



SERVICE MANUAL

HOME THEATER SURROUND
SYSTEM

This Service Manual is the "Revision Publishing" and replaces "Simple Manual"
(S/M Code No. 09-002-340-4T2).

SYSTEM	CENTER UNIT	SUBWOOFER
HE-501	HE-C501	*TS-W45

If requiring information about the SUBWOOFER(TS-W45), see Service Manual of
TS-W45 S/M Code No.09-003-403-7N1.

This Service Manual does not include "IC BLOCK DIAGRAM".

These items will be issued in the next Supplement.

aiwa

S/M Code No. 09-002-340-4R2

REVISION

DATA

SPECIFICATONS

Power output	25 W + 25 W (1 kHz, 6 ohms, 10%)
Inputs	INPUT 1/2: 250 mV, adjustable (22 kohms)
Muting	-20 dB
General	
Power requirements	AC 120V/220-240V, switchable, 50/60 Hz
Power consumption	55 W
Dimensions	550 × 129 × 241 mm (W × H × D)
Weight	6.2 kg

- Design and specifications are subject to change without notice.

ACCESSORIES LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8A-YP2-901-010		IB, H(ECA)D	6	87-099-789-010		PLUG, ADPTR IR44
2	8A-YP2-625-010		RC UNIT, RC-AAP05	7	8A-YP2-221-010		FOOT, RUBBER HIGH
3	8A-YP2-624-010		CORD ASSY, RCA-3.5 ST 1.5M	8	8A-YP2-218-010		FOOT, RUBBER REAR
4	87-A80-141-010		CORD, PIN 2PC368V 150CM R-W	9	8A-YP1-231-010		HLDR, FOOT STEEL
5	87-YP3-632-010		186-C13000, CORD ASSY				

ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
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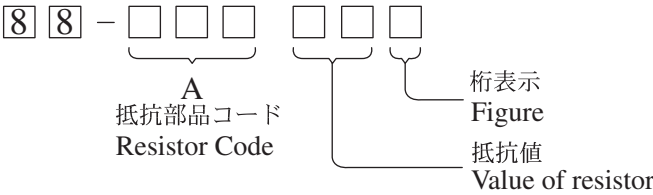
REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
IC				C226	87-010-404-080		CAP, ELECT 4.7-50V
	87-017-804-010	IC, BU4052BC		C301	87-A10-520-000		CAP, E 3300-35 M SMG
	87-A91-074-010	RCR UNIT, NJL68H380		C302	87-A10-520-000		CAP, E 3300-35 M SMG
	87-A20-754-010	IC, BA4558N-DX		C303	87-010-196-080		CHIP CAPACITOR, 0.1-25
	87-A21-545-010	IC, LA2787		C304	87-010-196-080		CHIP CAPACITOR, 0.1-25
	87-A21-546-010	IC, LV1018		C305	87-010-196-080		CHIP CAPACITOR, 0.1-25
	87-A21-103-040	IC, MM1454/XFBE		C306	87-010-196-080		CHIP CAPACITOR, 0.1-25
	87-A20-452-040	IC, TC9260FS		C307	87-010-928-090		CAP, E 4700-25V
	87-A21-544-010	IC, STK402-030		C309	87-010-405-080		CAP, ELECT 10-50V
	8A-YP2-609-010	IC, LA865508A-5P10		C310	87-010-381-080		CAP, E 330-16 SME
TRANSISTOR				C311	87-012-140-080		CAP 470P
	89-213-702-080	TR, 2SB1370E		C312	87-010-112-080		CAP, ELECT 100-16V
	89-420-612-080	TR, 2SD2061E		C313	87-010-393-080		CAP, ELECT 100-35V
	89-406-554-580	TR, CSD655E		C314	87-010-112-080		CAP, ELECT 100-16V
	87-026-610-080	TR, KTC3198GR		C315	87-010-235-080		CAP, E 470-16 SME
	87-026-609-080	TR, KTA1266GR		CN2	87-009-755-010		CONN, 14P PH V
	87-A30-196-080	TR, 2SC4115SRS		CN5	87-099-043-010		CONN 2P EH
	87-026-200-080	CHIP-TR, DTC114ES		CN6	87-099-043-010		CONN 2P EH
	87-A30-087-080	C-FET, 2SK2158		CN7	87-099-416-010		CONN, 3P EH
	87-026-235-080	CHIP-TR, DTC114EK		CNA2	8A-YP2-612-010		CONN ASSY, 7P MAIN-PT
	87-026-227-080	CHIP-TR, DTA114EK		CNA3	8A-YP2-630-010		CONN, ASSY, 2P SAN
DIODE				PR203	87-A91-276-080		125MA
	87-020-465-080	DIODE, 1SS133 (110MA)		PR204	87-A91-276-080		125MA
	87-A40-004-080	ZENER, MTZJ16A		PR303	87-A90-195-080		PROTECTOR 7A 125V 49
	87-017-978-080	DIODE, 1N4003		PR304	87-A90-195-080		PROTECTOR 7A 125V 49
	87-A40-269-080	C-DIODE, MC2836		R220	8A-YP2-626-080		RES, M/F 0.22-2W
	87-070-334-080	ZENER, MTZJ10B		FR C.B			
	86-SP2-646-010	151-540235, DIODE IN5402LT		C502	87-010-196-080		CHIP CAPACITOR, 0.1-25
	87-A40-509-080	ZENER, MTZJ6.8C		C503	87-010-196-080		CHIP CAPACITOR, 0.1-25
	87-A40-270-080	C-DIODE, MC2838		C504	87-010-405-080		CAP, ELECT 10-50V
MAIN C.B				C505	87-010-194-080		CAP, CHIP 0.047
				C506	87-010-248-080		CAP, ELECT 220-10V
				C507	87-010-196-080		CHIP CAPACITOR, 0.1-25
				C508	87-010-221-080		CAP, ELECT 470-10V
				C509	87-010-196-080		CHIP CAPACITOR, 0.1-25
				C510	87-010-400-080		CAP, ELECT 0.47-50V
				C511	87-010-198-080		CAP, CHIP 0.022
C96	87-012-141-080	C-CAP, S0.22		C512	87-010-196-080		CHIP CAPACITOR, 0.1-25
C97	87-012-141-080	C-CAP, S0.22		C513	87-010-317-080		C-CAP, S 39P-50 CH
C98	87-010-196-080	CHIP CAPACITOR, 0.1-25		C514	87-010-317-080		C-CAP, S 39P-50 CH
C99	87-010-544-080	CAP, ELECT 0.1-50V		C515	87-010-263-080		CAP, ELECT 100-10V
C100	87-010-544-080	CAP, ELECT 0.1-50V		C516	87-010-178-080		CHIP CAP 1000P
C101	87-010-322-080	C-CAP, S 100P-50 CH		CN4	87-A60-164-010		CONN, 16P H FE
C102	87-010-322-080	C-CAP, S 100P-50 CH		D503	87-A40-806-080		LED, L-113IDT RED
C103	87-010-196-080	CHIP CAPACITOR, 0.1-25		D504	87-A40-806-080		LED, L-113IDT RED
C126	87-010-112-080	CAP, ELECT 100-16V		D505	87-A40-806-080		LED, L-113IDT RED
C201	87-010-402-080	CAP, ELECT 2.2-50V		D506	87-A40-806-080		LED, L-113IDT RED
C202	87-010-402-080	CAP, ELECT 2.2-50V		D507	87-A40-806-080		LED, L-113IDT RED
C203	87-010-993-080	CAP, CHIP 0.056		D508	87-A40-806-080		LED, L-113IDT RED
C204	87-010-993-080	CAP, CHIP 0.056		D509	87-A40-806-080		LED, L-113IDT RED
C205	87-010-177-080	CAP, CHIP 820P		D510	87-A40-806-080		LED, L-113IDT RED
C206	87-010-177-080	CAP, CHIP 820P		D511	87-A40-805-080		LED, L-34IDSL RED
C207	87-010-546-080	CAP, ELECT 0.33-50V		D512	87-A40-805-080		LED, L-34IDSL RED
C208	87-010-546-080	CAP, ELECT 0.33-50V		D513	87-A40-805-080		LED, L-34IDSL RED
C209	87-012-156-080	C-CAP, S 220P-50 CH		D514	87-A40-805-080		LED, L-34IDSL RED
C210	87-012-156-080	C-CAP, S 220P-50 CH		D515	87-A40-805-080		LED, L-34IDSL RED
C211	87-010-150-080	C-CAP, S 6P-50 CH		D516	87-A40-805-080		LED, L-34IDSL RED
C212	87-010-150-080	C-CAP, S 6P-50 CH		D517	87-A40-805-080		LED, L-34IDSL RED
C213	87-010-405-080	CAP, ELECT 10-50V		D518	87-A40-806-080		LED, L-113IDT RED
C214	87-010-405-080	CAP, ELECT 10-50V		D519	87-A40-807-080		LED, L-3VEGW RED/GRN
C215	87-010-195-080	C-CAP, S 0.068-25 F		S501	87-A91-616-010		SW, PUSH 2-2-2 SPEA12-2N
C216	87-010-195-080	C-CAP, S 0.068-25 F		S502	86-SP2-647-010		SW, TACT
C217	87-010-544-080	CAP, ELECT 0.1-50V		S503	86-SP2-647-010		SW, TACT
C218	87-010-544-080	CAP, ELECT 0.1-50V		S504	86-SP2-647-010		SW, TACT
C219	87-010-197-080	CAP, CHIP 0.01 DM		S505	86-SP2-647-010		SW, TACT
C220	87-010-393-080	CAP, ELECT 100-35V		S506	86-SP2-647-010		SW, TACT
C221	87-010-393-080	CAP, ELECT 100-35V		W2	8A-YP2-615-010		FF-CABLE, 16P 1.25 FR-MID
C223	87-010-405-080	CAP, ELECT 10-50V					
C224	87-010-405-080	CAP, ELECT 10-50V					
C225	87-010-260-080	CAP, ELECT 47-25V					

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
X501	87-030-376-080	VIB, CER	CSA5.76MG200	CN3	87-A60-141-010		CONN, 16P V FE
MID C.B				CNA1	8A-YP2-632-010		CONN ASSY, 14P MAIN-MID
				D1	87-A40-818-080		VARI-CAP, SVC201SPA
				L1	87-005-196-080		COIL, 10UH
				W1	8A-YP2-613-010		F-CABLE, 7P 2 MID-INP
C16	87-010-101-080	CAP,	ELECT 220-16	INP C.B			
C17	87-010-405-080	CAP,	ELECT 10-50V				
C18	87-010-405-080	CAP,	ELECT 10-50V				
C19	87-010-405-080	CAP,	ELECT 10-50V				
C20	87-010-405-080	CAP,	ELECT 10-50V				
C21	87-010-101-080	CAP,	ELECT 220-16	C1	87-010-178-080		CHIP CAP 1000P
C22	87-010-401-080	CAP,	ELECT 1-50V	C2	87-010-178-080		CHIP CAP 1000P
C23	87-010-401-080	CAP,	ELECT 1-50V	C3	87-010-178-080		CHIP CAP 1000P
C24	87-010-401-080	CAP,	ELECT 1-50V	C4	87-010-178-080		CHIP CAP 1000P
C27	87-010-400-080	CAP,	ELECT 0.47-50V	C5	87-010-196-080		CHIP CAPACITOR, 0.1-25
C28	87-010-404-080	CAP,	ELECT 4.7-50V	C6	87-010-401-080		CAP, ELECT 1-50V
C29	87-010-400-080	CAP,	ELECT 0.47-50V	C7	87-010-401-080		CAP, ELECT 1-50V
C30	87-010-404-080	CAP,	ELECT 4.7-50V	C10	87-010-403-080		CAP, ELECT 3.3-50V
C32	87-010-403-080	CAP,	ELECT 3.3-50V	C11	87-010-403-080		CAP, ELECT 3.3-50V
C35	87-010-403-080	CAP,	ELECT 3.3-50V	C12	87-010-196-080		CHIP CAPACITOR, 0.1-25
C37	87-010-404-080	CAP,	ELECT 4.7-50V	C13	87-010-112-080		CAP, ELECT 100-16V
C38	87-010-400-080	CAP,	ELECT 0.47-50V	C120	87-010-406-080		CAP, ELECT 22-50
C39	87-010-404-080	CAP,	ELECT 4.7-50V	C127	87-010-196-080		CHIP CAPACITOR, 0.1-25
C40	87-010-400-080	CAP,	ELECT 0.47-50V	CN8	87-009-345-010		CONN, 2P PH
C43	87-010-401-080	CAP,	ELECT 1-50V	CN10	87-009-313-010		CONN 7P 51048
C44	87-010-101-080	CAP,	ELECT 220-16	J1	87-A61-233-010		JACK, PIN 4P W/R HSP-204V
C46	87-010-196-080	CHIP	CAPACITOR, 0.1-25	J2	85-SP3-620-010		JACK, PIN 2P
C47	87-010-176-080	C-CAP, S	680P-50 SL	J3	87-099-801-010		JACK, PIN 1P BLK
C48	87-010-401-080	CAP,	ELECT 1-50V	PT MAIN C.B			
C50	87-010-196-080	CHIP	CAPACITOR, 0.1-25				
C51	87-010-101-080	CAP,	ELECT 220-16				
C52	87-010-196-080	CHIP	CAPACITOR, 0.1-25	CN352	87-A60-959-010		CONN, 5P V VH B5P9
C55	87-010-101-080	CAP,	ELECT 220-16	CN353	87-099-407-010		CONN, 7P EH V WHT
C57	87-012-156-080	C-CAP, S	220P-50 CH	△PT351	8A-YP2-627-010		PT, HR
C58	87-010-805-020	C-CAP, S	1-16	PT SUB C.B			
C59	87-010-805-020	C-CAP, S	1-16				
C60	87-010-322-080	C-CAP, S	100P-50 CH				
C61	87-010-402-080	CAP,	ELECT 2.2-50V				
C62	87-010-546-080	CAP,	ELECT 0.33-50V				
C63	87-010-401-080	CAP,	ELECT 1-50V	C354	87-A10-479-080		CAP, CER 2200P-250 M E KH
C68	87-010-101-080	CAP,	ELECT 220-16	C355	87-010-405-080		CAP, ELECT 10-50V
C69	87-010-316-080	C-CAP, S	33P-50 CH	C356	87-010-387-080		CAP, E 470-25 SME
C70	87-010-322-080	C-CAP, S	100P-50 CH	CNA352	8A-YP2-610-010		CONN ASSY, 9P PT PRI
C71	87-010-318-080	C-CAP, S	47P-50 CH	CNA353	8A-YP2-629-010		CONN, ASSY, 3P 1PH
C72	87-010-312-080	C-CAP, S	15P-50 CH	△PT352	8Z-NF8-663-010		PT, SUB ZNF-8(H)
C76	87-010-402-080	CAP,	ELECT 2.2-50V	RY351	87-A91-281-010		RELAY, AC DC12V OSA-SS-212DM5
C77	87-010-402-080	CAP,	ELECT 2.2-50V	S351	87-A90-234-010		SW, SL 1-2-2 SW2201
C78	87-010-405-080	CAP,	ELECT 10-50V	T351	82-304-743-010		TERMINAL, 1P
C80	87-010-197-080	CAP,	CHIP 0.01 DM	T352	82-304-743-010		TERMINAL, 1P
C81	87-010-197-080	CAP,	CHIP 0.01 DM	W351	8A-YP2-611-010		F-CABLE, 2P 2.5 SUB PT
C82	87-010-408-080	CAP,	ELECT 47-50V				
C83	87-010-196-080	CHIP	CAPACITOR, 0.1-25				
C84	87-010-384-080	CAP,	ELECT 100-25V				
C85	87-010-403-080	CAP,	ELECT 3.3-50V				
C86	87-010-403-080	CAP,	ELECT 3.3-50V				
C89	87-010-403-080	CAP,	ELECT 3.3-50V				
C90	87-010-403-080	CAP,	ELECT 3.3-50V				
C93	87-010-196-080	CHIP	CAPACITOR, 0.1-25				
C104	87-010-401-080	CAP,	ELECT 1-50V				
C105	87-010-401-080	CAP,	ELECT 1-50V				
C110	87-010-112-080	CAP,	ELECT 100-16V				
C111	87-010-196-080	CHIP	CAPACITOR, 0.1-25				
C113	87-010-403-080	CAP,	ELECT 3.3-50V				
C114	87-010-403-080	CAP,	ELECT 3.3-50V				
C118	87-010-112-080	CAP,	ELECT 100-16V				
C119	87-010-544-080	CAP,	ELECT 0.1-50V				
C122	87-010-404-080	CAP,	ELECT 4.7-50V				
C123	87-010-406-080	CAP,	ELECT 22-50				
C124	87-010-313-080	CAP,	CHIP 18P				
CN1	87-009-261-010	CONN,	7P52147MXJ				

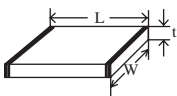
○チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち

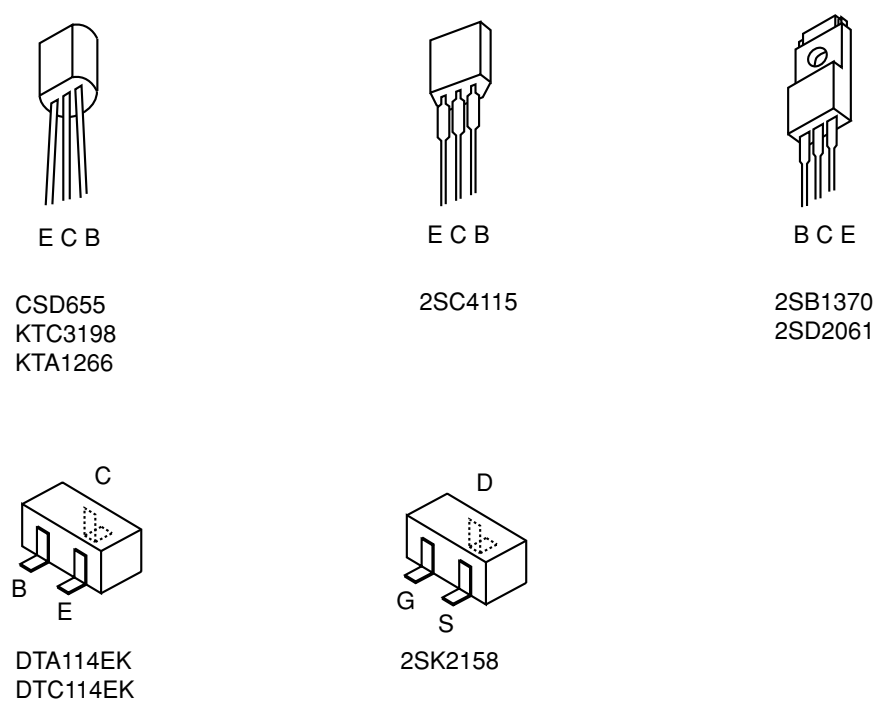
Chip Resistor Part Coding



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 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

TRANSISTOR ILLUSTRATION

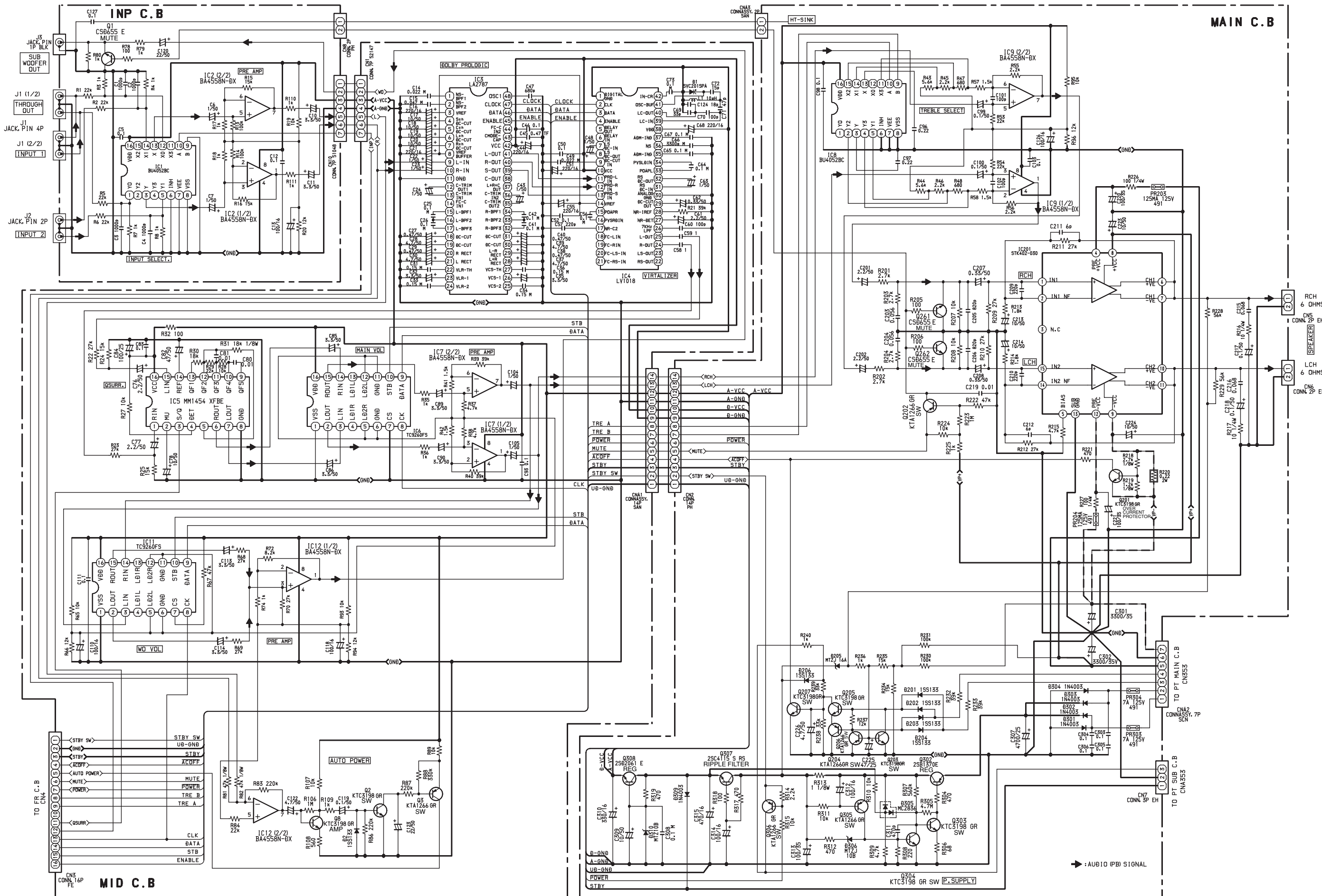


IC DESCRIPTION

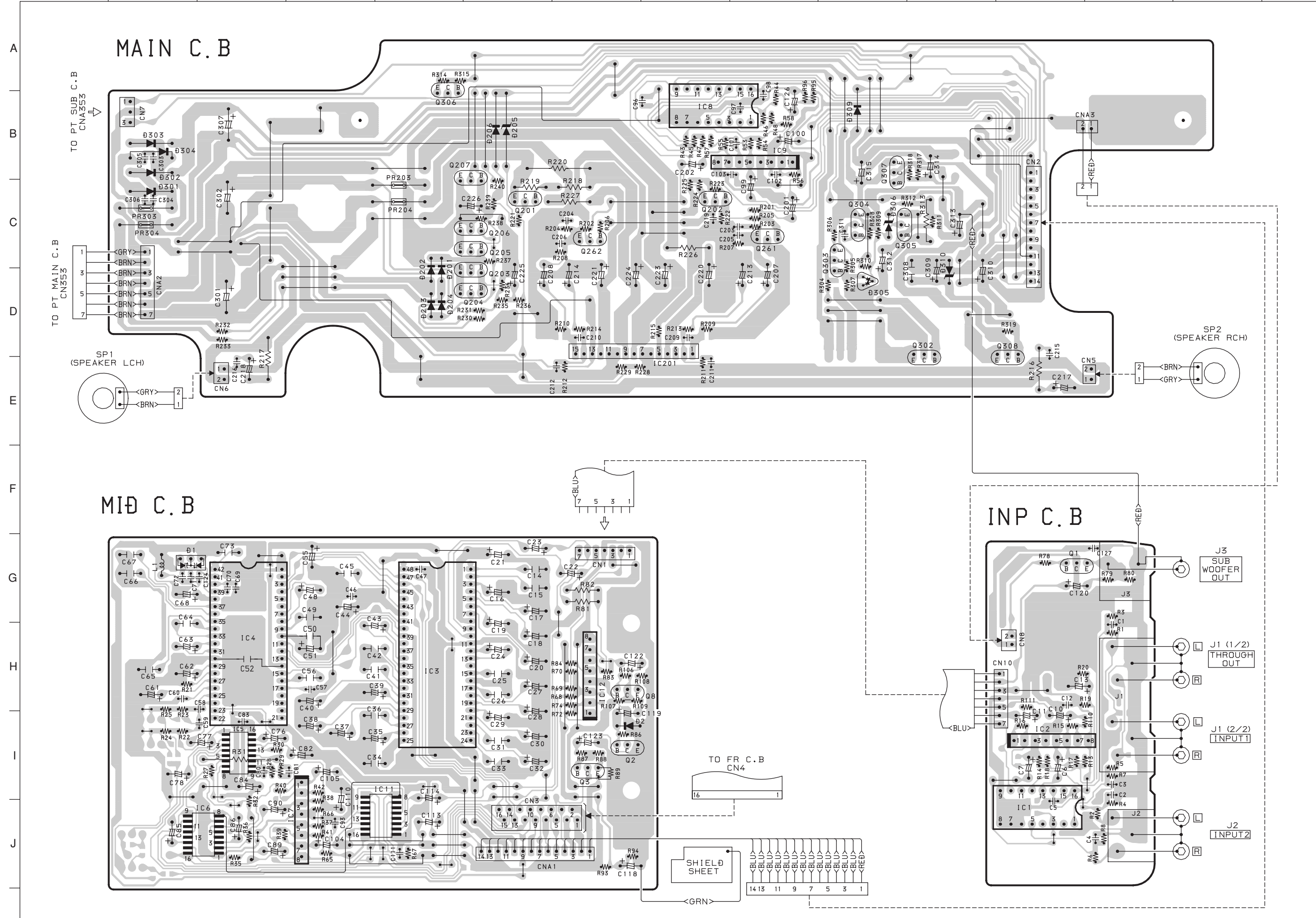
IC, LA865508A-5P10

Pin No.	Pin Name	I/O	Description
1, 2	VOL LED 6, 7	O	Volume, Balance, Surround level, Woofer level, Treble display LED output
3	TRE LED	O	Treble LED output
4	MUTE	O	Muting output
5	RES	I	System reset terminal
6	OSC1	—	Ground of the crystal oscillator
7	NC	—	Not connected.
8	OSC1	—	Not connected.
9	VSS	—	GND
10	OSC2	I	For the connection of a 6 MHz crystal oscillator.
11	OSC2	O	
12	VDD	—	Power supply of microprocessor (+5V)
13	KEY2	I	Tact key A/D input
14	ACOFF	I	Abnormal detect A/D input
15	KEY1	I	Push key input
16	APOW	I	Auto power on/off input
17	SEL	I	AYP2: Lo, AYP3: Hi
18	NC	—	Not connected.
19	POW LEDR	O	POW LED RED output
20	POW LEDG	O	POW LED GRN output
21	DIMMER	O	DIMMER control output
22	QSURR	O	Qsurround on/off control output
23	POWER	O	Power on/off control output
24	NC	—	Not connected.
25	REMO	I	Remote control input
26	INP1 LED	O	INPUT1 LED output
27	INP2 LED	O	INPUT2 LED output
28	QSURR LED	O	Qsurround on/off LED output
29	NC	—	Not connected
30	DOLBY LED	O	Virtual Surround on/off LED output
31	VOL LED	O	Vol function LED output
32	BAL LED	O	Balance function LED output
33	SLEV LED	O	Surround level function LED output
34	WO LED	O	Woofer function LED output
35	ENABLE	O	Main volume, Woofer volume, Virtual surround control data
36	STB	O	
37	DATA	O	
38	INP	O	Input select control output
39	CLK	O	Reference clock output
40, 41	TRE A, B	O	Treble control output
42	NC	—	Not connected
43 ~ 47	VOL LED 1~ 5	O	Volume, Balance, Surround level, Woofer level, Treble display LED output
48	NC	—	Not connected

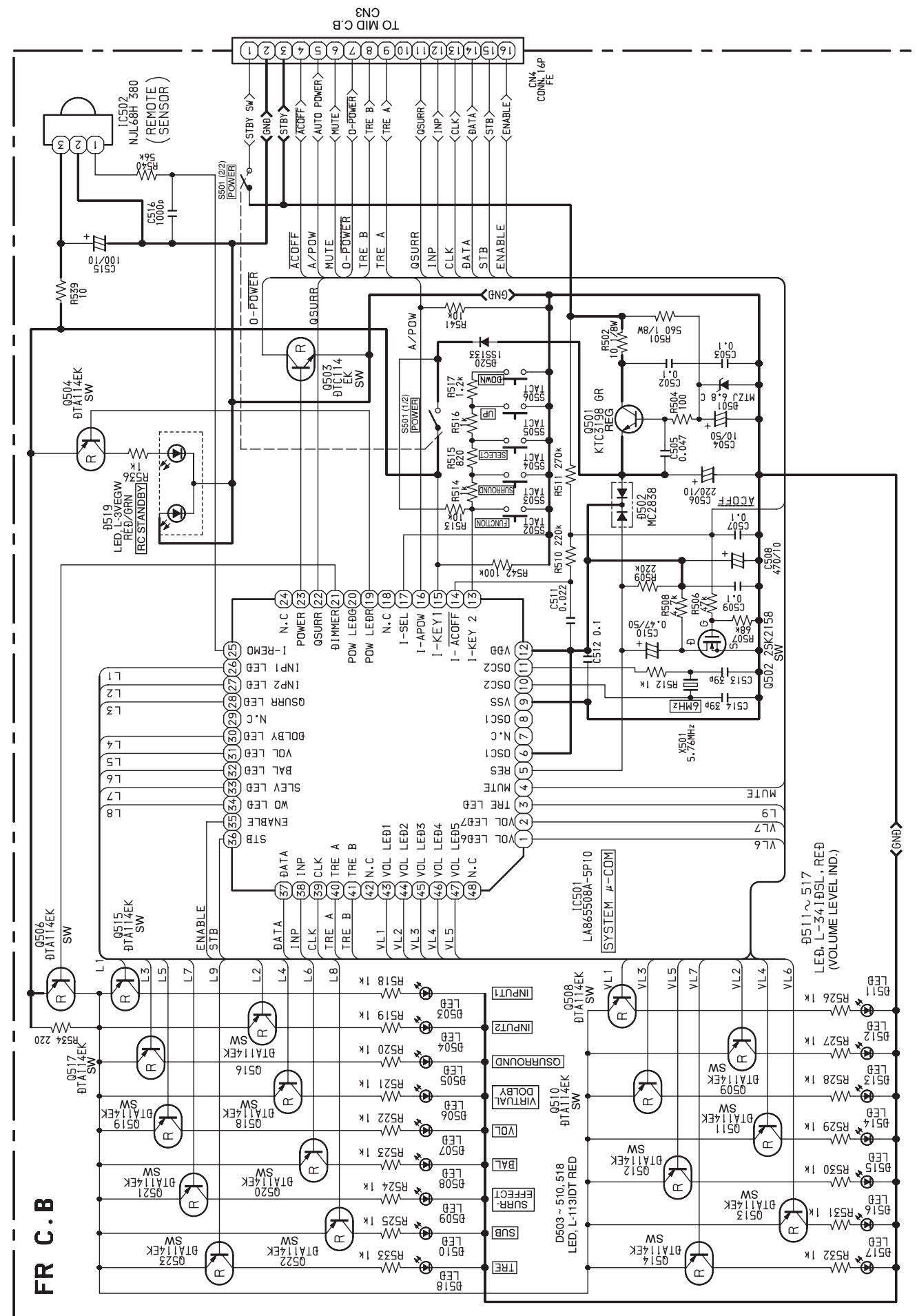
SCHEMATIC DIAGRAM-1 (MAIN, MID, INP SECTION)



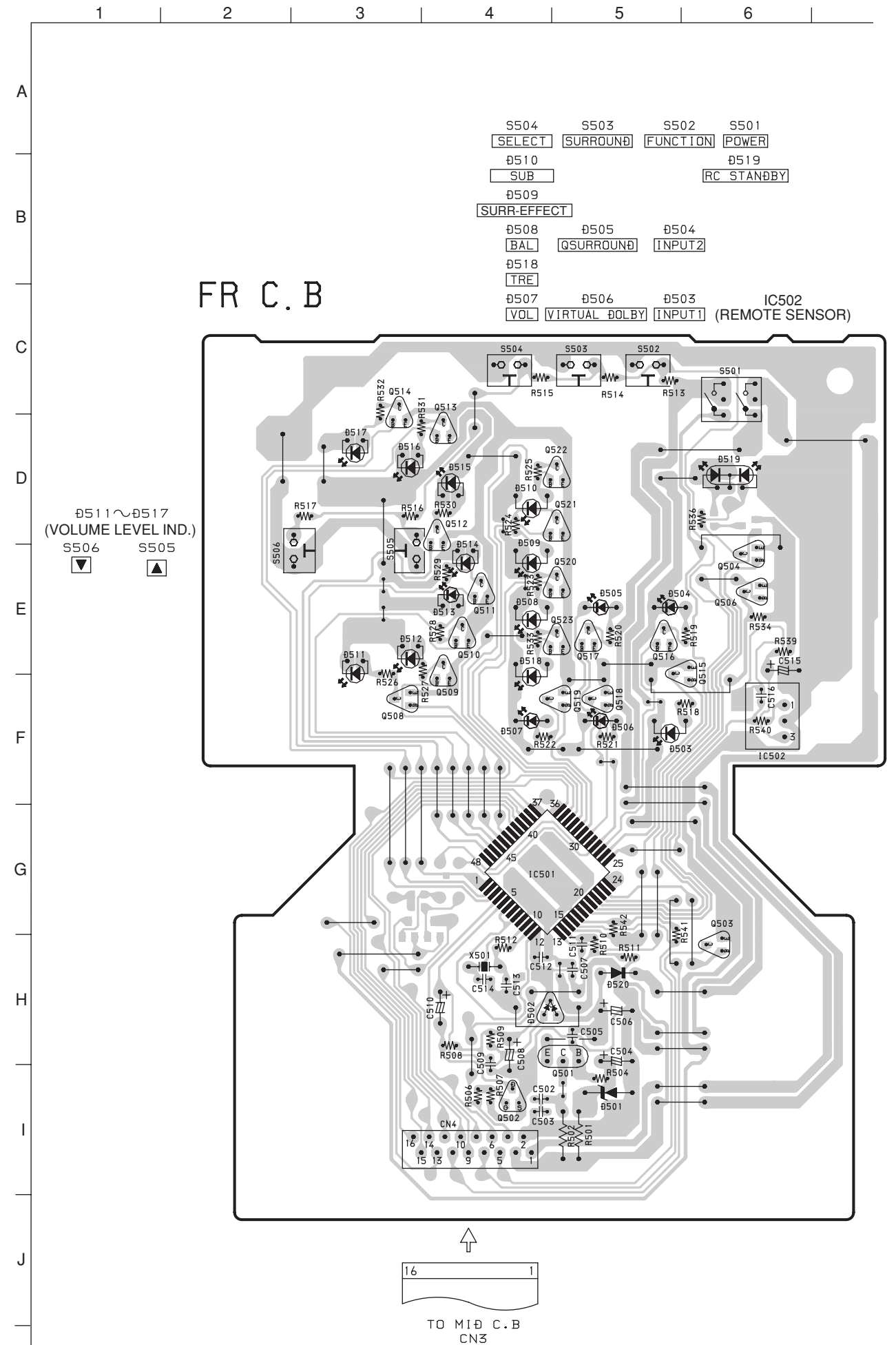
1 2 3 4 5 6 7 8 9 10 11 12 13 14



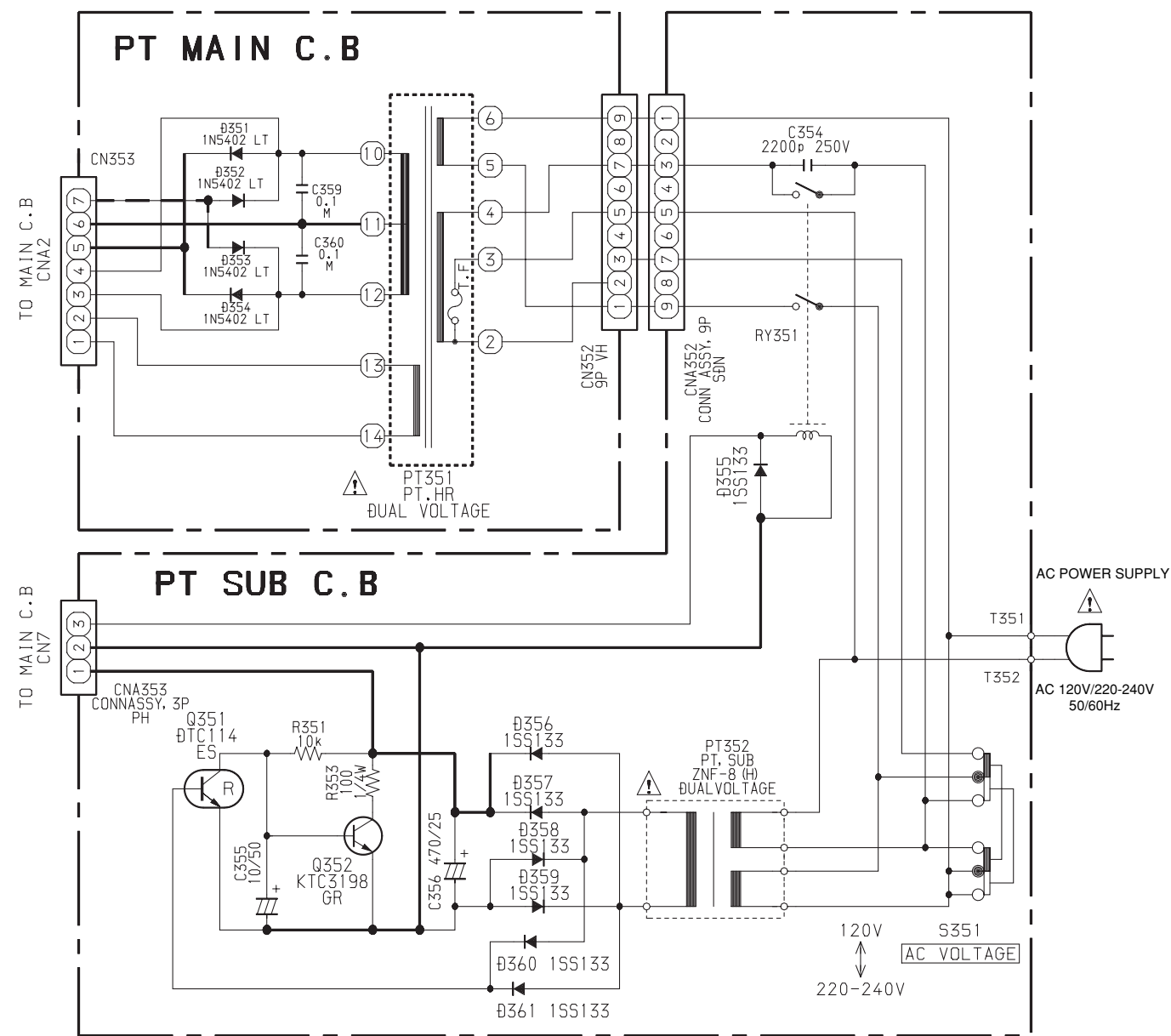
SCHEMATIC DIAGRAM-2 (FR SECTION)



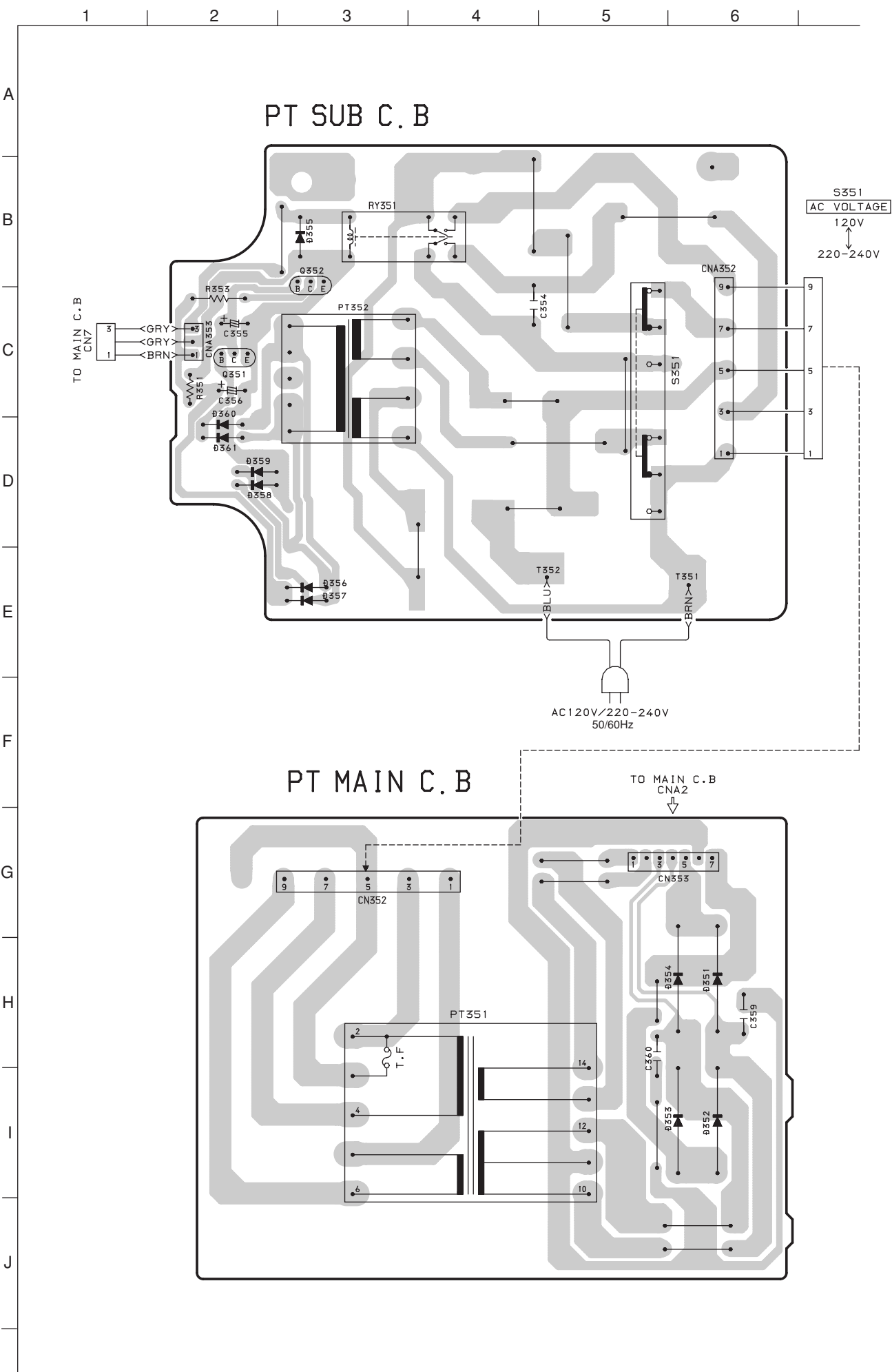
WIRING-2 (FR C.B SECTION)

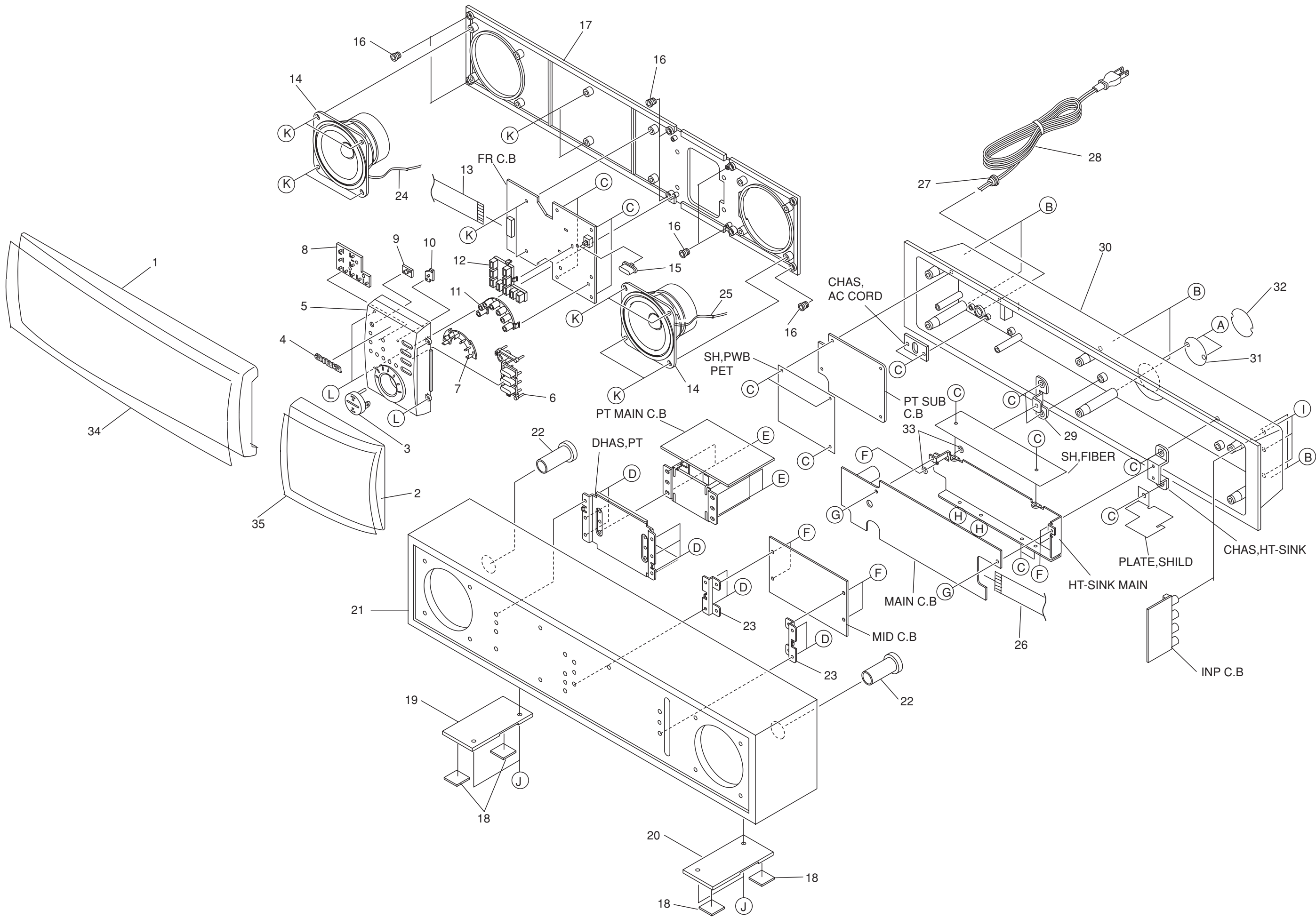


SCHEMATIC DIAGRAM-3 (PT MAIN, PT SUB SECTION)



WIRING-2 (PT MAIN, PT SUB C.B SECTION)





MECHANICAL MAIN PARTS LIST 1/1

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8A-YP2-201-010		CABI, FRAME L	26	87-009-755-010		CONN, 14P H WHT PH
2	8A-YP2-202-010		CABI, FRAME R	27	86-SP2-637-010		BUSHING, AC U
3	8A-YP2-019-010		KEY, VOL ST	28	86-SP2-634-010		AC CORD, E
4	8A-YP2-025-010		BADGE, AIWA 30.6 ABS SIL	29	8A-YP2-213-010		HLDR, HT-SINK
5	8A-YP2-026-010		PANEL, FRONT ST EX	30	8A-YP2-002-010		CABI, REAR HR
6	8A-YP2-018-010		KEY, FUN ST	31	8A-YP2-028-010		PLATE, BLIND DUCT N
7	8A-YP2-008-010		WINDOW, LEVEL	32	8A-YP2-024-010		PLATE, BLIND DUCT
8	8A-YP2-009-010		WINDOW, FUN	33	82-YP3-220-010		W-F, BAFFLE
9	8A-YP2-007-010		WINDOW, REMOTE	34	8A-YP2-020-010		CLOTH, FRAME L ST
10	8A-YP2-010-010		WINDOW, POWER	35	8A-YP2-021-010		CLOTH, FRAME R ST
11	8A-YP2-205-010		HLDR, LED LEVEL	A	87-741-074-410		UT2+2.6-8 W/O SLOT
12	8A-YP2-204-010		HLDR, LED FUN	B	8Z-YP1-233-010		SW+3.5-20
13	8A-YP2-615-010		FF-CABLE, 16P 1.25 FR-MID	C	87-067-703-010		BVT2+3-10
14	8A-YP2-618-010		SPKR, 88 60HM	D	87-641-096-410		UT1+3-10
15	8A-YP2-017-010		BTN, POWER ST	E	87-067-566-010		VFTT+3-6
16	84-SP1-206-010		BUSHING NET	F	87-067-689-010		BVTT+3-8
17	8A-YP2-203-010		CABI, BAFFLE	G	87-NF4-224-010		S-SCREW IT3B+3-8 CUT
18	8A-YP2-217-010		FOOT, RUBBER	H	87-067-581-010		BVT2+3-15
19	8A-YP1-214-010		HLDR, FOOT	I	87-755-096-410		VT2+3-10 W/O SLOT
20	8A-YP1-235-010		HLDR, FOOT R	J	8Z-YP1-231-010		SW+3.5-22
21	8A-YP2-023-010		CABI, WOOD BOX ST	K	87-YP4-211-010		SW+3.5-22SSY U
22	8A-YP2-206-010		RING, DUCT	L	87-751-076-010		VT2+2.6-12D DUCT N
23	8A-YP2-212-010		HLDR, PWB				
24	8A-YP2-616-010		CONN ASSY, 2P SPKR L				
25	8A-YP2-617-010		CONN ASSY, 2P SPKR R				

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		





SERVICE MANUAL

HOME THEATER SURROUND
SYSTEM

SYSTEM	CENTER UNIT	SUBWOOFER
HE-501	HE-C501	*TS-W45

If requiring information about the SUBWOOFER(TS-W45), see Service Manual of TS-W45 S/M Code No.09-005-403-7N2.

This Service Manual does not include "IC BLOCK DIAGRAM".

These items will be issued in the next Supplement.

SPECIFICATONS

Power output	25 W + 25 W (1 kHz, 6 ohms, 10%)
Inputs	INPUT 1/2: 250 mV, adjustable (22 kohms)
Outputs	THROUGH OUT jacks SUB WOOFER OUT jack
Muting	-20 dB
General	
Power requirements	AC 120V, 60 Hz
Power consumption	42 W
Dimensions	550 × 129 × 241 mm (W × H × D)
Weight	6.2 kg

• Design and specifications are subject to change without notice.

ACCESSORIES LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8A-YP2-911-010		IB,H(EC-H)D	6	8A-YP1-233-010		HLDR,FOOT STEEL N
2	8A-YP2-622-010		RC UNIT,RC-AAP03	7	8A-YP2-227-010		FOOT,RUBBER REAR N
3	8A-YP2-624-010		CORD ASSY,RCA-3.5 ST 1.5M	8	8A-YP1-236-010		VFT2+4-10 W/O SLOT BLK
4	87-A80-141-010		CORD,PIN 2PC368V 150CM R-W				
5	87-YP3-632-010		CORD ASSY,PIN P-C285V-30				

ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

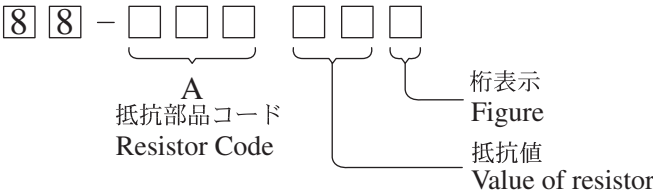
REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
IC				C226	87-010-404-080		CAP, ELECT 4.7-50V
	87-017-804-010	IC,BU4052BC		C301	87-A10-520-000		CAP,E 3300-35 M SMG
	87-A91-074-010	RCR UNIT,NJL68H380		C302	87-A10-520-000		CAP,E 3300-35 M SMG
	87-A20-754-010	IC,BA4558N-DX		C303	87-010-196-080		CHIP CAPACITOR,0.1-25
	87-A21-545-010	IC,LA2787		C304	87-010-196-080		CHIP CAPACITOR,0.1-25
	87-A21-546-010	IC,LV1018		C305	87-010-196-080		CHIP CAPACITOR,0.1-25
				C306	87-010-196-080		CHIP CAPACITOR,0.1-25
	87-A21-103-040	IC,MM1454/XFBE		C307	87-010-928-090		CAP,E 4700-25V
	87-A20-452-040	IC,TC9260FS		C309	87-010-405-080		CAP, ELECT 10-50V
	87-A21-544-010	IC,STK402-030		C310	87-010-381-080		CAP,E 330-16 SME
	8A-YP2-609-010	IC,LA865508A-5P10		C311	87-012-140-080		CAP 470P
TRANSISTOR				C312	87-010-112-080		CAP, ELECT 100-16V
	89-213-702-080	TR,2SB1370E		C313	87-010-393-080		CAP, ELECT 100-35V
	89-420-612-080	TR,2SD2061E		C314	87-010-112-080		CAP, ELECT 100-16V
	89-406-554-580	TR,CSD655E		C315	87-010-235-080		CAP,E 470-16 SME
	87-026-610-080	TR,KTC3198GR		CN2	87-009-755-010		CONN,14P PH V
	87-026-609-080	TR,KTA1266GR		CN5	87-099-043-010		CONN 2P EH
				CN6	87-099-043-010		CONN 2P EH
	87-A30-196-080	TR,2SC4115SR		CN7	87-099-416-010		CONN,3P EH
	87-026-200-080	CHIP-TR,DTC114ES		CNA2	8A-YP2-612-010		CONN ASSY, 7P MAIN-PT
	87-A30-087-080	C-FET,2SK2158		CNA3	8A-YP2-630-010		CONN,ASSY,2P SAN
	87-026-235-080	CHIP-TR,DTC114EK		△PR203	87-A91-276-080		FUSE,125MA 125V F251
	87-026-227-080	CHIP-TR,DTA114EK		△PR204	87-A91-276-080		FUSE,125MA 125V F251
DIODE				△PR303	87-026-690-080		FUSE,5A 125V 251
				△PR304	87-026-690-080		FUSE,5A 125V 251
	87-020-465-080	DIODE,1SS133 (110MA)		R220	8A-YP2-626-080		RES,M/F 0.22-2W
	87-A40-004-080	ZENER,MTZJ16A		FR C.B			
	87-017-978-080	DIODE,1N4003		C502	87-010-196-080		CHIP CAPACITOR,0.1-25
	87-A40-269-080	C-DIODE,MC2836		C503	87-010-196-080		CHIP CAPACITOR,0.1-25
	87-070-334-080	ZENER,MTZJ10B		C504	87-010-405-080		CAP, ELECT 10-50V
				C505	87-010-194-080		CAP, CHIP 0.047
	86-SP2-646-010	151-540235,DIODE IN5402LT		C506	87-010-248-080		CAP, ELECT 220-10V
	87-A40-509-080	ZENER,MTZJ6.8C		C507	87-010-196-080		CHIP CAPACITOR,0.1-25
	87-A40-270-080	C-DIODE,MC2838		C508	87-010-221-080		CAP, ELECT 470-10V
MAIN C.B				C509	87-010-196-080		CHIP CAPACITOR,0.1-25
C96	87-012-141-080	C-CAP,S0.22		C510	87-010-400-080		CAP, ELECT 0.47-50V
C97	87-012-141-080	C-CAP,S0.22		C511	87-010-198-080		CAP, CHIP 0.022
C98	87-010-196-080	CHIP CAPACITOR,0.1-25		C512	87-010-196-080		CHIP CAPACITOR,0.1-25
C99	87-010-544-080	CAP, ELECT 0.1-50V		C513	87-010-317-080		C-CAP,S 39P-50 CH
C100	87-010-544-080	CAP, ELECT 0.1-50V		C514	87-010-317-080		C-CAP,S 39P-50 CH
C101	87-010-322-080	C-CAP,S 100P-50 CH		C515	87-010-263-080		CAP, ELECT 100-10V
C102	87-010-322-080	C-CAP,S 100P-50 CH		C516	87-010-178-080		CHIP CAP 1000P
C103	87-010-196-080	CHIP CAPACITOR,0.1-25		CN4	87-A60-164-010		CONN,16P H FE
C126	87-010-112-080	CAP, ELECT 100-16V		D503	87-A40-806-080		LED,L-113IDT RED
C201	87-010-402-080	CAP, ELECT 2.2-50V		D504	87-A40-806-080		LED,L-113IDT RED
C202	87-010-402-080	CAP, ELECT 2.2-50V		D505	87-A40-806-080		LED,L-113IDT RED
C203	87-010-993-080	CAP, CHIP 0.056		D506	87-A40-806-080		LED,L-113IDT RED
C204	87-010-993-080	CAP, CHIP 0.056		D507	87-A40-806-080		LED,L-113IDT RED
C205	87-010-177-080	CAP,CHIP 820P		D508	87-A40-806-080		LED,L-113IDT RED
C206	87-010-177-080	CAP,CHIP 820P		D509	87-A40-806-080		LED,L-113IDT RED
C207	87-010-546-080	CAP, ELECT 0.33-50V		D510	87-A40-806-080		LED,L-113IDT RED
C208	87-010-546-080	CAP, ELECT 0.33-50V		D511	87-A40-805-080		LED,L-34IDSL RED
C209	87-012-156-080	C-CAP,S 220P-50 CH		D512	87-A40-805-080		LED,L-34IDSL RED
C210	87-012-156-080	C-CAP,S 220P-50 CH		D513	87-A40-805-080		LED,L-34IDSL RED
C211	87-010-150-080	C-CAP,S 6P-50 CH		D514	87-A40-805-080		LED,L-34IDSL RED
C212	87-010-150-080	C-CAP,S 6P-50 CH		D515	87-A40-805-080		LED,L-34IDSL RED
C213	87-010-405-080	CAP, ELECT 10-50V		D516	87-A40-805-080		LED,L-34IDSL RED
C214	87-010-405-080	CAP, ELECT 10-50V		D517	87-A40-805-080		LED,L-34IDSL RED
C215	87-010-195-080	C-CAP,S 0.068-25 F		D518	87-A40-806-080		LED,L-113IDT RED
C216	87-010-195-080	C-CAP,S 0.068-25 F		D519	87-A40-807-080		LED,L-3VEGW RED/GRN
C217	87-010-544-080	CAP, ELECT 0.1-50V		S501	87-A91-616-010		SW,PUSH 2-2-2 SPEA12-2N
C218	87-010-544-080	CAP, ELECT 0.1-50V		S502	86-SP2-647-010		SW,TACT
C219	87-010-197-080	CAP, CHIP 0.01 DM		S503	86-SP2-647-010		SW,TACT
C220	87-010-393-080	CAP, ELECT 100-35V		S504	86-SP2-647-010		SW,TACT
C221	87-010-393-080	CAP, ELECT 100-35V		S505	86-SP2-647-010		SW,TACT
C223	87-010-405-080	CAP, ELECT 10-50V		S506	86-SP2-647-010		SW,TACT
C224	87-010-405-080	CAP, ELECT 10-50V		W2	8A-YP2-615-010		FF-CABLE, 16P 1.25 FR-MID
C225	87-010-260-080	CAP, ELECT 47-25V					

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
X501	87-030-376-080	VIB,CER CSA5.76MG200		CN3	87-A60-141-010		CONN,16P V FE
				CNA1	8A-YP2-632-010		CONN ASSY,14P MAIN-MID
				D1	87-A40-818-080		VARI-CAP,SVC201SPA
MID C.B				L1	87-005-196-080		COIL,10UH
				W1	8A-YP2-613-010		F-CABLE,7P 2 MID-INP
C16	87-010-101-080	CAP, ELECT 220-16					
C17	87-010-405-080	CAP, ELECT 10-50V		INP C.B			
C18	87-010-405-080	CAP, ELECT 10-50V					
C19	87-010-405-080	CAP, ELECT 10-50V		C1	87-010-178-080		CHIP CAP 1000P
C20	87-010-405-080	CAP, ELECT 10-50V		C2	87-010-178-080		CHIP CAP 1000P
				C3	87-010-178-080		CHIP CAP 1000P
C21	87-010-101-080	CAP, ELECT 220-16		C4	87-010-178-080		CHIP CAP 1000P
C22	87-010-401-080	CAP, ELECT 1-50V		C5	87-010-196-080		CHIP CAPACITOR,0.1-25
C23	87-010-401-080	CAP, ELECT 1-50V					
C24	87-010-401-080	CAP, ELECT 1-50V		C6	87-010-401-080		CAP, ELECT 1-50V
C27	87-010-400-080	CAP, ELECT 0.47-50V		C7	87-010-401-080		CAP, ELECT 1-50V
				C10	87-010-403-080		CAP, ELECT 3.3-50V
C28	87-010-404-080	CAP, ELECT 4.7-50V		C11	87-010-403-080		CAP, ELECT 3.3-50V
C29	87-010-400-080	CAP, ELECT 0.47-50V		C12	87-010-196-080		CHIP CAPACITOR,0.1-25
C30	87-010-404-080	CAP, ELECT 4.7-50V					
C32	87-010-403-080	CAP, ELECT 3.3-50V		C13	87-010-112-080		CAP, ELECT 100-16V
C35	87-010-403-080	CAP, ELECT 3.3-50V		C120	87-010-406-080		CAP, ELECT 22-50
				C127	87-010-196-080		CHIP CAPACITOR,0.1-25
C37	87-010-404-080	CAP, ELECT 4.7-50V		CN8	87-009-345-010		CONN,2P PH
C38	87-010-400-080	CAP, ELECT 0.47-50V		CN10	87-009-313-010		CONN 7P 51048
C39	87-010-404-080	CAP, ELECT 4.7-50V					
C40	87-010-400-080	CAP, ELECT 0.47-50V		J1	87-A61-233-010		JACK,PIN 4P W/R HSP-204V
C43	87-010-401-080	CAP, ELECT 1-50V		J2	85-SP3-620-010		JACK,PIN 2P
				J3	87-099-801-010		JACK,PIN 1P BLK
C44	87-010-101-080	CAP, ELECT 220-16					
C46	87-010-196-080	CHIP CAPACITOR,0.1-25		PT MAIN C.B			
C47	87-010-176-080	C-CAP,S 680P-50 SL					
C48	87-010-401-080	CAP, ELECT 1-50V		CN352	87-A60-959-010		CONN,5P V VH B5P9
C50	87-010-196-080	CHIP CAPACITOR,0.1-25		CN353	87-099-407-010		CONN,7P EH V WHT
				△PT351	8A-YP2-606-010		PT,U
C51	87-010-101-080	CAP, ELECT 220-16					
C52	87-010-196-080	CHIP CAPACITOR,0.1-25		PT SUB C.B			
C55	87-010-101-080	CAP, ELECT 220-16					
C57	87-012-156-080	C-CAP,S 220P-50 CH		C354	87-A10-479-080		CAP,CER 2200P-250 M E KH
C58	87-010-805-020	C-CAP,S1-16		C355	87-010-405-080		CAP, ELECT 10-50V
				C356	87-016-521-010		CAP,E 2200-16 M SMG
C59	87-010-805-020	C-CAP,S1-16		CNA351	8A-YP2-628-010		CONN ASSY,3P PT PRI
C60	87-010-322-080	C-CAP,S 100P-50 CH		CNA353	8A-YP2-629-010		CONN,ASSY,3P 1PH
C61	87-010-402-080	CAP, ELECT 2.2-50V		△F359	87-A91-276-080		FUSE,125mA F251
C62	87-010-546-080	CAP, ELECT 0.33-50V		△PT352	8Z-NF8-661-010		PT,SUB ZNF-8(U)
C63	87-010-401-080	CAP, ELECT 1-50V		T351	82-304-743-010		TERMINAL, 1P
				T352	82-304-743-010		TERMINAL, 1P
C68	87-010-101-080	CAP, ELECT 220-16		W351	8A-YP2-611-010		F-CABLE,2P 2.5 SUB PT
C69	87-010-316-080	C-CAP,S 33P-50 CH					
C70	87-010-322-080	C-CAP,S 100P-50 CH					
C71	87-010-318-080	C-CAP,S 47P-50 CH					
C72	87-010-312-080	C-CAP,S 15P-50 CH					
C76	87-010-402-080	CAP, ELECT 2.2-50V					
C77	87-010-402-080	CAP, ELECT 2.2-50V					
C78	87-010-405-080	CAP, ELECT 10-50V					
C80	87-010-197-080	CAP, CHIP 0.01 DM					
C81	87-010-197-080	CAP, CHIP 0.01 DM					
C82	87-010-408-080	CAP, ELECT 47-50V					
C83	87-010-196-080	CHIP CAPACITOR,0.1-25					
C84	87-010-384-080	CAP, ELECT 100-25V					
C85	87-010-403-080	CAP, ELECT 3.3-50V					
C86	87-010-403-080	CAP, ELECT 3.3-50V					
C89	87-010-403-080	CAP, ELECT 3.3-50V					
C90	87-010-403-080	CAP, ELECT 3.3-50V					
C93	87-010-196-080	CHIP CAPACITOR,0.1-25					
C104	87-010-401-080	CAP, ELECT 1-50V					
C105	87-010-401-080	CAP, ELECT 1-50V					
C110	87-010-112-080	CAP, ELECT 100-16V					
C111	87-010-196-080	CHIP CAPACITOR,0.1-25					
C113	87-010-403-080	CAP, ELECT 3.3-50V					
C114	87-010-403-080	CAP, ELECT 3.3-50V					
C118	87-010-112-080	CAP, ELECT 100-16V					
C119	87-010-544-080	CAP, ELECT 0.1-50V					
C122	87-010-404-080	CAP, ELECT 4.7-50V					
C123	87-010-406-080	CAP, ELECT 22-50					
C124	87-010-313-080	CAP, CHIP 18P					
CN1	87-009-261-010	CONN,7P52147MXJ					

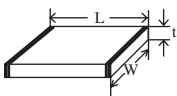
○チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち

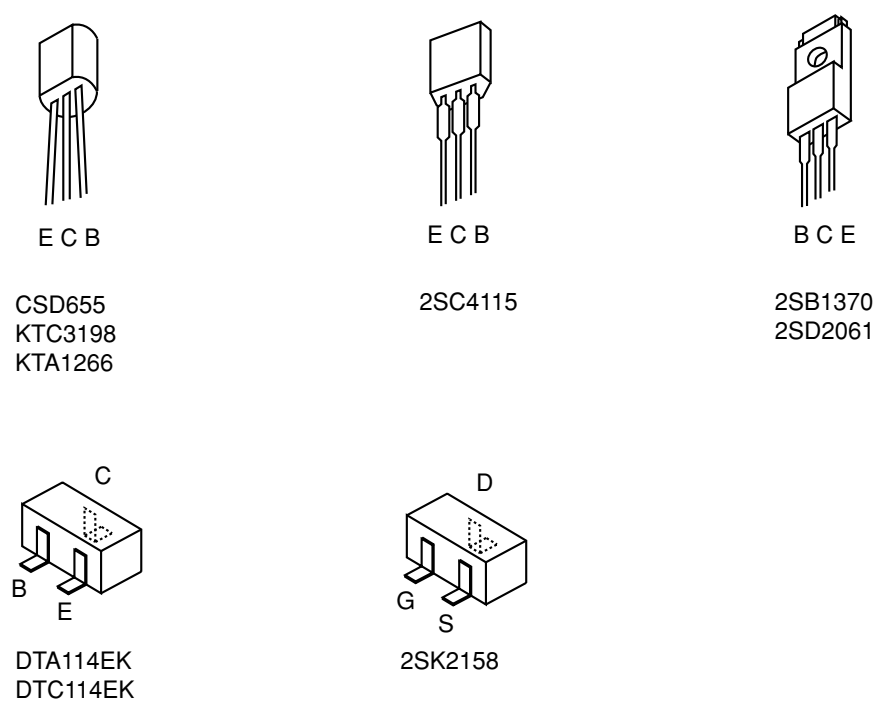
Chip Resistor Part Coding



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 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

TRANSISTOR ILLUSTRATION

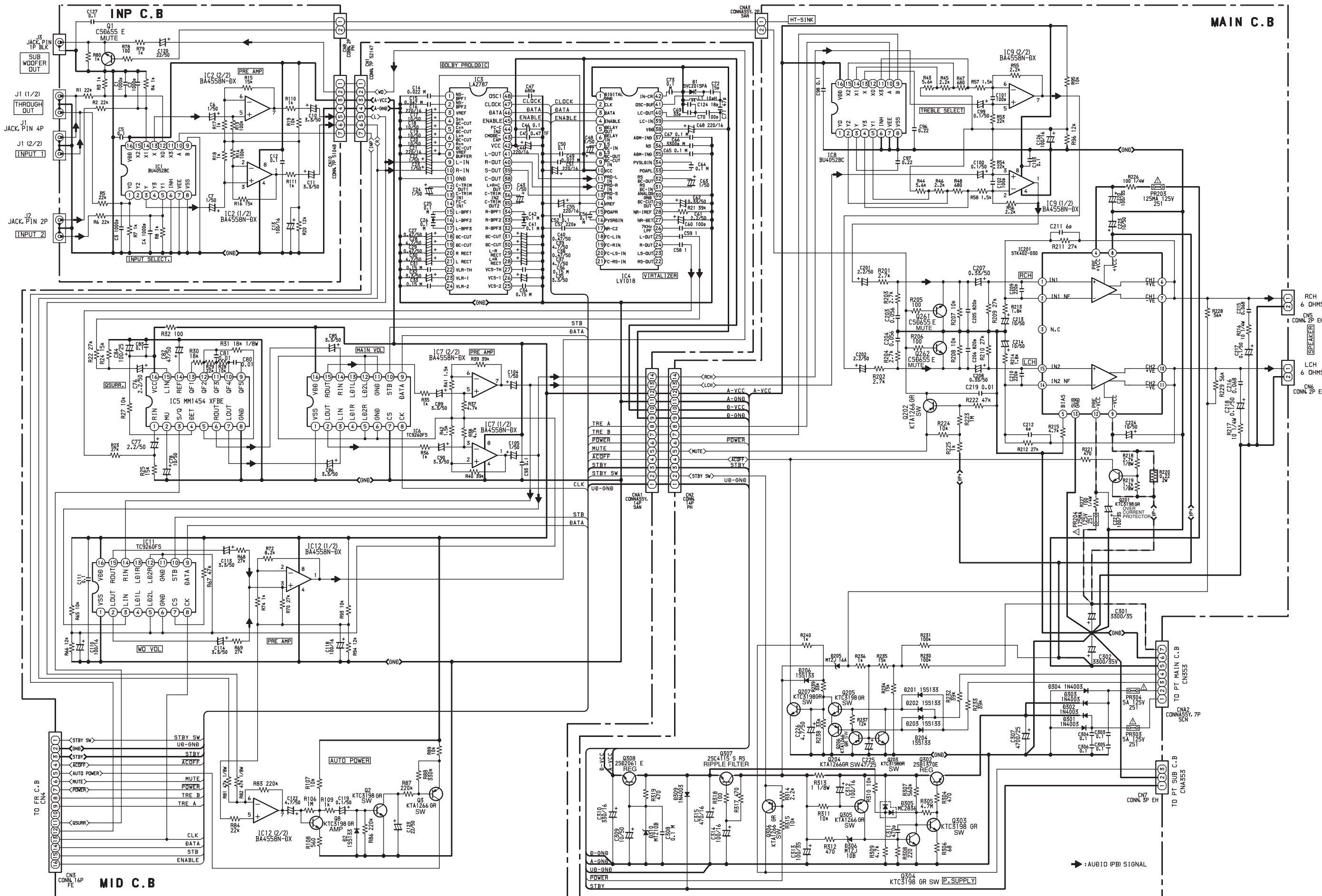


IC DESCRIPTION

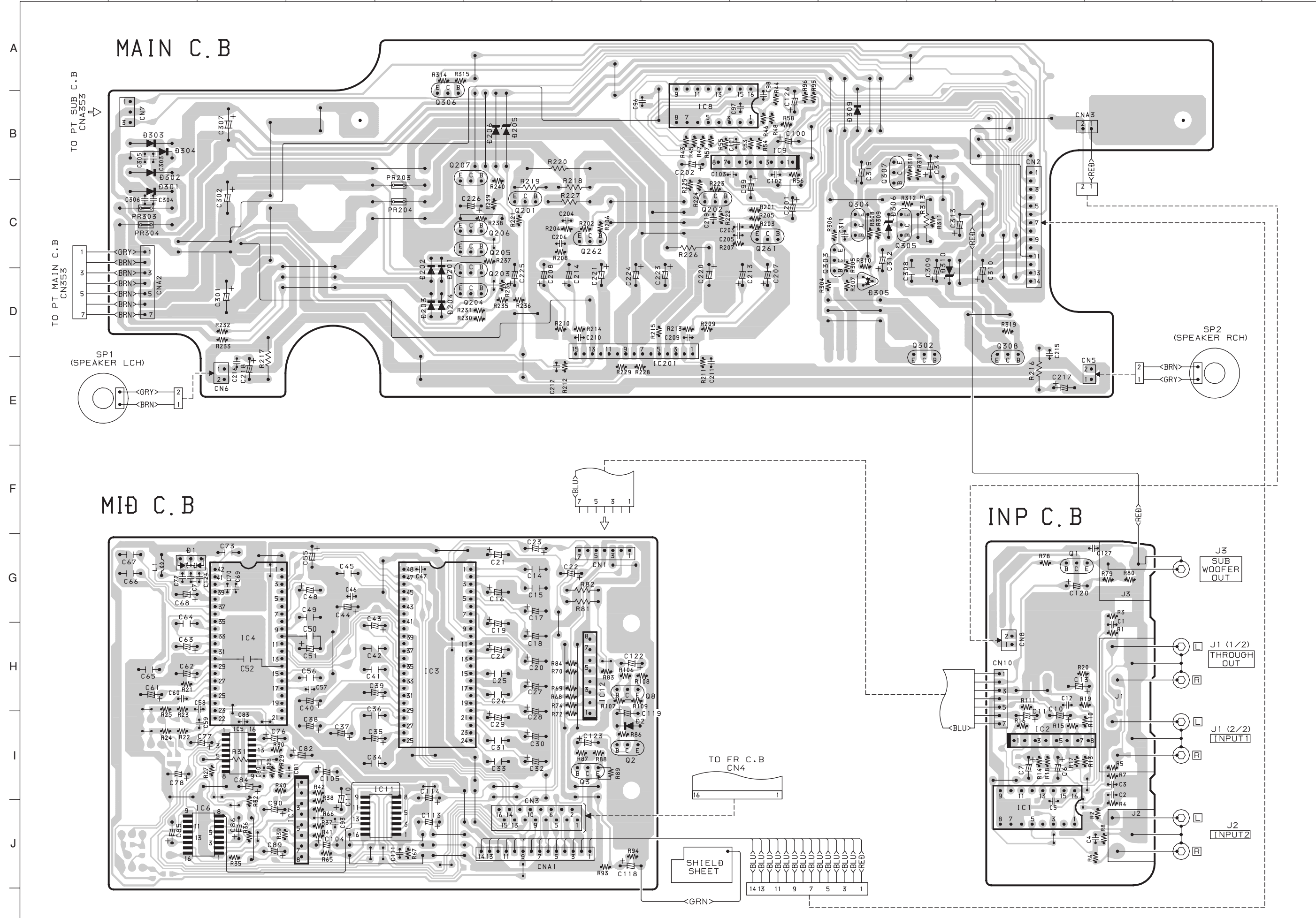
IC, LA865508A-5P10

Pin No.	Pin Name	I/O	Description
1, 2	VOL LED 6, 7	O	Volume, Balance, Surround level, Woofer level, Treble display LED output
3	TRE LED	O	Treble LED output
4	MUTE	O	Muting output
5	RES	I	System reset terminal
6	OSC1	—	Ground of the crystal oscillator
7	NC	—	Not connected.
8	OSC1	—	Not connected.
9	VSS	—	GND
10	OSC2	I	For the connection of a 6 MHz crystal oscillator.
11	OSC2	O	
12	VDD	—	Power supply of microprocessor (+5V)
13	KEY2	I	Tact key A/D input
14	ACOFF	I	Abnormal detect A/D input
15	KEY1	I	Push key input
16	APOW	I	Auto power on/off input
17	SEL	I	AYP2: Lo, AYP3: Hi
18	NC	—	Not connected.
19	POW LEDR	O	POW LED RED output
20	POW LEDG	O	POW LED GRN output
21	DIMMER	O	DIMMER control output
22	QSURR	O	Qsurround on/off control output
23	POWER	O	Power on/off control output
24	NC	—	Not connected.
25	REMO	I	Remote control input
26	INP1 LED	O	INPUT1 LED output
27	INP2 LED	O	INPUT2 LED output
28	QSURR LED	O	Qsurround on/off LED output
29	NC	—	Not connected
30	DOLBY LED	O	Virtual Surround on/off LED output
31	VOL LED	O	Vol function LED output
32	BAL LED	O	Balance function LED output
33	SLEV LED	O	Surround level function LED output
34	WO LED	O	Woofer function LED output
35	ENABLE	O	Main volume, Woofer volume, Virtual surround control data
36	STB	O	
37	DATA	O	
38	INP	O	Input select control output
39	CLK	O	Reference clock output
40, 41	TRE A, B	O	Treble control output
42	NC	—	Not connected
43 ~ 47	VOL LED 1~ 5	O	Volume, Balance, Surround level, Woofer level, Treble display LED output
48	NC	—	Not connected

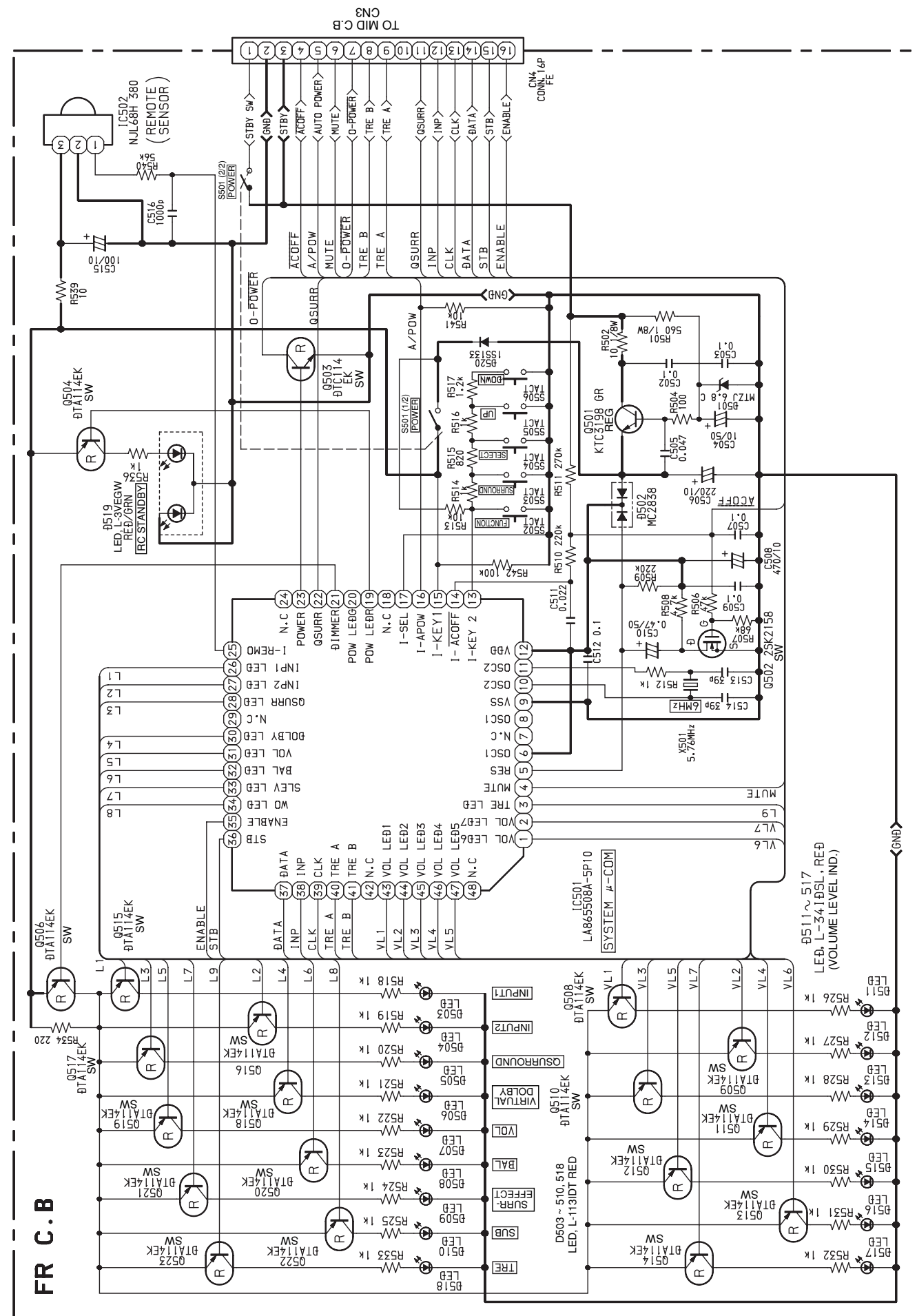
SCHEMATIC DIAGRAM-1 (MAIN, MID, INP SECTION)



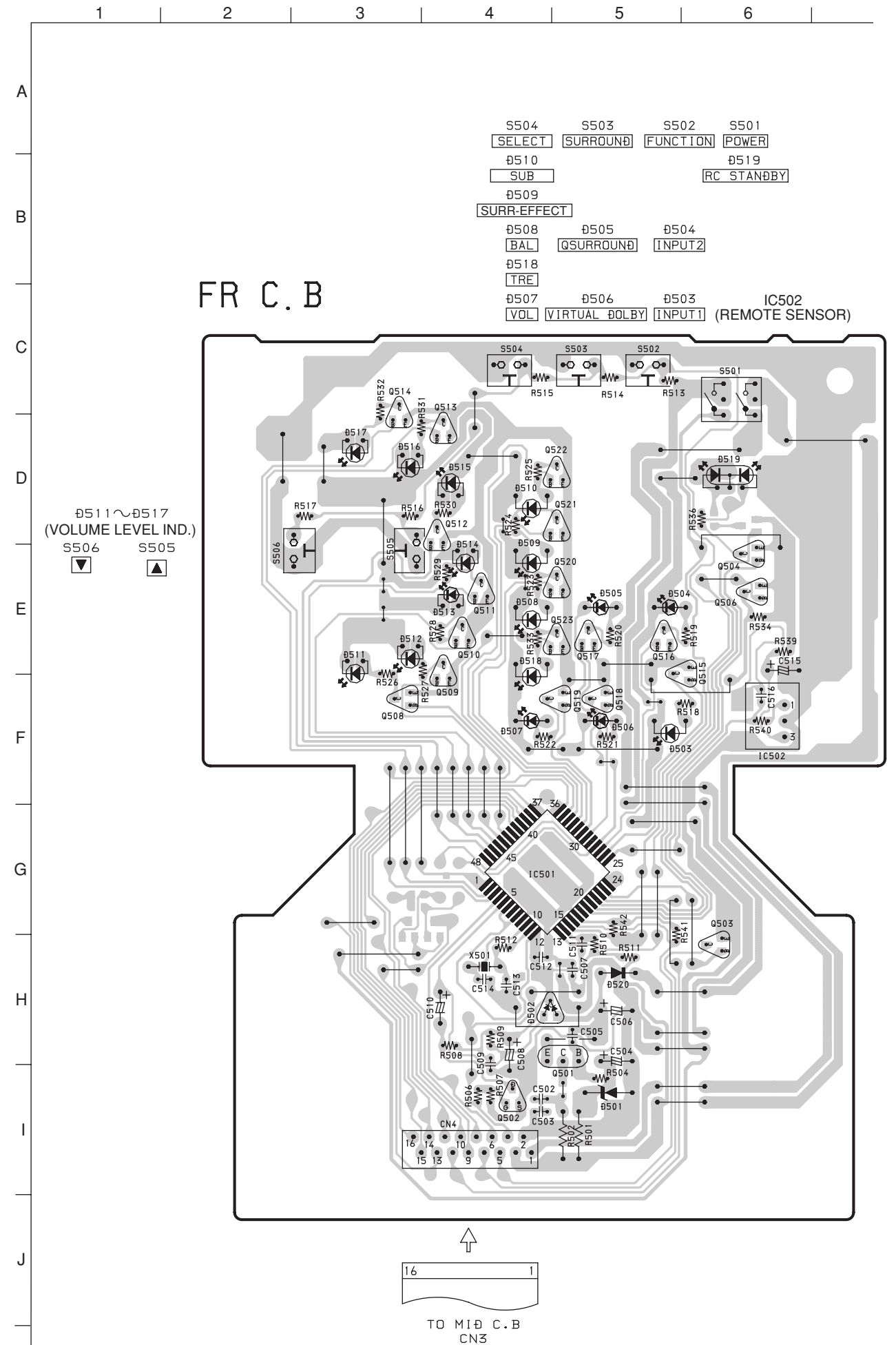
1 2 3 4 5 6 7 8 9 10 11 12 13 14



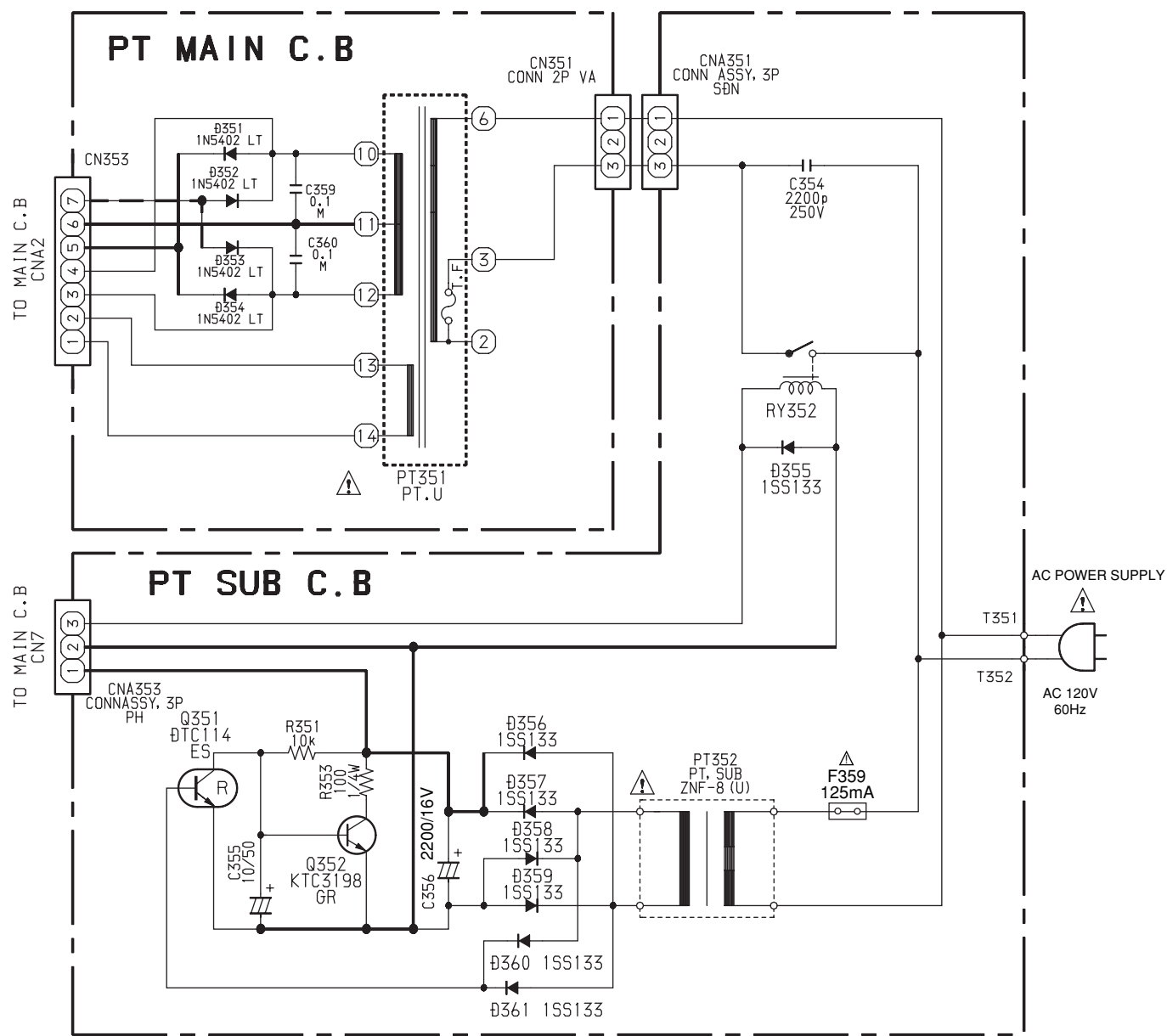
SCHEMATIC DIAGRAM-2 (FR SECTION)



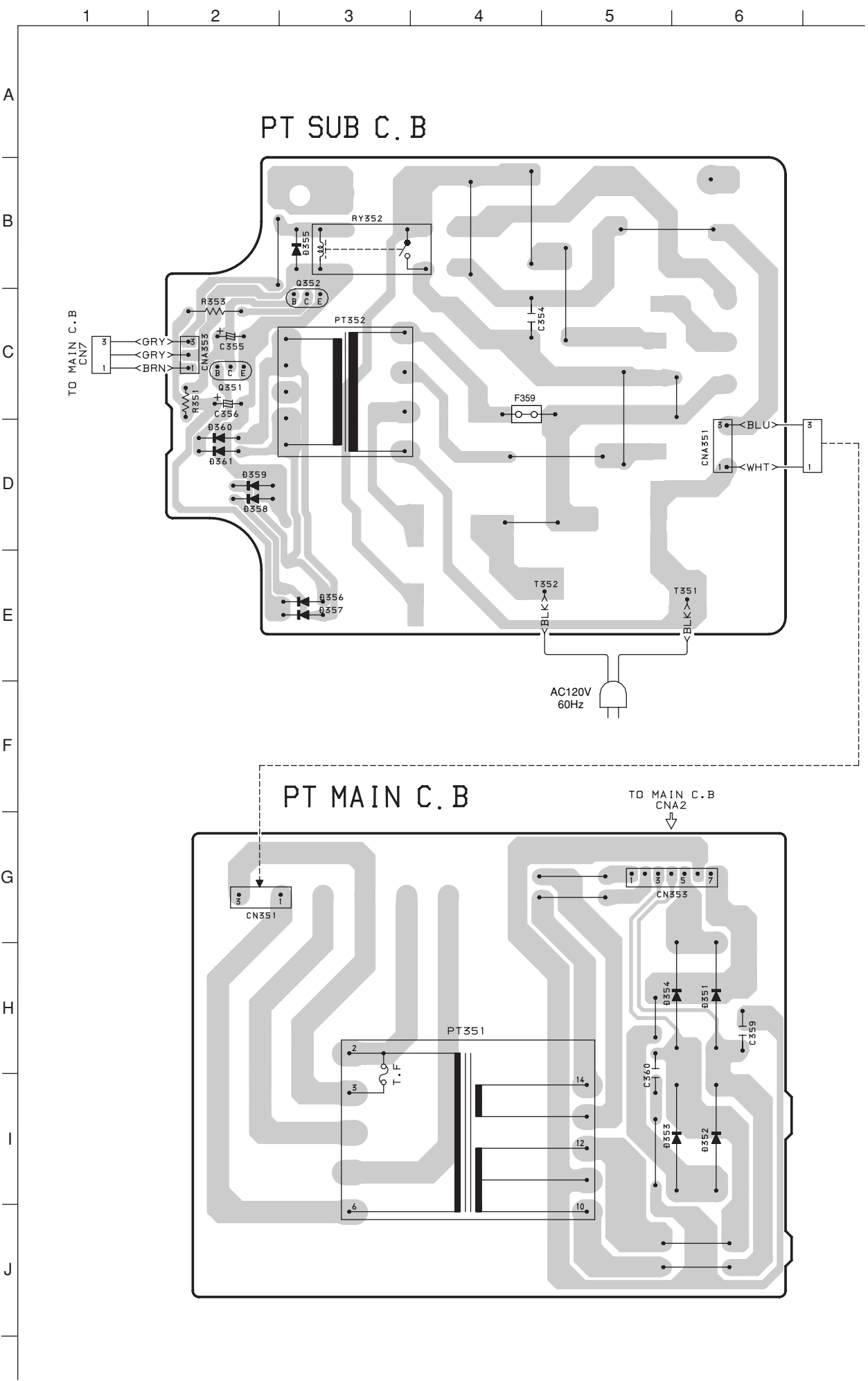
WIRING-2 (FR C.B SECTION)

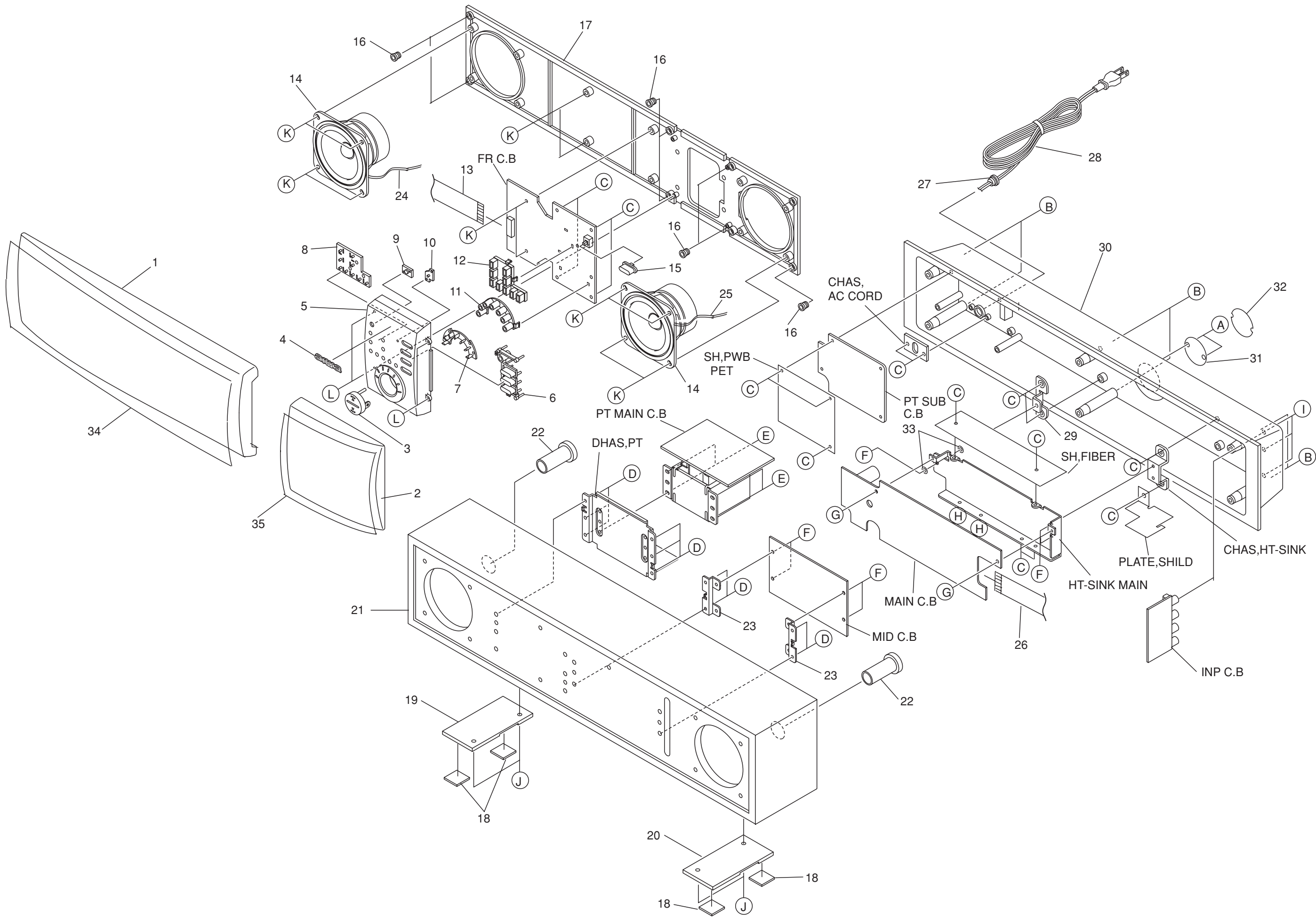


SCHEMATIC DIAGRAM-3 (PT MAIN, PT SUB SECTION)



WIRING-2 (PT MAIN, PT SUB C.B SECTION)





MECHANICAL MAIN PARTS LIST 1/1

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8A-YP2-201-010		CABI, FRAME L	26	87-009-755-010		CONN, 14P H WHT PH
2	8A-YP2-202-010		CABI, FRAME R	27	86-SP2-637-010		BUSHING, AC U
3	8A-YP2-019-010		KEY, VOL ST	28	87-YP4-620-010		AC CORD ASSY, U, STT-2W
4	8A-YP2-025-010		BADGE, AIWA 30.6 ABS SIL	29	8A-YP2-213-010		HLD, HT-SINK
5	8A-YP2-026-010		PANEL, FRONT ST EX	30	8A-YP2-002-010		CABI, REAR HR
6	8A-YP2-018-010		KEY, FUN ST	31	8A-YP2-028-010		PLATE, BLIND DUCT N
7	8A-YP2-008-010		WINDOW, LEVEL	32	8A-YP2-024-010		PLATE, BLIND DUCT
8	8A-YP2-009-010		WINDOW, FUN	33	87-YP3-220-010		W-F, BAFFLE
9	8A-YP2-007-010		WINDOW, REMOTE	A	87-741-074-410		UT2+2.6-8 W/O SLOT
10	8A-YP2-010-010		WINDOW, POWER	B	8Z-YP1-233-010		SW+3.5-20
11	8A-YP2-205-010		HLD, LED LEVEL	C	87-067-703-010		BVT2+3-10
12	8A-YP2-204-010		HLD, LED FUN	D	87-641-096-410		UT1+3-10
13	8A-YP2-615-010		FF-CABLE, 16P 1.25 FR-MID	E	87-067-566-010		VFTT+3-6
14	8A-YP2-618-010		SPKR, 88 60HM	F	87-067-689-010		BVTT+3-8
15	8A-YP2-017-010		BTN, POWER ST	G	87-NF4-224-010		S-SCREW IT3B+3-8 CUT
16	84-SP1-206-010		BUSHING NET	H	87-067-581-010		BVT2+3-15
17	8A-YP2-203-010		CABI, BAFFLE	I	87-755-096-410		VT2+3-10 W/O SLOT
18	8A-YP2-217-010		FOOT, RUBBER	J	8Z-YP1-231-010		SW+3.5-22
19	8A-YP1-214-010		HLD, FOOT	K	87-YP4-211-010		SW+3.5-22SSY U
20	8A-YP1-235-010		HLD, FOOT R	L	87-751-076-010		VT2+2.6-12D DUCT N
21	8A-YP2-023-010		CABI, WOOD BOX ST				
22	8A-YP2-206-010		RING, DUCT				
23	8A-YP2-212-010		HLD, PWB				
24	8A-YP2-616-010		CONN ASSY, 2P SPKR L				
25	8A-YP2-617-010		CONN ASSY, 2P SPKR R				

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		

