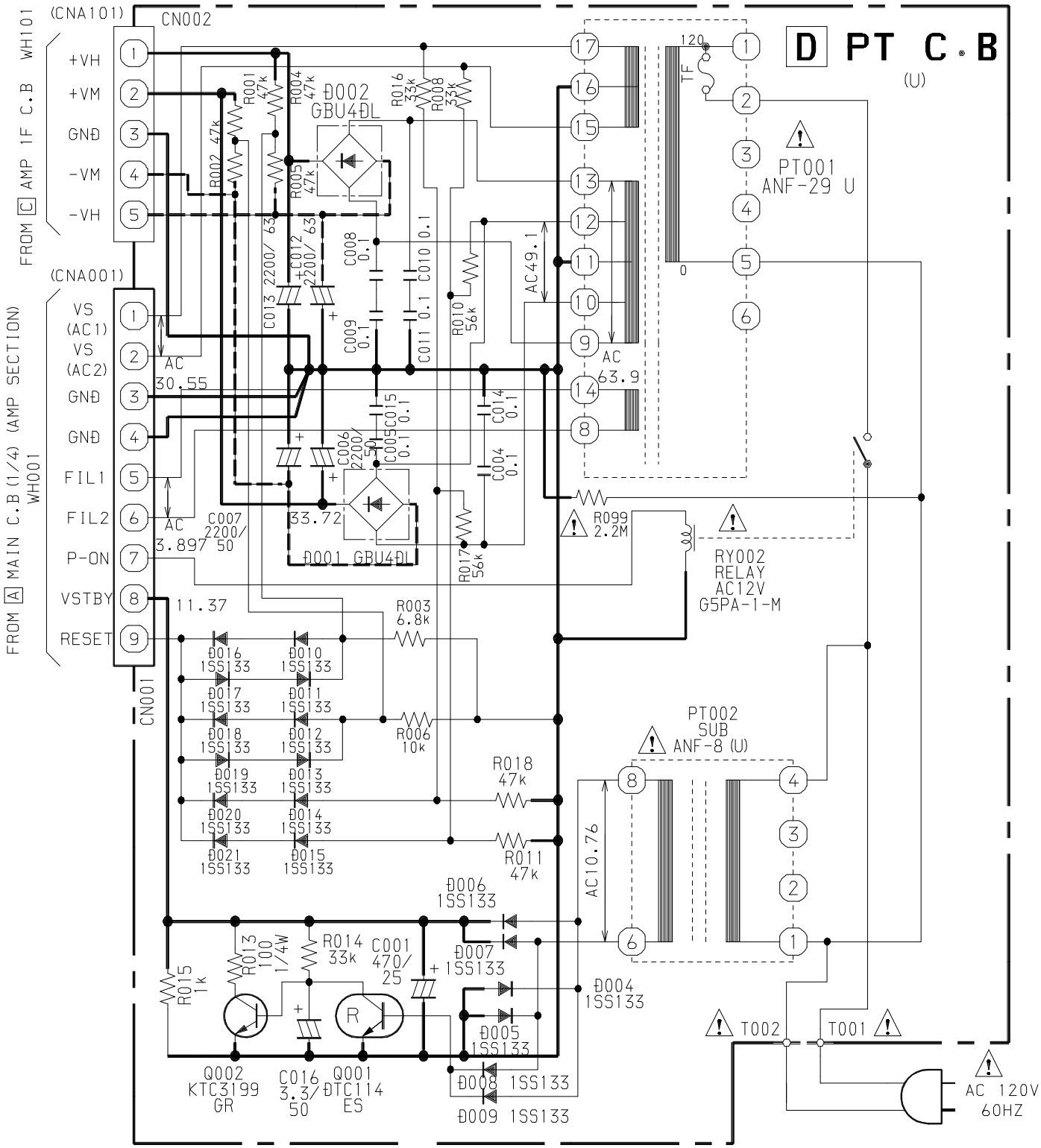
A B C D E F G H I J K L M N O P Q R S T U




C AMP 1F C·B
CN101
ÐC-ÐET
HOLÐ
VCC
IN-LF (R)
IN-LF (L)
A-GNÐ
IN-HF (R) (NC)
IN-HF (L) (NC)
IN-SUB-W
IN-CENT
A-GNÐ (NC)
IN-SUR (R)
IN-SUR (L) (NC)
TO A MAIN C.B (1/3) (AMP SECTION) CN101
2.972
11.18
IC201
SURROUNÐ/ CENTRE AMP
STK490-110
IC201
STK490-110
FRONT AMP
Ð201 MC2836
Ð101 MC2836
Q150 CMBT5401
HOLÐ SW
Ð150 MC2838
Q201 CMBT5401
Q202 CMBT5401
Q203 2SA1235 F
THERMAL PROTECTOR
Ð202 MC2838
Ð204 1SS133
Q201, 202 OVERLOAÐ ÐETECTOR
Q204 2SA1235 F
THERMAL PROTECTOR
Ð203 MC2840
Ð103 MC2840
HIGH-LCH
L-OUT
R-OUT
J201
J201 (1/4)
J201 (2/4)
CENTER SPEAKER
IMP:8Ω
J201 (3/4)
J201 (4/4)
SUB WOOFER
1.6V
SURROUNÐ SPEAKERS
IMP:8Ω~16Ω
SP-GNÐ (L)
SP-GNÐ (R)
CN102
SP-LF (L)
SP-LF (R)
+VS
+VS
GNÐ
GNÐ
-VS
-VS
SP-GNÐ (L) HF/SR
SP-GNÐ (R) HF/SR/CNT
SP-GNÐ (CNT)
SP-GNÐ (SUR) (NC)
U:19.81
LH:20.0
U:-20.58
LH:-20.7
TO A MAIN C.B (1/4) (AMP SECTION) CN001
(CNA101)
+VH
+VL
GNÐ
-VL
-VH
U:43.8
LH:44.7
U:33.4
LH:34.1
U:-33.4
LH:-34.1
U:-43.8
LH:-44.7
TO B PT C.B CN002
WH101
Ð401 MC2838
Ð402 1N4003
Ð403 1N4003
Q401, 402 ÐC ÐET
Q401 2SA1235 F
Q402 2SA1235 F
Q101 CMBT5401
Q102 CMBT5401
Q101, 102 OVERLOAÐ CUT OFF
Q151 CMBT5551
OVERLOAÐ CUT OFF
SIGNAL:
:PB

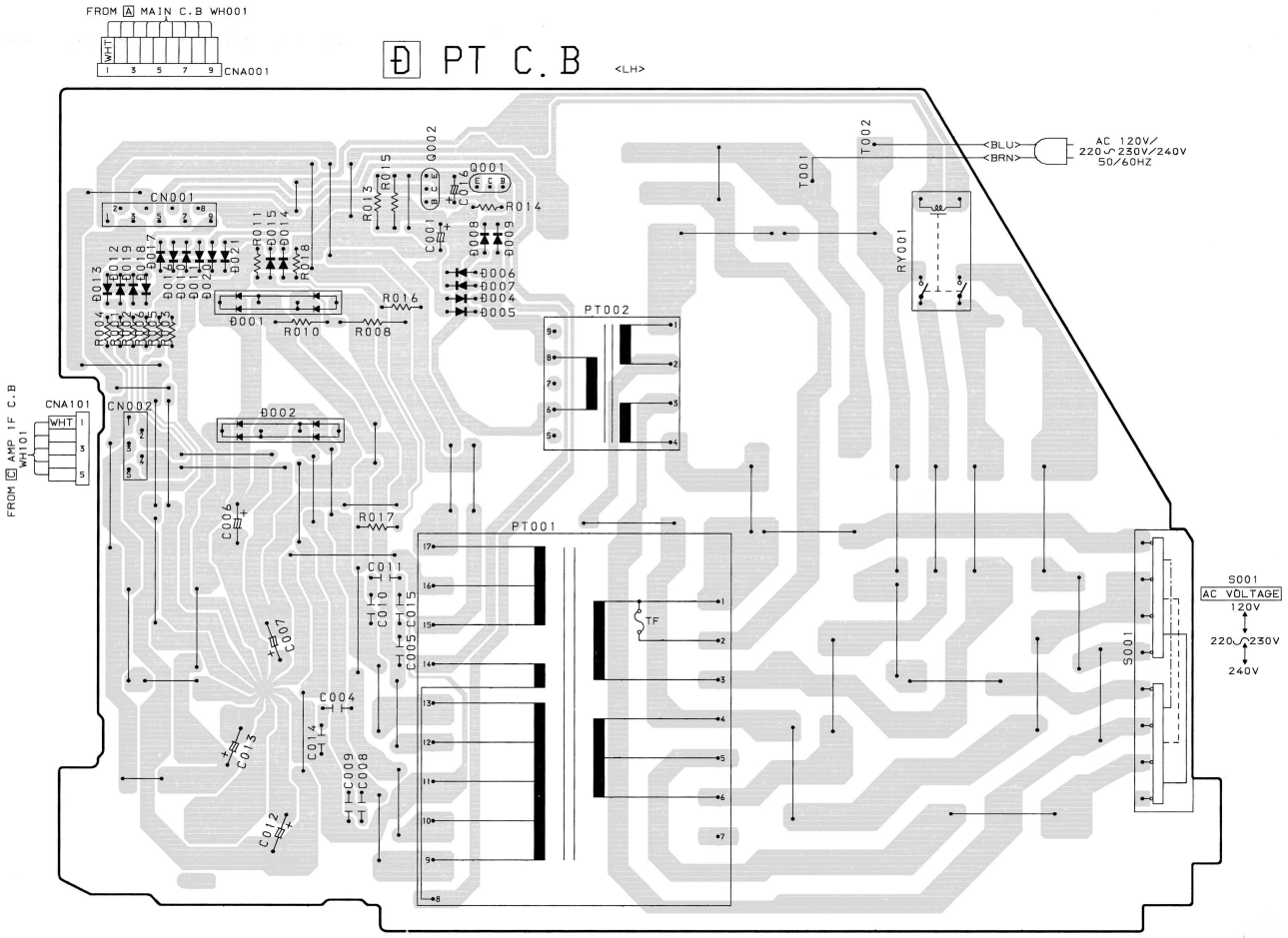

FROM A MAIN C.B WH001
CNA001
PT C.B <U>
RY002
T002
T001
<WHT>
<BLK>
AC 120V
60HZ
CN001
Q001
Q002
R099
R014
R016
R010
R008
D001
D002
PT002
PT001
CNA101
CN002
FROM C AMP 1F C.B
WH101
R017
C011
C010
C005
C015
C007
C004
C013
C014
C009
C008
C012
C006
TF

SCHEMATIC DIAGRAM – 7 (PT : U)

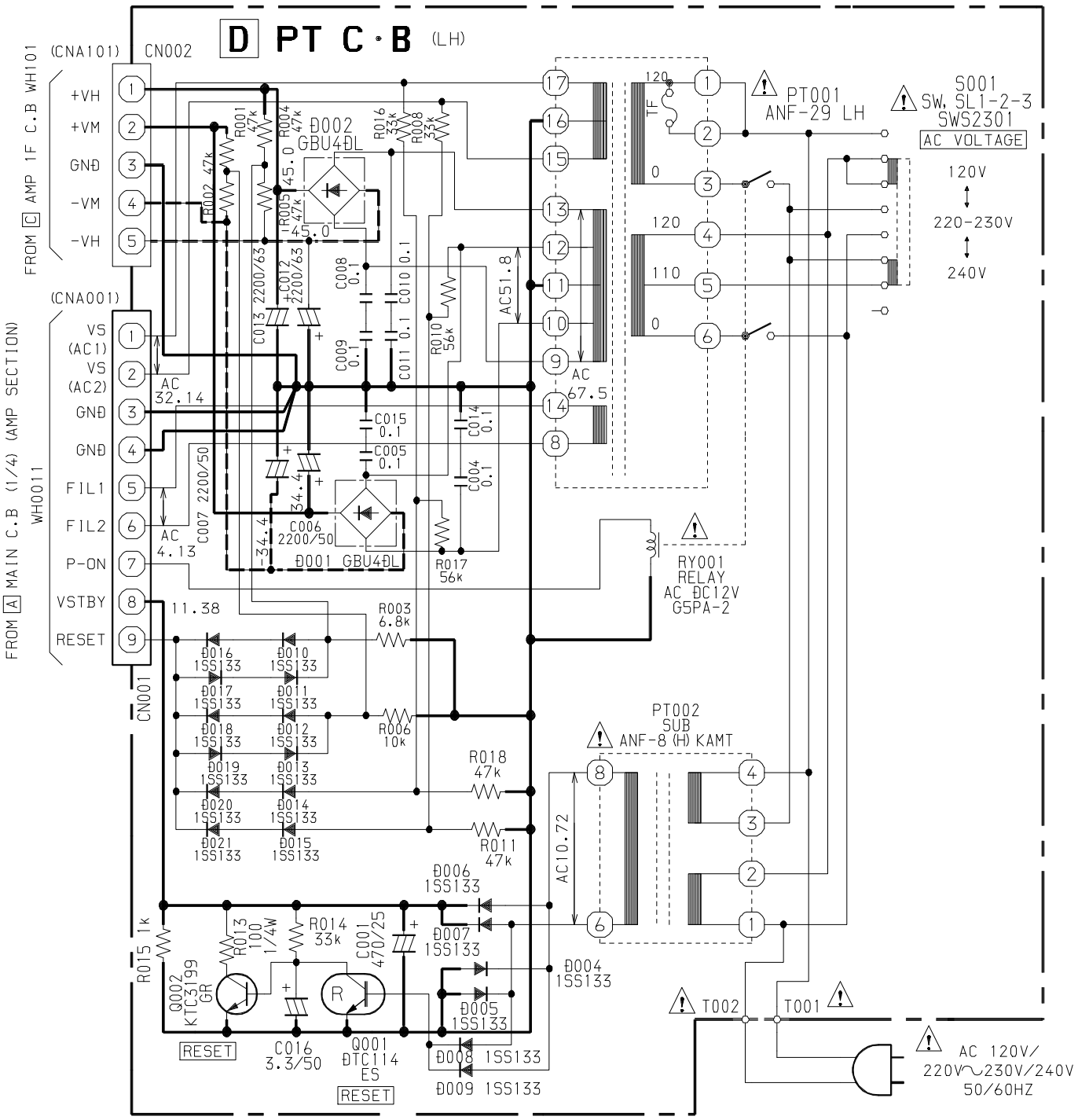


15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

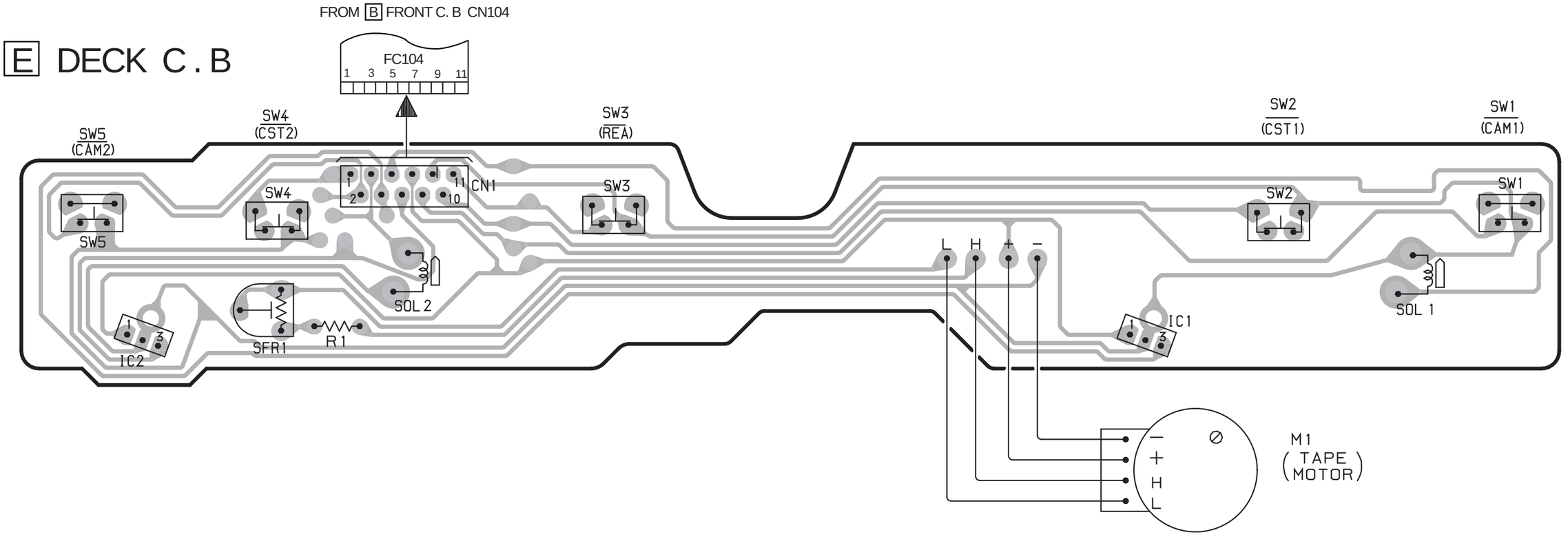
A B C D E F G H I J K L M N O P Q R S T U

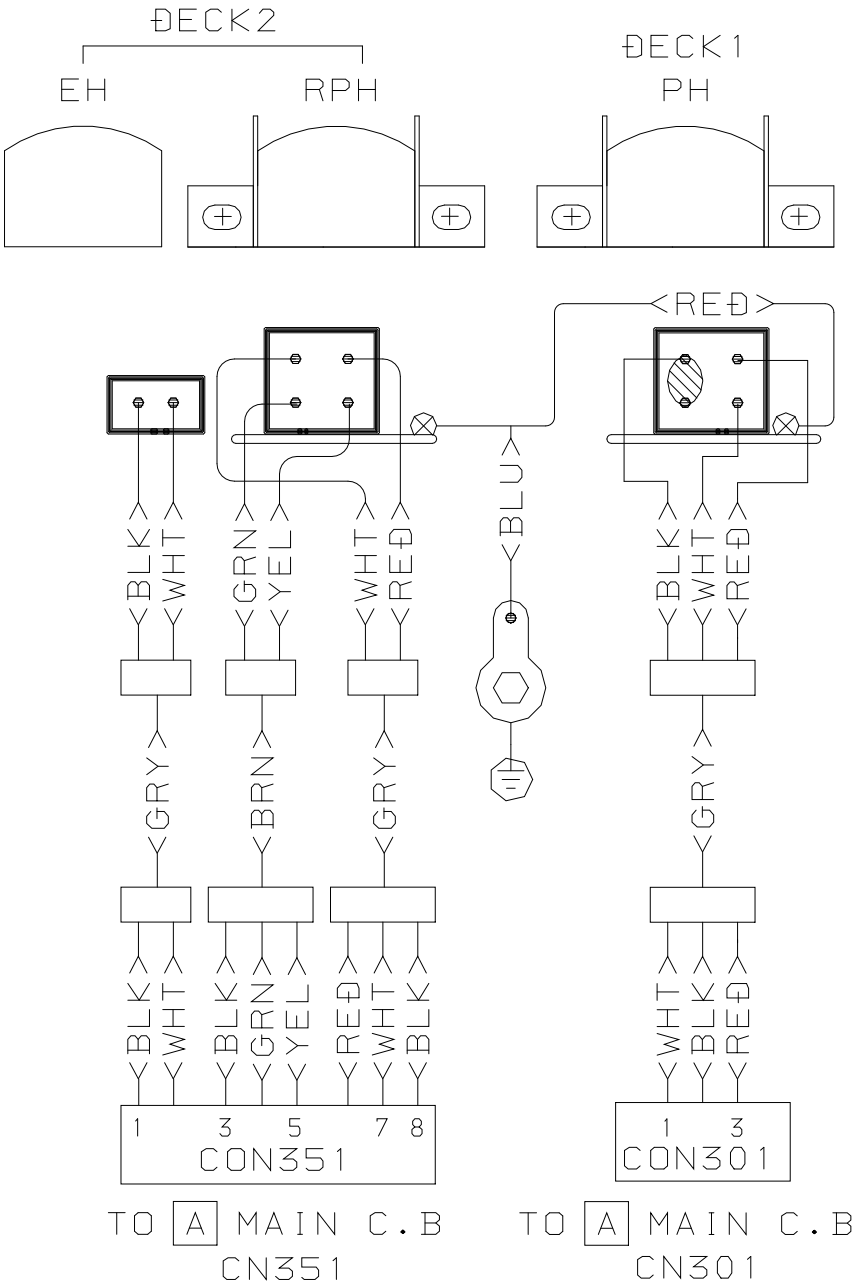


SCHEMATIC DIAGRAM – 8 (PT : LH)



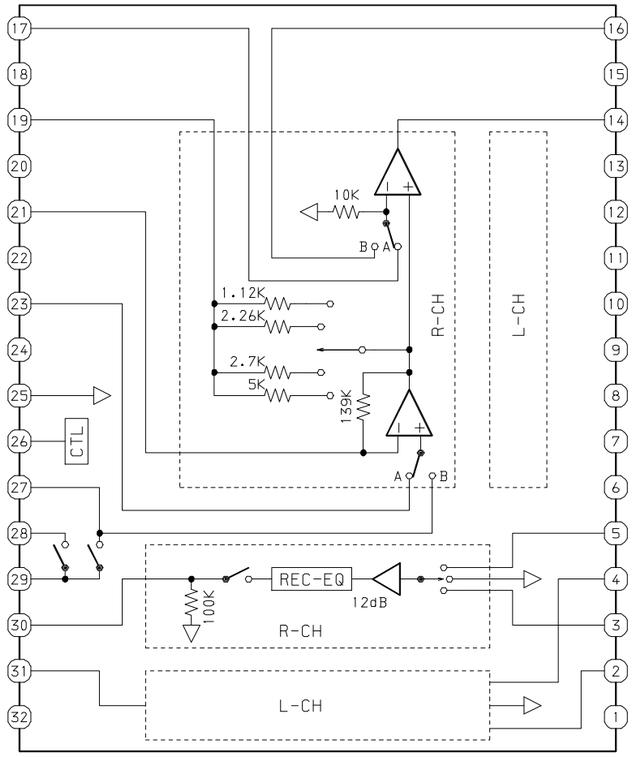
E DECK C.B


FROM B FRONT C. B CN104
FC104
1 3 5 7 9 11
SW5 (CAM2)
SW4 (CST2)
SW3 (REA)
SW2 (CST1)
SW1 (CAM1)
CN1
1
2
11
10
SW5
SW4
SW3
SW2
SW1
L H + –
SOL 2
SOL 1
IC2
SFR1
R1
IC1
M1 (TAPE MOTOR)
–
+
H
L

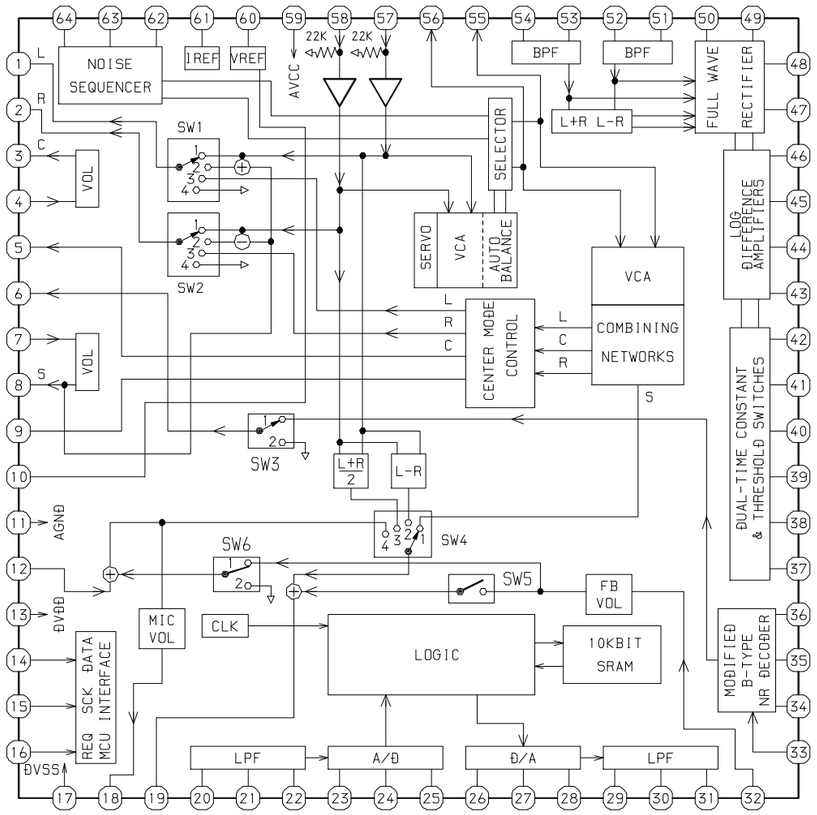

DECK2
EH
RPH
DECK1
PH
<RED>
BLK
WHT
GRN
YEL
WHT
RED
BLU
BLK
WHT
RED
GRY
BRN
GRY
GRY
BLK
WHT
BLK
GRN
YEL
RED
WHT
BLK
WHT
BLK
RED
1 3 5 7 8
CON351
1 3
CON301
TO A MAIN C.B
CN351
TO A MAIN C.B
CN301

IC BLOCK DIAGRAM

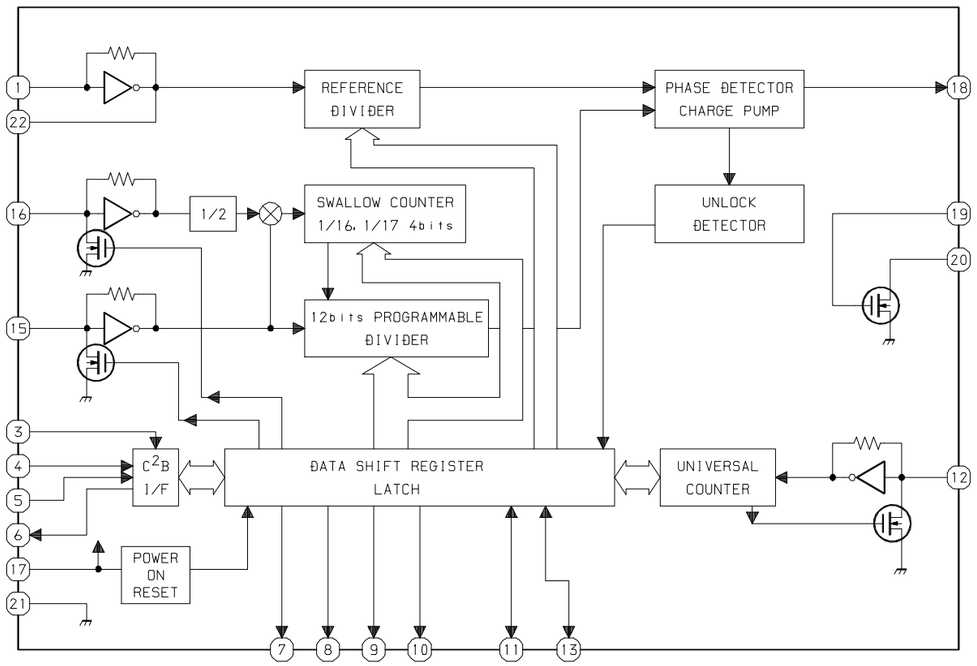
IC, BA7762AFS



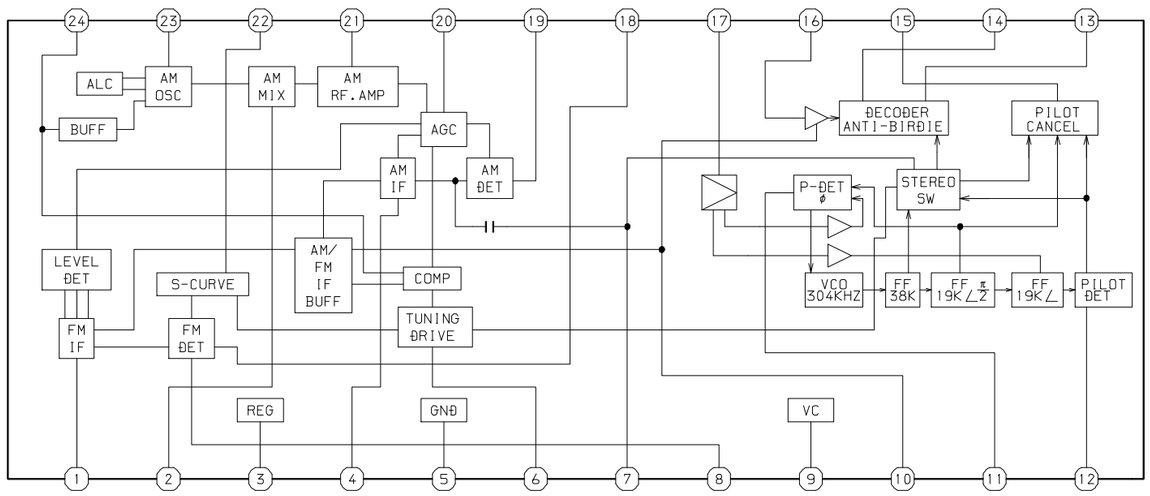
IC, M62463AFP



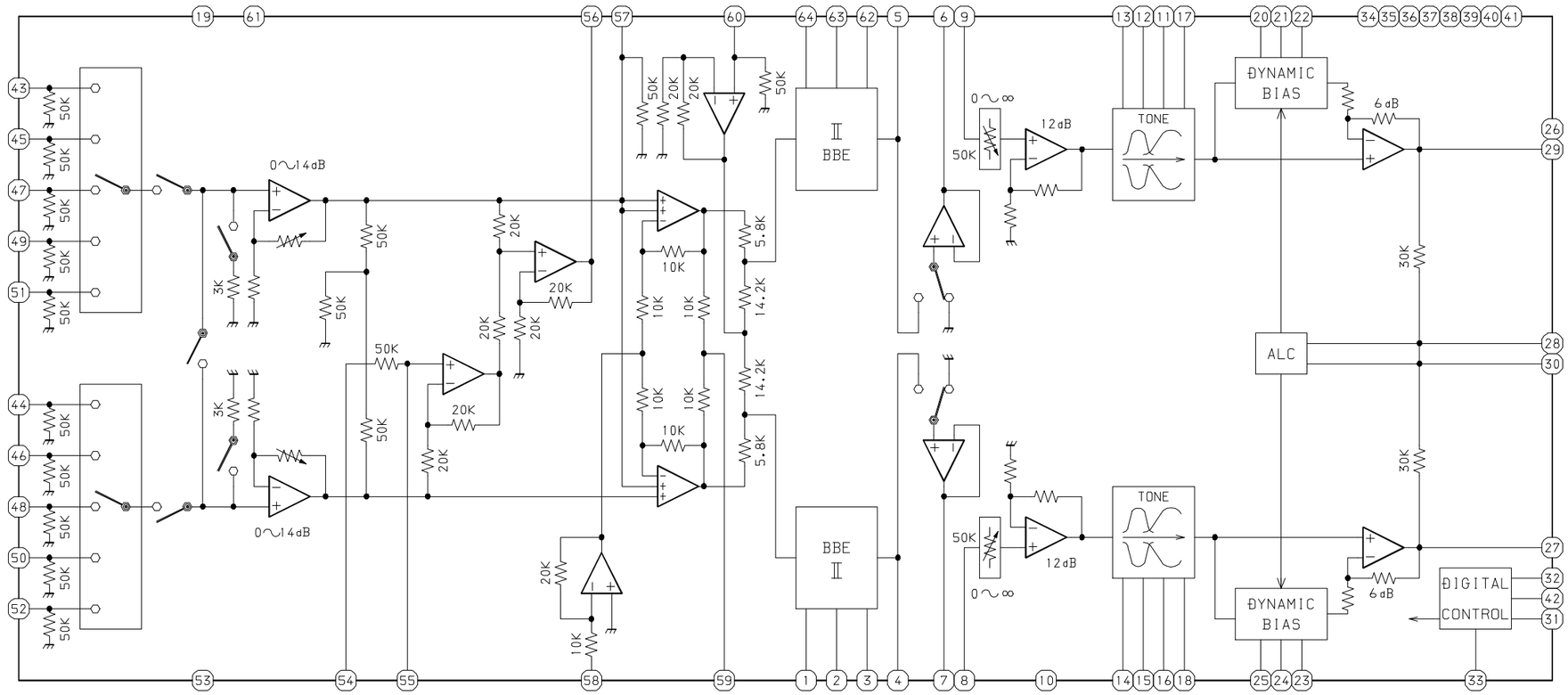
IC, LC72131D



IC, LA1843



IC, BÐ3876KS2

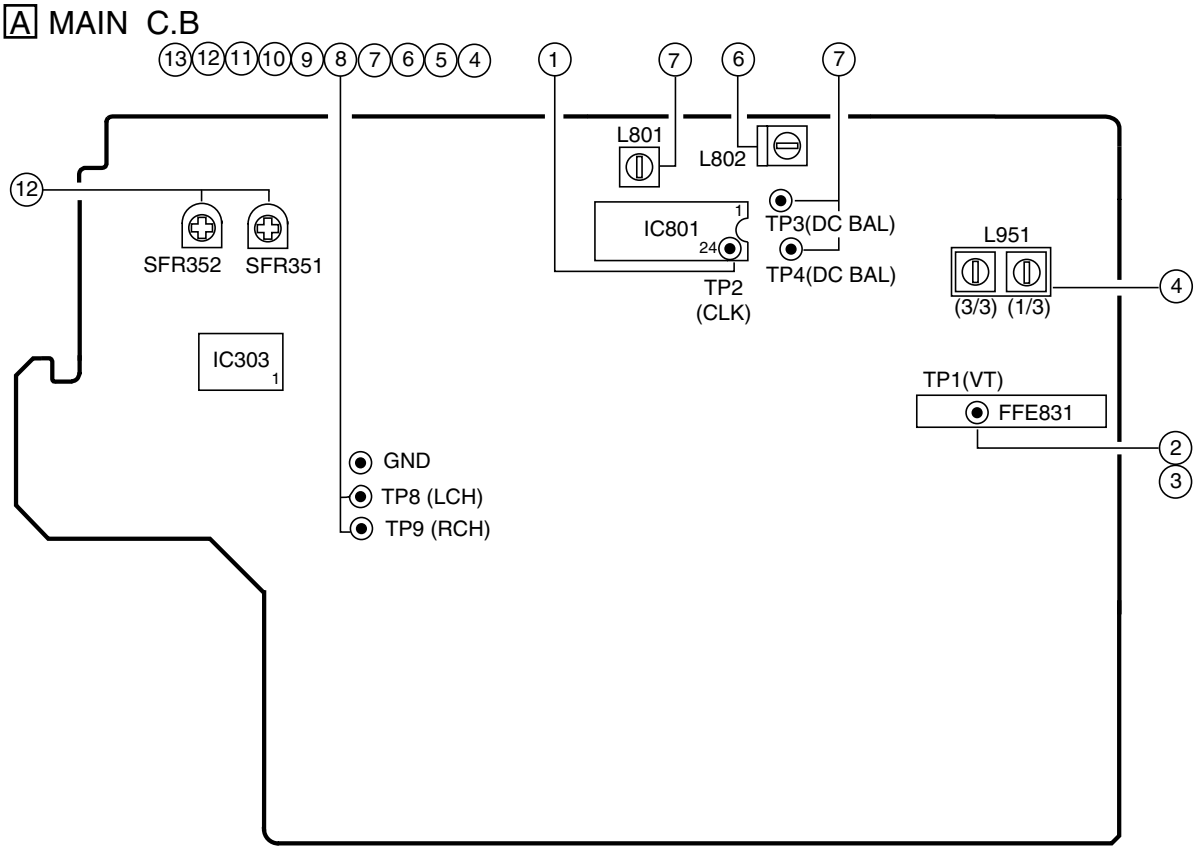


IC DESCRIPTION

IC, µPD780228GF-060-3BA

Pin No.	Pin Name	I/O	Description
1	O-$\overline{\text{MOTOR}}$	O	DECK MOTOR ON/OFF output.
2	O-$\overline{\text{SOL1}}$	O	DECK1 solenoid output.
3	O-$\overline{\text{SOL2}}$	O	DECK2 solenoid output.
4	$\overline{\text{P-LOGIC\_LED}}$	O	PRO LOGIC LED ON/OFF output.
5	NC	–	Not connected.
6	O-$\overline{\text{SET\_LED}}$	O	SET LED ON/OFF output.
7	O-$\overline{\text{CLEAR\_LED}}$	O	CLEAR LED ON/OFF output.
8	O-$\overline{\text{PRESET\_LED}}$	O	PRESET LED ON/OFF output.
9	O-$\overline{\text{DOWN\_LED}}$	O	DOWN LED ON/OFF output.
10	O-$\overline{\text{UP\_LED}}$	O	UP LED ON/OFF output.
11	NC	–	Not connected.
12	O-MUTE	O	MUTE output.
13	NC	–	Not connected.
14	O-$\overline{\text{BIAS}}$	O	BIAS ON output.
15	NC	–	Not connected.
16	I-$\overline{\text{HP-MUTE}}$	I	Head phones connect detect input.
17	IC	–	Internal connection (connected to GND).
18	VSSO	–	GND.
19	VDDO	–	Power supply.
20	O-POWER	O	System power supply $\overline{\text{ON}}$/OFF output.
21	O-OPEN	O	CD tray open data output.
22	O-CLOSE	O	CD tray close data output.
23	O-DISH_F	O	CD turntable forward rotation output.
24	O-DISH_R	O	CD turntable reverse rotation output.
25	NC	–	Not connected.
26	O-STB	O	Strobe output for MAIN C.B.
27	I-$\overline{\text{REA}}$	I	Deck 2 side-A recordable switch data input. "L"=REC.
28	I-RDS_CLK	I	Tuner RDS clock input (Not used).
29	I-SUBQ	I	CD SUBQ data input.
30	$\overline{\text{RESET}}$	–	System reset.
31	O-DATA	O	Data output for MAIN.
32	I-WRQ/$\overline{\text{STEREO}}$	I	CD WRQ input / Tuner stereo input.
33	I-DRF/$\overline{\text{IFC}}$	I	CD DRF input / Tune IF count serial data input.
34	I-$\overline{\text{RMC}}$	I	System remote control input.
35	I-DISHSENS	I	CD turntable photo sensor input.
36	O-$\overline{\text{CLK\_SFT}}$	O	Micon clock shift output.
37	VDD1	–	Power supply.
38	X2	–	4.19MHz oscillator circuit.
39	X1	–	4.19MHz oscillator circuit.
40	VSS1	–	GND.
41	AVDD	–	Power supply.
42	I-HOLD	I	Power failure detected input.
43	I-CDSW	I	CD mecha switch input.

Pin No.	Pin Name	I/O	Description
44	I-SPEANA_L	I	A/D L-input for spectrum analyser level display.
45	I-SPEANA_R	I	A/D R-input for spectrum analyser level display.
46	I-KEY1	I	Key1 input.
47	I-KEY2	I	Key2 input.
48	I-KEY3	I	Key3 input.
49	I-TU_SIG	I	Tuner signal input.
50	AVSS	–	GND.
51	O-PLL_CLK	O	PLL clock enable output.
52	O-PLL_CE	O	Chip enable output for tuner PLL.
53	O-CD_LED	O	CD flash window LED ON/OFF output.
54	O-KSCAN	O	Key scan output.
55	O-CD_CLK	O	CD clock output.
56	O-CD_DATA	O	CD data output.
57	O-CD_CE	O	CD enable output.
58	NC	–	Not connected.
59	I-JOG_B	I	Dial jog rotary encoder input B.
60	I-JOG_A	I	Dial jog rotary encoder input A.
61	I-VOL_B	I	Volume rotary encoder input B.
62	I-VOL_A	I	Volume rotary encoder input A.
63	NC	–	Not connected.
64	I-TM_BASE	I	Base input for clock.
65	I-$\overline{\text{CAM2}}$	I	DECK2 CAM switch data input.
66	I-$\overline{\text{CAM1}}$	I	DECK1 CAM STOP switch data input.
67	P1/I-AUTO2	O/I	FL segment P1 output / DECK2 AUTO STOP switch data input.
68	P2/I-AUTO1	O/I	FL segment P2 output / DECK1 AUTO STOP switch data input.
69	P3/I-$\overline{\text{CST2}}$	O/I	FL segment P3 output / DECK2 cassette detect switch data input.
70	P4/I-$\overline{\text{CST1}}$	O/I	FL segment P4 output / DECK1 cassette detect switch data input.
71	P5/AM10K	O/I	FL segment P5 output / AM10 change diode input.
72 ~ 78	P6 ~ P12	O	FL segment P6 ~ P12 output.
79	VDD2	–	Power supply.
80	VLOAD	–	Power supply for FL display.
81	P13/C-JACK	O/I	FL segment P13 output / C-JACK data input <LH>.
82	P14/ECO-OFF	O/I	FL segment P14 output / ECO-OFF data input <LH>.
83 ~ 90	P15 ~ P22	O	FL segment P15 ~ P22 output.
91 ~100	G1 ~ G10	O	FL grid G1 ~ G10 output.



< TUNER SECTION >

1. Clock frequency Check
   Settings : • Test point : TP2 (CLK)
   Method : Set to AM 1710kHz and check that the test point is 2160kHz ± 45Hz.

2. AM VT Check
   Settings : • Test point : TP1 (VT)
   Method : Set to AM 1710kHz, 530kHz and check that the test point is less than 8.5V (1710kHz) and more than 0.6V (530kHz).

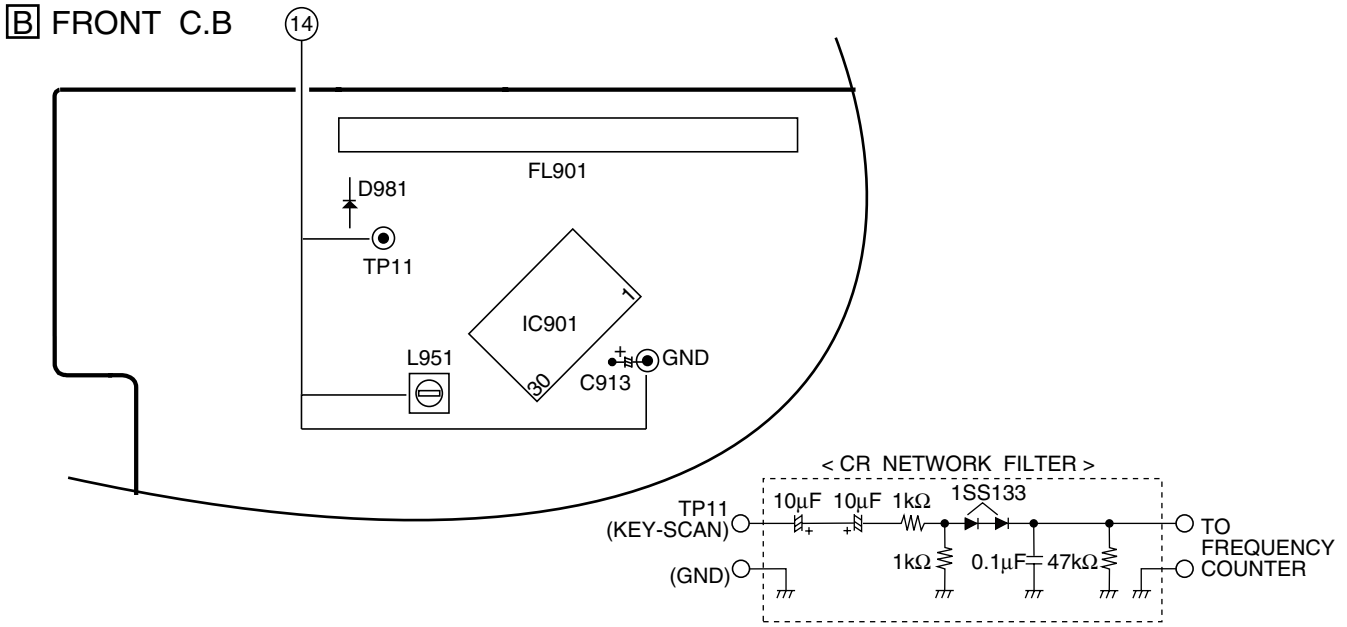
3. FM VT Check
   Settings : • Test point : TP1 (VT)
   Method : Set to FM 87.5MHz, 108.0MHz and check that the test point is more than 0.5V (87.5MHz) and less than 8.0V (108.0MHz).

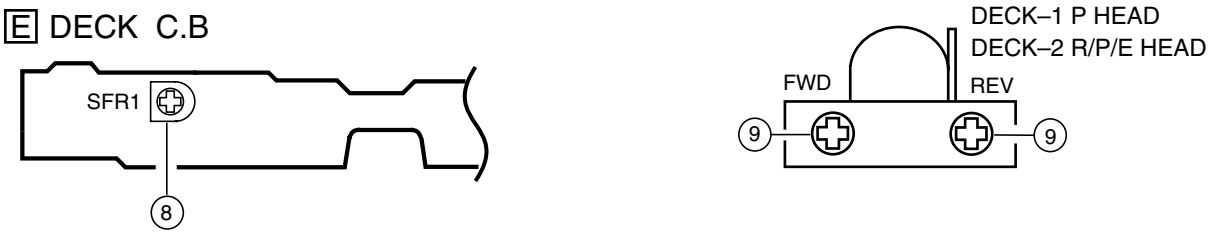
4. AM Tracking Adjustment
   Settings : • Test point : TP8(Lch), TP9(Rch)
   • Adjustment location :
   L951(1/3) 1000kHz
   Method : Set to MW 1000kHz and adjust L951(1/3) to MAX.

5. 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 9dBµV.

6. AM IF Adjustment
   Settings : • Test point : TP8(Lch), TP9(Rch)
   • Adjustment location :
   L802 ..... 450kHz

7. DC Balance / Mono Distortion Adjustment
   Settings : • Test point : TP3, TP4 (DC Balance)
   TP8(Lch), TP9(Rch) (Distortion)
   • Adjustment location : L801
   • Input level : 60dBµV
   Method : Set to FM 98.0MHz and adjust L801 so that the voltage between TP3 and TP4 becomes 0V ± 0.3V.
   Next, check that the distortion is less than 1.3%.





< DECK SECTION >

8. Tape Speed Adjustment (DECK 2)
   Settings : • Test tape : TTA–100
   • Test point : TP8(Lch), TP9(Rch)
   • Adjustment location : SFR1
   Method : Play back the test tape and adjust SFR1 so that the frequency counter reads 3000Hz ± 5Hz (FWD) and FWD SPEED ± 45Hz (REV).

9. Head Azimuth Adjustment (DECK 1, DECK 2)
   Settings : • Test tape : TTA–330
   • Test point : TP8(Lch), TP9(Rch)
   • Adjustment location : 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.

10. PB Frequency Response Check (DECK 1, DECK 2)
    Settings : • Test tape : TTA–330
    • Test point :TP8(Lch), TP9(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.

11. PB Sensitivity Check (DECK 1, DECK 2)
    Settings : • Test tape : TTA–200
    • Test point : TP8(Lch), TP9(Rch)
    Method : Play back the test tape and check that the output level of the test point is 110mV ± 3dB.

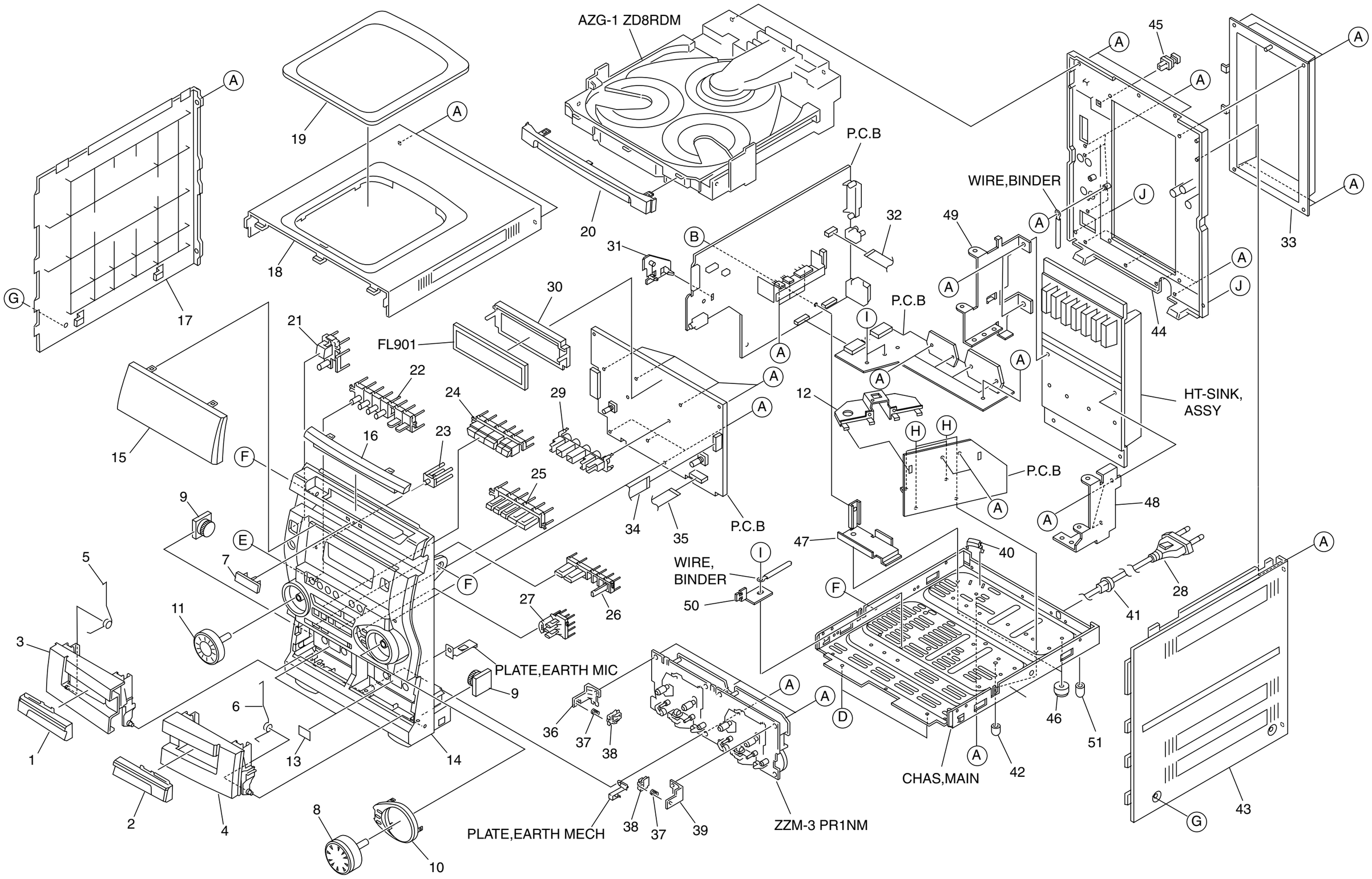
12. REC/PB Frequency Response Adjustment (DECK 2)
    Settings : • Test tape : TTA–602
    • Test point : TP8(Lch), TP9(Rch)
    • Input signal : 1kHz / 8kHz (LINE IN)
    • Adjustment location : SFR351 (Lch), SFR352 (Rch)
    Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP8, TP9 becomes -20VU (-26dBV). Record and play back the 1kHz and 8kHz signals and adjust SFRs so that the output of the 8kHz signals becomes 0dB ± 0.5dB with respect to that of the 1kHz signal.

13. REC/PB Sensitivity Check (DECK 2)
    Settings : • Test tape : TTA–602
    • Test point : TP8(Lch), TP9(Rch)
    • Input signal : 1kHz (LINE IN)
    Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at TP8, TP9 becomes 0VU (-6dBV). Record and play back the 1kHz signals and check that the output is -2dB ± 3.5dB.

< FRONT SECTION >

14. µ-con OSC Adjustment
    Settings : • Test point : TP11,(KEY-SCAN), GND
    • Adjustment location : L951
    Method : Connect a frequency counter across TP11 and GND via a CR network filter. Then adjust L951 so that the test point becomes 184.94Hz ± 0.18Hz.

MECHANICAL EXPLODED VIEW 1 / 1



MECHANICAL PARTS LIST 1 / 1

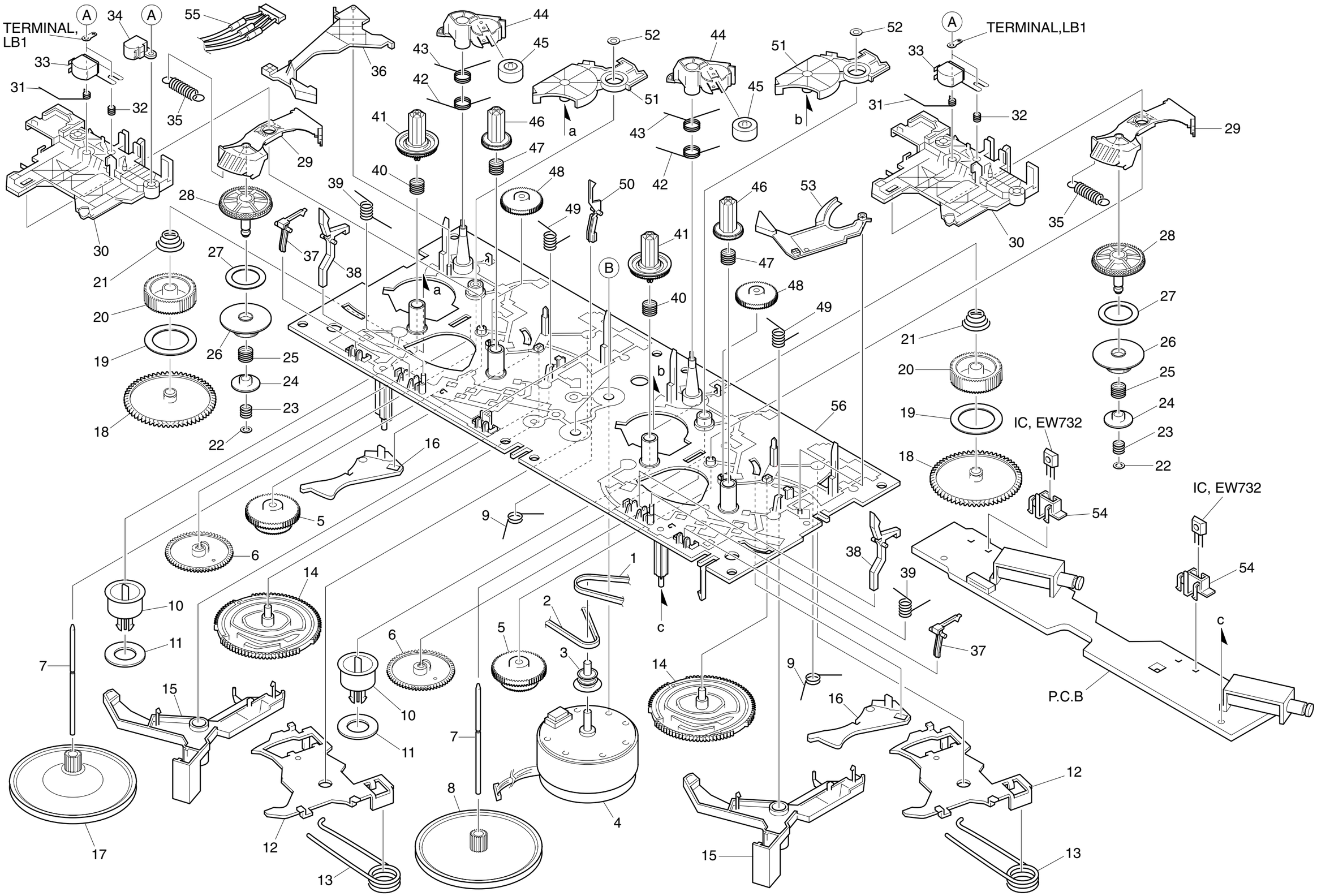
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-NF9-006-010		WINDOW,CASS 1
2	8A-NF9-007-010		WINDOW,CASS 2
3	8A-NF9-003-010		BOX,CASS 1
4	8A-NF9-004-010		BOX,CASS 2
5	8A-NF8-207-010		SPR-T,EJECT 1
6	8A-NF8-208-010		SPR-T,EJECT 2
7	87-CE3-023-010		BADGE,AIWA 30N SILV
8	8A-NF9-018-010		KNOB,RTRY JOG
9	8A-NF8-209-010		OIL-DMPR,120
10	8A-NF9-017-010		PANEL,JOG
11	8A-NF9-016-010		KNOB,RTRY VOL
12	8A-NF6-217-010		HLDR,PWB PT
13	81-532-080-010		LABEL, CASS. COMPT
14	8A-NFW-001-010		CABI,FR U
15	8A-NFW-017-010		WINDOW,DISP H<LH>
15	8A-NFW-002-010		WINDOW,DISP U<U>
16	8A-NF9-039-010		WINDOW,CD
17	8A-NF8-007-010		PANEL,LEFT V-2
18	8A-NF8-005-010		PANEL,TOP
19	8A-NF8-006-010		WINDOW,TOP
20	8A-NF9-014-010		PANEL,TRAY
21	8A-NF9-008-010		KEY,POWER
22	8A-NFW-003-010		KEY,PRO
23	8A-NF9-022-010		REFLECTOR,ECO
24	8A-NF9-010-110		KEY,ASSY OPE 1 WAY
25	8A-NF9-020-010		KEY,CD
26	8A-NF9-019-010		KEY,SYNC
27	8A-NF9-026-110		KEY,ENTER
⚠ 28	87-A80-157-010		AC CORD ASSY,E BLK CC<LH>
⚠ 28	87-A80-110-010		AC CORD ASSY,U SPT-2W<U>
29	8A-NF9-201-010		GUIDE,OPE 1 WAY
30	82-NF7-210-110		GUIDE,FL (*)
31	8A-NF8-206-010		HLDR,PWB M
32	88-906-251-110		FF-CABLE,6P 1.25
33	8A-NHU-053-010		COVER, REAR H<LH>

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
33	8A-NFW-031-110		COVER, REAR STEEL UM<U>
34	88-913-301-110		FF-CABLE,13P-1.25
35	88-911-101-110		FF-CABLE,11P 1.25
36	87-NF4-216-010		HLDR,LOCK 1
37	86-NF9-224-010		SPR-C,LOCK
38	82-NF5-229-010		PLATE,LOCK
39	87-NF4-217-110		HLDR,LOCK 2
40	87-NF4-221-010		HLDR,CABLE
41	87-085-185-010		BUSHING, AC CORD (E)<LH>
41	87-085-189-010		BUSHING, CORD (U)<U>
42	8Z-NB8-240-010		COVER, PL
43	8A-NF7-112-010		PANEL,RIGHT V-2
44	8A-NFW-007-010		PANEL,REAR LHSM<LH>
44	8A-NFW-006-010		PANEL,REAR USM<U>
45	84-ZG1-245-210		CAP,OPTICAL
46	87-085-221-010		FOOT,H13.5
47	8A-NF7-209-010		HLDR,PWB-M BTM
48	8A-NF7-208-010		HLDR,HT R
49	8A-NF7-207-010		HLDR,HT L
50	8A-NFW-250-110		HLDR,PLATE
51	8Z-NB8-254-010		COVER, PL M3
A	87-067-703-010		TAPPING SCREW, BVT2+3-10
B	87-NF4-224-010		S-SCREW,IT3B+3-8 CU
C	87-067-581-010		TAPPING SCREW, BVT2+3-15
D	87-067-689-010		TAPPING SCREW, BVTT+3-8
E	87-723-096-410		QT2+3-10W/O SLOT BL
F	87-721-097-410		QT2+3-12 GLD
G	87-067-641-010		UTT2+3-8(W/O SLOT)BL
H	87-078-191-010		S-SCREW,IT+4-10
I	87-067-584-010		TAPPING SCREW, BVT2+3-6
J	8A-NF7-251-010		W,3.2-8-0.45

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange		

TAPE MECHANISM EXPLODED VIEW 1 / 1



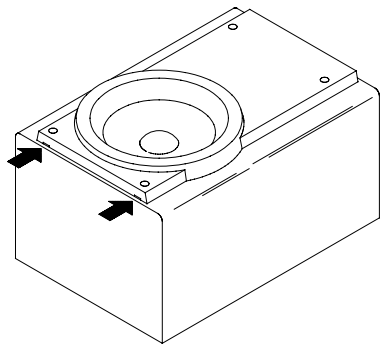
TAPE MECHANISM PARTS LIST 1 / 1

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-ZM3-227-010		BELT,MAIN M3
2	8Z-ZM3-235-010		BELT,MAIN L
3	8Z-ZM1-235-010		PULLEY,MOT
4	87-045-347-010		MOT,SHU2L 70
5	8Z-ZM1-232-010		GEAR,IDL FF/REW
6	8Z-ZM3-244-010		GEAR,CAM TD20
7	8Z-ZM3-242-010		SHAFT,CAP M3
8	8Z-ZM3-228-010		FLY-WHL,M3
9	8Z-ZM3-231-010		SPR-T,TRIG
10	8Z-ZM3-213-010		CLR,MG
11	82-ZM3-616-010		RING MAGNET 4
12	8Z-ZM3-243-010		LEVER ASSY,HD UP
13	8Z-ZM3-238-010		SPR-T,HD UP
14	8Z-ZM3-219-010		GEAR,CAM M3
15	8Z-ZM3-206-010		LEVER,TRIG
16	8Z-ZM3-209-010		LEVER,CAM FR
17	8Z-ZM2-211-010		FLY-WHL,ZZM-2
18	8Z-ZM1-228-010		GEAR,SLIP T-UP B
19	8Z-ZM1-265-010		FELT,T-UP
20	8Z-ZM1-227-010		GEAR,SLIP T-UP A
21	8Z-ZM1-251-110		SPR-C,T-UP SLIP
22	8Z-ZM1-275-010		W-L,1,47-4-0.25
23	8Z-ZM1-257-010		SPR-C,F/R
24	8Z-ZM1-236-010		CLR,SLIP FF/REW
25	8Z-ZM3-226-010		SPR-C,FR M3
26	8Z-ZM3-250-010		GEAR,SLIP F/R A M3
27	8Z-ZM1-269-010		FELT,FF/REW 2
28	8Z-ZM1-238-110		GEAR,SLIP FF/REW B 2
29	8Z-ZM3-220-010		LEVER,FR M3
30	8Z-ZM3-205-010		LEVER,PLAY M3
31	8Z-ZM3-233-010		SPR-T,BRG M3
32	84-ZM2-227-310		SPR-C,AZIMUTH
33	87-A90-403-110		HEAD,RPH MS15R
34	87-A90-404-010		HEAD,EH LE15B
35	8Z-ZM3-239-010		SPR-E,FR
36	8Z-ZM3-211-010		LEVER,EJECT R
37	8Z-ZM3-225-010		LEVER,STOP
38	8Z-ZM3-221-010		LEVER,CAS
39	8Z-ZM3-234-010		SPR-T,LVR CAS
40	8Z-ZM3-223-010		SPR-C,REEL R M3
41	8Z-ZM1-225-110		GEAR,REEL R
42	8Z-ZM3-240-010		SPR-T,T-UP M3
43	8Z-ZM3-237-010		SPR-T,PINCH M3
44	8Z-ZM3-215-010		LEVER,PINCH M3
45	8Z-ZM1-261-110		ROLLER ASSY,PINCH
46	8Z-ZM1-226-010		GEAR,REEL L
47	8Z-ZM3-222-010		SPR-C,REEL L M3
48	8Z-ZM3-251-010		GEAR,IDL REW M3
49	8Z-ZM3-236-010		SPR-T,PLAY M3
50	82-ZM1-240-110		LVR,REC(*)
51	8Z-ZM3-216-010		LEVER,T-UP M3
52	87-B10-301-010		W-L,1.63-3.2-05 SLIT
53	8Z-ZM3-212-010		LEVER,EJECT L
54	8Z-ZM3-214-010		HLDR,IC
55	86-ZM3-605-110		CONN ASSY,8P -RPB
56	8Z-ZM3-203-010		CHAS ASSY,M3
A	84-ZM2-242-010		S-SCREW,AZ1-2-6.4
B	8Z-ZM2-220-110		V+2.6 ZZM-2

SPEAKER DISASSEMBLY INSTRUCTIONS

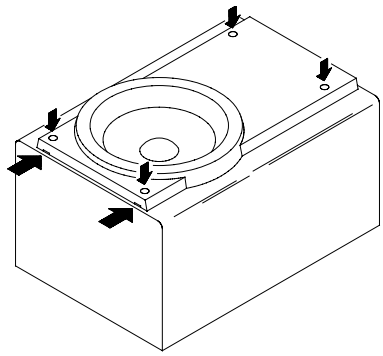
Type.1

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.



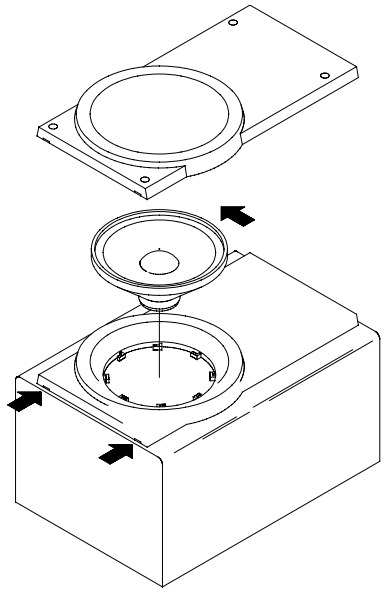
Type.2

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.

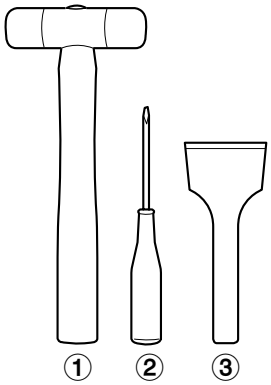


Type.3

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Turn the speaker unit to counter-clockwise 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 until "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.

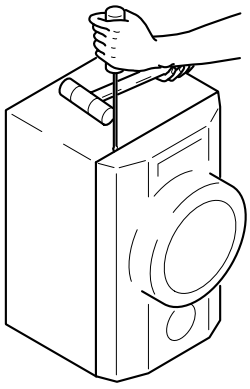


Fig-1

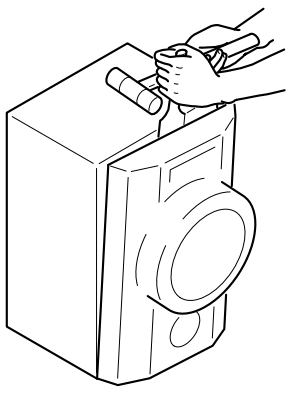


Fig-2

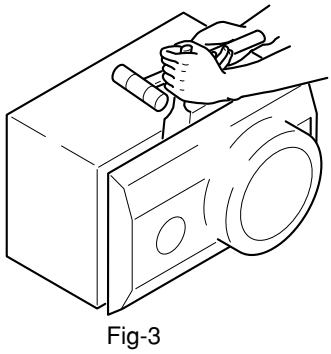


Fig-3

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 <NSX-DP25>
SX-NSZ52 (YLSL)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-NSJ-001-010		PANEL,FR R
2	8A-NSJ-002-010		PANEL,FR L
3	8A-NSJ-003-010		GRILLE,FRAME ASSY
4	8A-NSJ-008-010		PROTECTOR,TWA
5	87-NS7-611-010		CORD,SPKR
6	8A-NSJ-602-010		SPKR,W 130
7	88-NS5-605-010		SPKR,T 60
8	88-MS1-608-010		SPKR, CERAMIC

SPEAKER PARTS LIST <NSX-HMT25>
SX-NAJ22 (YUSC, YUSL)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-NSK-001-010		PANEL,FR
2	8A-NSK-003-010		GRILLE,FRAME ASSY
3	8A-NSK-007-010		PROTECTOR,TWA
4	8A-NSK-602-010		SPKR,W 140<YUSL>
4	8A-NSK-608-010		SPKR,W 130<YUSC>
5	88-NS5-605-010		SPKR,T 60<YUSL>
5	8A-NSK-610-010		SPKR,TW 60<YUSC>
6	87-NSH-612-010		SPKR,CERAMIC ASSY
7	87-NS7-611-010		CORD,SPKR

SX-R277 (YSTC)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-YS1-001-010		CABI,REAR
2	8Z-YS1-002-010		GRILLE,FRAME ASSY
3	81-VSA-009-010		CORD,BUSH
4	87-010-384-010		CAP,E 100-25 M SME
5	87-YS6-002-010		SPKR,CORD Y
6	8Z-YS1-601-010		SPKR,100

SX-R275 (YUSTNC, YUSTNL, YUSTNP)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	87-YS1-001-010		CABI,REAR
2	87-YS1-004-010		GRILLE,FRAME ASSY
3	81-VSA-009-010		CORD,BUSH
4	87-010-384-010		CAP,E 100-25 M SME
5	87-YS6-002-010		SPKR,CORD Y
6	87-YS6-601-010		SPKR,100

SX-C607 (YSTC)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	87-YS7-012-010		PANEL,FR S
2	87-YS7-013-010		PANEL,REAR S
3	87-YS3-003-010		GRILLE,FRAME ASSY
4	81-VSA-009-010		CORD,BUSH
5	83-NSM-010-010		SPKR,CORD
6	87-YS7-602-010		SPKR,100

SX-C605 (YUSTNC, YUSTNL)

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	87-YS3-001-010		PANEL,FR ST
2	87-YS3-002-010		PANEL,REAR ST
3	87-YS3-003-010		GRILLE,FRAME ASSY
4	81-VSA-009-010		CORD,BUSH
5	83-NSM-010-010		SPKR,CORD
6	87-YS7-602-010		SPKR,100<YUSTNC>
6	87-YS7-604-010		SPKR,100<YUSTNL>

ACCESSORIES / PACKAGE LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-NFW-902-010		IB,LH(ESP)M<LH>
1	8A-NFW-903-010		IB,U(ESF)M<U>
2	87-006-225-010		AM,LOOP ANT NC2
3	87-043-115-010		ANT,FEEDER FM
4	8Z-NFW-702-010		RC UNIT,ZAS10
5	87-A91-017-010		PLUG CONVERSION JT-0476<LH>

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

9820543 0251431 Printed in Singapore