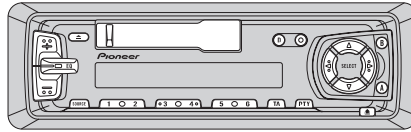


Service Manual

Pioneer

KEH-P4830R/X1M/EW



ORDER NO.
CRT2258

MULTI-CD CONTROL HIGH POWER CASSETTE PLAYER WITH RDS TUNER

KEH-P4830R

KEH-P4800R X1M/EW

X1M/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 2L series.
- This service manual does not describe the CD test mode.

For the operations in the CD test mode, refer to the CD player's Service Manual.

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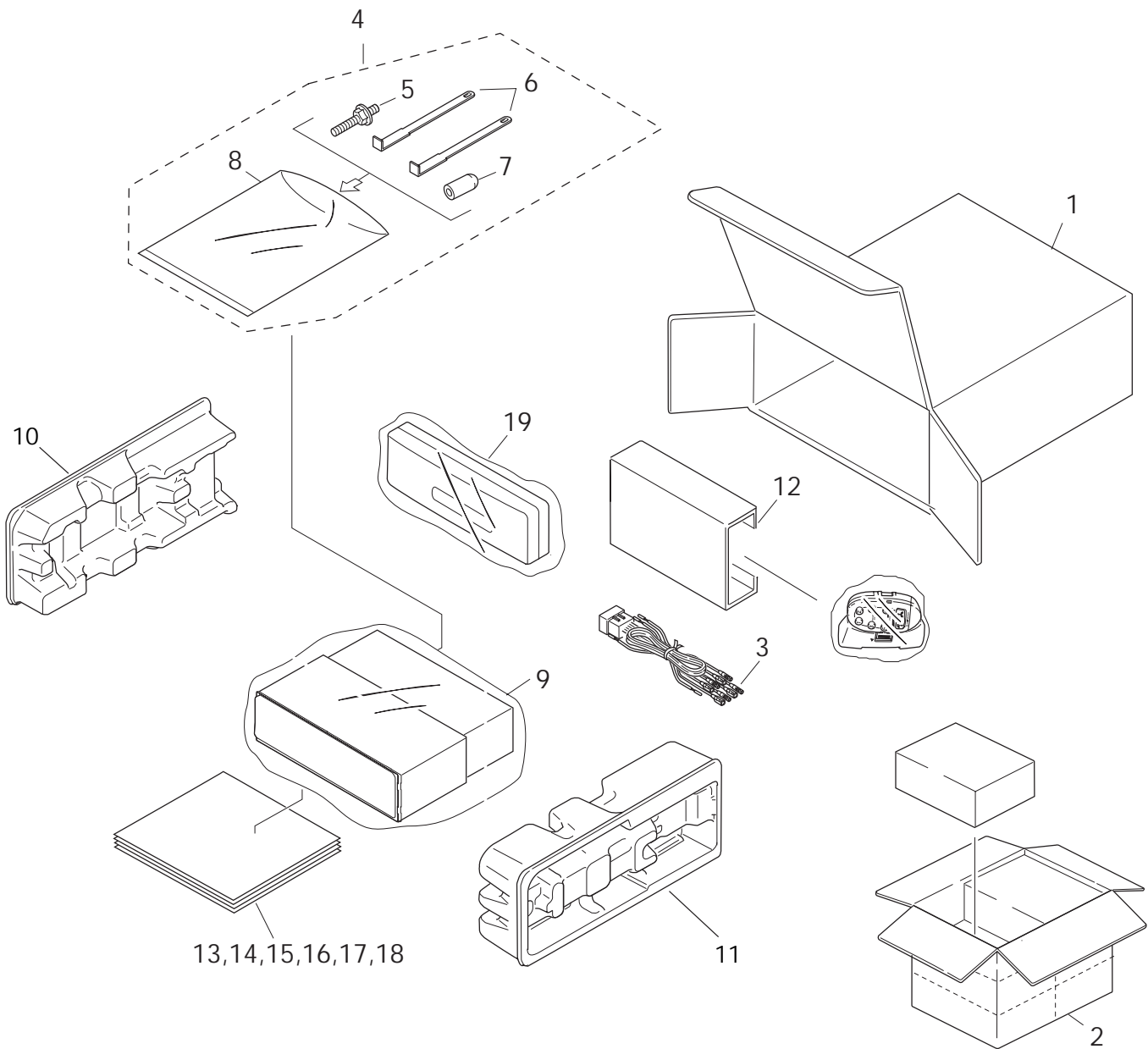
PIONEER ELECTRONIC CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153-8654, Japan
PIONEER ELECTRONICS SERVICE INC. P.O.Box 1760, Long Beach, CA 90801-1760 U.S.A.
PIONEER ELECTRONIC [EUROPE] N.V. Haven 1087 Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE.LTD. 501 Orchard Road, #10-00, Wheelock Place, Singapore 238880

1. SAFETY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

2. EXPLODED VIEWS AND PARTS LIST

2.1 PACKING



NOTE:

- Parts marked by "*" are generally unavailable because they are not in our Master Spare Parts List.
- Screws adjacent to ∇ mark on the product are used for disassembly.

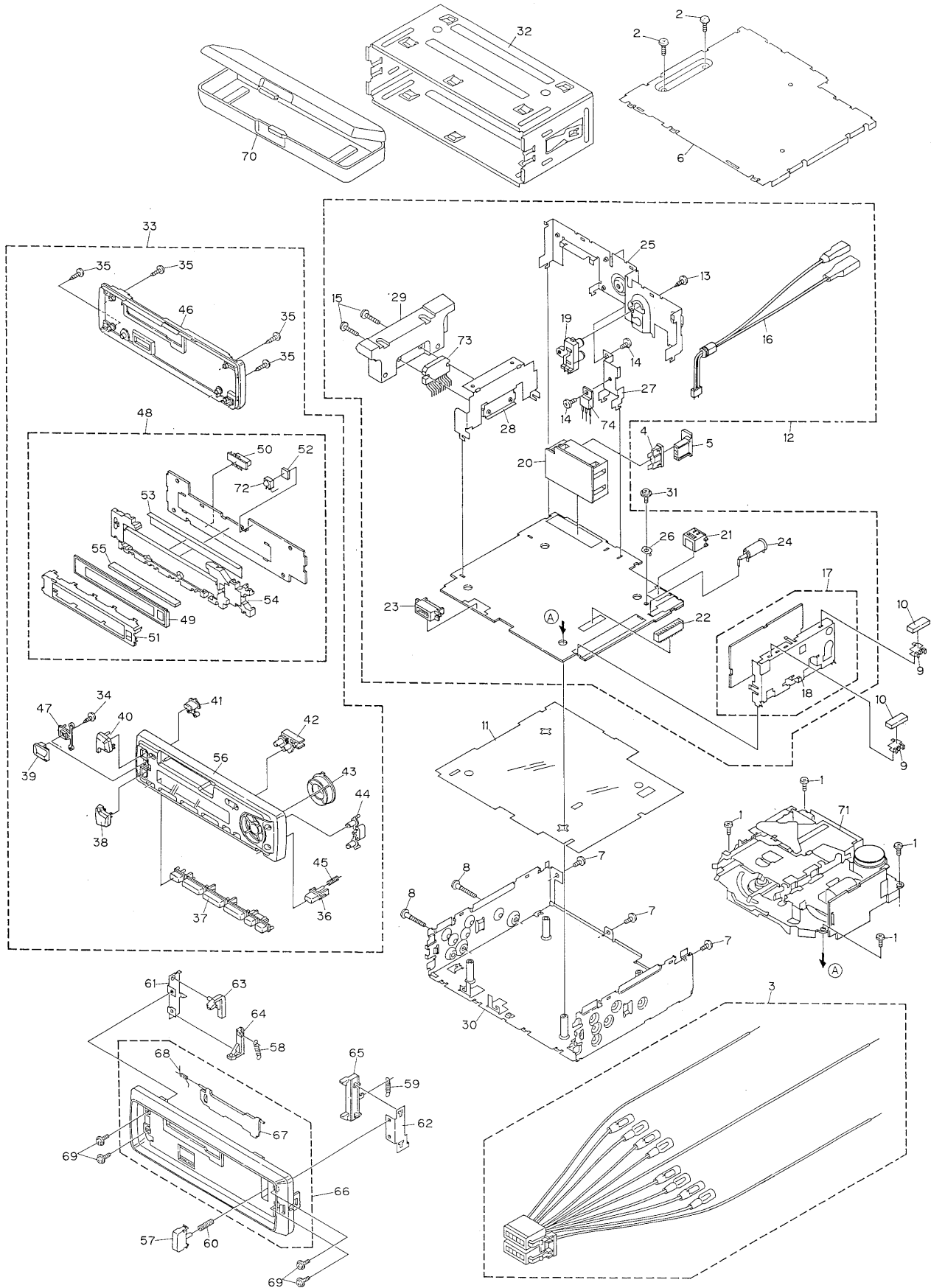
● PACKING SECTION PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Carton(P4830R)	CHG3568	9	Polyethylene Bag	CEG-162
	Carton(P4800R)	CHG3567	10	Protector	CHP2102
2	Contain Box(P4830R)	CHL3568	11	Protector	CHP2101
	Contain Box(P4800R)	CHL3567	12	Inner-box	CHW1754
3	Cord Assy	CDE5796	13	Owner's Manual	CRD2777
4	Accessory Assy	CEA1917	14	Owner's Manual	CRD2778
5	Screw	CBA1304	15	Owner's Manual	CRD2779
6	Handle	CNC5395	16	Installation Manual	CRD2780
7	Bush	CNV3930	*	17 Passport	CRY1013
*	8 Polyethylene Bag	E36-615	*	18 Warranty Card	CRY1087
			19	Case Assy	CXB3520

● Owner's Manual, Installation Manual

Model	Part No.	Language
KEH-P4830R/X1M/EW	CRD2777	English,Spanish
KEH-P4800R/X1M/EW	CRD2778	German,French
	CRD2779	Italian,Dutch
	CRD2780	English,Spanish,German, French,Italian,Dutch

2.2 EXTERIOR



(1) EXTERIOR SECTION PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Screw	BSZ26P050FMC	41	Button(Eject)	CAC5793
2	Screw	BSZ30P050FMC	42	Button(Display)	CAC5788
3	Cord Assy	CDE5796	43	Button	See Contrast table(2)
4	Fuse(10A)	CEK1136	44	Button	See Contrast table(2)
5	Plug	CKM1290	45	Spring	CBH2103
6	Case	CNB2350	46	Cover	See Contrast table(2)
7	Screw	BSZ30P050FMC	47	Housing	CNV5528
8	Screw	BSZ30P200FMC	48	Keyboard Unit	See Contrast table(2)
9	Holder	CNC5704	49	LCD(LCD1901)	See Contrast table(2)
10	Cushion	CNM5210	50	Connector(CN1901)	CKS3580
11	Insulator	CNM5963	51	Holder	CNC7981
12	Tuner Amp Unit	See Contrast table(2)	52	Spacer	CNM5043
13	Screw	BPZ26P080FMC	53	Sheet	CNM5941
14	Screw	BSZ26P080FMC	54	Lighting Conductor	CNV5527
15	Screw	BSZ26P160FMC	55	Connector	CNV5531
16	Cord	CDE5750	56	Grille Unit	See Contrast table(2)
17	FM/AM Tuner Unit	CWE1466	57	Button	CAC4836
18	Holder	CNC6554	58	Spring	CBH1834
19	Pin Jack(CN301)	CKB1035	59	Spring	CBH1835
20	Plug(CN603)	CKM1288	60	Spring	CBH2182
21	Connector(CN701)	CKS3408	61	Bracket	CNC6135
22	Connector(CN602)	CKS3568	62	Bracket	CNC6791
23	Connector(CN601)	CKS3581	63	Arm	CNV4692
24	Antenna Jack(CN402)	CKX1056	64	Arm	CNV4693
25	Panel	CNB2340	65	Arm	CNV4728
26	Holder	CNC5399	66	Panel Unit	See Contrast table(2)
27	Holder	CNC6845	67	Door	See Contrast table(2)
28	Holder	CNC7996	68	Spring	CBH1838
29	Heat Sink	CNR1505	69	Screw	IMS20P030FZK
30	Chassis Unit	See Contrast table(2)	70	Case Assy	CXB3520
31	Screw	ISS26P055FUC	71	Cassette Mechanism Module	EXK3695
32	Holder Unit	CXB2687	72	IC(IC1902)	SBX8035-H
33	Detach Grille Assy	See Contrast table(2)	73	IC(IC302)	TDA7384
34	Screw	BPZ20P060FMC	74	Transistor(Q904)	2SD2396
35	Screw	BPZ20P100FZK			
36	Button	See Contrast table(2)			
37	Button(1-6)	CAC5785			
38	Button	See Contrast table(2)			
39	Button	See Contrast table(2)			
40	Button	See Contrast table(2)			

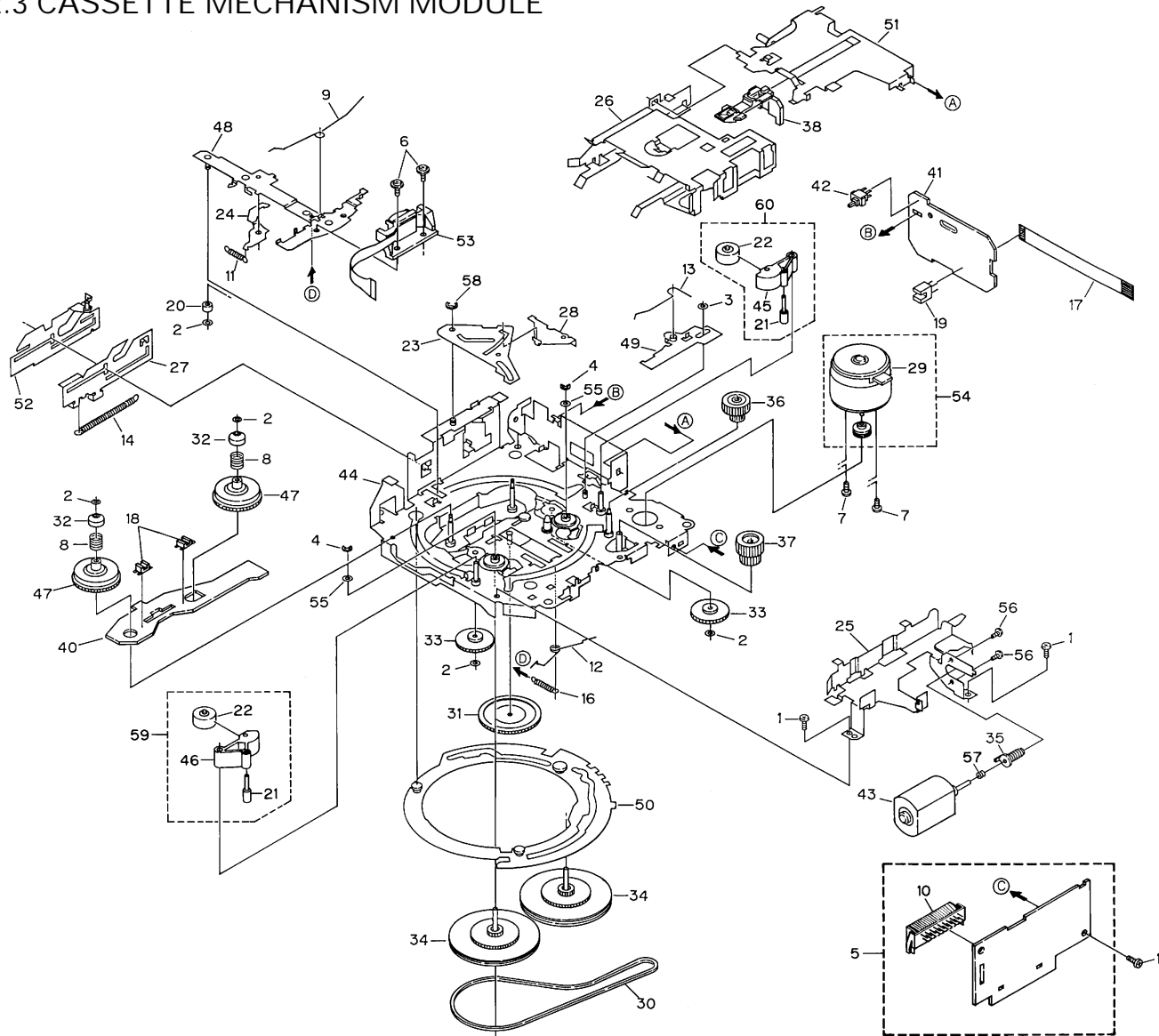
KEH-P4830R,P4800R

(2) CONTRAST TABLE

KEH-P4830R/X1M/EW and KEH-P4800R/X1M/EW have the same construction except for the following:

Mark No. Description	Part No.	
	KEH-P4830R/X1M/EW	KEH-P4800R/X1M/EW
12 Tuner Amp Unit	CWM6246	CWM6245
30 Chassis Unit	CXB3015	CXB3014
33 Detach Grille Assy	CXB3320	CXB3319
36 Button(Detach)	CAC5929	CAC5789
38 Button(-)	CAC5931	CAC5930
39 Button(EQ)	CAC6136	CAC6135
40 Button(+)	CAC5797	CAC5783
43 Button(Cross)	CAC5799	CAC5786
44 Button(A,B)	CAC5801	CAC5787
46 Cover	CNS5131	CNS5130
48 Keyboard Unit	CWM6257	CWM6110
49 LCD(LCD1901)	CAW1542	CAW1506
56 Grille Unit	CXB4063	CXB4062
66 Panel Unit	CXB3022	CXB3021
67 Door	CAT1835	CAT2028

2.3 CASSETTE MECHANISM MODULE



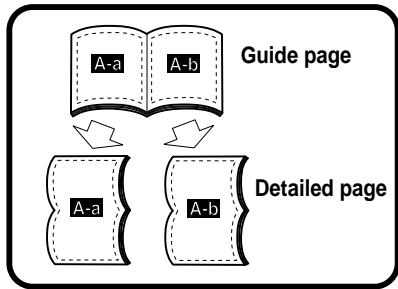
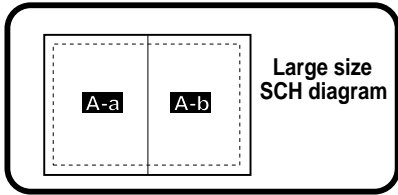
● CASSETTE MECHANISM MODULE SECTION PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Screw	BSZ20P040FMC	46	Pinch Holder	ENV1486
2	Washer	CBF1037	47	Reel Unit	EXA1543
3	Washer	CBF1038	48	Head Base Unit	EXA1457
4	Washer	CBG1003	49	Lever Unit	EXA1438
5	Deck Unit	EWM1021	50	Gear Unit	EXA1574
6	Screw	EBA1028	51	Frame Unit	EXA1458
7	Screw	EBA1037	52	Lever Unit	EXA1439
8	Spring	EBH1531	53	Head Assy(HD1)	EXA1506
9	Spring	EBH1575	54	Motor Unit(M1)	EXA1490
10	Plug(CN251)	CKS3540	55	Washer	HBF-179
11	Spring	EBH1515	56	Screw	BMZ20P022FMC
12	Spring	EBH1587	57	Spring	EBH1545
13	Spring	EBH1517	58	Washer	YE20FUC
14	Spring	EBH1518	59	Pinch Holder Unit	EXA1529
15	.....		60	Pinch Holder Unit	EXA1528
16	Spring	EBH1537			
17	Cord	EDD1020			
18	Photo-interrupter(EGN2,3)	EGN1006			
19	Photo-interrupter(EGN1)	EGN1005			
20	Roller	ENR1031			
21	Shaft	ELA1373			
22	Pinch Roller	ENV1518			
23	Arm	ENC1489			
24	Arm	ENC1397			
25	Guide	ENC1481			
26	Holder	ENC1417			
27	Lever	ENC1448			
28	Arm	ENC1488			
* 29	Motor	EXM1031			
30	Belt	ENT1027			
31	Gear	ENV1347			
32	Collar	ENV1508			
33	Gear	ENV1350			
34	Flywheel	ENV1500			
35	Worm Gear	ENV1439			
36	Worm Wheel	ENV1440			
37	Gear	ENR1028			
38	Lever	ENV1442			
39	.....			
40	Gathering PCB	ENX1037			
41	Gathering PCB	ENX1042			
42	Switch(S1)	ESG1004			
43	Motor Unit(M2)	EXA1485			
44	Chassis Unit	EXA1511			
45	Pinch Holder	ENV1485			

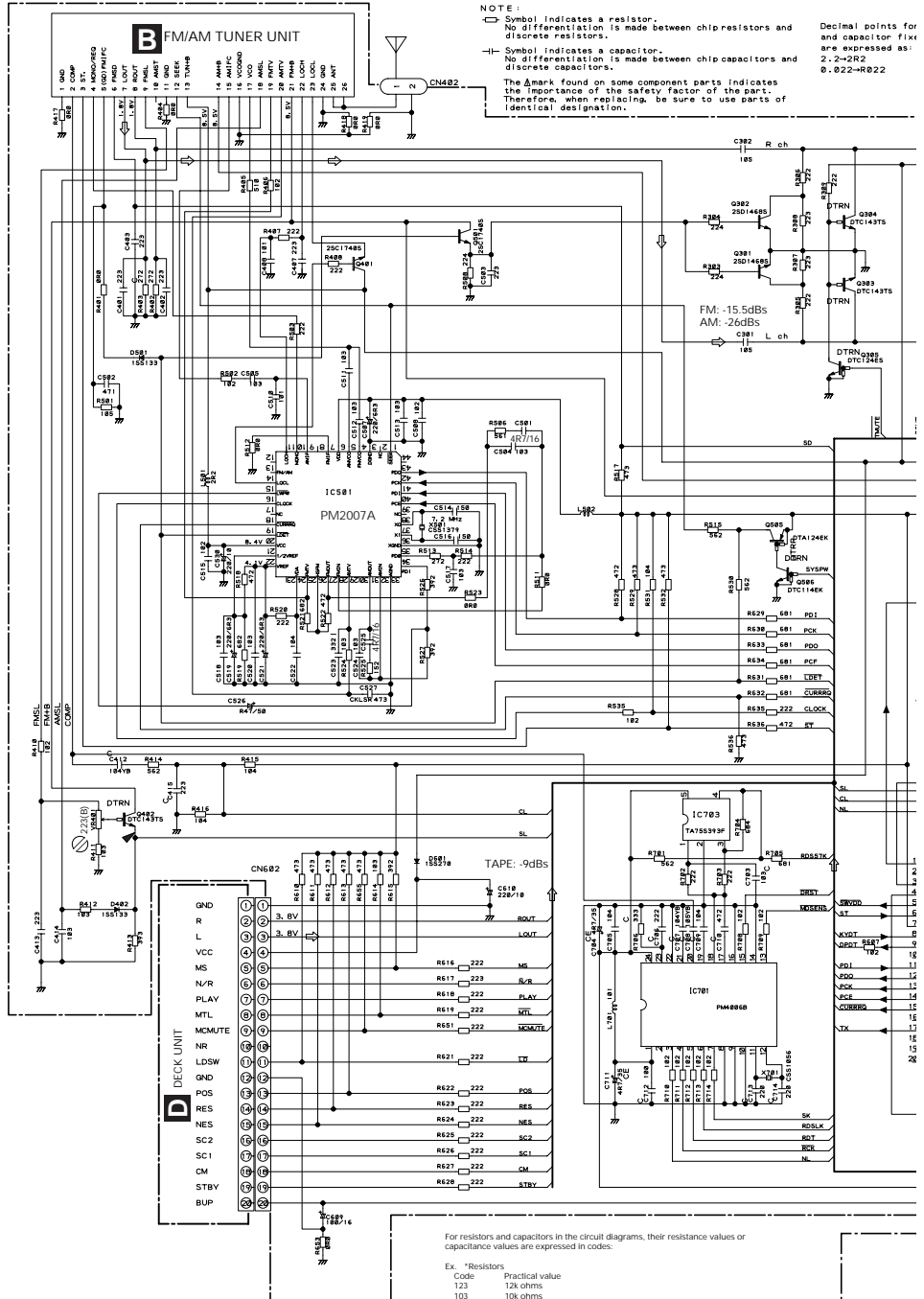
3. SCHEMATIC DIAGRAM

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".



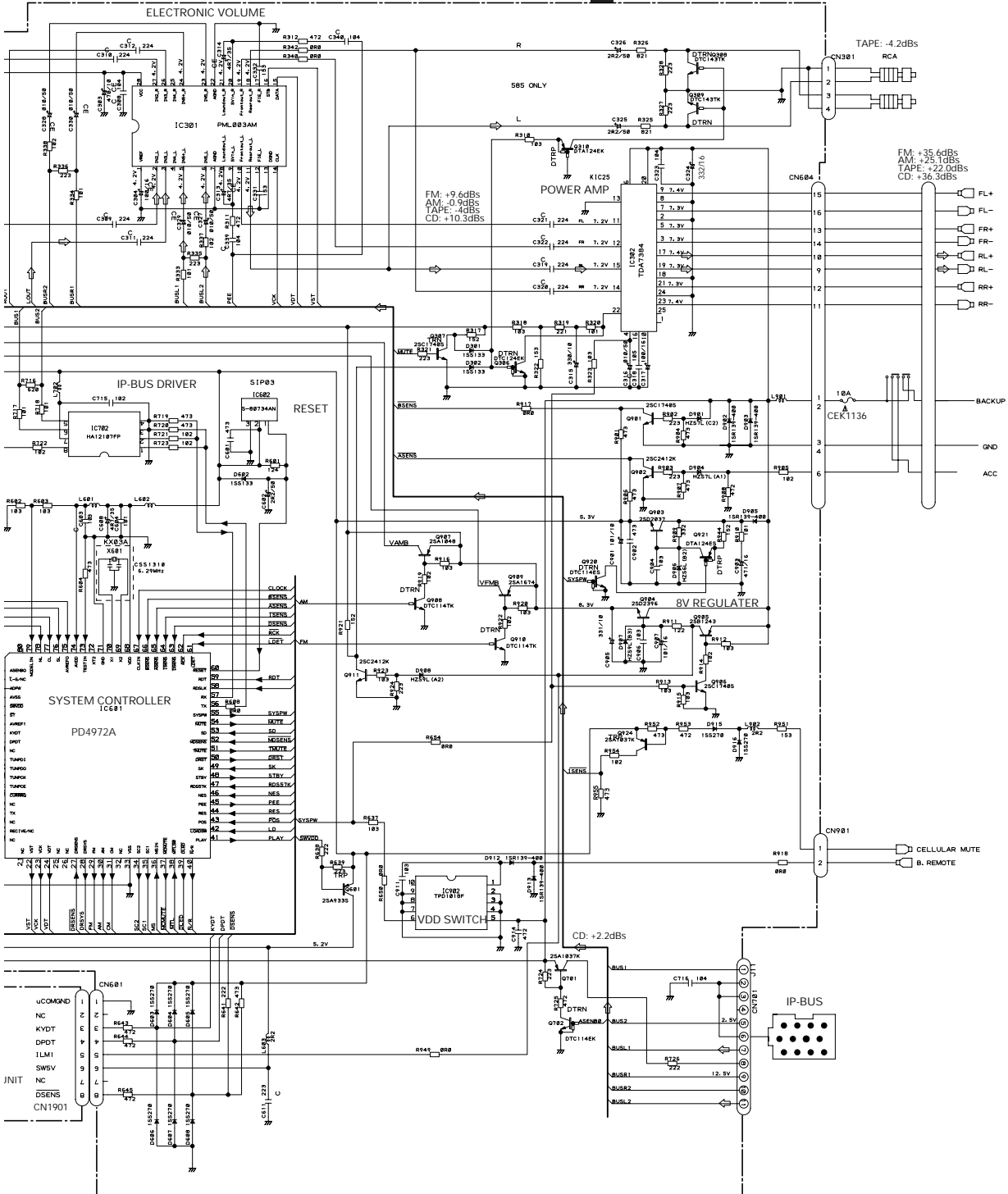
A-a



A-b

* resistor
id values

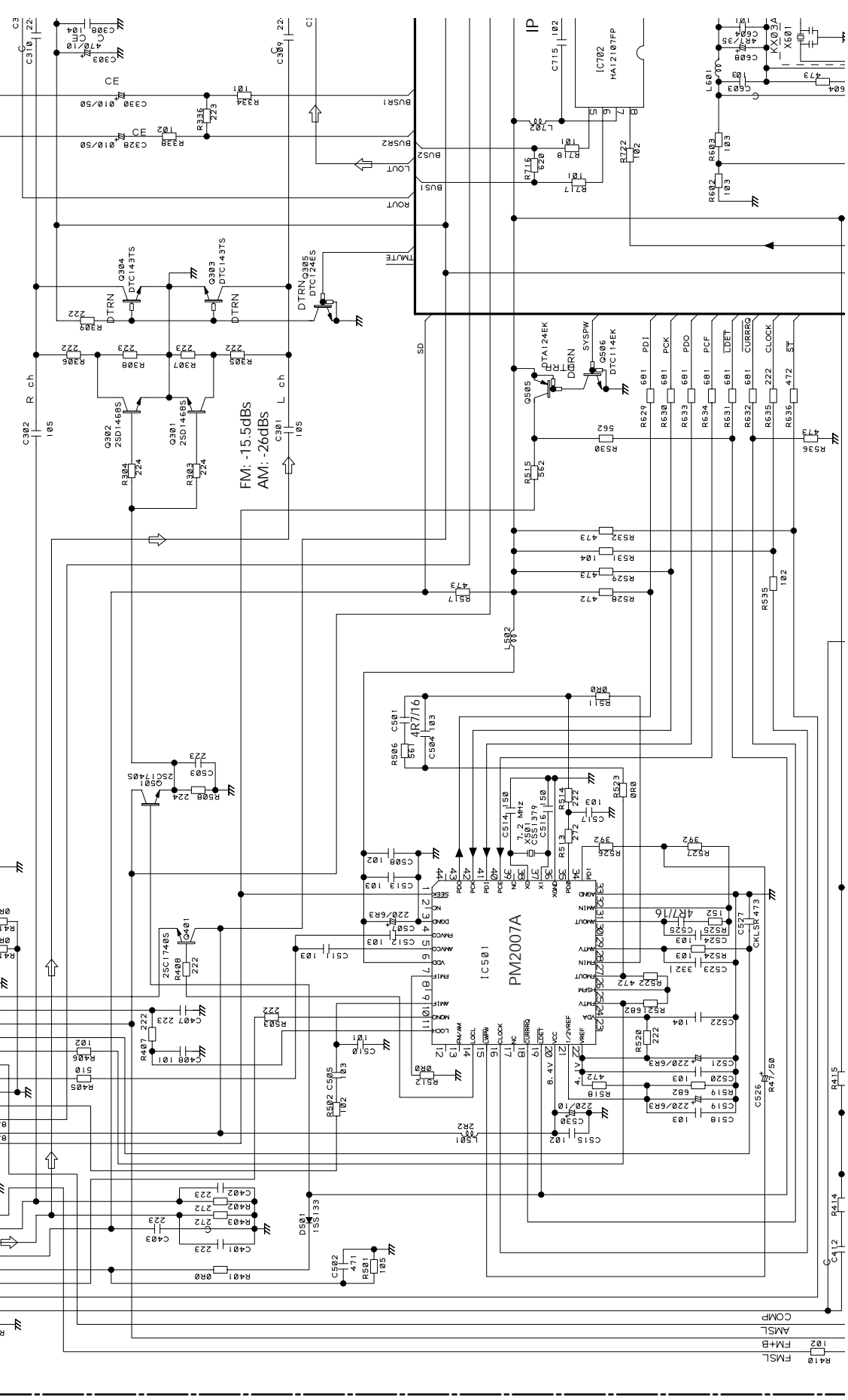
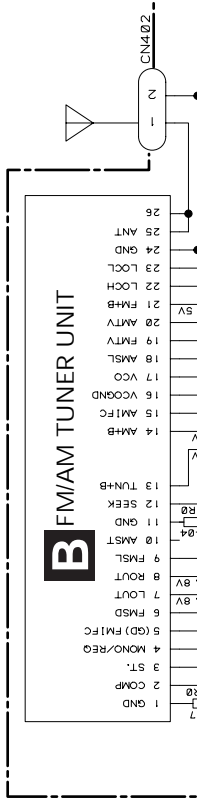
A TUNER AMP UNIT



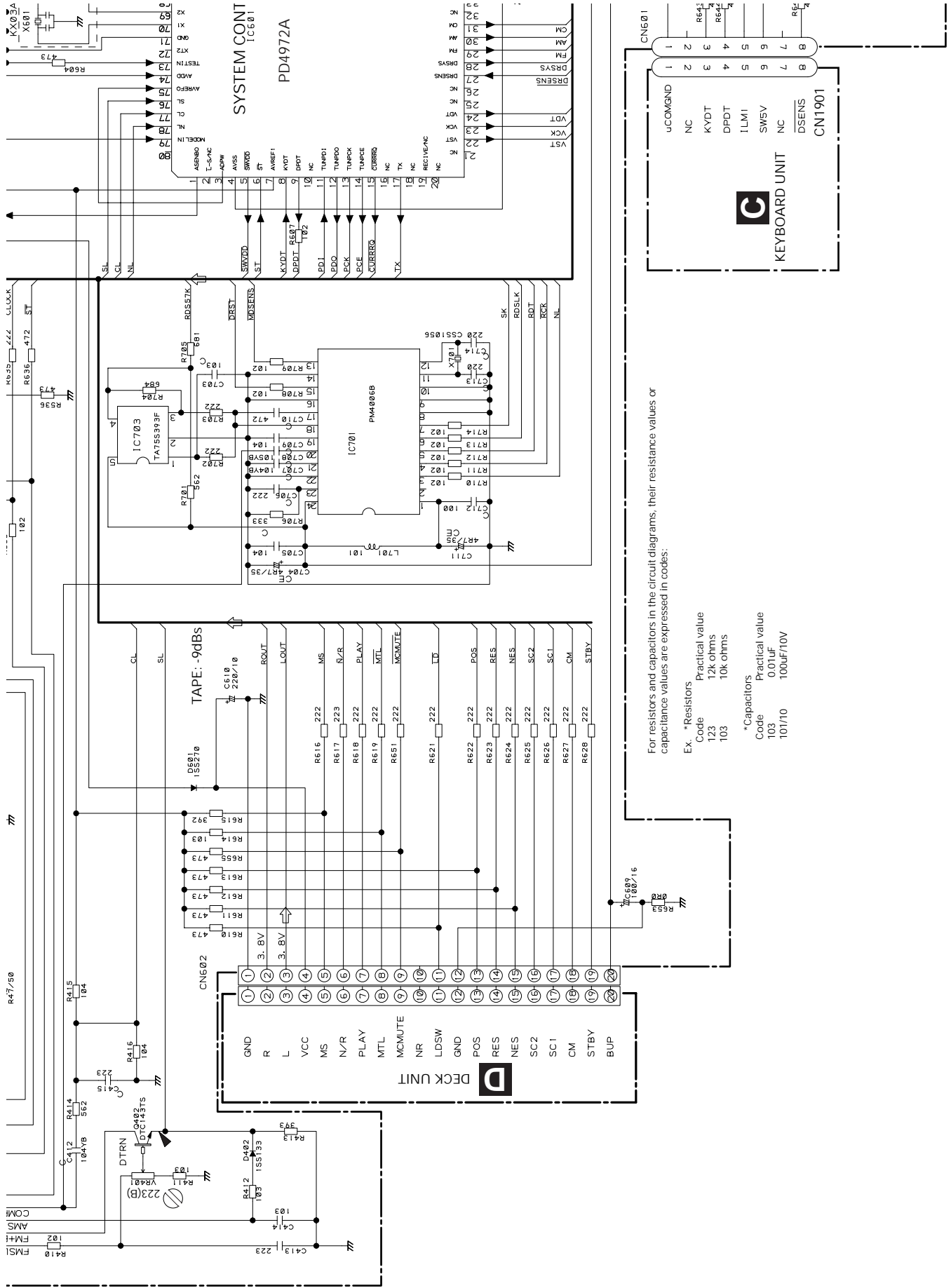
A-a A-b

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.
 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.

Decimal points for resistor and capacitor fixed values are expressed as:
 2.2→2R2
 0.022→R022



A-a



For resistors and capacitors in the circuit diagrams, their resistance values or capacitance values are expressed in codes:

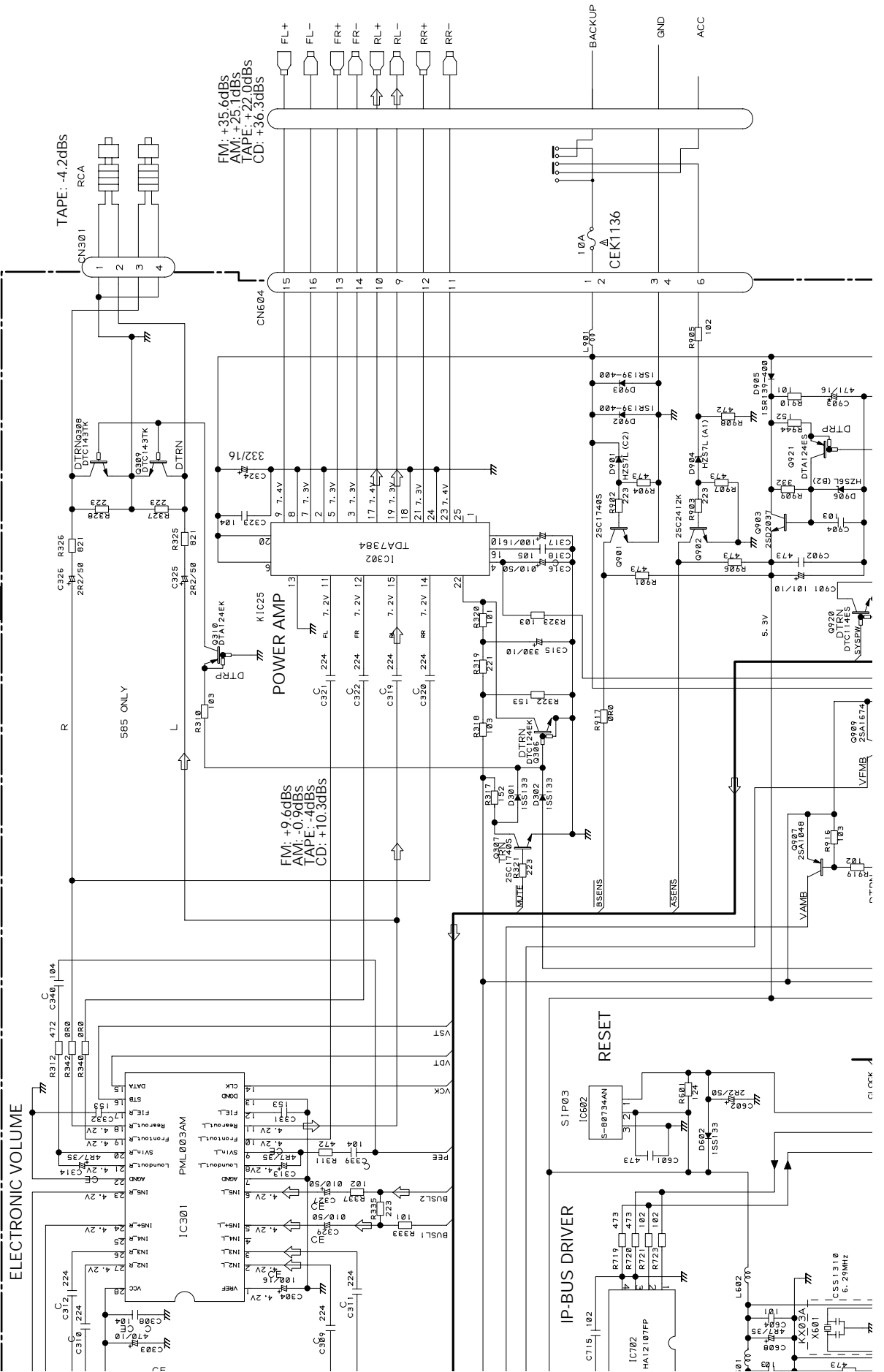
- Ex. *Resistors
- Code Practical value
- 123 12k-ohms
- 103 10k-ohms
- *Capacitors
- Code Practical value
- 103 0.01µF
- 101/10 100µF/10V

A-a A-b

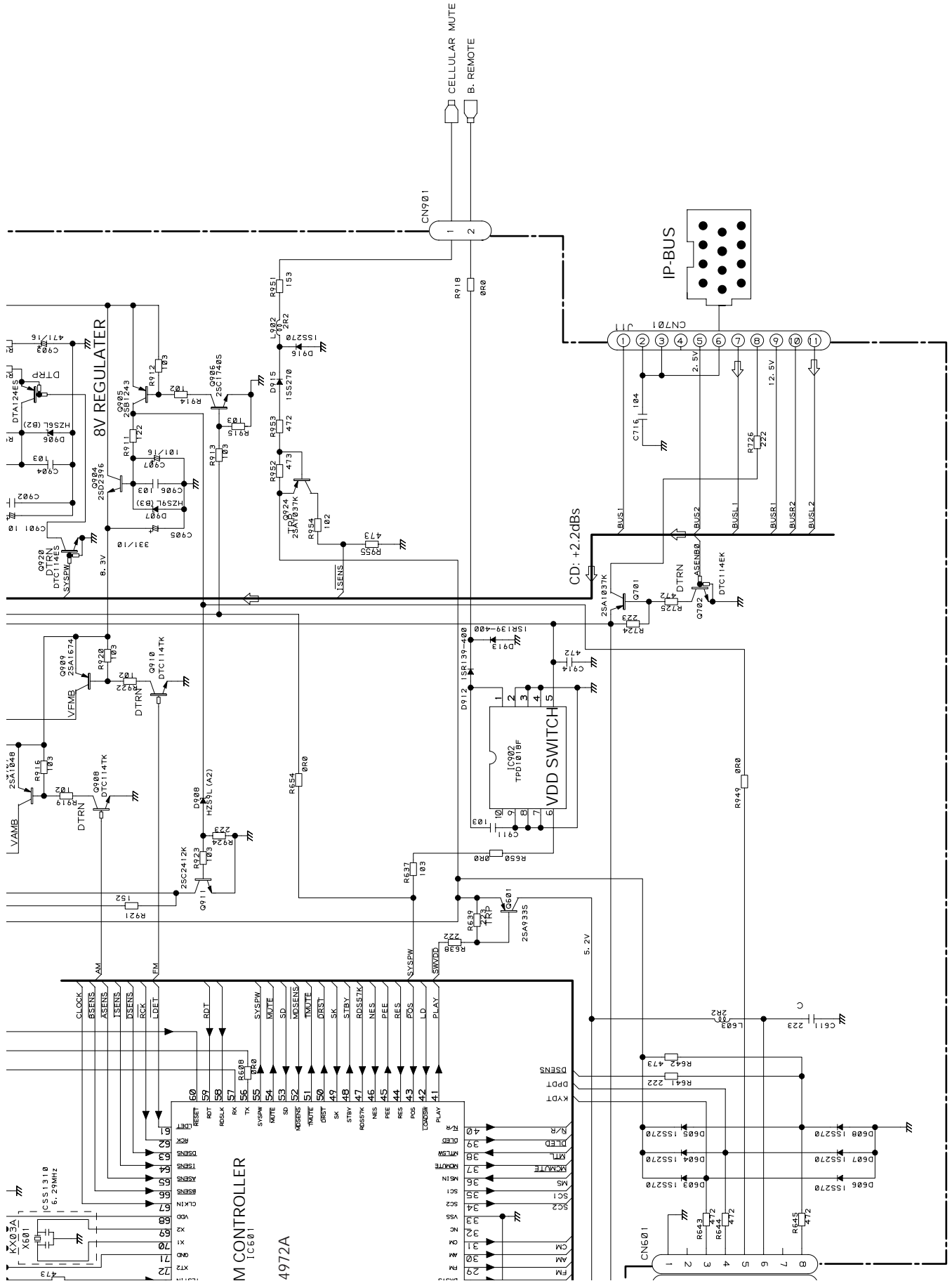
A B C D

A-a A-b

A TUNER AMP UNIT

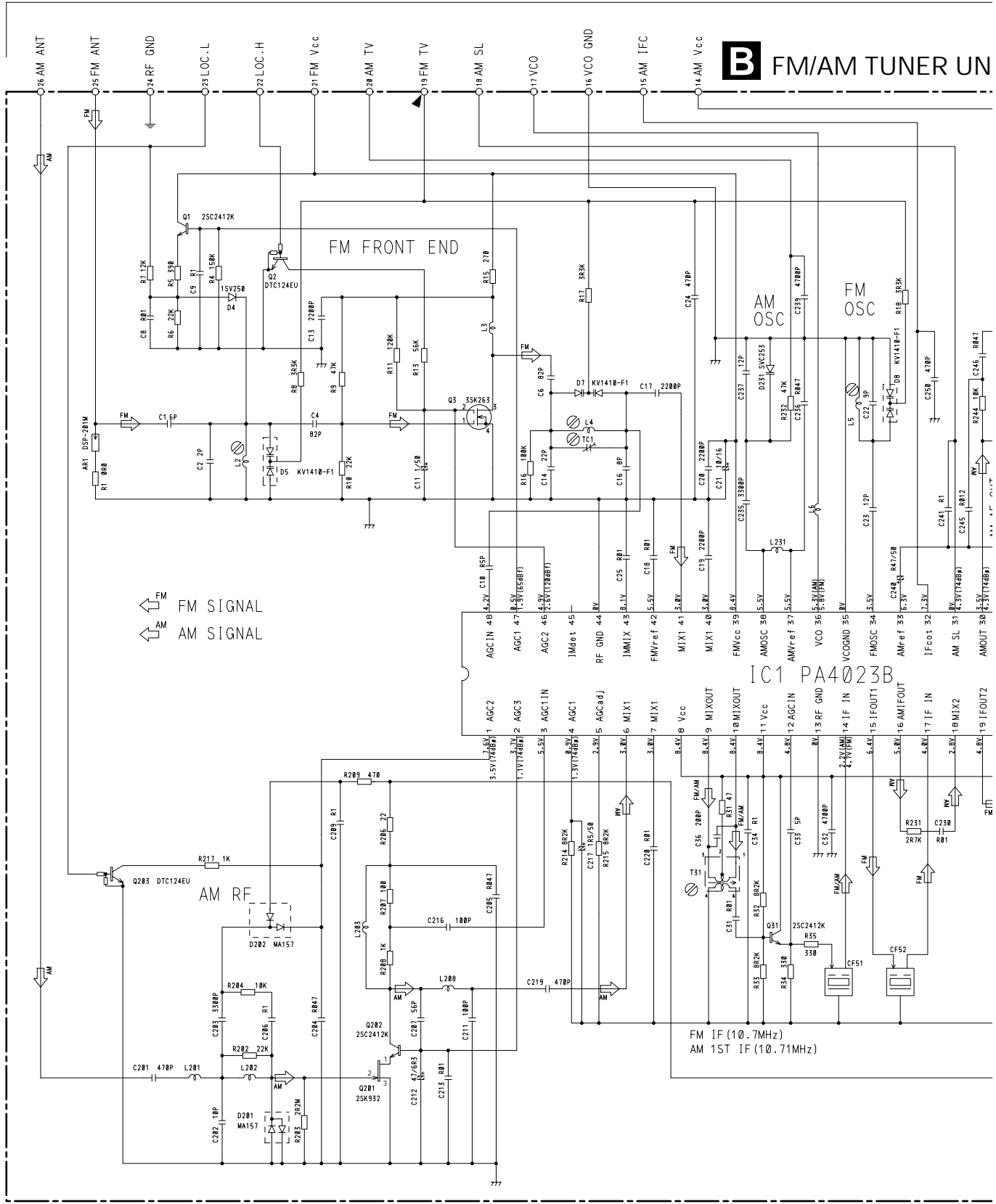


A-b



3.2 FM/AM TUNER UNIT

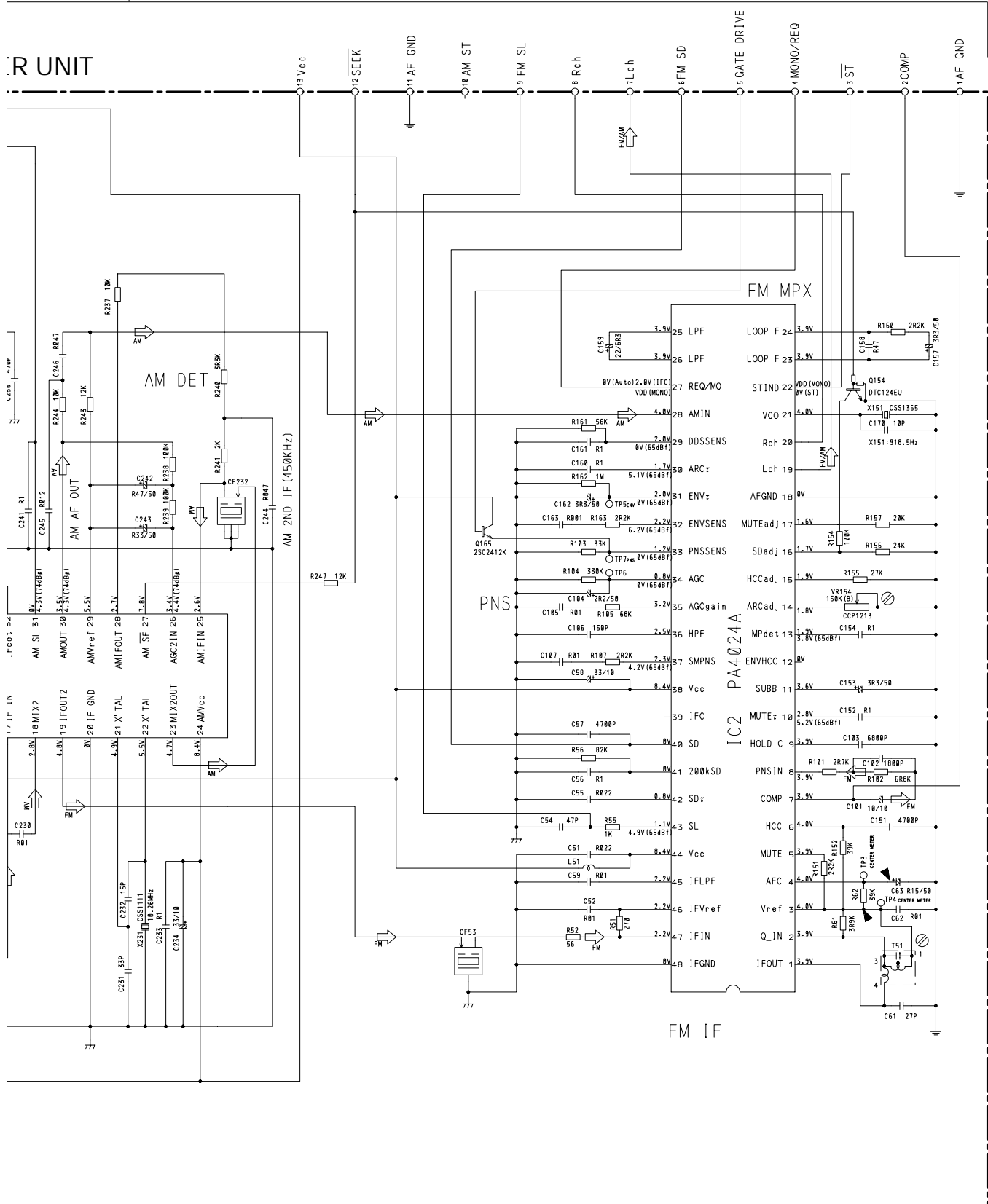
B FM/AM TUNER UN



B

A

R UNIT



A

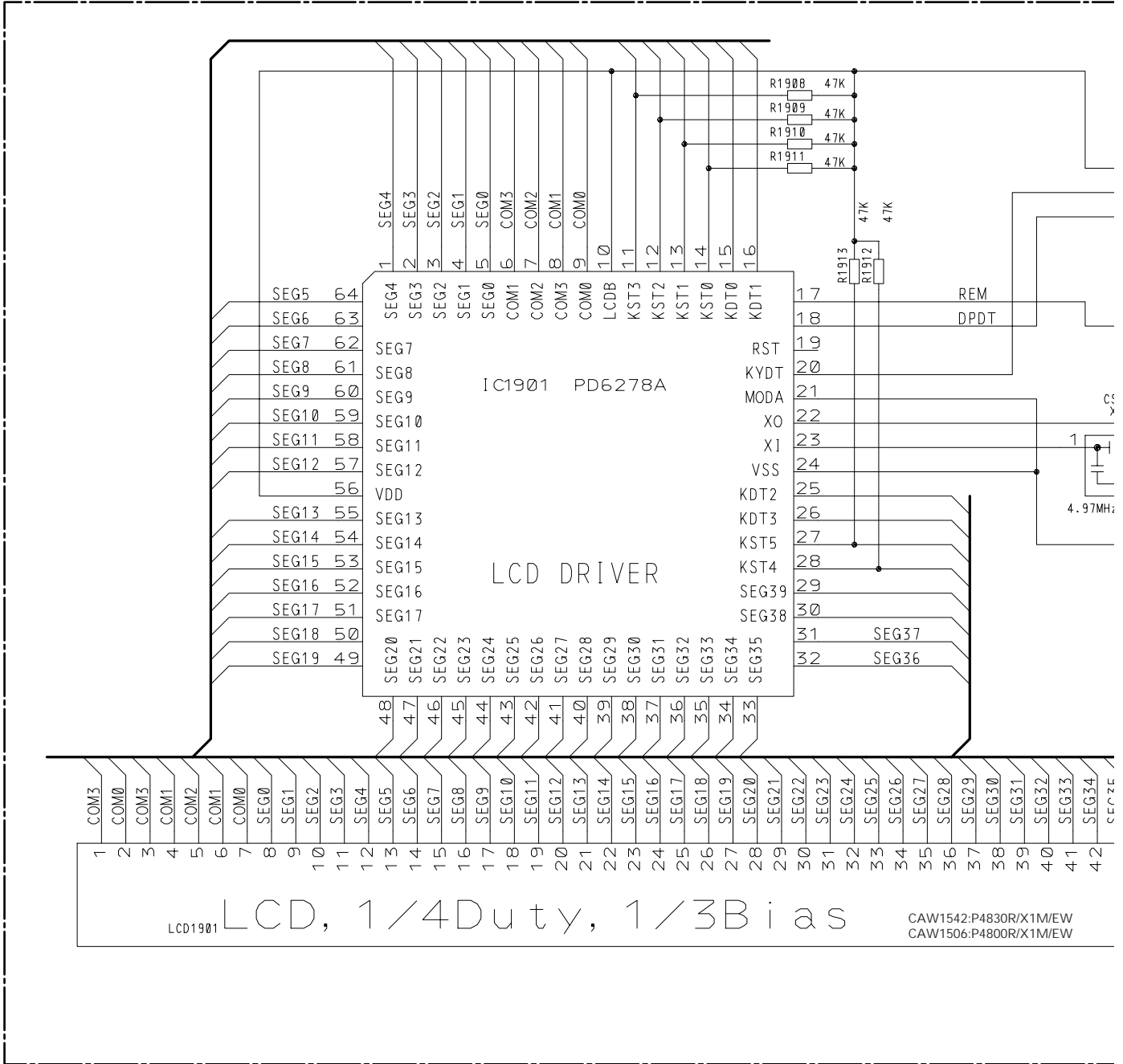
B

C

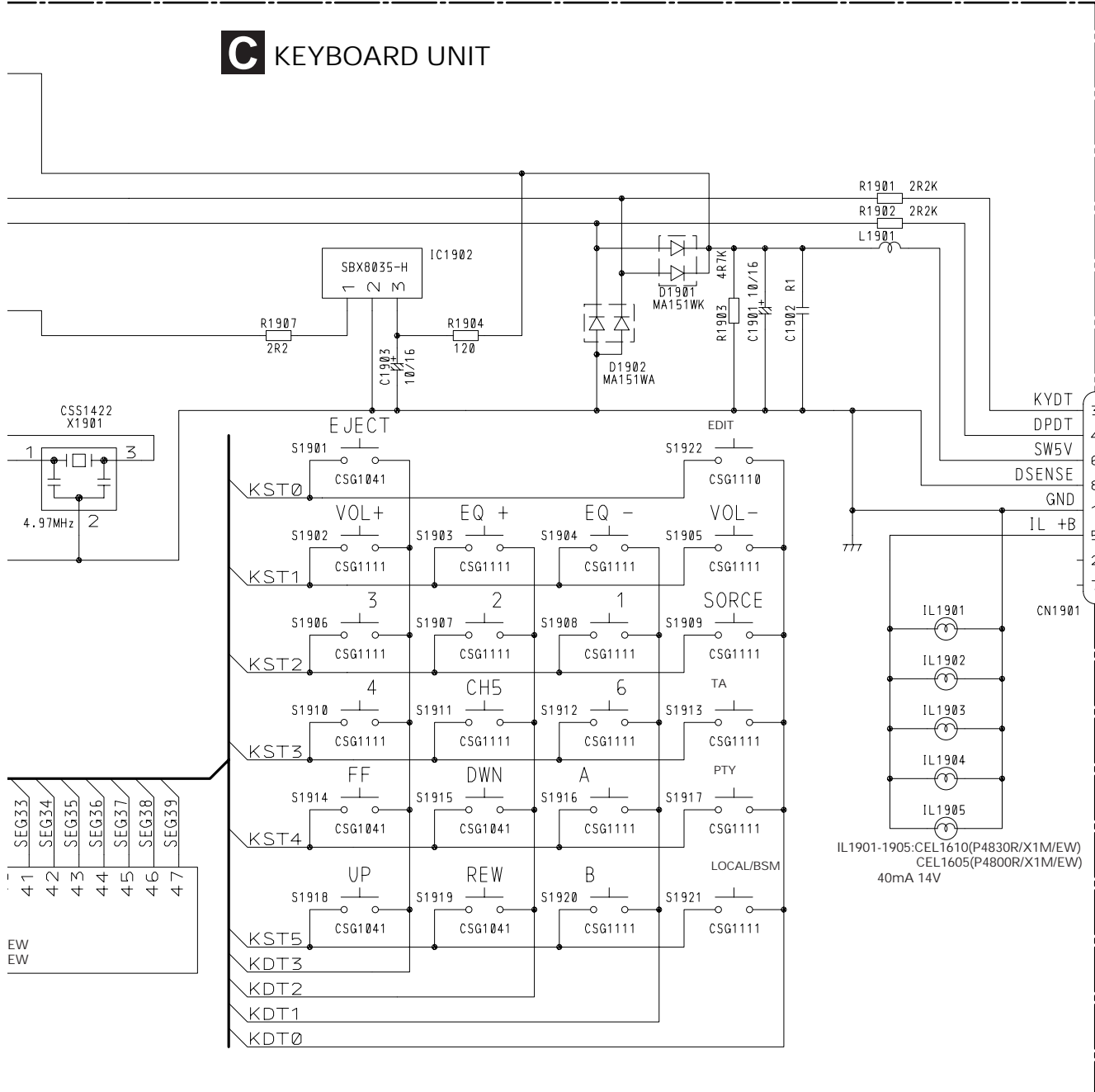
D

B

3.3 KEYBOARD UNIT



C KEYBOARD UNIT



A CN601

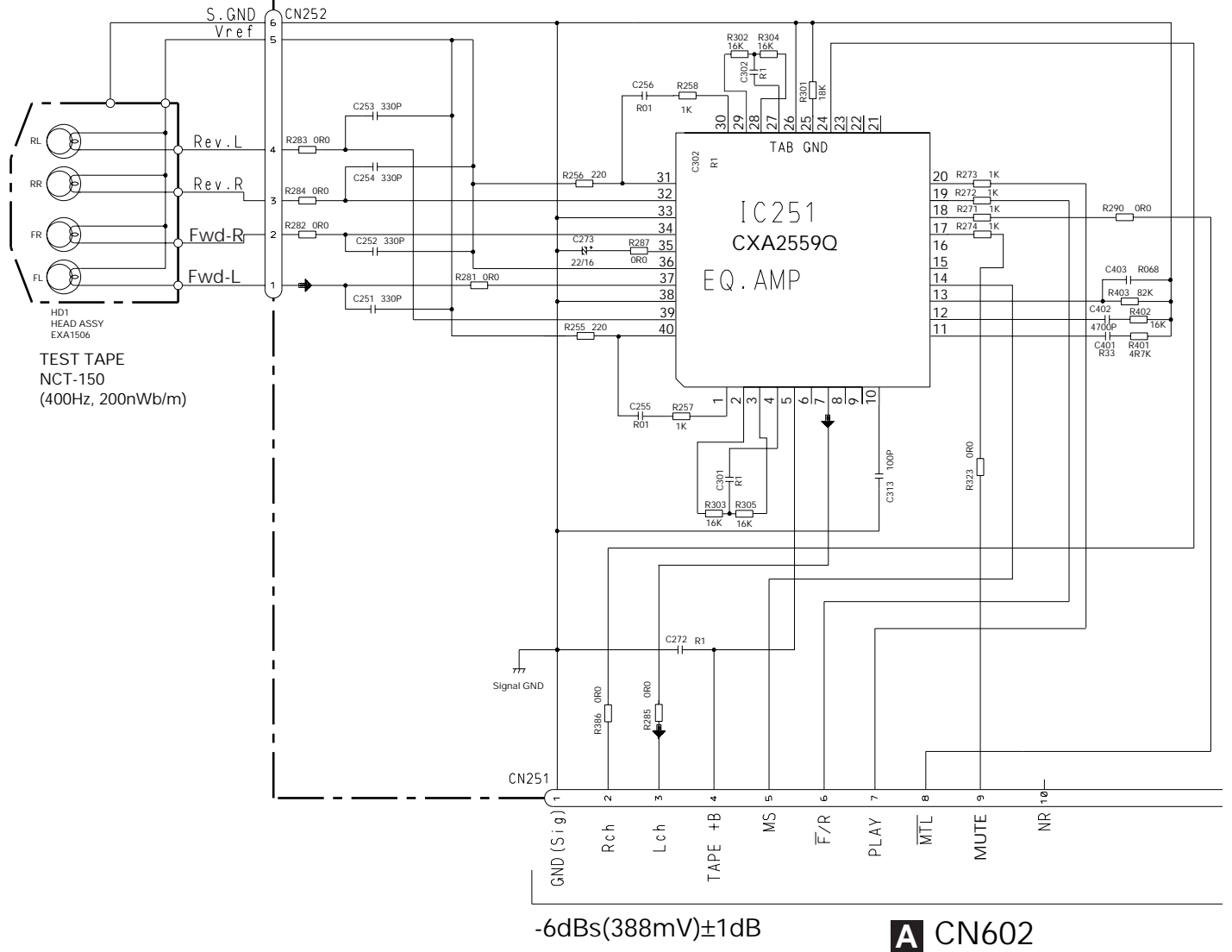
A

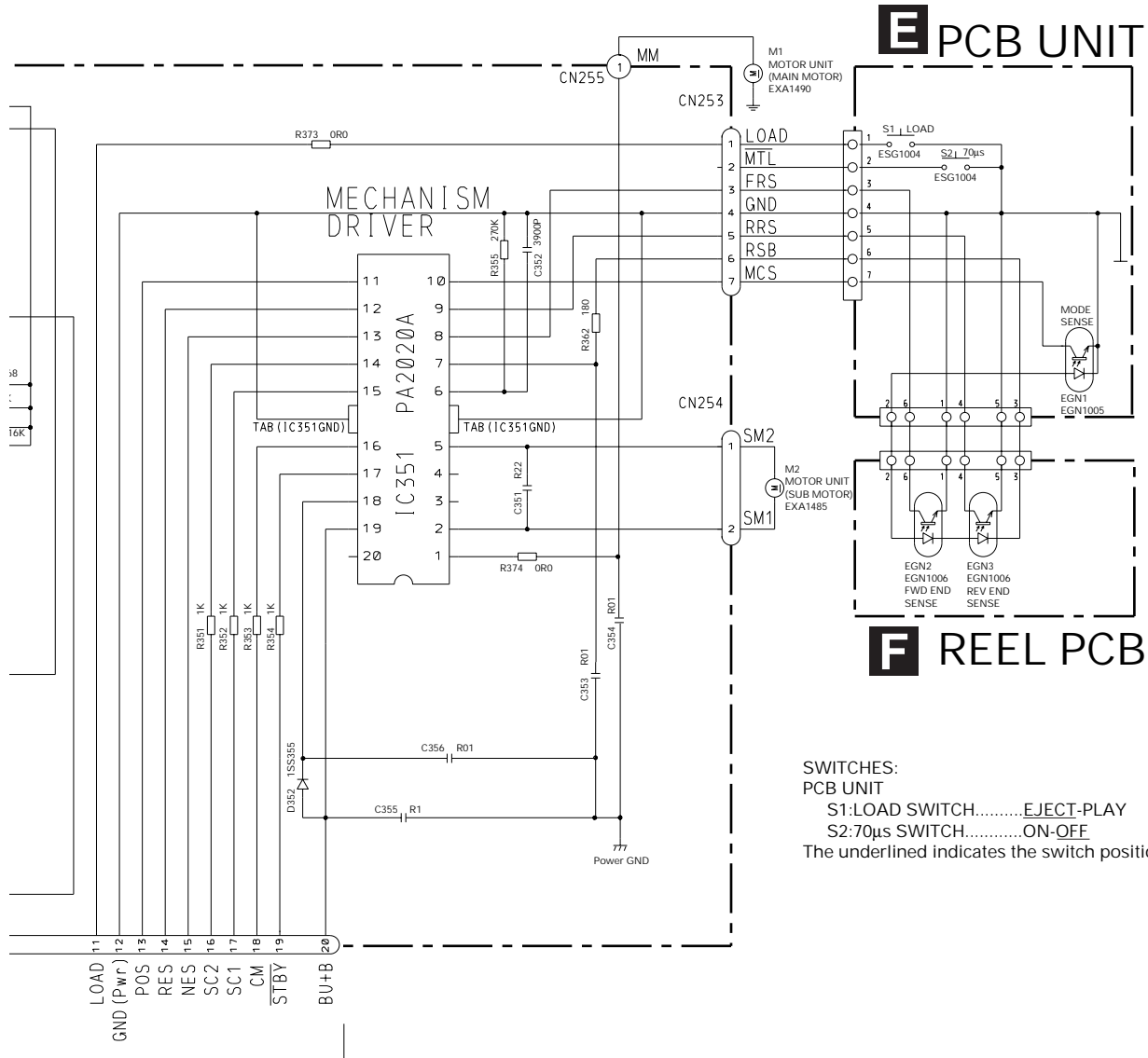
C



3.4 CASSETTE MECHANISM MODULE

D DECK UNIT





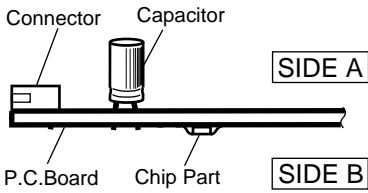
4. PCB CONNECTION DIAGRAM

4.1 TUNER AMP UNIT

NOTE FOR PCB DIAGRAMS

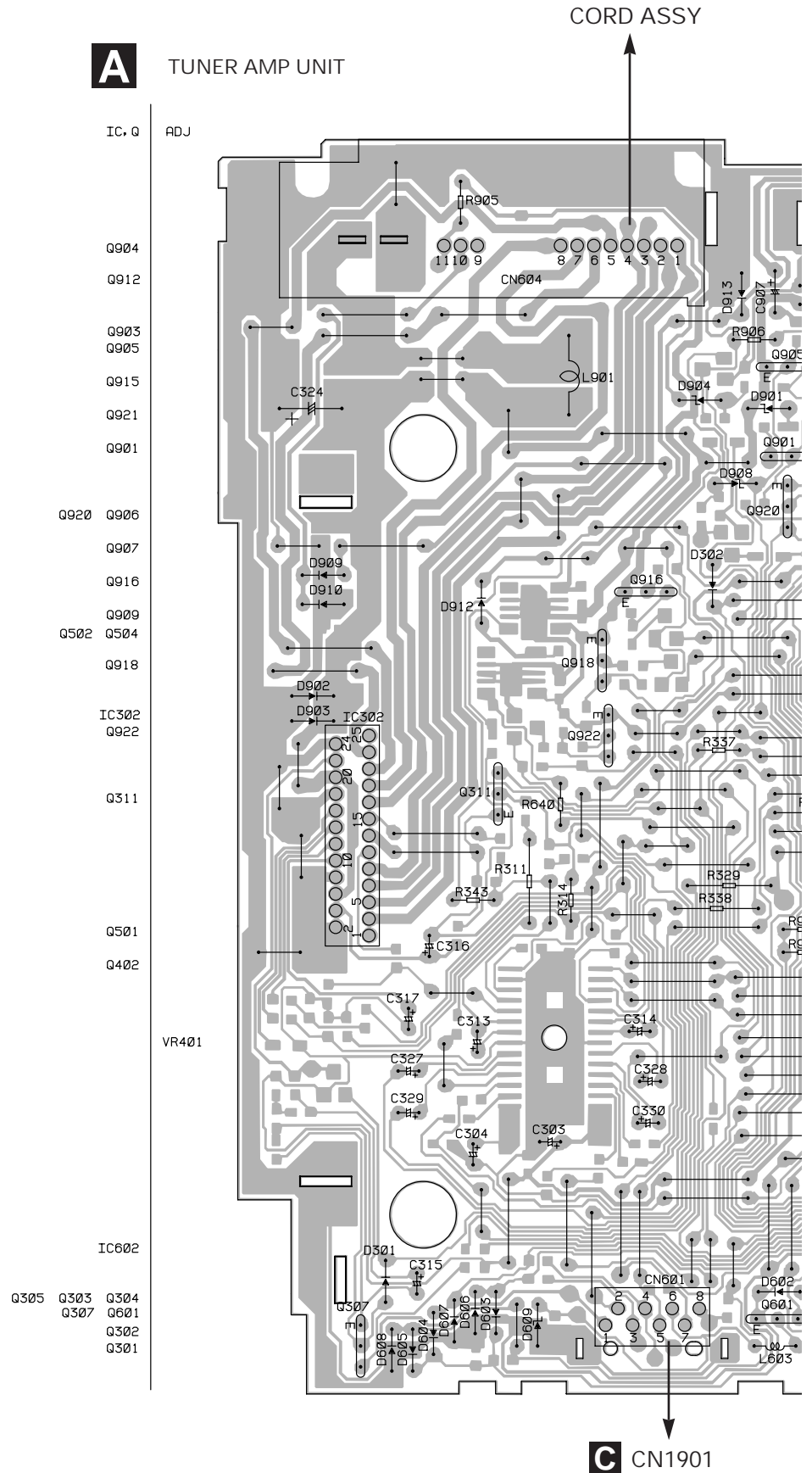
1. The parts mounted on this PCB include all necessary parts for several destination. For further information for respective destinations, be sure to check with the schematic diagram.

2. Viewpoint of PCB diagrams

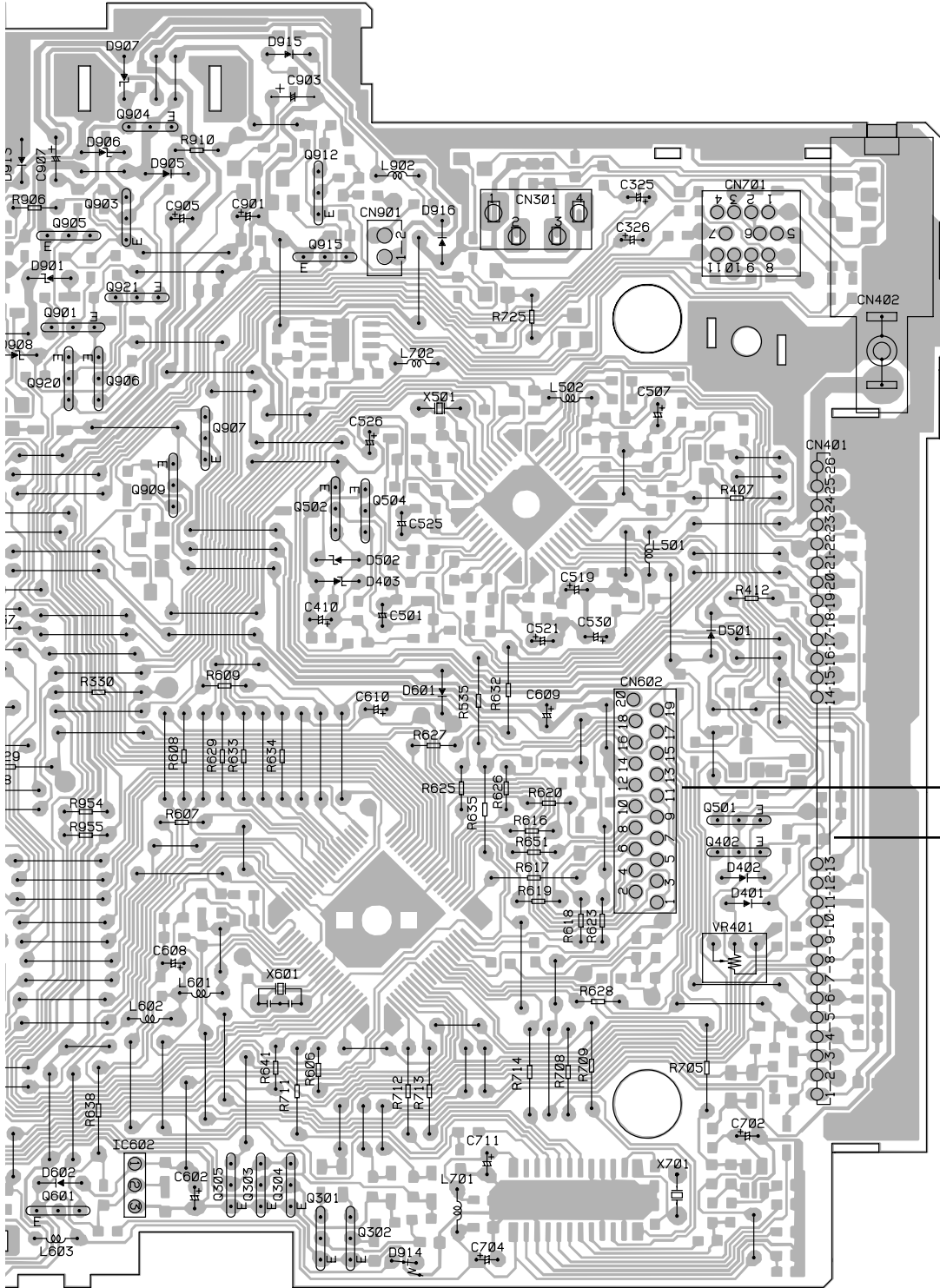


A

TUNER AMP UNIT



SIDE A

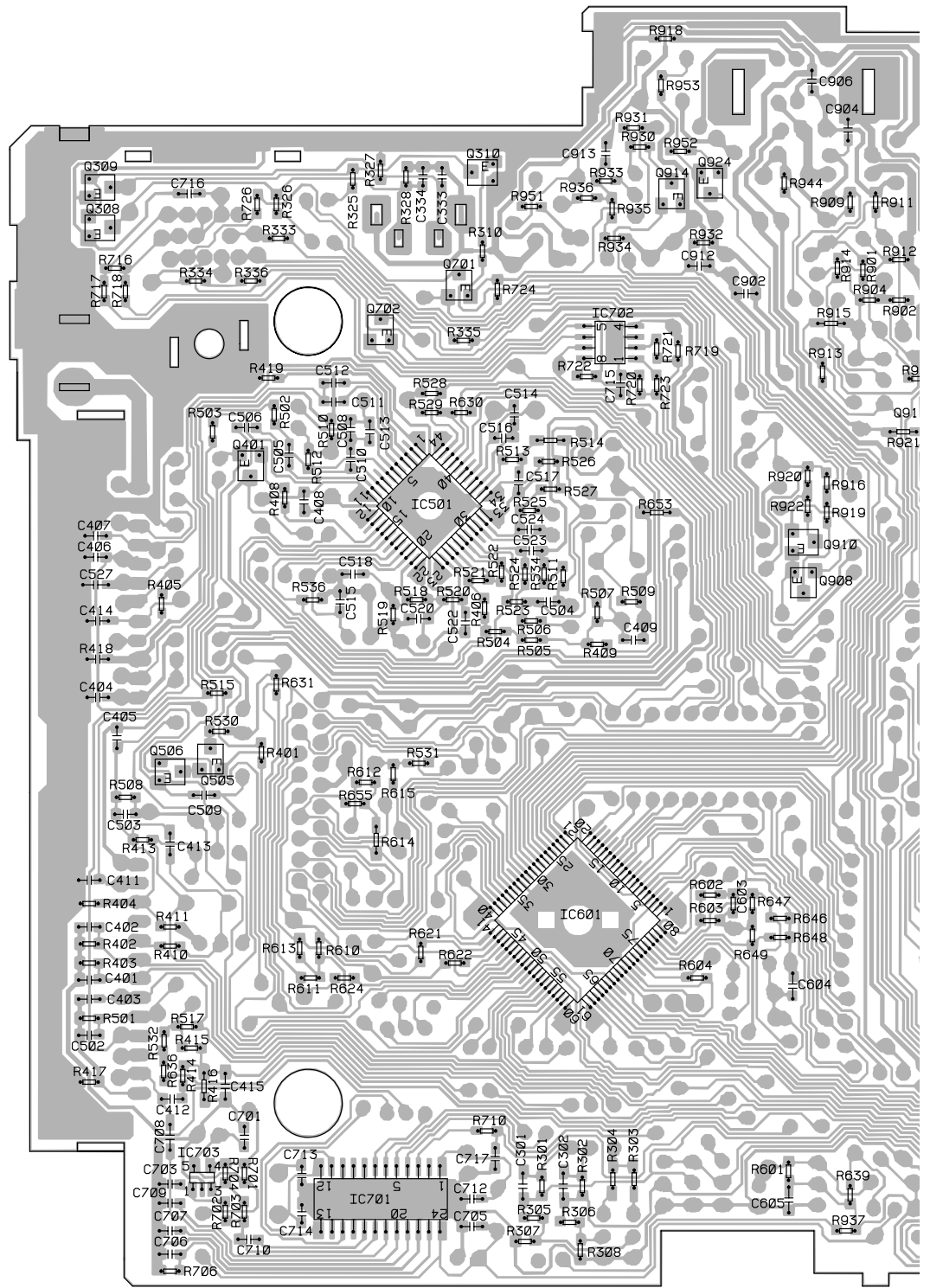


D CN251

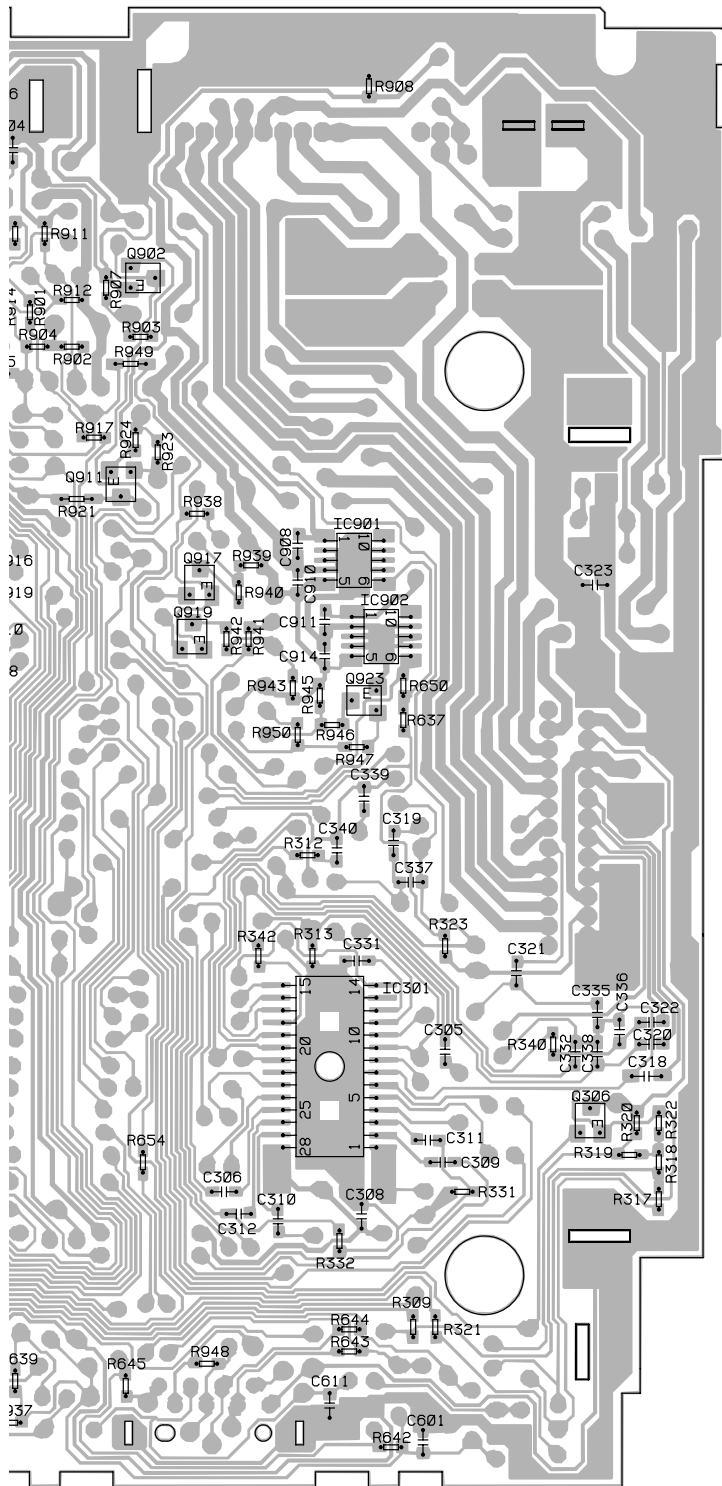
B

A

A TUNER AMP UNIT



SIDE B



- IC. 0
- Q310
- Q309
- Q924
- Q308
- Q902
- Q701
- Q702
- IC702
- Q911
- Q401
- IC901
- Q917
- IC501
- Q919
- IC902
- Q910
- Q908
- Q923
- Q506
- Q505
- IC301
- IC601
- Q306
- IC703
- IC701

A

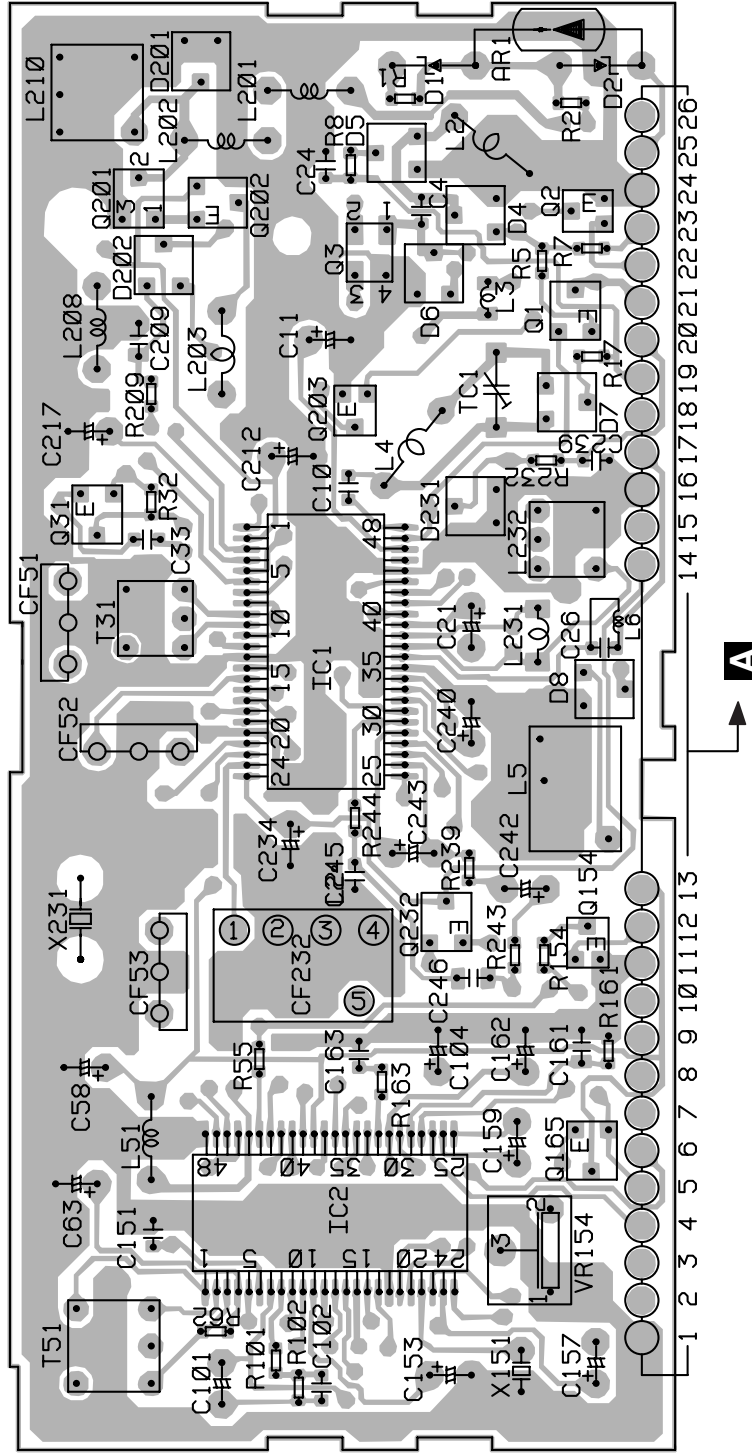
B

C

D

4.2 FM/AM TUNER UNIT

SIDE A



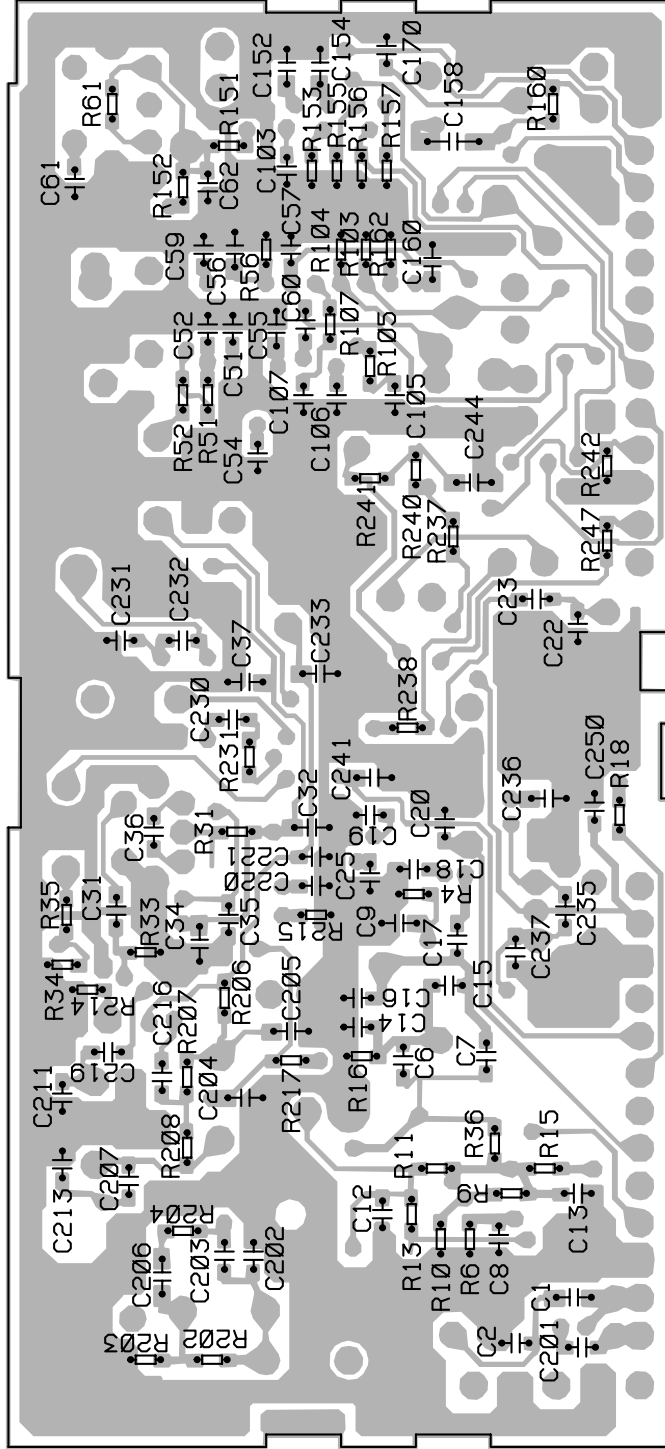
FM/AM TUNER UNIT

IC, Q	ADJ
Q31	T51
Q201	T31
Q202	
Q203	L4
IC2	L2
Q232	TC1
Q1	L5
Q2	VR154
Q154	



SIDE B

FM/AM TUNER UNIT



B

B

A

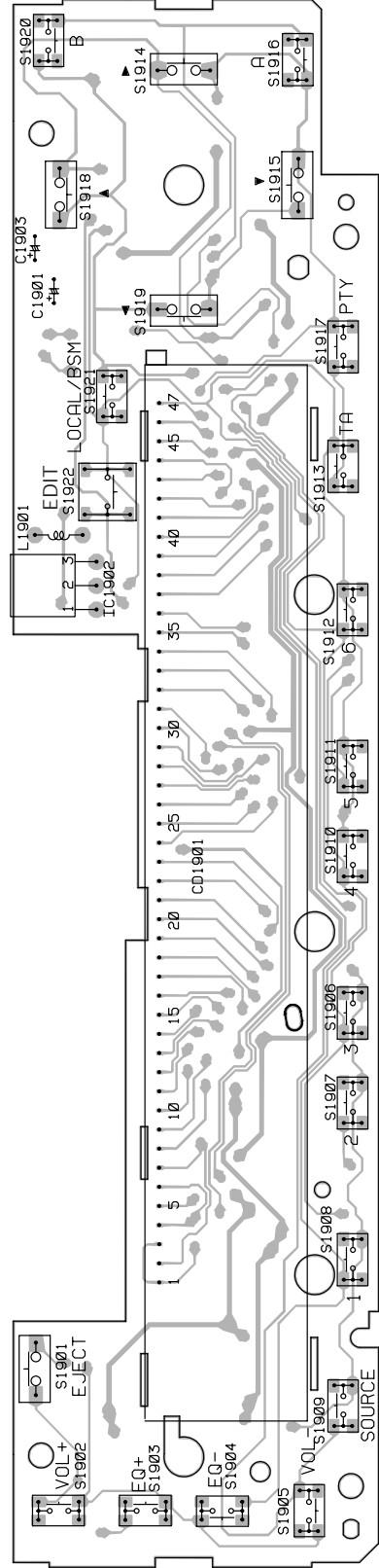
B

C

D

4.3 KEYBOARD UNIT

SIDE A



IC: 0

IC1902

KEYBOARD UNIT

1

2

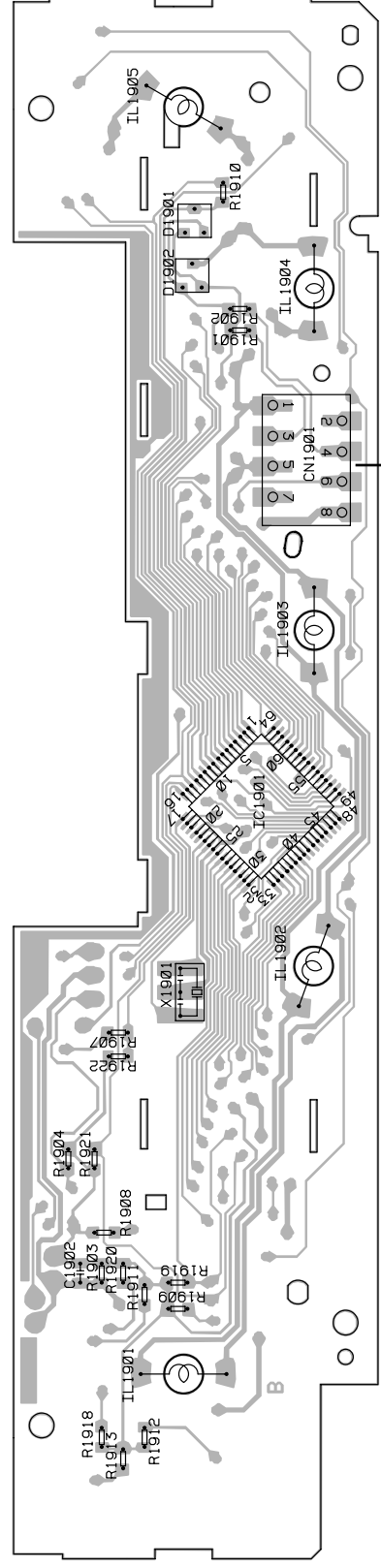
3

4

SIDE B

IC.0 IC1901

KEYBOARD UNIT



A CN601

A B C D

1

2

3

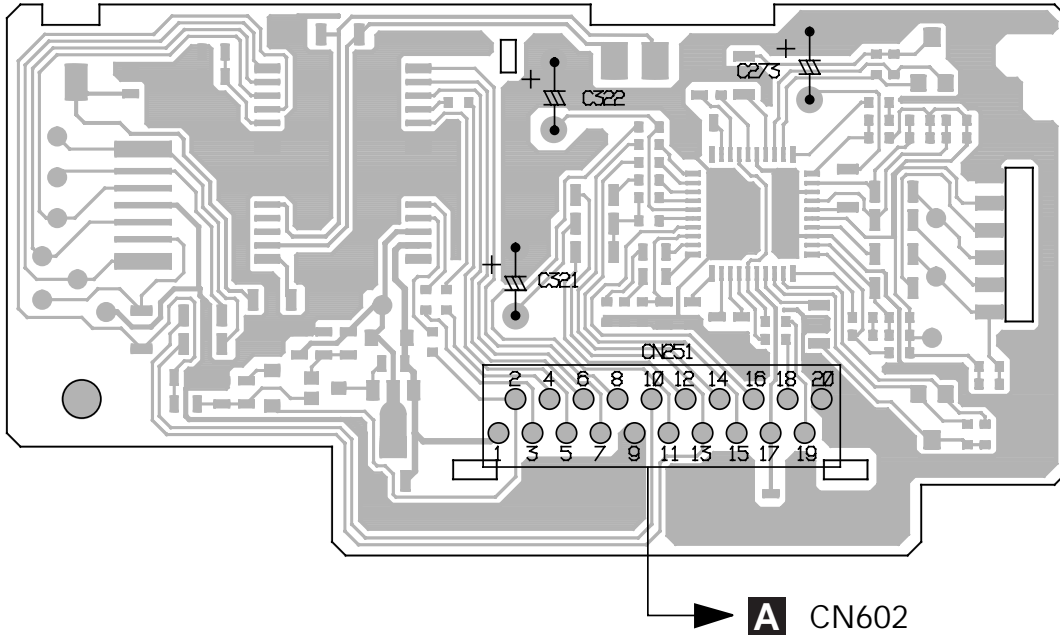
4



4.4 CASSETTE MECHANISM MODULE

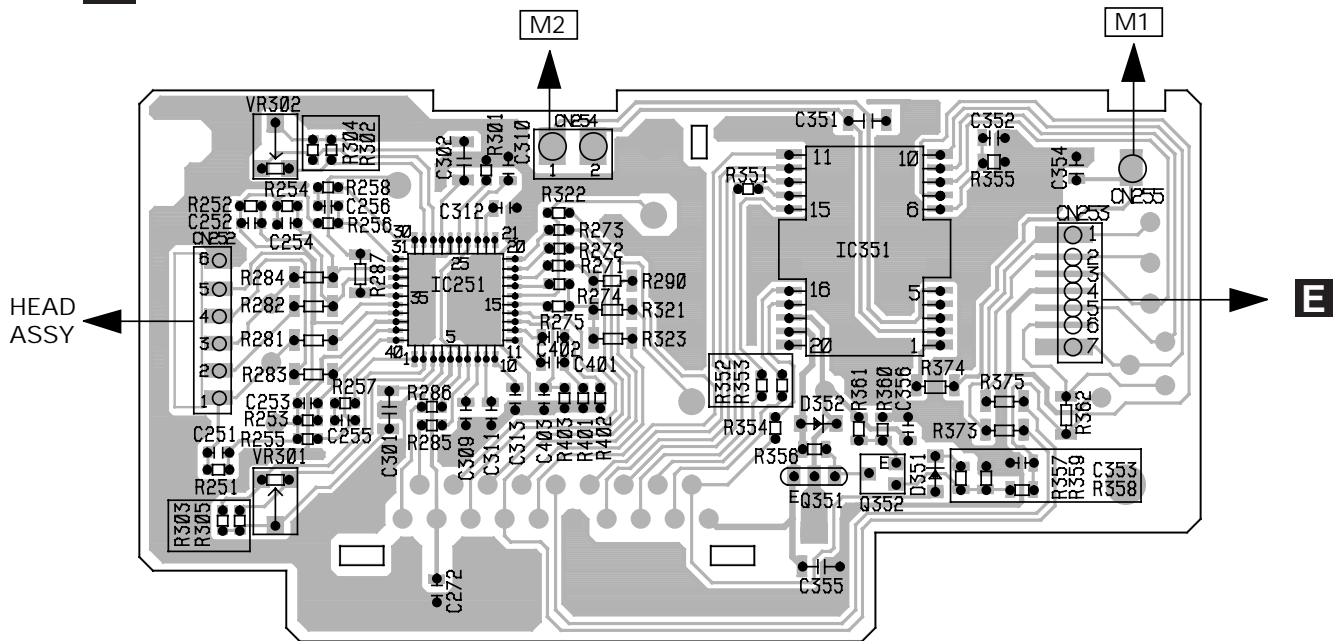
D DECK UNIT

SIDE A

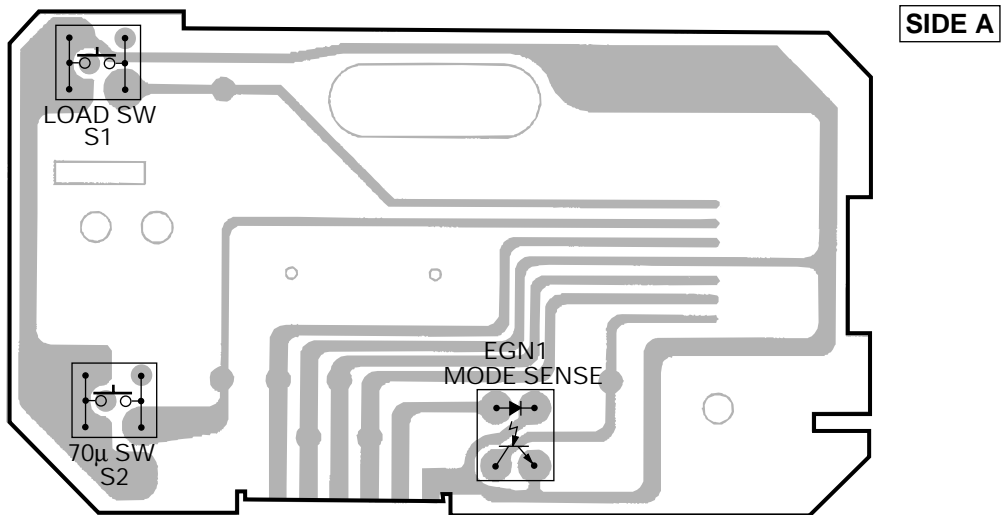


D DECK UNIT

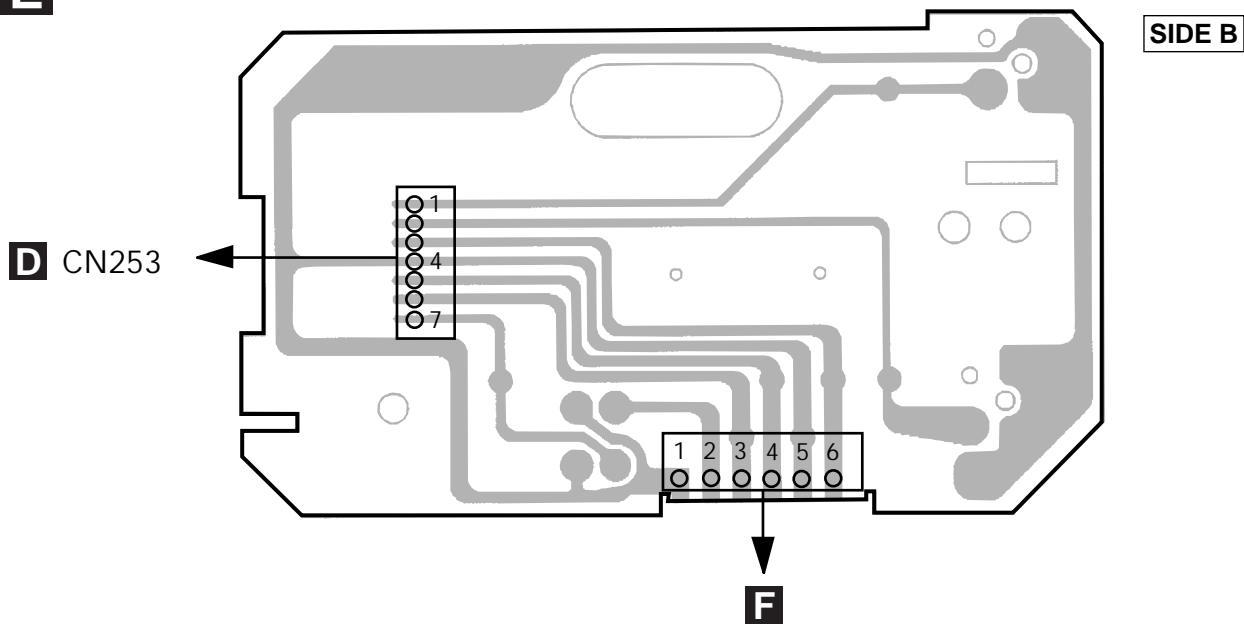
SIDE B



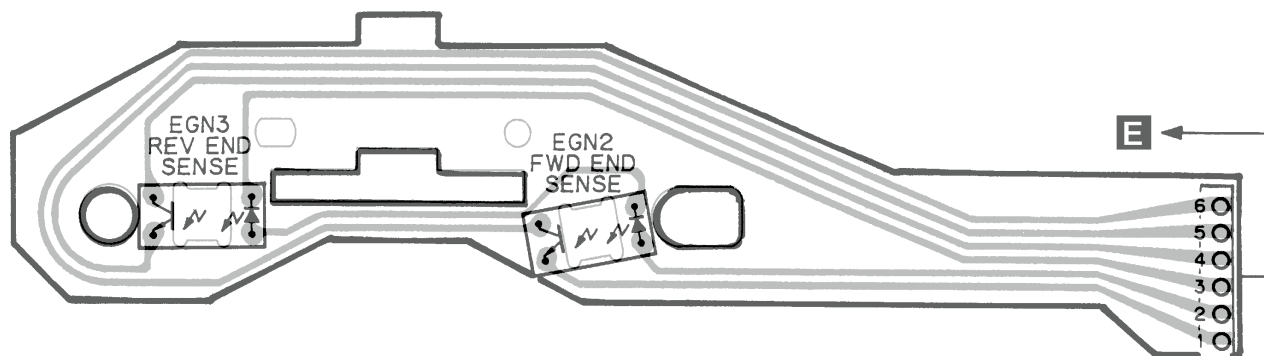
E PCB UNIT



E PCB UNIT



F REEL PCB



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/OSOOOJ,RS1/OOSOOOJ

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

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

====Circuit Symbol and No.====Part Name	Part No.	====Circuit Symbol and No.====Part Name	Part No.
A Unit Number : CWM6246(KEH-P4830R/X1M/EW)		D 606 Diode	1SS270
Unit Name : CWM6245(KEH-P4800R/X1M/EW)		D 607 Diode	1SS270
Unit Name : Tuner Amp Unit		D 608 Diode	1SS270
		D 901 Diode	HZS7L(C2)
		D 902 Diode	1SR139-400
		D 903 Diode	1SR139-400
		D 904 Diode	HZS7L(A1)
		D 905 Diode	1SR139-400
		D 906 Diode	HZS6L(B2)
		D 907 Diode	HZS9L(B3)
		D 908 Diode	HZS9L(A2)
		D 912 Diode	1SR139-400
		D 913 Diode	1SR139-400
		D 915 Diode	1SS270
		D 916 Diode	1SS270
MISCELLANEOUS		L 501 Ferri-Inductor	LAU2R2K
IC 301 IC	PML003AM	L 502 Ferri-Inductor	LAU2R2K
IC 302 IC	TDA7384	L 601 Ferri-Inductor	LAU2R2K
IC 501 IC	PM2007A	L 602 Ferri-Inductor	LAU2R2K
IC 601 IC	PD4972A	L 603 Ferri-Inductor	LAU2R2K
IC 602 IC	S-80734AN	L 701 Ferri-Inductor	LAU101K
		L 702 Ferri-Inductor	LAU2R2K
IC 701 IC	PM4006B	L 901 Coil	CTH1219
IC 702 IC	CA0008AM	L 902 Ferri-Inductor	LAU2R2K
IC 703 IC	TA75S393F	X 501 Crystal Resonator 7.200MHz	CSS1379
IC 902 IC	TPD1018F	X 601 Ceramic Resonator 6.29MHz	CSS1310
Q 301 Transistor	2SD1468S	X 701 Crystal Resonator 4.332MHz	CSS1056
		VR 401 Semi-fixed 22kΩ(B)	CCP1321
Q 302 Transistor	2SD1468S		
Q 303 Transistor	DTC143TS	RESISTORS	
Q 304 Transistor	DTC143TS	R 303	RS1/8S224J
Q 305 Transistor	DTC124ES	R 304	RS1/8S224J
Q 306 Transistor	DTC124EK	R 305	RS1/10S222J
		R 306	RS1/10S222J
Q 307 Transistor	2SC1740S	R 307	RS1/10S223J
Q 308 Transistor	DTC143TK	R 308	RS1/10S223J
Q 309 Transistor	DTC143TK	R 309	RS1/10S222J
Q 310 Transistor	DTA124EK	R 310	RS1/10S103J
Q 401 Transistor	2SC2412K	R 311	RD1/4PU472J
		R 312	RS1/10S472J
Q 402 Transistor	DTC143TS	R 317	RS1/10S152J
Q 501 Transistor	2SC1740S	R 318	RS1/10S103J
Q 505 Transistor	DTA124EK	R 319	RS1/10S221J
Q 506 Transistor	DTC114EK	R 320	RS1/10S101J
Q 601 Transistor	2SA933S	R 321	RS1/10S223J
		R 322	RS1/10S153J
Q 701 Transistor	2SA1037K	R 323	RS1/10S103J
Q 702 Transistor	DTC114EK	R 325	RS1/10S821J
Q 901 Transistor	2SC1740S	R 326	RS1/10S821J
Q 902 Transistor	2SC2412K	R 327	RS1/10S223J
Q 903 Transistor	2SD2037	R 328	RS1/10S223J
		R 333	RS1/10S101J
Q 904 Transistor	2SD2396	R 334	RS1/10S101J
Q 905 Transistor	2SB1243	R 335	RS1/10S223J
Q 906 Transistor	2SC1740S	R 336	RS1/10S223J
Q 907 Transistor	2SA1048	R 338	RS1/10S223J
Q 908 Transistor	DTC114TK	R 339	RS1/10S101J
		R 340	RS1/10S101J
Q 909 Transistor	2SA1674	R 341	RS1/10S223J
Q 910 Transistor	DTC114TK	R 342	RS1/10S223J
Q 911 Transistor	2SC2412K	R 343	RS1/10S223J
Q 920 Transistor	DTC114ES	R 344	RS1/10S223J
Q 921 Transistor	DTA124ES	R 345	RS1/10S223J
		R 346	RS1/10S223J
Q 924 Transistor	2SA1037K	R 347	RS1/10S223J
D 301 Diode	1SS270	R 348	RS1/10S223J
D 302 Diode	1SS270	R 349	RS1/10S223J
D 402 Diode	1SS270	R 350	RS1/10S223J
D 501 Diode	1SS270	R 351	RS1/10S223J
		R 352	RS1/10S223J
D 601 Diode	1SS270	R 353	RS1/10S223J
D 602 Diode	1SS270	R 354	RS1/10S223J
D 603 Diode	1SS270	R 355	RS1/10S223J
D 604 Diode	1SS270	R 356	RS1/10S223J
D 605 Diode	1SS270	R 357	RS1/10S223J

====Circuit Symbol and No.====Part Name	Part No.	====Circuit Symbol and No.====Part Name	Part No.
R 337	RD1/4PU102J	R 619	RD1/4PU222J
R 338	RD1/4PU102J	R 621	RS1/10S222J
R 340	RS1/10S0R0J	R 622	RS1/10S222J
R 342	RS1/10S0R0J	R 623	RD1/4PU222J
R 401	RS1/10S0R0J	R 624	RS1/10S222J
R 402	RS1/10S272J	R 625	RD1/4PU222J
R 403	RS1/10S272J	R 626	RD1/4PU222J
R 404	RS1/10S0R0J	R 627	RD1/4PU222J
R 405	RS1/10S510J	R 628	RD1/4PU222J
R 406	RS1/10S102J	R 629	RD1/4PU681J
R 407	RD1/4PU222J	R 630	RS1/10S681J
R 408	RS1/10S222J	R 631	RS1/10S681J
R 410	RS1/10S102J	R 632	RD1/4PU681J
R 411	RS1/10S103J	R 633	RD1/4PU681J
R 412	RD1/4PU103J	R 634	RD1/4PU681J
R 413	RS1/10S393J	R 635	RD1/4PU222J
R 414	RS1/10S562J	R 636	RS1/10S472J
R 415	RS1/10S104J	R 637	RS1/10S103J
R 416	RS1/8S104J	R 638	RD1/4PU222J
R 417	RS1/10S0R0J	R 639	RS1/10S223J
R 418	RS1/10S0R0J	R 641	RD1/4PU222J
R 419	RS1/10S0R0J	R 642	RS1/10S473J
R 501	RS1/10S105J	R 643	RS1/10S472J
R 502	RS1/10S102J	R 644	RS1/10S472J
R 503	RS1/10S222J	R 645	RS1/10S472J
R 506	RS1/10S561J	R 650	RS1/10S0R0J
R 508	RS1/10S224J	R 651	RD1/4PU222J
R 510	RS1/10S0R0J	R 653	RS1/8S0R0J
R 511	RS1/10S0R0J	R 654	RS1/10S0R0J
R 512	RS1/10S0R0J	R 655	RS1/10S473J
R 513	RS1/10S272J	R 701	RS1/10S562J
R 514	RS1/8S222J	R 702	RS1/10S222J
R 515	RS1/10S562J	R 703	RS1/10S222J
R 517	RS1/10S473J	R 704	RS1/10S684J
R 518	RS1/10S472J	R 705	RD1/4PU681J
R 519	RS1/10S682J	R 706	RS1/10S333J
R 520	RS1/10S222J	R 708	RD1/4PU102J
R 521	RS1/10S682J	R 709	RD1/4PU102J
R 522	RS1/10S472J	R 710	RS1/10S102J
R 523	RS1/10S0R0J	R 711	RD1/4PU102J
R 524	RS1/10S103J	R 712	RD1/4PU102J
R 525	RS1/10S152J	R 713	RD1/4PU102J
R 526	RS1/10S392J	R 714	RD1/4PU102J
R 527	RS1/10S392J	R 716	RS1/10S620J
R 528	RS1/10S472J	R 717	RS1/10S101J
R 529	RS1/10S473J	R 718	RS1/10S101J
R 530	RS1/10S562J	R 719	RS1/10S473J
R 531	RS1/10S104J	R 720	RS1/10S473J
R 532	RS1/10S473J	R 721	RS1/10S102J
R 535	RD1/4PU102J	R 722	RS1/10S102J
R 536	RS1/10S473J	R 723	RS1/10S102J
R 601	RS1/10S124J	R 724	RS1/10S223J
R 602	RS1/10S103J	R 725	RD1/4PU472J
R 603	RS1/10S103J	R 726	RS1/10S222J
R 604	RS1/10S473J	R 901	RS1/10S473J
R 607	RD1/4PU102J	R 902	RS1/10S223J
R 610	RS1/10S473J	R 903	RS1/10S223J
R 611	RS1/10S473J	R 904	RS1/10S473J
R 612	RS1/10S473J	R 905	RD1/4PU102J
R 613	RS1/10S473J	R 906	RD1/4PU473J
R 614	RS1/8S103J	R 907	RS1/10S473J
R 615	RS1/10S392J	R 908	RS1/10S472J
R 616	RD1/4PU222J	R 909	RS1/10S332J
R 617	RD1/4PU223J	R 910	RD1/4PU101J
R 618	RD1/4PU222J	R 911	RS1/10S122J

KEH-P4830R,P4800R

====Circuit Symbol and No.====Part Name	Part No.	====Circuit Symbol and No.====Part Name	Part No.
R 912	RS1/10S103J	C 501	4.7μF/16V
R 913	RS1/10S103J	C 502	
R 914	RS1/10S102J	C 503	
R 915	RS1/10S103J	C 504	
R 916	RS1/10S103J	C 505	
R 917	RS1/10S0R0J	C 507	
R 918	RS1/8S0R0J	C 508	
R 919	RS1/10S102J	C 510	
R 920	RS1/10S103J	C 511	
R 921	RS1/10S152J	C 512	
R 922	RS1/10S102J	C 513	
R 923	RS1/10S103J	C 514	
R 924	RS1/10S223J	C 515	
R 944	RS1/10S152J	C 516	
R 948	RS1/10S0R0J	C 517	
R 949	RS1/8S0R0J	C 518	
R 951	RS1/10S153J	C 519	
R 952	RS1/10S472J	C 520	
R 953	RS1/10S472J	C 521	
R 954	RD1/4PU102J	C 522	
R 955	RD1/4PU473J	C 523	
CAPACITORS		C 524	
C 301	CKSQYB105K10	C 525	4.7μF/16V
C 302	CKSQYB105K10	C 526	
C 303	CEJA470M10	C 527	
C 304	CEJA100M16	C 530	
C 308	CKSQYB104K50	C 601	
C 309	CKSQYB224K16	C 602	
C 310	CKSQYB224K16	C 603	
C 311	CKSQYB224K16	C 604	
C 312	CKSQYB224K16	C 608	
C 313	CEJA4R7M35	C 609	
C 314	CEJA4R7M35	C 610	
C 315	CEJA330M10	C 611	
C 316	CEJA1R0M50	C 703	
C 317	CEJA100M16	C 704	
C 318	CKSYB105K16	C 705	
C 319	CKSQYB224K16	C 706	
C 320	CKSQYB224K16	C 707	
C 321	CKSQYB224K16	C 708	
C 322	CKSQYB224K16	C 709	
C 323	CKSQYB104K50	C 710	
C 324	3300μF/16V	C 711	
C 325	CCH1169	C 712	
C 326	CEJA2R2M50	C 713	
C 327	CEJA2R2M50	C 714	
C 328	CEJA1R0M50	C 715	
C 329	CEJA1R0M50	C 716	
C 330	CEJA1R0M50	C 717	
C 331	CKSQYB153K50	C 901	
C 332	CKSQYB153K50	C 902	
C 339	CKSQYB104K50	C 903	470μF/16V
C 340	CKSQYB104K50	C 904	
C 401	CKSQYB223K25	C 905	330μF/10V
C 402	CKSQYB223K25	C 906	
C 403	CKSQYB223K25	C 907	100μF/16V
C 407	CKSQYB223K50	C 911	
C 408	CCSOSL101J50	C 914	
C 412	CKSQYB104K50		
C 413	CKSQYB223K50		
C 414	CKSQYB103K50		
C 415	CKSYB223K50		

C Unit Number : CWM6257(KEH-P4830R/X1M/EW)
: CWM6110(KEH-P4800R/X1M/EW)
Unit Name : Keyboard Unit

MISCELLANEOUS

IC 1901	IC	PD6278A
IC 1902	IC	SBX8035-H
D 1901	Chip Diode	MA151WK
D 1902	Diode	MA151WA
L 1901	Ferri-Inductor	LAU101K

====Circuit Symbol and No.===	Part Name	Part No.
X 1901	Ceramic Resonator 4.97MHz	CSS1422
S 1901	Switch	CSG1041
S 1902	Switch	CSG1111
S 1903	Switch	CSG1111
S 1904	Switch	CSG1111
S 1905	Switch	CSG1111
S 1906	Switch	CSG1111
S 1907	Switch	CSG1111
S 1908	Switch	CSG1111
S 1909	Switch	CSG1111
S 1910	Switch	CSG1111
S 1911	Switch	CSG1111
S 1912	Switch	CSG1111
S 1913	Switch	CSG1111
S 1914	Switch	CSG1041
S 1915	Switch	CSG1041
S 1916	Switch	CSG1111
S 1917	Switch	CSG1111
S 1918	Switch	CSG1041
S 1919	Switch	CSG1041
S 1920	Switch	CSG1111
S 1921	Switch	CSG1111
S 1922	Switch	CSG1110
IL 1901	Lamp 40mA 14V(P4830R/X1M/EW)	CEL1610
IL 1901	Lamp 40mA 14V(P4800R/X1M/EW)	CEL1605
IL 1902	Lamp 40mA 14V(P4830R/X1M/EW)	CEL1610
IL 1902	Lamp 40mA 14V(P4800R/X1M/EW)	CEL1605
IL 1903	Lamp 40mA 14V(P4830R/X1M/EW)	CEL1610
IL 1903	Lamp 40mA 14V(P4800R/X1M/EW)	CEL1605
IL 1904	Lamp 40mA 14V(P4830R/X1M/EW)	CEL1610
IL 1904	Lamp 40mA 14V(P4800R/X1M/EW)	CEL1605
IL 1905	Lamp 40mA 14V(P4830R/X1M/EW)	CEL1610
IL 1905	Lamp 40mA 14V(P4800R/X1M/EW)	CEL1605
LCD1901	LCD(KEH-P4830R/X1M/EW)	CAW1542
LCD1901	LCD(KEH-P4800R/X1M/EW)	CAW1506

RESISTORS

R 1901	RS1/10S222J
R 1902	RS1/10S222J
R 1903	RS1/10S472J
R 1904	RS1/10S121J
R 1907	RS1/10S2R2J
R 1908	RS1/10S473J
R 1909	RS1/10S473J
R 1910	RS1/10S473J
R 1911	RS1/10S473J
R 1912	RS1/10S473J
R 1913	RS1/10S473J

CAPACITORS

C 1901	CEAL100M16
C 1902	CKSQYB104K16
C 1903	CEAL100M16

D Unit Number : EWM1021
Unit Name : Deck Unit

MISCELLANEOUS

IC 251	IC	CXA2559Q
IC 351	IC	PA2020A
D 352	Diode	1SS355

====Circuit Symbol and No.===	Part Name	Part No.
RESISTORS		
R 255		RS1/16S221J
R 256		RS1/16S221J
R 257		RS1/16S102J
R 258		RS1/16S102J
R 271		RS1/16S102J
R 272		RS1/16S102J
R 273		RS1/16S102J
R 274		RS1/16S102J
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		RS1/8S0R0J
R 290		RS1/8S0R0J
R 301		RS1/16S183J
R 302		RS1/16S163J
R 303		RS1/16S163J
R 304		RS1/16S163J
R 305		RS1/16S163J
R 323		RS1/8S0R0J
R 351		RS1/16S102J
R 352		RS1/16S102J
R 353		RS1/16S102J
R 354		RS1/16S102J
R 355		RS1/10S274J
R 362		RS1/8S181J
R 373		RS1/8S0R0J
R 374		RS1/8S0R0J
R 401		RS1/16S472J
R 402		RS1/16S163J
R 403		RS1/16S823J

CAPACITORS

C 251	CKSRYB331K50
C 252	CKSRYB331K50
C 253	CKSRYB331K50
C 254	CKSRYB331K50
C 255	CKSRYB103K25
C 256	CKSRYB103K25
C 272	CKSQYB104K16
C 273	CEJA220M16
C 301	CKSYB104K50
C 302	CKSYB104K50
C 313	CCSQCH101K50
C 351	CKSYB224K25
C 352	CKSQYB392K50
C 353	CKSQYB103K50
C 354	CKSQYB103K50
C 355	CKSYB104K50
C 356	CKSQYB103K50
C 401	CKSQYB334K16
C 402	CKSQYB472K50
C 403	CKSQYB683K16

E Unit Number :
Unit Name : PCB Unit

S 1	Switch (Load)	ESG1004
EGN 1	Photo-Interrupter	EGN1005

KEH-P483OR,P480OR

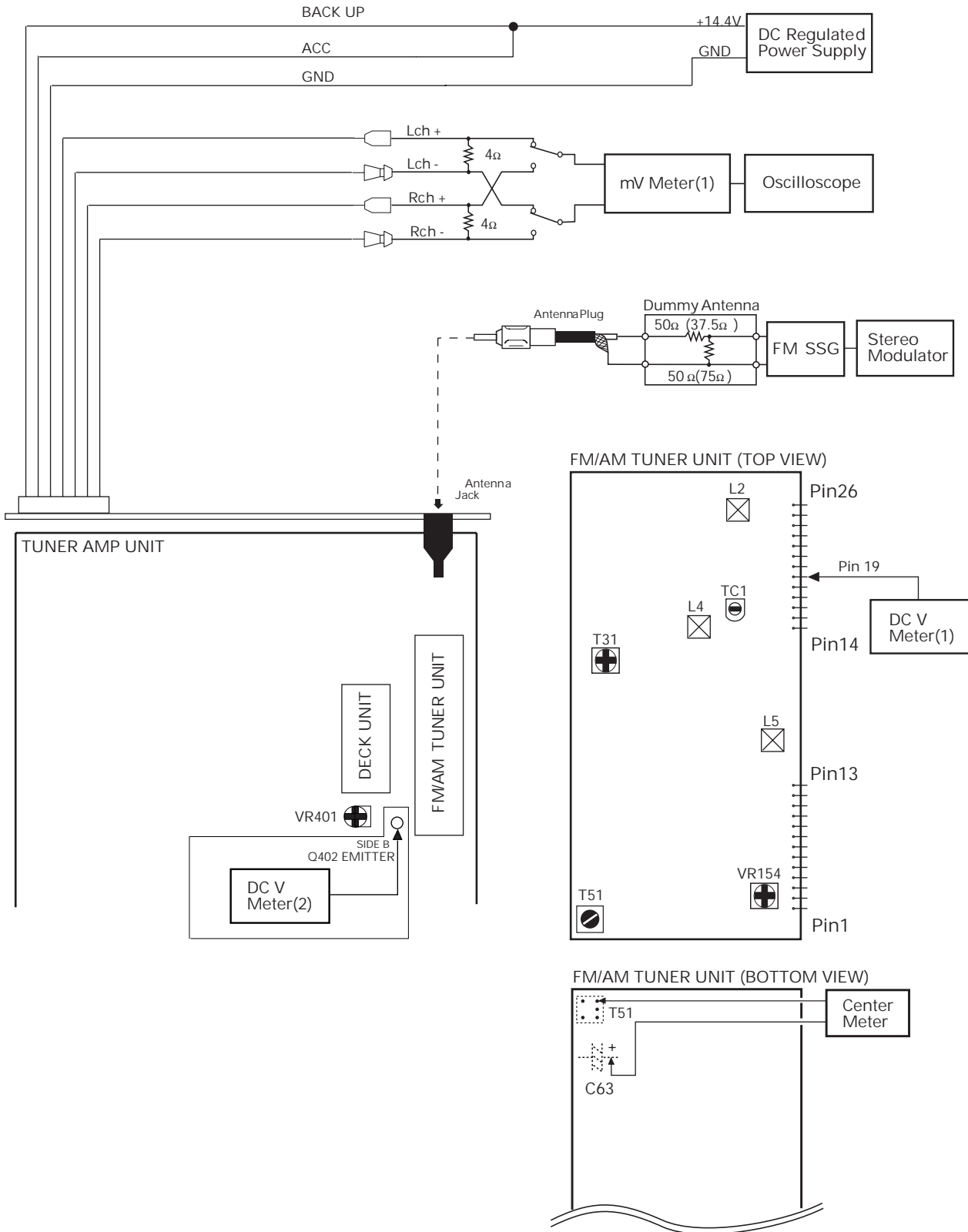
====Circuit Symbol and No.===Part Name	Part No.	====Circuit Symbol and No.===Part Name	Part No.
F Unit Number :		R 32	RS1/16S822J
Unit Name : Reel PCB		R 33	RS1/16S822J
EGR 2 Photo-Interrupter	EGR1006	R 34	RS1/16S331J
EGR 3 Photo-Interrupter	EGR1006	R 35	RS1/16S331J
		R 51	RS1/16S271J
B Unit Number : CWE1466		R 52	RS1/16S560J
Unit Name : FM/AM Tuner Unit		R 55	RS1/16S102J
		R 56	RS1/16S823J
		R 61	RS1/16S392J
MISCELLANEOUS		R 62	RS1/16S393J
IC 1 IC	PA4023B	R 101	RS1/16S272J
IC 2 IC	PA4024A	R 102	RS1/16S682J
Q 1 Transistor	2SC2412K	R 103	RS1/16S333J
Q 2 Transistor	DTC124EU	R 104	RS1/16S334J
Q 3 FET	3SK263	R 105	RS1/16S683J
Q 31 Transistor	2SC2412K	R 107	RS1/16S222J
Q 154 Transistor	DTC124EU	R 151	RS1/16S222J
Q 165 Transistor	2SC2412K	R 152	RS1/16S393J
Q 201 FET	2SK932	R 154	RS1/16S104J
Q 202 Transistor	2SC2412K	R 155	RS1/16S273J
Q 203 Transistor	DTC124EU	R 156	RS1/16S243J
D 4 Diode	1SV250	R 157	RS1/16S203J
D 5 Diode	KV1410-F1	R 160	RS1/16S222J
D 7 Diode	KV1410-F1	R 161	RS1/16S563J
D 8 Diode	KV1410-F1	R 162	RS1/16S105J
D 201 Diode	MA157	R 163	RS1/16S222J
D 202 Diode	MA157	R 202	RS1/16S223J
D 231 Diode	SVC253	R 203	RS1/16S225J
L 2 Coil	CTC1133	R 204	RS1/16S103J
L 3 Inductor	LCTB2R2K2125	R 206	RS1/16S220J
L 4 Coil	CTC1133	R 207	RS1/16S101J
L 5 Coil	CTC1132	R 208	RS1/16S102J
L 6 Inductor	LCTBR15K1608	R 209	RS1/16S471J
L 51 Ferri-Inductor	LAU150K	R 214	RS1/16S822J
L 201 Ferri-Inductor	LAU4R7K	R 215	RS1/16S822J
L 202 Ferri-Inductor	LAU330K	R 217	RS1/16S102J
L 203 Inductor	CTF1287	R 231	RS1/16S272J
L 208 Inductor	LAU121K	R 232	RS1/16S473J
L 231 Inductor	LCTA3R3J3225	R 237	RS1/16S103J
T 31 Coil	CTE1116	R 238	RS1/16S104J
T 51 Coil	CTC1136	R 239	RS1/16S104J
TC 1 Trimmer	CCL1046	R 240	RS1/16S332J
CF 51 Ceramic Filter	CTF1442	R 241	RS1/16S202J
CF 52 Ceramic Filter	CTF1442	R 243	RS1/16S123J
CF 53 Ceramic Filter	CTF1442	R 244	RS1/16S103J
CF 232 Ceramic Filter	CTF1348	R 247	RS1/16S123J
X 151 Radiator 918.5Hz	CSS1365		
X 231 Crystal Resonator 10.26MHz	CSS1111		
VR 154 Semi-fixed 150kΩ(B)	CCP1213		
AR 1 Capacitor with Discharge Gap	DSP-201M		
RESISTORS		CAPACITORS	
R 1	RS1/16S0R0J	C 1	CCSQCH6R0D50
R 4	RS1/16S154J	C 2	CCSRCK2R0C50
R 5	RS1/16S391J	C 4	CCSRCH820J50
R 6	RS1/16S223J	C 6	CCSRCH820J50
R 7	RS1/16S123J	C 8	CKSRYB103K25
R 8	RS1/16S332J	C 9	CKSQYB104K16
R 9	RS1/16S473J	C 10	CCSRCKR50C50
R 10	RS1/16S223J	C 11	CEJA1R0M50
R 11	RS1/16S124J	C 13	CKSRYB222K50
R 13	RS1/16S563J	C 14	CCSRCH220J50
R 15	RS1/16S271J	C 16	CCSRCH8R0D50
R 16	RS1/16S104J	C 17	CKSRYB222K50
R 17	RS1/16S332J	C 18	CKSRYB103K25
R 18	RS1/16S332J	C 19	CKSRYB222K50
R 31	RS1/16S470J	C 20	CKSRYB222K50
		C 21	CEJA100M16
		C 22	CCSRTH9R0D50
		C 23	CCSRTH120J50
		C 24	CCSRCH471J50
		C 25	CKSRYB103K25

====Circuit Symbol and No.==Part Name	Part No.
C 31	CKSRYP103K25
C 32	CKSQYB472K50
C 33	CCSRCH5R0C50
C 34	CKSQYB104K16
C 36	CCSRRH201J50
C 51	CKSRYP223K25
C 52	CKSRYP103K25
C 54	CCSRCH470J50
C 55	CKSQYB223K25
C 56	CKSQYB104K16
C 57	CKSRYP472K50
C 58	CEJA330M10
C 59	CKSRYP103K25
C 61	CCSRCH270J50
C 62	CKSRYP103K25
C 63	CEJAR15M50
C 101	CEJANP100M10
C 102	CKSRYP182K50
C 103	CKSRYP682K25
C 104	CEJA2R2M50
C 105	CKSRYP103K25
C 106	CCSRCH151J50
C 107	CKSRYP103K25
C 151	CKSRYP472K50
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	CKSRYP102K50
C 170	CCSRCH100D50
C 201	CCSRCH471J50
C 202	CCSRCH100D50
C 203	CKSRYP332K50
C 204	CKSQYB473K16
C 205	CKSQYB473K16
C 206	CKSQYB104K16
C 207	CCSRCH560J50
C 209	CKSQYB104K16
C 211	CCSRCH101J50
C 212	CEJA470M6R3
C 213	CKSRYP103K25
C 216	CCSRCH101J50
C 217	CEJA1R5M50
C 219	CCSRCH471J50
C 220	CKSRYP103K25
C 230	CKSRYP103K25
C 231	CCSRCH330J50
C 232	CCSRCH150J50
C 233	CKSQYB104K16
C 234	CEJA330M10
C 235	CKSRYP332K50
C 236	CKSQYB473K16
C 237	CCSRCH120J50
C 239	CKSRYP472K50
C 240	CEJAR47M50
C 241	CKSQYB104K16
C 242	CEJAR47M50
C 243	CEJAR33M50
C 244	CKSQYB473K16
C 245	CKSRYP123K25

====Circuit Symbol and No.==Part Name	Part No.	
C 246	CKSQYB473K16	
C 250	CCSRCH471J50	
Miscellaneous Parts List		
M 1	Motor Unit (Main)	EXA1490
M 2	Motor Unit (Sub)	EXA1485
HD 1	Head Assy	EXA1506
	Fuse(10A)	CEK1136

6. ADJUSTMENT

● Connection Diagram



FM ADJUSTMENT

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

S:STEREO MOD., 1kHz, L or R=30%(20.25kHz+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—100	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
RF Trimmer	5	129.3 M	60—80	107.9	TC1	mV Meter(1) : Minimum
	6	RF Coil and RF Trimmer shall be adjusted twice or more				
IFT	7	98.1 M	5	98.1	T31	mV Meter(1) : Maximum (STEREO MODE)
ARC	8	98.1 S	40	98.1	VR154	mV Meter(1) : Separation 5dB (STEREO MODE)

RDS SL ADJUSTMENT

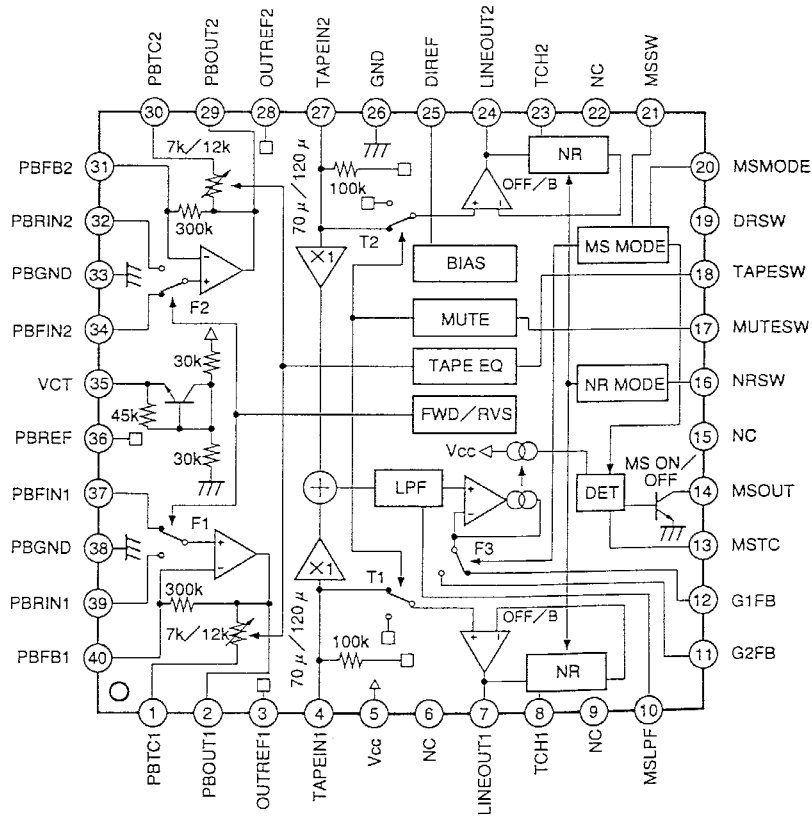
	No.	FM SSG		Displayed Frequency(MHz)	Adjustment Point	Adjustment Method (Switch Position)
		Frequency(MHz)	Level(dBf)			
	1	104.0 S	35	104.0	VR401	DC V Meter(2) : 1.75V+0.05,-0.35

7. GENERAL INFORMATION

7.1 PARTS

7.1.1 IC

CXA2559Q

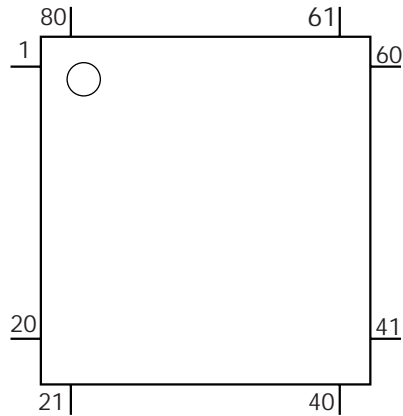


● Pin Functions(PD4972A)

Pin No.	Pin Name	I/O	Format	Function and Operation
1	ASENBO	O	C	Slave power supply control output
2	$\overline{I/S}$	O	C	RDS time constant control output
3	ADPW	O	C	A/D converter power
4	AVSS			GND
5	\overline{SWVDD}	O	C	Grille power supply control output
6	ST	I		FM stereo input
7	AVREF1			D/A converter standard voltage
8	KYDT	I		Grille MicroComputer data input
9	DPDT	O	C	Grille MicroComputer data output
10	NC			Not used
11	TUNPDI	I		PLL IC data input
12	TUNPDO	O	C	PLL IC data output
13	TUNPCK	O	C	PLL IC clock output
14	TUNPCE	O	C	PLL IC chip enable output
15	\overline{CURRRQ}	O	C	Tuner voltage FIX output
16-18	NC			Not used
19	RECIVE	O	C	During RDS data reception output
20	DILM	O	C	DILM output
21	EORR	O	C	Correct RDS error output
22	VST	O	C	Strobe pulse output for electronic volume
23	VCK	O	C	Clock output for electronic volume
24	VDT	O	C	Data output for electronic volume
25	LCDPW	O	C	LCD back light power supply control output
26	ILMPW	O	C	Illumination power supply control output
27	DRSENS	I		Door open/close sense input
28	DRSYS	O	C	Door system select output
29	FM	O	C	FM power control output
30	AM	O	C	AM power control output
31	CM	O	C	Cassette mechanism capstan motor control output
32	NC			Not used
33	VSS			GND
34	SC2	O	C	Cassette mechanism sub motor control output
35	SC1	O	C	Cassette mechanism sub motor control output
36	MSIN	I		Cassette mechanism MS sense input
37	RIMUTE	O	N	RI output port
38	\overline{MTLSW}	I		Metal sense input
39	\overline{DLED}	O	N	Alarm LED output
40	$\overline{N/R}$	O		Normal reverse output
41	PLAY	O	C	Tape MS filter select output
42	\overline{LOADSW}	I		Tape loading input
43	POS	I		Cassette mechanism position sense input
44	RES	I		Cassette mechanism reverse end sense input
45	PEE	O	C	Beep tone output
46	NES	I		Cassette mechanism forward end sense input
47	RDS57K	I		57kHzBP-OUT sense input
48	STBY	O	C	Stand-by output
49	SK	I		SK signal input
50	\overline{DRST}	O	C	Decoder reset output
51	\overline{TMUTE}	O	C	Tuner mute output
52	\overline{MDSENS}	I		Modulation detect input
53	SD	I		SD input
54	\overline{MUTE}	O	C	Mute output
55	SYSPW	O	C	System power supply control output
56	TX	O	C	IP BUS data output
57	RX	I		IP BUS data input
58	RDSLK	I		RDS LK signal input
59	RDT	I		RDS data input
60	RESET	I		Reset input
61	\overline{LDET}	I		PLL lock sense input

Pin No.	Pin Name	I/O	Format	Function and Operation
62	RCK	I		RDS clock input
63	DSSENS	I		Grille detach sense input
64	TELIN	I		Cellular mute input
65	ASSENS	I		ACC power sense input
66	BSSENS	I		Back up power sense input
67	NC			Not used
68	VDD			VDD
69	X2	O		Oscillator output
70	X1	I		Oscillator input
71	IC			Connect to GND
72	XT2			Sub Clock terminal
73	TESTIN	I		Test program mode input
74	AVDD			A/D converter analog power supply (VDD)
75	AVREF0	I		A/D converter standard voltage input
76	SL	I		Signal level input
77	CL	I		Synchronizing signal input of display data latch
78	NL	I		Noise level input
79	MODELIN	I		Model select input
80	ALMUTE	O	C	Mute output for Detach alarm

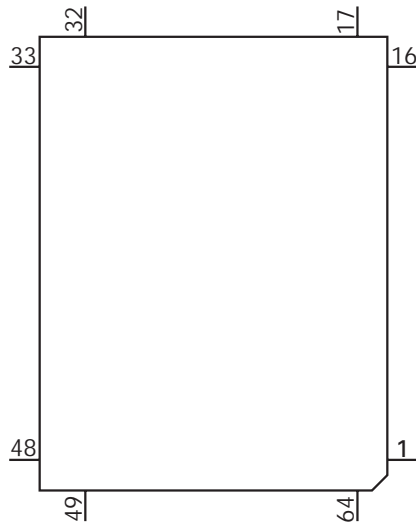
*PD4972A



Format	Meaning
C	C MOS
N	N Channel open drain

IC's marked by* are MOS type.
Be careful in handling them because they are very liable to be damaged by electrostatic induction.

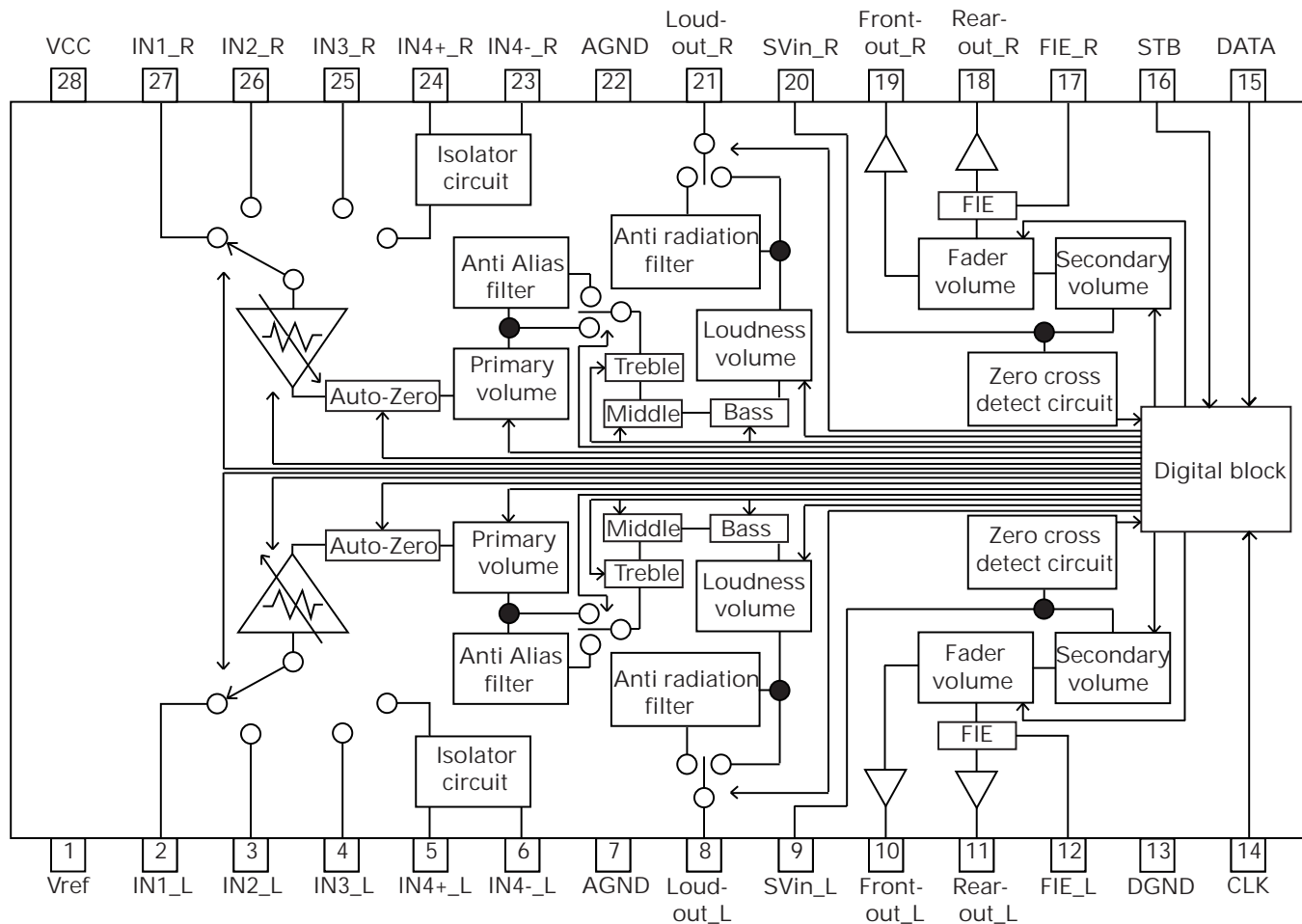
*PD6278A



● Pin Functions (PD6278A)

Pin No.	Pin Name	I/O	Function and Operation
1-5	SEG4-0	O	LCD segment output
6-9	COM3-0	O	LCD common output
10	V3		LCD drive power supply
11-14	KS4-1	O	Key strobe output
15,16	KD1,2	I	Key data input (analogue input)
17	REM	I	Remote control reception
18	RXD	I	System micro computer UART communication data input
19	RST	I	System reset
20	TXD	O	System micro computer UART communication data output
21	MODA		GND
22	X0		Crystal oscillator connection pin
23	X1		Crystal oscillator connection pin
24	VSS		GND
25,26	KD3,4	I	Key data input
27,28	KS6,5	O	Key strobe output
29-55	SEG39-13	O	LLCD segment output
56	VCC		Power supply
57-64	SEG12-5	O	LCD segment output

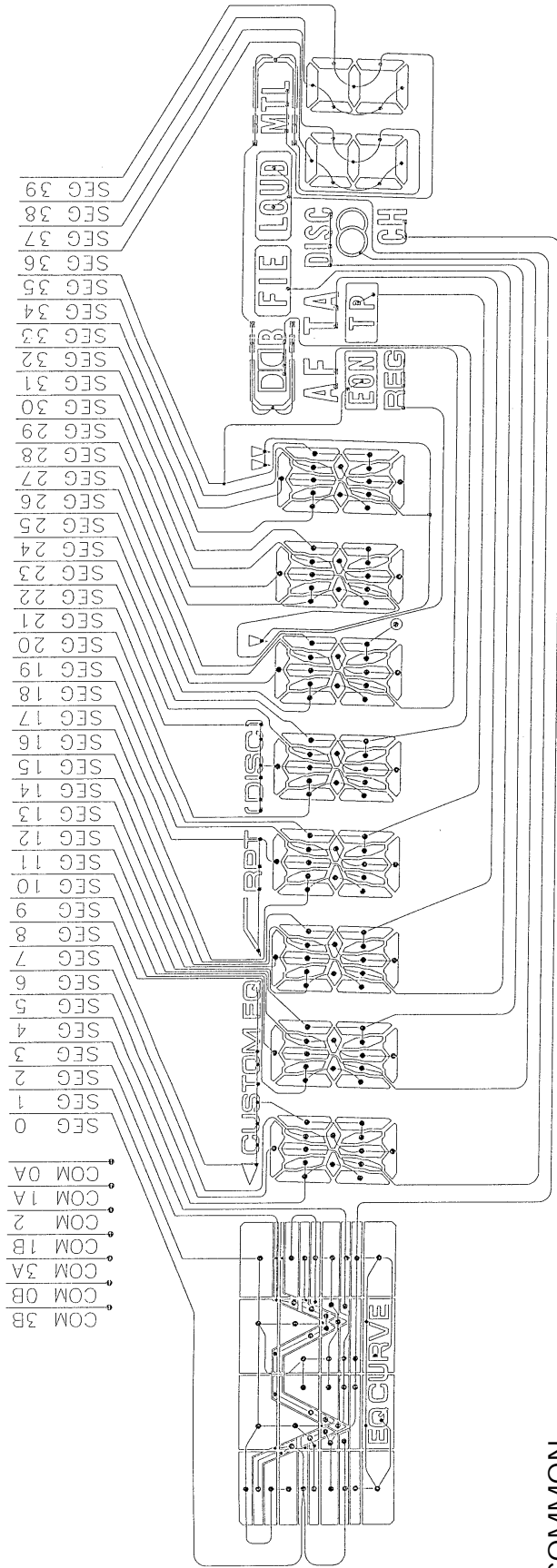
PML003AM



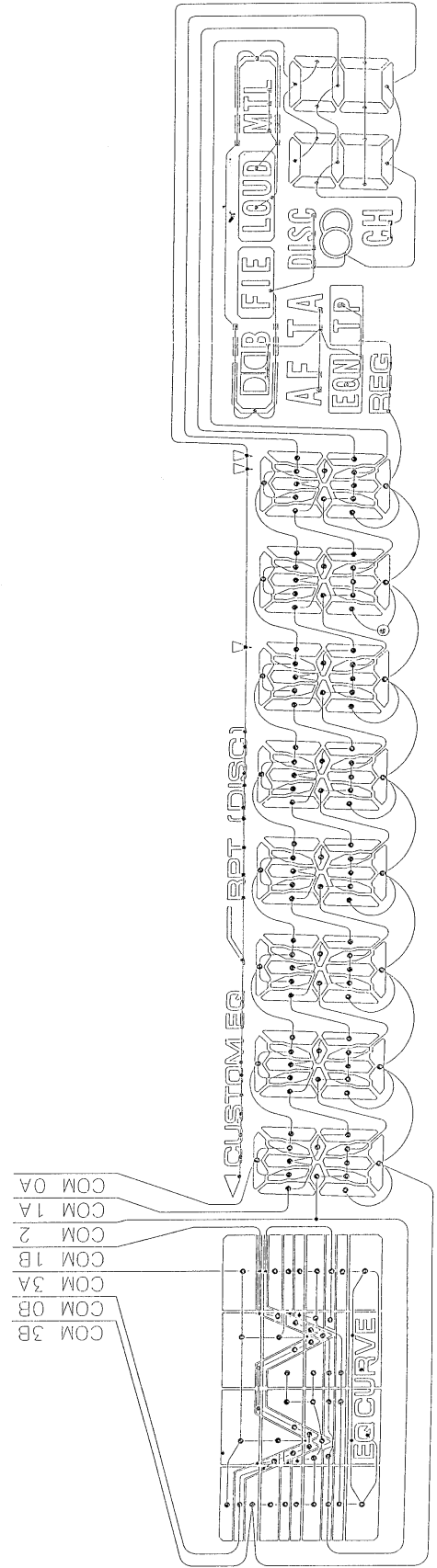
7.1.2 DISPLAY

● CAW1542(P4830R),CAW1506(P4800R)

SEGMENT



COMMON



7.2 DISASSEMBLY

● Removing the Case(not shown)

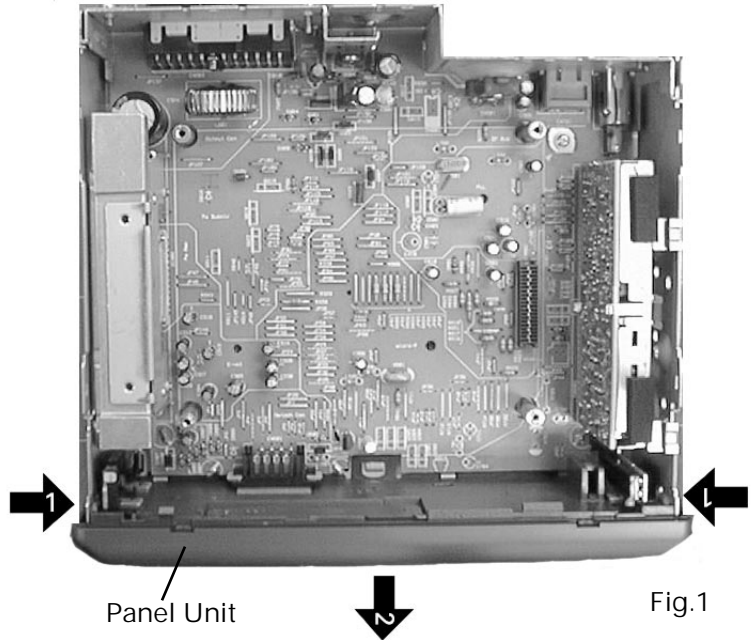
- 1.Remove the two screws.
- 2.Remove the Case.

● Removing the Cassette Mechanism Module (not shown)

- 1.Remove the four screws.
- 2.Disconnect the connector, and then removing the Cassette Mechanism Module.

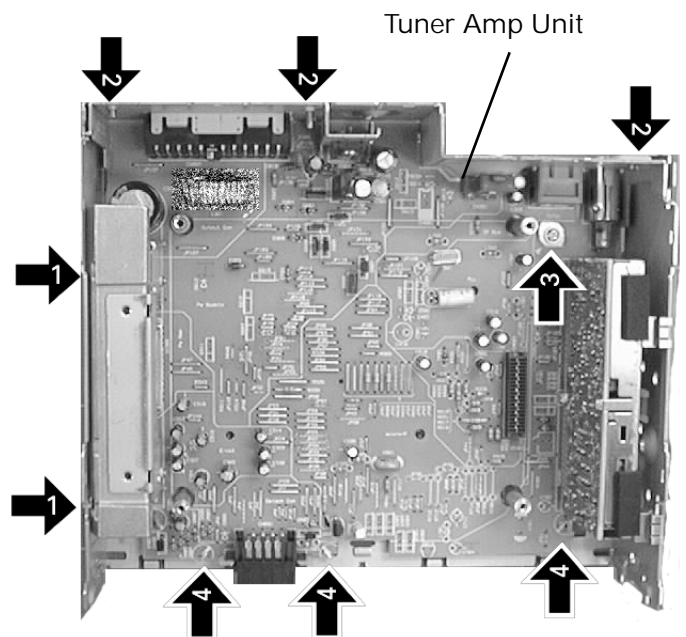
● Removing the Panel Unit(Fig.1)

- 1** Remove the two screws.
- 2** Disengage the stopper at two locations indicated and remove the Panel Unit.

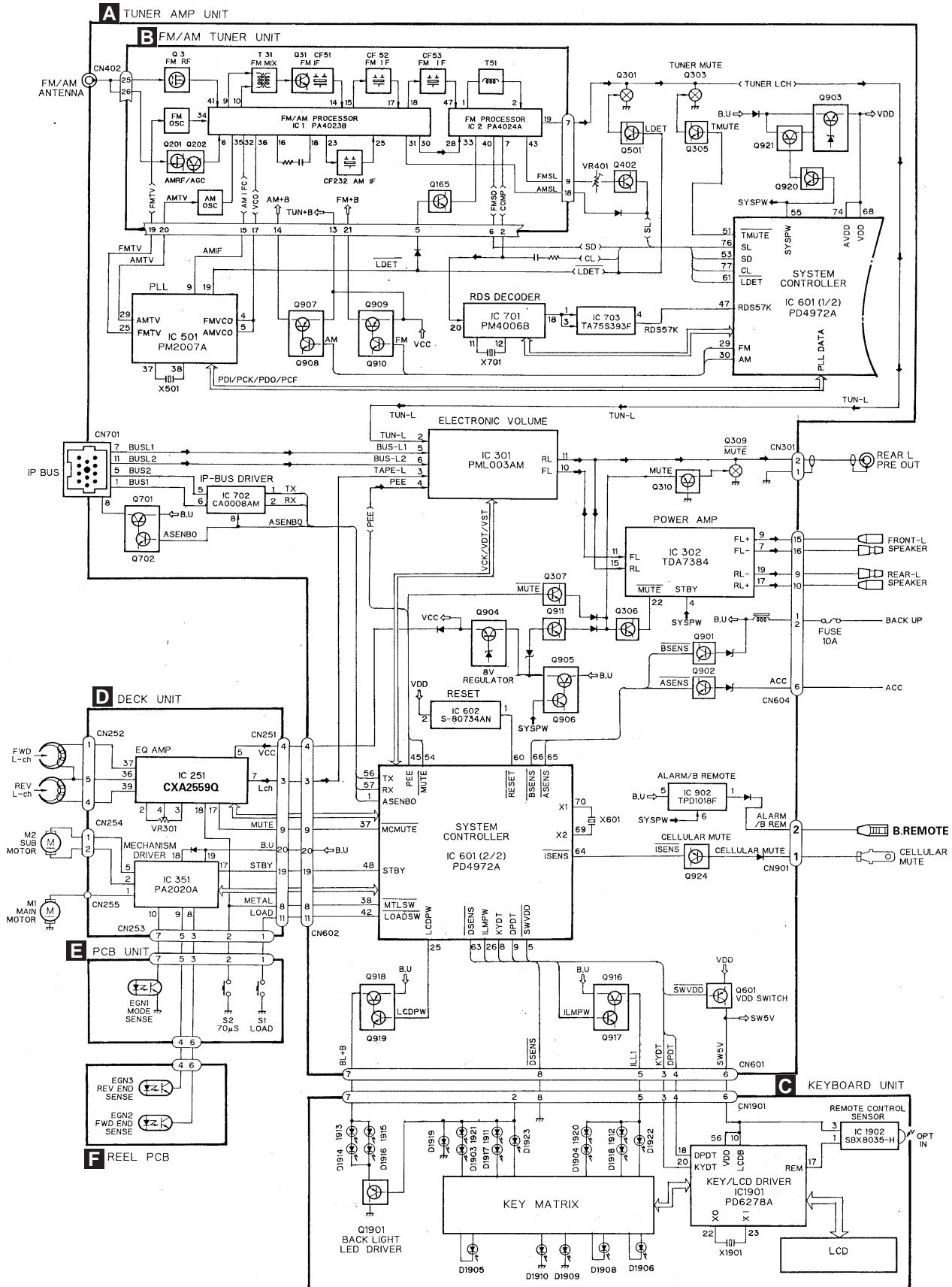


● Removing the Tuner Amp Unit(Fig.2)

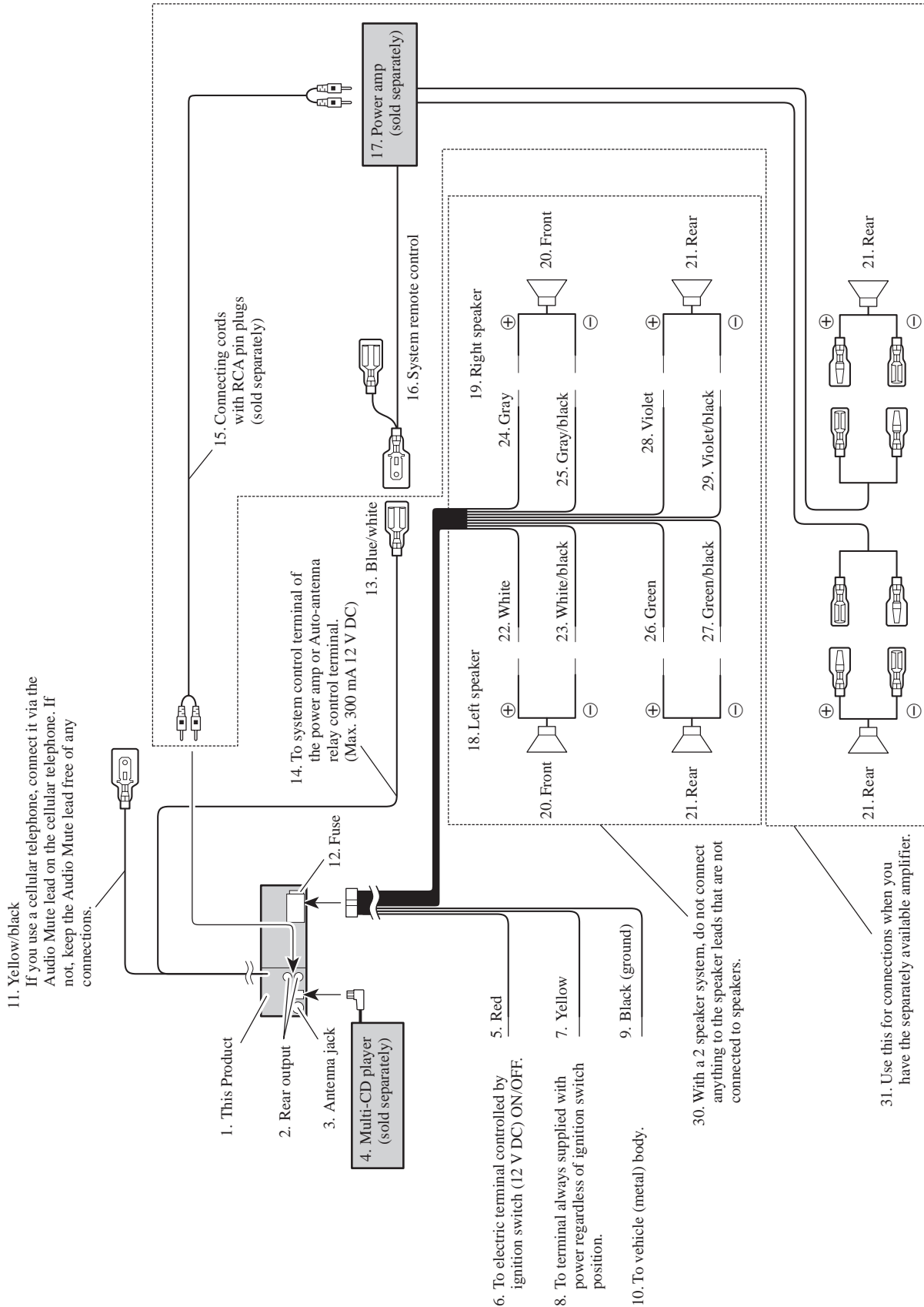
- 1** Removing the two screws.
- 2** Removing the three screws.
- 3** Removing the screw.
- 4** Unbend the tabs at three locations indicated by arrow until straight. Remove the Tuner Amp Unit.



7.3 BLOCK DIAGRAM



8. OPERATIONS AND SPECIFICATIONS

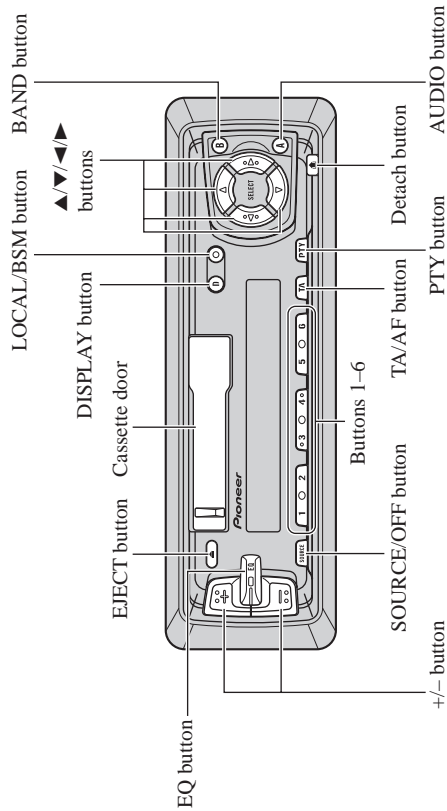


CAUTION

- Cords for this product and those for other products may be different colors even if they have the same function. When connecting this product to another product, refer to the supplied Installation manuals of both products and connect cords that have the same function.

32.

Head Unit



Basic Operation

To Listen to Music

The following explains the initial operations required before you can listen to music.

Note:

- Loading a cassette in this product.

1. Select the desired source (e.g. Tuner).



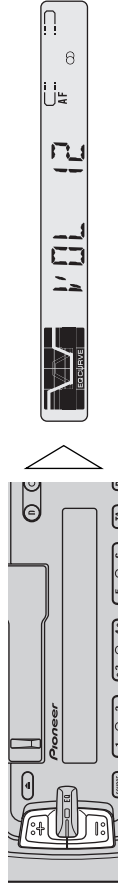
Each press changes the Source ...

Each press of the SOURCE/OFF button selects the desired source in the following order:
Tuner → Tape → Multi-CD player → AUX

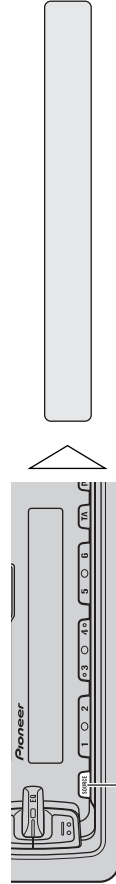
Note:

- In the following cases, the sound source will not change:
 - * When a product is not connected to this product.
 - * When no tape is set in this product.
 - * When no magazine is set in the Multi-CD player.
 - * When the AUX (external input) is set to OFF.

2. Raise or lower the volume.



3. Turn the source OFF.



Hold for 1 second or more

Basic Operation

Basic Operation of Tuner

This product's AF function can be switched ON and OFF. AF should be switched OFF for normal tuning operations. (Refer to page 13.)

Manual and Seek Tuning

- You can select the tuning method by changing the length of time you press the ◀/▶ button.

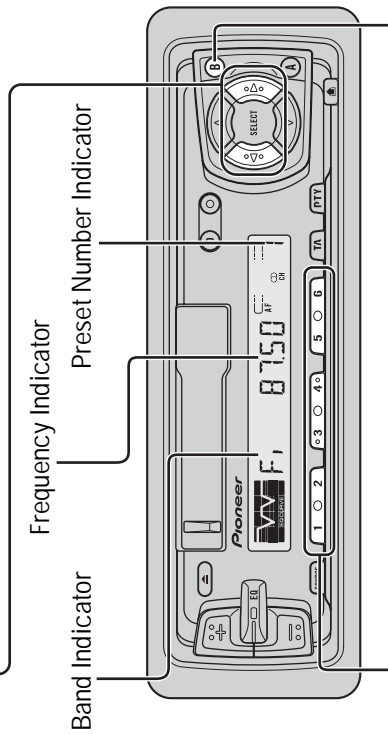
Manual Tuning (step by step)	0.5 seconds or less
Seek Tuning	0.5 seconds or more

Note:

- If you continue pressing the button for longer than 0.5 seconds, you can skip broadcast stations. Seek Tuning starts as soon as you stop pressing the button.

Note:

- “O” stereo indicator lights when a stereo station is selected.



Preset Tuning

- You can memorize broadcast stations in buttons 1 through 6 for easy, one-touch station recall.

Preset station recall	2 seconds or less
Broadcast station preset memory	2 seconds or more

Note:

- Up to 18 FM stations (6 in F1 (FM1), F2 (FM2) and F3 (FM3)) and 6 MW/LW stations can be stored in memory.
- You can also use the ▲ or ▼ buttons to recall broadcast stations memorized in buttons 1 through 6.

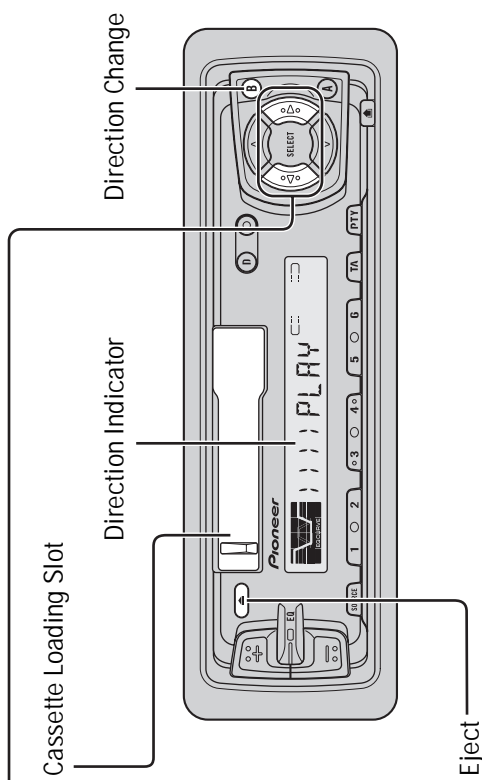
Basic Operation of Cassette Player

Fast Forward/Rewind and Music Search

- Each press of the ▶ button selects Fast forward or Forward-Music Search.
FF (Fast forward) → F-MS (Forward-Music Search) → Normal Playback
- Each press of the ◀ button selects Rewind or Rewind-Music Search.
REW (Rewind) → R-MS (Rewind-Music Search) → Normal Playback

Note:

- Fast forward/Rewind and Music Search can be canceled by pressing the BAND button.



Note:

- The Tape function can be turned ON/OFF with the cassette tape remaining in this product.

Basic Operation of Multi-CD Player

This product can control one or more multi-CD players. (There are some types of Multi-CD players such as "CDX-P630S" which you cannot connect more than one.)

Switching the Multi-CD Player

Using a multiple connection adapter lets you connect up to three Multi-CD players.

M-CD 1 → M-CD 2 → M-CD 3
(Displayed for about 2 seconds.)

Track Search and Fast Forward/Reverse

- You can select between **Track Search** or **Fast forward/Reverse** by pressing the ◀/▶ button for a different length of time.

Track Search	0.5 seconds or less
Fast forward/Reverse	Continue pressing

Disc Number Search (for 6-Disc, 12-Disc types)

- You can select discs directly with the 1 to 6 buttons. Just press the number corresponding to the disc you want to listen to.

Note:

- When a 12-Disc Multi-CD Player is connected and you want to select disc 7 to 12, press the 1 to 6 buttons for 2 seconds or longer.

Disc Number Rough Search (for 50-Disc type only)

This handy function lets you select discs loaded in a 50-Disc Multi-CD Player using the 1 to 5 buttons. The 50 discs are divided into five blocks, with each of the 1 to 5 buttons assigned to a block.

- Select the desired block with the 1 to 5 button.

Note:

- After completing a rough search, use the ▲ and ▼ buttons to select a desired disc.

Displaying Disc Titles

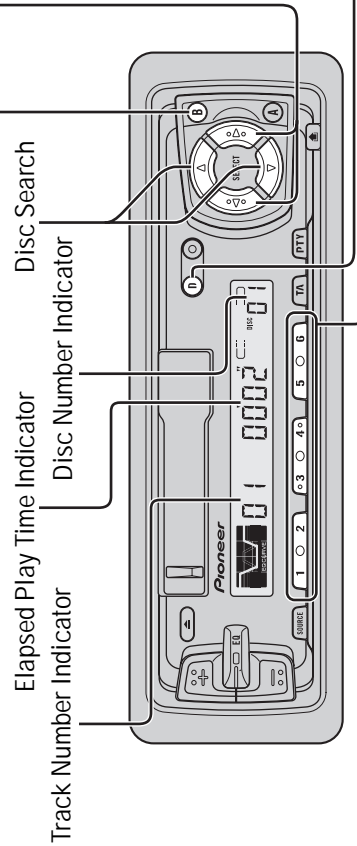
- Press the **DISPLAY** button, to change the **Disc Title** display of the current disc.

Note:

- If you switch displays when disc titles have not been input, "NO TITLE" is displayed.
- Repeat the preceding operation to return to the normal display.

Note:

- The multi-CD player may perform a preparatory operation, such as verifying the presence of a disc or reading disc information, when the power is turned ON or a new disc is selected for playback. "READY" is displayed.
- When a magazine is loaded into a 50-Disc type Multi-CD Player, information on all the discs in the magazine is read.
If you start playing a disc on a 50-Disc type Multi-CD Player before reading of information on all discs has been completed, reading of information stops part way through.
- If the multi-CD player cannot operate properly, an error message such as "ERROR-14" is displayed. Refer to the multi-CD player owner's manual.
- If there are no discs in the multi-CD player magazine, "NO DISC" is displayed.
- "LOAD" will be displayed in the following cases:
 - * If the disc in the extra tray is selected.
 - * If the disc is moved from the extra tray to the magazine.
- (Refer to the 50-Disc type multi-CD player owner's manual.)
- You cannot use the "Ejecting a Single Disc", "Frequency Play", "Music Group Play", or "ABC Disc Title Search" functions with this product.



8.2 SPECIFICATIONS

General

Power source	..... 14.4 V DC (10.8 – 15.1 V allowable)
Grounding system	..... Negative type
Max. current consumption	..... 8.5 A
Dimensions	
(mounting size)	..... 178 (W) × 50 (H) × 155 (D) mm
(front face)	..... 188 (W) × 58 (H) × 19 (D) mm
Weight	..... 1.2 kg

Amplifier

Maximum power output	..... 40 W × 4
Continuous power output	..... 22 W × 4 (DIN45324, +B = 14.4 V)
Load impedance	..... 4 Ω (4 – 8 Ω allowable)
Preout maximum output level/output impedance	..... 2.2 V _{p-p} /1 kΩ
Equalizer (3 band equalizer)	
(Low)	..... ±12 dB
(Mid)	..... ±12 dB
(High)	..... ±12 dB
Loudness contour	
(Low)	..... +3.5 dB (100 Hz), +3 dB (10 kHz)
(Mid)	..... +10 dB (100 Hz), +6.5 dB (10 kHz)
(High)	..... +11 dB (100 Hz), +11 dB (10 kHz) (volume: –30 dB)

Cassette player

Tape	..... Compact cassette tape (C-30 – C-90)
Tape speed	..... 4.76cm/sec.(+0.14cm/sec.,-0.05cm/sec.)
Fast forward/rewinding time	..... Approx. 100 sec. for C-60
Wow & flutter	..... 0.09% (WRMS)
Frequency response	..... Metal: 30 – 16,000 Hz (±3 dB)
Stereo separation	..... 45 dB
Signal-to-noise ratio	..... 61 dB (IEC-A network)

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 (S/N: 20 dB)
Selectivity	..... 50 dB (±9 kHz)

LW tuner

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

Note:

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