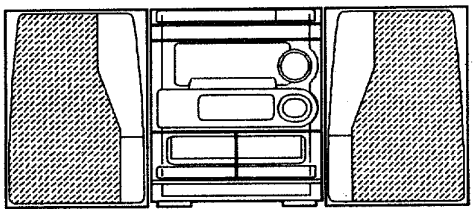
aiwa

aiwa SERVICE

NSX-K550

SERVICE MANUAL



COMPACT DISC STEREO
CASSETTE RECEIVER

- BASIC TAPE MECHANISM : 2ZM-3MK2 YPR4N
- BASIC CD MECHANISM : 4ZG-1 VSGD
- TYPE : HR,HC

•If requiring information about the CD mechanism, see Service Manual of 4ZG-1, S/M Code No. 09-977-206-10T.

S/M Code No. 09-976-199-7FE

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 µV/m
Antenna	Loop antenna

<SW Tuner section>

Tuning range	5.900 MHz ~ 17.900 MHz
Antenna	Wire antenna

<Amplifier section>

***Power output**	Rated : 100 W + 100 W (6 ohms, T.H.D. 1 %, 1 kHz) Reference : 120 W + 120 W (6 ohms, T.H.D. 10 %, 1 kHz) *without connecting to the SURROUND SPEAKERS
Total harmonic distortion	0.05 % (70 W, 1 kHz, 6 ohms, DIN AUDIO)
Inputs	VIDEO /AUX : 210 mV (adjustable) MD : 210 mV (adjustable) MIC : 1.4 mV (10 kohms)
Outputs	LINE OUT : 200 mV VIDEO OUT: 1.0Vp-p (75 ohms) SUPER WOOFER : 2.7 V SPEAKERS: accept speakers of 6 ohms or more SURROUND SPEAKERS : accept speakers of 16 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	CrO2 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/ 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	MPEG1
Audio data	MPEG1, LAYER2:

<Speaker system SX–ANS70>

Cabinet type	4 way, bass reflex with surround speaker (magnetic sealed type)
Speakers	Woofer : 160 mm cone type Tweeter : 50 mm cone type Super tweeter : 20 mm ceramic type Cardioid speaker : 80 mm cone type Surround speaker : 80 mm cone type
Impedance	Front speaker : 6 ohms Surround speaker : 16 ohms
Output sound pressure level	87 dB/W/m
Dimensions (W x H x D)	250 x 310 x 280 mm
Weight	4.5 kg

<General>

Power requirements	120 V/ 220 – 230 V/ 240 V AC, switchable ,50 / 60 Hz
Power consumption	140 W
Dimensions of main unit (W x H x D)	260 x 309 x 346 mm
Weight of main unit	7.2 kg

- Design and specifications are subject to change without notice.
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ELECTRICAL MAIN PARTS LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-NH4-610-010		IC,LC866548A-5E56
	87-070-083-010		IC,GPIU281X
	87-A20-501-040		C-IC,BA7762FS
	87-A20-083-010		IC,BA3835S
	87-A20-450-040		C-IC,BH3864F
	87-A20-056-010		IC,BA3880S
	87-A20-613-040		C-IC,BU9262AFS
	87-A20-456-040		C-IC,BH3810FS
	87-017-888-080		C-IC,NJM4558MD
	86-NFZ-655-010		IC,LC72131D(Z)
	87-A20-438-010		IC,LA1837
	87-020-454-010		IC,DN6851
	87-A20-561-040		C-IC,M65847AFP
TRANSISTOR			
	87-026-263-080		C-TR,RN1410
	89-213-702-010		TR,2SB1370E
	87-A30-076-080		C-TR,2SC3052F
	87-A30-075-080		C-TR,2SA1235F
	87-026-610-080		TR,KTC3198GR
	87-A30-073-080		C-TR,RT1N 141C
	87-A30-085-070		C-TR,CSA1362GR
	87-A30-083-080		TR,CSD1489B
	87-A30-084-080		TR,CSB1058B
	87-A30-071-080		C-TR,RT1N 144C
	87-026-609-080		TR,KTA1266GR
	87-A30-086-070		C-TR,CSD1306E
	87-A30-106-070		C-TR,CMBT5551
	87-A30-111-080		TR,C2N5401
	87-A30-097-010		TR,FN1016
	87-A30-098-010		TR,FP1016
	87-A30-089-010		FET,2SK2723
	87-A30-072-080		C-TR,RT1P 144C
	87-A30-087-080		C-FET,2SK2158
	87-A30-074-080		C-TR,RT1P 141C
	89-327-143-080		C-TR,2SC2714(O)
	89-505-434-540		C-TR,2SK543-TB (4/5)
	87-026-463-080		TR,2SA933S
DIODE			
	87-A40-270-080		C-DIODE,MC2838
	87-A40-115-060		DIODE,RS603M
	87-017-437-080		DIODE,1N4148M
	87-A40-246-080		DIODE,1N4148T-72
	87-A40-269-080		C-DIODE,MC2836
	87-070-274-080		DIODE,1N4003 SEM
	87-A40-344-080		ZENER,MTZJ6.2C
	87-A40-341-080		ZENER,MTZJ36A
	87-A40-345-080		ZENER,MTZJ10C
	87-A40-234-080		ZENER,MTZJ5.6A
	87-070-136-080		ZENER,MTZJ5.1B
	87-A40-004-080		ZENER,MTZJ16A
	87-026-681-080		DIODE,RK 34(F)
	87-017-931-080		ZENER,MTZJ5.6B
	87-A40-003-080		ZENER,MTZJ4.3A
MAIN C.B			
	88-906-241-110		FF-CABLE,6P 1.25
C101	87-016-520-090		CAP,E 3300-65 M SMG
C102	87-016-520-090		CAP,E 3300-65 M SMG
C103	87-010-928-090		CAP,E 4700-25 M SMG
C104	87-010-928-090		CAP,E 4700-25 M SMG
C105	87-012-368-080		C-CAP,S 0.1-50 Z F
C106	87-012-368-080		C-CAP,S 0.1-50 Z F
C107	87-012-368-080		C-CAP,S 0.1-50 Z F
C108	87-012-368-080		C-CAP,S 0.1-50 Z F
C109	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C110	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C111	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C112	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C113	87-010-247-080		CAP,E 100-50 M SME
C116	87-010-247-080		CAP,E 100-50 M SME
C117	87-010-430-080		CAP,E 100-63 M SME
C118	87-010-263-080		CAP,E 100-10 SME
C119	87-010-260-080		CAP,E 47-25 SME
C120	87-010-403-080		CAP,E 3.3-50 M SME
C121	87-012-140-080		C-CAP,S 470P-50 J CH
C123	87-010-247-080		CAP,100-50 M SME
C124	87-010-112-080		CAP,E 100-16 M SME
C125	87-010-235-080		CAP,E 470-16 SME
C129	87-010-393-080		CAP,E 100-35 M SME
C201	87-010-401-080		CAP,E 1-50 M SME
C202	87-010-401-080		CAP,E 1-50 M SME
C205	87-010-181-080		C-CAP,S 1800P-50KB
C206	87-010-181-080		C-CAP,S 1800P-50KB
C207	87-010-404-080		CAP,E 4.7-50 M SME
C208	87-010-404-080		CAP,E 4.7-50 M SME
C209	87-010-404-080		CAP,E 4.7-50 M SME
C210	87-010-404-080		CAP,E 4.7-50 M SME
C211	87-010-186-080		C-CAP,S 4700P-50 K B
C212	87-010-186-080		C-CAP,S 4700P-50 K B
C213	87-010-260-080		CAP,E 47-25 SME
C214	87-010-260-080		CAP,E 47-25 SME
C215	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C219	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C220	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C221	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C222	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C223	87-010-194-080		C-CAP,S 0.047-25 Z F
C225	87-A10-516-080		C-CAP,S 100P-200 J CH
C226	87-A10-516-080		C-CAP,S 100P-200 J CH
C229	87-016-461-080		C-CAP,S 0.47-16 Z F
C230	87-016-461-080		C-CAP,S 0.47-16 Z F
C242	87-010-382-080		CAP,E 22-50 M SME
C243	87-010-197-080		CAP,S 0.01-25 K B
C244	87-010-382-080		CAP,E 22-50 M SME
C301	87-010-318-080		C-CAP,S 47P-50 J CH
C302	87-010-318-080		C-CAP,S 47P-50 J CH
C303	87-012-157-080		C-CAP,S 330P-50 J CH GRM
C304	87-012-157-080		C-CAP,S 330P-50 J CH GRM
C305	87-012-145-080		C-CAP,S 270P-50 J CH
C306	87-012-145-080		C-CAP,S 270P-50 J CH
C307	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C309	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C310	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C311	87-010-198-080		C-CAP,S 0.022-25 K B
C312	87-010-198-080		C-CAP,S 0.022-25 K B
C313	87-010-178-080		C-CAP,S 1000P-50 K B
C314	87-010-178-080		C-CAP,S 1000P-50 K B
C315	87-010-178-080		C-CAP,S 1000P-50 K B
C316	87-010-178-080		C-CAP,S 1000P-50 K B
C321	87-016-492-080		C-CAP,S 0.33-16 Z F
C322	87-016-492-080		C-CAP,S 0.33-16 Z F
C324	87-010-260-080		CAP,E 47-25 SME
C325	87-010-370-080		CAP,E 330-6.3 M SME
C327	87-010-404-080		CAP,E 4.7-50 M SME
C328	87-010-404-080		CAP,E 4.7-50 M SME
C332	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C335	87-010-401-080		CAP,E 1-50 M SME
C336	87-010-401-080		CAP,E 1-50 M SME
C337	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C339	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C340	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C351	87-012-140-080		C-CAP,S 470P-50 J CH
C352	87-012-140-080		C-CAP,S 470P-50 J CH

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C354	87-010-175-080		C-CAP,S 560P-50 J SL
C355	87-012-349-080		C-CAP,S 1000P-50 J CH
C356	87-010-260-080		CAP,E 47-25 SME
C357	87-010-197-080		C-CAP,S 0.01-25 K B
C358	87-010-183-080		C-CAP,S 2700P-50 K B
C359	87-010-183-080		C-CAP,S 2700P-50 K B
C360	87-010-183-080		C-CAP,S 2700P-50 K B
C370	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C373	87-010-993-080		C-CAP,S 0.056-25 K B MK212
C374	87-010-993-080		C-CAP,S 0.056-25 K B MK212
C378	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C379	87-010-382-080		CAP,E 22-25 M SME
C380	87-010-382-080		CAP,E 22-25 M SME
C381	87-010-197-080		C-CAP,S 0.01-25 K B
C382	87-010-312-080		C-CAP,S 15P-50 J CH
C383	87-010-197-080		C-CAP,S 0.01-25 K B
C384	87-010-402-080		CAP,E 2.2-50 M SME
C386	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C387	87-012-145-080		C-CAP,S 270P-50 J CH
C388	87-010-154-080		C-CAP,S 10P-50 D CH
C401	87-010-187-080		C-CAP,S 5600P-50 K B
C402	87-010-187-080		C-CAP,S 5600P-50 K B
C403	87-010-405-080		CAP,E 10-50 M SME
C404	87-010-405-080		CAP,E 10-50 M SME
C405	87-010-260-080		CAP,E 47-25 SME
C406	87-010-101-080		CAP,E 220-16 SME
C407	87-010-188-080		C-CAP,S 6800P-50 K B
C408	87-010-188-080		C-CAP,S 6800P-50 K B
C409	87-012-140-080		C-CAP,S 470P-50 J CH
C410	87-012-140-080		C-CAP,S 470P-50 J CH
C411	87-010-197-080		C-CAP,S 0.01-25 K B
C412	87-010-197-080		C-CAP,S 0.01-25 K B
C413	87-010-195-080		C-CAP,S 0.068-25 Z F C2012
C414	87-010-195-080		C-CAP,S 0.068-25 Z F C2012
C415	87-010-404-080		CAP,E 4.7-50 M SME
C416	87-010-404-080		CAP,E 4.7-50 M SME
C417	87-010-404-080		CAP,E 4.7-50 M SME
C418	87-010-404-080		CAP,E 4.7-50 M SME
C421	87-010-401-080		CAP,E 1-50 M SME
C422	87-010-401-080		CAP,E 1-50 M SME
C503	87-012-154-080		C-CAP,S 150P-50J CH
C504	87-012-154-080		C-CAP,S 150P-50J CH
C505	87-012-145-080		C-CAP,S 270P-50 K B
C506	87-012-145-080		C-CAP,S 270P-50 K B
C507	87-010-183-080		C-CAP,S 2700P-50 K B
C509	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C510	87-010-177-080		C-CAP,S 820P-50 J SL
C511	87-010-177-080		C-CAP,S 820P-50 J SL
C512	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C513	87-010-374-080		CAP,E 47-10 SME
C514	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C515	87-010-263-080		CAP,E 100-10 SME
C517	87-010-183-080		C-CAP,S 2700P-50 K B
C527	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C605	87-010-180-080		C-CAP,S 1500P-50 K B
C606	87-010-180-080		C-CAP,S 1500P-50 K B
C611	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C613	87-010-404-080		CAP,E 4.7-50 M SME
C614	87-010-404-080		CAP,E 4.7-50 M SME
C615	87-010-183-080		C-CAP,S 2700P-50 K B
C619	87-010-263-080		CAP,E 100-10 SME
C620	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C621	87-010-263-080		CAP,E 100-10 SME
C622	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C623	87-010-194-080		C-CAP,S 0.047-25 Z F
C629	87-010-196-080		C-CAP,S 0.1-25 Z F
C646	87-010-322-080		C-CAP,S 100P-50J C H
C647	87-010-322-080		C-CAP,S 100P-50J C H
C650	87-010-381-080		CAP,E 330-16 SME
C701	87-010-381-080		CAP,E 330-16 SME
C702	87-010-404-080		CAP,E 4.7-50 M SME
C703	87-010-197-080		C-CAP,S 0.01-25 K B
C704	87-010-197-080		C-CAP,S 0.01-25 K B
C711	87-010-263-080		CAP,E 100-10 SME
C712	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C713	87-010-197-080		C-CAP,S 0.01-25 K B
C714	87-010-197-080		C-CAP,S 0.01-25 K B
C721	87-010-312-080		C-CAP,S 15P-50 J CH
C722	87-010-312-080		C-CAP,S 15P-50 J CH
C723	87-010-178-080		C-CAP,S 1000P-50 K B
C725	87-010-178-080		C-CAP,S 1000P-50 K B
C727	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C728	87-010-248-080		CAP,E 220-10 SME
C755	87-010-197-080		C-CAP,S 0.01-25 K B
C756	87-010-197-080		C-CAP,S 0.01-25 K B
C757	87-010-318-080		C-CAP,S 47P-50 J CH
C758	87-010-149-080		C-CAP,S 5P-50 CH
C761	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C762	87-010-197-080		C-CAP,S 0.01-25 K B
C763	87-010-194-080		C-CAP,S 0.047-25 Z F
C765	87-010-197-080		C-CAP,S 0.01-25 K B
C766	87-010-197-080		C-CAP,S 0.01-25 K B
C767	87-010-405-080		CAP,E 10-50 M SME
C768	87-010-197-080		C-CAP,S 0.01-25 K B
C769	87-010-408-080		CAP,E 47-50 SME
C770	87-015-821-080		C-CAP, 0.047-50 Z F GR
C771	87-010-407-080		CAP,E 33-50 SME
C772	87-010-194-080		C-CAP,S 0.047-25 Z F
C773	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C774	87-010-263-080		CAP,E 100-10 SME
C775	87-010-404-080		CAP,E 4.7-50 M SME
C777	87-010-400-080		CAP,E 0.47-50 M SME
C778	87-010-401-080		CAP,E 1-50 M SME
C779	87-010-401-080		CAP,E 1-50 M SME
C780	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C781	87-010-405-080		CAP,E 10-50 M SME
C782	87-010-405-080		CAP,E 10-50 M SME
C783	87-015-819-080		C-CAP,0.01-50 K B
C784	87-010-197-080		C-CAP,S 0.01-25 K B
C785	87-010-400-080		CAP,E 0.47-50 M SME
C786	87-010-400-080		CAP,E 0.47-50 M SME
C787	87-010-184-080		C-CAP,S 3300P-50 K B
C788	87-010-184-080		C-CAP,S 3300P-50 K B
C789	87-010-179-080		C-CAP,S 1200P-50 K B
C790	87-010-179-080		C-CAP,S 1200P-50 K B
C791	87-010-405-080		CAP,E 10-50 M SME
C793	87-010-178-080		C-CAP,S 1000P-50 K B
C794	87-010-406-080		CAP,E 22-50 M SME
C795	87-010-596-080		C-CAP,S 0.047-16 R K
C796	87-010-403-080		CAP,E 3.3-50 M SME
C797	87-010-180-080		C-CAP,S 1500P-50 K B
C798	87-010-182-080		C-CAP,S 2200P-50 K B
C799	87-010-194-080		C-CAP,S 0.047-25 Z F
C812	87-010-197-080		C-CAP,S 0.01-25 K B
C814	87-010-197-080		C-CAP,S 0.01-25 K B
C820	87-010-408-080		CAP,E 47-50 SME
C821	87-010-197-080		C-CAP,S 0.01-25 K B
C822	87-010-197-080		C-CAP,S 0.01-25 K B
C823	87-010-197-080		C-CAP,S 0.01-25 K B
C828	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C829	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C940	87-010-197-080		C-CAP,S 0.01-25 K B
C941	87-010-314-080		C-CAP,S 22P-50 J CH
C943	87-010-197-080		C-CAP, S 0.01-25 K B
C944	87-014-051-080		CAP,PP 560P-100 J
C945	87-010-197-080		C-CAP,S 0.01-25 K B
C947	87-010-197-080		C-CAP,S 0.01-25 K B
C950	87-014-073-080		CAP,PP 4700P-100 J

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C952	87-010-197-080		C-CAP,S 0.01-25 K B
C953	87-010-197-080		C-CAP,S 0.01-25 K B
C954	87-010-400-080		CAP,E 0.47-50 M SME
C956	87-010-263-080		CAP,E 100-10 SME
C959	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C960	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C962	87-010-401-080		CAP,E 1-50 M SME
CF801	87-008-261-010		FLTR,CFSFE10.7MA5
CF802	87-008-261-010		FLTR,CFSFE10.7MA5
FFE801	A8-7ZA-291-030		7ZA-2 YFEUNM
J252	87-A60-024-010		JACK,DIA6.3 BLK ST W/SW KM
J253	87-099-474-010		JACK,PIN 3P BLK W/SW
J254	87-A60-238-010		TERMINAL,SP 4P (MSC)
J601	87-A60-426-010		JACK,PIN 6P 3835
J801	87-A60-202-010		TERMINAL,ANT 4P MSP-154V-02
L201	87-003-383-010		COIL,1UH K
L202	87-003-383-010		COIL,1UH K
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 85KHZ BIAS
L601	87-003-231-089		C-COIL,1UH
L770	87-005-849-080		COIL,10UH K CECS
L771	87-A50-165-010		COIL,FM DET-N(TOK)
L772	87-A90-052-010		FLTR,CFMT-450A (TOK)
L832	87-005-847-080		COIL,2.2UH K CECS
L941	87-A50-022-010		COIL,ANT SW (COI) 7.96 MHZ
L942	87-A50-173-010		COIL,OSC SW-N (COI)
L943	87-005-372-080		COIL,1 MHZ K LALO3
L944	87-A50-159-010		COIL,10 MH K C28
⚠ L981	87-NF4-666-010		COIL,AM PACK3(TOK)
⚠ PR201	87-026-682-080		PROTECTOR,10A 491SERIES 60V
⚠ PR202	87-026-682-080		PROTECTOR,10A 491SERIES 60V
R231	87-A00-262-080		RES,M/F 0.15-2W J
R232	87-A00-262-080		RES,M/F 0.15-2W J
RY101	87-045-389-010		RELAY,12V OSA-SS-212DM5
RY201	87-045-382-010		RELAY,12V OUAZ-SH
SFR301	87-024-438-080		SFR,220K H RH063MC
SFR302	87-024-438-080		SFR,220K H RH063MC
SFR303	87-024-438-080		SFR,220K H RH063MC
SFR304	87-024-438-080		SFR,220K H RH063MC
SFR351	87-024-436-080		SFR,47K H RH063MC
SFR352	87-024-436-080		SFR,47K H RH063MC
TH201	87-A90-221-080		C-THMS 100K
TH202	87-A90-221-080		C-THMS 100K
W001	85-NF5-628-010		F-CABLE,7P-2.5
X721	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309
X771	87-030-354-01		VIB,CER 450.0KHZ BFUC

FRONT C.B

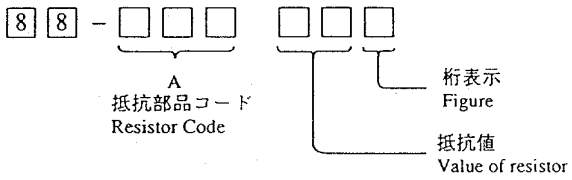
	85-NF5-618-010		CABLE,FFC 13P-1.25
	85-NF5-615-010		CABLE,FFC 15P-1.25
C101	87-010-198-080		C-CAP,S 0.022-25 K B
C102	87-010-198-080		C-CAP,S 0.022-25 K B
C103	87-010-197-080		C-CAP,S 0.01-25 K B
C104	87-010-312-080		C-CAP,S 15P-50 J CH
C105	87-010-316-080		C-CAP,S 33P-50 J CH
C106	87-010-320-080		C-CAP,S 68P-50 J CH
C107	87-012-157-080		C-CAP,S 330P-50 J CH GRM
C108	87-010-498-040		CAP,E 10-16 M 5L SRE
C109	87-010-494-040		CAP,E 1-50 5L SRE
C110	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C111	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C112	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C113	87-A10-189-040		CAP,E 220-10 M
C114	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C115	87-010-178-080		C-CAP,S 1000P-50 K B
C116	87-010-494-040		CAP,E 1-50 5L SRE
C117	87-010-550-040		CAP,E 100-6.3 5L SRE
C118	87-010-194-080		C-CAP,S 0.047-25 Z F
C119	87-010-408-040		CAP,E 47-50 M SME
C120	87-010-404-040		CAP,E 4.7-50 SME
C121	87-010-404-040		CAP,E 4.7-50 SME
C122	87-010-194-080		C-CAP,S 0.047-25 Z F
C123	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C124	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C125	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C127	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C128	87-010-178-080		C-CAP,S 1000P-50 K B
C351	87-012-158-080		C-CAP,S 390P-50 J CH GRM
C352	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C353	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C354	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C355	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C356	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C357	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C403	87-010-596-080		C-CAP,S 0.047-16 K R
C404	87-010-596-080		C-CAP,S 0.047-16 K R
C405	87-010-401-040		CAP,E 1-50 M SME
C406	87-010-401-040		CAP,E 1-50 M SME
C407	87-010-184-080		C-CAP,S 3300P-50 K B
C408	87-010-184-080		C-CAP,S 3300P-50 K B
C409	87-010-592-080		C-CAP,S 0.022-16KR
C410	87-010-592-080		CAP,S 0.022-16KR
C411	87-016-463-080		C-CAP,0.33-16 K B
C412	87-016-463-080		C-CAP,0.33-16 K B
C413	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C414	87-010-374-040		CAP,E 47-10 SME
C415	87-010-374-040		CAP,E 47-10 SME
C416	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C417	87-016-081-080		C-CAP,S 0.1-16 K R
C418	87-010-405-040		CAP,E 10-50 M SME
C501	87-010-319-080		C-CAP,S 56P-50J CH
C502	87-010-319-080		C-CAP,S 56P-50J CH
C503	87-012-393-080		C-CAP,S 0.22-16KW5
C504	87-010-197-080		C-CAP,S 0.01-25K B
C505	87-010-180-080		C-CAP,S 1500P-50KB
C506	87-010-213-080		C-CAP,S 0.015-25KB
C507	87-010-213-080		C-CAP,S 0.015-25KB
C508	87-010-197-080		C-CAP,S 0.01-25KB
C509	87-010-181-080		C-CAP,S 1800P-50KB
C510	87-010-196-080		C-CAP,S 0.1-25 Z F
C511	87-010-196-080		C-CAP,S 0.1-25 Z F
C512	87-010-374-040		CAP,E 47-10 SME
C513	87-010-494-040		CAP,E 1-50 5L SRE
C514	87-010-494-040		CAP,E 1-50 5L SRE
C515	87-010-183-080		C-CAP,S 2700P-50KB
C516	87-010-183-080		C-CAP,S 2700P-50KB
C518	87-010-196-080		C-CAP,S 0.1-25 Z F
C519	87-015-677-040		CAP,E 100-6.3 M 7L
C523	87-012-141-080		CAP,S 0.22-16 Z F
C601	87-010-560-040		CAP,E 10-50 M 5L MA
C602	87-010-186-080		C-CAP,S 4700P-50KB
C603	87-010-498-040		CAP,E 10-16 M 5L
C604	87-010-499-040		CAP,E 22-6.3 M 5L
C605	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C607	87-010-321-080		C-CAP,S 82P-50 J CH
C608	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
C609	87-010-491-040		CAP,E 0.22-50 5L SRE
C611	87-010-177-080		C-CAP,S 820P-50 J SL
C614	87-010-248-040		CAP,E 220-10 M SME
FB601	87-008-372-080		FLTR,EMIBL01 RN1
FL101	87-NF6-610-010		FL,BJ531GK
J601	87-NF7-630-010		JACK,3.5MO
J602	87-NF7-630-010		JACK,3.5MO
L501	87-005-448-080		COIL,220UH K FLR50
LED201	87-A40-317-080		LED,SLR-342VCT31 RED
LED202	87-A40-317-080		LED,SLR-342VCT31 RED
LED203	87-A40-317-080		LED,SLR-342VCT31 RED
LED204	87-A40-317-080		LED,SLR-342VCT31 RED

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
LED205	87-A40-317-080		LED,SLR-342VCT31 RED
LED206	87-A40-316-080		LED,SLR-56PCT31 GRN
LED207	87-A40-316-080		LED,SLR-56PCT31 GRN
LED208	87-A40-316-080		LED,SLR-56PCT31 GRN
LED209	87-A40-316-080		LED,SLR-56PCT31 GRN
LED210	87-A40-316-080		LED,SLR-56PCT31 GRN
LED211	87-A40-316-080		LED,SLR-56PCT31 GRN
LED212	87-A40-316-080		LED,SLR-56PCT31 GRN
LED213	87-A40-316-080		LED,SLR-56PCT31 GRN
LED214	87-A40-316-080		LED,SLR-56PCT31 GRN
LED215	87-A40-316-080		LED,SLR-56PCT31 GRN
LED216	87-A40-264-080		LED,SLH-56PCTE7 GRN
LED217	87-A40-264-080		LED,SLH-56PCTE7 GRN
LED218	87-A40-264-080		LED,SLH-56PCTE7 GRN
LED219	87-A40-264-080		LED,SLH-56PCTE7 GRN
LED220	87-A40-264-080		LED,SLH-56PCTE7 GRN
LED221	87-A40-264-080		LED,SLH-56PCTE7 GRN
LED233	87-A40-265-010		LED,SLH-56PCL GRN
LED234	87-A40-265-010		LED,SLH-56PCL GRN
LED235	87-A40-267-010		LED,SLH-56VCL RED
LED236	87-A40-267-010		LED,SLH-56VCL RED
LED237	87-A40-265-010		LED,SLH-56PCL GRN
LED238	87-A40-265-010		LED,SLH-56PCL GRN
S301	87-A90-164-080		SW,TACT SKQNAB(N)
S302	87-A90-164-080		SW,TACT SKQNAB(N)
S303	87-A90-164-080		SW,TACT SKQNAB(N)
S304	87-A90-164-080		SW,TACT SKQNAB(N)
S305	87-A90-164-080		SW,TACT SKQNAB(N)
S306	87-A90-164-080		SW,TACT SKQNAB(N)
S307	87-A90-164-080		SW,TACT SKQNAB(N)
S308	87-A90-164-080		SW,TACT SKQNAB(N)
S314	87-A90-164-080		SW,TACT SKQNAB(N)
S315	87-A90-164-080		SW,TACT SKQNAB(N)
S316	87-A90-164-080		SW,TACT SKQNAB(N)
S317	87-A90-164-080		SW,TACT SKQNAB(N)
S318	87-A90-164-080		SW,TACT SKQNAB(N)
S319	87-A90-164-080		SW,TACT SKQNAB(N)
S320	87-A90-164-080		SW,TACT SKQNAB(N)
S323	87-A90-164-080		SW,TACT SKQNAB(N)
S324	87-A90-164-080		SW,TACT SKQNAB(N)
S325	87-A90-164-080		SW,TACT SKQNAB(N)
S326	87-A90-164-080		SW,TACT SKQNAB(N)
S327	87-A90-164-080		SW,TACT SKQNAB(N)
S328	87-A90-164-080		SW,TACT SKQNAB(N)
S331	87-A90-164-080		SW,TACT SKQNAB(N)
S332	87-A90-164-080		SW,TACT SKQNAB(N)
S333	87-A90-164-080		SW,TACT SKQNAB(N)
S334	87-A90-164-080		SW,TACT SKQNAB(N)
S335	87-A90-164-080		SW,TACT SKQNAB(N)
S336	87-A90-164-080		SW,TACT SKQNAB(N)
S337	87-A90-164-080		SW,TACT SKQNAB(N)
S338	87-A90-164-080		SW,TACT SKQNAB(N)
S342	87-A90-164-080		SW,TACT SKQNAB(N)

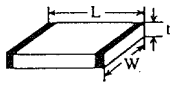
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
SW101	87-A90-535-010		SW,RTRY EC16B24304
X101	87-A70-070-080		VIB,CER 5.76MHZ CRHF
W001	85-NF5-628-010		F-CABLE,7P-2.5
KEY C.B			
S365	87-A90-164-080		SW,TACT SKQNAB(N)
S366	87-A90-164-080		SW,TACT SKQNAB(N)
S367	87-A90-164-080		SW,TACT SKQNAB(N)
S368	87-A90-164-080		SW,TACT SKQNAB(N)
S369	87-A90-164-080		SW,TACT SKQNAB(N)
AC1 C.B			
⚠ FC001	87-033-147-010		FUSE CLAMP,MT-20
⚠ FC002	87-033-147-010		FUSE CLAMP,MT-20
⚠ F101	87-035-369-010		FUSE,5 A 250V T
⚠ PT101	87-NF6-623-010		PT,7NF-6 HR
⚠ SW001	87-A90-165-010		SW,SL 1-2-3 SWS2301
⚠ T001	87-A60-317-010		TERMINAL, 1P MSC
⚠ T002	87-A60-317-010		TERMINAL, 1P MSC
AC2 C.B			
⚠ PR001	87-026-682-080		PROTECTOR,10A 491SERIES
⚠ PR002	87-026-682-080		PROTECTOR,10A 491SERIES
⚠ PR005	87-026-682-080		PROTECTOR,10A 491SERIES
⚠ PR006	87-026-682-080		PROTECTOR,10A 491SERIES
DECK C.B			
CON502	87-099-756-010		CONN,15P 9604 S F
SFR1	87-024-581-089		SFR,3.3K DIA 6H
SOL1	82-ZM1-618-010		SOL ASSY, 27
SOL2	82-ZM1-618-010		SOL ASSY, 27
SW1	87-A90-248-010		SW, MICRO ESE11SH2CXQ
SW2	87-A90-248-010		SW, MICRO ESE11SH2CXQ
SW3	87-A90-248-010		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-A90-248-010		SW, MICRO ESE11SH2CXQ
SW9	87-036-110-010		SW, MICRO SPPB62
W1	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

○ 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	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

E C B

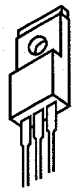
KTA1266GR
KTC3198GR

E C B

CSD1489B
CSB1058B

E C B

2SA933S

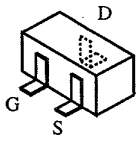


G D S

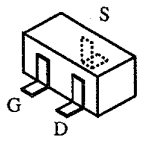
2SK2723

B C E

2SB1370
FN1016
FP1016



2SK2158



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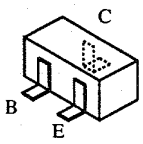


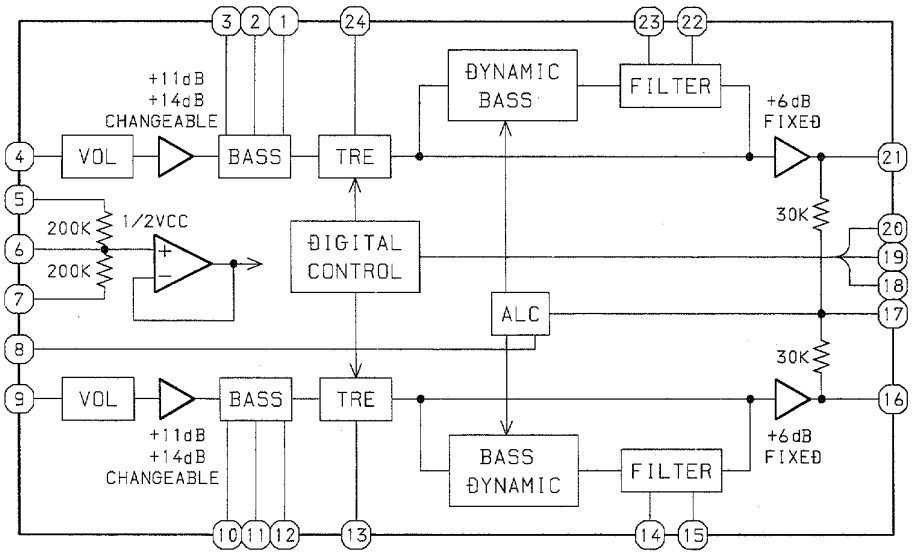
2SC2714
RN1410
2SC3052F
2SA1235F
RT1N141C
RT1P141C
CSA1362GR
RT1N144C
CSD1306E
CMBT5551
RT1P144C

E B C

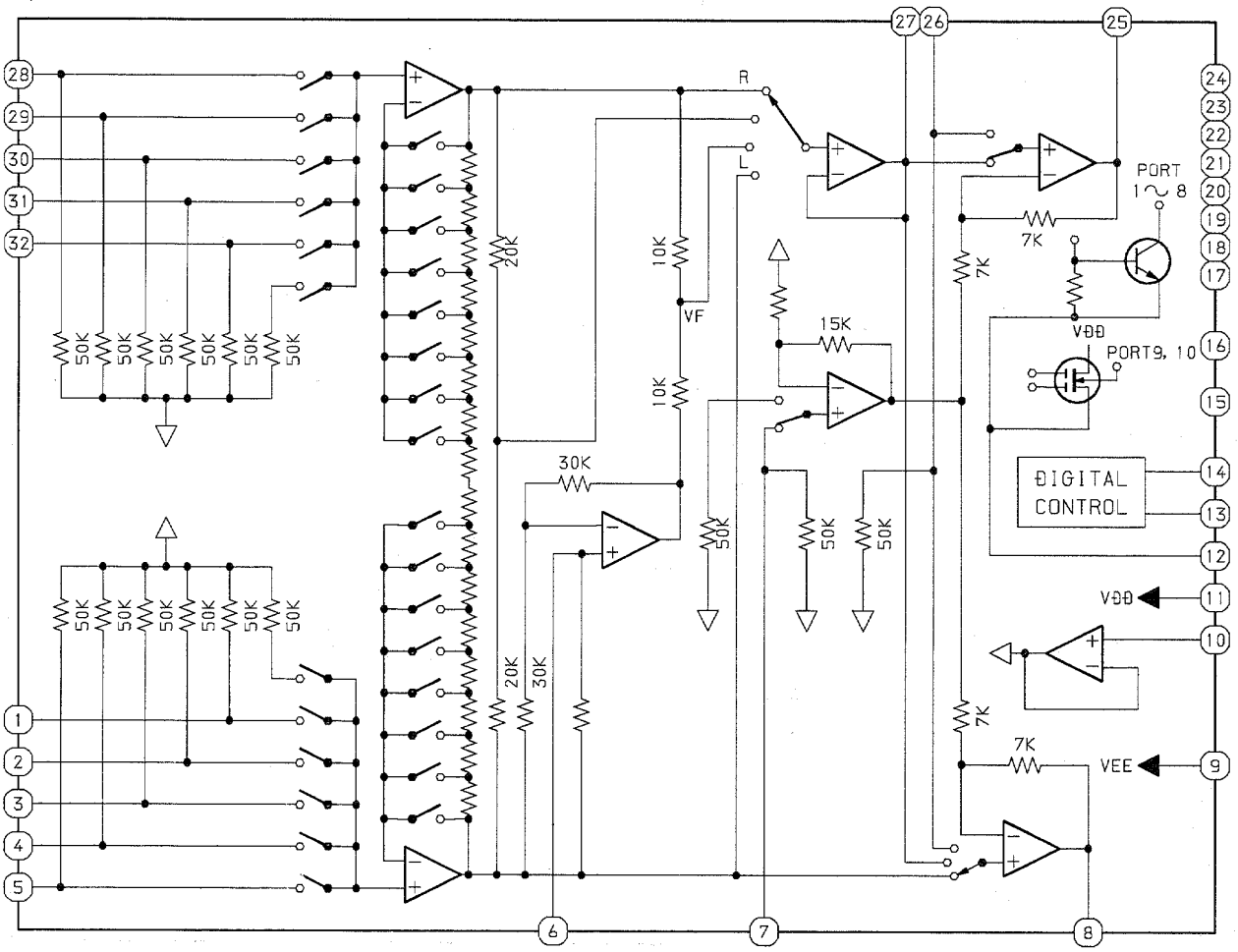
C2N5401

IC BLOCK DIAGRAM – 1

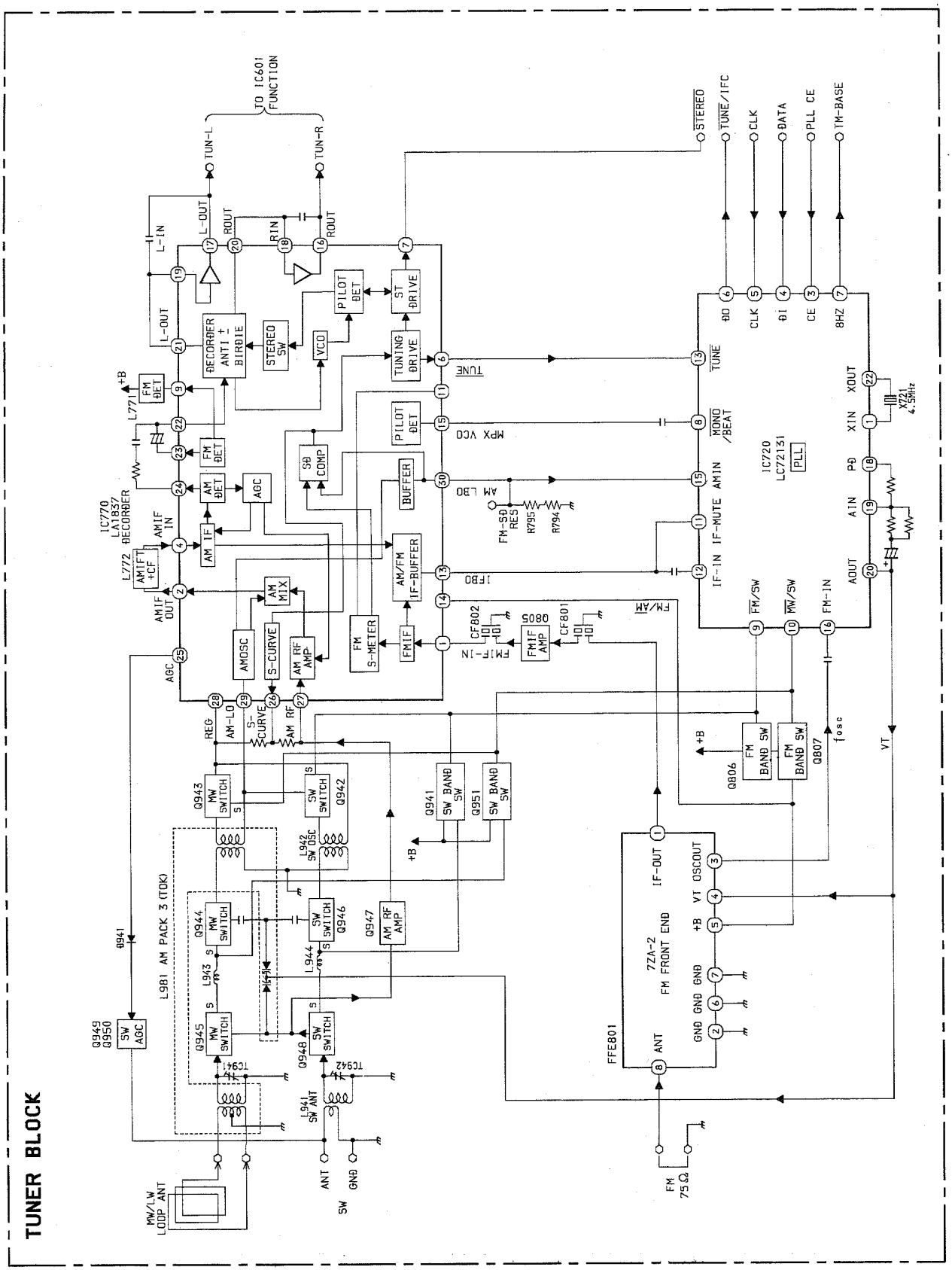
IC, BH3864F



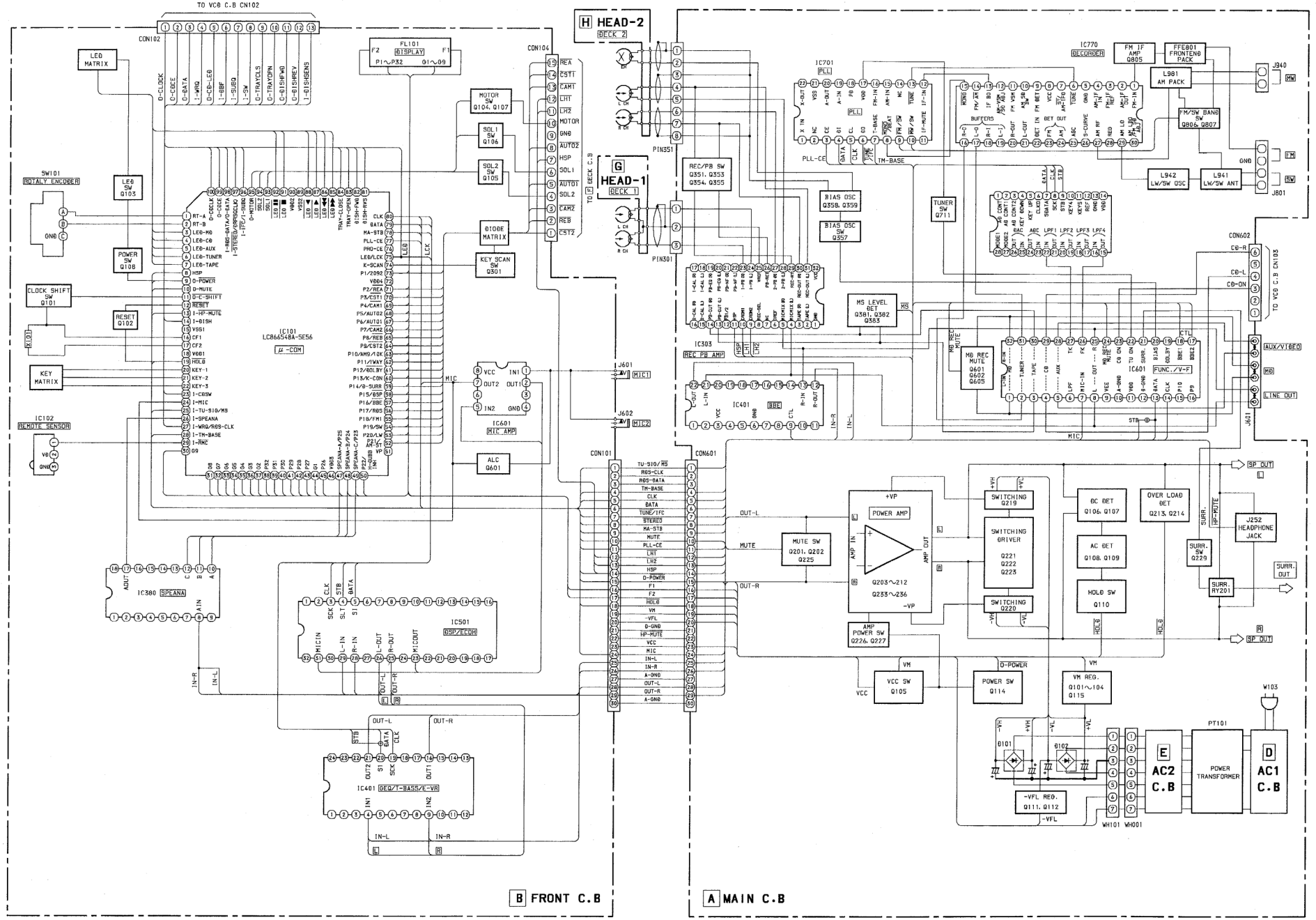
IC, BH3810FS



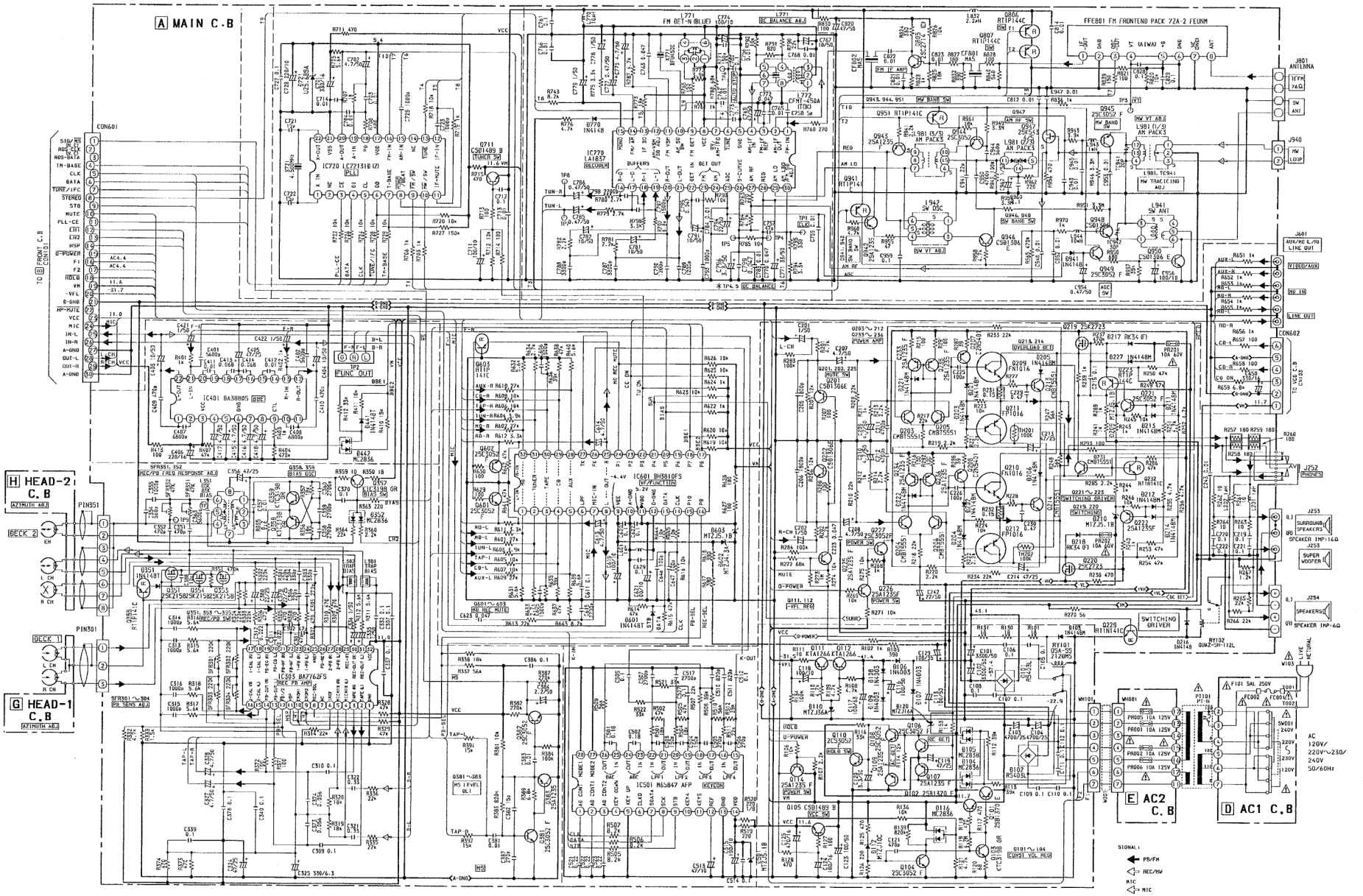
BLOCK DIAGRAM – 1 (TUNER)



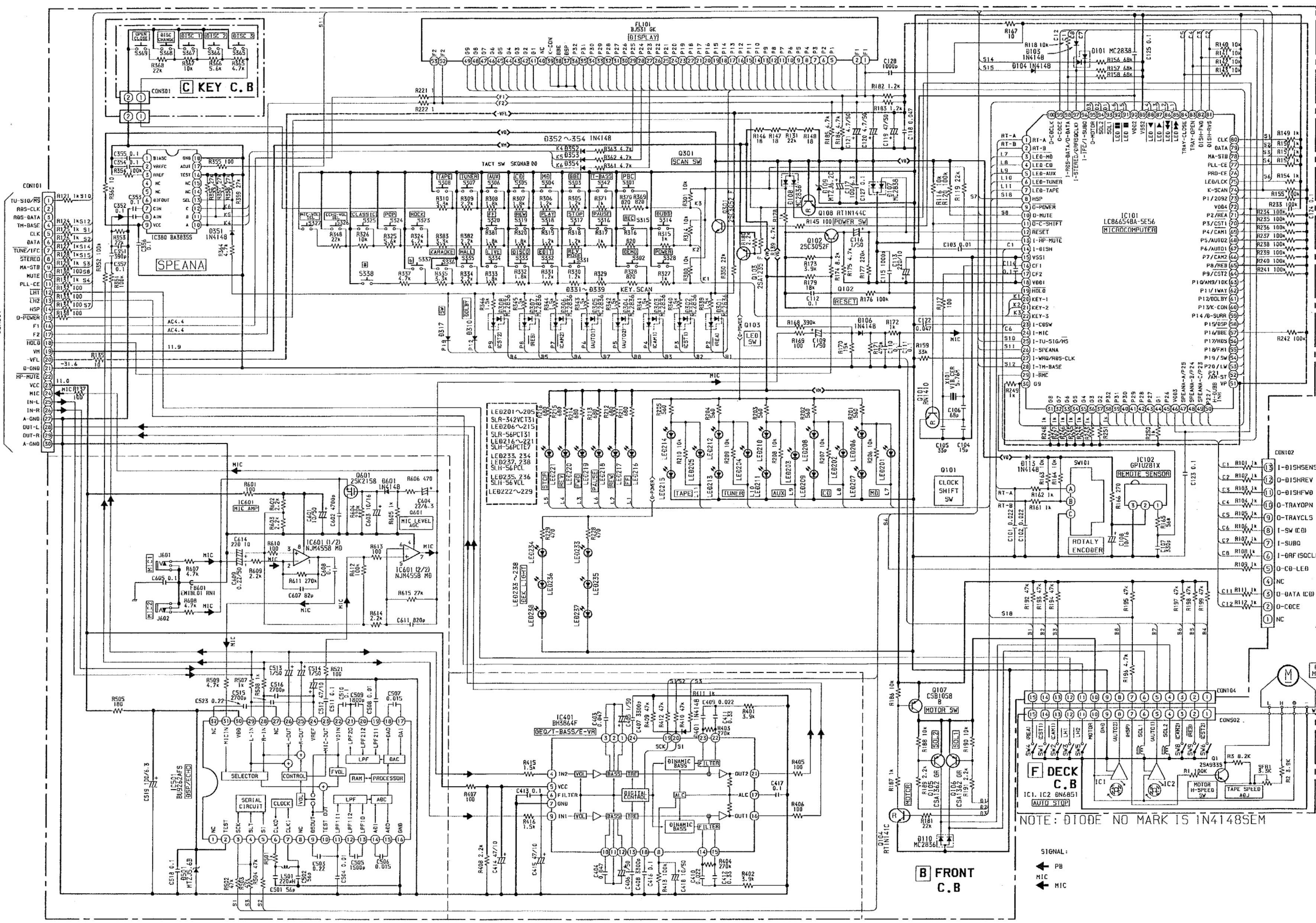
BLOCK DIAGRAM – 2 (MAIN / FRONT)

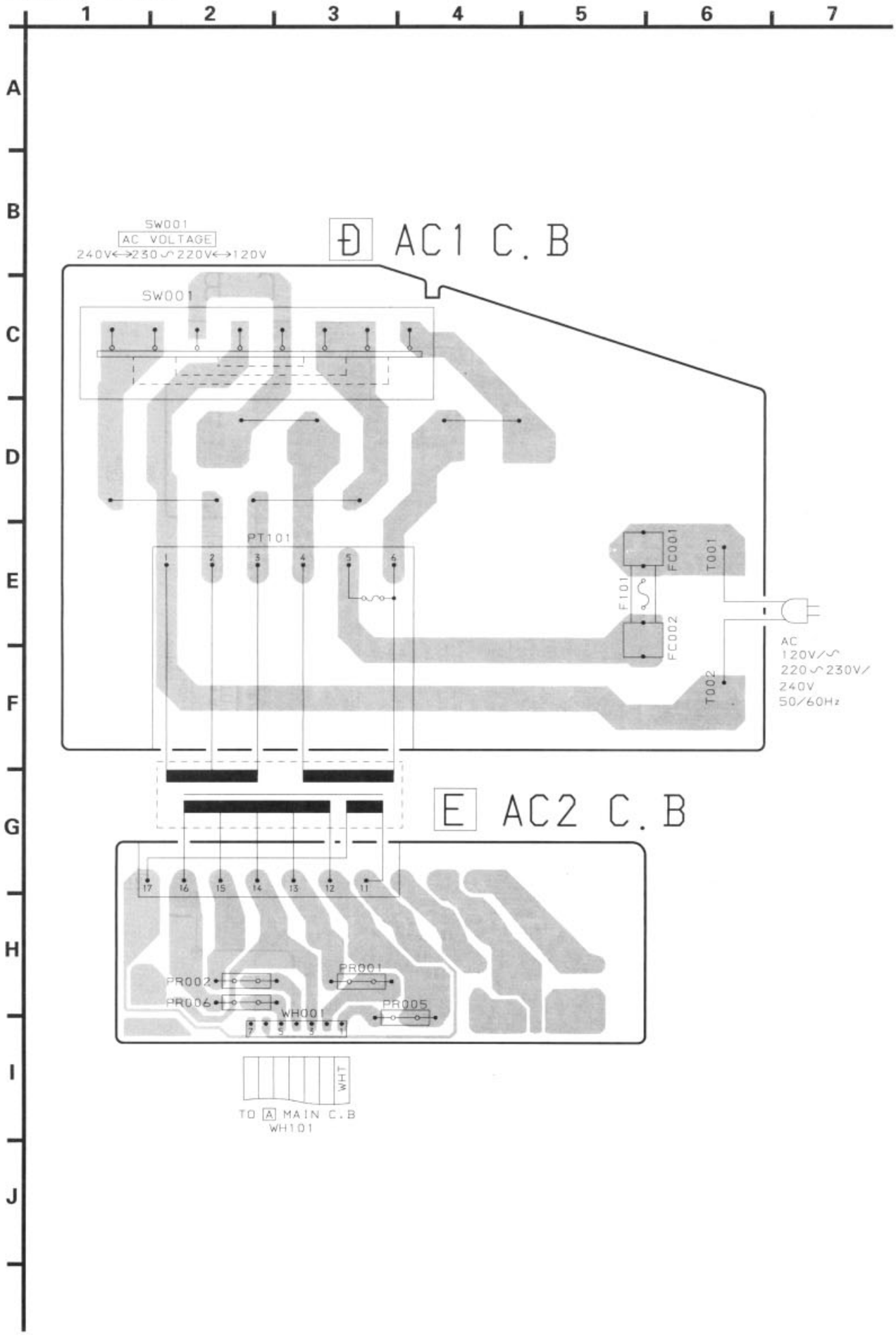


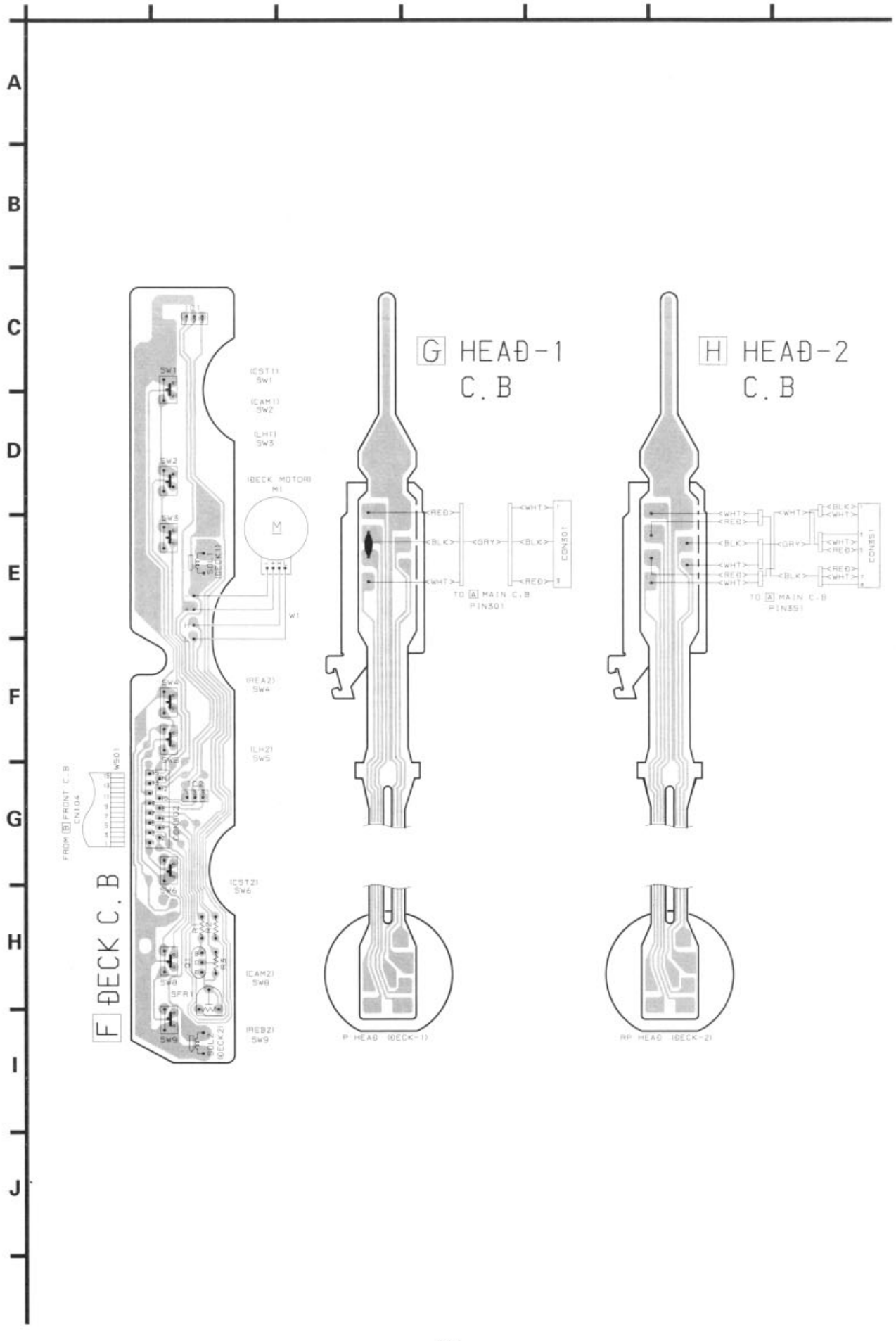
SCHEMATIC DIAGRAM – 1 (MAIN)



SCHEMATIC DIAGRAM – 2 (FRONT)

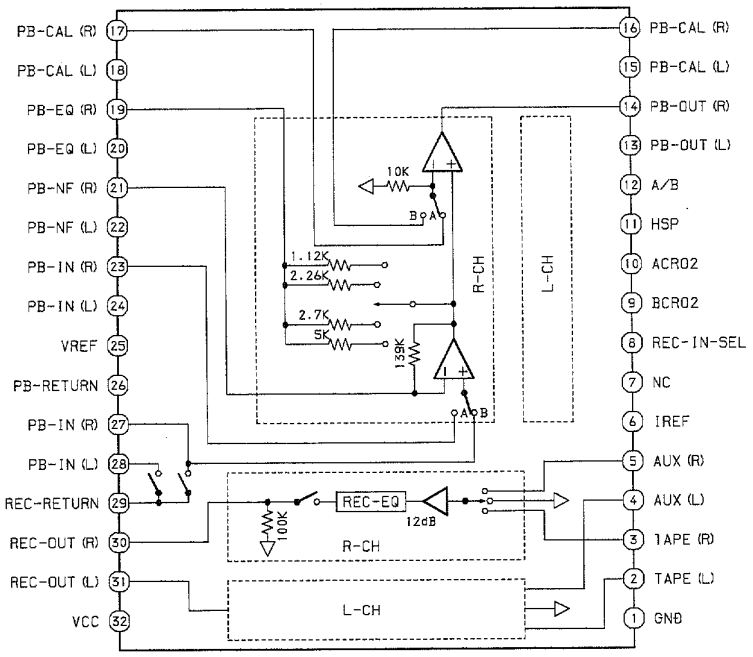



1
2
3
4
5
6
7
A
B
C
D
E
F
G
H
I
J
SW001
AC VOLTAGE
240V↔230∽220V↔120V
Ð AC1 C.B
SW001
PT101
1
2
3
4
5
6
FC001
T001
F101
FC002
T002
AC
120V/∽
220∽230V/
240V
50/60Hz
E AC2 C.B
17
16
15
14
13
12
11
PR002
PR001
PR006
PR005
WH001
7
6
5
4
3
2
1
WHT
TO A MAIN C.B
WH101

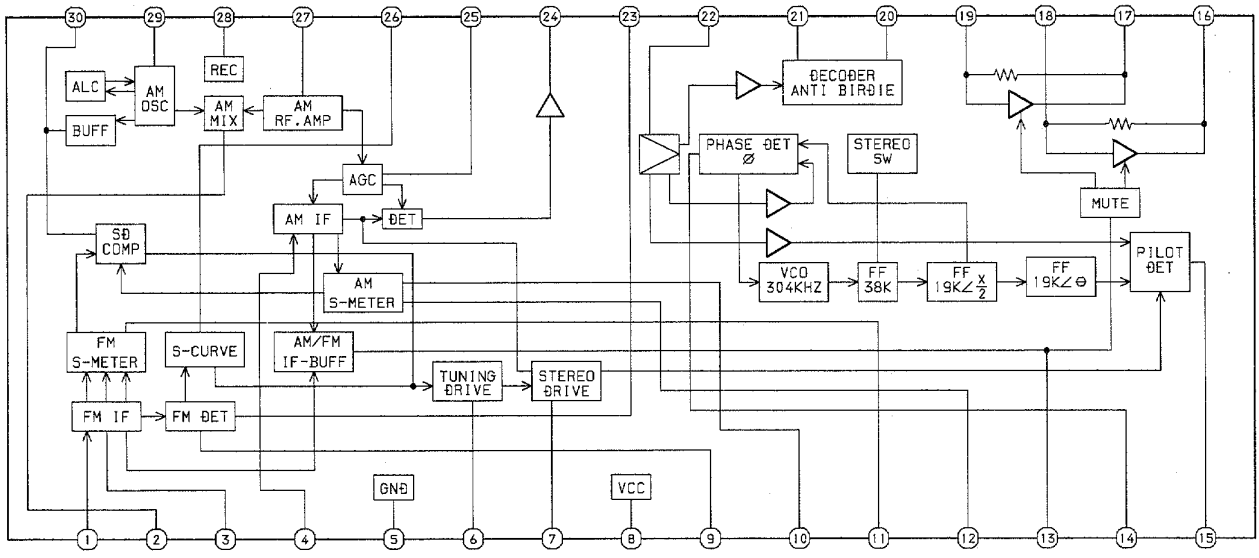

F DECK C.B
G HEAD-1 C.B
H HEAD-2 C.B
TO A MAIN C.B PIN301
TO A MAIN C.B PIN351
P HEAD (DECK-1)
RP HEAD (DECK-2)

IC BLOCK DIAGRAM – 2

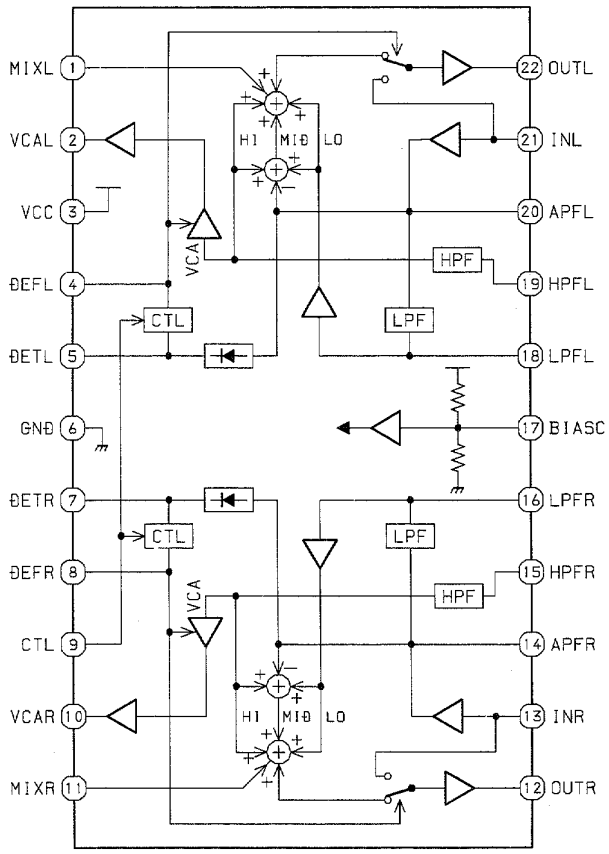
IC, BA7762FS



IC, LA1837



IC, BA3880S



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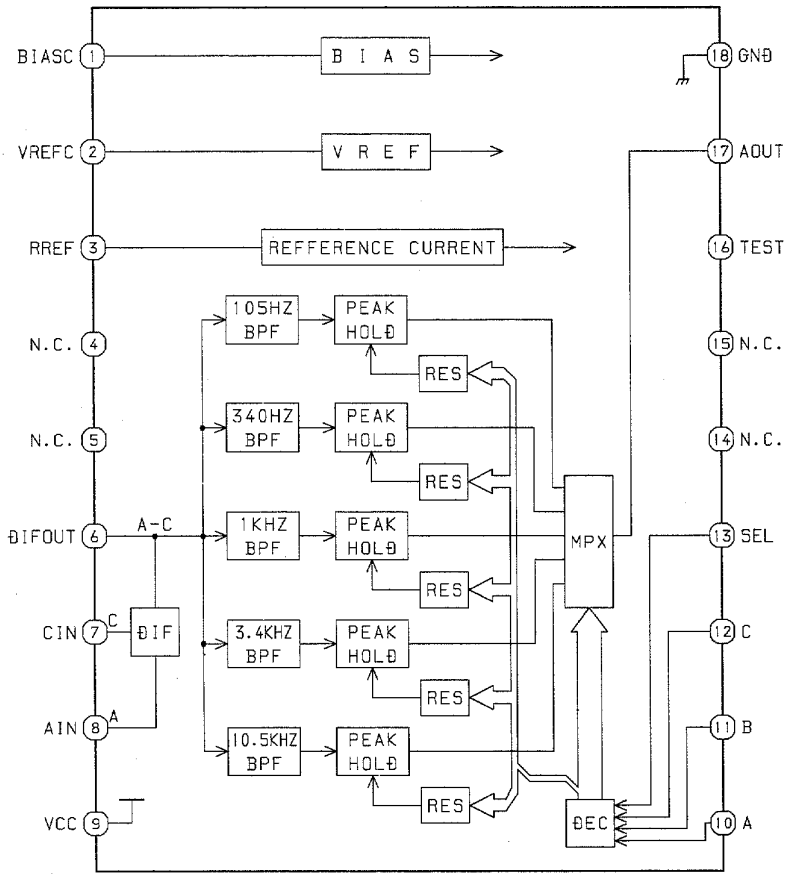

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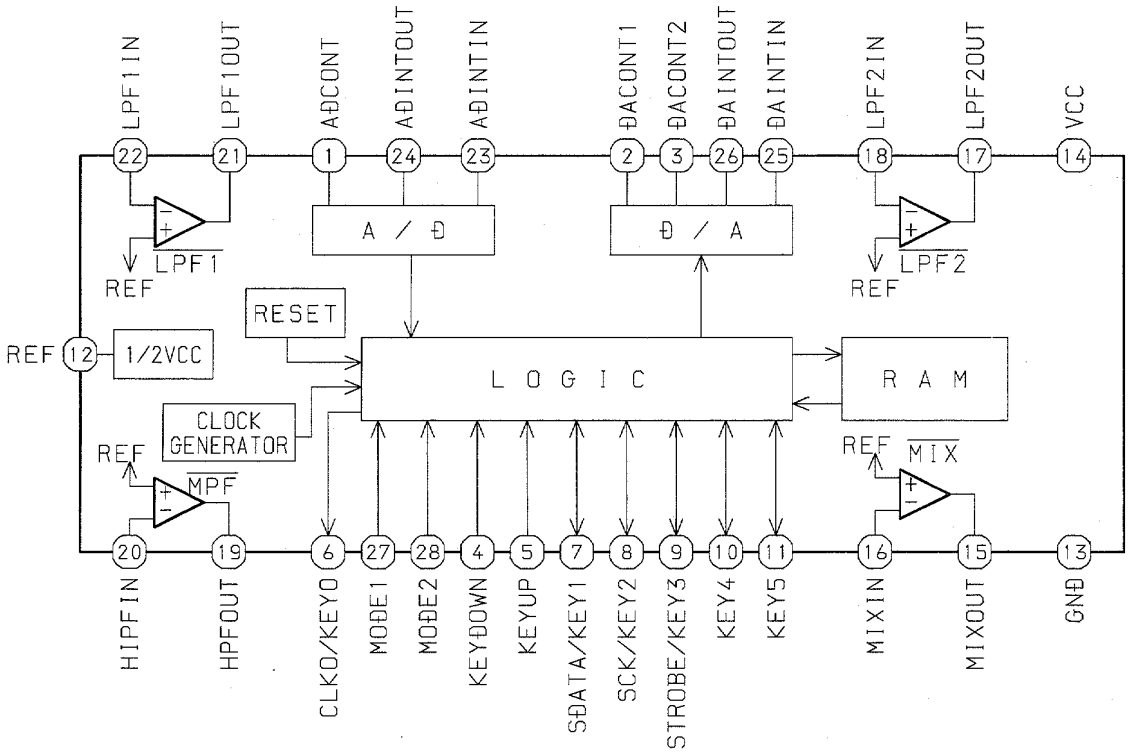
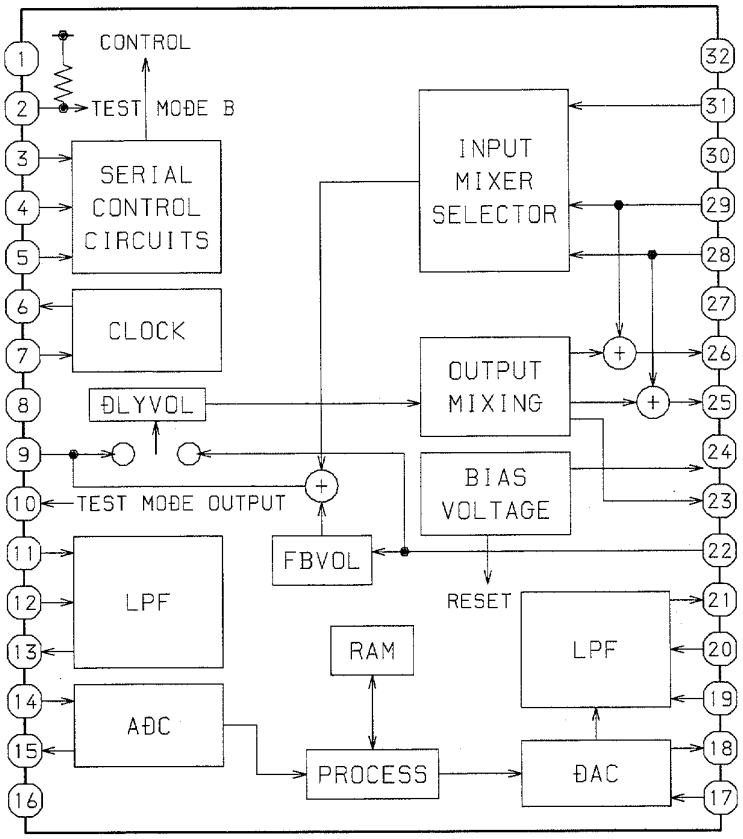
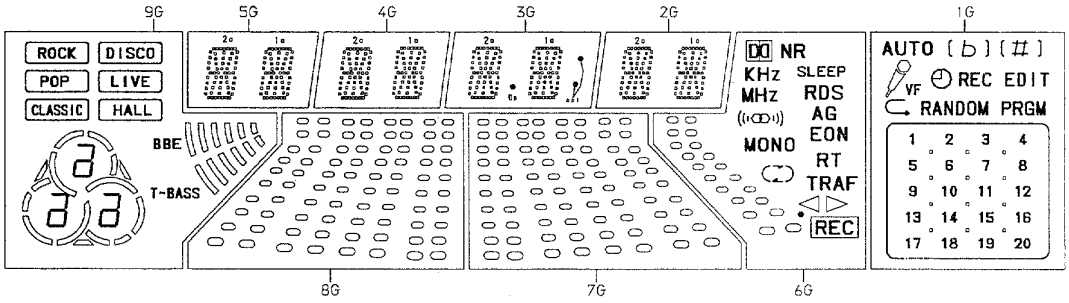


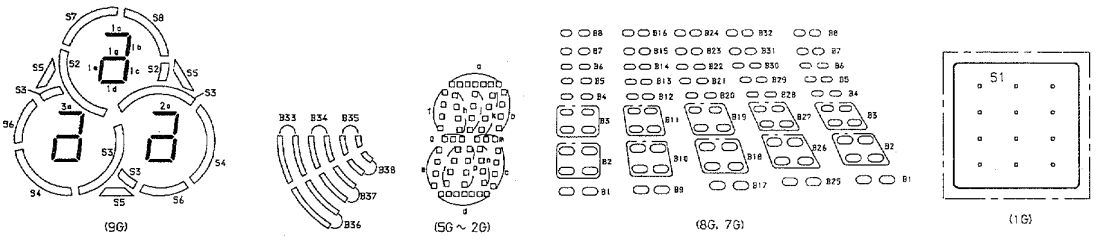
IC, BU9262AFS



FL GRID ASSIGNMENT & ANODE CONNECTION

GRID ASSIGNMENT





ANODE CONNECTION

	9G	8G, 7G	6G	5G, 4G	3G	2G	1G
P1	S8	B32	▷	-	col(F)	-	RANDOM
P2	S2	B24	◁	1d	1d	1d	-
P3	1b	B16	SLEEP	1n	1n	1n	PRGM
P4	1c	B8	B8	1p	1p	1p	EDIT
P5	1e	B31	○	1r	1r	1r	1
P6	1a, 1d, 1g	B23	REC	1e	1e	1e	2
P7	2b	B15	KHz	1c	1c	1c	3
P8	2c	B7	B7	1g	1g	1g	4
P9	2e	B30	MHz	1m	1m	1m	5
P10	2a, 2d, 2g	B22	-	1f	1f	1f	6
P11	3b	B14	DD NR	1b	1b	1b	7
P12	3c	B6	B6	1k	1k	1k	8
P13	3e	B29	RDS	1j	1j	1j	9
P14	3a, 3d, 3g	B21	-	1h	1h	1h	10
P15	S3	B13	-	1a	1a	1a	11
P16	S5	B5	B5	-	col(E)	-	12
P17	S7	B28	-	-	Dp	-	13
P18	S4	B20	-	2d	2d	2d	14
P19	S6	B12	-	2n	2n	2n	15
P20	(HALL)	B4	B4	2p	2p	2p	16
P21	(LIVE)	B27	AG	2r	2r	2r	17
P22	(DISCO)	B19	((●))	2e	2e	2e	18
P23	(CLASSIC)	B11	EON	2c	2c	2c	19
P24	(POP)	B3	B3	2g	2g	2g	20
P25	(ROCK)	B26	RT	2m	2m	2m	AUTO
P26	B36	B18	MONO	2f	2f	2f	VF
P27	B37	B10	TRAF	2b	2b	2b	◷
P28	B38	B2	B2	2k	2k	2k	REC
P29	B33	B25	)	2j	2j	2j	⊂→
P30	B34	B17	▼	2h	2h	2h	(#)
P31	B35	B9	(	2a	2a	2a	(♭)
P32	S9 T-BASS	B1	B1	-	-	-	S1
P33	S10	-	-	-	-	-	-
P34	BBE	-	-	-	-	-	-
P35	-	-	-	-	-	-	♭ #

BJ531GK
ANODE CONNECTION

IC DESCRIPTION

IC, LC866548A-5E56

Pin No.	Pin Name	I/O	Description
1	RT-A	I	Rotary encoder A input.
2	RT-B	I	Rotary encoder B input.
3	$\overline{\text{LED-MD}}$	O	"MD" LED $\overline{\text{ON}}$/OFF output.
4	$\overline{\text{LED-CD}}$	O	"CD " LED $\overline{\text{ON}}$/OFF output.
5	$\overline{\text{LED-AUX}}$	O	"AUX" LED $\overline{\text{ON}}$/OFF output.
6	$\overline{\text{LED-TUNER}}$	O	"TUNER" LED $\overline{\text{ON}}$/OFF output.
7	$\overline{\text{LED-TAPE}}$	O	"TAPE" LED $\overline{\text{ON}}$/OFF output.
8	HSP	O	Tape deck motor high speed ON/$\overline{\text{OFF}}$ output.
9	$\overline{\text{O-POWER}}$	O	System power supply $\overline{\text{ON}}$/OFF output.
10	O-MUTE	O	System mute ON/$\overline{\text{OFF}}$ output.
11	$\overline{\text{O-CLK-SHIFT}}$	O	U-COM clock shift output.
12	$\overline{\text{RESET}}$	I	Reset input.
13	$\overline{\text{I-HP-MUTE}}$	–	Not connected.
14	I-DISH	I	CD turntable photo sensor A/D converter input.
15	VSS 1	–	GND.
16	CF 1	–	5.76MHz oscillator circuit.
17	CF 2	–	
18	VDD 1	–	Power supply input.
19	$\overline{\text{HOLD}}$	I	Power failure detected input "1" to stop clock and main memory.
20	KEY-1	I	KEY input.(A/D)
21	KEY-2	I	
22	KEY-3	I	
23	I-CD SW	I	CD mechanical switch A/D converter input.
24	I-MIC	I	Microphone input for AUTO VF display.
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.
30~37	G9~G2	O	FL GRID output G2~G9.
38~43	P32~P27	O	FL SEGMENT output P27~P32.
44	G1	O	FL grid output G1.
45	P26	–	FL SEGMENT output P26.
46	VDD3	–	Power supply input.
47	SPEANA-A/P25	O	Spectrum analyzer band switching output /FL segment P25 output.
48	SPEANA-B/P24	O	Spectrum analyzer band switching output /FL segment P24 output.
49	SPEANA-C/P23	O	Spectrum analyzer band switching output /FL segment P23 output.
50	P22/H-DUBB INH	I /O	FL segment P22 output / high dubbing inhibit input to diode.
51	VP	–	Power supply input for FL display.
52	P21/AM-ST	I /O	FL segment P21 output / AM stereo input to diode.
53	P20/LW	I/O	FL segment P20 output / LW mode data input to diode.
54	P19/SW	I/O	FL segment P19 output / SW mode data input to diode.

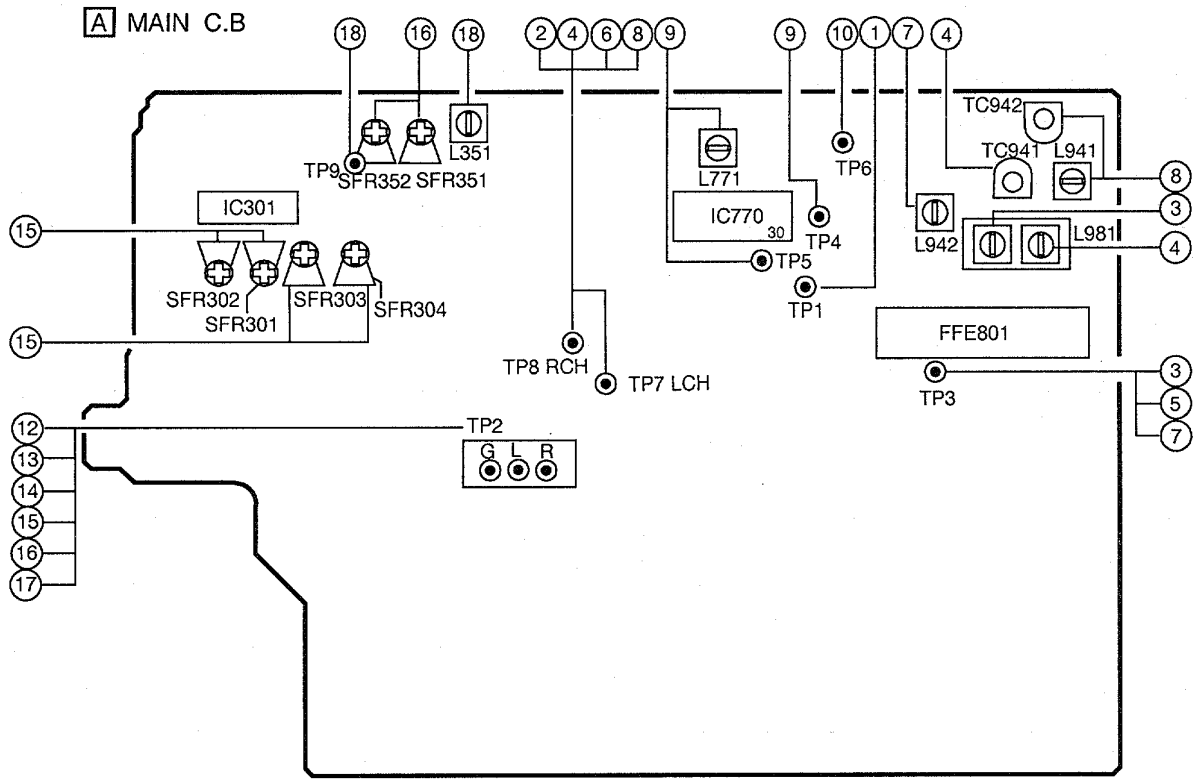
Pin No.	Pin Name	I/O	Description
55	P18/FM 1	I/O	FL segment P18 output / FM1 (OIRT) data input to diode.
56	P17/RDS	I/O	FL segment P17 output / RDS data input to diode.
57	P16/$\overline{\text{BBE}}$	I/O	FL segment P16 output / BBE data input to diode.
58	P15/$\overline{\text{DSP}}$	I/O	FL segment P15 output / DSP data input to diode.
59	P14/D-SURR	I/O	FL segment P14 output / DOLBY-SURR data input to diode.
60	P13/K-CON	I/O	FL segment P13 output / K-CON data input to diode.
61	P12/$\overline{\text{DOLBY}}$	I/O	FL segment P12 output / DOLBY data input to diode.
62	P11/WAY	I/O	FL segment P11 output / DECK/WAY MECHA data input to diode.
63	P10/AM-9K/10K	I/O	FL segment P10 output / INITIAL AM 10 kHz step data input to diode.
64	P9/$\overline{\text{CST 2}}$	I/O	FL segment P9 output / DECK2 cassette detect switch data input.
65	P8/$\overline{\text{REB}}$	I/O	FL segment P8 output / DECK2 side-B record OK switch data input.
66	P7/$\overline{\text{CAM 2}}$	I/O	FL segment P7 output / DECK2 CAM switch data input.
67	P6/AUTO 1	I/O	FL segment P6 output / DECK1 AUTO stop signal input.
68	P5/AUTO 2	I/O	FL segment P5 output / DECK2 AUTO stop signal input.
69	P4/$\overline{\text{CAM 1}}$	I/O	FL segment P4 output / DECK1 CAM switch data input.
70	P3/$\overline{\text{CST 1}}$	I/O	FL segment P3 output / DECK1 cassette detect switch data input.
71	P2/$\overline{\text{REA}}$	I/O	FL segment P2 output / DECK2 side A record OK switch data input.
72	VDD 4	–	Power supply input.
73	P1/2092	I/O	FL segment P1 output / SHIFT resistor IC 2092 data input to diode.
74	K-SCAN	O	Switch SCAN timing output.
75	LED/LCK	O	Latch clock output for front shift resistor.
76	PRO-CE	O	PRO LOGIC IC chip enable output.(Not used.)
77	PLL-CE	O	PLL IC chip enable output.
78	MA-STB	O	Latch strobe output for Main C.B.
79	DATA	O	DATA output for Main, Front C.B.
80	CLK	O	CLOCK output for Main,Front C.B.
81	DISH-RVS	O	CD turntable reverse rotation output.
82	DISH-FWD	O	CD turntable forward rotation output.
83	TRAY-OPEN	O	CD TRAY OPEN data output.
84	TRAY-CLOSE	O	CD TRAY CLOSE data output.
85	$\overline{\text{LED ▶▶}}$	O	▶▶ LED $\overline{\text{ON/OFF}}$ output.
86	$\overline{\text{LED ◀◀}}$	O	◀◀ LED $\overline{\text{ON/OFF}}$ output.
87	$\overline{\text{LED ▶}}$	O	▶ LED $\overline{\text{ON/OFF}}$ output.
88	$\overline{\text{LED ◀}}$	O	◀ LED $\overline{\text{ON/OFF}}$ output.
89	VSS 2	–	GND.
90	VDD 2	–	Power supply input.
91	$\overline{\text{LED ■}}$	O	■ LED $\overline{\text{ON/OFF}}$ output.
92	$\overline{\text{LED II}}$	O	II LED $\overline{\text{ON/OFF}}$ 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-$\overline{\text{IFC}}$/I-SUB Q	I	Tune IF count serial data input /CD SUB Q data input.

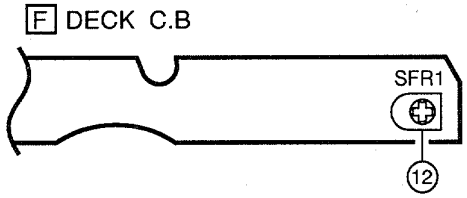
Pin No.	Pin Name	I/O	Description
97	I-$\overline{\text{STEREO}}$/O-SQCLK	I/O	Tuner stereo detected input/CD SQ CLOCK output.
98	I-RDS-DATA/O-DATA	I/O	RDS data input/CD data output.
99	O-CDCE	O	CD CE output.
100	O-CDCLK	O	CD CLOCK output.

IC, LC72131

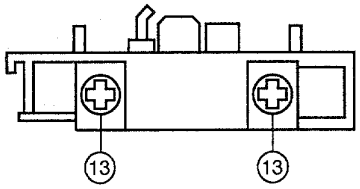
Pin No.	Pin Name	I/O	Description
1	XIN	I/O	A crystal oscillator (7.2MHz) is connected between these pins.
22	XOUT		
2	NC	–	Not used.
3	CE	I	To enable the IC. Active "H".
4	DI	I	Digital data input from CPU (LC866548A-5E56) when relevant key is operated. Active "H".
5	CL	I	To clock in the data DI.
6	DO	O	Digital data output to CPU (LC866548A-5E56).
7	T-BASE	O	Outputs a reference clock signal (8Hz) for the clock.
8	$\overline{\text{MONO}}$ / BEAT	O	Outputs "H" when MONO / BEAT is switched.
9	$\overline{\text{FM}}$ /SW	O	Output "L" or "H" as follows: 2 BAND: AM H, FM L 3 BAND: LW H, MW H, FM L 3 BAND: MW H, SW L, FM L
10	$\overline{\text{MW}}$/SW	O	Outputs "L" or "H" as follows: 2 BAND: AM L, FM L 3 BAND: LW H, MW L, FM L 3 BAND: MW L, SW H, FM L
11	IF-MUTE	O	To control internal counter.
12	IF-IN	I	General purpose counter input.
13	$\overline{\text{TUNE}}$	I	Receives "L" when station is tuned.
14	NC	–	Not used.
15	AM-IN	I	Receives the AM local oscillator frequency signal.
16	FM-IN	I	Receives the FM local oscillator frequency signal.
17	VDD	–	Supply power to IC (+5V).
18	PD	O	PLL charge pump output.
19	A-IN	I	The MOS transistor for PLL active low pass filter.
20	A-OUT	O	
21	VSS	–	Ground.

ADJUSTMENT <TUNER / DECK>





DECK–1 P, DECK–2 R / P / E HEAD



< TUNER SECTION >

1. Clock Check
   Settings : • Test point : TP1
   Method : Set to MW 1710kHz and check that the test point is 2160kHz ± 0.045kHz.

2. FM Seperation Check
   Settings : • Test point : TP7,TP8
   • Input Level : 54dB
   Method : Set to FM 98.0MHz and check that the test point is more than 25 dB

3. MW VT Adjustment
   Settings : • Test point : TP3 (VT)
   • Adjustment location : L981
   Method : Set to MW 1710kHz and adjust L981 so that the test point becomes 8.5V ± 0.05V. Then set to MW 530kHz and check that the test point is more than 0.3V.

4. MW Tracking Adjustment
   Settings : • Test point : TP7, TP8
   • Adjustment location :
   L981 ..... 600kHz
   TC941 ..... 1400kHz
   Method : Set up TC941 to center before adjustment. The level at 600 kHz is adjusted to MAX by L981. Then the level at 1400 kHz is adjusted to MAX by TC941.

5. FM VT Check
   Settings : • Test point : TP3 (VT)
   Method : Set to FM 108.0MHz and check that the test point is less than 8.5V.
   Set to FM 87.5MHz and check that the test point is more than 1.5V.

6. FM Tracking Check
   Settings : • Test point : TP7, TP8
   Method : • Set to FM 98.0MHz and check that the test point is 2 ± 6dB.

7. SW VT Adjustment
   Settings : • Test point : TP3 (VT)
   • Adjustment location : L942
   Method : Set to SW 17.9MHz and adjust L942 so that the test point becomes 7.0V ± 0.05V.

8. SW Tracking Adjustment (HR)
   Settings : • Test point : TP7, TP8
   • Adjustment location :
   L941 ..... 5.9MHz
   TC942 ..... 17.9MHz
   Method : Set up TC942 to center before adjustment. The level at 5.9MHz is adjust to MAX by L941. Then the level at 17.9MHz is adjust to MAX by TC942.

9. DC Balance / Mono Distortion Adjustment
   Settings : • Test point : TP4, TP5
   • Adjustment location : L771
   • Input level : 54dB
   Method : Set to FM 98.0MHz and adjust L771 so that the voltage between TP4 and TP5 becomes 0V ± 0.04V. Next, check that the distortion is less than 1.3% .

10. Auto Stop Level Check
    Settings : • Test point : TP6
    • Input level : adjustable
    Method : Set to FM 98.0 MHz and check that the voltage low about 0.1V. After that voltage high about 7.0V out by 2dB down.

11. Auto Stop Level Check
    MW
    Settings : • Input level : adjustable
    Method : Check auto stop at MW 999kHz and the level is 35 ~ 60 dB.

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

    SW
    Settings : • Input level : adjustable
    Method : Check auto stop at FM 12MHz and the level is less than 60 dB.

< DECK SECTION >

12. Tape Speed Adjustment
    Settings : • Test tape : TTA–100
    • Test point : TP2
    • Adjustment location : SFR1
    Method : Play back the test tape and adjust SFR1 so that the frequency counter reads 3000Hz ± 5Hz.

13. Head Azimuth Adjustment
    Settings : • Test tape : TTA–300
    • Test point : TP2
    • Adjustment location : Head azimuth adjustment screw
    Method : Play back the 10kHz signal of the test tape and adjust screw so that the output becomes maximum. Next, perform on each FWD PLAY and REV PLAY mode.

14. PB Frequency Response Check (DECK 1, DECK 2)
    Settings : • Test tape : TTA–300
    • Test point : TP2
    Method : Play back the 315Hz and 10kHz signals of the test tape and check that the output ratio of the 10kHz signal with respect to that of the 315Hz signal is within 2dB.

15. PB Sensitivity Adjustment (DECK 1, DECK 2)
    Settings : • Test tape : TTA–200
    • Test point : TP2
    • Adjustment location :
    SFR301 (DECK 1, Lch)
    SFR302 (DECK 1, Rch)
    SFR303 (DECK 2, Lch)
    SFR304 (DECK 2, Rch)
    Method : Play back the test tape and adjust SFRs so that the output level of the test point becomes 330mV[Deck1], 300 mV[Deck 2].

16. REC/PB Frequency Response Adjustment
    Settings : • Test tape : TTA–602
    • Test point : TP2
    • 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 TP2 becomes 210mV. 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.

17. REC/PB Sensitivity Check
    Settings : • Test tape : TTA–602
    • Test point : TP2
    • Input signal : 1kHz (LINE IN)
    Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP2 becomes 21mV. Record and play back the 1kHz signals and check that the output is 17mV ± 3dB.

18. Bias OSC Frequency Adjustment
    Settings : • Test point : TP9
    • Adjustment location : L351
    Method : Set to the REC mode. Adjust L351 so that the frequency counter of the test point is 85kHz ± 1kHz.

PRACTICAL SERVICE FIGURE

<TUNER SECTION>

<FM SECTION>

IHF Sensitivity :	4dB ± 6dB
(THD 3%)	[at 87.5 / 98.0MHz/ 108.0MHz]
S/N 50dB Quieting sensitivity :	
	STEREO :
	30dB ± 6dB
	[at 87.5 / 98.0 / 108.0MHz]
Signal to noise ratio :	MONO :
	More than 65dB
	[at 98.0MHz]
	STEREO :
	More than 64dB
	[at 83.0MHz]
Distortion :	STEREO :
	Less than 2%
	[at 98.0MHz]
	STEREO :
	Less than 1.3%
	[at 98.0MHz]
Stereo separation :	More than 25dB
	[at 98.0MHz]
Intermediate frequency :	10.7MHz

<MW SECTION>

Sensitivity :	55dB ± 5dB
(S/N 20 dB)	[at 603kHz]
	53dB ± 5dB
	[at 999 / 1404kHz]
Distortion :	Less than 1.5%
	[at 999kHz]
Intermediate frequency :	450kHz

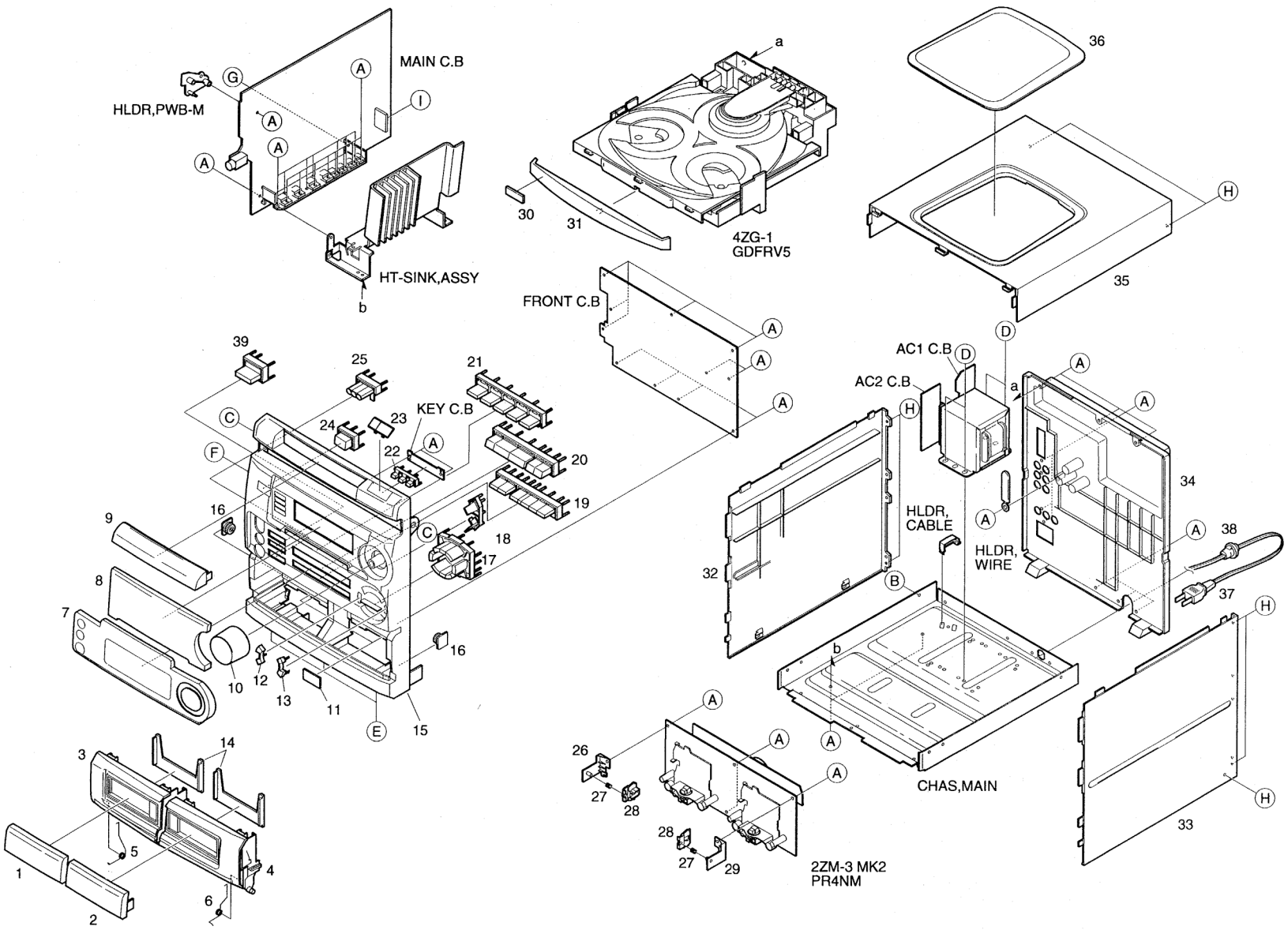
<SW SECTION>

Sensitivity :	38dB ± 5dB (5.9MHz)
(S/N 20dB)	33dB ± 5dB (12.0MHz)
	30dB ± 8dB (17.9MHz)
Distortion :	Less than 1.5% (12.0MHz)
Intermediate frequency :	450kHz

<DECK SECTION>

Tape speed :	3000Hz ± 45Hz
Wow & flutter :	Less than 0.18% (R.M.S)
Take-up torque :	30 ~ 55g-cm (FWD, REV)
F.F & REW torque :	75 ~ 180g-cm (F.F)
	75 ~ 130g-cm (REW)
Back tension :	2 ~ 7g-cm (DECK1,DECK2)
PB Output level :	330mV ± 1dB (DECK1)
	300mV ± 1dB (DECK2)
REC/PB Output level :	180mV ± 1dB
Distortion (REC/PB) :	Less than 2.0% (NORM, CrO2)
Noise level (PB) :	Less than 2mV (NORM, DOLBY OFF/ ON B.C)
	Less than 1.5mV (CrO2, DOLBY OFF/ ON B.C)
Noise level (REC/PB) :	Less than 2mV(NORM, DOLBY OFF/ ON B.C)
	Less than 1.5mV(CrO2, DOLBY OFF/ ON B.C)
Crosstalk :	More than 60dB (1kHz, NORM)
Channel separation :	More than 30dB (1kHz, NORM)
Erasing ratio :	More than 60dB (at 125Hz,CrO2)
Test tape :	NORM : TTA–602
	CrO2 : TTA–615

MECHANICAL EXPLODED VIEW 1 / 1

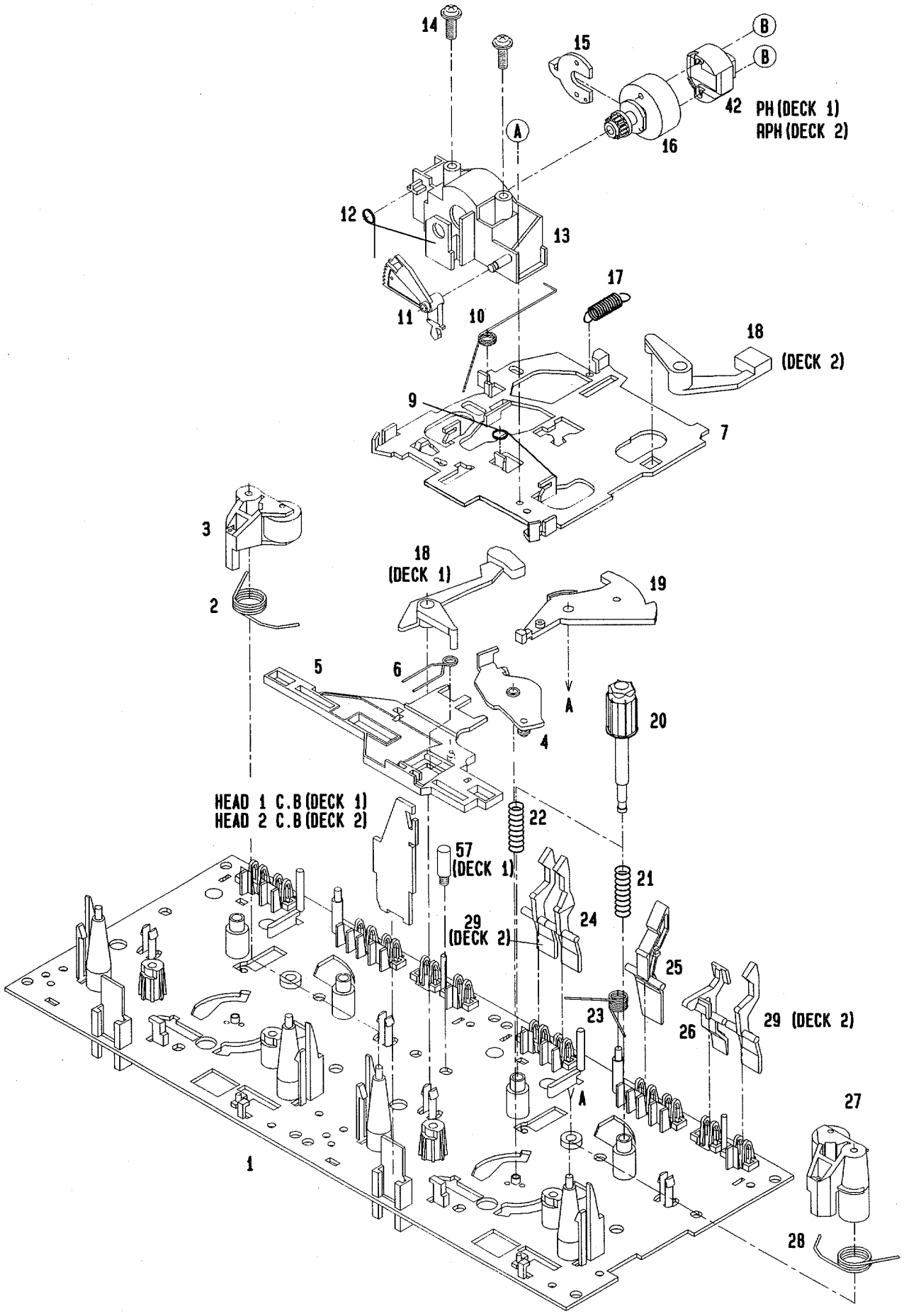


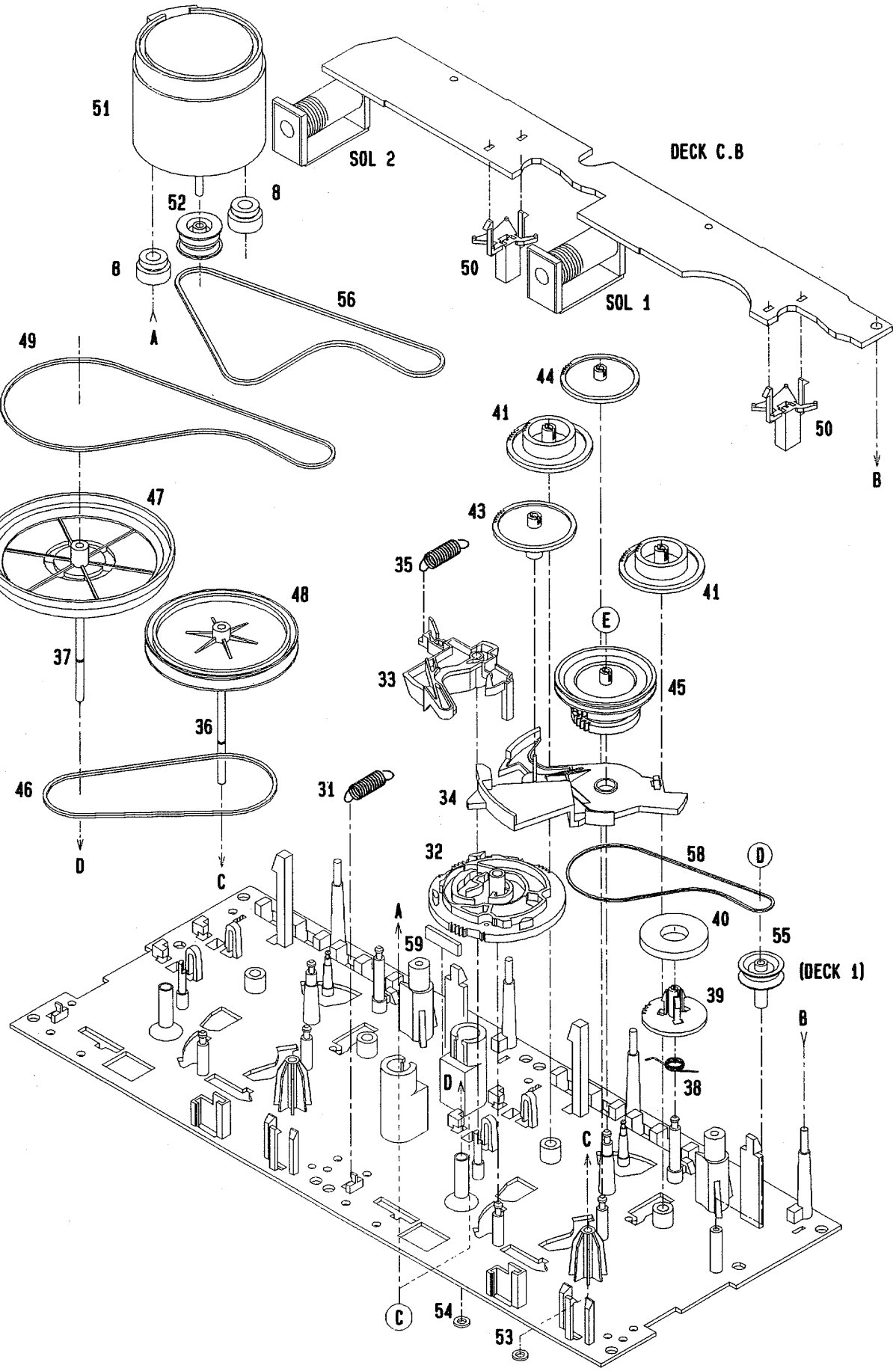
MECHANICAL PARTS LIST 1 / 1

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	87-NF6-041-010		WINDOW,CASS 1
2	87-NF6-042-010		WINDOW,CASS 2
3	87-NF6-011-110		BOX,CASS 1H
4	87-NF6-012-110		BOX,CASS 2H
5	82-NF5-218-010		SPR-T,EJECT 1(SIN)
6	82-NF5-219-010		SPR-T,EJECT 2(SIN)
7	87-NH6-015-010		PANEL,FR H
8	87-NH6-007-010		WINDOW,DISPLAY H
9	87-NF6-043-010		WINDOW,CD
10	87-NF6-036-010		KNOB,RTRY VOL
11	81-532-080-010		LBL,CASS-COMPT
12	87-NF6-040-010		PANEL,T-BASS
13	87-NF6-039-010		PANEL,BBE
14	86-NF6-061-010		REFLECTOR,CASS
15	87-NF6-001-010		CABI,FR H
16	87-063-165-010		OIL-DMPR,150
17	87-NF6-026-010		KEY,CURSOR H
18	87-NF6-028-110		KEY,MIC
19	87-NF6-032-010		KEY,REC H
20	87-NF6-049-010		KEY,ASSY PLAY
21	87-NF6-029-010		KEY,FUNCTION
22	87-NF6-045-010		KEY,DISC
23	87-NF6-024-010		KEY,CD
24	87-NF6-025-010		KEY,POWER
25	87-NH6-019-010		KEY,CON
26	87-NF4-216-010		HLDR,LOCK 1
27	82-NF5-228-010		SPR-C,LOCK
28	82-NF5-229-010		PLATE,LOCK(*)
29	87-NF4-217-010		HLDR,LOCK 2
30	82-NE6-067-010		BADGE,AIWA 30N
31	87-NH6-013-010		PANEL,TRAY H
32	87-NF6-022-010		PANEL,LEFT
33	87-NF6-023-010		PANEL,RIGHT
34	87-NH6-027-010		CABI,REAR HCST<HC>
34	87-NH6-028-010		CABI,REAR HRST<HR>
35	87-NF6-021-010		PANEL,TOP
36	86-NF6-007-010		WINDOW,TOP
⚠ 37	87-050-079-010		AC CORD ASSY,E BLK
38	87-085-185-010		BUSHING,AC CORD(E)
39	87-NH6-018-110		KEY,PBC H
A	87-067-703-010		BVT2+3-10 W/O SLOT
B	87-721-096-410		QT2+3-10 W/O SLOT
C	87-721-097-410		QT2+3-12 W/O SLOT
D	87-078-019-010		S-SCREW,IT+4-6 SWCH12A
E	87-067-688-010		BVTT+3-6
F	87-723-096-410		QT2+3-10 W/O SLOT BLK
G	87-NF4-224-010		S-SCREW,IT3B+3-8 CU
H	87-B10-091-010		UTT2+3-10 W/O SLOT BLK
I	87-067-579-010		BVT2+3-8 W/O SLOT

TAPE MECHANISM EXPLODED VIEW 1 / 1




51
SOL 2
DECK C.B
52
8
8
50
SOL 1
56
A
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44
41
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B
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43
35
41
48
E
37
33
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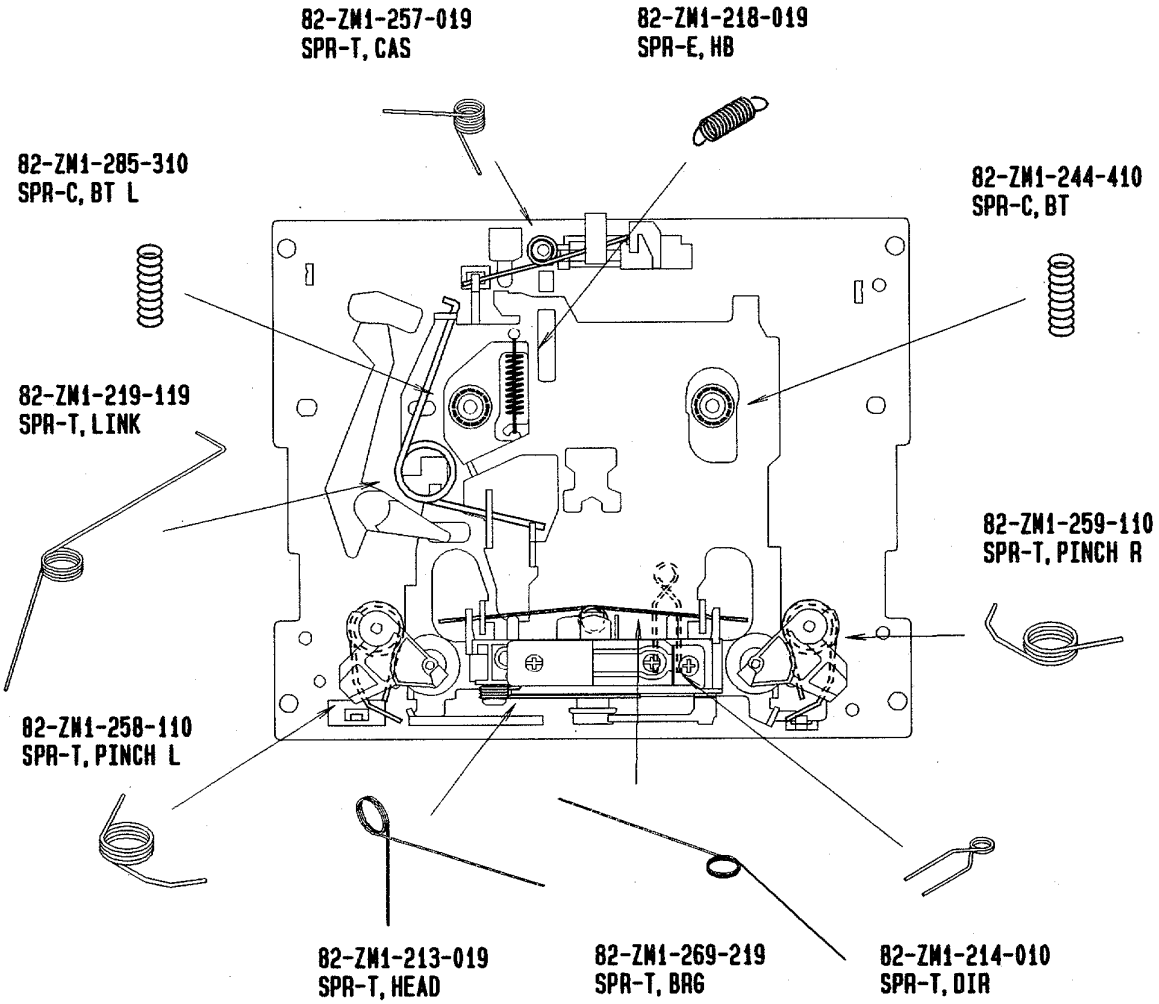
36
46
31
34
D
C
32
58
D
A
40
55
59
(DECK 1)
39
B
38
D
C
C
54
53

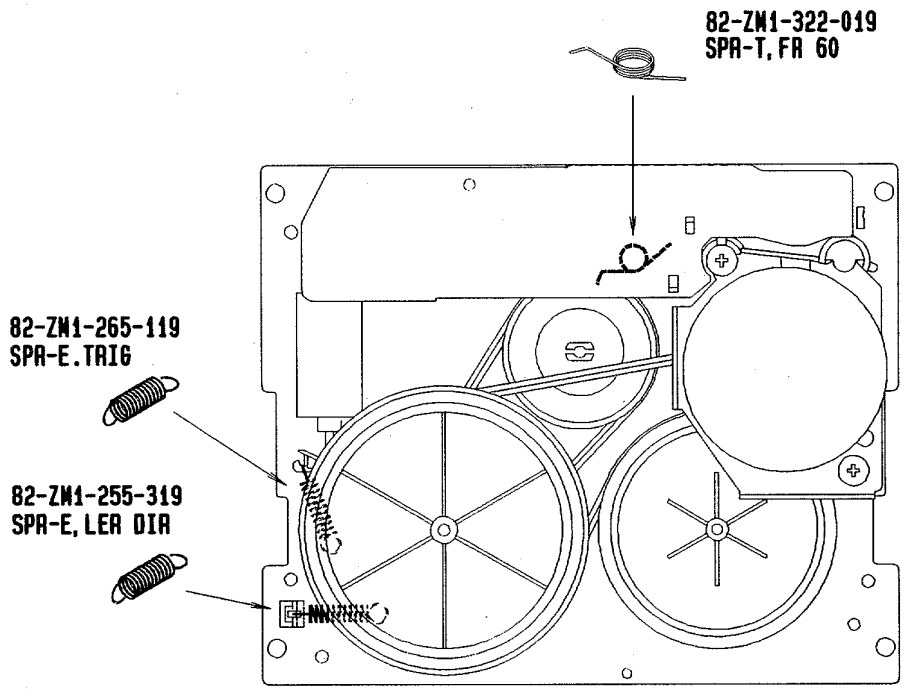
TAPE MECHANISM PARTS LIST 1 / 1

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

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



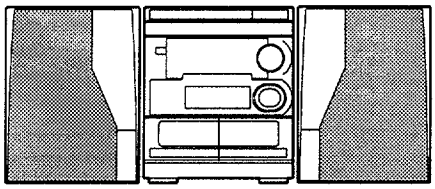


aiwa

aiwa SERVICE

NSX-K550

SERVICE MANUAL



COMPACT DISC STEREO
CASSETTE RECEIVER

- BASIC TAPE MECHANISM : 2ZM-3MK2 YPR4NM
- BASIC CD MECHANISM : 4ZG–1 VSGDNM
- TYPE : HE

SUPPLEMENT

SYSTEM	CD – CASSEIVER	SPEAKER	REMOTE CONTROLLER
NSX–K550	CX – NK550	SX – ANS70	RC UNIT, 7AS07

- This Service Manual contains information about the difference between NSX-K550 (HE) and NSX-K550 (HR). If requiring the other information, see Service Manual of NSX-K550 (HR,HC). (S/M Code No 09-976-199-7FE)

- If requiring information about the CD mechanism, see Service Manual of 4ZG-1, S/M Code No. 09-977-206-10T.

S/M Code No. 09–979–227–8FE

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 µV/m
Antenna	Loop antenna

<SW Tuner section>

Tuning range	5.900 MHz ~ 17.900 MHz
Antenna	Wire antenna

<Amplifier section>

***Power output**	Rated : 100 W + 100 W (6 ohms, T.H.D. 1 %, 1 kHz) Reference : 120 W + 120 W (6 ohms, T.H.D. 10 %, 1 kHz) *without connecting to the SURROUND SPEAKERS
Total harmonic distortion	0.05 % (70 W, 1 kHz, 6 ohms, DIN AUDIO)
Inputs	VIDEO /AUX : 210 mV (adjustable) MD : 210 mV (adjustable) MIC : 1.4 mV (10 kohms)
Outputs	LINE OUT : 200 mV VIDEO OUT: 1.0Vp-p (75 ohms) SUPER WOOFER : 2.7 V SPEAKERS: accept speakers of 6 ohms or more SURROUND SPEAKERS : accept speakers of 16 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	CrO2 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/ 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	MPEG1
Audio data	MPEG1, LAYER2:

<Speaker system SX–ANS70>

Cabinet type	4 way, bass reflex with surround speaker (magnetic sealed type)
Speakers	Woofer : 160 mm cone type Tweeter : 50 mm cone type Super tweeter : 20 mm ceramic type Cardioid speaker : 80 mm cone type Surround speaker : 80 mm cone type
Impedance	Front speaker : 6 ohms Surround speaker : 16 ohms
Output sound pressure level	87 dB/W/m
Dimensions (W x H x D)	250 x 310 x 280 mm
Weight	4.5 kg

<General>

Power requirements	120 V/ 220 – 230 V/ 240 V AC, switchable ,50/60 Hz
Power consumption	140 W
Dimensions of main unit (W x H x D)	260 x 309 x 346 mm
Weight of main unit	7.2 kg

- Design and specifications are subject to change without notice.
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  Under license from BBE Sound,Inc.

ELECTRICAL MAIN PARTS LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

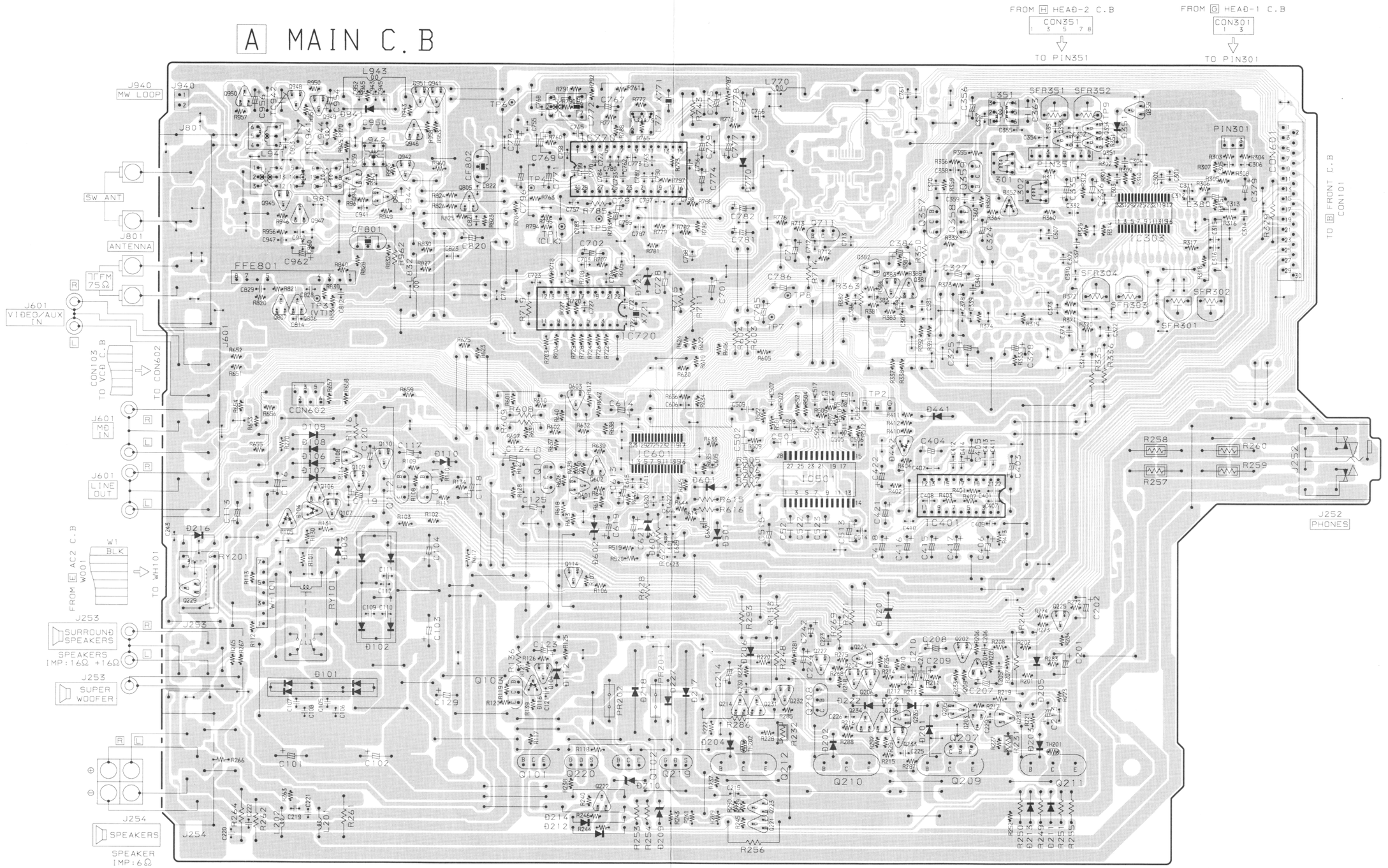
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-NH4-610-110		IC,LC866548A-5F60
	87-A20-783-040		C-IC,BA7762AFS
MAIN C.B			
FFE801	A8-7ZA-290-030		7ZA-2 FEUNM
J253	87-A60-401-010		JACK,PIN 3P B/R/W HS
J601	87-A60-402-010		JACK,PIN 6P R/W HSP-246V30
J801	87-033-239-010		TERMINAL,ANT 4P MSP-154V-02
TC941	87-011-220-080		TRIMMER,CER 20P
TC942	87-011-221-080		TRIMMER,CER 30P

1

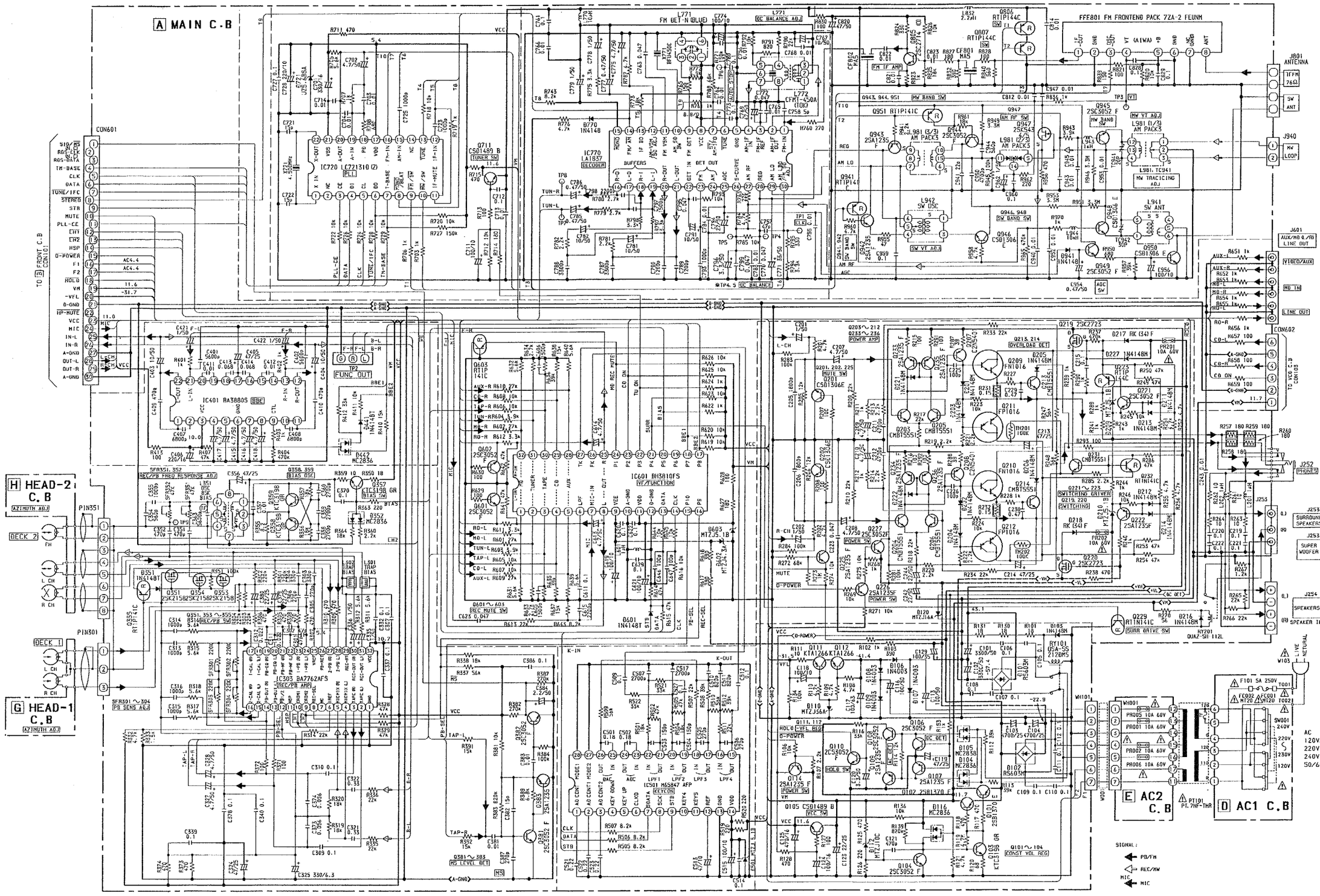
1 2 3 4 5 6 7 8 9 10 11 12 13 14

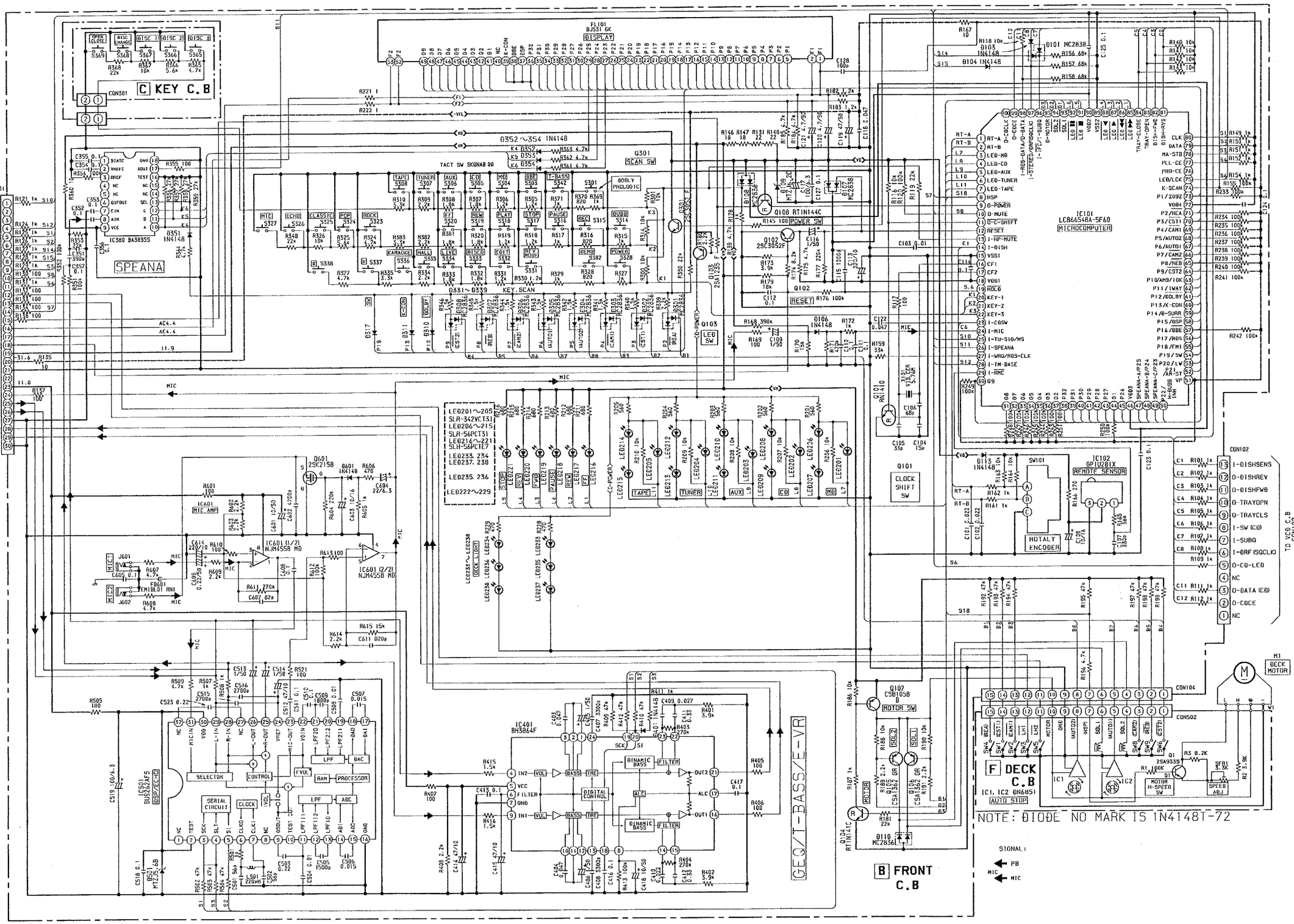
A B C D E F G H I J

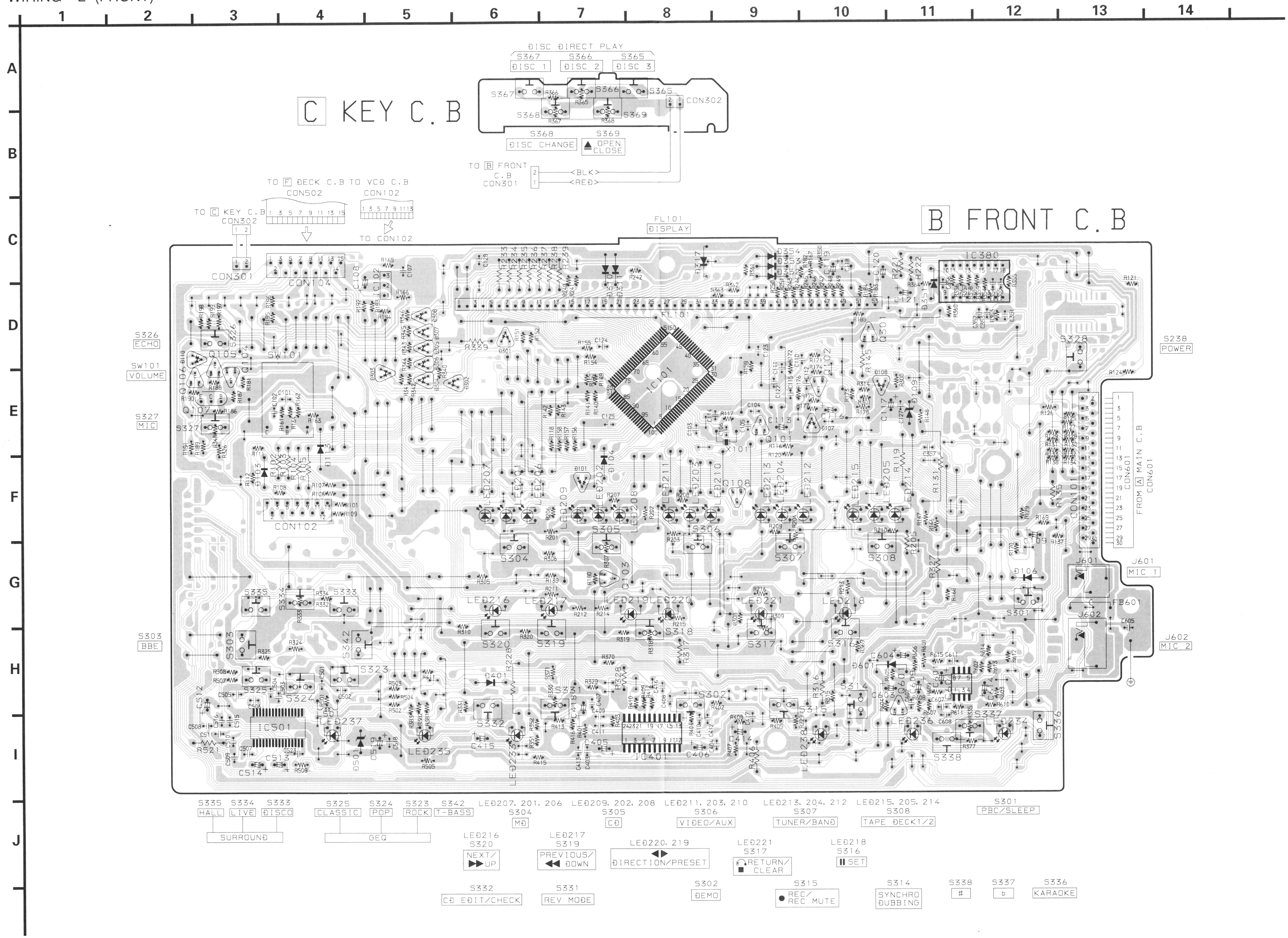
A MAIN C.B



SCHEMATIC DIAGRAM – 1 (MAIN)




C KEY C.B
SPEANA
IC380 BA3835S
IC601 MIC AMP
IC601 (1/2) NJM4558 MD
IC601 (2/2) NJM4558 MD
IC501 BU52624FS DSP/ECHO
IC401 BH3864F
GEQ/T-BASS/E-VR
IC101 LC866548A-5F60 MICROCOMPUTER
IC102 GP1U281X REMOTE SENSOR
KEY-SCAN
LED201~205 SLR-342VCT31
LED206~215 SLR-56PCT31
LED216~221 SLH-56PCT67
LED235, 234 LED237, 238
LED235, 236
LED222~229
LED231~LED238 DECK LIGHT
ROTALY ENCODER
F DECK C.B
IC1, IC2 6N6851
AUTO STOP
B FRONT C.B
M1 DECK MOTOR
NOTE: DIODE NO MARK IS 1N4148T-72
SIGNAL:
PB
MIC


C KEY C.B
DISC DIRECT PLAY
S367 DISC 1
S366 DISC 2
S365 DISC 3
CON302
S368 DISC CHANGE
S369 ▲ OPEN CLOSE
TO B FRONT C.B CON301
<BLK>
<RED>
TO F DECK C.B CON502
TO VCD C.B CON102
TO C KEY C.B CON302
B FRONT C.B
FL101 DISPLAY
IC380
IC101
IC401
IC501
S326 ECHO
SW101 VOLUME
S327 MIC
S303 BBE
S238 POWER
FROM A MAIN C.B CON601
J601 MIC 1
J602 MIC 2
S335 HALL
S334 LIVE
S333 DISCO
SURROUND
S325 CLASSIC
S324 POP
S323 ROCK
GEQ
S342 T-BASS
LED207, 201, 206 S304 MD
LED209, 202, 208 S305 CD
LED211, 203, 210 S306 VIDEO/AUX
LED213, 204, 212 S307 TUNER/BAND
LED215, 205, 214 S308 TAPE DECK1/2
S301 PBC/SLEEP
LED216 S320 NEXT/ ▶▶UP
LED217 S319 PREVIOUS/ ◀◀ DOWN
LED220, 219 ◀▶ DIRECTION/PRESET
LED221 S317 RETURN/ ■ CLEAR
LED218 S316 ⏸ SET
S332 CD EDIT/CHECK
S331 REV MODE
S302 DEMO
S315 ● REC/ REC MUTE
S314 SYNCHRO DUBBING
S338 #
S337 b
S336 KARAOKE