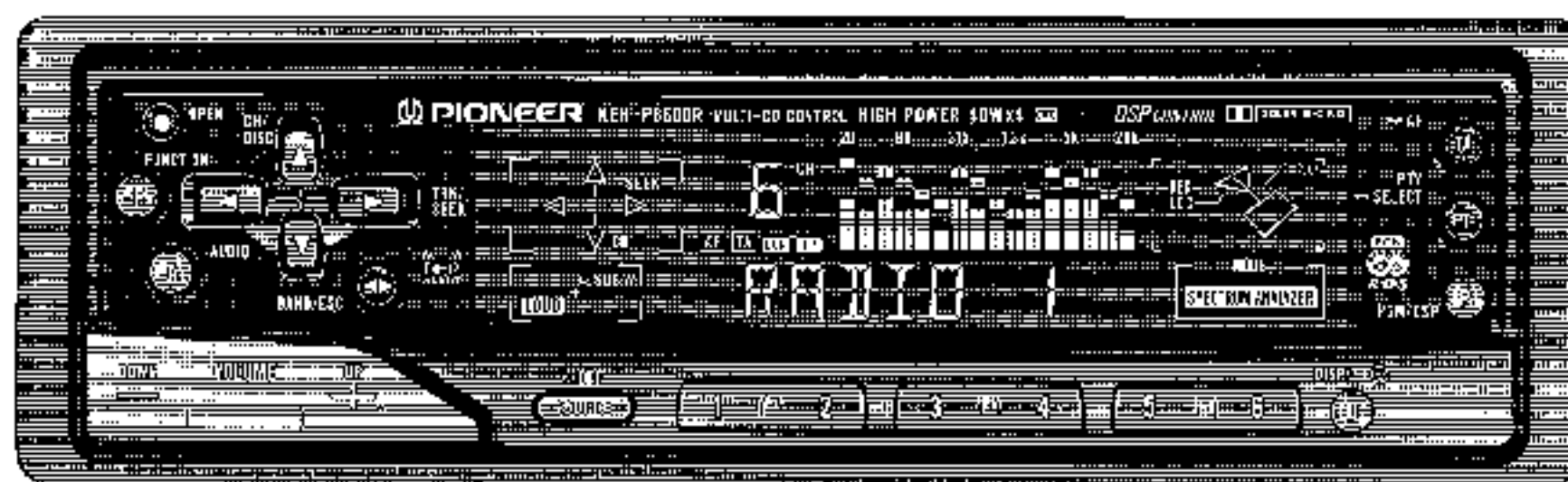


Service Manual

PIONEER
The Art of Entertainment

KEH-P8600R/EW



ORDER NO.
CRT2011

MULTI-CD CONTROL HIGH POWER CASSETTE PLAYER WITH CD/DSP TUNER

KEH-P8600R

EW

MULTI-CD CONTROL HIGH POWER CASSETTE PLAYER WITH RDS TUNER

KEH-P7600R

EW

NOTE:

- See the separate manual CX-631(CRT1640) for the cassette mechanism description.
- The cassette mechanism assy employed in this model is one of X-2L series
- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.
- This model has no CD test mode.
For the operations in the CD test mode, refer to the CD player's Service Manual.
- This device employs an inverter as the power supply for EL. The inverter has an output voltage reach approximately 200 volts(AC). Utmost care should be used not to suffer from a possible electric shock, accordingly.

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K-FEM. MAY 1997 Printed in Belgium

2.3 CASSETTE MECHANISM MODULE

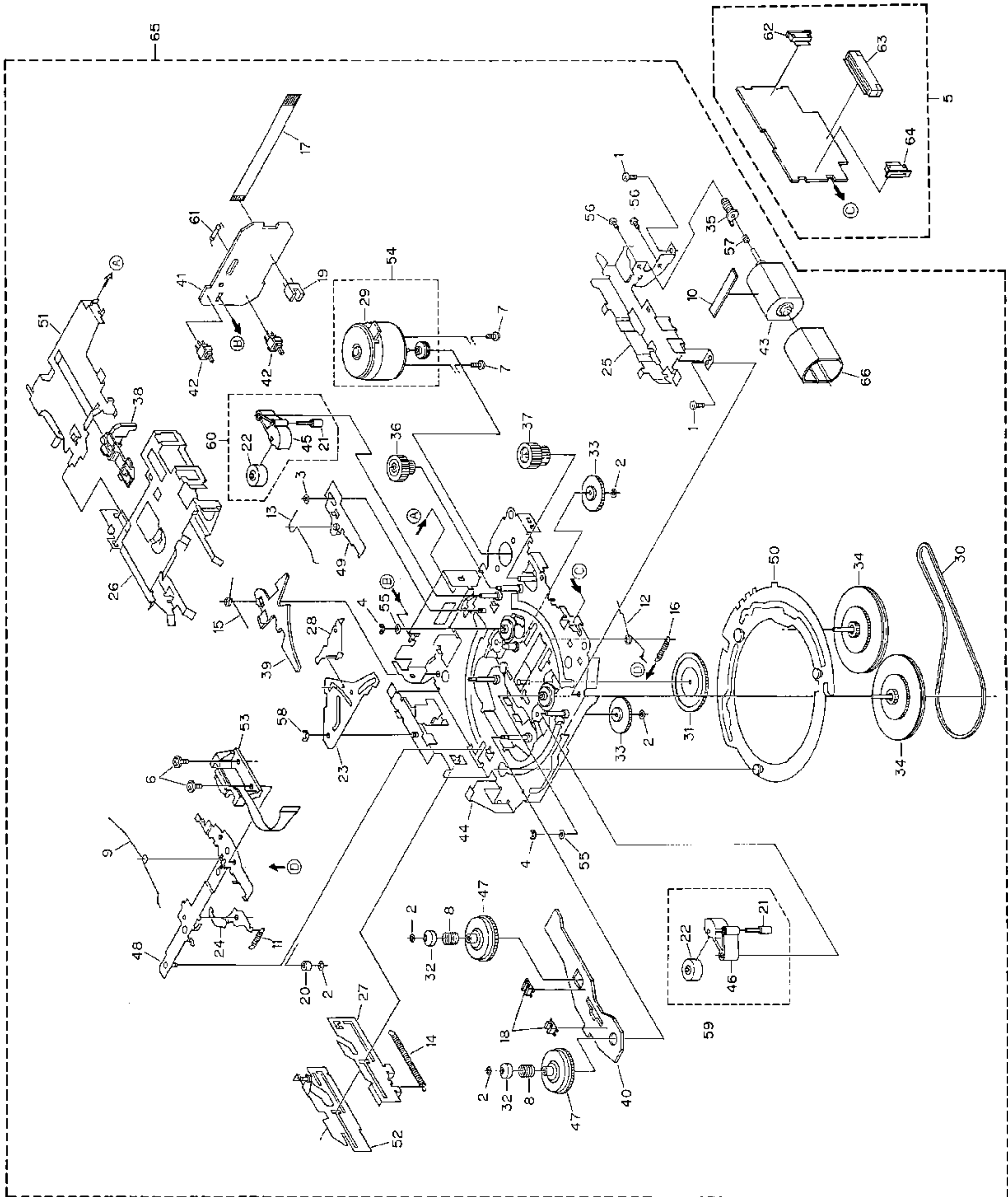


Fig. 3

● CASSETTE MECHANISM MODULE

(1)PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Screw	BSZ20P040FMC	36	Worm Wheel	ENV1440
2	Washer	CBF1037	37	Gear	ENR1028
3	Washer	CBF1038	38	Lever	ENV1442
4	Washer	CBG1003	39	Arm	ENV1445
5	Deck Unit	See Contrast table	40	Gathering P.C.Board	ENX1037
6	Screw	EBA1028	41	Gathering P.C.Board	ENX1038
7	Screw	EBA1037	42	Switch(S1,S2)	ESG1004
8	Spring	EBH1531	43	Motor Unit(M2)	EXA1485
9	Spring	EBH1575	44	Chassis Unit	EXA1511
10	Cushion	EWM1034	45	Pinch Holder	ENV1485
11	Spring	EBH1515	46	Pinch Holder	ENV1486
12	Spring	EBH1587	47	Reel Unit	EXA1456
13	Spring	EBH1517	48	Head Base Unit	EXA1457
14	Spring	EBH1518	49	Lever Unit	EXA1438
15	Spring	EBH1519	50	Gear Unit	EXA1436
16	Spring	EBH1537	51	Frame Unit	EXA1458
17	Cord	EDD1015	52	Lever Unit	EXA1439
18	Photo-interrupter(EGN2,3)	EGN1006	53	Head Assy(HD1)	EXA1452
19	Photo-interrupter(EGN1)	EGN1005	54	Motor Unit(M1)	EXA1454
20	Roller	ENR1031	55	Washer	HBF-179
21	Shaft	ELA1373	56	Screw	BMZ20P022FMC
22	Pinch Roller	ENV1518	57	Spring	EBH1545
23	Arm	ENC1396	58	Washer	YE20FUC
24	Arm	ENC1397	59	Pinch Holder Unit	EXA1529
25	Guide	ENC1398	60	Pinch Holder Unit	EXA1528
26	Holder	ENC1417	61	Resistor(R1)	RD1/4HM181J
27	Lever	ENC1448	62	Connector(CN253)	CKS2129
28	Arm	ENC1401	63	Connector(CN251)	CKS1711
29	Motor	EXM1027	64	Connector(CN252)	CKS2127
30	Belt	ENT1027	65	Spare Unit	See Contrast table
31	Gear	ENV1347	66	Shield	See Contrast table
32	Collar	ENV1508			
33	Gear	ENV1350			
34	Flywheel	ENV1410			
35	Worm Gear	ENV1439			

(2) CONTRAST TABLE

KEH-P8600R/EW and KEH-P7600R/EW have the same construction except for the following:

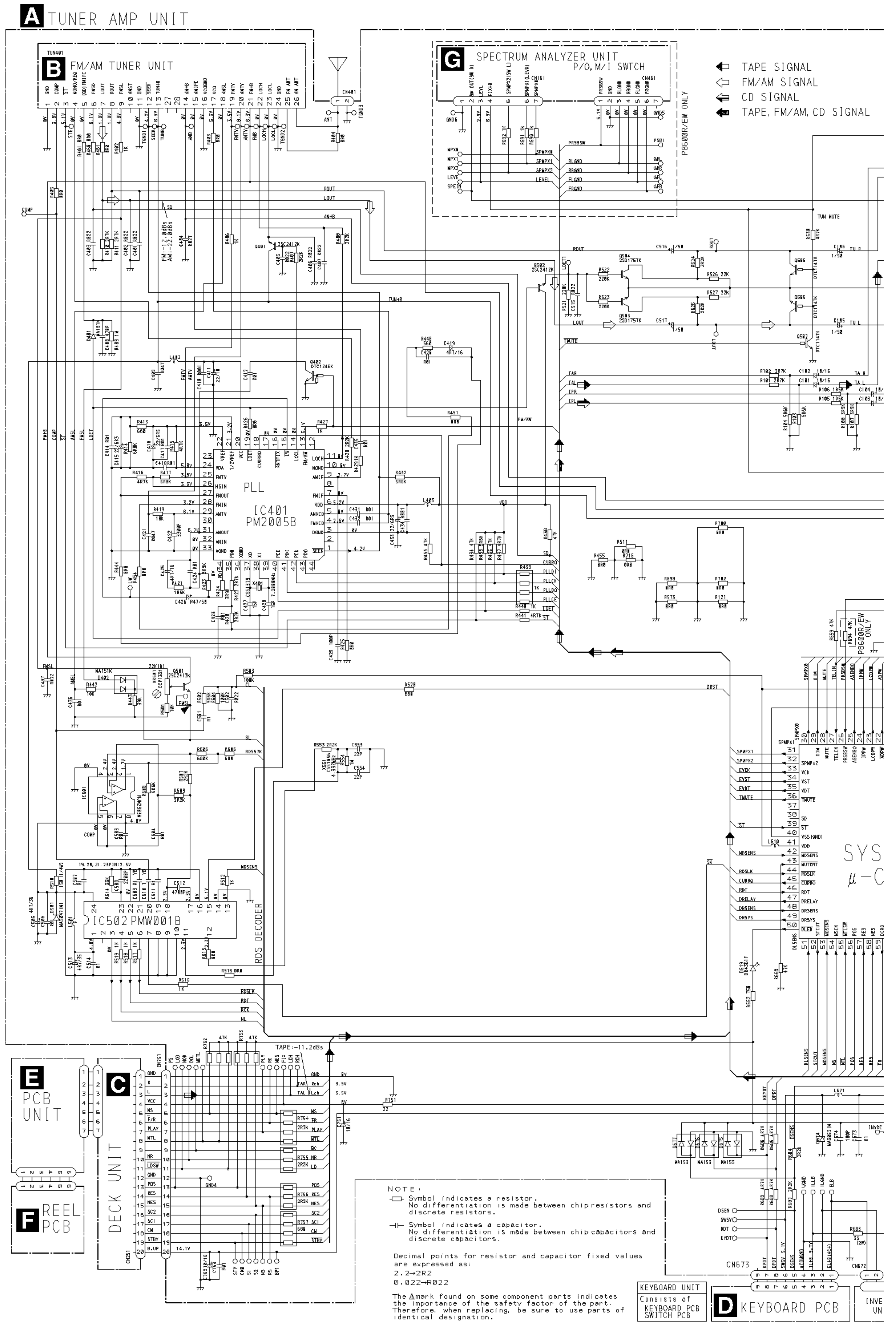
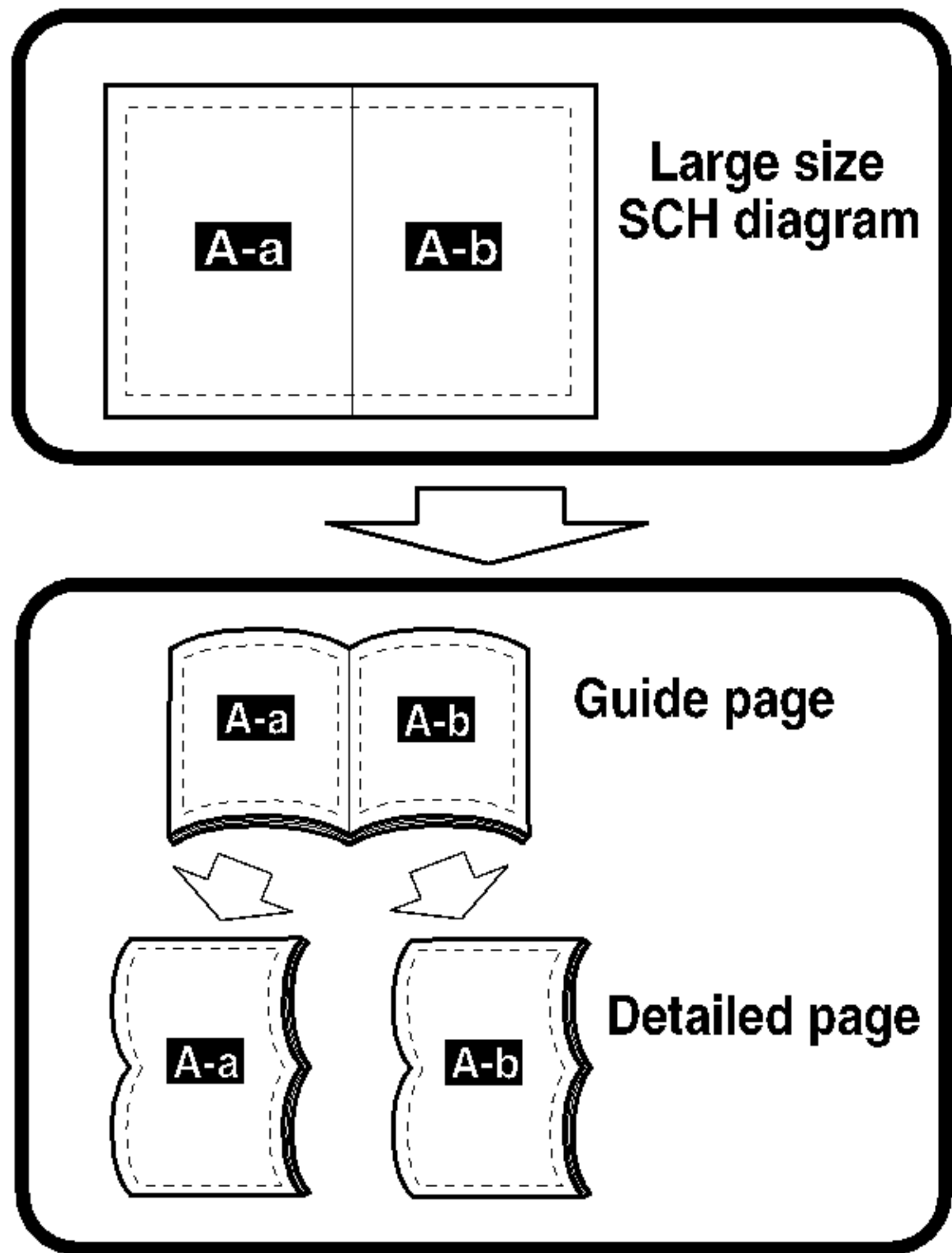
Mark No.	Symbol & Description	Part No.	
		KEH-P8600R/EW	KEH-P7600R/EW
5	Deck Unit	CWM1008	CWM1007
65	Spare Unit	CXA3029	CXA3028
66	Shield	ENC1410	Not used

3. SCHEMATIC DIAGRAM

3.1 OVERALL CONNECTION DIAGRAM (GUIDE PAGE)

Note: When ordering service parts, be sure to refer to "EXPLODED VIEWS AND PARTS LIST" or "ELECTRICAL PARTS LIST".

A-a



A-b

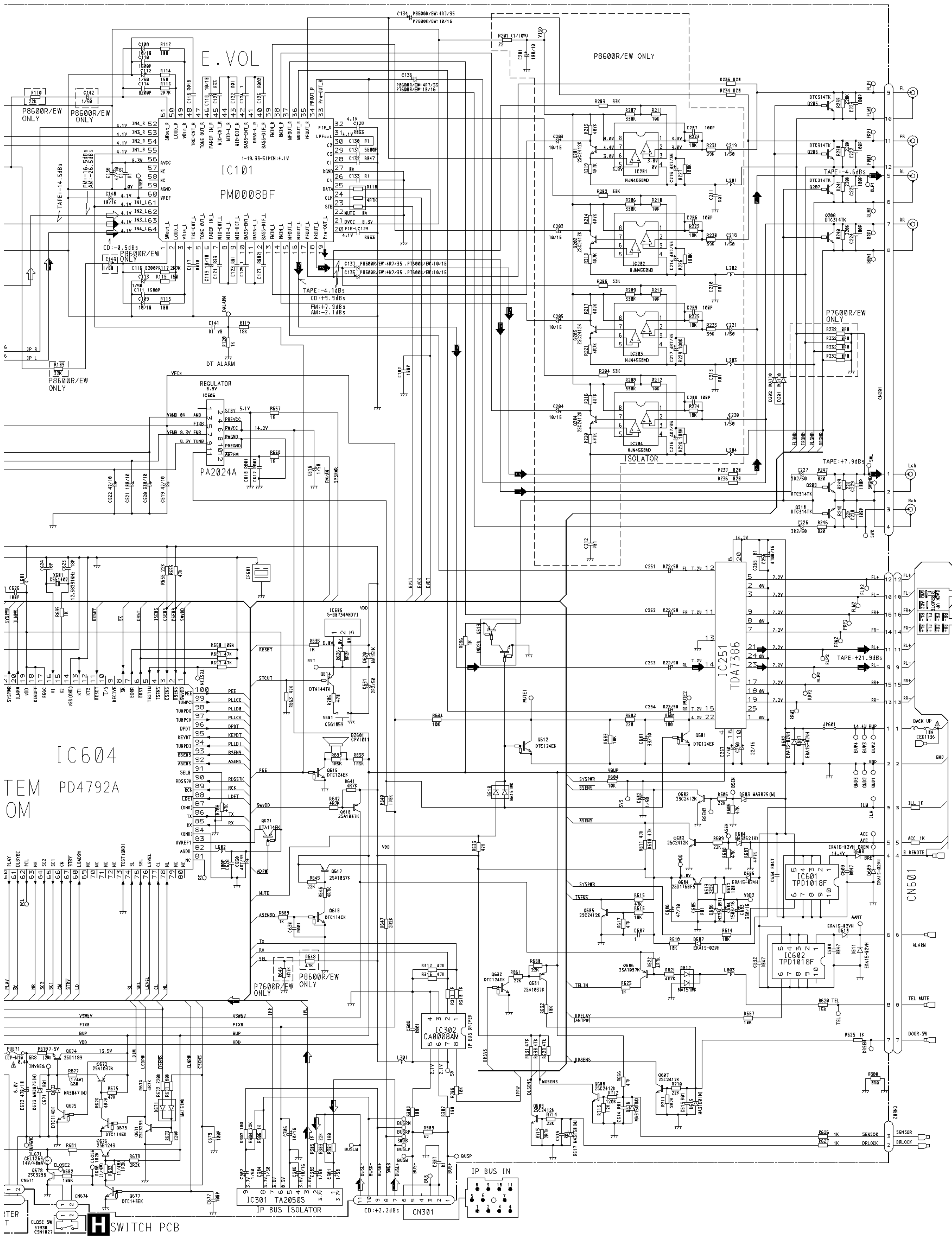


Fig. 4

KEH-P8600R, P7600R

A-b

10

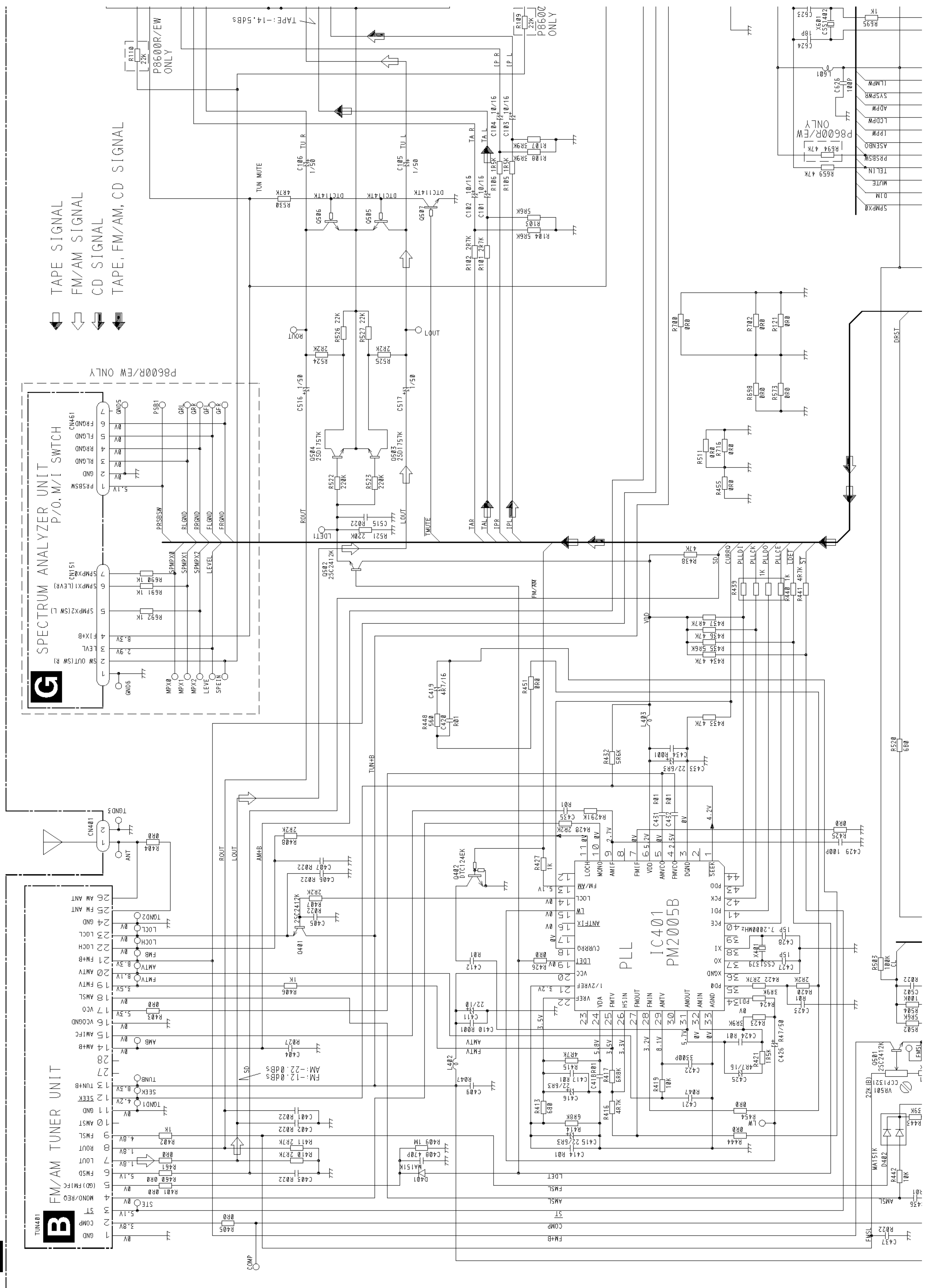
A-a

A TUNER AMP UNIT

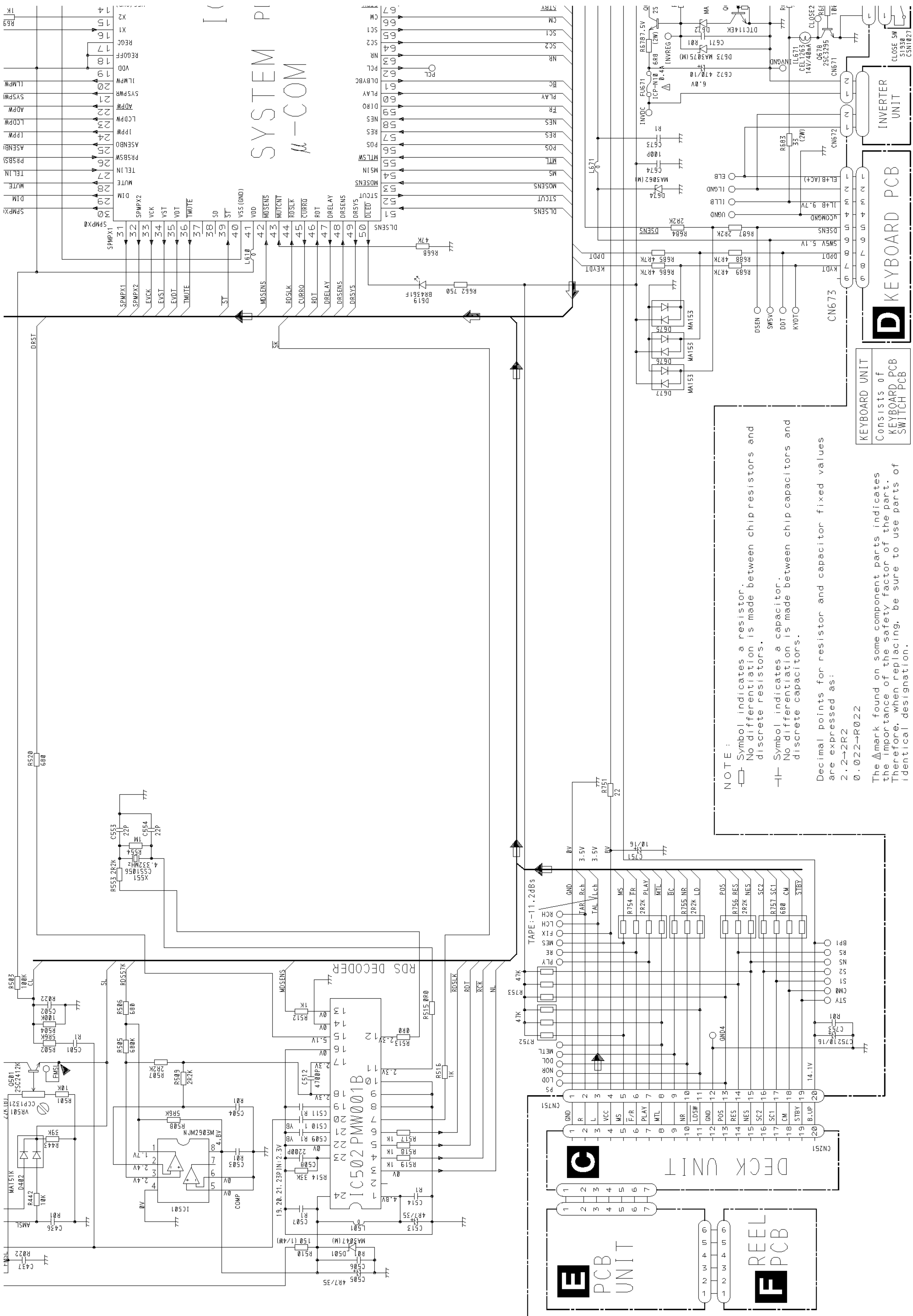
B FM/AM TUNER UNIT

G SPECTRUM ANALYZER UNIT

TAPE SIGNAL
 FM/AM SIGNAL
 CD SIGNAL
 TAPE, FM/AM, CD SIGNAL



P8600R/EW ONLY
 TEL IN
 MUTE
 P8600R/EW ONLY
 TEL IN
 MUTE
 P8600R/EW ONLY
 TEL IN
 MUTE



NOTE :

- Symbol indicates a resistor. No differentiation is made between chip resistors and discrete resistors.
- ||— Symbol indicates a capacitor. No differentiation is made between chip capacitors and discrete capacitors.

Decimal points for resistor and capacitor fixed values are expressed as:
 2.2→R22
 0.022→R022

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

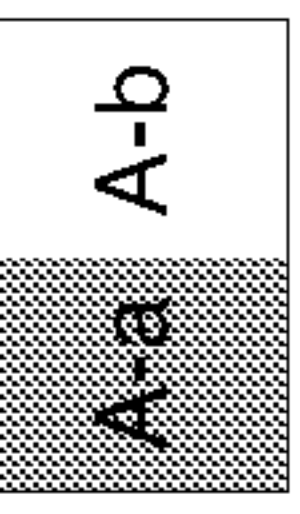


Fig. 5

A-a A-b

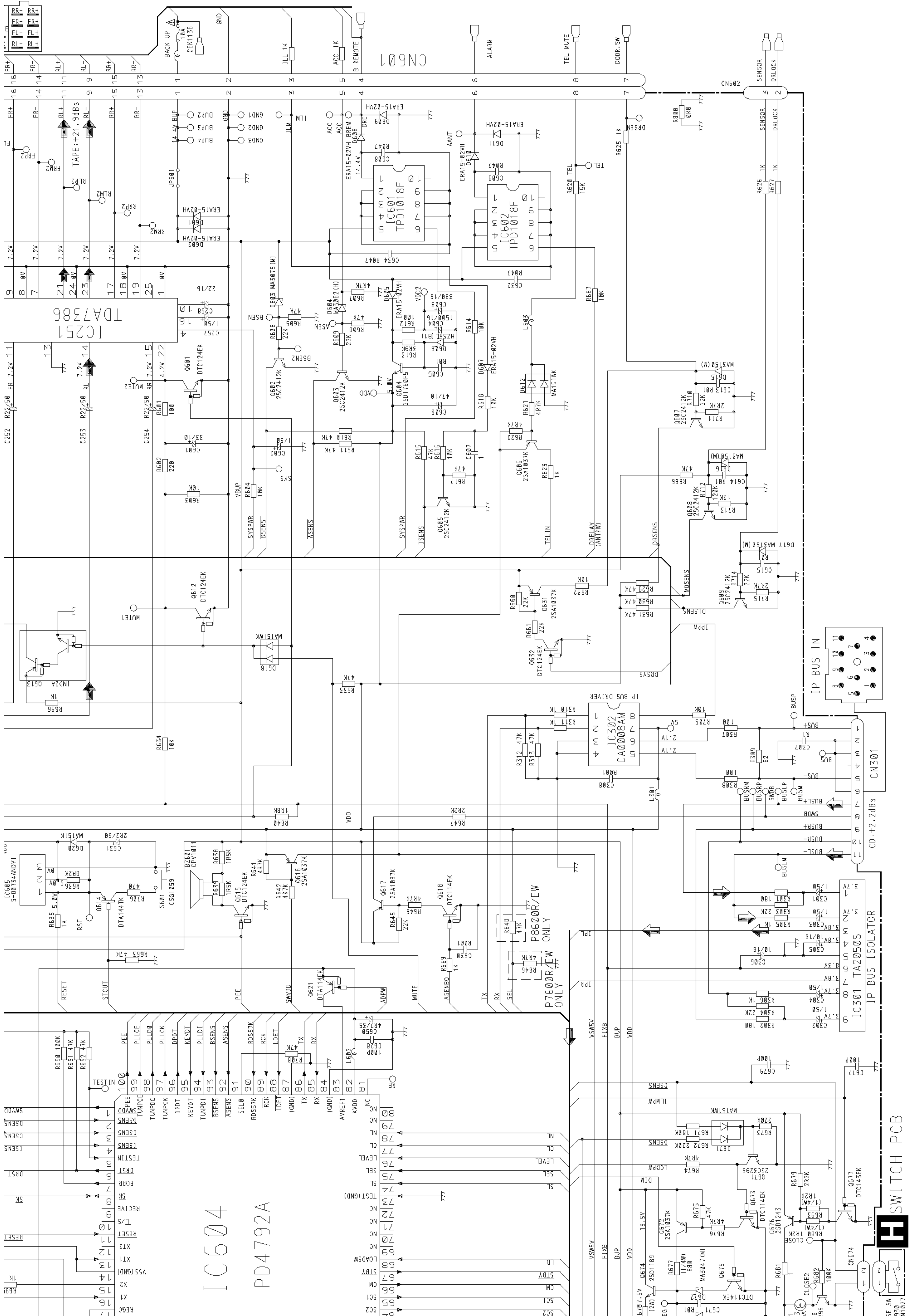
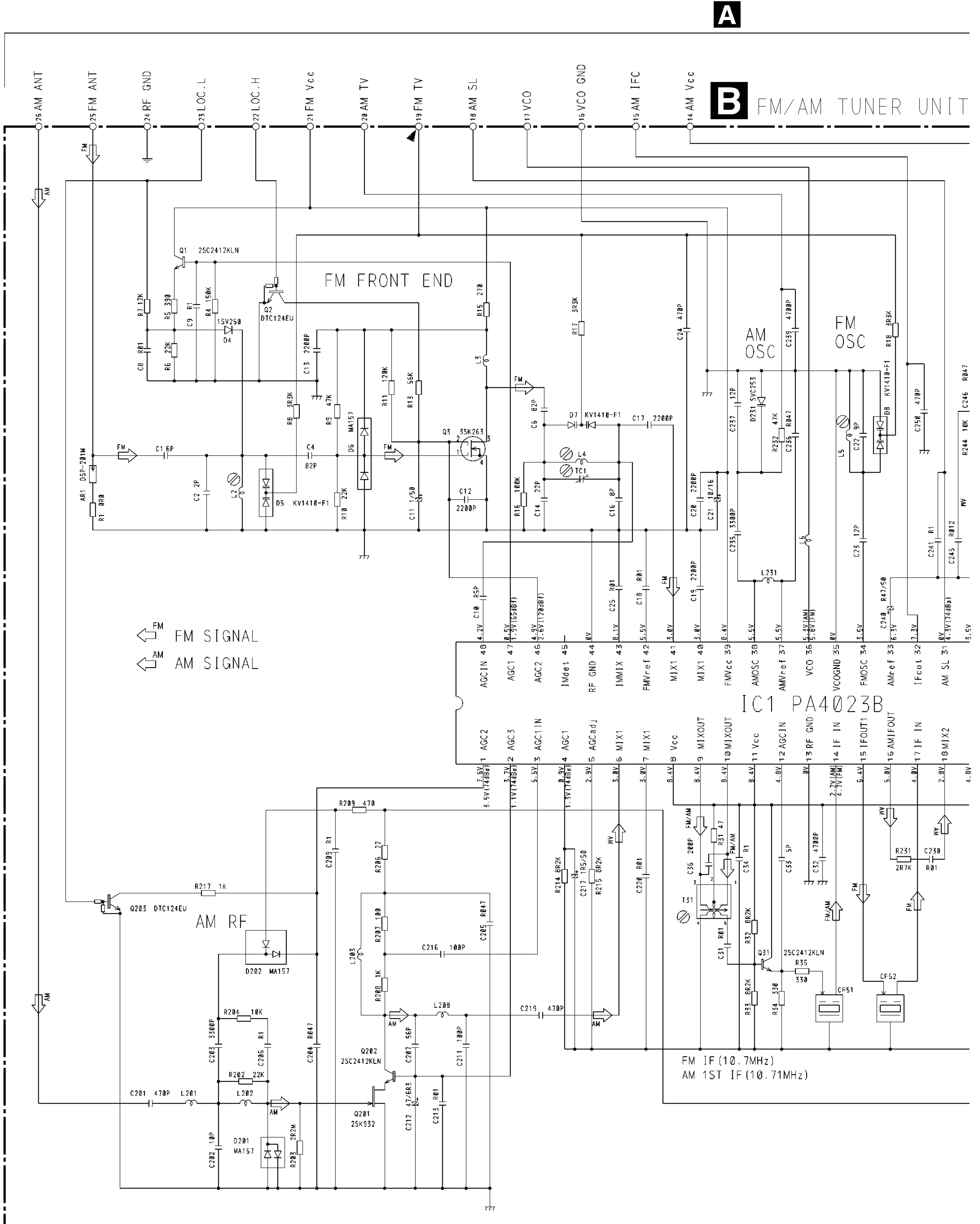


Fig. 6



3.2 FM/AM TUNER UNIT



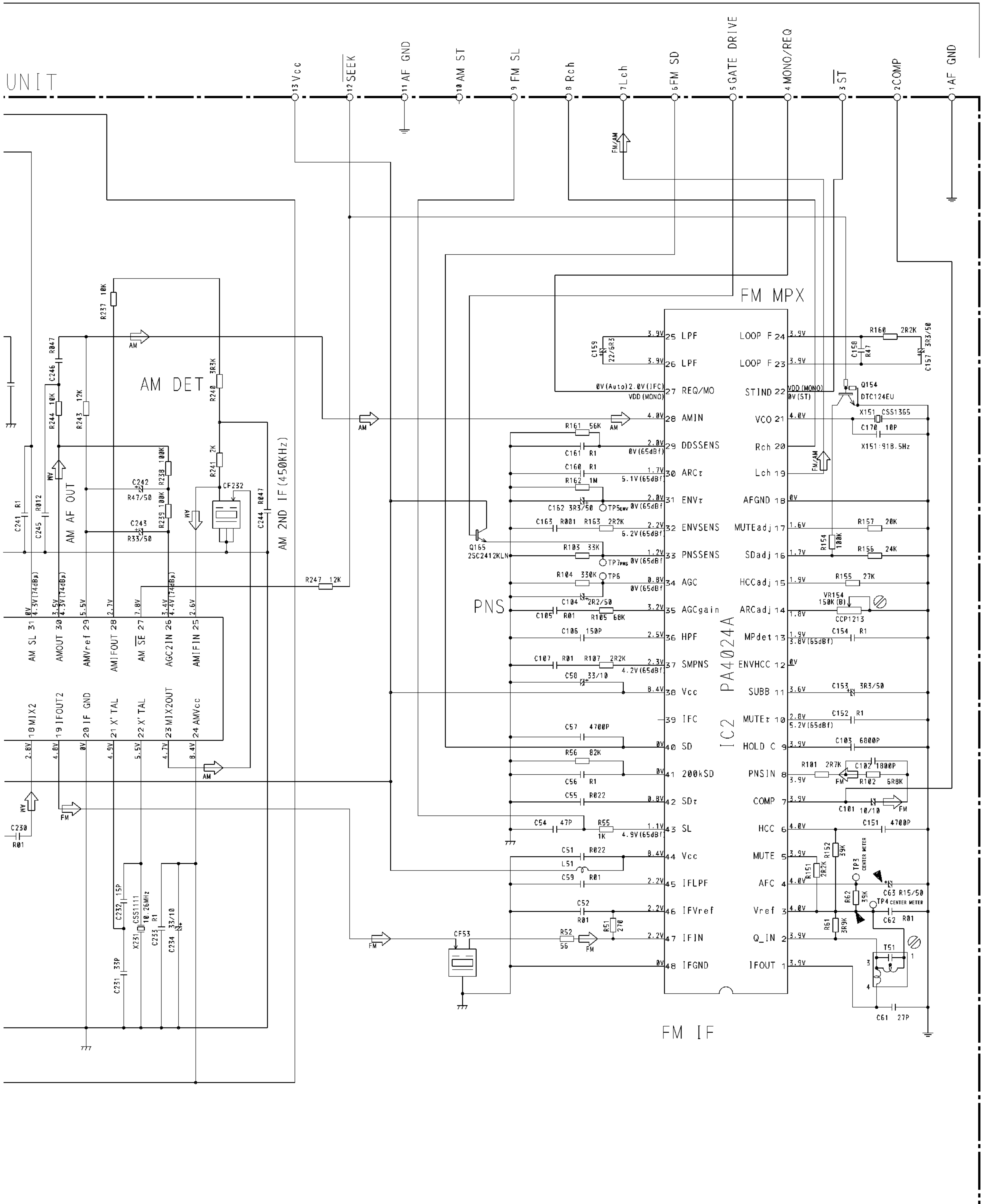
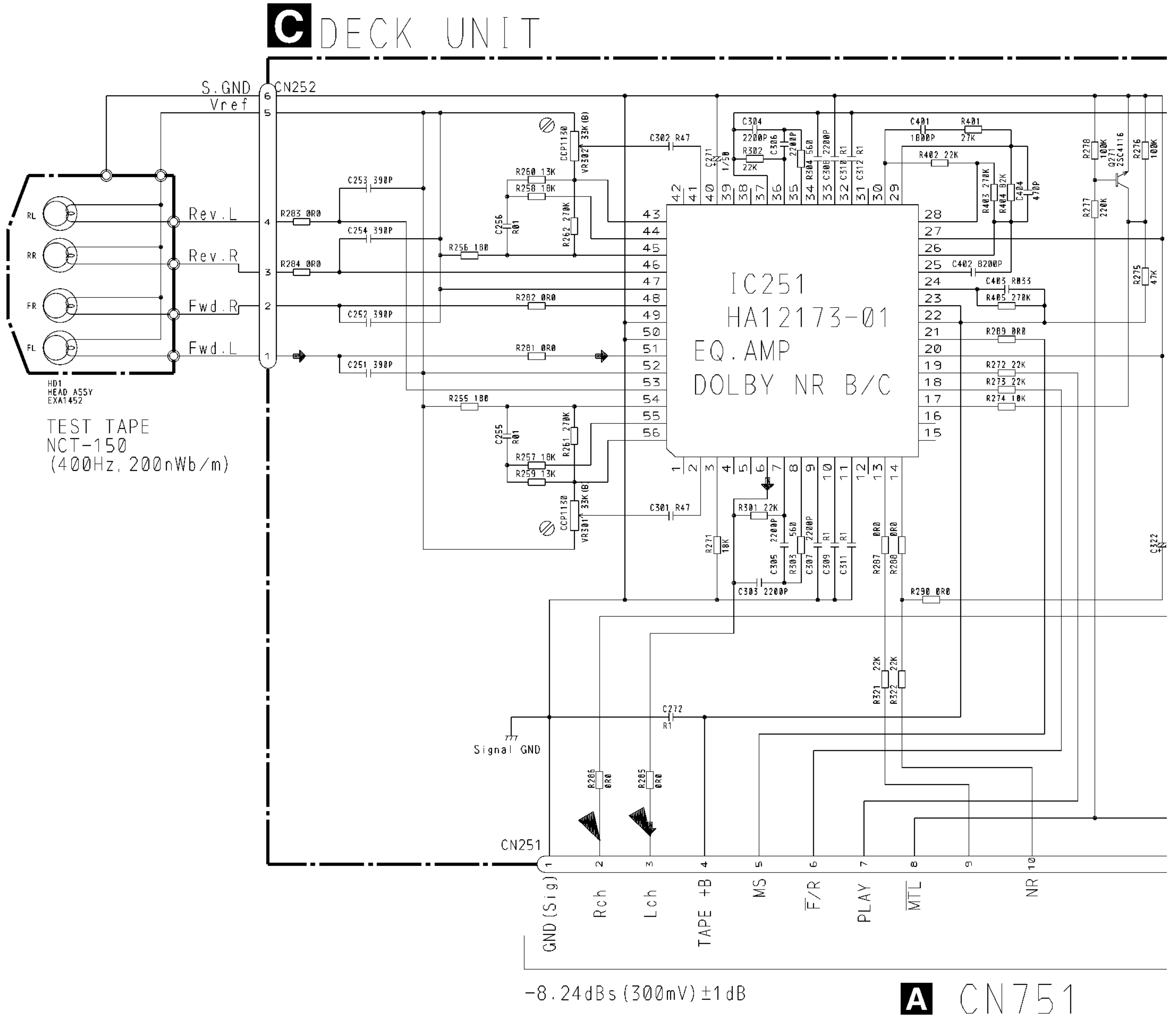


Fig. 7



3.3 CASSETTE MECHANISM MODULE

● KEH-P8600R/EW



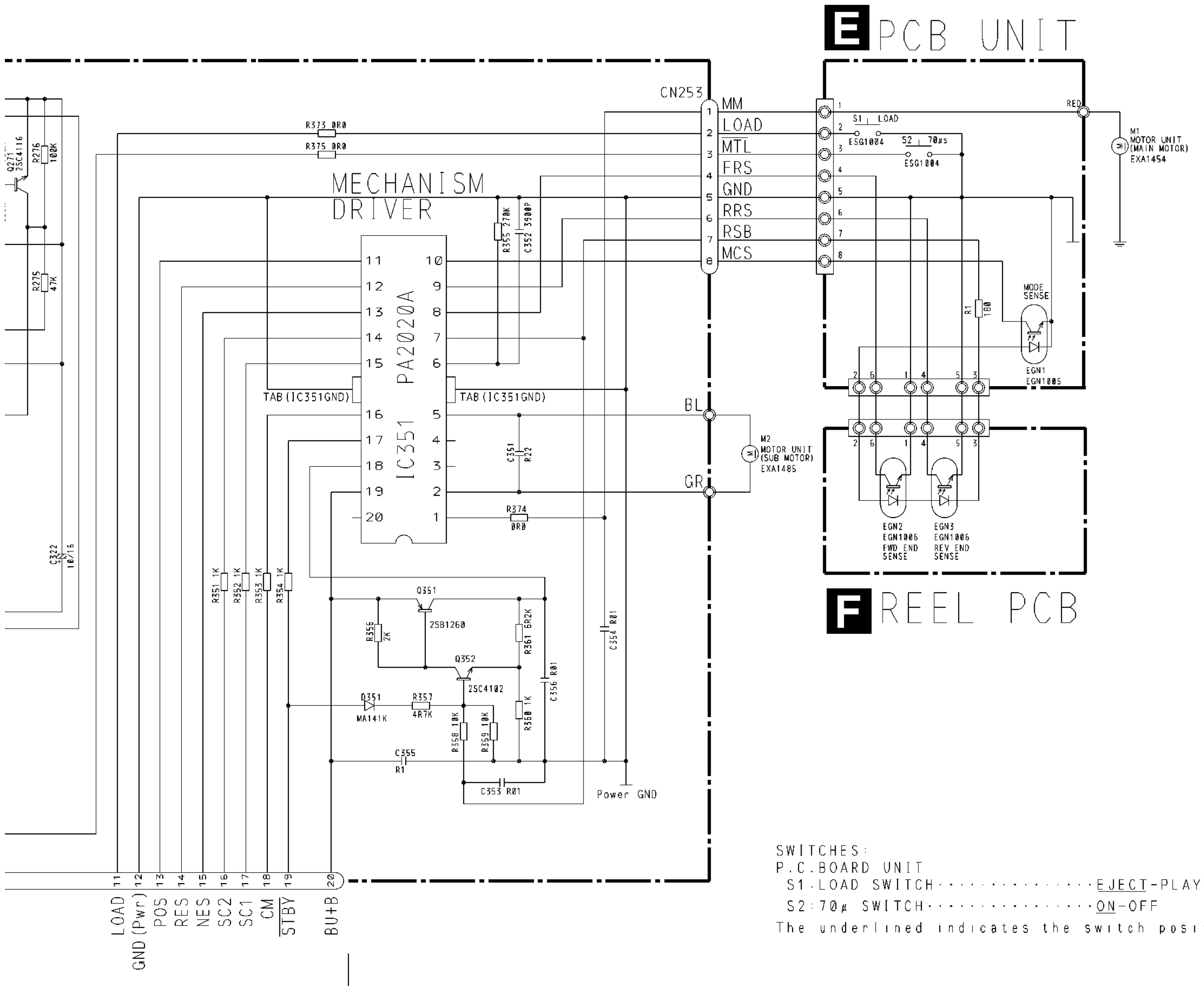
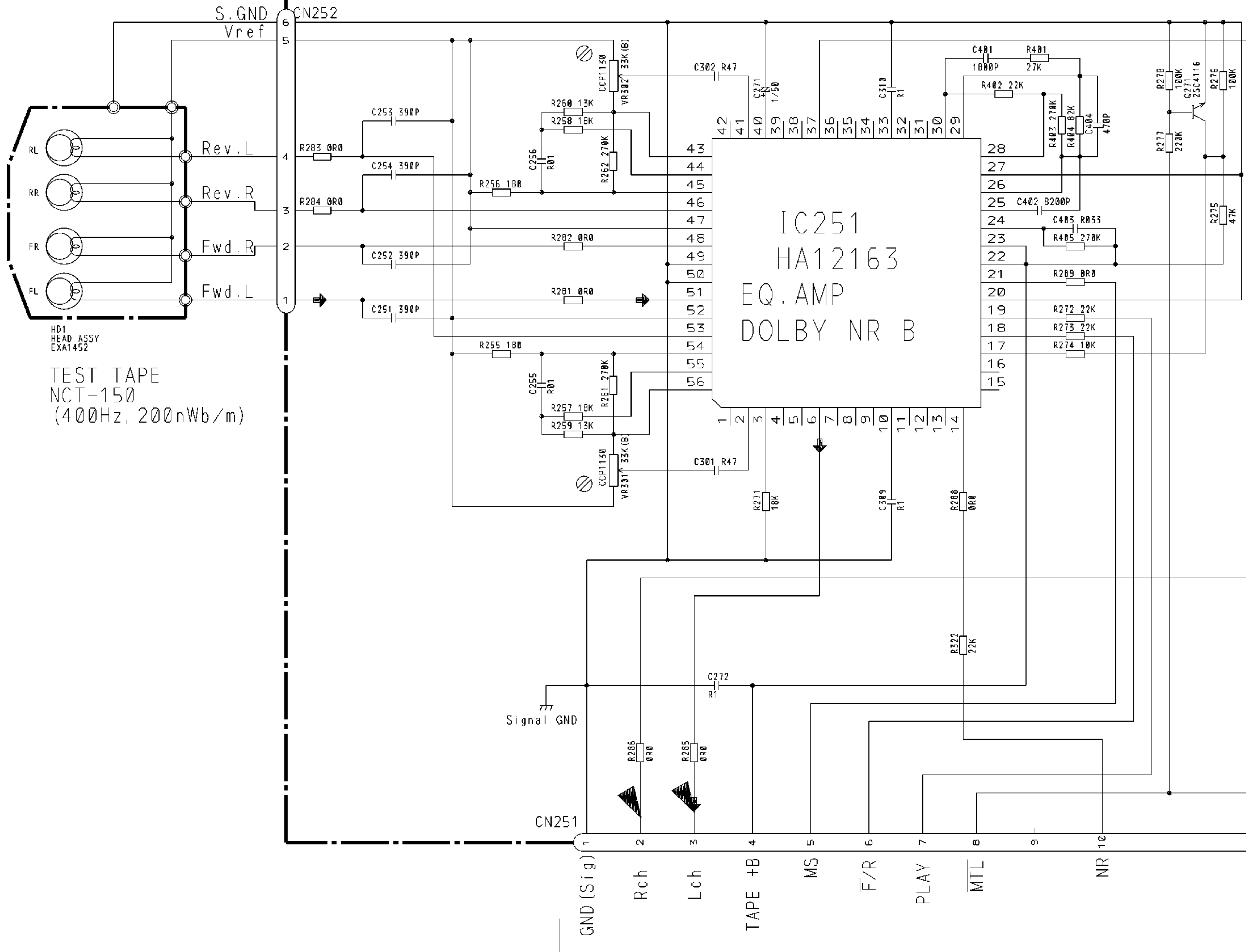


Fig. 8

● KEH-P7600R/EW

C DECK UNIT



-8.24dBs (300mV) ±1dB

A CN751



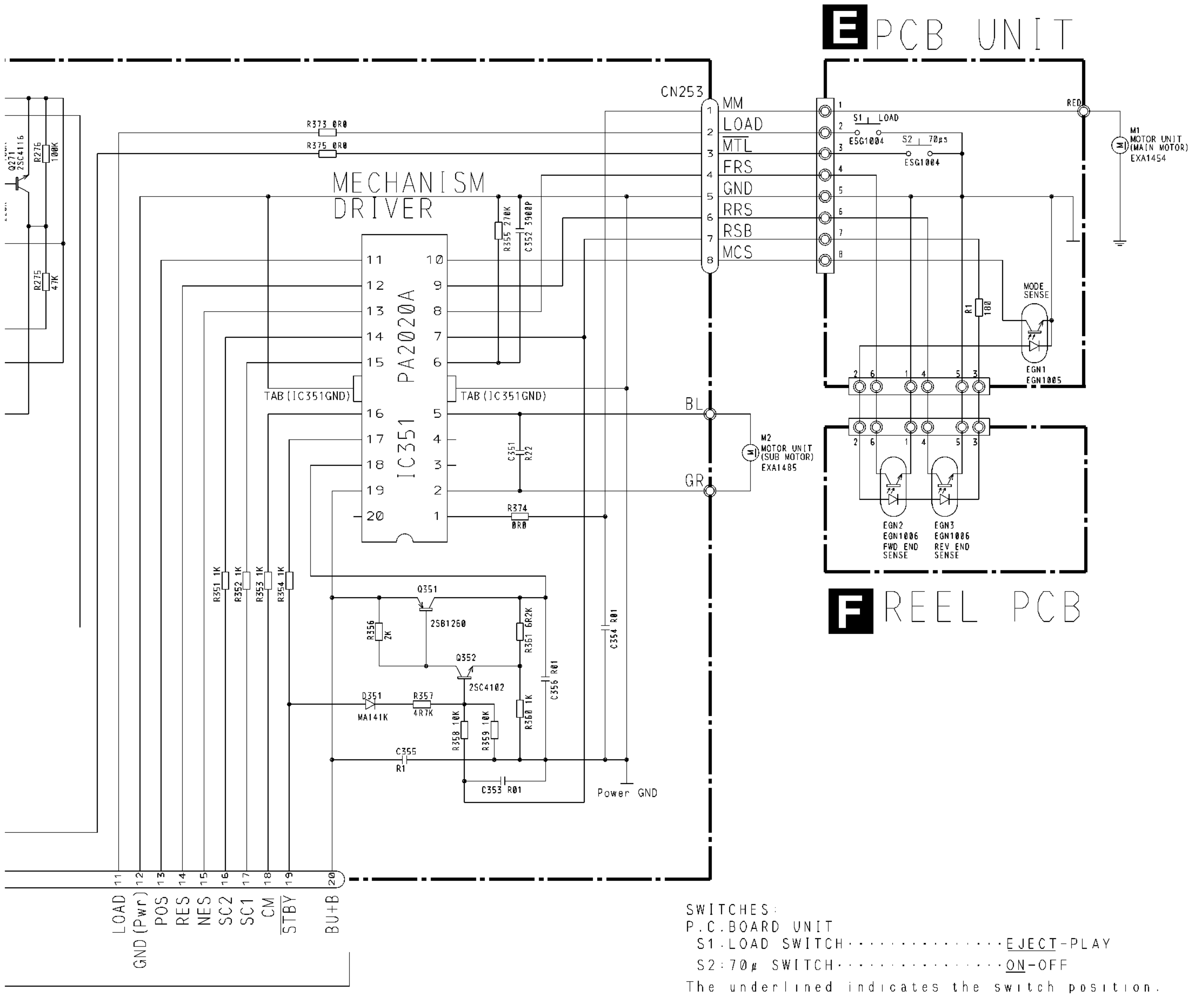


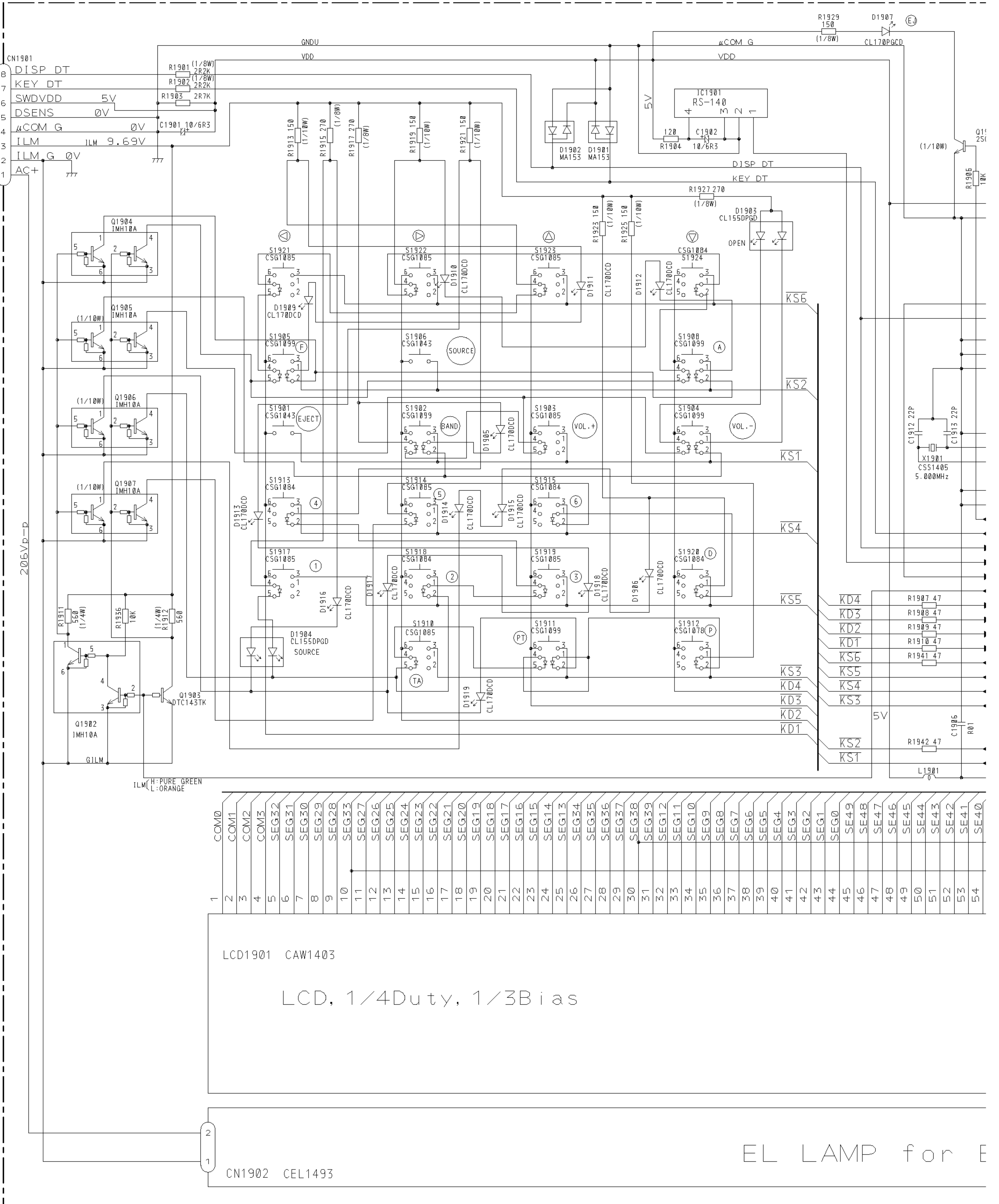
Fig. 9

3.4 KEYBOARD PCB

● KEH-P8600R/EW

D KEYBOARD PCB

A CN673



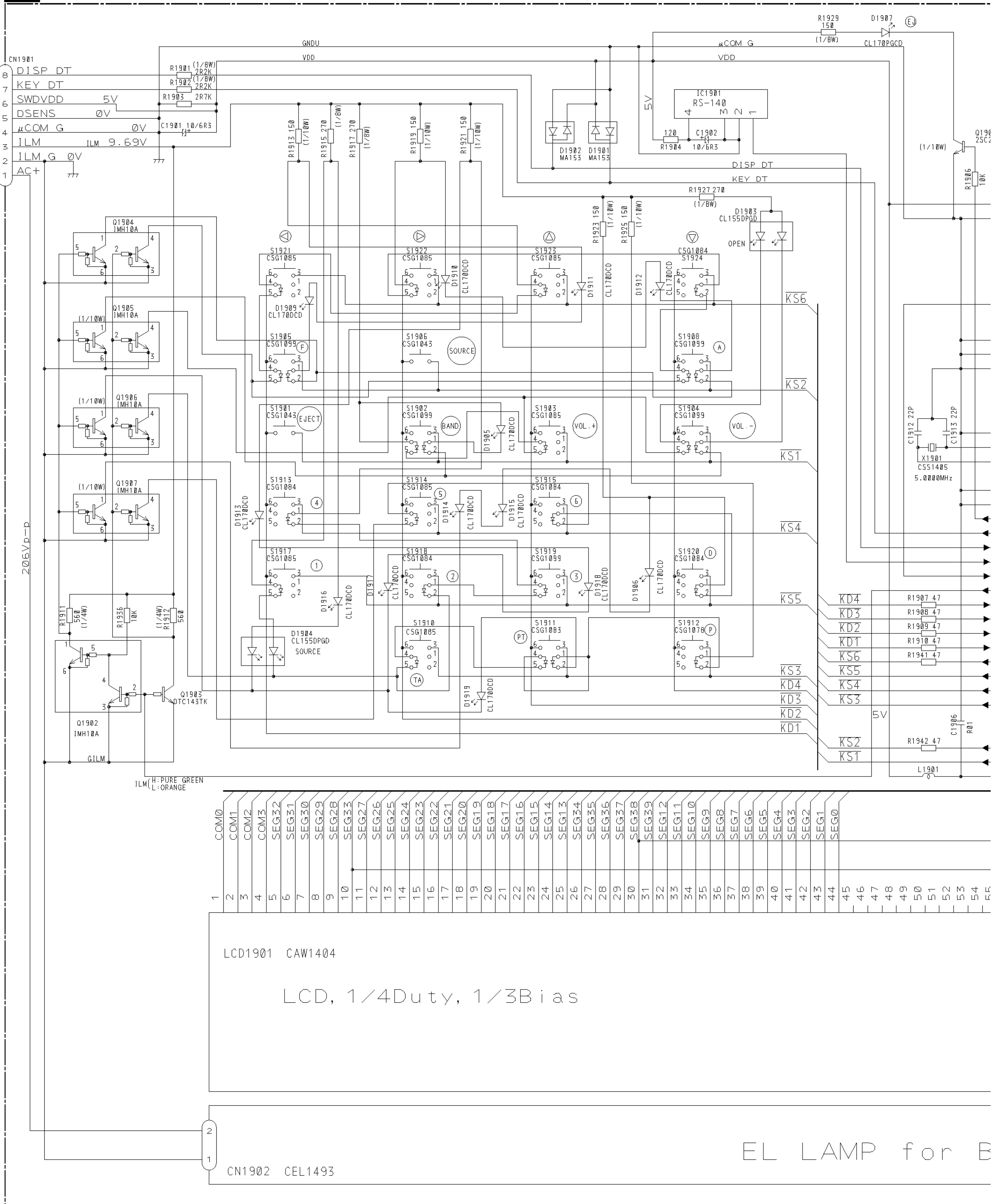
1	COM0
2	COM1
3	COM2
4	COM3
5	SEG32
6	SEG31
7	SEG30
8	SEG29
9	SEG28
10	SEG23
11	SEG27
12	SEG26
13	SEG25
14	SEG24
15	SEG22
16	SEG22
17	SEG21
18	SEG20
19	SEG19
20	SEG18
21	SEG17
22	SEG16
23	SEG15
24	SEG14
25	SEG13
26	SEG34
27	SEG35
28	SEG36
29	SEG37
30	SEG38
31	SEG39
32	SEG12
33	SEG11
34	SEG10
35	SEG9
36	SEG8
37	SEG7
38	SEG6
39	SEG5
40	SEG4
41	SEG3
42	SEG2
43	SEG1
44	SEG0
45	SE49
46	SE48
47	SE47
48	SE46
49	SE45
50	SE44
51	SE43
52	SE42
53	SE41
54	SE40



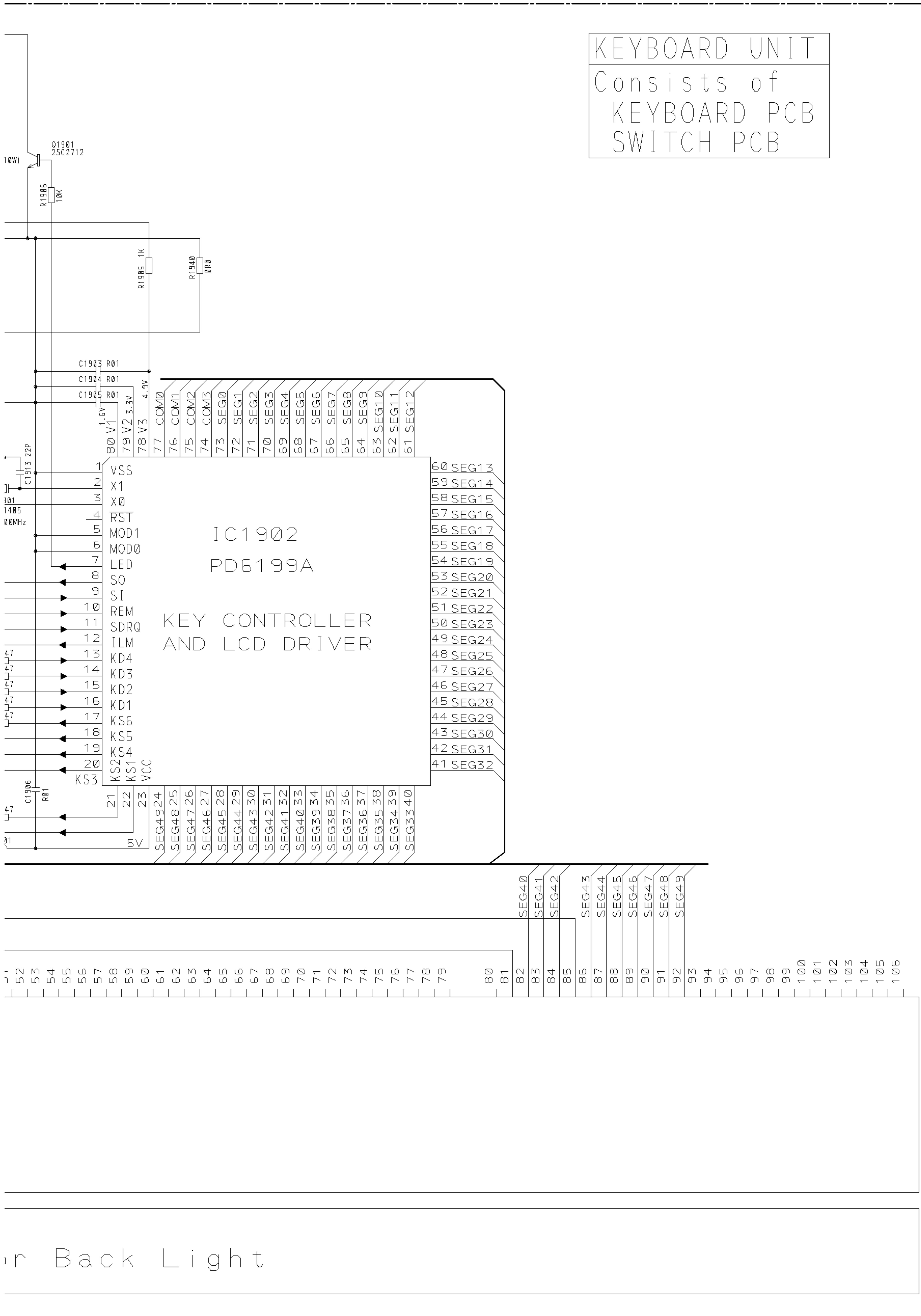
● KEH-P7600R/EW

D KEYBOARD PCB

A CN673



KEYBOARD UNIT
 Consists of
 KEYBOARD PCB
 SWITCH PCB



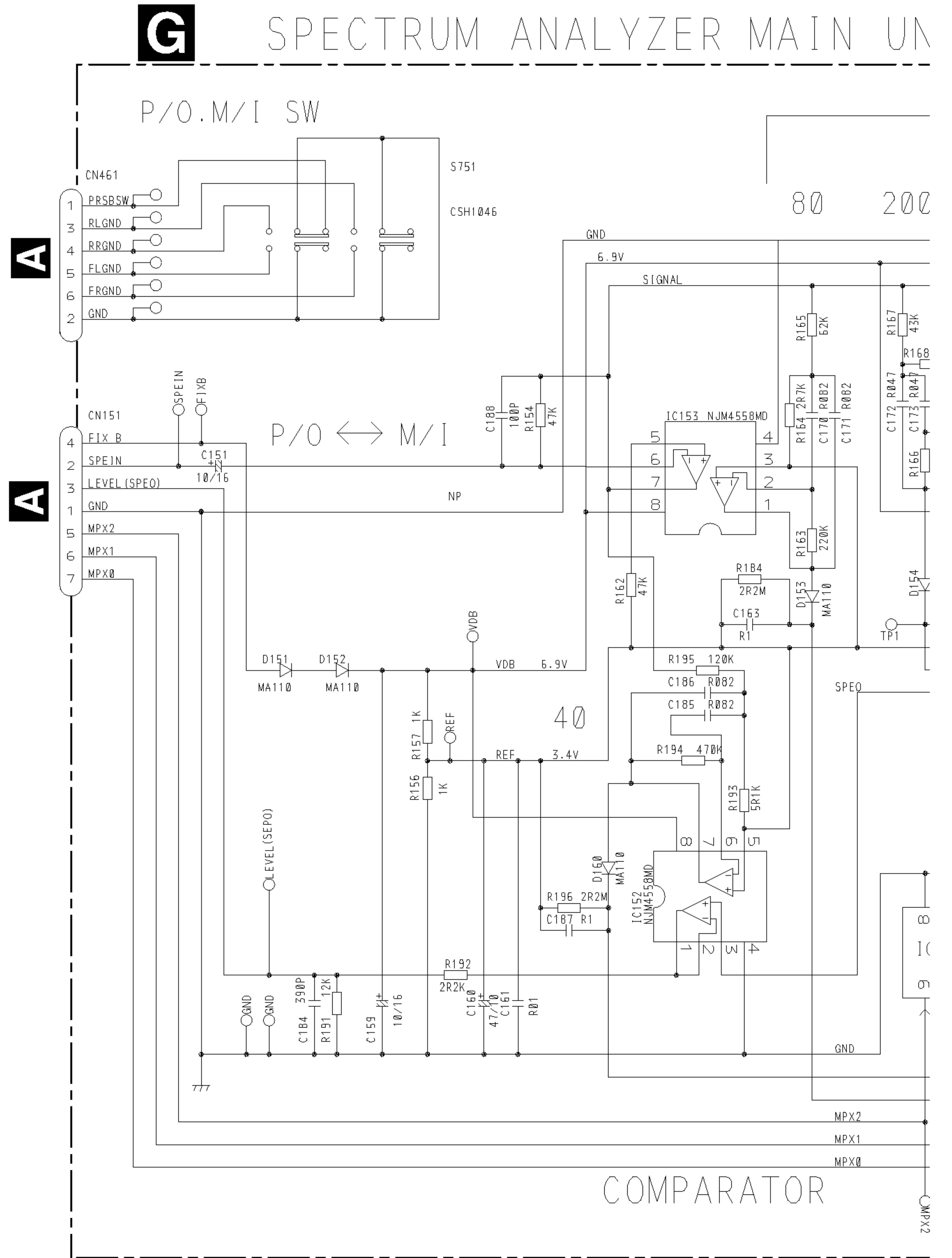
or Back Light

Fig. 11



3.5 SPECTRUM ANALYZER MAIN UNIT

● KEH-P8600R/EW



UNIT

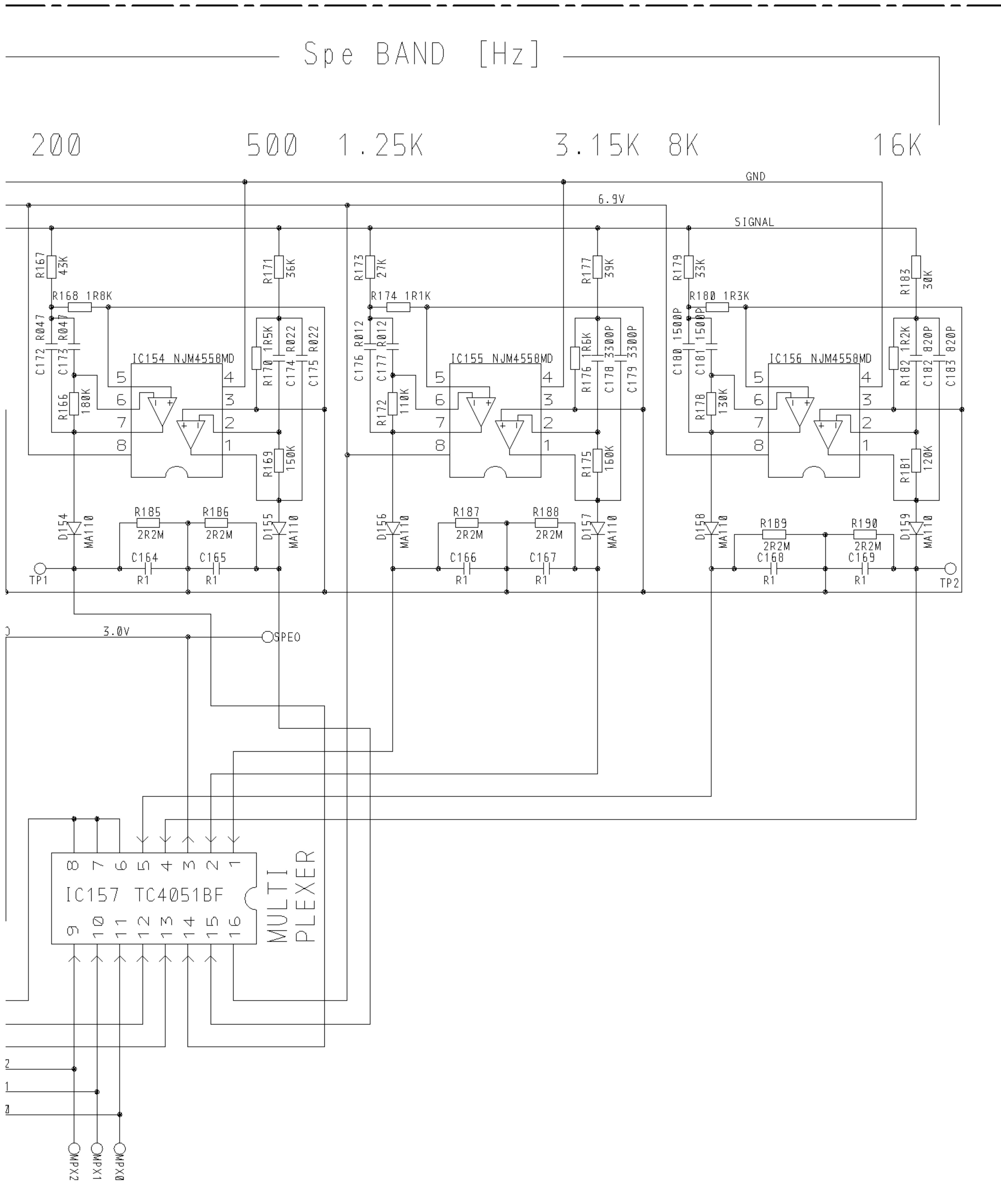


Fig. 12

5. ELECTRICAL PARTS LIST

NOTE:

- Parts whose parts numbers are omitted are subject to being not supplied.
- The part numbers shown below indicate chip components.

Chip Resistor

RS1/OS○○○○J,RS1/○○S○○○○J

Chip Capacitor (except for CQS.....)

CKS....., CCS....., CSZS.....

====Circuit Symbol & No.====Part Name	Part No.	====Circuit Symbol & No.====Part Name	Part No.
B Unit Number : CWE1416		R 8	RS1/16S332J
Unit Name : FM/AM Tuner Unit		R 9	RS1/16S473J
MISCELLANEOUS		R 10	RS1/16S223J
IC 1 IC	PA4023B	R 11	RS1/16S124J
IC 2 IC	PA4024A	R 13	RS1/16S563J
Q 1 Transistor	2SC2412KLN	R 15	RS1/16S271J
Q 2 Transistor	DTC124EU	R 16	RS1/16S104J
Q 3 FET	3SK263	R 17	RS1/16S332J
		R 18	RS1/16S332J
		R 31	RS1/16S470J
Q 31 Transistor	2SC2412KLN	R 32	RS1/16S822J
Q 154 Transistor	DTC124EU	R 33	RS1/16S822J
Q 165 Transistor	2SC2412KLN	R 34	RS1/16S331J
Q 201 FET	2SK932	R 35	RS1/16S331J
Q 202 Transistor	2SC2412KLN	R 51	RS1/16S271J
Q 203 Transistor	DTC124EU		
D 4 Diode	1SV250	R 52	RS1/16S560J
D 5 Diode	KV1410-F1	R 55	RS1/16S102J
D 6 Diode	MA157	R 56	RS1/16S823J
D 7 Diode	KV1410-F1	R 61	RS1/16S392J
		R 62	RS1/16S393J
D 8 Diode	KV1410-F1		
D 201 Diode	MA157	R 101	RS1/16S272J
D 202 Diode	MA157	R 102	RS1/16S682J
D 231 Diode	SVC253	R 103	RS1/16S333J
L 2 Coil	CTC1108	R 104	RS1/16S334J
		R 105	RS1/16S683J
L 3 Inductor	LCTB2R2K2125		
L 4 Coil	CTC1108	R 107	RS1/16S222J
L 5 Coil	CTC1107	R 151	RS1/16S222J
L 6 Inductor	LCTBR15K1608	R 152	RS1/16S393J
L 51 Ferri-Inductor	LAU150K	R 154	RS1/16S104J
		R 155	RS1/16S273J
L 201 Ferri-Inductor	LAU4R7K		
L 202 Ferri-Inductor	LAU330K	R 156	RS1/16S243J
L 203 Inductor	CTF1287	R 157	RS1/16S203J
L 208 Inductor	LAU121K	R 160	RS1/16S222J
L 231 Inductor	LCTA3R3J3225	R 161	RS1/16S563J
		R 162	RS1/16S105J
T 31 Coil	CTE1116		
T 51 Coil	CTC1136	R 163	RS1/16S222J
TC 1 Capacitor	CCL1038	R 202	RS1/16S223J
CF 51 Ceramic Filter	CTF1292	R 203	RS1/16S225J
CF 52 Ceramic Filter	CTF1292	R 204	RS1/16S103J
		R 206	RS1/16S220J
CF 53 Ceramic Filter	CTF1292		
CF 232 Ceramic Filter	CTF1348	R 207	RS1/16S101J
X 151 Resonator 920.5kHz	CSS1365	R 208	RS1/16S102J
X 231 Crystal Resonator 10.26MHz	CSS1111	R 209	RS1/16S471J
VR 154 Semi-fixed 150kΩ(B)	CCP1213	R 214	RS1/16S822J
		R 215	RS1/16S822J
AR 1 Capacitor with Discharge Gap	DSP-201M	R 217	RS1/16S102J
RESISTORS		R 231	RS1/16S272J
R 1	RS1/16S0R0J	R 232	RS1/16S473J
R 4	RS1/16S154J	R 237	RS1/16S103J
R 5	RS1/16S391J	R 238	RS1/16S104J
R 6	RS1/16S223J		
R 7	RS1/16S123J	R 239	RS1/16S104J
		R 240	RS1/16S332J
		R 241	RS1/16S202J
		R 243	RS1/16S123J
		R 244	RS1/16S103J

KEH-P8600R,P7600R

====Circuit Symbol & No.====Part Name	Part No.
R 247	RS1/16S123J
CAPACITORS	
C 1	CCSQCH6R0D50
C 2	CCSRCK2R0C50
C 4	CCSRCH820J50
C 6	CCSRCH820J50
C 8	CKSRYB103K25
C 9	CKSQYB104K16
C 10	CCSRCKR50C50
C 11	CEJA1R0M50
C 12	CKSRYB222K50
C 13	CKSRYB222K50
C 14	CCSRCH220J50
C 16	CCSRCH8R0D50
C 17	CKSRYB222K50
C 18	CKSRYB103K25
C 19	CKSRYB222K50
C 20	CKSRYB222K50
C 21	CEJA100M16
C 22	CCSRTH9R0D50
C 23	CCSRTH120J50
C 24	CCSRCH471J50
C 25	CKSRYB103K25
C 31	CKSRYB103K25
C 32	CKSQYB472K50
C 33	CCSRCH5R0C50
C 34	CKSQYB104K16
C 36	CCSRRH201J50
C 51	CKSRYB223K25
C 52	CKSRYB103K25
C 54	CCSRCH470J50
C 55	CKSQYB223K25
C 56	CKSQYB104K16
C 57	CKSRYB472K50
C 58	CEJA330M10
C 59	CKSRYB103K25
C 61	CCSRCH270J50
C 62	CKSRYB103K25
C 63	CEJAR15M50
C 101	CEJANP100M10
C 102	CKSRYB182K50
C 103	CKSRYB682K25
C 104	CEJA2R2M50
C 105	CKSRYB103K25
C 106	CCSRCH151J50
C 107	CKSRYB103K25
C 151	CKSRYB472K50
C 152	CKSQYB104K16
C 153	CEJA3R3M50
C 154	CKSQYB104K16
C 157	CEJA3R3M50
C 158	CKSYB474K16
C 159	CEJA220M6R3
C 160	CKSQYB104K16
C 161	CKSQYB104K16
C 162	CEJA3R3M50
C 163	CKSRYB102K50
C 170	CCSRCH100D50
C 201	CCSRCH471J50
C 202	CCSRCH100D50
C 203	CKSRYB332K50
C 204	CKSQYB473K16
C 205	CKSQYB473K16
C 206	CKSQYB104K16
C 207	CCSRCH560J50
C 209	CKSQYB104K16
C 211	CCSRCH101J50

====Circuit Symbol & No.====Part Name	Part No.
C 212	CEJA470M6R3
C 213	CKSRYB103K25
C 216	CCSRCH101J50
C 217	CEJA1R5M50
C 219	CCSRCH471J50
C 220	CKSRYB103K25
C 230	CKSRYB103K25
C 231	CCSRCH330J50
C 232	CCSRCH150J50
C 233	CKSQYB104K16
C 234	CEJA330M10
C 235	CKSRYB332K50
C 236	CKSQYB473K16
C 237	CCSRCH120J50
C 239	CKSRYB472K50
C 240	CEJAR47M50
C 241	CKSQYB104K16
C 242	CEJAR47M50
C 243	CEJAR33M50
C 244	CKSQYB473K16
C 245	CKSRYB123K25
C 246	CKSQYB473K16
C 250	CCSRCH471J50

A Unit Number : CWM5336
 Unit Name : Tuner Amp Unit (KEH-P8600R/EW)

MISCELLANEOUS

IC 101	IC	PM0008BF
IC 201	IC	See Contrast table
IC 202	IC	See Contrast table
IC 203	IC	See Contrast table
IC 204	IC	See Contrast table
IC 251	IC	TDA7386
IC 301	IC	TA2050S
IC 302	IC	CA0008AM
IC 401	IC	PM2005B
IC 501	IC	NJM2903M
IC 502	IC	PMW001B
IC 601	IC	TPD1018F
IC 602	IC	TPD1018F
IC 604	IC	PD4792A
IC 605	IC	S-80734ANDYI
IC 606	IC	PA2024A
Q 201	Transistor	See Contrast table
Q 202	Transistor	See Contrast table
Q 203	Transistor	See Contrast table
Q 204	Transistor	See Contrast table
Q 205	Transistor	DTC314TK
Q 206	Transistor	DTC314TK
Q 207	Transistor	DTC314TK
Q 208	Transistor	DTC314TK
Q 209	Transistor	DTC314TK
Q 210	Transistor	DTC314TK
Q 401	Transistor	2SC2412K
Q 402	Transistor	DTC124EK
Q 501	Transistor	2SC2412K
Q 502	Transistor	2SC2412K
Q 503	Transistor	2SD1757K
Q 504	Transistor	2SD1757K
Q 505	Transistor	DTC114TK
Q 506	Transistor	DTC114TK
Q 507	Transistor	DTC114TK
Q 601	Transistor	DTC124EK
Q 602	Transistor	2SC2412K
Q 603	Transistor	2SC2412K
Q 604	Transistor	2SD1760F5
Q 605	Transistor	2SC2412K

KEH-P8600R,P7600R

====Circuit Symbol & No.====Part Name	Part No.	====Circuit Symbol & No.====Part Name	Part No.
R 236	RS1/10S821J	R 454	RS1/10S0R0J
R 237	RS1/10S821J	R 455	RS1/10S0R0J
R 238	RS1/10S224J	R 460	RS1/10S0R0J
R 239	RS1/10S224J	R 461	RS1/10S0R0J
R 240	RS1/10S224J	R 501	RS1/16S103J
R 241	RS1/10S224J	R 502	RS1/10S562J
R 246	RS1/10S821J	R 503	RS1/10S104J
R 247	RS1/10S821J	R 504	RS1/16S104J
R 248	RS1/10S223J	R 505	RS1/10S684J
R 249	RS1/10S223J	R 506	RS1/10S681J
R 301	RS1/10S181J	R 507	RS1/10S222J
R 302	RS1/16S181J	R 508	RS1/10S562J
R 303	RS1/10S223J	R 509	RS1/10S222J
R 304	RS1/10S223J	R 510	RD1/4PU151J
R 305	RS1/10S102J	R 511	RS1/10S0R0J
R 306	RS1/10S102J	R 512	RS1/10S102J
R 307	RS1/10S101J	R 513	RS1/10S0R0J
R 308	RS1/10S101J	R 514	RS1/10S333J
R 309	RS1/10S620J	R 515	RS1/10S0R0J
R 310	RS1/10S102J	R 516	RS1/16S102J
R 311	RS1/10S102J	R 517	RS1/16S102J
R 312	RS1/10S473J	R 518	RS1/16S102J
R 313	RS1/10S473J	R 519	RS1/16S102J
R 401	RS1/10S0R0J	R 520	RS1/16S681J
R 402	RS1/10S102J	R 521	RS1/16S224J
R 403	RS1/10S0R0J	R 522	RS1/10S224J
R 404	RS1/10S0R0J	R 523	RS1/10S224J
R 405	RS1/10S0R0J	R 524	RS1/10S222J
R 406	RS1/10S102J	R 525	RS1/10S222J
R 407	RS1/10S222J	R 526	RS1/10S223J
R 408	RS1/10S222J	R 527	RS1/10S223J
R 409	RS1/10S105J	R 530	RS1/16S472J
R 410	RS1/10S272J	R 553	RS1/10S222J
R 411	RS1/10S272J	R 554	RS1/10S105J
R 413	RS1/10S681J	R 573	RS1/10S0R0J
R 414	RS1/10S682J	R 601	RS1/10S101J
R 415	RS1/10S472J	R 602	RS1/10S221J
R 416	RS1/10S472J	R 603	RS1/10S103J
R 417	RS1/10S682J	R 604	RS1/10S103J
R 419	RS1/10S103J	R 605	RS1/10S473J
R 420	RS1/10S222J	R 606	RS1/10S223J
R 421	RS1/10S152J	R 607	RS1/10S472J
R 422	RS1/10S272J	R 608	RS1/10S473J
R 423	RS1/10S392J	R 609	RS1/10S223J
R 424	RS1/10S392J	R 610	RS1/16S473J
R 425	RS1/10S0R0J	R 611	RS1/16S473J
R 426	RS1/10S0R0J	R 612	RS1/10S101J
R 427	RS1/10S102J	R 613	RS1/10S392J
R 428	RS1/10S222J	R 614	RS1/10S103J
R 429	RS1/10S102J	R 615	RS1/10S473J
R 432	RS1/10S562J	R 616	RS1/10S103J
R 433	RS1/10S473J	R 617	RS1/16S473J
R 434	RS1/10S473J	R 618	RS1/10S103J
R 435	RS1/10S562J	R 620	RD1/4PU153J
R 436	RS1/10S473J	R 621	RS1/10S472J
R 437	RS1/10S472J	R 622	RS1/10S472J
R 438	RS1/10S473J	R 623	RS1/16S102J
R 439	RA4C102J	R 625	RD1/4PU102J
R 440	RS1/10S102J	R 626	RD1/4PU102J
R 441	RS1/10S472J	R 627	RD1/4PU102J
R 442	RS1/16S103J	R 629	RS1/16S473J
R 443	RS1/10S393J	R 630	RS1/16S473J
R 444	RS1/10S0R0J	R 631	RS1/16S473J
R 448	RS1/10S561J	R 632	RS1/16S103J
R 451	RS1/10S0R0J	R 633	RS1/10S473J

====Circuit Symbol & No.====Part Name	Part No.	====Circuit Symbol & No.====Part Name	Part No.
R 634	RS1/10S103J	R 715	RS1/10S272J
R 635	RS1/16S102J	R 716	RS1/10S0R0J
R 636	RS1/10S822J	R 751	RS1/10S220J
R 638	RS1/10S152J	R 752	RA3C473J
R 639	RS1/10S152J	R 753	RA3C473J
R 640	RS1/10S182J	R 754	RA4C222J
R 641	RS1/10S472J	R 755	RA3C222J
R 642	RS1/10S472J	R 756	RA3C222J
R 645	RS1/10S223J	R 757	RA4C681J
R 646	RS1/10S472J	R 800	RS1/10S0R0J
R 647	RS1/10S222J	CAPACITORS	
R 648	RS1/16S473J	C 101	CEJA100M16
R 650	RS1/16S104J	C 102	CEJA100M16
R 651	RS1/16S473J	C 103	CEJA100M16
R 652	RS1/16S473J	C 104	CEJA100M16
R 655	RS1/10S473J	C 105	CEJA1R0M50
R 656	RS1/16S223J	C 106	CEJA1R0M50
R 657	RS1/16S102J	C 108	CEJANP100M10
R 658	RS1/10S102J	C 109	CEJANP100M10
R 659	RS1/10S473J	C 110	CKSQYB152K50
R 660	RS1/10S223J	C 111	CKSQYB152K50
R 661	RS1/16S223J	C 112	CEJA1R0M50
R 662	RS1/10S751J	C 113	CEJA1R0M50
R 663	RS1/10S473J	C 114	CKSQYB822K50
R 666	RS1/10S473J	C 115	CKSQYB822K50
R 667	RS1/10S103J	C 116	CKSQYB183K50
R 668	RS1/10S473J	C 117	CKSQYB183K50
R 669	RS1/10S102J	C 118	CEJANP100M10
R 671	RS1/10S184J	C 119	CEJANP100M10
R 672	RS1/10S224J	C 120	CKSQYB334K16
R 673	RS1/10S224J	C 121	CKSQYB334K16
R 674	RS1/16S472J	C 122	CKSQYB103K25
R 675	RS1/10S473J	C 123	CKSQYB103K25
R 676	RS1/10S472J	C 124	CKSYB105K16
R 677	RS1/4S681J	C 125	CKSYB105K16
R 678	RS2PMF6R8J	C 126	CKSQYB823K25
R 679	RS1/10S222J	C 127	CKSQYB823K25
R 680	RS1/4S122J	C 128	CKSQYB333K25
R 681	RS1/10S1R0J	C 129	CKSQYB333K25
R 682	RS1/16S104J	C 130	CKSQYB104K16
R 683	RS2PMF330J	C 131	CKSQYB562K50
R 684	RS1/10S222J	C 132	CKSQYB473K16
R 685	RS1/10S472J	C 133	CKSQYB104K16
R 686	RS1/10S472J	C 134	See Contrast table
R 687	RS1/10S222J	C 135	See Contrast table
R 688	RS1/10S472J	C 136	See Contrast table
R 689	RS1/10S472J	C 137	See Contrast table
R 690	See Contrast table	C 138	See Contrast table
R 691	See Contrast table	C 139	See Contrast table
R 692	See Contrast table	C 140	CKSQYB104K16
R 693	RS1/4S122J	C 141	CEJA100M16
R 694	RS1/16S473J	C 142	CKSQYB104K16
R 695	RS1/10S102J	C 143	See Contrast table
R 696	RS1/10S102J	C 201	See Contrast table
R 698	RS1/10S0R0J	C 202	See Contrast table
R 700	RS1/10S0R0J	C 203	See Contrast table
R 702	RS1/10S0R0J	C 204	See Contrast table
R 705	RS1/16S103J	C 205	See Contrast table
R 706	RS1/10S471J	C 206	See Contrast table
R 708	RS1/10S473J	C 207	See Contrast table
R 710	RS1/10S223J	C 208	See Contrast table
R 711	RS1/10S272J	C 209	See Contrast table
R 712	RS1/10S124J	C 210	See Contrast table
R 713	RS1/10S123J	C 211	See Contrast table
R 714	RS1/10S223J	C 212	See Contrast table
		C 213	See Contrast table

KEH-P8600R,P7600R

====Circuit Symbol & No.====Part Name	Part No.	====Circuit Symbol & No.====Part Name	Part No.
C 214	See Contrast table	C 436	CKSRYP103K25
C 215	See Contrast table	C 437	CKSRYP223K25
C 216	See Contrast table	C 501	CKSQYB104K16
C 217	See Contrast table	C 502	CKSRYP223K25
C 218	See Contrast table	C 503	CKSQYB103K25
C 219	See Contrast table	C 504	CKSQYB103K25
C 220	See Contrast table	C 505	CEJA4R7M35
C 221	See Contrast table	C 506	CKSQYB103K25
C 222	CCSQCH101J50	C 507	CKSQYB104K16
C 223	CCSQCH101J50	C 508	CKSQYB222K50
C 224	CCSQCH101J50	C 509	CKSQYB104K16
C 225	CCSQCH101J50	C 510	CKSYB105K16
C 226	CEJA2R2M50	C 511	CKSQYB104K16
C 227	CEJA2R2M50	C 512	CKSQYB472K50
C 228	CCSQCH101J50	C 513	CEJA4R7M35
C 229	CCSQCH101J50	C 514	CKSQYB104K16
C 251	CEJAR22M50	C 515	CKSRYP223K25
C 252	CEJAR22M50	C 516	CEJA1R0M50
C 253	CEJAR22M50	C 517	CEJA1R0M50
C 254	CEJAR22M50	C 553	CCSQCH220J50
C 255	CKSQYB104K16	C 554	CCSQCH220J50
C 256	4700μF/16V CCH1178	C 601	CEJA330M10
C 257	CEJA1R0M50	C 602	CEJA1R0M50
C 258	CEJA220M16	C 603	CEAS331M16
C 301	CEJA1R0M50	C 604	CCH1201
C 302	CEJA1R0M50	C 605	CKSQYB103K25
C 303	CEJA1R0M50	C 606	CEJA470M10
C 304	CEJA1R0M50	C 607	CKSYB105K16
C 305	CEJA100M16	C 608	CKSQYB473K16
C 306	CEJA100M16	C 609	CKSQYB473K16
C 307	CKSQYB104K16	C 613	CKSQYB103K25
C 308	CKSQYB102K50	C 614	CKSQYB103K25
C 401	CKSQYB223K25	C 615	CKSQYB103K25
C 402	CKSQYB223K25	C 616	CEJA1R0M50
C 403	CKSQYB223K25	C 617	CKSQYB102K50
C 404	CKSQYB273K25	C 618	CKSQYB102K50
C 405	CKSQYB223K25	C 619	CEAS470M10
C 406	CKSQYB223K25	C 620	CCH1181
C 407	CKSQYB223K25	C 621	CEAS101M10
C 408	CKSQYB471K50	C 622	CEAS470M10
C 409	CKSQYB473K16	C 623	CCSQCH180J50
C 410	CKSQYB102K50	C 624	CCSQCH180J50
C 411	CEJA220M10	C 626	CCSQCH101J50
C 412	CKSQYB103K25	C 628	CCSQCH101J50
C 414	CKSQYB103K25	C 630	CKSQYB102K50
C 415	CEJA220M6R3	C 631	CEJA2R2M50
C 416	CEJA220M6R3	C 632	CKSQYB473K16
C 417	CKSQYB103K25	C 634	CKSQYB473K16
C 418	CKSQYB103K25	C 650	CEJA4R7M35
C 419	4.7μF/16V CCH1250	C 671	CKSQYB103K25
C 420	CKSQYB103K25	C 672	CEAS471M10
C 421	CKLSR473K16	C 673	CKSQYB104K16
C 422	CKSQYB332K50	C 674	CCSQCH101J50
C 423	CKSQYB103K25	C 677	CCSQCH101J50
C 424	CKSQYB103K25	C 679	CCSQCH101K50
C 425	4.7μF/16V CCH1250	C 702	CCSQCH101J50
C 426	CEJAR47M50	C 751	CEJA100M16
C 427	CCSQCH150J50	C 752	CEJA100M16
C 428	CCSQCH150J50	C 753	CKSQYB103K25
C 429	CCSQCH101J50		
C 431	CKSQYB103K25		
C 432	CKSQYB103K25		
C 433	CEJA220M6R3		
C 434	CKSQYB102K50		
C 435	CKSQYB103K25		

====Circuit Symbol & No.====Part Name Part No.

====Circuit Symbol & No.====Part Name Part No.

CONTRAST TABLE of TUNER AMP UNIT

KEH-P8600R/EW and KEH-P7600R/EW have the same construction except for the following:

Symbol & Description	Part No.	
	KEH-P8600R/EW	KEH-P7600R/EW
Spectrum Analyzer Main Unit	CWM5339	Not used
IC 201,202,203,204 IC	NJM4558MD	Not used
Q 201,202 Transistor	2SC2412K	Not used
Q 203,204 Transistor	2SC2412K	Not used
L 201,202 Inductor	LCTB2R2K2125	Not used
L 203,204 Inductor	LCTB2R2K2125	Not used
R 109 110	RS1/10S223J	Not used
R 201	RS1/10S220J	Not used
R 202,203,204,205	RS1/10S333J	Not used
R 206,207,208,209	RS1/16S334J	Not used
R 210,211,212,213	RS1/16S103J	Not used
R 214,215,216,217	RS1/16S472J	Not used
R 218,219,220,221	RS1/16S472J	Not used
R 222,223,224,225	RS1/16S183J	Not used
R 226,227,228,229	RS1/16S184J	Not used
R 230,231,232,233	RS1/16S393J	Not used
R 242,243,244,245	Not used	RS1/10S0R0J
R 648,694	RS1/16S473J	Not used
R 649	Not used	RS1/16S473J
R 690,691,692	RS1/10S102J	Not used
C 134,135,136,137	CEJA4R7M35	CEJA100M16
C 142,143	CEJA1R0M50	Not used
C 201	CEJA101M10	Not used
C 202,203,204,205	CEWAR100M16	Not used
C 206,207,208,209	CCSRCH101J50	Not used
C 210,211,212,213	CKSRYB103K25	Not used
C 214,215,216,217	CEJA4R7M35	Not used
C 218,219,220,221	CEJA1R0M50	Not used

G Unit Number : CWM5339 (KEH-P8600R/EW)
Unit Name : Spectrum Analyzer Main Unit

MISCELLANEOUS

IC 152	IC	NJM4558MD
IC 153	IC	NJM4558MD
IC 154	IC	NJM4558MD
IC 155	IC	NJM4558MD
IC 156	IC	NJM4558MD
IC 157	IC	TC4051BF
D 151	Diode	MA110
D 152	Diode	MA110
D 153	Diode	MA110
D 154	Diode	MA110
D 155	Diode	MA110
D 156	Diode	MA110
D 157	Diode	MA110
D 158	Diode	MA110
D 159	Diode	MA110
D 160	Diode	MA110
S 751	Slide Switch	CSH1046

RESISTORS

R 154	RS1/10S473J
R 156	RS1/10S102J
R 157	RS1/10S102J
R 162	RS1/10S473J
R 163	RS1/10S224J

R 164	RS1/10S272J
R 165	RS1/10S623J
R 166	RS1/10S184J
R 167	RS1/10S433J
R 168	RS1/10S182J
R 169	RS1/10S154J
R 170	RS1/10S152J
R 171	RS1/10S363J
R 172	RS1/10S114J
R 173	RS1/10S273J
R 174	RS1/10S112J
R 175	RS1/10S164J
R 176	RS1/10S162J
R 177	RS1/10S393J
R 178	RS1/10S134J
R 179	RS1/10S333J
R 180	RS1/10S132J
R 181	RS1/10S124J
R 182	RS1/10S122J
R 183	RS1/10S303J
R 184	RS1/10S225J
R 185	RS1/10S225J
R 186	RS1/10S225J
R 187	RS1/10S225J
R 188	RS1/10S225J
R 189	RS1/10S225J
R 190	RS1/10S225J
R 191	RS1/10S123J
R 192	RS1/10S222J
R 193	RS1/10S512J
R 194	RS1/10S474J
R 195	RS1/10S124J
R 196	RS1/10S225J

CAPACITORS

C 151	CEJA100M16
C 159	CEJA100M16
C 160	CEJA470M10
C 161	CKSQYB103K25
C 163	CKSQYB104K25
C 164	CKSQYB104K25
C 165	CKSQYB104K25
C 166	CKSQYB104K25
C 167	CKSQYB104K25
C 168	CKSQYB104K25
C 169	CKSQYB104K25
C 170	CKSQYB823K25
C 171	CKSQYB823K25
C 172	CKSQYB473K25
C 173	CKSQYB473K25
C 174	CKSQYB223K25
C 175	CKSQYB223K25
C 176	CKSQYB123K25
C 177	CKSQYB123K25
C 178	CKSQYB332K50
C 179	CKSQYB332K50
C 180	CKSQYB152K50
C 181	CKSQYB152K50
C 182	CKSQYB821K50
C 183	CKSQYB821K50
C 184	CKSQYB391K50
C 185	CKSQYB823K25
C 186	CKSQYB823K25
C 187	CKSQYB104K25
C 188	CCSOSL101J50

KEH-P8600R,P7600R

====Circuit Symbol & No.====Part Name Part No.

C Unit Number : EWM1008
Unit Name : Deck Unit (KEH-P8600R/EW)

MISCELLANEOUS

IC	251	IC	HA12173-01
IC	351	IC	PA2020A
Q	271	Transistor	2SC4116
Q	351	Transistor	2SB1260
Q	352	Transistor	2SC4102
D	351	Diode	MA141K
VR	301	Semi-fixed 33kΩ(B)	CCP1130
VR	302	Semi-fixed 33kΩ(B)	CCP1130

RESISTORS

R	255	RS1/16S181J
R	256	RS1/16S181J
R	257	RS1/16S183J
R	258	RS1/16S183J
R	259	RS1/16S133J
R	260	RS1/16S133J
R	261	RS1/16S274J
R	262	RS1/16S274J
R	271	RS1/16S183J
R	272	RS1/8S223J
R	273	RS1/8S223J
R	274	RS1/8S103J
R	275	RS1/16S473J
R	276	RS1/16S104J
R	277	RS1/16S224J
R	278	RS1/16S104J
R	281	RS1/8S0R0J
R	282	RS1/8S0R0J
R	283	RS1/8S0R0J
R	284	RS1/8S0R0J
R	285	RS1/16S0R0J
R	286	RS1/16S0R0J
R	287	RS1/16S0R0J
R	288	RS1/16S0R0J
R	289	RS1/16S0R0J
R	290	RS1/8S0R0J
R	301	RS1/16S223J
R	302	RS1/16S223J
R	303	RS1/16S561J
R	304	RS1/16S561J
R	321	RS1/8S223J
R	322	RS1/8S223J
R	351	RS1/16S102J
R	352	RS1/16S102J
R	353	RS1/16S102J
R	354	RS1/16S102J
R	355	RS1/10S274J
R	356	RS1/10S202J
R	357	RS1/10S472J
R	358	RS1/10S103J
R	359	RS1/10S103J
R	360	RS1/10S102J
R	361	RS1/10S622J
R	373	RS1/8S0R0J
R	374	RS1/8S0R0J
R	375	RS1/8S0R0J
R	401	RS1/16S273J
R	402	RS1/16S223J
R	403	RS1/16S274J
R	404	RS1/16S823J
R	405	RS1/16S274J

====Circuit Symbol & No.====Part Name Part No.

CAPACITORS

C	251	CKSRYB391K50
C	252	CKSRYB391K50
C	253	CKSRYB391K50
C	254	CKSRYB391K50
C	255	CKSRYB103K25
C	256	CKSRYB103K25
C	271	CEV1R0M50
C	272	CKSQYB104K16
C	301	CKSYB474K16
C	302	CKSYB474K16
C	303	CKSRYB222K50
C	304	CKSRYB222K50
C	305	CKSRYB222K50
C	306	CKSRYB222K50
C	307	CKSRYB222K50
C	308	CKSRYB222K50
C	309	CKSQYB104K16
C	310	CKSQYB104K16
C	311	CKSQYB104K16
C	312	CKSQYB104K16
C	322	CEV100M16
C	351	CKSYB224K25
C	352	CKSQYB392K50
C	353	CKSQYB103K50
C	354	CKSQYB103K50
C	355	CKSYB104K50
C	356	CKSQYB103K50
C	401	CKSRYB182K50
C	402	CKSRYB822K25
C	403	CKSRYB333K16
C	404	CKSRYB471K50

C Unit Number : EWM1007
Unit Name : Deck Unit (KEH-P7600R/EW)

MISCELLANEOUS

IC	251	IC	HA12163
IC	351	IC	PA2020A
Q	271	Transistor	2SC4116
Q	351	Transistor	2SB1260
Q	352	Transistor	2SC4102
D	351	Diode	MA141K
VR	301	Semi-fixed 33kΩ (B)	CCP1130
VR	302	Semi-fixed 33kΩ (B)	CCP1130

RESISTORS

R	255	RS1/16S181J
R	256	RS1/16S181J
R	257	RS1/16S183J
R	258	RS1/16S183J
R	259	RS1/16S133J
R	260	RS1/16S133J
R	261	RS1/16S274J
R	262	RS1/16S274J
R	271	RS1/16S183J
R	272	RS1/8S223J
R	273	RS1/8S223J
R	274	RS1/8S103J
R	275	RS1/16S473J
R	276	RS1/16S104J
R	277	RS1/16S224J
R	278	RS1/16S104J
R	281	RS1/8S0R0J
R	282	RS1/8S0R0J
R	283	RS1/8S0R0J
R	284	RS1/8S0R0J

KEH-P8600R,P7600R

====Circuit Symbol & No.====Part Name	Part No.
R 1929	RS1/8S151J
R 1931	RS1/10S102J
R 1936	RS1/10S103J
R 1941	RS1/10S470J
R 1942	RS1/10S470J

CAPACITORS

C 1901	CSZS100M6R3
C 1902	CSZS100M6R3
C 1903	CKSQYB103K50
C 1904	CKSQYB103K50
C 1905	CKSQYB103K50
C 1906	CKSQYB103K50
C 1907	CKSQYB103K50
C 1908	CKSQYB103K50
C 1909	CKSQYB103K50
C 1910	CKSQYB103K50
C 1911	CKSQYB103K50
C 1912	CCSQCH220J50
C 1913	CCSQCH220J50

Keyboard Unit
Consists of
·Keyboard PCB
·Switch PCB

DH Unit Number : CWM5416
Unit Name : Keyboard Unit (KEH-P7600R/EW)

MISCELLANEOUS

IC 1901	HIC	RS-140
IC 1902	IC	PD6199A
Q 1901	Transistor	2SC2712
Q 1902	Transistor	IMH10A
Q 1903	Transistor	DTC143TK
Q 1904	Transistor	IMH10A
Q 1905	Transistor	IMH10A
Q 1906	Transistor	IMH10A
Q 1907	Transistor	IMH10A
D 1901	Diode	MA153
D 1902	Diode	MA153
D 1903	LED	CL155DPGD
D 1904	LED	CL155DPGD
D 1905	LED	CL170DCD
D 1906	LED	CL170DCD
D 1907	LED	CL170PGCD
D 1909	LED	CL170DCD
D 1910	LED	CL170DCD
D 1911	LED	CL170DCD
D 1912	LED	CL170DCD
D 1913	LED	CL170DCD
D 1914	LED	CL170DCD
D 1915	LED	CL170DCD
D 1916	LED	CL170DCD
D 1917	LED	CL170DCD
D 1918	LED	CL170DCD
D 1919	LED	CL170DCD
L 1901	Inductor	LCTB2R2K2125
X 1901	Resonator 5.0000MHz	CSS1405
S 1901	Switch	CSG1043
S 1902	Push Switch	CSG1099
S 1903	Push Switch	CSG1085
S 1904	Push Switch	CSG1099
S 1905	Push Switch	CSG1099
S 1906	Switch	CSG1043
S 1908	Push Switch	CSG1099
S 1910	Push Switch	CSG1085
S 1911	Push Switch	CSG1099
S 1912	Push Switch	CSG1078
S 1913	Push Switch	CSG1084

====Circuit Symbol & No.====Part Name	Part No.	
S 1914	Push Switch	CSG1085
S 1915	Push Switch	CSG1084
S 1917	Push Switch	CSG1085
S 1918	Push Switch	CSG1084
S 1919	Push Switch	CSG1085

S 1920	Push Switch	CSG1084
S 1921	Push Switch	CSG1085
S 1922	Push Switch	CSG1085
S 1923	Push Switch	CSG1085
S 1924	Push Switch	CSG1084

S 1930	Switch	CSN1027
CN 1902	EL	CEL1493
LCD1901	LCD	CAW1404

RESISTORS

R 1901	RS1/8S222J
R 1902	RS1/8S222J
R 1903	RS1/10S272J
R 1904	RS1/10S121J
R 1905	RS1/8S102J

R 1906	RS1/10S103J
R 1907	RS1/10S470J
R 1908	RS1/10S470J
R 1909	RS1/10S470J
R 1910	RS1/10S470J

R 1911	RS1/4S561J
R 1912	RS1/4S561J
R 1913	RS1/10S151J
R 1915	RS1/8S271J
R 1917	RS1/8S271J

R 1919	RS1/10S151J
R 1921	RS1/10S151J
R 1923	RS1/10S151J
R 1925	RS1/10S151J
R 1927	RS1/8S271J

R 1929	RS1/8S151J
R 1936	RS1/10S103J
R 1940	RS1/10S0R0J
R 1941	RS1/10S470J
R 1942	RS1/10S470J

CAPACITORS

C 1901	CSZS100M6R3
C 1902	CSZS100M6R3
C 1903	CKSQYB103K50
C 1904	CKSQYB103K50
C 1905	CKSQYB103K50

C 1906	CKSQYB103K50
C 1912	CCSQCH220J50
C 1913	CCSQCH220J50

E Unit Number :
Unit Name : PCB Unit

S 1	Switch (Load)	ESG1004
S 2	Switch (70µS)	ESG1004
EGN 1	Photo-Interrupter	EGN1005
R 1	Resistor	RD1/4PM181J

F Unit Number :
Unit Name : Reel PCB

EGN 2	Photo-Interrupter	EGN1006
EGN 3	Photo-Interrupter	EGN1006

Miscellaneous Parts List

M 1	Motor Unit (Main)	EXA1454
M 2	Motor Unit (Sub)	EXA1485
HD 1	Head Assy	EXA1452

6. ADJUSTMENT

● Connection Diagram

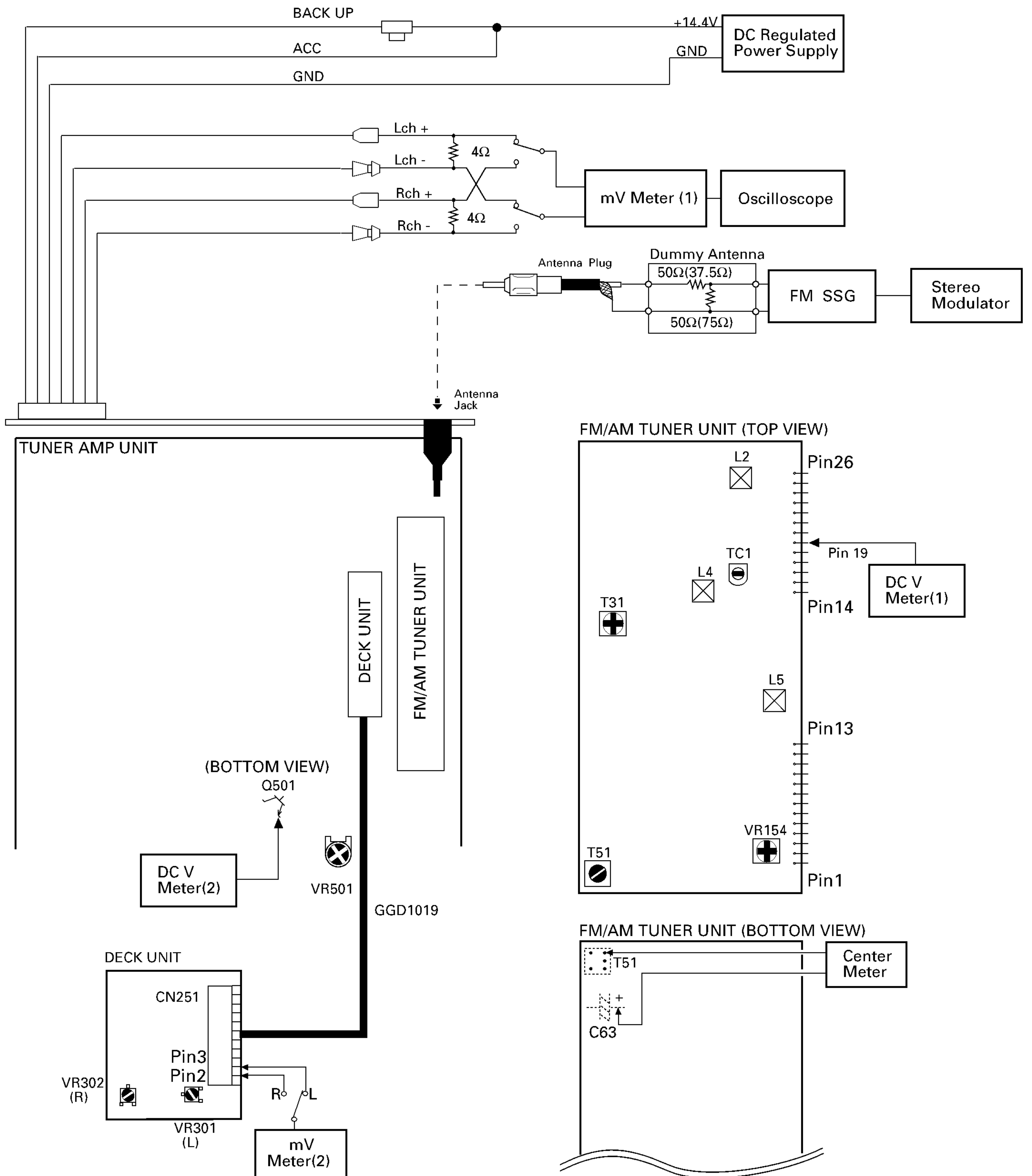


Fig. 27

KEH-P8600R,P7600R

FM ADJUSTMENT

Modulation M:MONO MOD., 400Hz 30%(22.5kHz Dev.) or 400Hz 100%(75kHz Dev.)

S1:STEREO MOD., 1kHz, L or R=30%(20.25kHz+7.5kHz Dev.)

S2:STEREO MOD., 400Hz, L or R=60%(40.50kHz+7.5kHz Dev.)

NOTE:Before proceeding to further adjustments after switching power ON, let the tuner run for ten minutes to allow the circuits to stabilize.

	No.	FM SSG		Displayed Frequency(MHz)	Adjustment Point	Adjustment Method (Switch Position)
		Frequency(MHz)	Level(dBf)			
TUN Volt	1	••••	••••	108.0	L5	DC V Meter(1) : 6V
IF	2	98.1 M	60	98.1	T51	Center Meter : 0
ANT Coil	3	98.1 M	5	98.1	L2	mV Meter(1) : Maximum
RF Coil	4	98.1 M	5	98.1	L4	mV Meter(1) : Maximum
Image	5	129.3 M	60—80	107.9	TC1	mV Meter(1) : Minimum
IFT	6	98.1 M	5	98.1	T31	mV Meter(1) : Maximum (STEREO MODE)
ARC	7	98.1 S1	40	98.1	VR154	mV Meter(1) : Separation 5dB (STEREO MODE)

RDS SL ADJUSTMENT

	No.	FM SSG		Displayed Frequency(MHz)	Adjustment Point	Adjustment Method (Switch Position)
		Frequency(MHz)	Level(dBf)			
	1	104.0 S2	35	104.0	VR501	DC V Meter(2) : 1.75V±0.05V

DOLBY B/C NR ADJUSTMENT(KEH-P8600R/EW)

No.	Test Tape	Adjustment Point	Adjustment Method (Switch Position)
1	NCT-150 (400Hz,200nwb/m)	VR301(Lch),VR302(Rch)	mV Meter(2) : - 8.24dBs+1.5dB, - 0.5dB (DOLBY NR Switch : OFF)

DOLBY B NR ADJUSTMENT(KEH-P7600R/EW)

No.	Test Tape	Adjustment Point	Adjustment Method (Switch Position)
1	NCT-150 (400Hz,200nwb/m)	VR301(Lch),VR302(Rch)	mV Meter(2) : -8.24dBs±1.0dB (DOLBY NR Switch : OFF)

● For Repair of the Detach Grille Assy, Use the Extension-Cord Tool GGD1056.

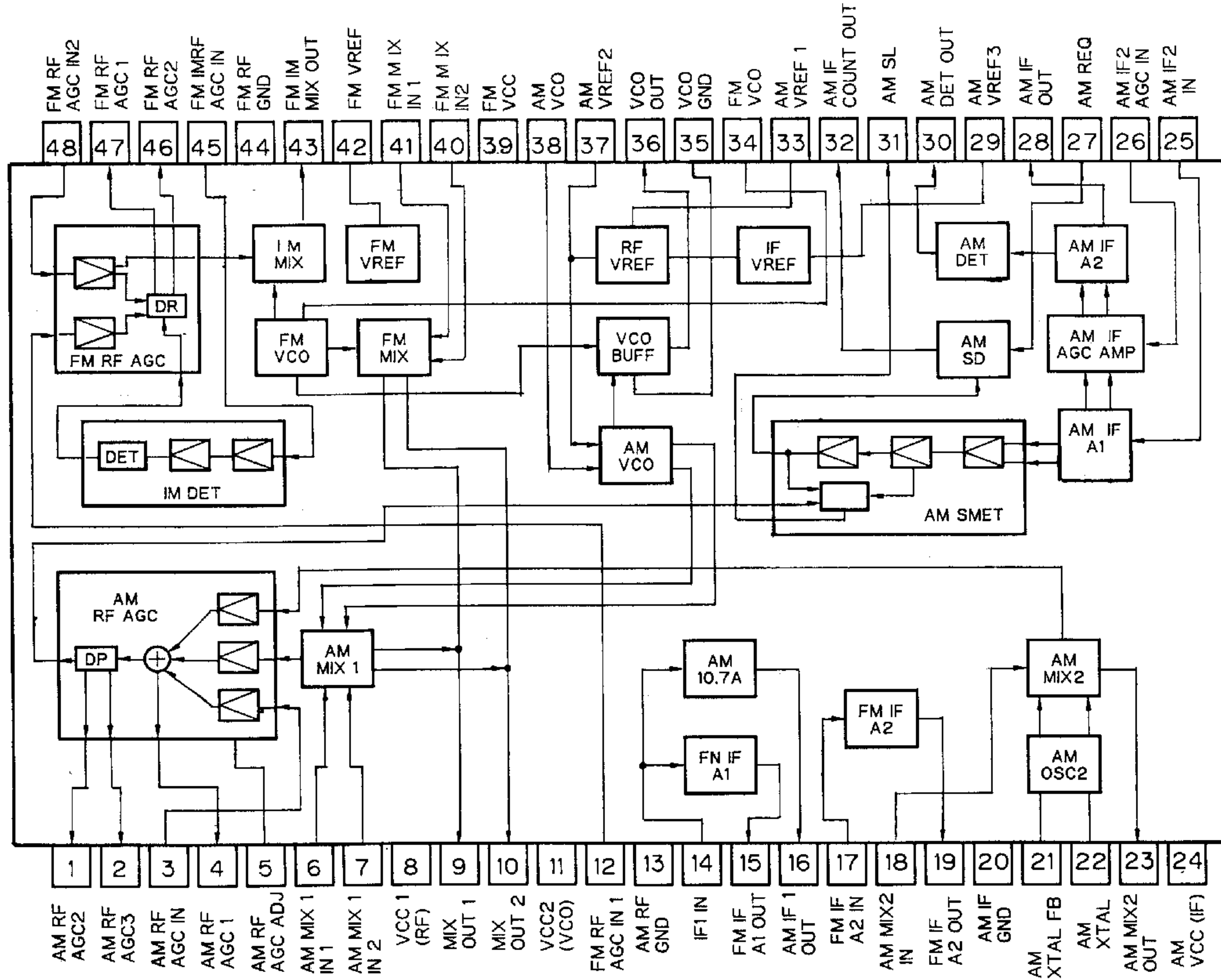
● For Repair of the Cassette Mechanism Module, Use the Extension-Cord Tool GGD1121.

7. GENERAL INFORMATION

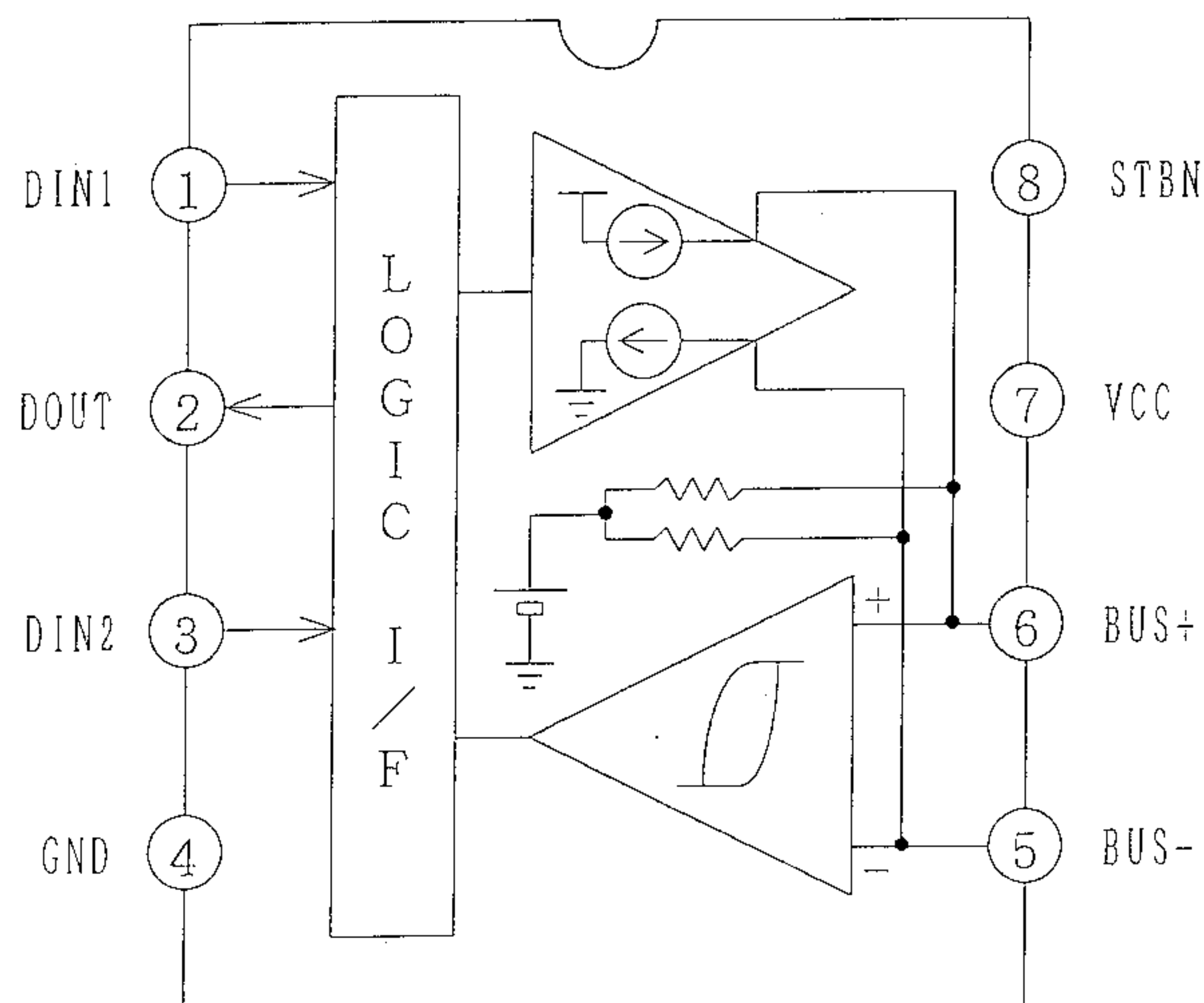
7.1 PARTS

7.1.1 IC

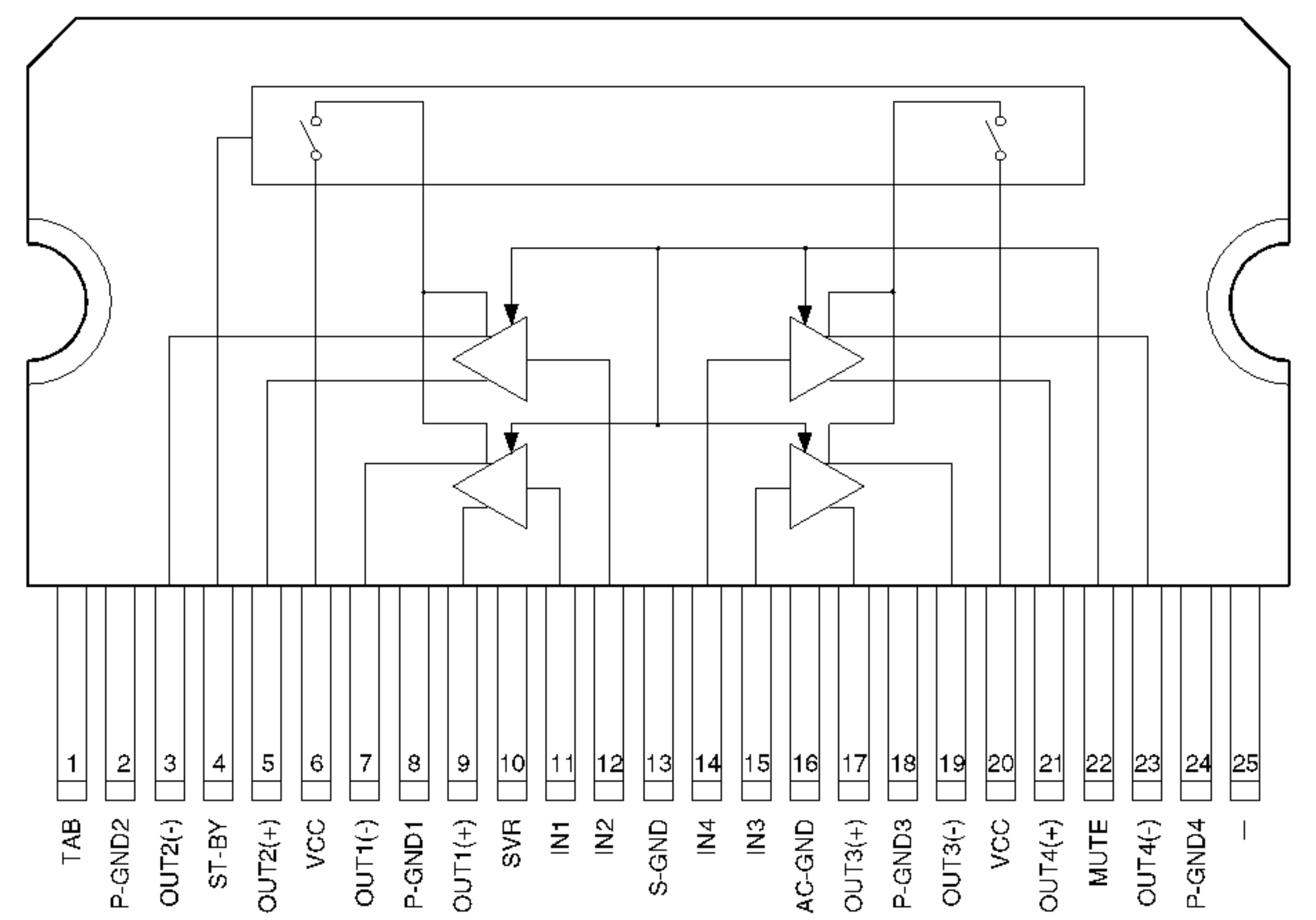
PA4023B



PM0008BF

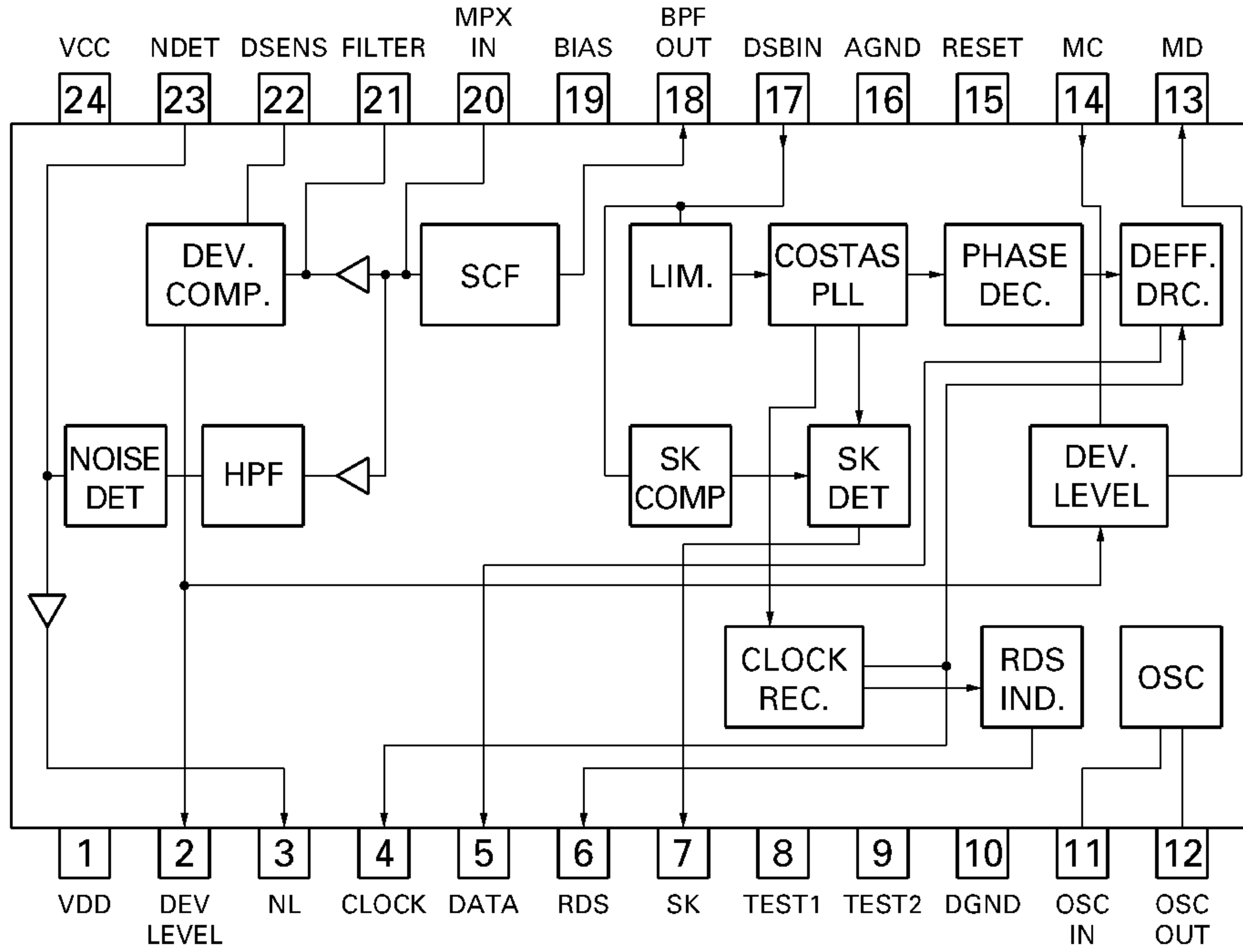


TDA7386

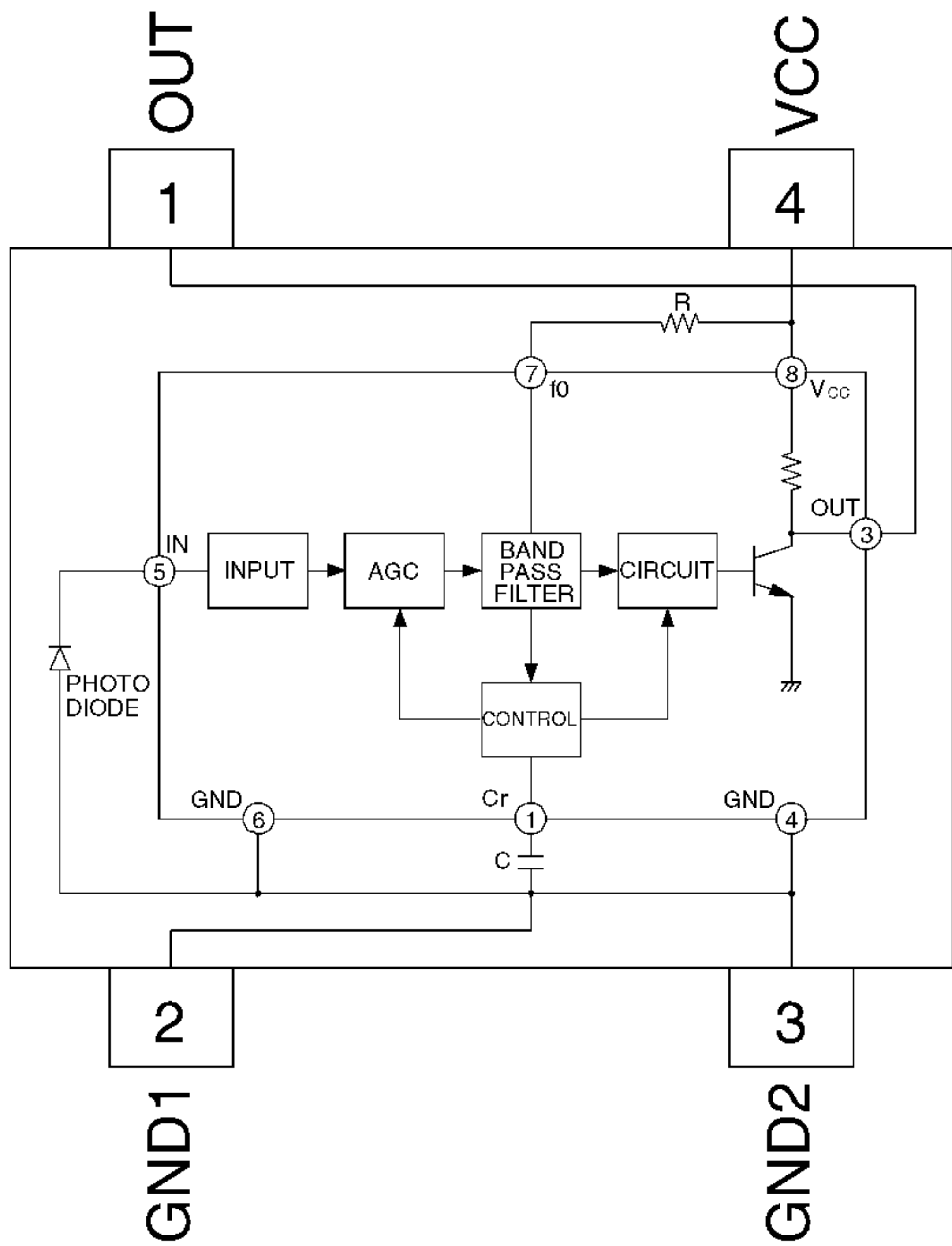


KEH-P8600R,P7600R

*PMW001B



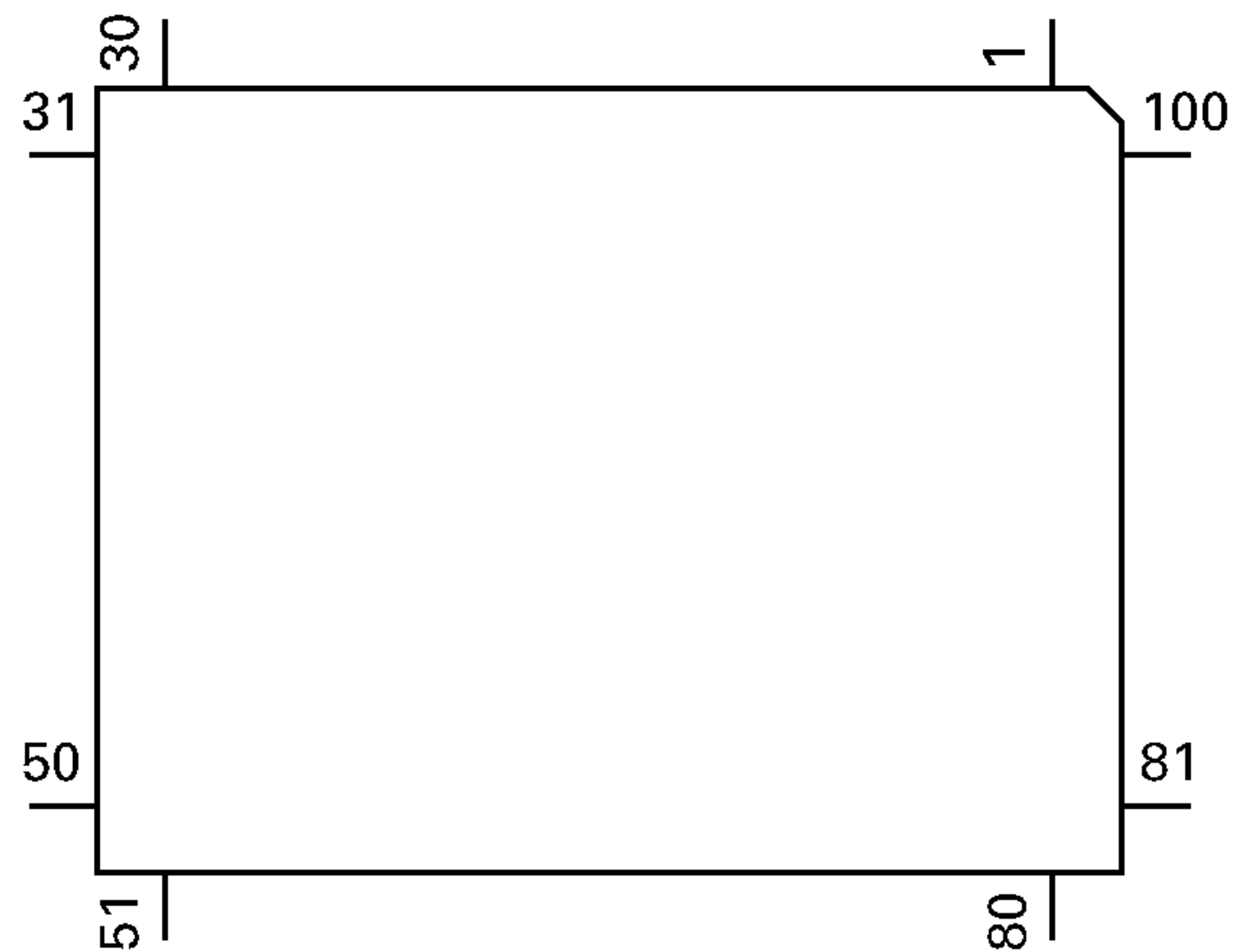
RS-140



IC's marked by* are MOS type.

Be careful in handling them because they are very liable to be damaged by electrostatic induction.

*PD4792A



● Pin Functions (PD4792A)

Pin No.	Pin Name	I/O	Function and Operation
1	SWVDD	O	Keyboard unit power supply control output
2	DSENS	I	Grille detach sense
3	CSENS	I	Flap close sense input
4	ISENS	I	Illumination sense input
5	TESTIN	I	Test program mode input
6	DRST	O	Reset output
7	ERROR	O	Disapprove of error correction output
8	SK	I	SK signal input
9	RECIVE	O	Not used
10	L/S	O	Not used
11	RESET	I	Reset input
12	XT2		(open)
13	XT1	I	(VSS)
14	VSS		(GND)
15	X2		Crystal oscillator connection pin
16	X1	I	Crystal oscillator connection pin
17	REGC		(VDD)
18	REGOFF		(VDD)
19	VDD		Power supply
20	ILMPW	O	Illumination power supply control output
21	SYSPWR	O	System power control output
22	ADPW	O	A/D converter power output
23	LCDPW	O	LCD back light power supply control output
24	IPPW	O	Power supply control output for IP BUS interface IC
25	ASENBO	O	Slave power supply control output
26	PRSBSW	I	PRE OUT/MAIN IN select input
27	TELIN	I	TEL mute signal input
28	MUTE	O	Mute output
29	DIM	O	Dimmer select output
30	SPMPX0	O	MPX output for spectrum analyzer 0
31	SPMPX1	O	MPX output for spectrum analyzer 1
32	SPMPX2	O	MPX output for spectrum analyzer 2
33	VCK	O	Clock output for electronic volume
34	VST	O	Strobe pulse output for electronic volume
35	VDT	O	Data output for electronic volume
36	TMUTE	O	Tuner mute output
37	NC		Not used
38	SD	I	Station detector input
39	ST	I	FM stereo input
40	VSS		GND
41	VDD		Power supply
42	MDSNS	I	Modulation detect input
43	MUTCNT	I	NF mute control input
44	RDSLK	I	RDS LK signal input
45	CURRO	O	Tuner voltage FIX output
46	RDT	I	RDS demodulation data input
47	DRELAY	O	External relay output
48	DRSENS	I	Door open/close sense input
49	DRSYS	O	Door system select output
50	DLED	O	Alarm LED output
51	DLSNS	I	Door lock sense input
52	STCUT	O	Starter cut off output
53	MOSENS	I	Motion/window damage sensor input
54	MSIN	I	MS sense input
55	MTLSW	I	Metal sense input
56	POS	I	Position sense input
57	RES	I	Cassette mechanism reverse end sense input

KEH-P8600R,P7600R

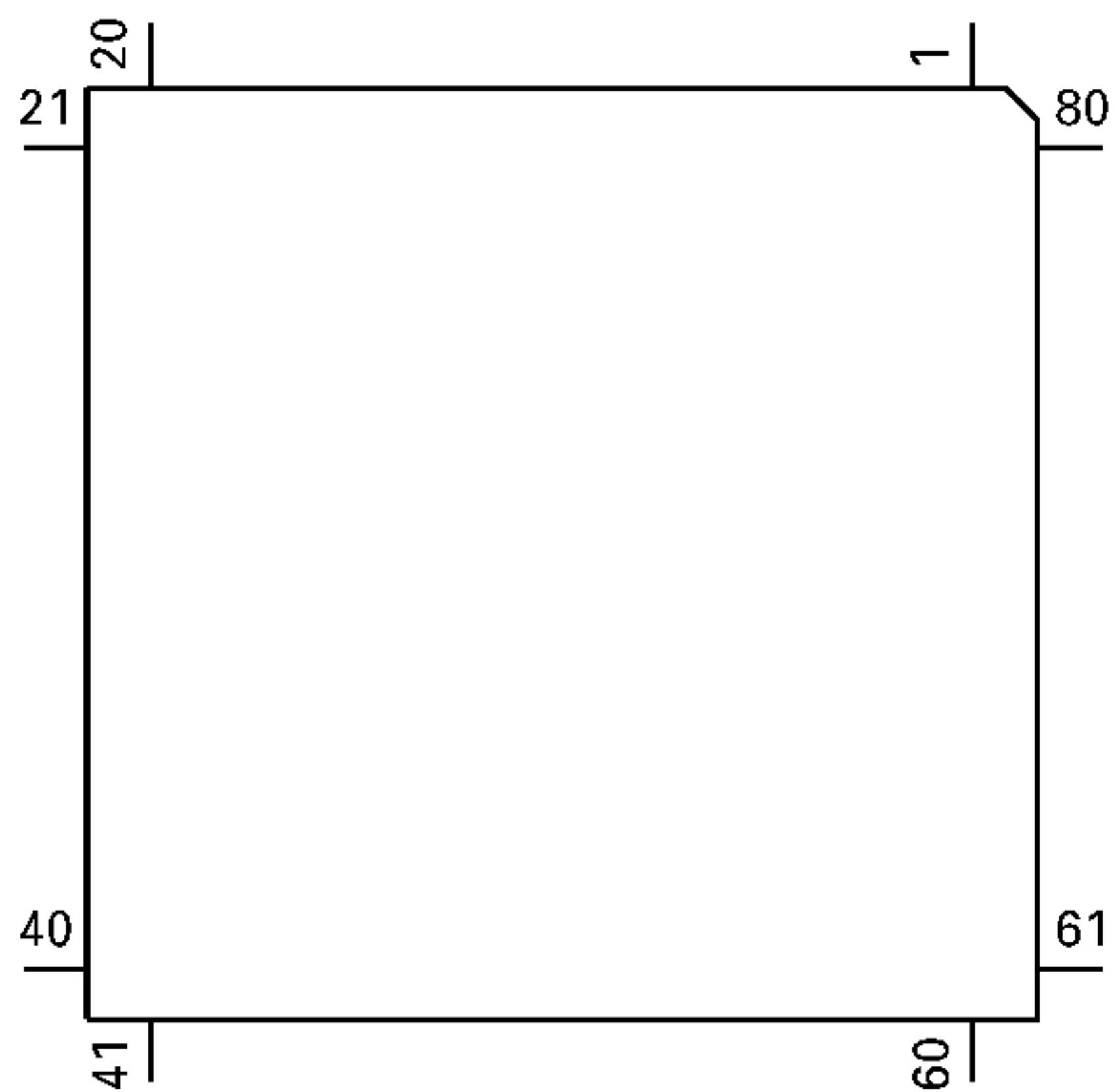
Pin No.	Pin Name	I/O	Function and Operation
58	NES	I	Cassette mechanism forward end sense input
59	DIRO	O	Head F/R select output
60	PLAY	O	MS gain select output
61	DLBYBC	O	Dolby B/C select output
62	PCL	O	Clock adjustment output
63	NR	O	NR output
64	SC2	O	Cassette mechanism sub motor control2 output
65	SC1	O	Cassette mechanism sub motor control1 output
66	CM	O	Cassette mechanism capstan motor control output
67	STBY	O	Drive control output
68	LOADSW	I	Tape loading input
69-72	NC		Not used
73	TEST	I	Test terminal
74	SL	I	Signal level input
75	SEL	I	Select input for the destination
76	LEVEL	I	Level input for spectrum analyzer
77	CL	I	Synchronizing signal input of display data latch
78	NL	I	Noise level input
79-81	NC		Not used
82	AVDD		A/D converter analog power supply (VDD)
83	AVREF1		(VDD)
84	GND		GND
85	RX	I	IP BUS data input
86	TX	O	IP BUS data output
87	GND		GND
88	LDET	I	PLL lock sense input
89	RCK	I	RDS clock input
90	RDS57K	I	57kHzBP-OUT sense input
91	SEL0		Not used
92	ASENS	I	ACC power sense input
93	BSENS	I	Back up power sense input
94	TUNPDI	I	PLL IC data input
95	KEYDT	I	Display data input
96	DPDT	O	Display data output
97	TUNPCK	O	PLL IC clock
98	TUNPDO	O	PLL data output
99	TUNPCE	O	PLL IC chip enable
100	PEE	O	Beep tone output

● Pin Functions (PD6199A)

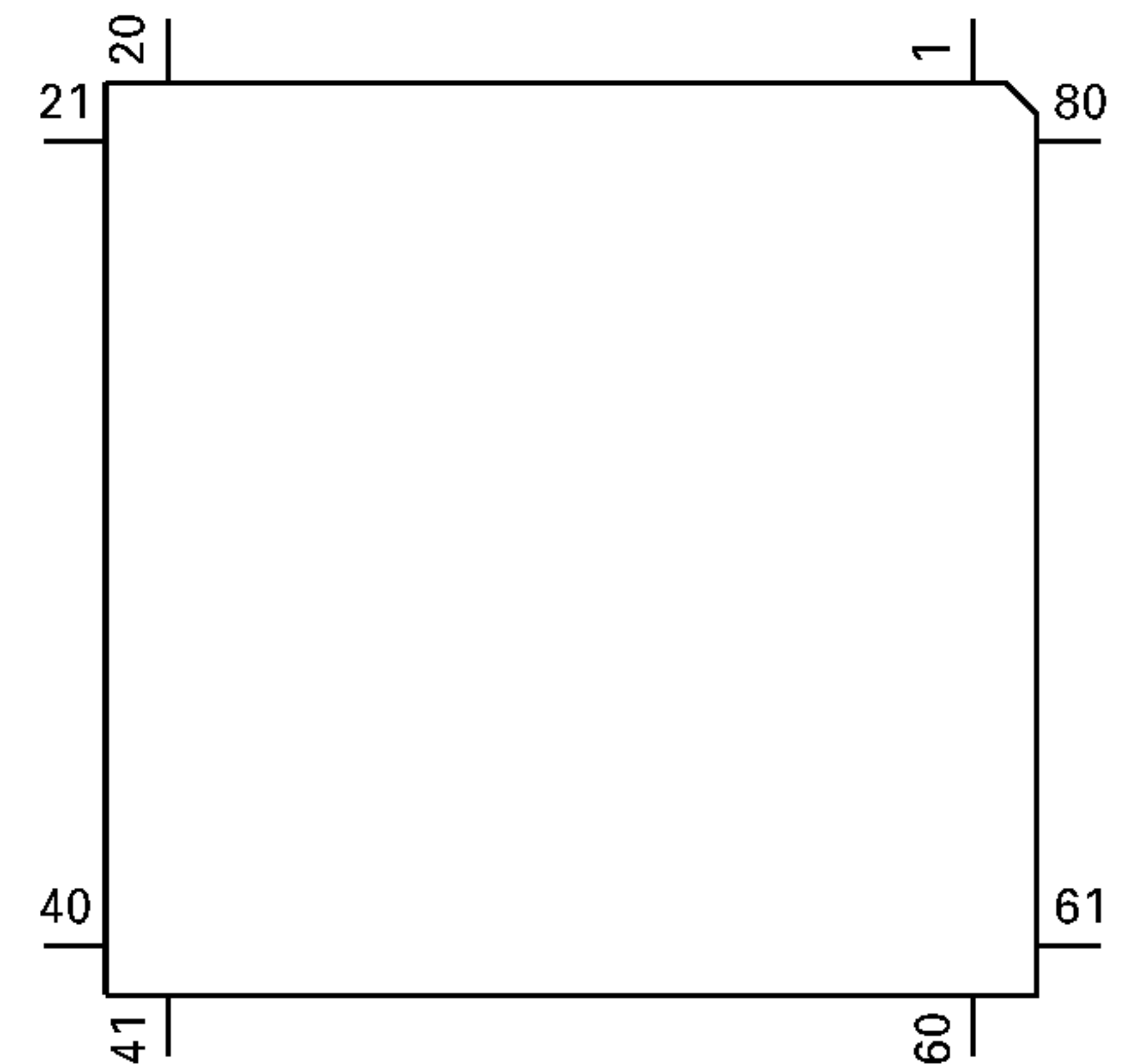
Pin No.	Pin Name	I/O	Format	Function and Operation
1	VSS			GND
2	XI	I		Crystal oscillator connection pin
3	XO	I		Crystal oscillator connection pin
4	RST			Not used
5,6	MOD1,0	I		Model select input
7	LED	O	C	LED control output
8	SO	O	C	Key data output
9	SI	I		Serial data input
10	REM	I		Remote control reception
11	SDRQ	I		Reception error request input
12	ILM	O	C	Illumination color select output
13-16	KD4-KD1	I		Key sense input
17-22	KST6-1	O	N	Key strobe output
23	VCC			Power supply terminal
24-73	SEG49-0	O		LCD segment output
74-77	COM3-0	O		LCD common output
78-80	V3-V1			LCD Power supply terminal

Format	Meaning
C	C MOS
N	N channel open drain

*PD6199A



*PD6200A



● Pin Functions (PD6200A)

Pin No.	Pin Name	I/O	Function and Operation
1	VSS		GND
2	XI		Not used
3	XO	I	Crystal oscillator connection pin
4	RST		Not used
5,6	MOD1,0	I	Model select input
7,8	NC		Not used
9	SI	I	Serial data input
10	NC		Not used
11	RVER	O	Reception error output
12-22	NC		Not used
23	VCC		Power supply terminal
24-59	SE49-14	O	LCD segment output
60-63	NC		Not used
64-73	SE9-0	O	LCD segment output
74-77	CO3-0	O	LCD common output
78-80	V3-V1		LCD Power supply terminal

7.2. DIAGNOSIS

7.2.1 DISASSEMBLY

● Removing the Case(not shown)

1. Remove the two screws.
2. Insert and turn a flat screwdriver to remove the case.

● Removing the Cassette Mechanism Module (not shown)

1. Remove the four screws.
2. Disconnect the connector.
3. Remove the Cassette Mechanism Module.

● Removing the Detach Grille Assy(Fig.30)

1. Press the OPEN button, and then pull Detach Grille Assy.

● Removing the Panel Assy(Fig.30)

1. Remove the two screws, and disconnect the two connectors.
2. Disengage the stoppers at two locations indicated by arrows.
3. Remove the Panel Assy.

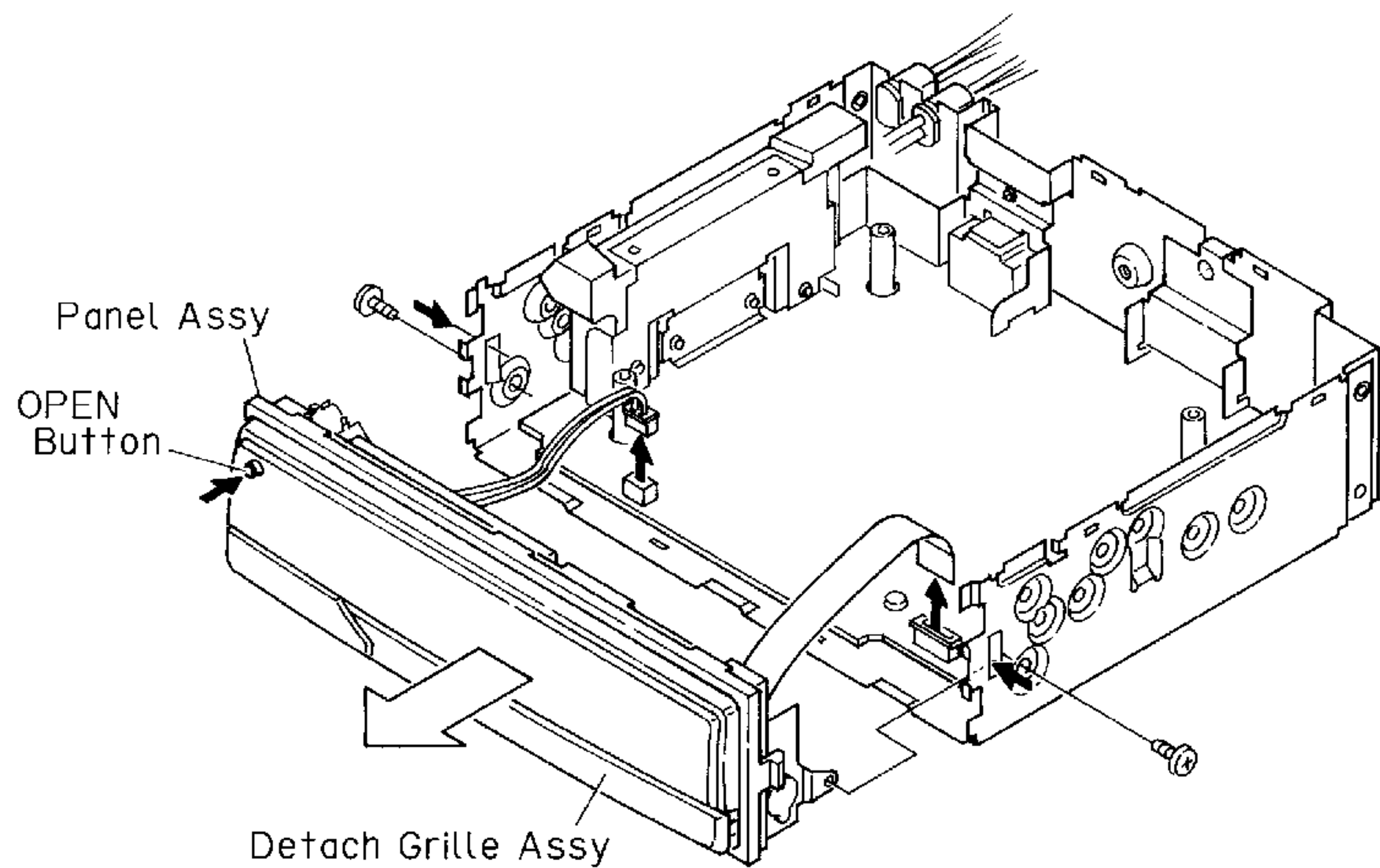


Fig. 30

● Removing the Tuner Amp Unit(Fig.31)

1. Remove the two screws A and three screws B.
2. Remove the one screw C.
3. Unbend the tabs at two locations indicated by arrows until straight.
4. Raise up on Tuner Amp Unit.

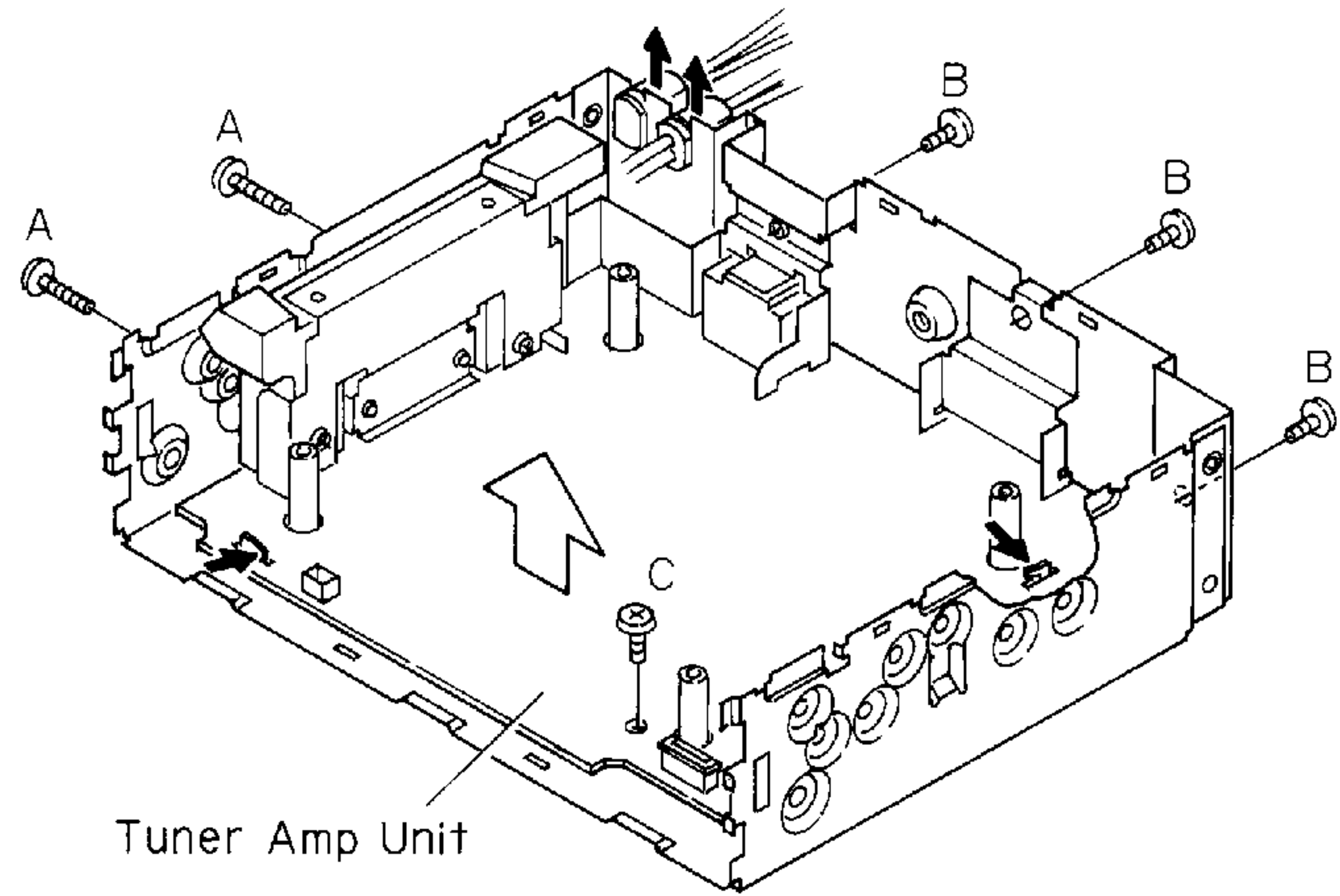


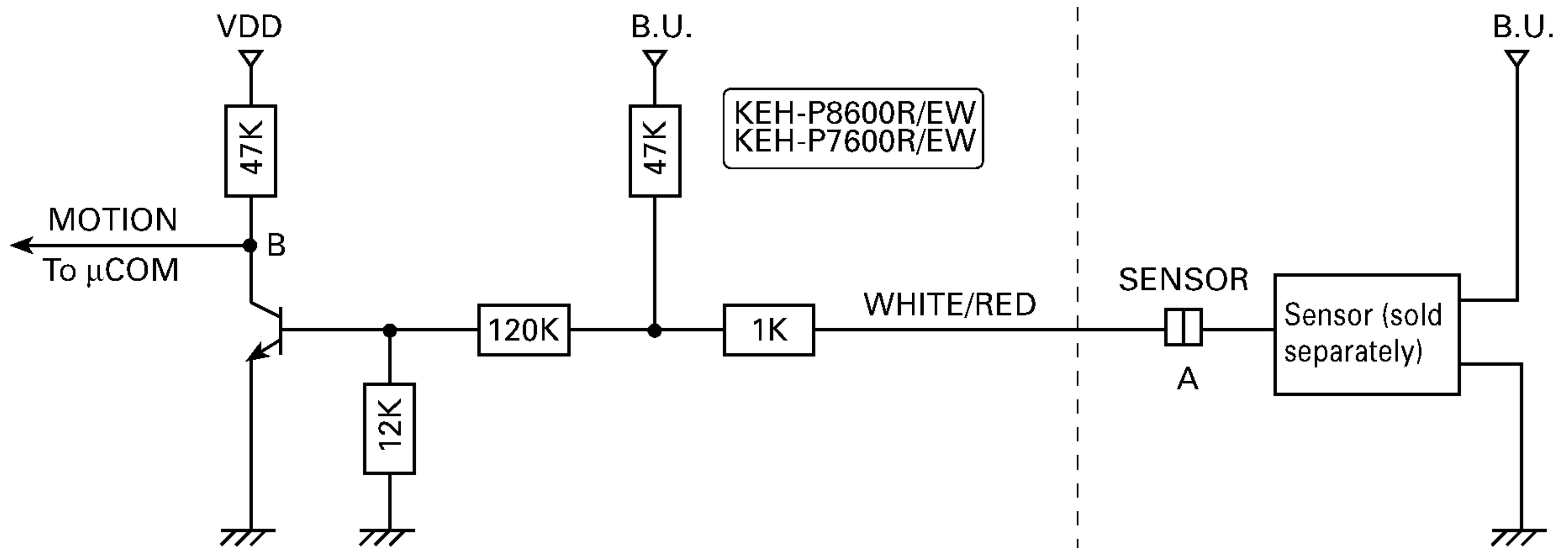
Fig. 31

7.3 EXPLANATION

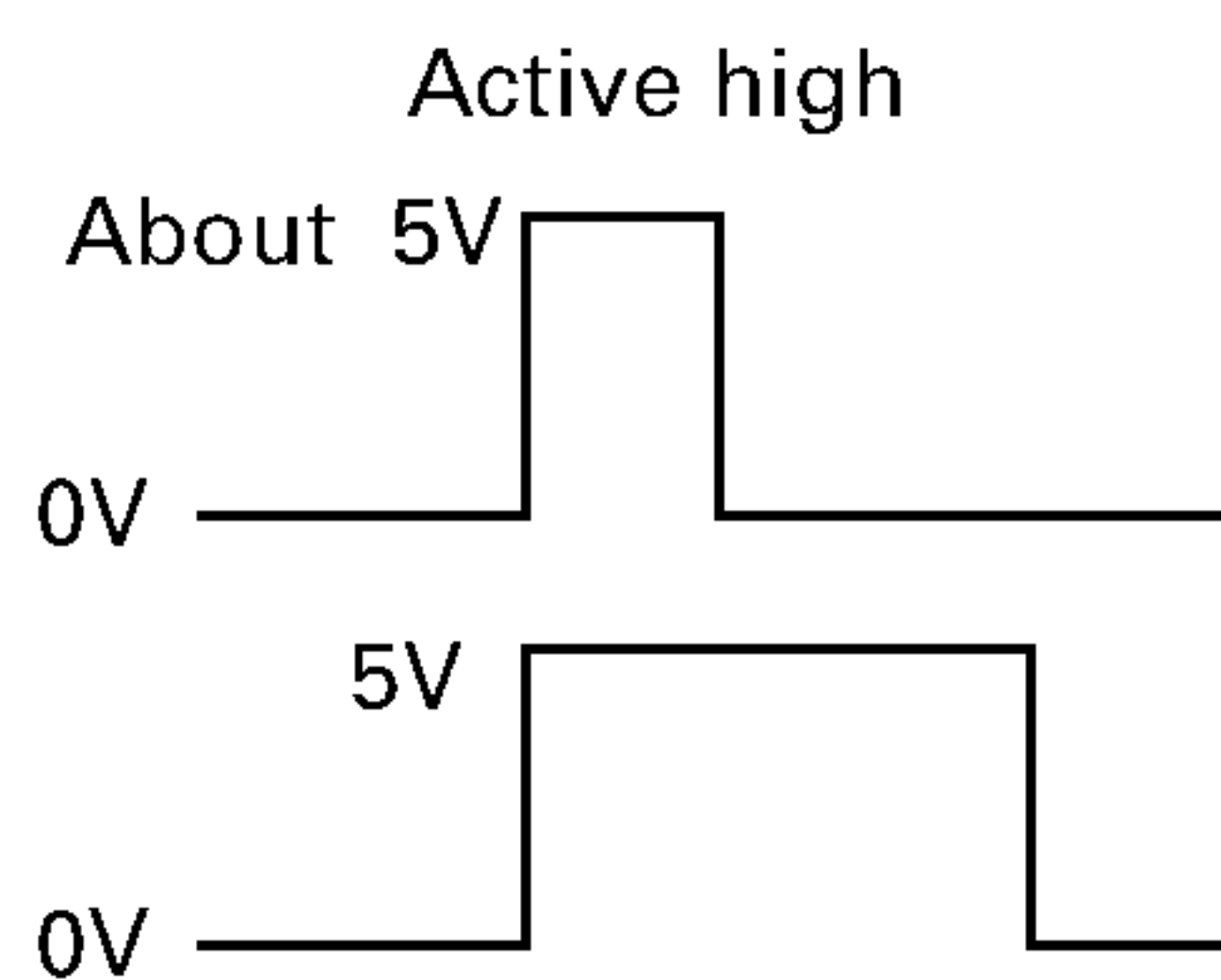
7.3.1 CIRCUIT DESCRIPTION

1) SENSOR

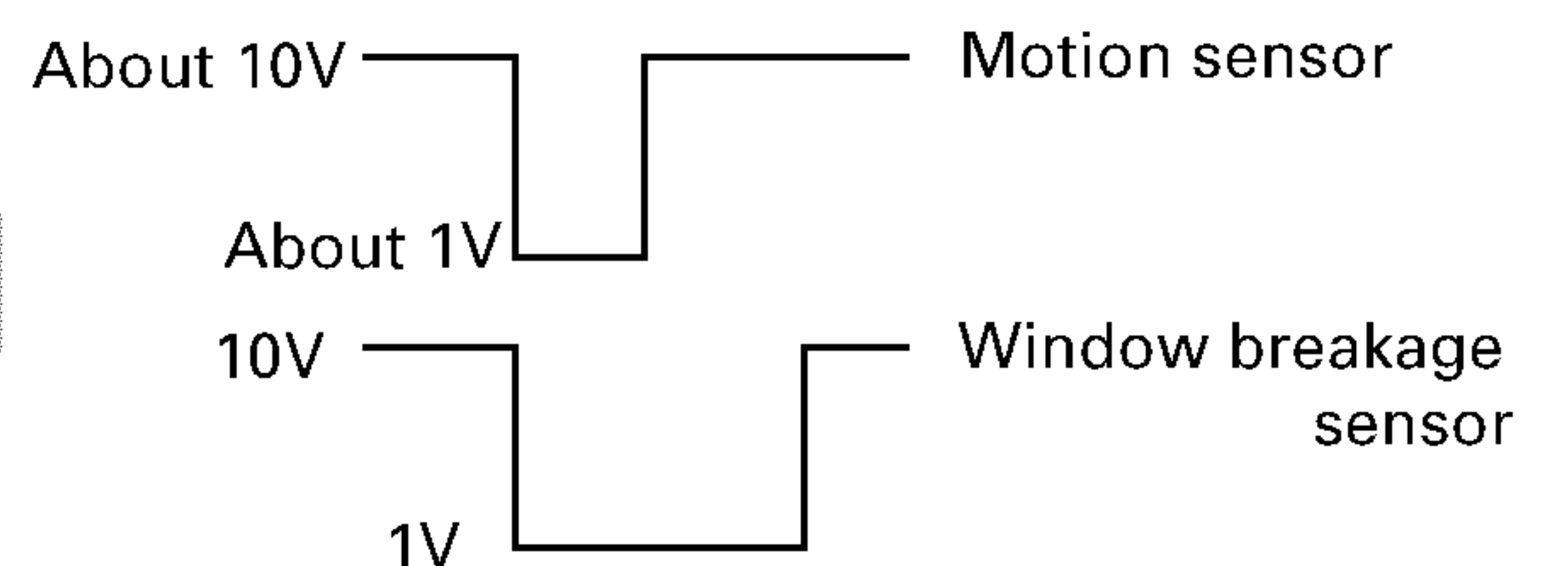
Install sensors sold separately, such as a motion sensor and window breakage sensor.



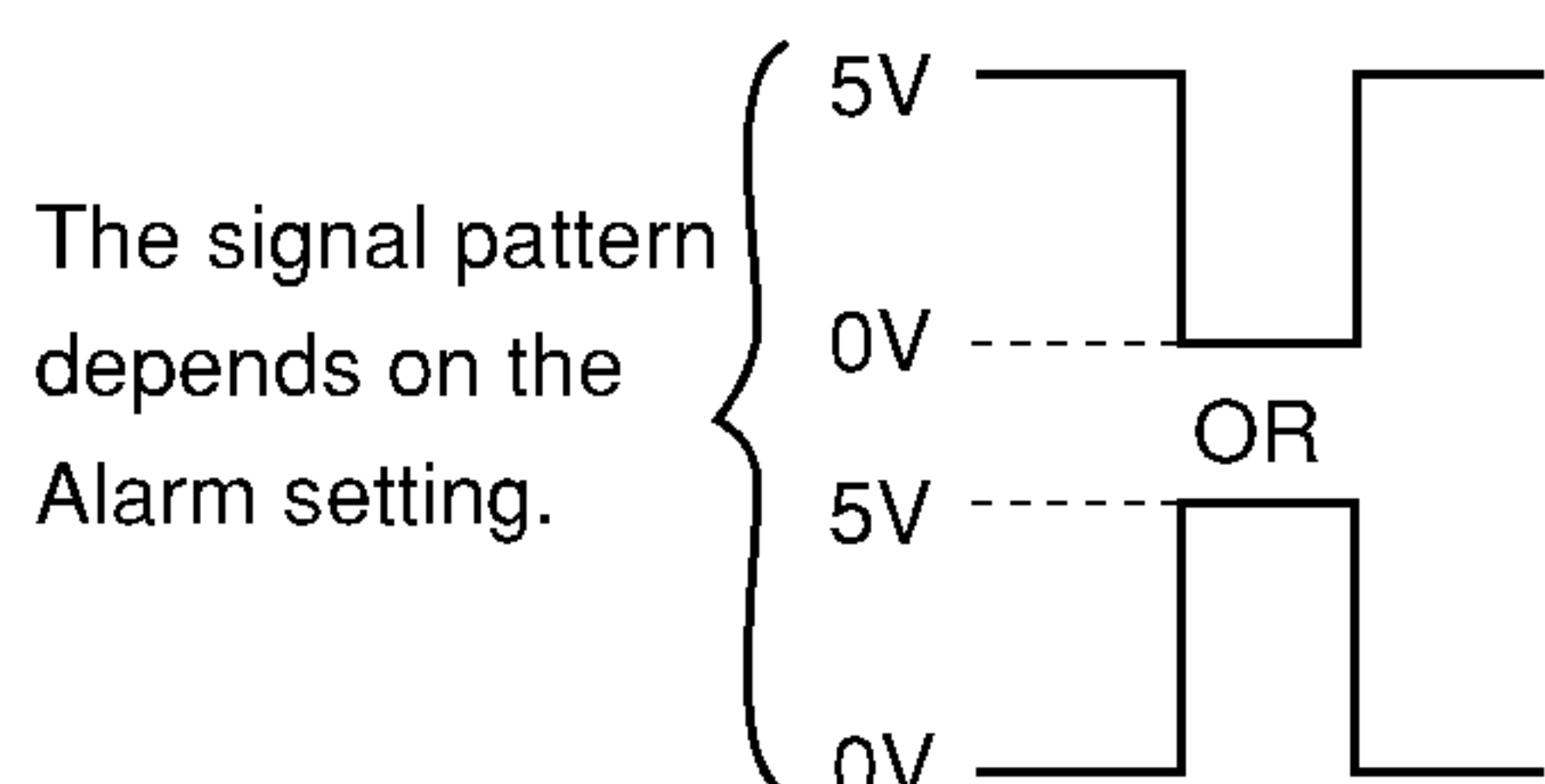
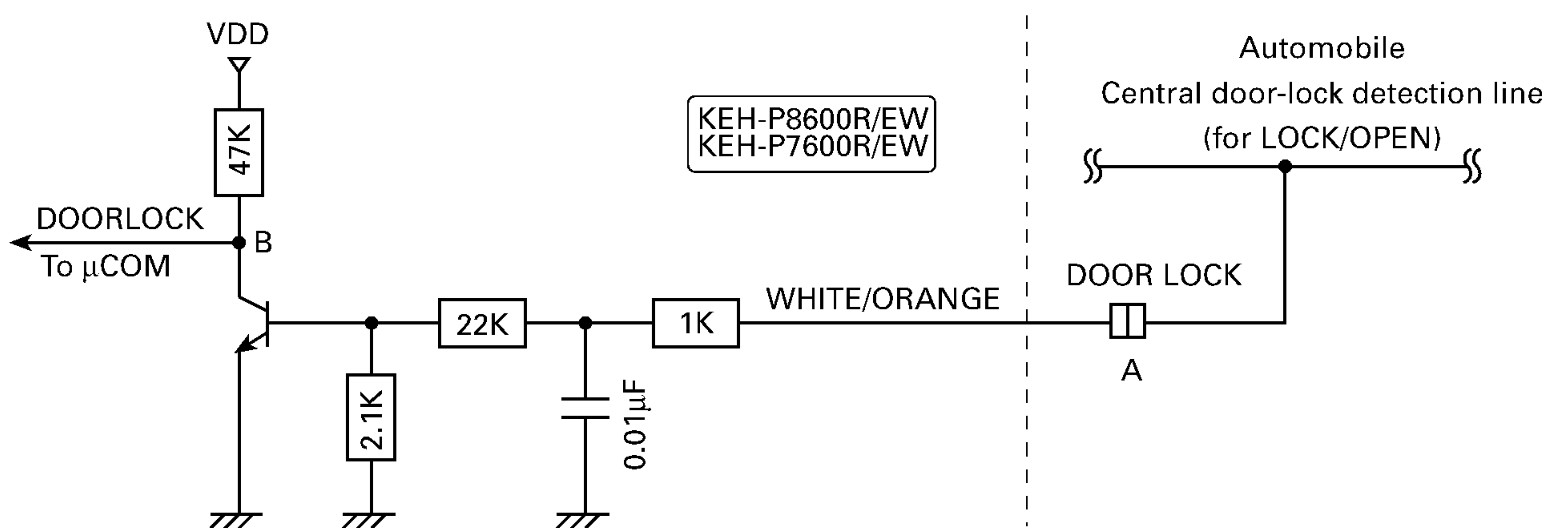
Point-B waveform (when a motion is sensed)



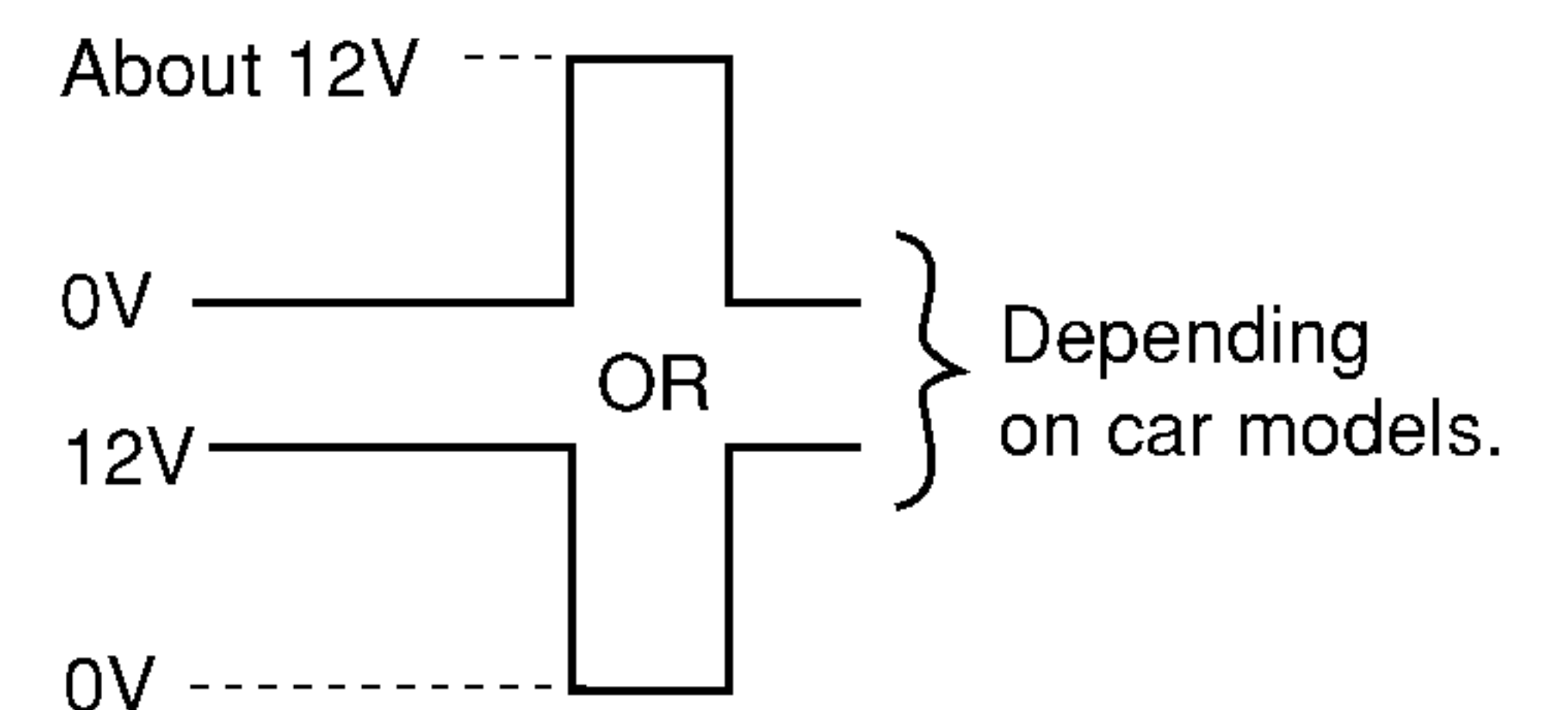
Point A waveform (when a motion is sensed)



2) DOOR LOCK

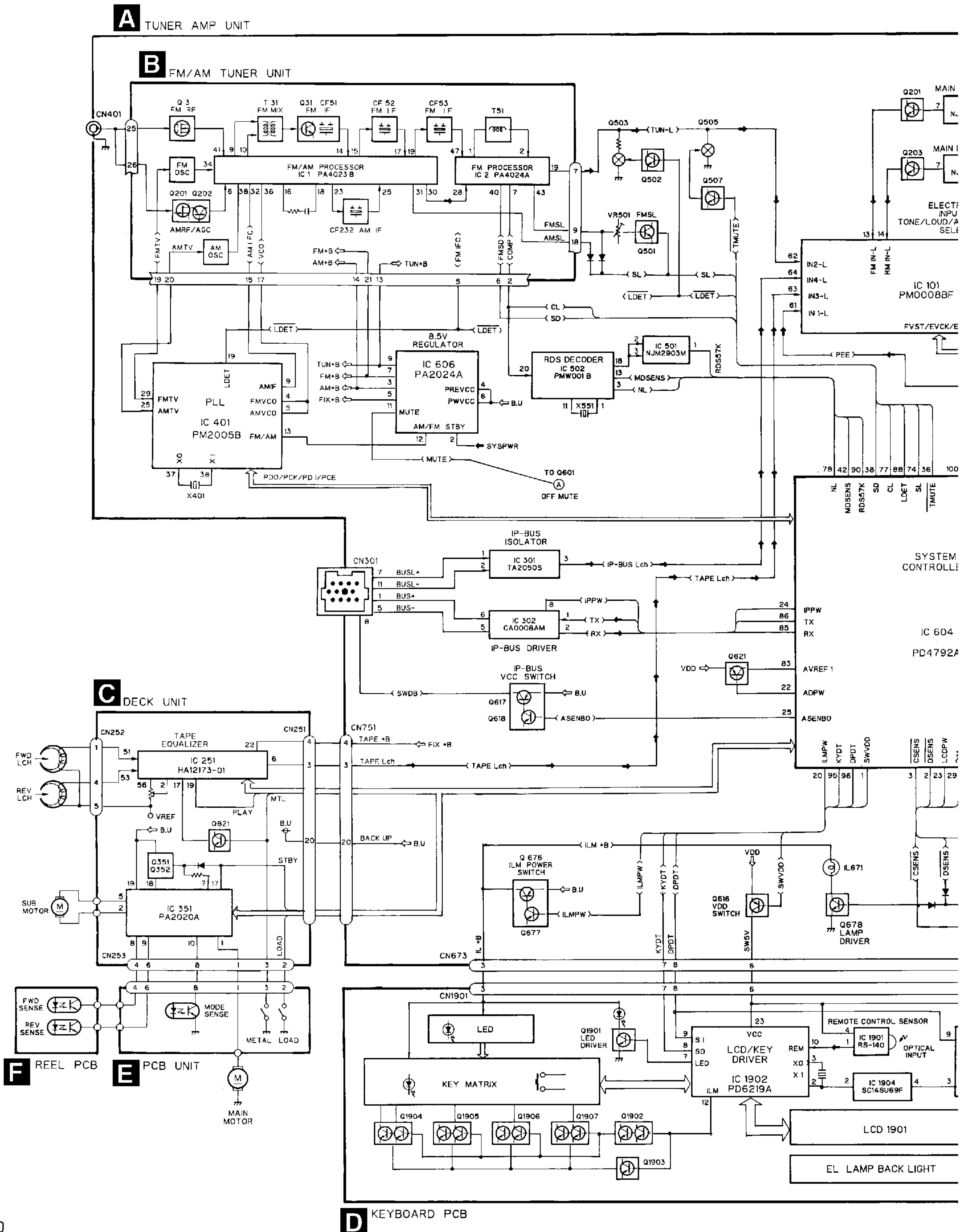


Point-A waveform (when the door is locked or open)



7.3.2 BLOCK DIAGRAM

● KEH-P8600R/EW



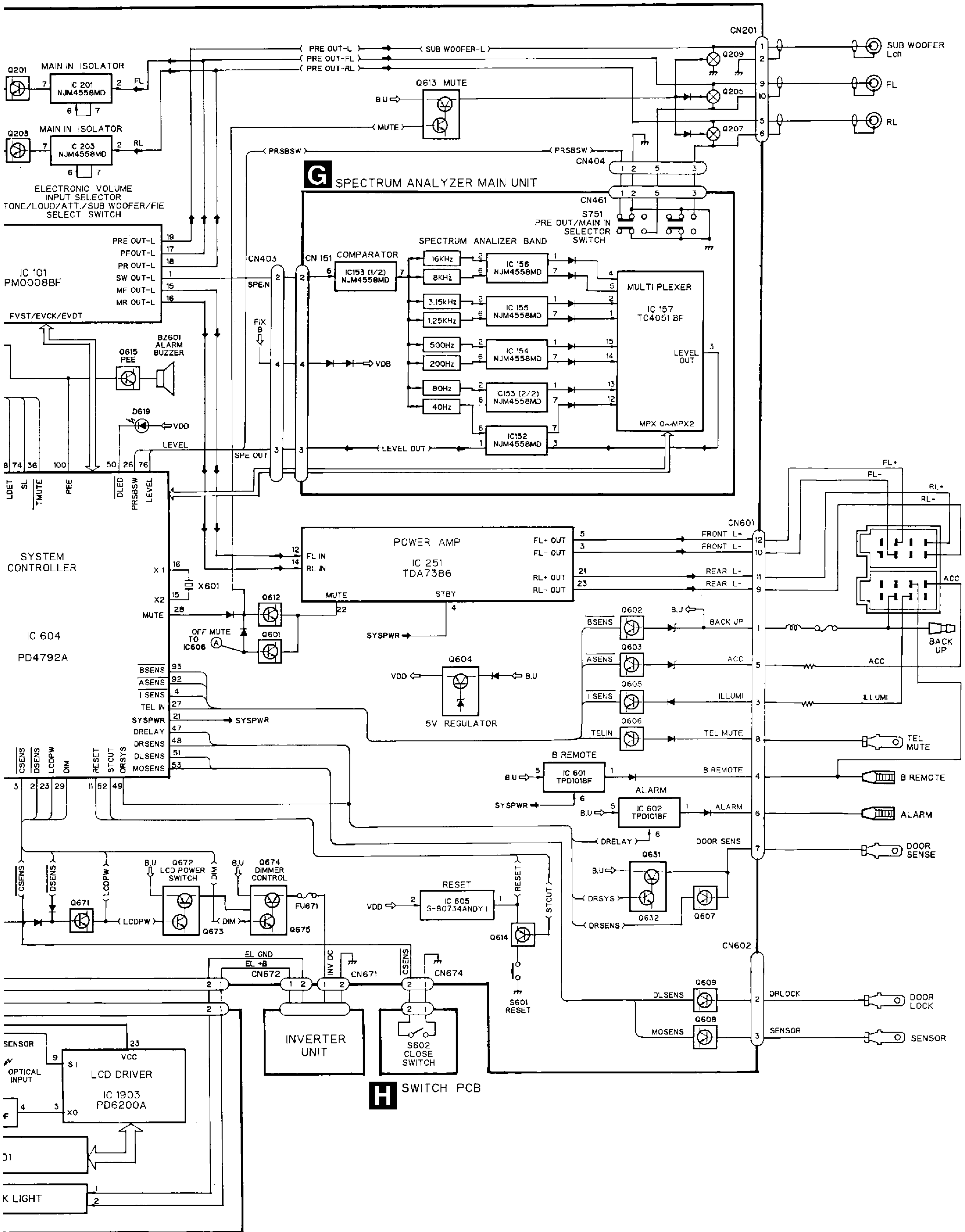


Fig. 32

Specifications

General

Power source 14.4 V DC (10.8 – 15.1 V allowable)
Grounding system Negative type
Max. current consumption 10 A
Dimensions
(mounting size) 178 (W) × 50 (H) × 150 (D) mm
(front face) 188 (W) × 58 (H) × 19 (D) mm
Weight 1.5 kg

Amplifier

Maximum power output 40 W × 4
Continuous power output 25 W × 4
(DIN45324, +B = 14.4 V)
Load impedance 4 Ω (4 – 8 Ω allowable)
Preout output level/output impedance 500 mV/1 kΩ
Sub-woofer output
Crossover frequency 50 Hz, 80 Hz, 125 Hz
Crossover slope –18 dB/oct
Tone controls
(Bass) ±12 dB (80 Hz)
(Middle) ±12 dB (400 Hz)
(Treble) ±12 dB (10 kHz)
Loudness contour +10 dB (100 Hz), +7 dB (10 kHz)
(volume: –30 dB)

Cassette player

Tape Compact cassette tape (C-30 – C-90)
Tape speed 4.76 cm/sec. (+0.14 cm/sec. –0.05 cm/sec.)
Fast forward/rewinding time .. Approx. 100 sec. for C-60
Wow & flutter 0.09% (WRMS)
Frequency response Metal: 30 – 19,000 Hz (±3 dB)
Stereo separation 45 dB
Signal-to-noise ratio
..... Metal:* Dolby C NR IN: 73 dB (IEC-A network)
Dolby B NR IN: 67 dB (IEC-A network)
Dolby NR OUT: 61 dB (IEC-A network)
* : KEH-P8600R/EW only.

FM tuner

Frequency range 87.5 – 108 MHz
Usable sensitivity
..... 11 dBf (1.0 μV/75 Ω, mono, S/N: 30 dB)
50 dB quieting sensitivity 16 dBf (1.7 μV/75 Ω, mono)
Signal-to-noise ratio 70 dB (IEC-A network)
Distortion 0.3% (at 65 dBf, 1 kHz, stereo)
Frequency response 30 – 15,000 Hz (±3 dB)
Stereo separation 40 dB (at 65 dBf, 1 kHz)

MW tuner

Frequency range 531 – 1,602 kHz
Usable sensitivity 18 μV (25 dB) (S/N: 20 dB)
Selectivity 50 dB (±9 kHz)

LW tuner

Frequency range 153 – 281 kHz
Usable sensitivity 30 μV (30 dB) (S/N: 20 dB)
Selectivity 50 dB (±9 kHz)

Note:

- Specifications and the design are subject to possible modification without notice due to improvements.