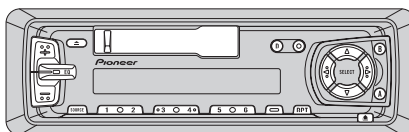


Service Manual

Pioneer

KEH-P5850/X1M/ES



ORDER NO.
CRT2259

MULTI-CD CONTROL HIGH POWER CASSETTE PLAYER WITH FM/AM TUNER

KEH-P580

X1M/UC

KEH-P5800

X1M/UC

KEH-P5850

X1M/ES

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.
- 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 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

UC model

CAUTION

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.

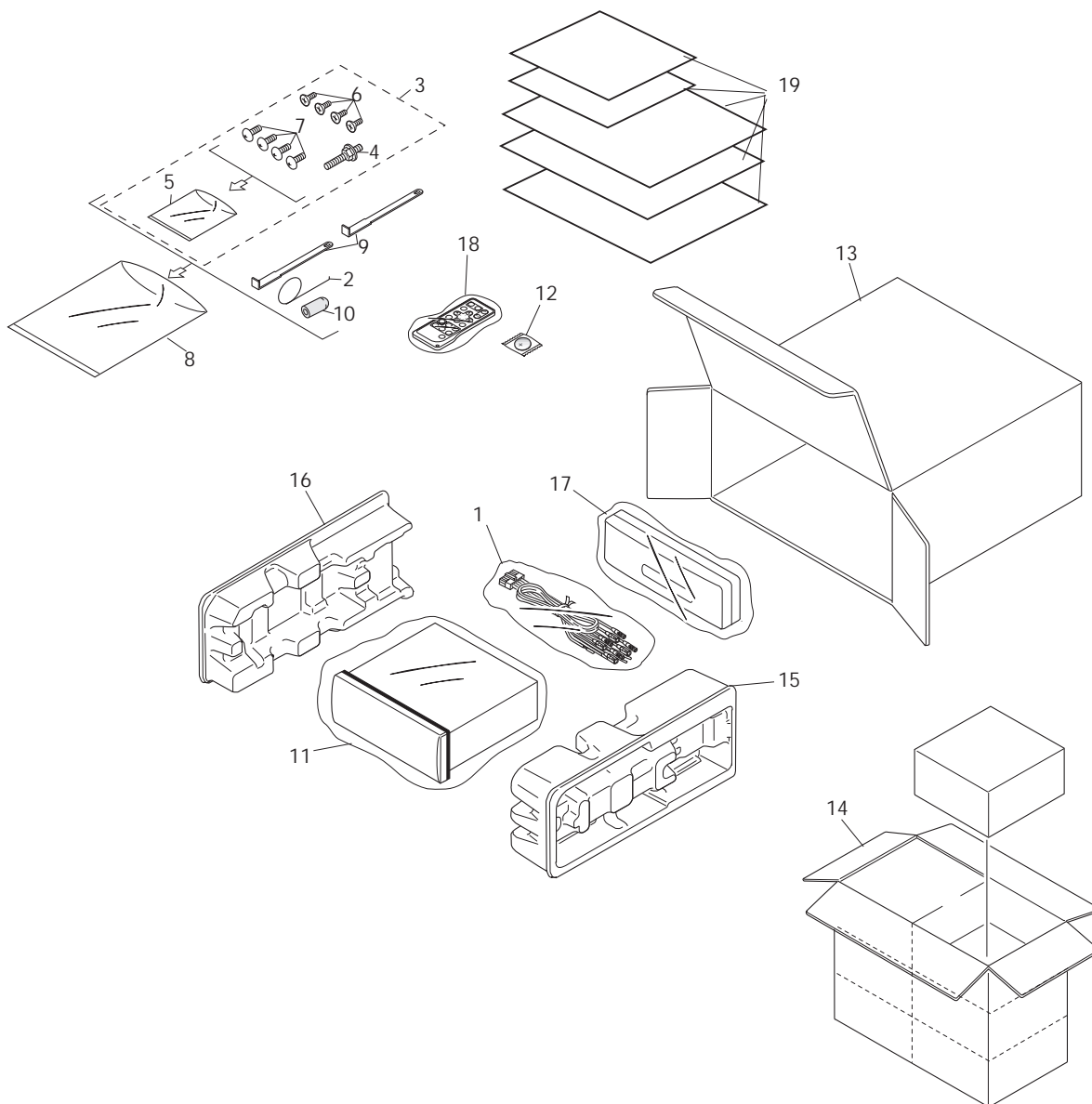
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely; you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health and Safety Code, Section 25249.5). When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

2. EXPLODED VIEWS AND PARTS LIST

2.1 PACKING



NOTE:

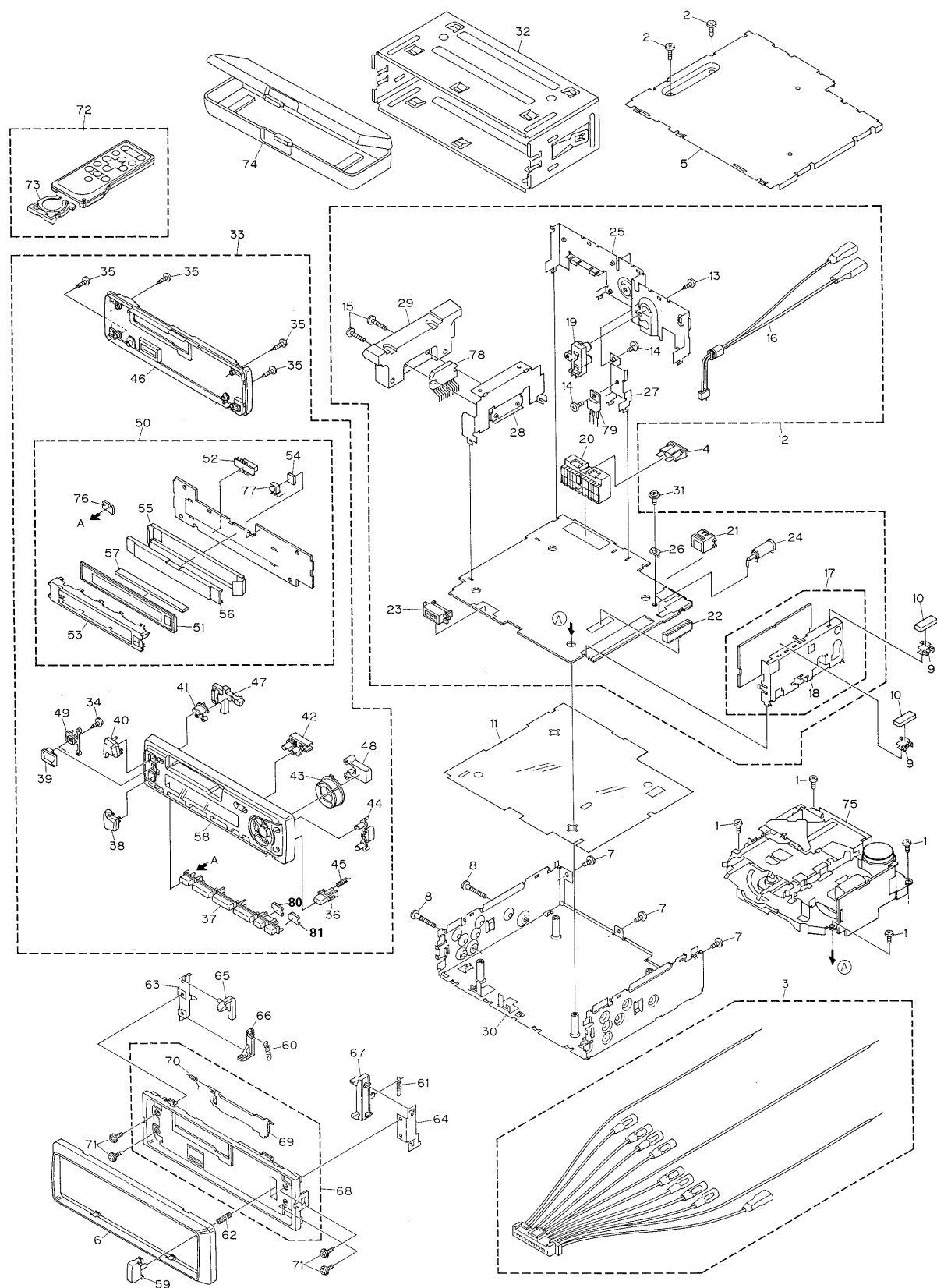
- Parts marked by “*” are generally unavailable because they are not in our Master Spare Parts List.
- Screws adjacent to ∇ mark on the product are used for disassembly.
- PACKING SECTION PARTS LIST

Mark No. Description	Part No.		
	KEH-P580/X1M/UC	KEH-P5800/X1M/UC	KEH-P5850/X1M/ES
1 Cord Assy	CDE5798	CDE5798	CDE5798
2 Spring	CBH1650	CBH1650	CBH1650
3 Screw Assy	CEA2351	CEA2351	CEA2351
4 Screw	CBA1304	CBA1304	CBA1304
* 5 Polyethylene Bag	CEG-127	CEG-127	CEG-127
6 Screw(x4)	CRZ50P090FMC	CRZ50P090FMC	CRZ50P090FMC
7 Screw(x4)	TRZ50P080FMC	TRZ50P080FMC	TRZ50P080FMC
* 8 Polyethylene Bag	CEG-158	CEG-158	CEG-158
9 Handle(x2)	CNC5395	CNC5395	CNC5395
10 Bush	CNV3930	CNV3930	CNV3930
11 Polyethylene Bag	CEG1173	CEG1173	CEG-162
12 Battery	CEX1030	Not used	CEX1030
13 Carton	CHG3555	CHG3554	CHG3556
14 Contain Box	CHL3555	CHL3554	CHL3556
15 Protector	CHP2101	CHP2101	CHP2101
16 Protector	CHP2102	CHP2102	CHP2102
17 Case Assy	CXB3520	CXB3520	CXB3520
18 Remote Control Unit	CXB3454	Not used	CXB3454
19-1 Owner's Manual	CRD2772	CRD2770	CRD2774
19-2 Installation Manual	CRD2773	CRD2771	CRD2776
* 19-3 Warranty Card	CRY1070	Not used	Not used
* 19-4 Card	Not used	ARY1048	Not used
19-5 Owner's Manual	Not used	Not used	CRD2775

● Owner's Manual, Installation Manual

Model	Part No.	Language
KEH-P580/X1M/UC	CRD2772	English, French
	CRD2773	English, French
KEH-P5800/X1M/UC	CRD2770	English, French, Spanish
	CRD2771	English, French, Spanish
KEH-P5850/X1M/ES	CRD2774	English, Spanish, Portuguese(B)
	CRD2775	Chinese, Arabic
	CRD2776	English, Spanish, Portuguese(B), Chinese, Arabic

2.2 EXTERIOR



(1) EXTERIOR SECTION PARTS LIST

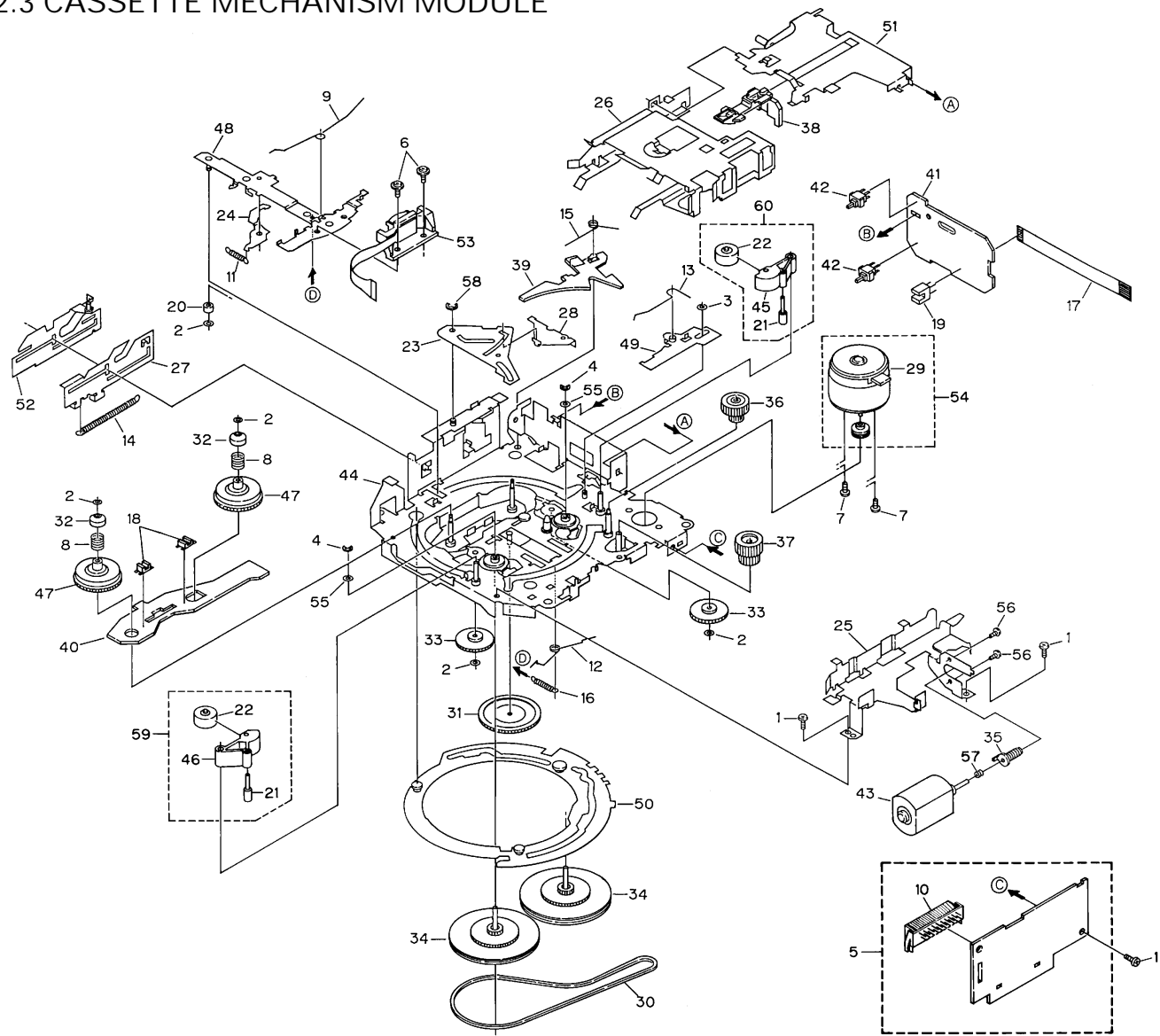
Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Screw	BSZ26P050FMC	41	Button(Eject)	CAC5793
2	Screw	BSZ30P050FMC	42	Button(Display)	CAC5788
3	Cord Assy	CDE5798	43	Button(Cross)	CAC5786
4	Fuse(10A)	CEK1136	44	Button(A,B)	CAC5787
5	Case	CNB2350	45	Spring	CBH2103
6	Panel	CNS5137	46	Cover	CNS5130
7	Screw	BSZ30P050FMC	47	Lighting Conductor	CNV5525
8	Screw	BSZ30P200FMC	48	Housing	CNV5526
9	Holder	CNC5704	49	Housing	CNV5528
10	Cushion	CNM5210	50	Keyboard Unit	See Contrast table(2)
11	Insulator	CNM5963	51	LCD(LCD1901)	CAW1526
12	Tuner Amp Unit	See Contrast table(2)	52	Connector(CN1901)	CKS3580
13	Screw	BPZ26P080FMC	53	Holder	CNC7981
14	Screw	BSZ26P080FMC	54	Spacer	CNM5043
15	Screw	BSZ26P160FMC	55	Sheet	CNM6192
16	Cord	CDE5753	56	Lighting Conductor	CNV5524
17	FM/AM Tuner Unit	See Contrast table(2)	57	Connector	CNV5531
18	Holder	CNC6554	58	Grille Unit	See Contrast table(2)
19	Pin Jack(CN301)	CKB1035	59	Button	CAC4836
20	Plug(CN603)	CKM1270	60	Spring	CBH1834
21	Connector(CN701)	CKS3408	61	Spring	CBH1835
22	Connector(CN602)	CKS3568	62	Spring	CBH2182
23	Connector(CN601)	CKS3581	63	Bracket	CNC6135
24	Antenna Jack(CN402)	CKX1056	64	Bracket	CNC6791
25	Panel	See Contrast table(2)	65	Arm	CNV4692
26	Holder	CNC5399	66	Arm	CNV4693
27	Holder	CNC6845	67	Arm	CNV4728
28	Holder	CNC7996	68	Panel Unit	CXB3020
29	Heat Sink	CNR1505	69	Door	CAT2026
30	Chassis Unit	CXB3012	70	Spring	CBH1838
31	Screw	ISS26P055FUC	71	Screw	IMS20P030FZK
32	Holder Unit	CXB2687	72	Remote Control Unit	CXB3454
33	Detach Grille Assy	See Contrast table(2)	73	Cover	CNS4948
34	Screw	BPZ20P060FMC	74	Case Assy	CXB3520
35	Screw	BPZ20P100FZK	75	Cassette Mechanism Module	EXK3690
36	Button(Detach)	CAC5789	76	Sheet	CNM6243
37	Button(1-6)	CAC5794	77	IC(IC1902)	SBX8035-H
38	Button(-)	CAC5930	78	IC(IC302)	TDA7384
39	Button(EQ)	CAC6135	79	Transistor(Q904)	2SD2396
40	Button(+)	CAC5783	80	Sheet	CWM6292
			81	Sheet	CWM6293

(2)CONTRAST TABLE

KEH-P580/X1M/UC , KEH-P5800/X1M/UC and KEH-P5850/X1M/ES have the same construction except for the following:

Mark No. Description	Part No.		
	KEH-P580/X1M/UC	KEH-P5800/X1M/UC	KEH-P5850/X1M/ES
12 Tuner Amp Unit	CWM6108	CWM6243	CWM6244
17 FM/AM Tuner Unit	CWE1467	CWE1467	CWE1486
25 Panel	CNB2341	CNB2343	CNB2341
33 Detach Grille Assy	CXB3316	CXB3317	CXB3318
50 Keyboard Unit	CWM6254	CWM6255	CWM6256
58 Grille Unit	CXB4061	CXB4058	CXB4059

2.3 CASSETTE MECHANISM MODULE



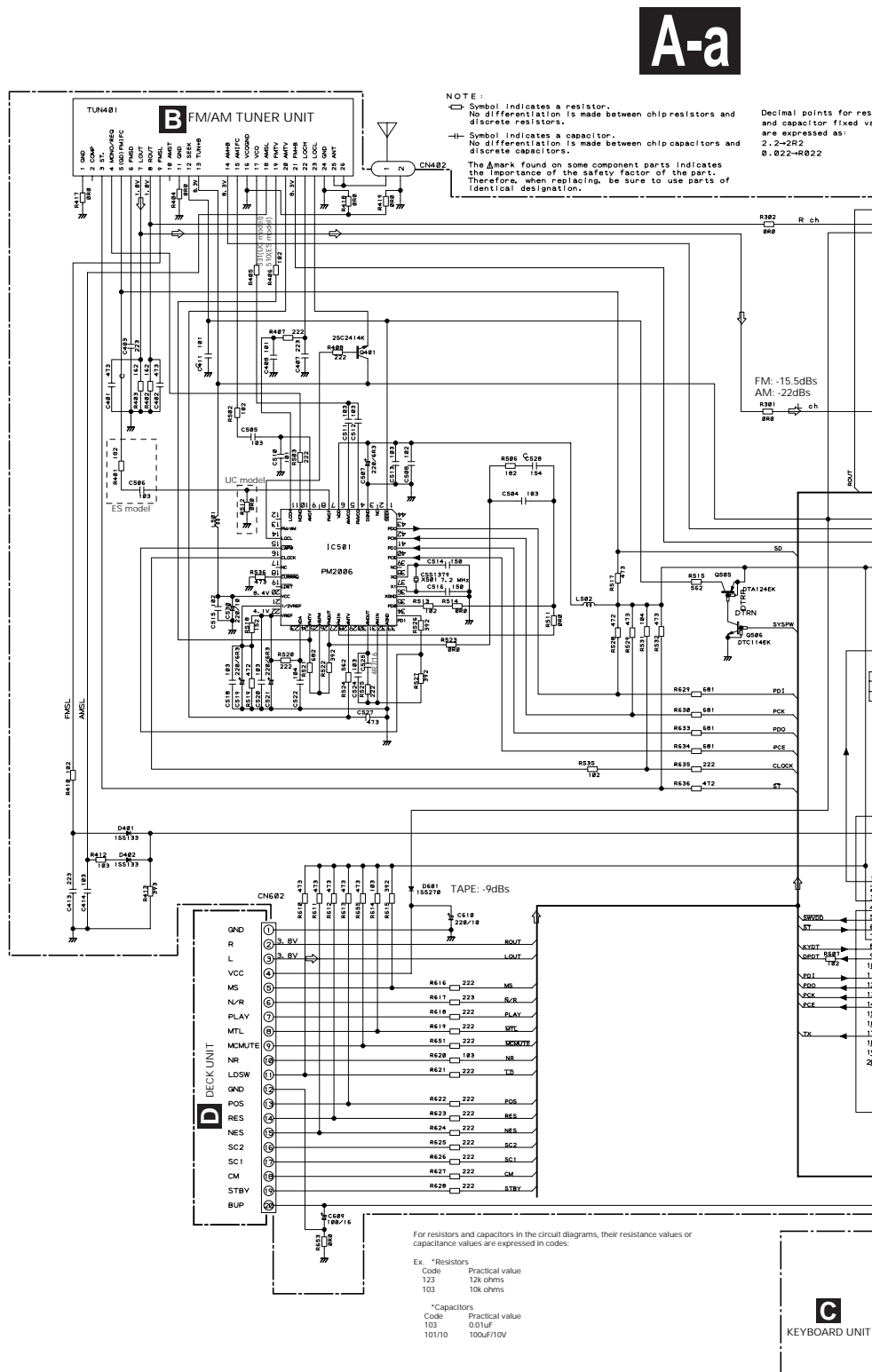
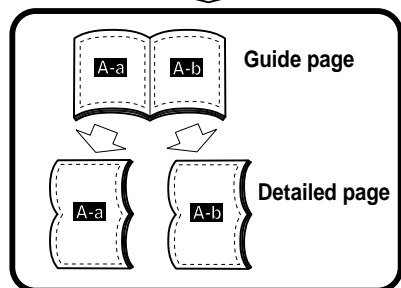
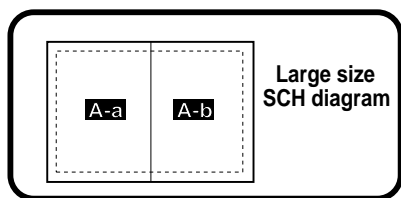
● CASSETTE MECHANISM MODULE SECTION PARTS LIST

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	EWM1018	50	Gear Unit	EXA1545
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	Spring	EBH1519	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	Arm	ENV1525			
40	Gathering PCB	ENX1037			
41	Gathering PCB	ENX1042			
42	Switch(S1,S2)	ESG1004			
43	Motor Unit(M2)	EXA1485			
44	Chassis Unit	EXA1511			
45	Pinch Holder	ENV1485			

3. SCHEMATIC DIAGRAM

3.1 OVERALL CONNECTION DIAGRAM(GUIDE PAGE)

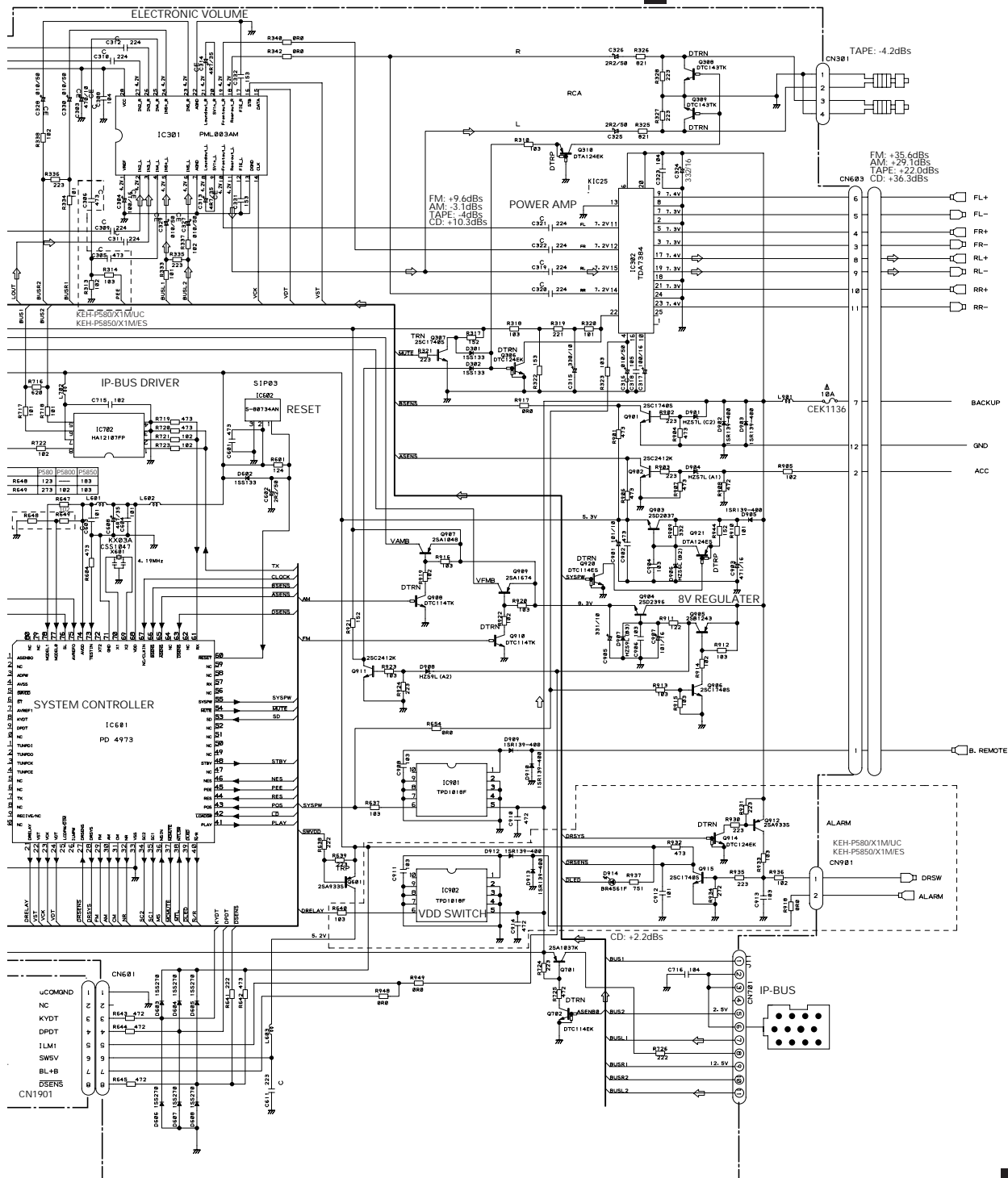
Note: When ordering service parts, be sure to refer to “EXPLODED VIEWS AND PARTS LIST” or “ELECTRICAL PARTS LIST”.

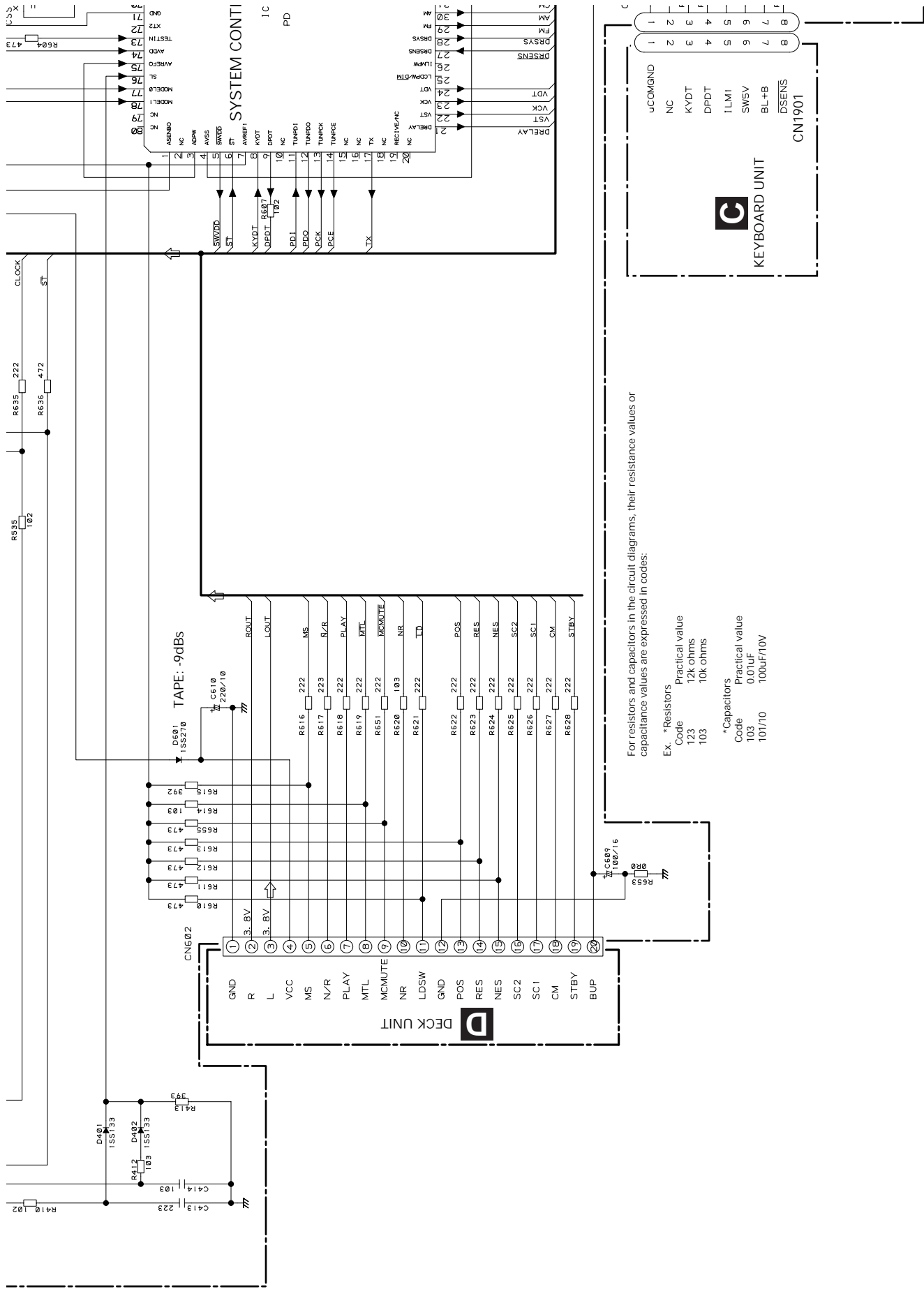


A-b

istor
alues

A TUNER AMP UNIT



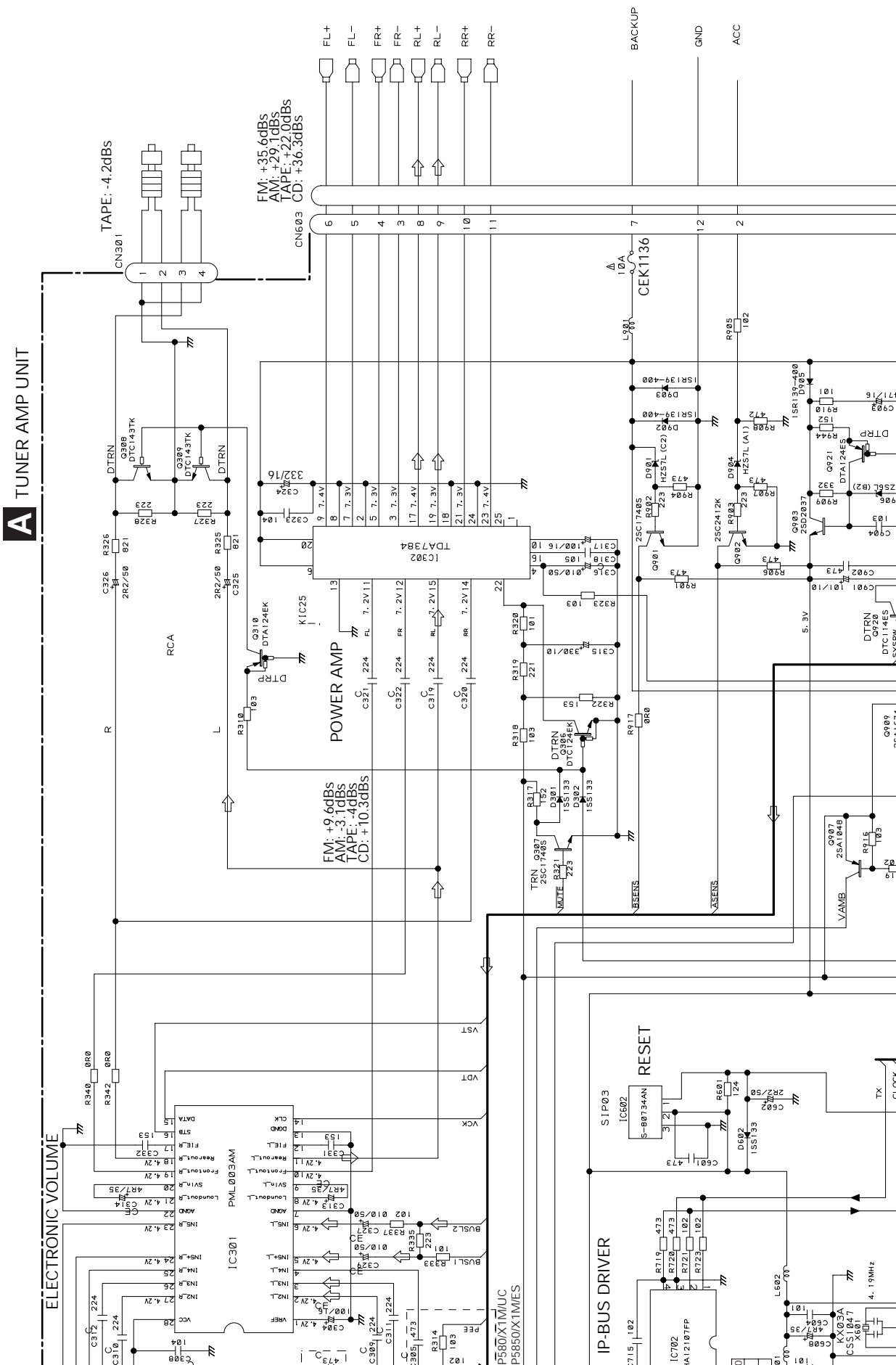


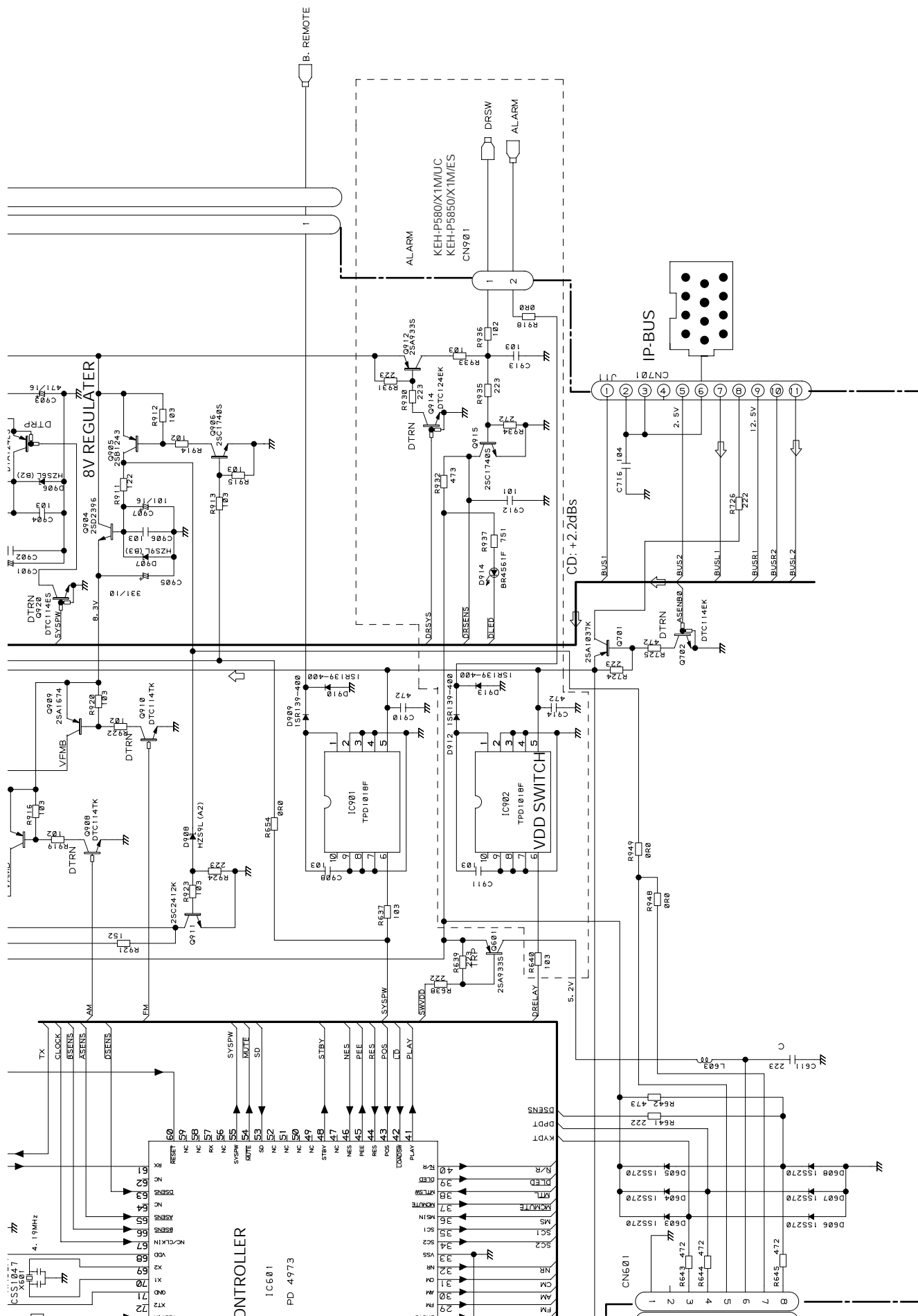
For resistors and capacitors in the circuit diagrams, their resistance values or capacitance values are expressed in codes:

Ex. *Resistors	
Code	Practical value
123	12k ohms
103	10k ohms

*Capacitors	
Code	Practical value
103	0.01uF
101/10	100uF/10V

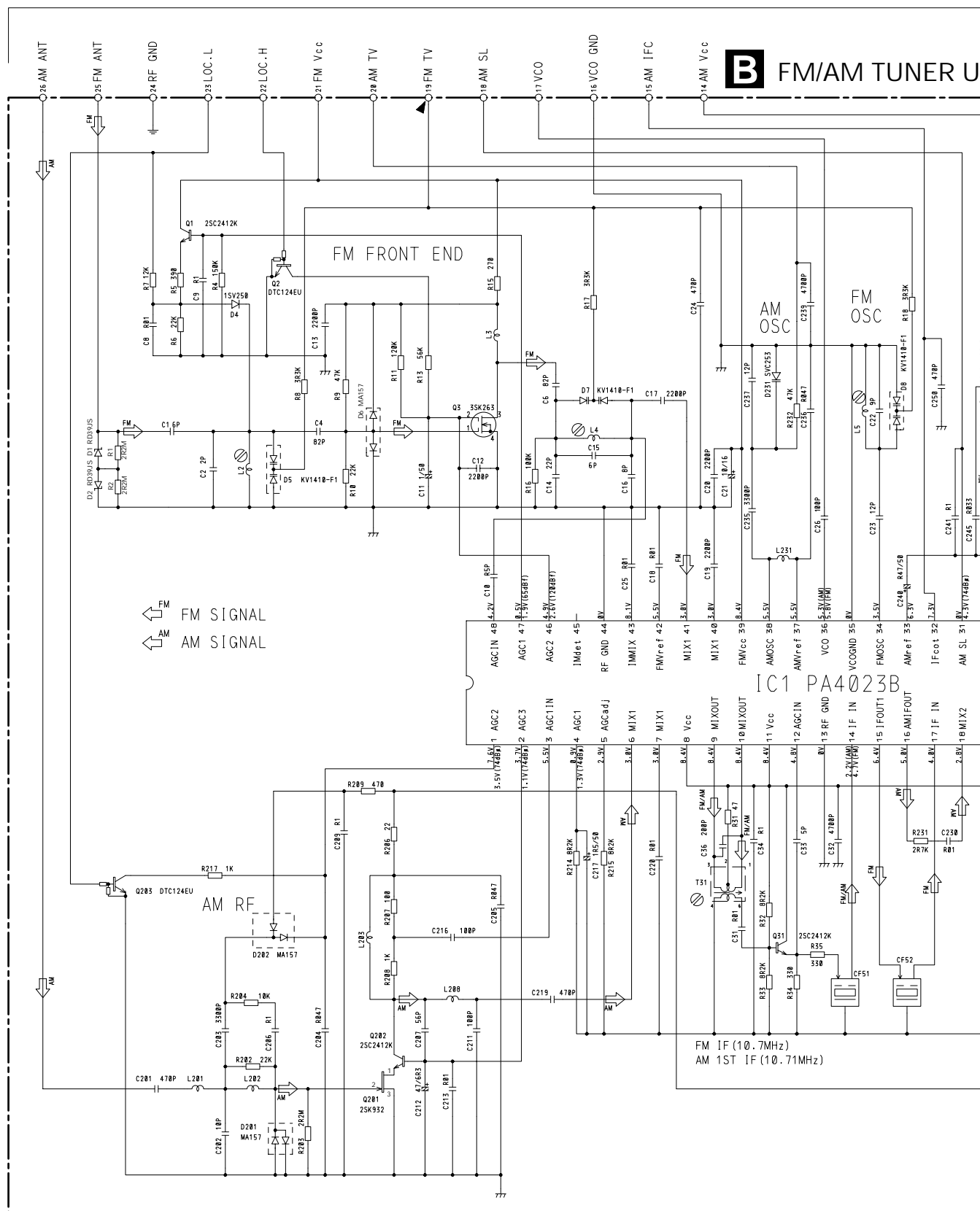
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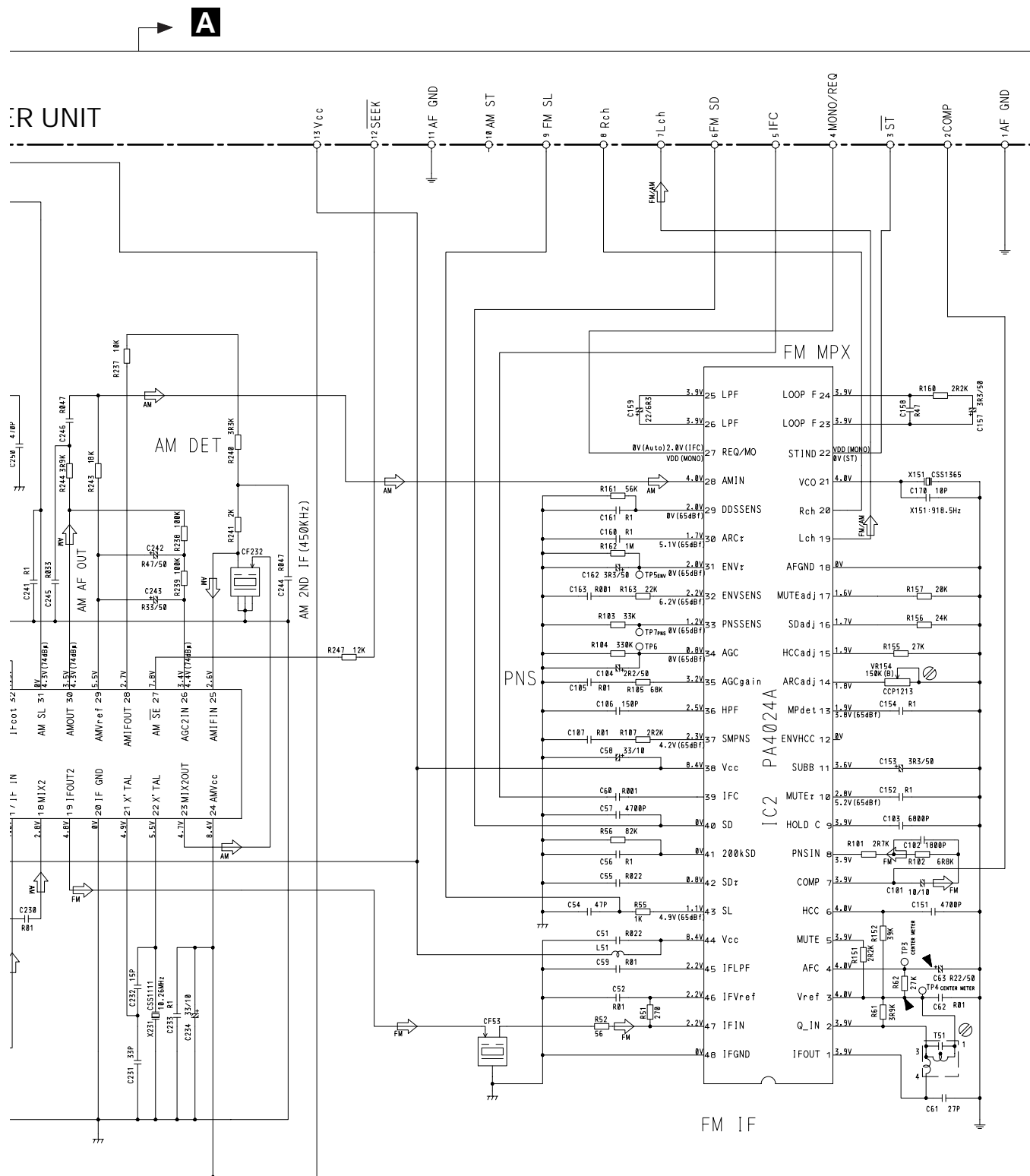


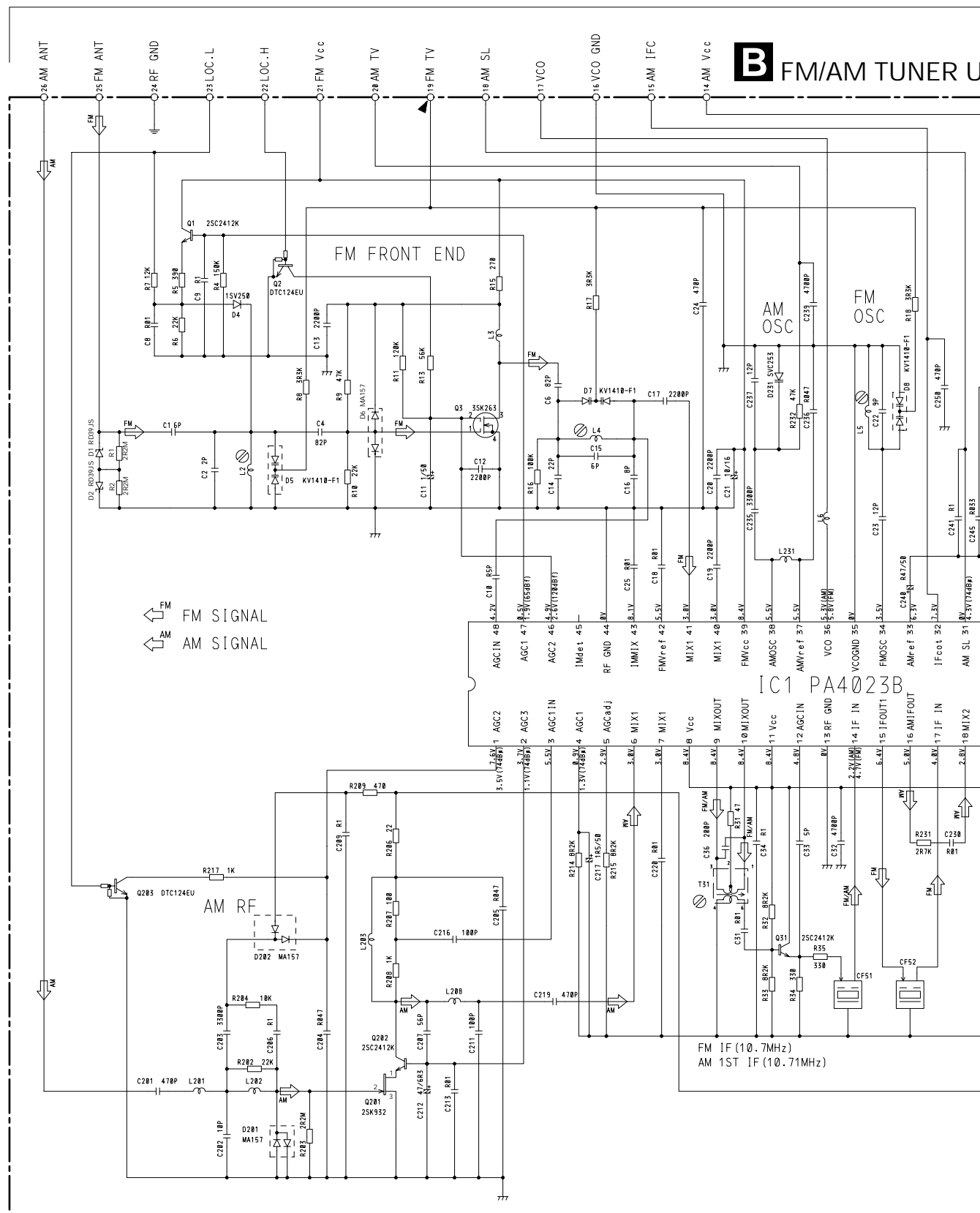


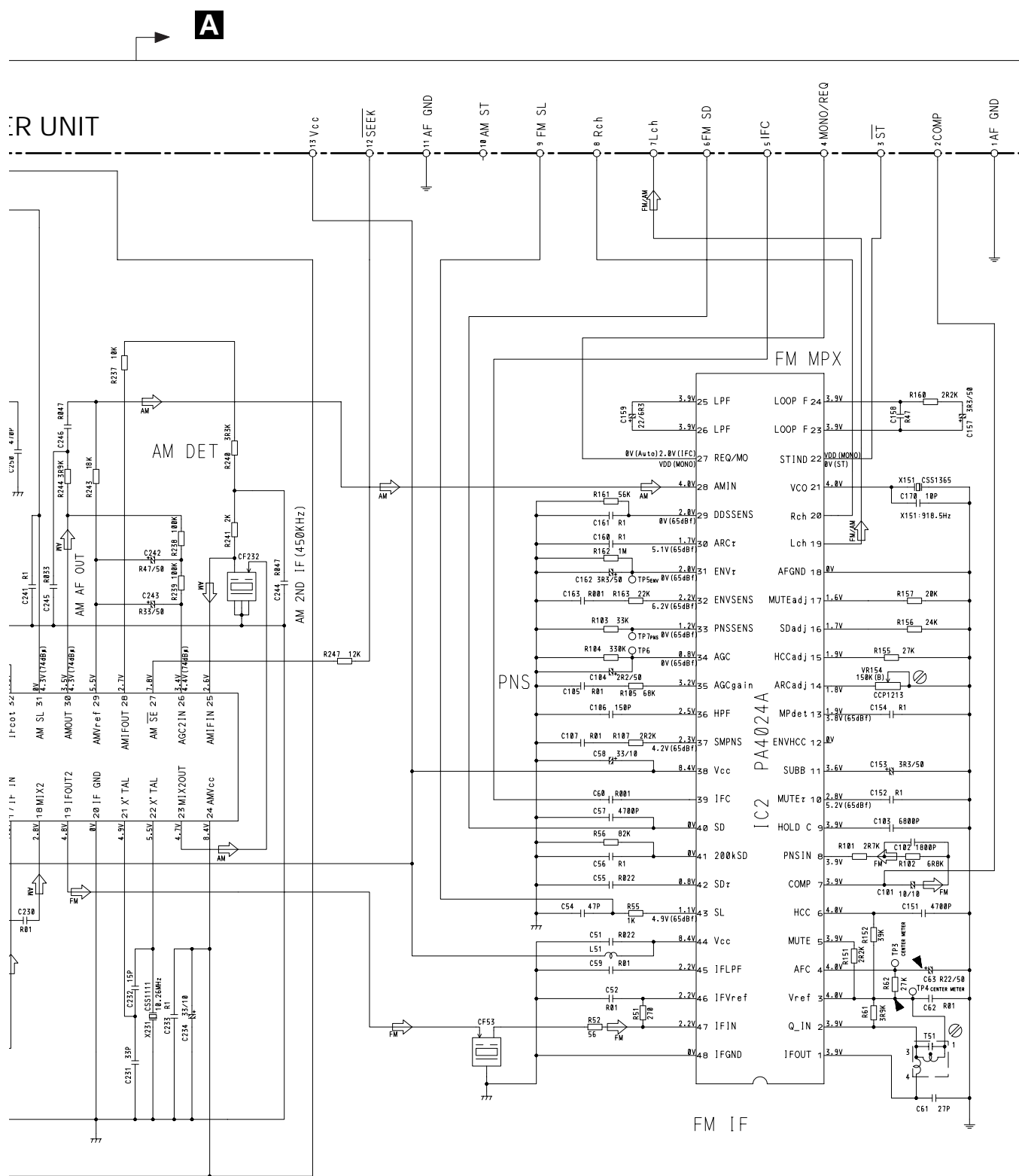
3.2 FM/AM TUNER UNIT

● KEH-P580/X1M/UC,KEH-P5800/X1M/UC





B FM/AM TUNER U



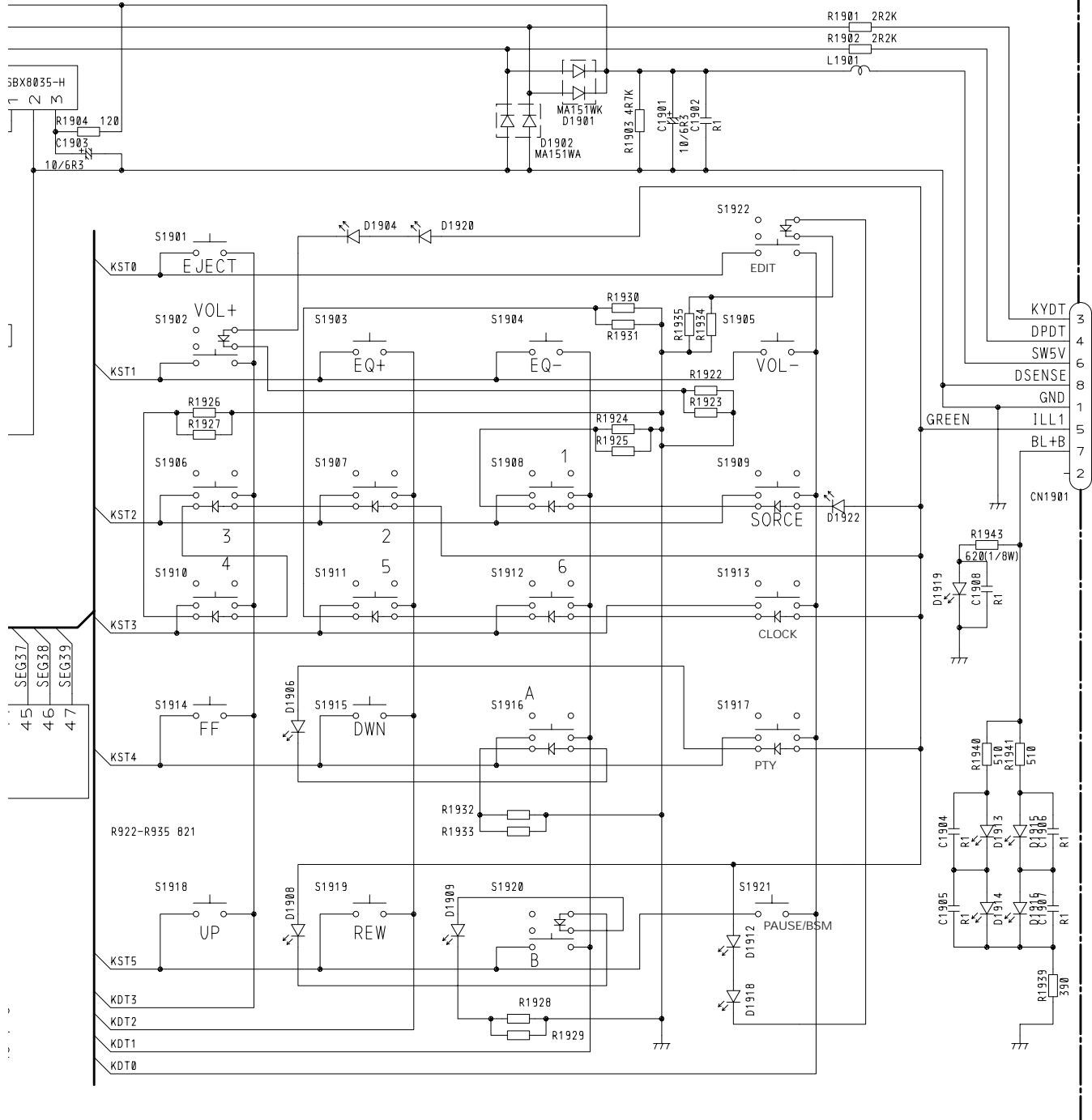
A

B

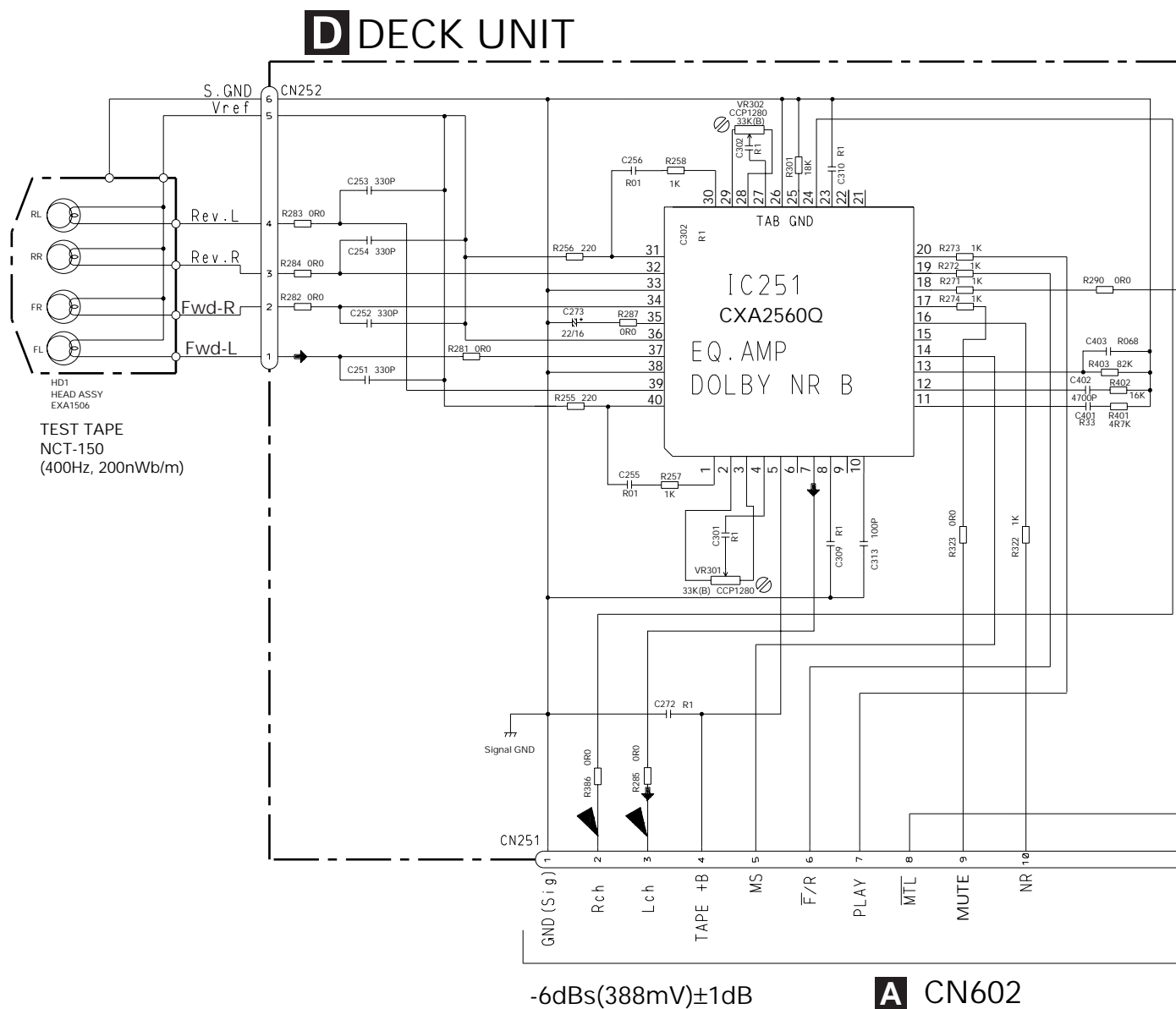
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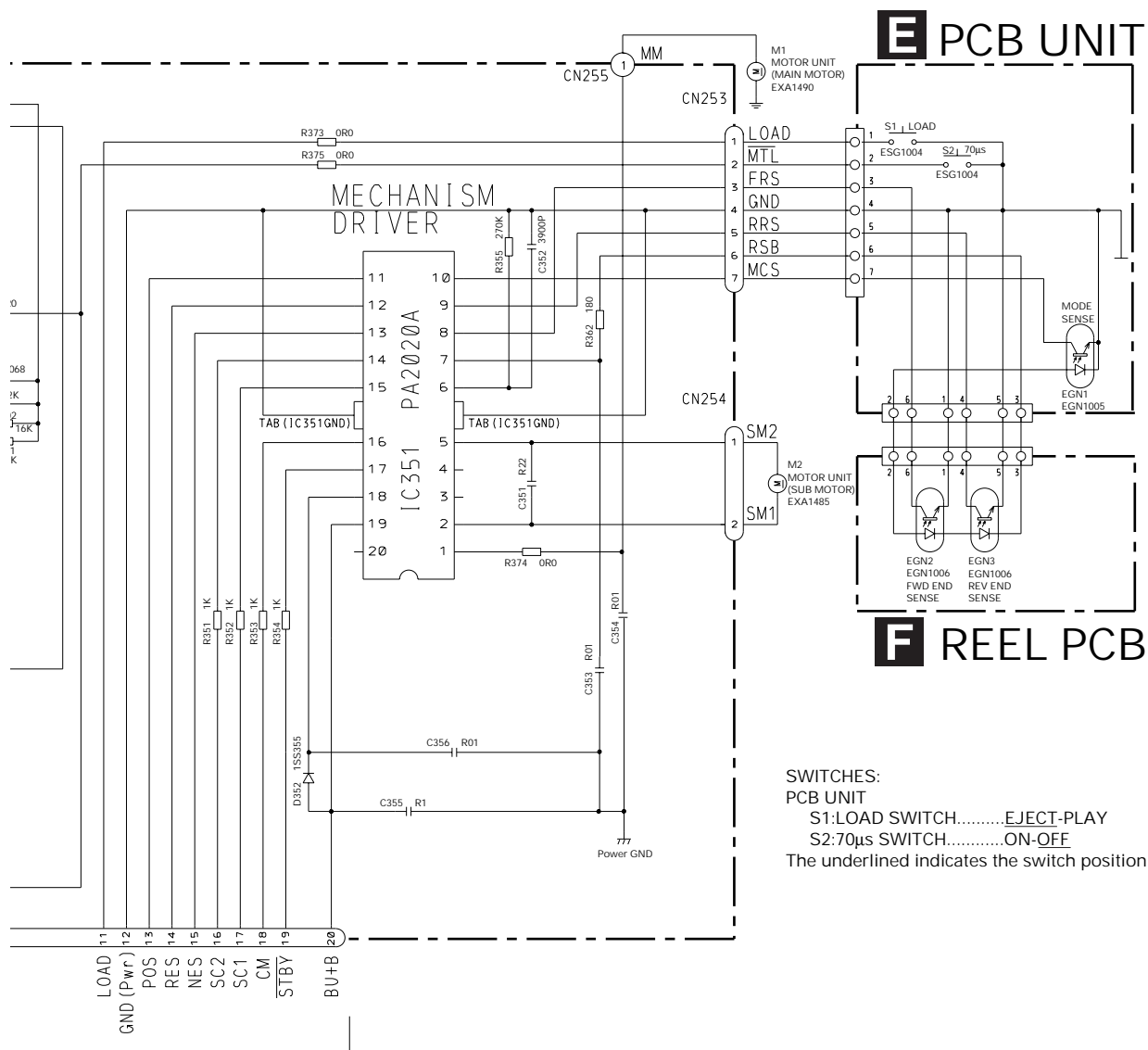
D

C KEYBOARD UNIT

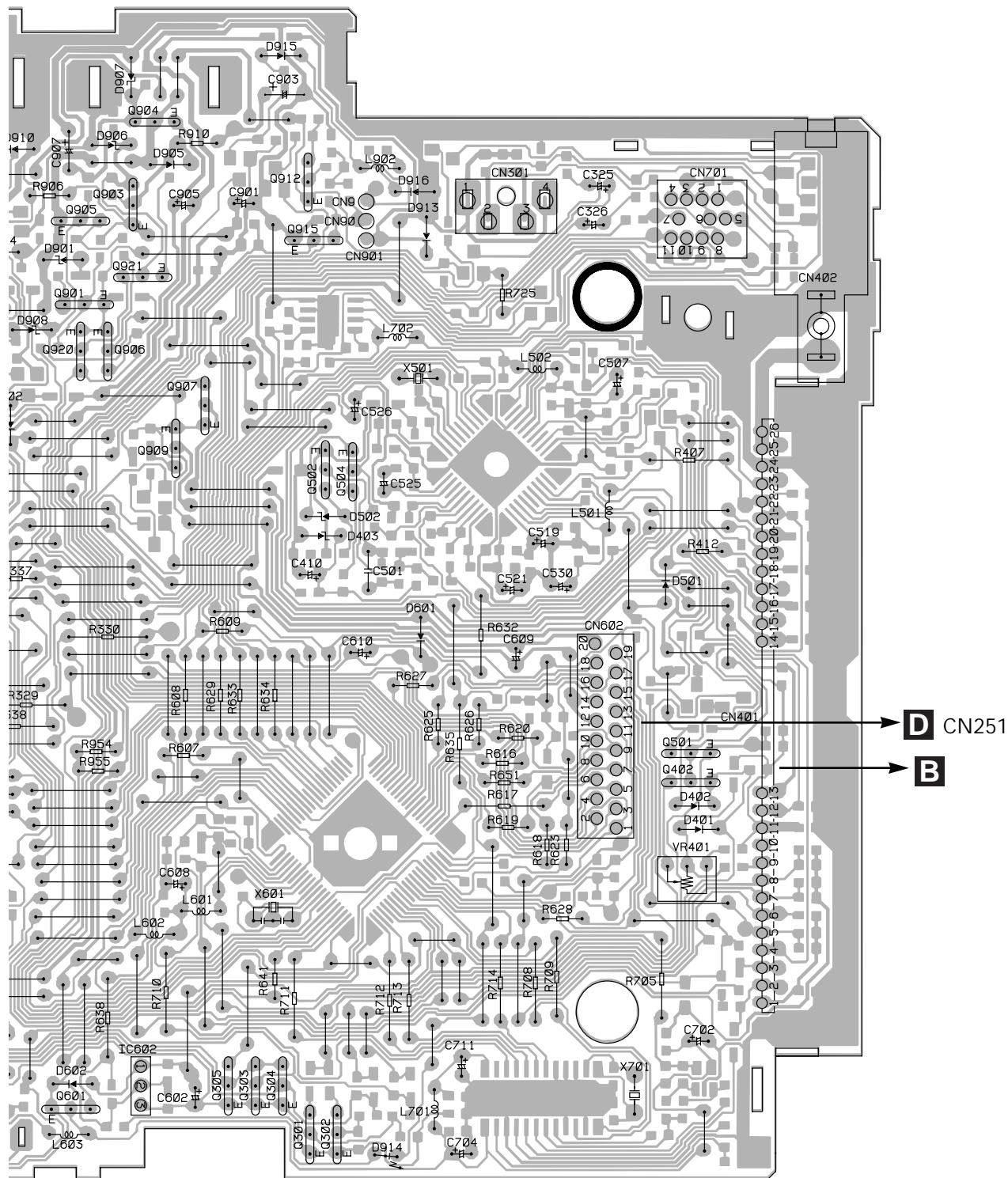


3.4 CASSETTE MECHANISM MODULE

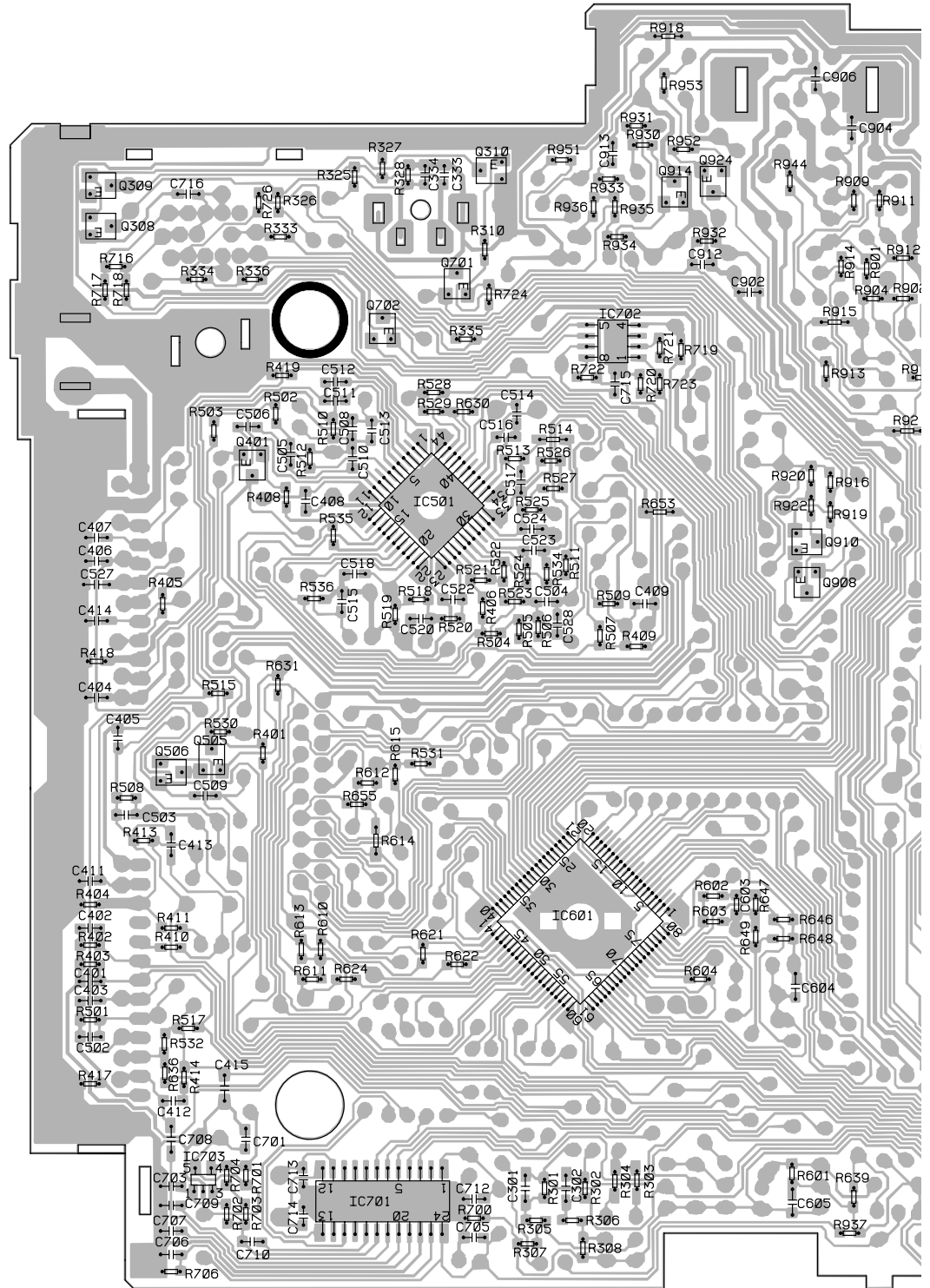




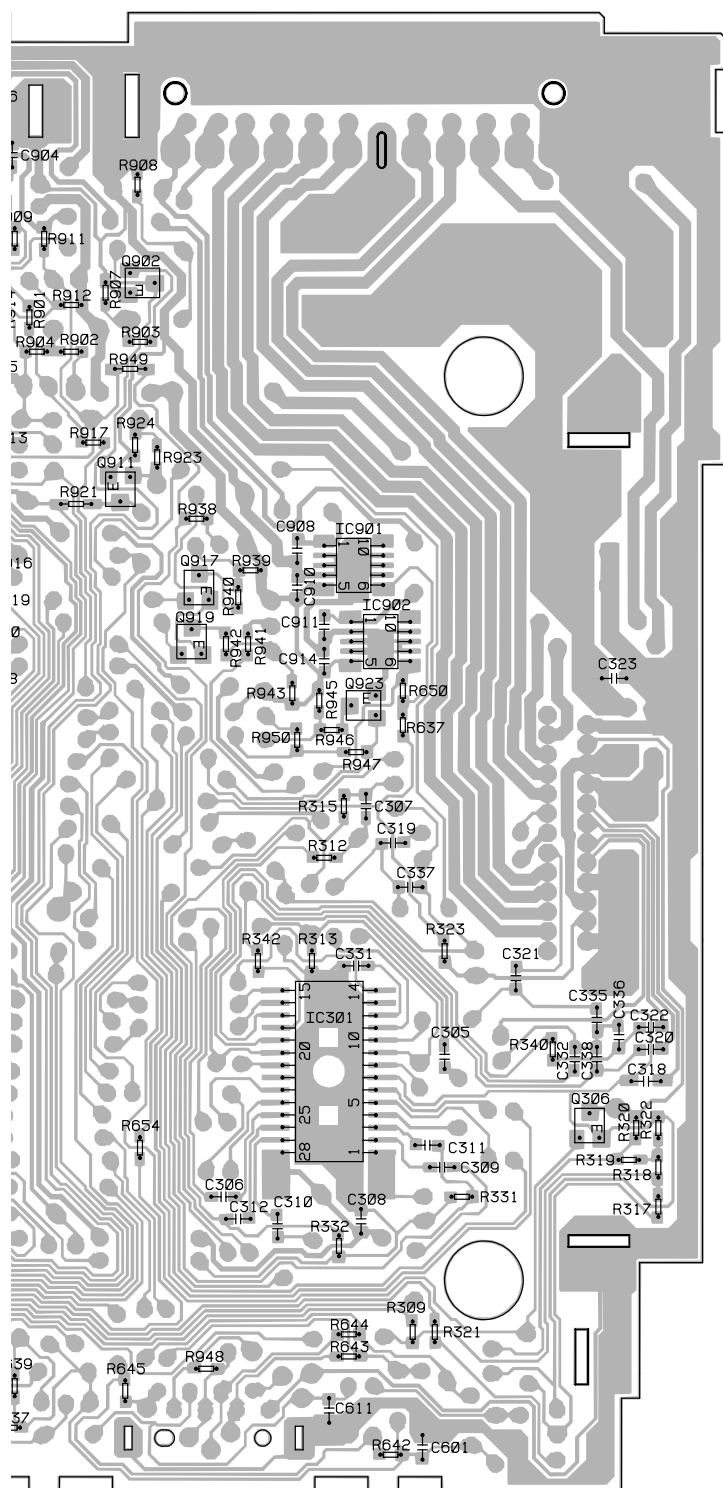
SIDE A



A TUNER AMP UNIT



SIDE B



IC, Q

Q310
Q914 Q924
Q309

Q308 Q902

Q701

Q702
IC702

Q911

Q401
IC901
Q917
IC501
IC902
Q919
Q910

Q908 Q923

Q505
Q506

IC301

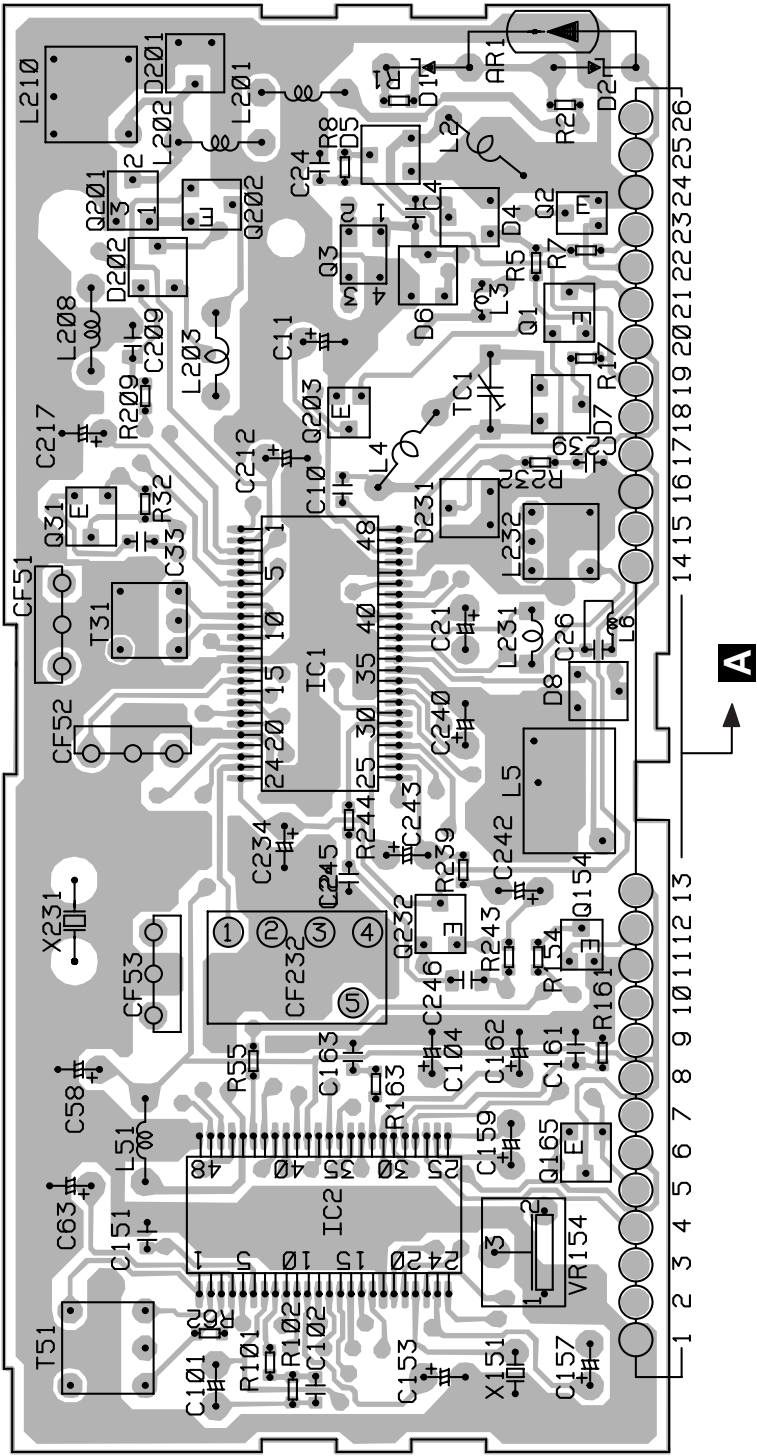
IC601
Q306

IC703
IC701

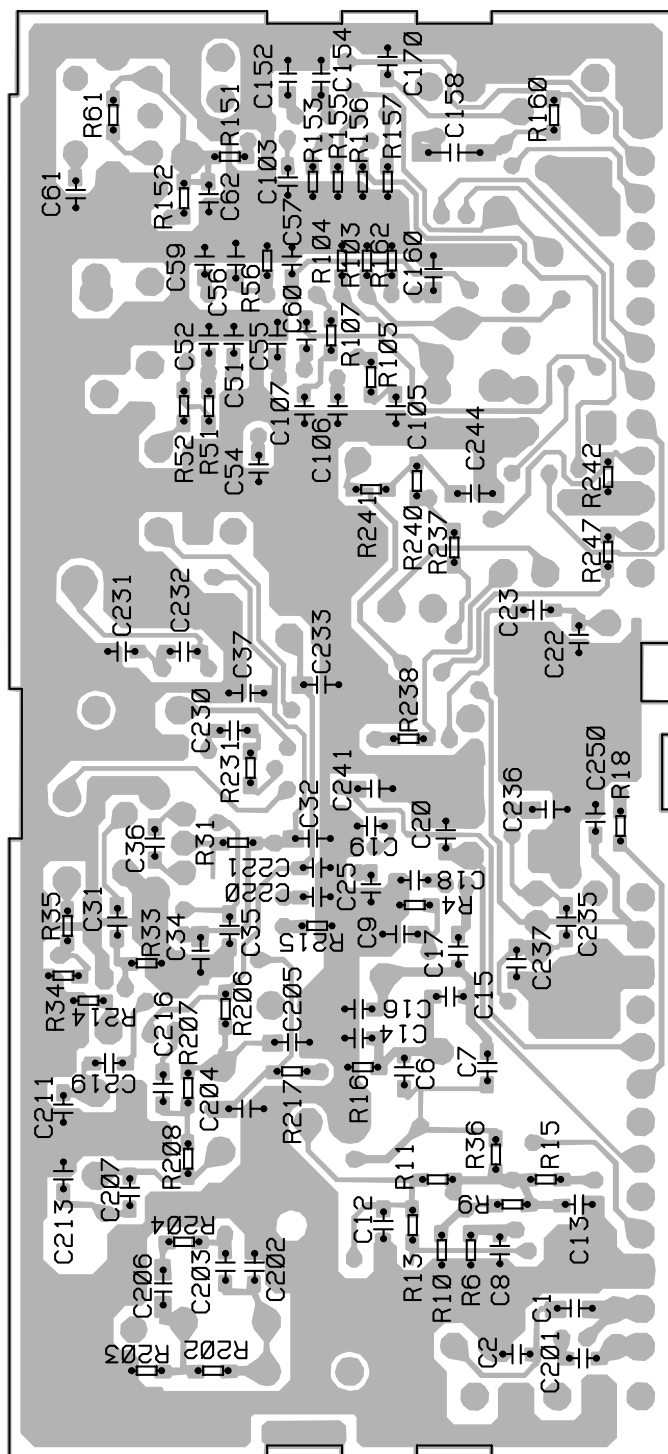
4.2 FM/AM TUNER UNIT

FM/AM TUNER UNIT

IC, Q	ADJ
Q31	T51
Q201	T31
Q202	
Q203	L4
IC2	L2
Q232	
Q1	L5
Q165	VR154
Q154	



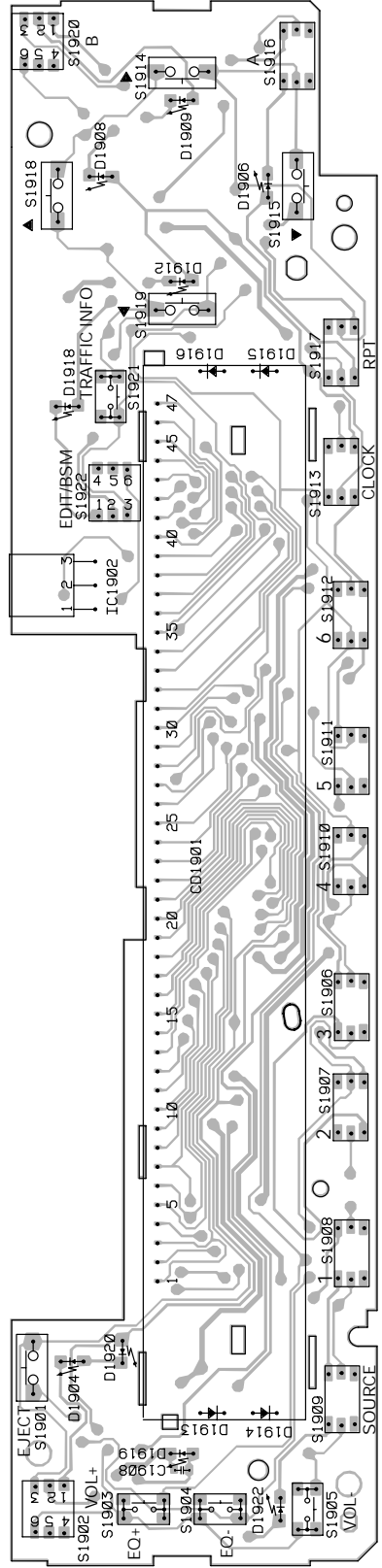
SIDE A



4.3 KEYBOARD UNIT

KEH-P580,P5800,P5850

IC: 0
IC:1902



SIDE A

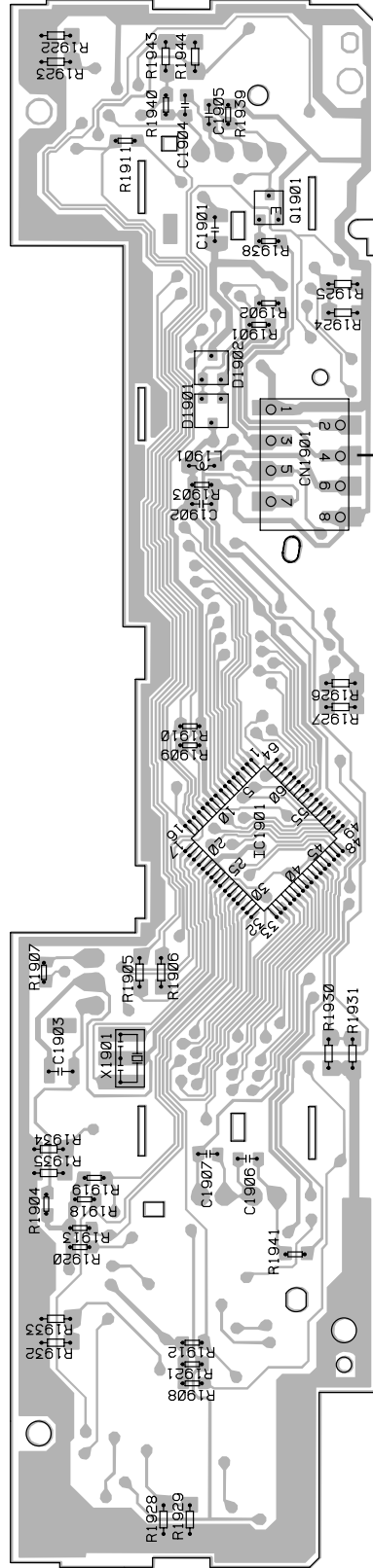
SIDE B

IC, Q

Q1901
IC1901

KEYBOARD UNIT

A CN601

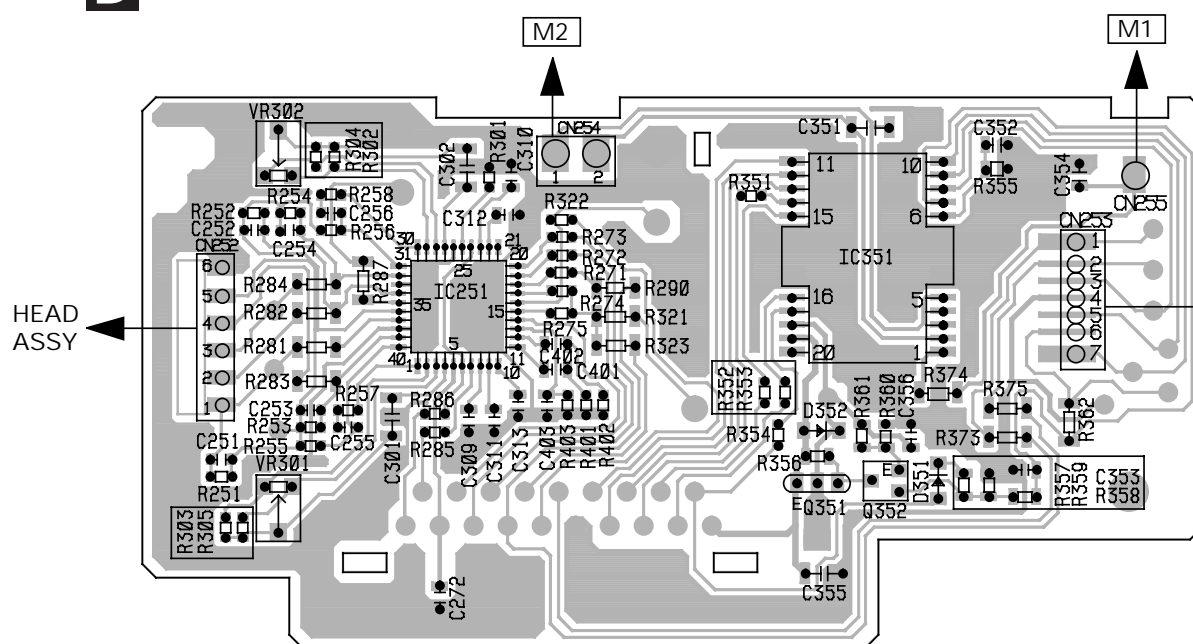


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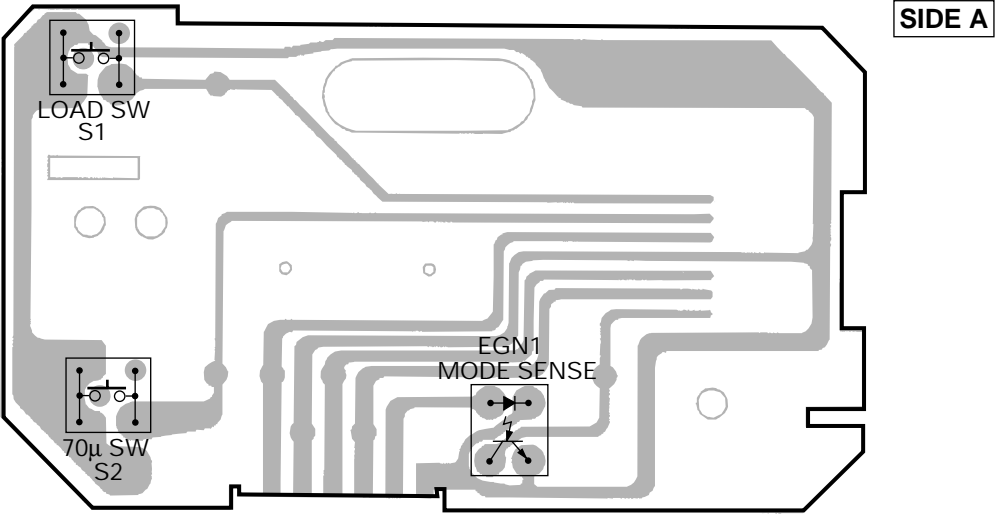
SIDE A



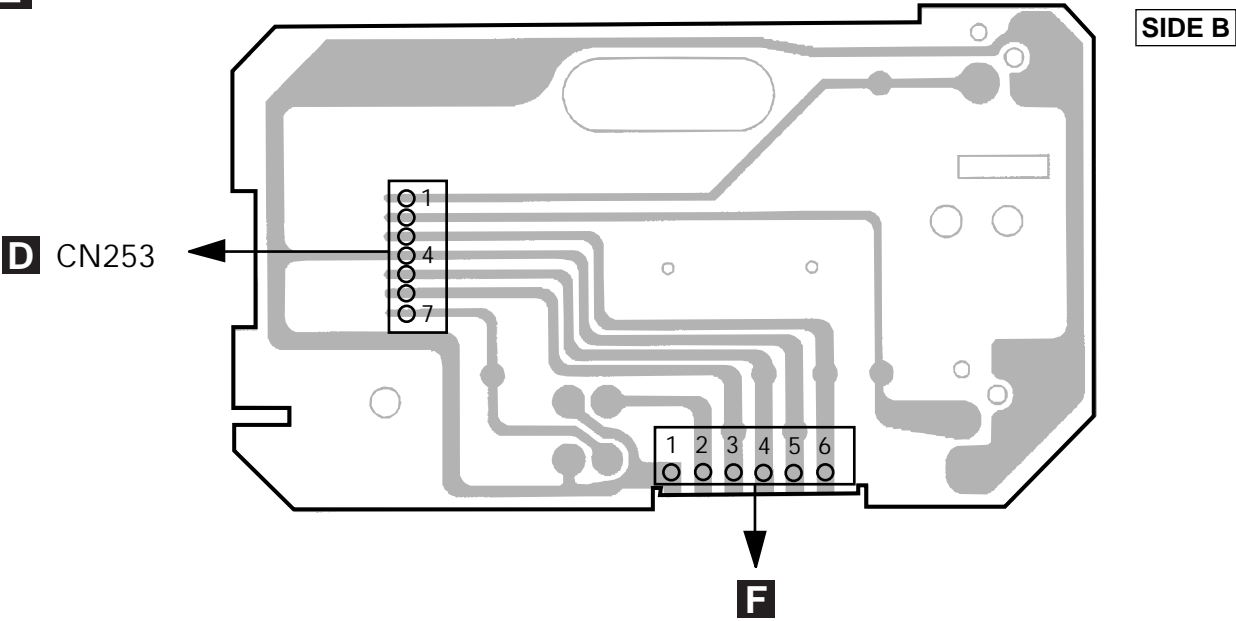
E



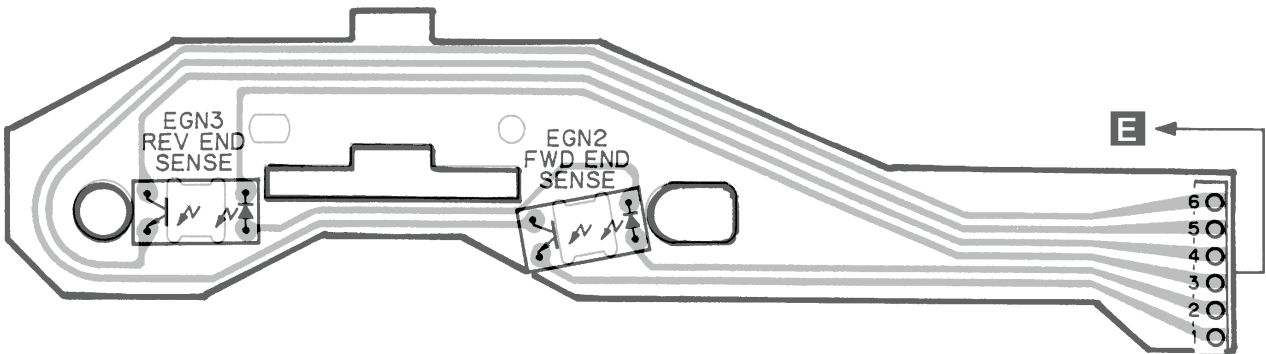
E PCB UNIT



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/○S○○○○J,RS1/○○S○○○○J

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 : CWM6108(KEH-P580/X1M/UC) CWM6243(KEH-P5800/X1M/UC) CWM6244(KEH-P5850/X1M/ES) Unit Name : Tuner Amp Unit		D 607 Diode	1SS270
		D 608 Diode	1SS270
		D 901 Diode	HZS7L(C2)
		D 902 Diode	1SR139-400
		D 903 Diode	1SR139-400
MISCELLANEOUS		D 904 Diode	HZS7L(A1)
IC 301 IC	PML003AM	D 905 Diode	1SR139-400
IC 302 IC	TDA7384	D 906 Diode	HZS6L(B2)
IC 501 IC	PM2006A	D 907 Diode	HZS9L(B3)
IC 601 IC	PD4973A	D 908 Diode	HZS9L(A2)
IC 602 IC	S-80734AN		
IC 702 IC	CA0008AM	D 909 Diode	1SR139-400
IC 901 IC	TPD1018F	D 910 Diode	1SR139-400
IC 902 IC	See Contrast table	D 912 Diode	See Contrast table
Q 306 Transistor	DTC124EK	D 913 Diode	See Contrast table
Q 307 Transistor	2SC1740S	D 914 LED	See Contrast table
Q 308 Transistor	DTC143TK	L 501 Ferri-Inductor	LAU2R2K
Q 309 Transistor	DTC143TK	L 502 Ferri-Inductor	LAU2R2K
Q 310 Transistor	DTA124EK	L 601 Ferri-Inductor	LAU2R2K
Q 401 Transistor	2SC2412K	L 602 Ferri-Inductor	LAU2R2K
Q 505 Transistor	DTA124EK	L 603 Ferri-Inductor	LAU2R2K
Q 506 Transistor	DTC114EK	L 702 Ferri-Inductor	LAU2R2K
Q 601 Transistor	2SA933S	L 901 Choke Coil 600μH	CTH1168
Q 701 Transistor	2SA1037K	X 501 Crystal Resonator 7.200MHz	CSS1379
Q 702 Transistor	DTC114EK	X 601 Ceramic Resonator 4.194MHz	CSS1047
Q 901 Transistor	2SC1740S		See Contrast table
Q 902 Transistor	2SC2412K	RESISTORS	
Q 903 Transistor	2SD2037	R 301	RS1/10S0R0J
Q 904 Transistor	2SD2396	R 302	RS1/10S0R0J
Q 905 Transistor	2SB1243	R 310	RS1/10S103J
Q 906 Transistor	2SC1740S	R 313	See Contrast table
		R 314	See Contrast table
Q 907 Transistor	2SA1048	R 315	See Contrast table
Q 908 Transistor	DTC114TK	R 317	RS1/10S152J
Q 909 Transistor	2SA1674	R 318	RS1/10S103J
Q 910 Transistor	DTC114TK	R 319	RS1/10S221J
Q 911 Transistor	2SC2412K	R 320	RS1/10S101J
Q 912 Transistor	See Contrast table		
Q 914 Transistor	See Contrast table	R 321	RS1/10S223J
Q 915 Transistor	See Contrast table	R 322	RS1/10S153J
Q 920 Transistor	DTC114ES	R 323	RS1/10S103J
Q 921 Transistor	DTA124ES	R 325	RS1/10S821J
		R 326	RS1/10S821J
D 301 Diode	1SS270	R 327	RS1/10S223J
D 302 Diode	1SS270	R 328	RS1/10S223J
D 401 Diode	1SS270	R 333	RS1/10S101J
D 402 Diode	1SS270	R 334	RS1/10S101J
D 601 Diode	1SS270	R 335	RS1/10S223J
D 602 Diode	1SS270		
D 603 Diode	1SS270	R 336	RS1/10S223J
D 604 Diode	1SS270	R 337	RD1/4PU102J
D 605 Diode	1SS270	R 338	RD1/4PU102J
D 606 Diode	1SS270	R 340	RS1/10S0R0J
		R 342	RS1/10S0R0J

====Circuit Symbol and No.==Part Name	Part No.	====Circuit Symbol and No.==Part Name	Part No.
R 401	See Contrast table	R 634	RD1/4PU681J
R 402	RS1/10S162J	R 635	RD1/4PU222J
R 403	RS1/10S162J	R 636	RS1/10S472J
R 404	RS1/10S0R0J	R 637	RS1/10S103J
R 405	See Contrast table	R 638	RD1/4PU222J
R 406	RS1/10S102J	R 639	RS1/10S223J
R 407	RD1/4PU222J	R 640	See Contrast table
R 408	RS1/10S222J	R 641	RD1/4PU222J
R 410	RS1/10S102J	R 642	RS1/10S473J
R 412	RD1/4PU103J	R 643	RS1/10S472J
R 413	RS1/10S393J	R 644	RS1/10S472J
R 417	RS1/10S0R0J	R 645	RS1/10S472J
R 418	RS1/10S0R0J	R 647	RS1/10S102J
R 419	RS1/10S0R0J	R 648	See Contrast table
R 502	RS1/10S102J	R 649	See Contrast table
R 503	RS1/10S222J	R 651	RD1/4PU222J
R 506	RS1/10S182J	R 653	RS1/8S0R0J
R 510	RS1/10S0R0J	R 654	RS1/10S0R0J
R 511	RS1/10S0R0J	R 655	RS1/10S473J
R 512	See Contrast table	R 716	RS1/10S620J
R 513	RS1/10S102J	R 717	RS1/10S101J
R 514	RS1/8S0R0J	R 718	RS1/10S101J
R 515	RS1/10S562J	R 719	RS1/10S473J
R 517	RS1/10S473J	R 720	RS1/10S473J
R 518	RS1/10S152J	R 721	RS1/10S102J
R 519	RS1/10S472J	R 722	RS1/10S102J
R 520	RS1/10S222J	R 723	RS1/10S102J
R 521	RS1/10S822J	R 724	RS1/10S223J
R 522	RS1/10S392J	R 725	RD1/4PU472J
R 523	RS1/10S0R0J	R 726	RS1/10S222J
R 524	RS1/10S562J	R 901	RS1/10S473J
R 525	RS1/10S222J	R 902	RS1/10S223J
R 526	RS1/10S392J	R 903	RS1/10S223J
R 527	RS1/10S392J	R 904	RS1/10S473J
R 528	RS1/10S472J	R 905	RD1/4PU102J
R 529	RS1/10S473J	R 906	RD1/4PU473J
R 531	RS1/10S104J	R 907	RS1/10S473J
R 532	RS1/10S473J	R 908	RS1/10S472J
R 535	RD1/4PU102J	R 909	RS1/10S332J
R 536	RS1/10S473J	R 910	RD1/4PU101J
R 601	RS1/10S124J	R 911	RS1/10S122J
R 604	RS1/10S473J	R 912	RS1/10S103J
R 607	RD1/4PU102J	R 913	RS1/10S103J
R 610	RS1/10S473J	R 914	RS1/10S102J
R 611	RS1/10S473J	R 915	RS1/10S103J
R 612	RS1/10S473J	R 916	RS1/10S103J
R 613	RS1/10S473J	R 917	RS1/10S0R0J
R 614	RS1/8S103J	R 918	See Contrast table
R 615	RS1/10S392J	R 919	RS1/10S102J
R 616	RD1/4PU222J	R 920	RS1/10S103J
R 617	RD1/4PU223J	R 921	RS1/10S152J
R 618	RD1/4PU222J	R 922	RS1/10S102J
R 619	RD1/4PU222J	R 923	RS1/10S103J
R 620	RD1/4PU103J	R 924	RS1/10S223J
R 621	RS1/10S222J	R 930	See Contrast table
R 622	RS1/10S222J	R 931	See Contrast table
R 623	RD1/4PU222J	R 932	See Contrast table
R 624	RS1/10S222J	R 933	See Contrast table
R 625	RD1/4PU222J	R 934	See Contrast table
R 626	RD1/4PU222J	R 935	See Contrast table
R 627	RD1/4PU222J	R 936	See Contrast table
R 628	RD1/4PU222J	R 937	See Contrast table
R 629	RD1/4PU681J	R 944	RS1/10S152J
R 630	RS1/10S681J	R 948	RS1/10S0R0J
R 633	RD1/4PU681J	R 949	RS1/8S0R0J

====Circuit Symbol and No.==Part Name	Part No.	====Circuit Symbol and No.==Part Name	Part No.
CAPACITORS			
C 303	CEJA470M10	C 602	CEJA2R2M50
C 304	CEJA100M16	C 603	CCSQCH101J50
C 305	See Contrast table	C 604	CCSQCH101J50
C 306	See Contrast table	C 608	CEJA4R7M35
C 308	CKSQYB104K50	C 609	CEJA100M16
C 309	CKSQYB224K16	C 610	CEJA220M10
C 310	CKSQYB224K16	C 611	CKSQYB223K50
C 311	CKSQYB224K16	C 715	CKSQYB102K50
C 312	CKSQYB224K16	C 716	CKSQYB104K50
C 313	CEJA4R7M35	C 901	CEJA101M10
C 314	CEJA4R7M35	C 902	CKSQYB473K50
C 315	CEJA330M10	C 903	CCH1183
C 316	CEJA1R0M50	C 904	CKSQYB103K50
C 317	CEJA100M16	C 905	CCH1181
C 318	CKSYB105K16	C 906	CKSQYB103K50
C 319	CKSQYB224K16	C 907	CCH1179
C 320	CKSQYB224K16	C 908	CKSQYB103K50
C 321	CKSQYB224K16	C 910	CKSQYB472K50
C 322	CKSQYB224K16	C 911	See Contrast table
C 323	CKSQYB104K50	C 912	See Contrast table
		C 913	See Contrast table
		C 914	See Contrast table
C 324	CCH1169		
C 325	CEJA2R2M50		
C 326	CEJA2R2M50		
C 327	CEJA1R0M50		
C 328	CEJA1R0M50		
C 329	CEJA1R0M50		
C 330	CEJA1R0M50		
C 331	CKSQYB153K50		
C 332	CKSQYB153K50		
C 401	CKSQYB473K50		
C 402	CKSQYB473K50		
C 403	CKSQYB223K25		
C 407	CKSQYB223K50		
C 408	CCSOSL101J50		
C 411	CCSOSL101J50		
C 413	CKSQYB223K50		
C 414	CKSQYB103K50		
C 504	CKSQYB103K50		
C 505	CKSQYB103K50		
C 506	See Contrast table		
C 507	CEJA220M6R3		
C 508	CKSQYB102K50		
C 510	CCSOSL101J50		
C 511	CKSQYB103K50		
C 512	CKSQYB103K50		
C 513	CKSQYB103K50		
C 514	CCSQCH150J50		
C 515	CKSQYB102K50		
C 516	CCSQCH150J50		
C 518	CKSQYB103K50		
C 519	CEJA220M6R3		
C 520	CKSQYB103K50		
C 521	CEJA220M6R3		
C 522	CKSQYB104K50		
C 524	CKSQYB103K50		
C 525	CCH1250		
C 527	CKLSR473K16		
C 528	CKSQYB154K16		
C 530	CEJA220M10		
C 601	CKSQYB473K50		

CONTRAST TABLE of TUNER AMP UNIT

KEH-P580/X1M/UC , KEH-P5800/X1M/UC and KEH-P5750/X1M/ES have the same construction except for the following:

Symbol and Description	Part No.		
	KEH-P580/X1M/UC	KEH-P5800/X1M/UC	KEH-P5850/X1M/ES
Tuner Amp Unit	CWM6108	CWM6243	CWM6244
FM/AM Tuner Unit	CWE1467	CWE1467	CWE1486
IC902 IC	TPD1018F	Not used	TPD1018F
Q912 Transistor	2SA933S	Not used	2SA933S
Q914 Transistor	DTC124EK	Not used	DTC124EK
Q915 Transistor	2SC1740S	Not used	2SC1740S
D912 Diode	1SR139-400	Not used	1SR139-400
D913 Diode	1SR139-400	Not used	1SR139-400
D914 LED	BR4361F	Not used	BR4361F
R313	RS1/10S102J	Not used	RS1/10S102J
R314	RD1/4PU103J	Not used	RD1/4PU103J
R315	Not used	Not used	RS1/10S123J
R401	Not used	Not used	RS1/10S182J
R405	RS1/10S331J	RS1/10S331J	RS1/10S510J
R512	RS1/10S0R0J	RS1/10S0R0J	Not used
R640	RD1/4PU103J	Not used	RD1/4PU103J
R648	RS1/10S122J	Not used	RS1/10S182J
R649	RS1/10S272J	RS1/10S102J	RS1/10S102J
R918	RS1/8S0R0J	Not used	RS1/8S0R0J
R930	RS1/10S223J	Not used	RS1/10S223J
R931	RS1/10S223J	Not used	RS1/10S223J
R932	RS1/10S473J	Not used	RS1/10S473J
R933	RS1/10S103J	Not used	RS1/10S103J
R934	RS1/10S272J	Not used	RS1/10S272J
R935	RS1/10S223J	Not used	RS1/10S223J
R936	RD1/4PU102J	Not used	RD1/4PU102J
R937	RS1/10S751J	Not used	RS1/10S751J
C305	CKSQYB473K50	Not used	CKSQYB473K50
C306	CKSQYB473K50	Not used	CKSQYB473K50
C506	Not used	Not used	CKSQYB103K50
C911	CKSQYB103K50	Not used	CKSQYB103K50
C912	CCSQSL101J50	Not used	CCSQSL101J50
C913	CKSQYB103K50	Not used	CKSQYB103K50
C914	CKSQYB472K50	Not used	CKSQYB472K50

====Circuit Symbol and No.===Part Name	Part No.	====Circuit Symbol and No.===Part Name	Part No.
C Unit Number : CWM6254(KEH-P580/X1M/UC)	D 1920 LED	CL170PGCD	
CWM6255(KEH-P5800/X1M/UC)	D 1922 LED	CL170PGCD	
CWM6256(KEH-P5850/X1M/ES)	L 1901 Inductor	LCTB101K2125	
Unit Name : Keyboard Unit	X 1901 Ceramic Resonator 4.97MHz	CSS1422	
	S 1901 Switch	CSG1041	
MISCELLANEOUS	S 1902 Switch	CSG1107	
IC 1901 IC	S 1903 Switch	CSG1111	
IC 1902 IC	S 1904 Switch	CSG1111	
D 1901 Chip Diode	S 1905 Switch	CSG1111	
D 1902 Diode	S 1906 Switch	CSG1112	
D 1904 LED			
	S 1907 Switch	CSG1112	
D 1906 LED	S 1908 Switch	CSG1112	
D 1908 LED	S 1909 Switch	CSG1112	
D 1909 LED	S 1910 Switch	CSG1112	
D 1912 LED	S 1911 Switch	CSG1112	
D 1913 LED			
	S 1912 Switch	CSG1112	
D 1914 LED	S 1913 Switch	CSG1112	
D 1915 LED	S 1914 Switch	CSG1041	
D 1916 LED	S 1915 Switch	CSG1041	
D 1918 LED	S 1916 Switch	CSG1112	
D 1919 LED			

====Circuit Symbol and No.==Part Name	Part No.	====Circuit Symbol and No.==Part Name	Part No.
S 1917 Switch	CSG1112	D 2 Diode	RD39JS
S 1918 Switch	CSG1041	D 4 Diode	1SV250
S 1919 Switch	CSG1041	D 5 Diode	KV1410-F1
S 1920 Switch	CSG1107	D 6 Diode	MA157
S 1921 Switch	CSG1111	D 7 Diode	KV1410-F1
S 1922 Switch	CSG1107	D 8 Diode	KV1410-F1
LCD1901 LCD	CAW1526	D 201 Diode	MA157
RESISTORS		D 202 Diode	MA157
R 1901	RS1/10S222J	D 231 Diode	SVC253
R 1902	RS1/10S222J	L 2 Coil	CTC1133
R 1903	RS1/10S472J	L 3 Inductor	LCTB2R2K2125
R 1904	RS1/10S121J	L 4 Coil	CTC1133
R 1905	RS1/8S470J	L 5 Coil	CTC1132
		L 51 Ferri-Inductor	LAU150K
		L 201 Ferri-Inductor	LAU4R7K
R 1906	RS1/8S470J		
R 1907	RS1/10S2R2J	L 202 Ferri-Inductor	LAU330K
R 1908	RS1/10S473J	L 203 Inductor	CTF1287
R 1909	RS1/10S473J	L 208 Inductor	LAU121K
R 1910	RS1/10S473J	L 231 Inductor	LCTA3R3J3225
		T 31 Coil	CTE1117
R 1911	RS1/10S473J	T 51 Coil	CTC1159
R 1912	RS1/10S473J	CF 51 Ceramic Filter	CTF1441
R 1913	RS1/10S473J	CF 52 Ceramic Filter	CTF1441
R 1922	RS1/8S821J	CF 53 Ceramic Filter	CTF1441
R 1923	RS1/8S821J	CF 232 Ceramic Filter	CTF1348
R 1924	RS1/8S821J	X 151 Radiator 918.5Hz	CSS1365
R 1925	RS1/8S821J	X 231 Crystal Resonator 10.26MHz	CSS1111
R 1926	RS1/8S821J	VR 154 Semi-fixed 150kΩ(B)	CCP1213
R 1927	RS1/8S821J		
R 1928	RS1/8S821J	RESISTORS	
R 1929	RS1/8S821J	R 1	RS1/16S225J
R 1930	RS1/8S821J	R 2	RS1/16S225J
R 1931	RS1/8S821J	R 4	RS1/16S154J
R 1932	RS1/8S821J	R 5	RS1/16S391J
R 1933	RS1/8S821J	R 6	RS1/16S223J
R 1934	RS1/8S821J	R 7	RS1/16S123J
R 1935	RS1/8S821J	R 8	RS1/16S332J
R 1939	RS1/10S391J	R 9	RS1/16S473J
R 1940	RS1/10S511J	R 10	RS1/16S223J
R 1941	RS1/10S511J	R 11	RS1/16S124J
R 1943	RS1/8S621J	R 13	RS1/16S563J
		R 15	RS1/16S271J
CAPACITORS		R 16	RS1/16S104J
		R 17	RS1/16S332J
C 1901	CEH100M6R3	R 18	RS1/16S332J
C 1902	CKSQYB104K16		
C 1903	CEH100M6R3	R 31	RS1/16S470J
C 1904	CKSQYF104Z50	R 32	RS1/16S822J
C 1905	CKSQYF104Z50	R 33	RS1/16S822J
		R 34	RS1/16S331J
C 1906	CKSQYF104Z50	R 35	RS1/16S331J
C 1907	CKSQYF104Z50		
C 1908	CKSRYB104K16	R 51	RS1/16S271J
		R 52	RS1/16S560J
		R 55	RS1/16S102J
		R 56	RS1/16S823J
		R 61	RS1/16S392J
MISCELLANEOUS			
IC 1 IC	PA4023B	R 62	RS1/16S273J
IC 2 IC	PA4024A	R 101	RS1/16S272J
Q 1 Transistor	2SC2412K	R 102	RS1/16S682J
Q 2 Transistor	DTC124EU	R 103	RS1/16S333J
Q 3 FET	3SK263	R 104	RS1/16S334J
Q 31 Transistor	2SC2412K	R 105	RS1/16S683J
Q 201 FET	2SK932	R 107	RS1/16S222J
Q 202 Transistor	2SC2412K	R 151	RS1/16S222J
Q 203 Transistor	DTC124EU	R 152	RS1/16S393J
D 1 Diode	RD39JS	R 155	RS1/16S273J

B Number : CWE1467(UC model)
Unit Name : FM/AM Tuner Unit

====Circuit Symbol and No.==Part Name	Part No.	====Circuit Symbol and No.==Part Name	Part No.
R 156	RS1/16S243J	C 59	CKSBRYB103K25
R 157	RS1/16S203J	C 60	CKSBRYB102K50
R 160	RS1/16S222J	C 61	CCSRCH270J50
R 161	RS1/16S563J	C 62	CKSBRYB103K25
R 162	RS1/16S105J	C 63	CEJAR22M50
R 163	RS1/16S223J	C 101	CEJANP100M10
R 202	RS1/16S223J	C 102	CKSBRYB182K50
R 203	RS1/16S225J	C 103	CKSBRYB682K25
R 204	RS1/16S103J	C 104	CEJA2R2M50
R 206	RS1/16S220J	C 105	CKSBRYB103K25
R 207	RS1/16S101J	C 106	CCSRCH151J50
R 208	RS1/16S102J	C 107	CKSBRYB103K25
R 209	RS1/16S471J	C 151	CKSBRYB472K50
R 214	RS1/16S822J	C 152	CKSQYB104K16
R 215	RS1/16S822J	C 153	CEJA3R3M50
R 217	RS1/16S102J	C 154	CKSQYB104K16
R 231	RS1/16S272J	C 157	CEJA3R3M50
R 232	RS1/16S473J	C 158	CKSYB474K16
R 237	RS1/16S103J	C 159	CEJA220M6R3
R 238	RS1/16S104J	C 160	CKSQYB104K16
R 239	RS1/16S104J	C 161	CKSQYB104K16
R 240	RS1/16S332J	C 162	CEJA3R3M50
R 241	RS1/16S202J	C 163	CKSBRYB102K50
R 243	RS1/16S183J	C 170	CCSRCH100D50
R 244	RS1/16S392J	C 201	CCSRCH471J50
R 247	RS1/16S123J	C 202	CCSRCH100D50
CAPACITORS		C 203	CKSBRYB332K50
C 1	CCSQCH6R0D50	C 204	CKSQYB473K16
C 2	CCSRCK2R0C50	C 205	CKSQYB473K16
C 4	CCSRCH820J50	C 206	CKSQYB104K16
C 6	CCSRCH820J50	C 207	CCSRCH560J50
C 8	CKSBRYB103K25	C 209	CKSQYB104K16
C 9	CKSQYB104K16	C 211	CCSRCH101J50
C 10	CCSRCKR50C50	C 212	CEJA470M6R3
C 11	CEJA1R0M50	C 213	CKSBRYB103K25
C 12	CKSBRYB222K50	C 216	CCSRCH101J50
C 13	CKSBRYB222K50	C 217	CEJA1R5M50
C 14	CCSRCH220J50	C 219	CCSRCH471J50
C 15	CCSRCH6R0D50	C 220	CKSBRYB103K25
C 16	CCSRCH8R0D50	C 230	CKSBRYB103K25
C 17	CKSBRYB222K50	C 231	CCSRCH330J50
C 18	CKSBRYB103K25	C 232	CCSRCH150J50
C 19	CKSBRYB222K50	C 233	CKSQYB104K16
C 20	CKSBRYB222K50	C 234	CEJA330M10
C 21	CEJA100M16	C 235	CKSBRYB332K50
C 22	CCSRTH9R0D50	C 236	CKSQYB473K16
C 23	CCSRTH120J50	C 237	CCSRCH120J50
C 24	CCSRCH471J50	C 239	CKSBRYB472K50
C 25	CKSBRYB103K25	C 240	CEJAR47M50
C 26	CCSRCH101J50	C 241	CKSQYB104K16
C 31	CKSBRYB103K25	C 242	CEJAR47M50
C 32	CKSQYB472K50	C 243	CEJAR33M50
C 33	CCSRCH5R0C50	C 244	CKSQYB473K16
C 34	CKSQYB104K16	C 245	CKSBRYB333K16
C 36	CCSRRH201J50	C 246	CKSQYB473K16
C 51	CKSBRYB223K25	C 250	CCSRCH471J50
C 52	CKSBRYB103K25		
C 54	CCSRCH470J50		
C 55	CKSQYB223K25		
C 56	CKSQYB104K16		
C 57	CKSBRYB472K50		
C 58	CEJA330M10		

B


Unit Number : CWE1486(ES model)
Unit Name : FM/AM Tuner Unit

MISCELLANEOUS

IC 1 IC
IC 2 IC
Q 1 Transistor
Q 2 Transistor
Q 3 FET

PA4023B
PA4024A
2SC2412K
DTC124EU
3SK263

====Circuit Symbol and No.===Part Name			Part No.	====Circuit Symbol and No.===Part Name			Part No.
Q	31	Transistor	2SC2412K	R	105		RS1/16S683J
Q	201	FET	2SK932	R	107		RS1/16S222J
Q	202	Transistor	2SC2412K	R	151		RS1/16S222J
Q	203	Transistor	DTC124EU	R	152		RS1/16S393J
D	1	Diode	RD39JS	R	155		RS1/16S273J
D	2	Diode	RD39JS	R	156		RS1/16S243J
D	4	Diode	1SV250	R	157		RS1/16S203J
D	5	Diode	KV1410-F1	R	160		RS1/16S222J
D	6	Diode	MA157	R	161		RS1/16S563J
D	7	Diode	KV1410-F1	R	162		RS1/16S105J
D	8	Diode	KV1410-F1	R	163		RS1/16S223J
D	201	Diode	MA157	R	202		RS1/16S223J
D	202	Diode	MA157	R	203		RS1/16S225J
D	231	Diode	SVC253	R	204		RS1/16S103J
L	2	Coil	CTC1133	R	206		RS1/16S220J
L	3	Inductor	LCTB2R2K2125	R	207		RS1/16S101J
L	4	Coil	CTC1133	R	208		RS1/16S102J
L	5	Coil	CTC1132	R	209		RS1/16S471J
L	6	Inductor	LCTBR15K1608	R	214		RS1/16S822J
L	51	Ferri-Inductor	LAU150K	R	215		RS1/16S822J
L	201	Ferri-Inductor	LAU4R7K	R	217		RS1/16S102J
L	202	Ferri-Inductor	LAU330K	R	231		RS1/16S272J
L	203	Inductor	CTF1287	R	232		RS1/16S473J
L	208	Inductor	LAU121K	R	237		RS1/16S103J
L	231	Inductor	LCTA3R3J3225	R	238		RS1/16S104J
T	31	Coil	CTE1117	R	239		RS1/16S104J
T	51	Coil	CTC1159	R	240		RS1/16S332J
CF	51	Ceramic Filter	CTF1441	R	241		RS1/16S202J
CF	52	Ceramic Filter	CTF1441	R	243		RS1/16S183J
CF	53	Ceramic Filter	CTF1441	R	244		RS1/16S392J
CF	232	Ceramic Filter	CTF1348	R	247		RS1/16S123J
X	151	Radiator 918.5Hz	CSS1365				
X	231	Crystal Resonator 10.26MHz	CSS1111	CAPACITORS			
VR	154	Semi-fixed 150kΩ(B)	CCP1213	C	1		CCSQCH6R0D50
RESISTORS				C	2		CCSRCK2R0C50
R	1		RS1/16S225J	C	4		CCSRCH820J50
R	2		RS1/16S225J	C	6		CCSRCH820J50
R	4		RS1/16S154J	C	8		CKSRYB103K25
R	5		RS1/16S391J	C	9		CKSQYB104K16
R	6		RS1/16S223J	C	10		CCSRCKR50C50
R	7		RS1/16S123J	C	11		CEJA1R0M50
R	8		RS1/16S332J	C	12		CKSRYB222K50
R	9		RS1/16S473J	C	13		CKSRYB222K50
R	10		RS1/16S223J	C	14		CCSRCH220J50
R	11		RS1/16S124J	C	15		CCSRCH6R0D50
R	13		RS1/16S563J	C	16		CCSRCH8R0D50
R	15		RS1/16S271J	C	17		CKSRYB222K50
R	16		RS1/16S104J	C	18		CKSRYB103K25
R	17		RS1/16S332J	C	19		CKSRYB222K50
R	18		RS1/16S332J	C	20		CKSRYB222K50
R	31		RS1/16S470J	C	21		CEJA100M16
R	32		RS1/16S822J	C	22		CCSRTH9R0D50
R	33		RS1/16S822J	C	23		CCSRTH120J50
R	34		RS1/16S331J	C	24		CCSRCH471J50
R	35		RS1/16S331J	C	25		CKSRYB103K25
R	51		RS1/16S271J	C	31		CKSRYB103K25
R	52		RS1/16S560J	C	32		CKSQYB472K50
R	55		RS1/16S102J	C	33		CCSRCH5R0C50
R	56		RS1/16S823J	C	34		CKSQYB104K16
R	61		RS1/16S392J	C	36		CCSRRH201J50
R	62		RS1/16S273J	C	51		CKSRYB223K25
R	101		RS1/16S272J	C	52		CKSRYB103K25
R	102		RS1/16S682J	C	54		CCSRCH470J50
R	103		RS1/16S333J				
R	104		RS1/16S334J				

====Circuit Symbol and No.==Part Name	Part No.	====Circuit Symbol and No.==Part Name	Part No.
C 55	CKSQYB223K25	 Unit Number : EWM1018	
C 56	CKSQYB104K16	Unit Name : Deck Unit	
C 57	CKSRYB472K50		
C 58	CEJA330M10		
C 59	CKSRYB103K25	MISCELLANEOUS	
C 60	CKSRYB102K50	IC 251 IC	CXA2560Q
C 61	CCSRCH270J50	IC 351 IC	PA2020A
C 62	CKSRYB103K25	D 352 Diode	1SS355
C 63	CEJAR22M50	VR 301 Semi-fixed 33kΩ(B)	CCP1280
C 101	CEJANP100M10	VR 302 Semi-fixed 33kΩ(B)	CCP1280
C 102	CKSRYB182K50		
C 103	CKSRYB682K25	RESISTORS	
C 104	CEJA2R2M50	R 255	RS1/16S221J
C 105	CKSRYB103K25	R 256	RS1/16S221J
C 106	CCSRCH151J50	R 257	RS1/16S102J
C 107	CKSRYB103K25	R 258	RS1/16S102J
C 151	CKSRYB472K50	R 271	RS1/16S102J
C 152	CKSQYB104K16		
C 153	CEJA3R3M50	R 272	RS1/16S102J
C 154	CKSQYB104K16	R 273	RS1/16S102J
C 157	CEJA3R3M50	R 274	RS1/16S102J
C 158	CKSYB474K16	R 281	RS1/8S0R0J
C 159	CEJA220M6R3	R 282	RS1/8S0R0J
C 160	CKSQYB104K16		
C 161	CKSQYB104K16	R 283	RS1/8S0R0J
C 162	CEJA3R3M50	R 284	RS1/8S0R0J
C 163	CKSRYB102K50	R 285	RS1/16S0R0J
C 170	CCSRCH100D50	R 286	RS1/16S0R0J
C 201	CCSRCH471J50	R 287	RS1/8S0R0J
C 202	CCSRCH100D50		
C 203	CKSRYB332K50	R 290	RS1/8S0R0J
C 204	CKSQYB473K16	R 301	RS1/16S183J
C 205	CKSQYB473K16	R 322	RS1/16S102J
C 206	CKSQYB104K16	R 323	RS1/8S0R0J
C 207	CCSRCH560J50	R 351	RS1/16S102J
C 209	CKSQYB104K16		
C 211	CCSRCH101J50	R 352	RS1/16S102J
C 212	CEJA470M6R3	R 353	RS1/16S102J
C 213	CKSRYB103K25	R 354	RS1/16S102J
C 216	CCSRCH101J50	R 355	RS1/10S274J
C 217	CEJA1R5M50	R 362	RS1/8S181J
C 219	CCSRCH471J50		
C 220	CKSRYB103K25	R 373	RS1/8S0R0J
C 230	CKSRYB103K25	R 374	RS1/8S0R0J
C 231	CCSRCH330J50	R 375	RS1/8S0R0J
C 232	CCSRCH150J50	R 401	RS1/16S472J
C 233	CKSQYB104K16	R 402	RS1/16S163J
C 234	CEJA330M10		
C 235	CKSRYB332K50	R 403	RS1/16S823J
C 236	CKSQYB473K16	CAPACITORS	
C 237	CCSRCH120J50	C 251	CKSRYB331K50
C 239	CKSRYB472K50	C 252	CKSRYB331K50
C 240	CEJAR47M50	C 253	CKSRYB331K50
C 241	CKSQYB104K16	C 254	CKSRYB331K50
C 242	CEJAR47M50	C 255	CKSRYB103K25
C 243	CEJAR33M50		
C 244	CKSQYB473K16	C 256	CKSRYB103K25
C 245	CKSRYB333K16	C 272	CKSQYB104K16
C 246	CKSQYB473K16	C 273	CEJA220M16
C 250	CCSRCH471J50	C 301	CKSYB104K50
		C 302	CKSYB104K50
		C 309	CKSQYB104K16
		C 310	CKSQYB104K16
		C 313	CCSQCH101K50
		C 351	CKSYB224K25
		C 352	CKSQYB392K50
		C 353	CKSQYB103K50
		C 354	CKSQYB103K50
		C 355	CKSYB104K50
		C 356	CKSQYB103K50
		C 401	CKSQYB334K16

====Circuit Symbol and No.==Part Name		Part No.
C	402	CKSQYB472K50
C	403	CKSQYB683K16

E Unit Number :
Unit Name : PCB Unit

S	1	Switch (Load)	ESG1004
S	2	Switch (70μS)	ESG1004
EGN	1	Photo-Interrupter	EGN1005

F Unit Number :
Unit Name : Reel PCB

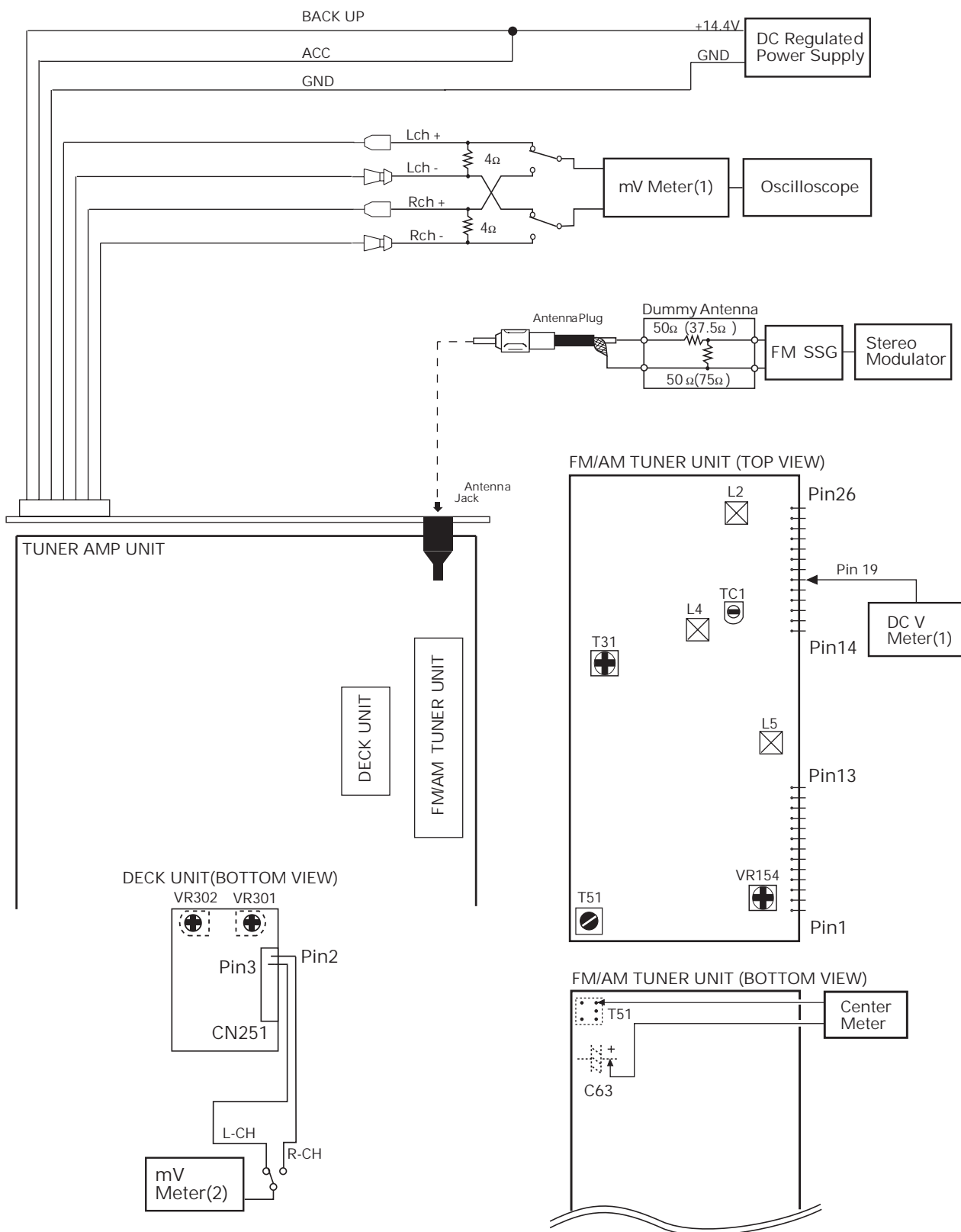
EGN	2	Photo-Interrupter	EGN1006
EGN	3	Photo-Interrupter	EGN1006

Miscellaneous Parts List

M	1	Motor Unit (Main)	EXA1490
M	2	Motor Unit (Sub)	EXA1485
HD	1	Head Assy	EXA1506

6. ADJUSTMENT

● Connection Diagram



KEH-P580,P5800,P5850

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.

FM ADJUSTMENT(UC MODEL)

	No.	FM SSG		Displayed Frequency(MHz)	Adjustment Point	Adjustment Method (Switch Position)
		Frequency(MHz)	Level(dBf)			
TUN Volt	1	.....	.....	107.9	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
IFT	5	98.1 M	5	98.1	T31	mV Meter(1) : Maximum (STEREO MODE)
ARC	6	98.1 S	40	98.1	VR154	mV Meter(1) : Separation 5dB (STEREO MODE)

FM ADJUSTMENT(ES MODEL)

	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
IFT	5	98.1 M	5	98.1	T31	mV Meter(1) : Maximum (STEREO MODE)
ARC	6	98.1 S	40	98.1	VR154	mV Meter(1) : Separation 5dB (STEREO MODE)

DOLBY B NR ADJUSTMENT

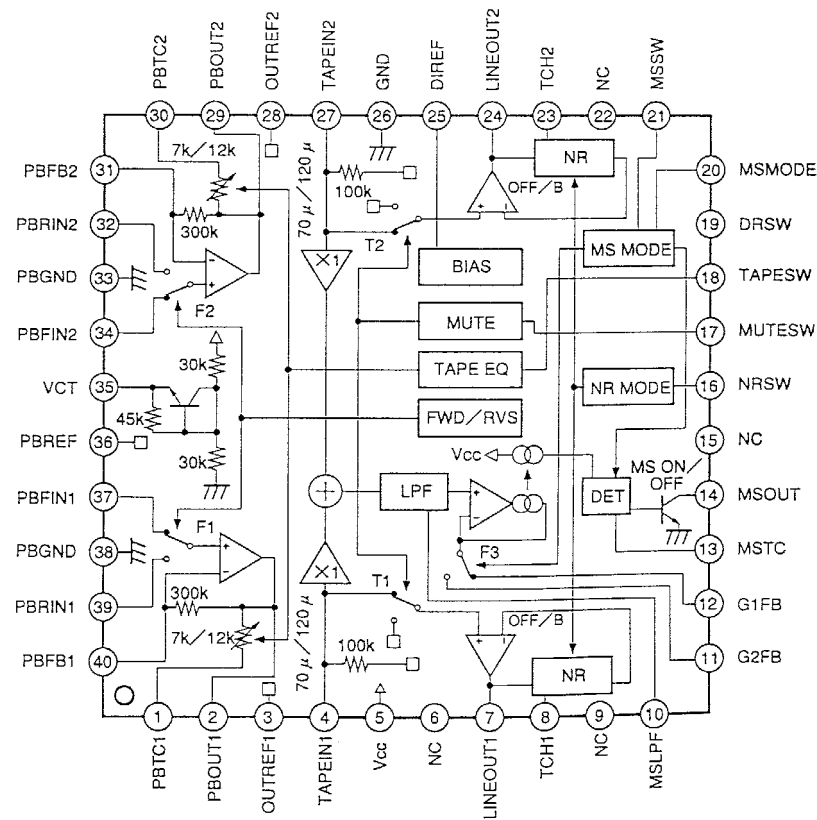
No.	Test Tape	Adjustment Point	Adjustment Method (Switch Position)
1	NCT-150 (400Hz,200nwb/m)	VR301(Lch),VR302(Rch)	mV Meter(2) : -6dBs±1.0dB (DOLBY NR Switch : OFF)

7. GENERAL INFORMATION

7.1 PARTS

7.1.1 IC

CXA2560Q

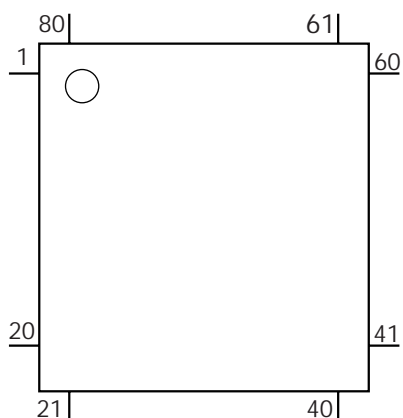


● Pin Functions(PD4973A)

Pin No.	Pin Name	I/O	Format	Function and Operation
1	ASENBO	O	C	Slave power supply control output
2	NC			Not used
3	ADPW	O	C	A/D converter power output
4	AVSS			GND
5	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
15,16	NC			Not used
17	TX	O	C	IP BUS data output
18,19	NC			Not used
20	DIMMER	O	C	Dimmer select output
21	DRELAY	O	C	Detach alarm relay 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	NR	O	C	DolbyB output
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	MCMUTE	O	N	Cassette mechanism mute output
38	MTLSW	I		Metal sense input
39	DLED	O	N	Alarm LED output
40	N/R	O	C	Normal reverse output
41	PLAY	O	C	Tape MS filter select output
42	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	NC			Not used
48	STBY	O	C	Stand-by output
49-52	NC			Not used
53	SD	I		SD input
54	MUTE	O	C	Mute output
55	SYSPW	O	C	System power supply control output
56-59	NC			Not used
60	RESET	I		Reset input
61	RX	I		IP BUS data input
62	NC			Not used
63	DSENS	I		Grille detach sense input
64	TELIN	I		TEL mute signal input
65	ASENS	I		ACC power sense input
66	BSENS	I		Back up power sense input
67	CLKIN	I		Clock input

Pin No.	Pin Name	I/O	Format	Function and Operation
68	VDD			VDD
69	X2			Oscillator output
70	X1			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	MODEL0	I		Model select input
78	MODEL1	I		Model select input
79,80	NC			Not used

*PD4973A

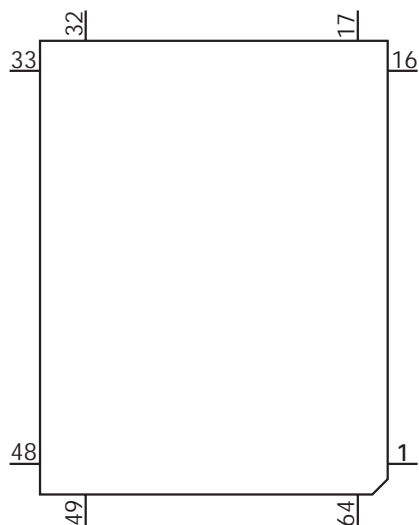


Format	Meaning
C	C MOS
N	N Channel open drain

IC's marked by* are MOS type.

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

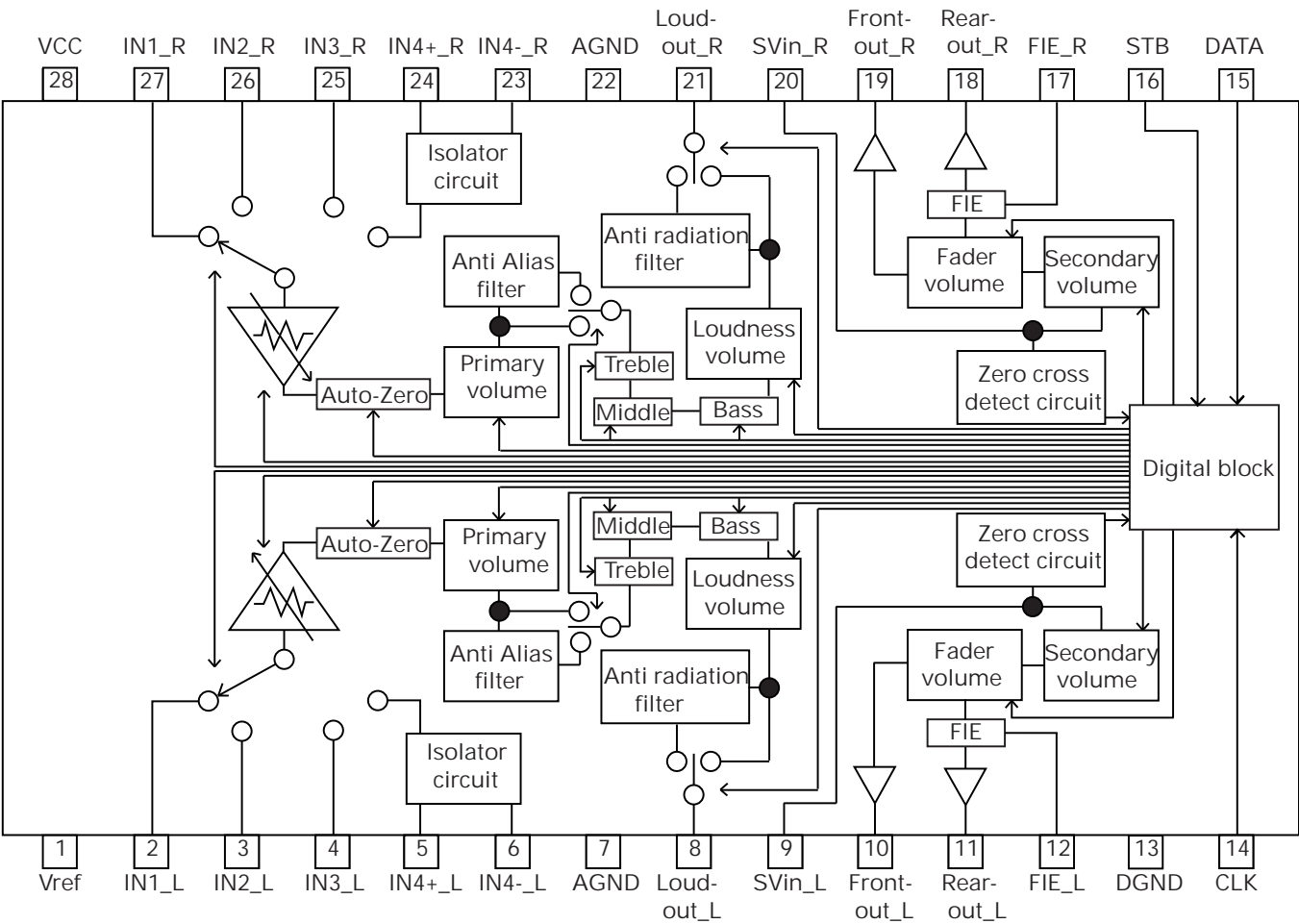
*PD6278A



● 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

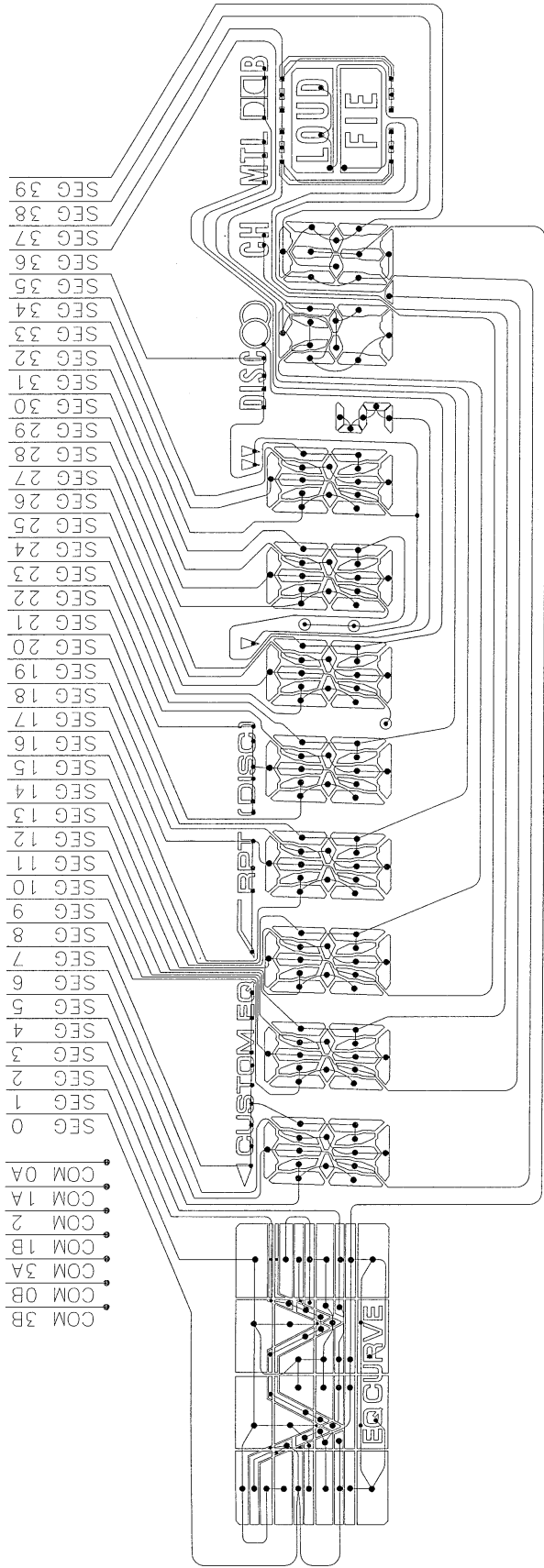
PML003AM



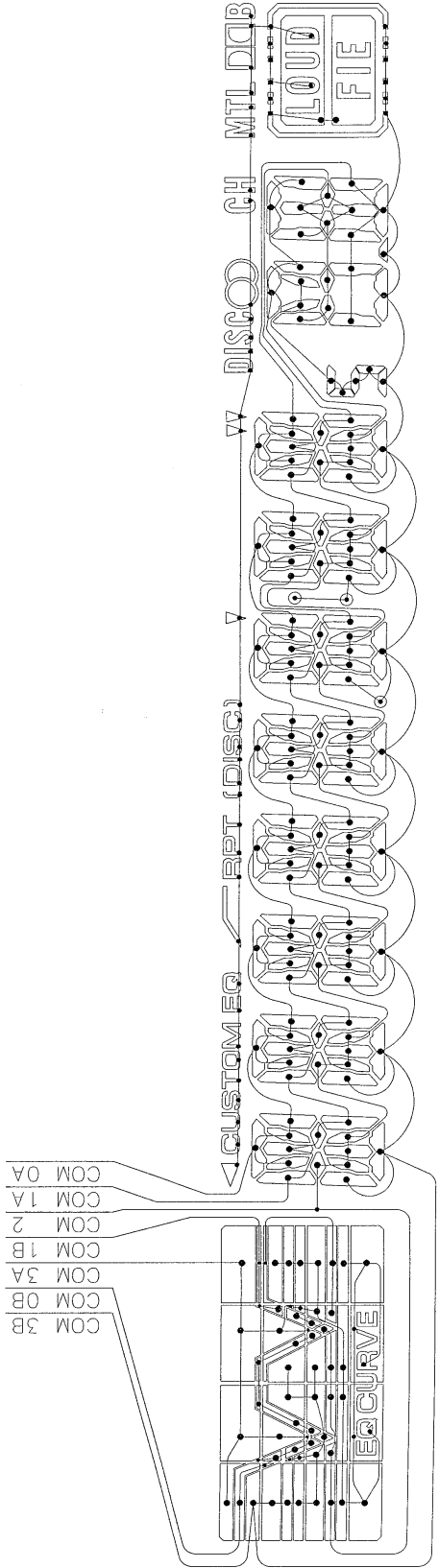
7.1.2 DISPLAY

● CAW1526

SEGMENT



COMMON



7.2 DISASSEMBLY

● Removing the Case(not shown)

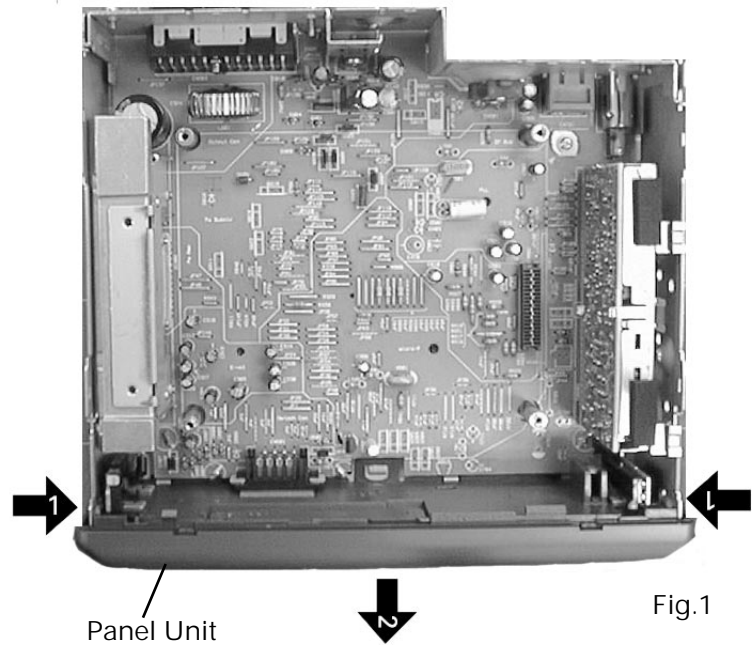
- 1.Remove the two screws.
2. Remove the Case.

● Removing the Cassette Mechanism Module (not shown)

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

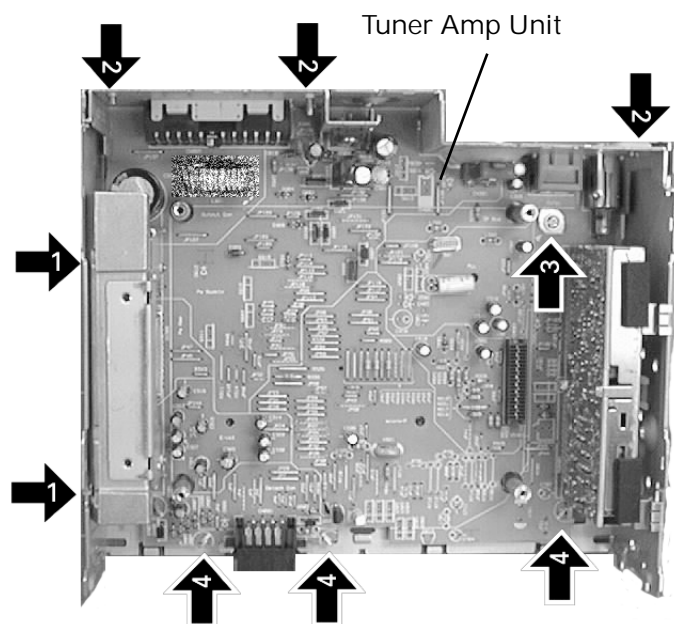
● Removing the Panel Unit(Fig.1)

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

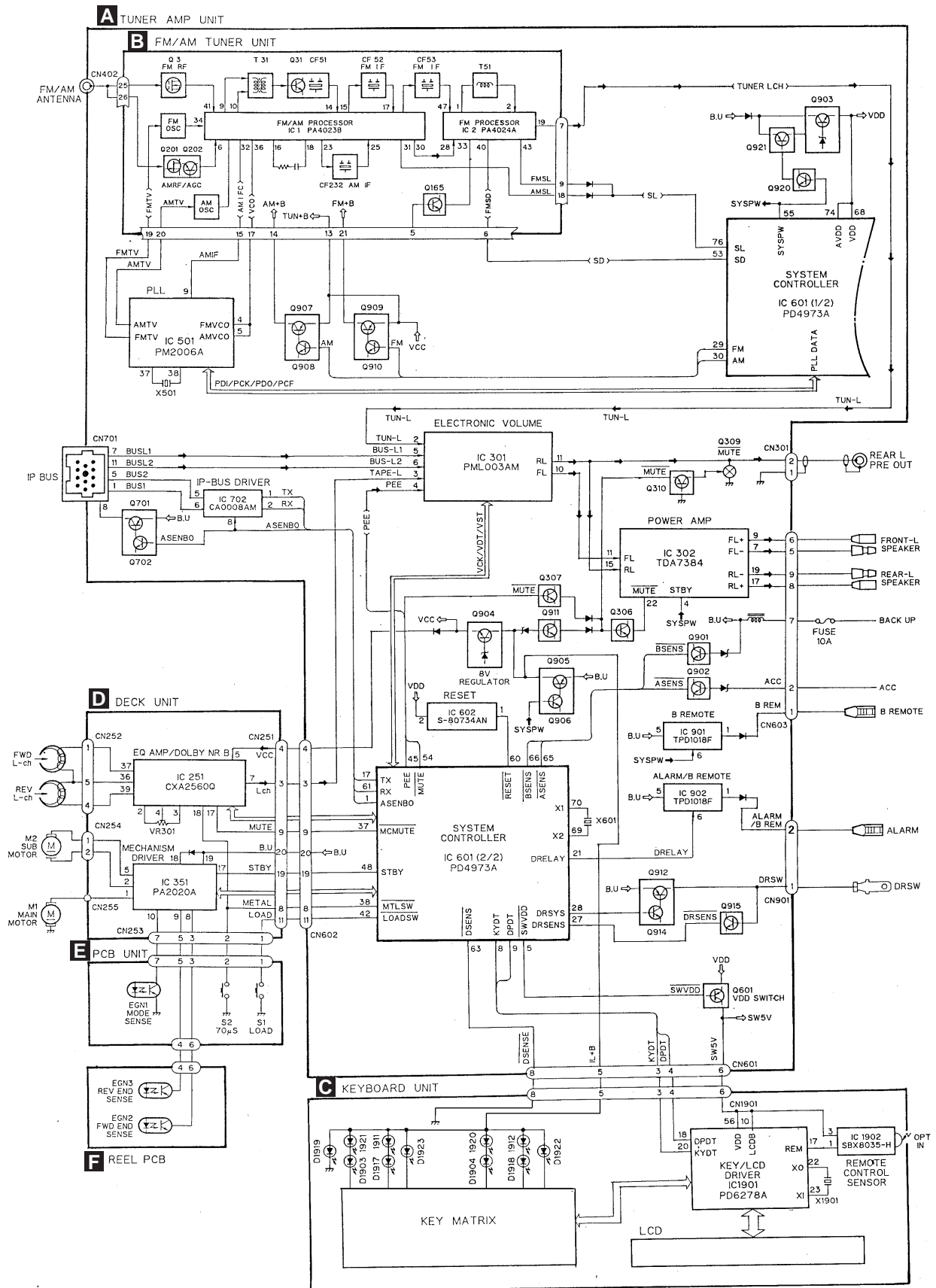


● Removing the Tuner Amp Unit(Fig.2)

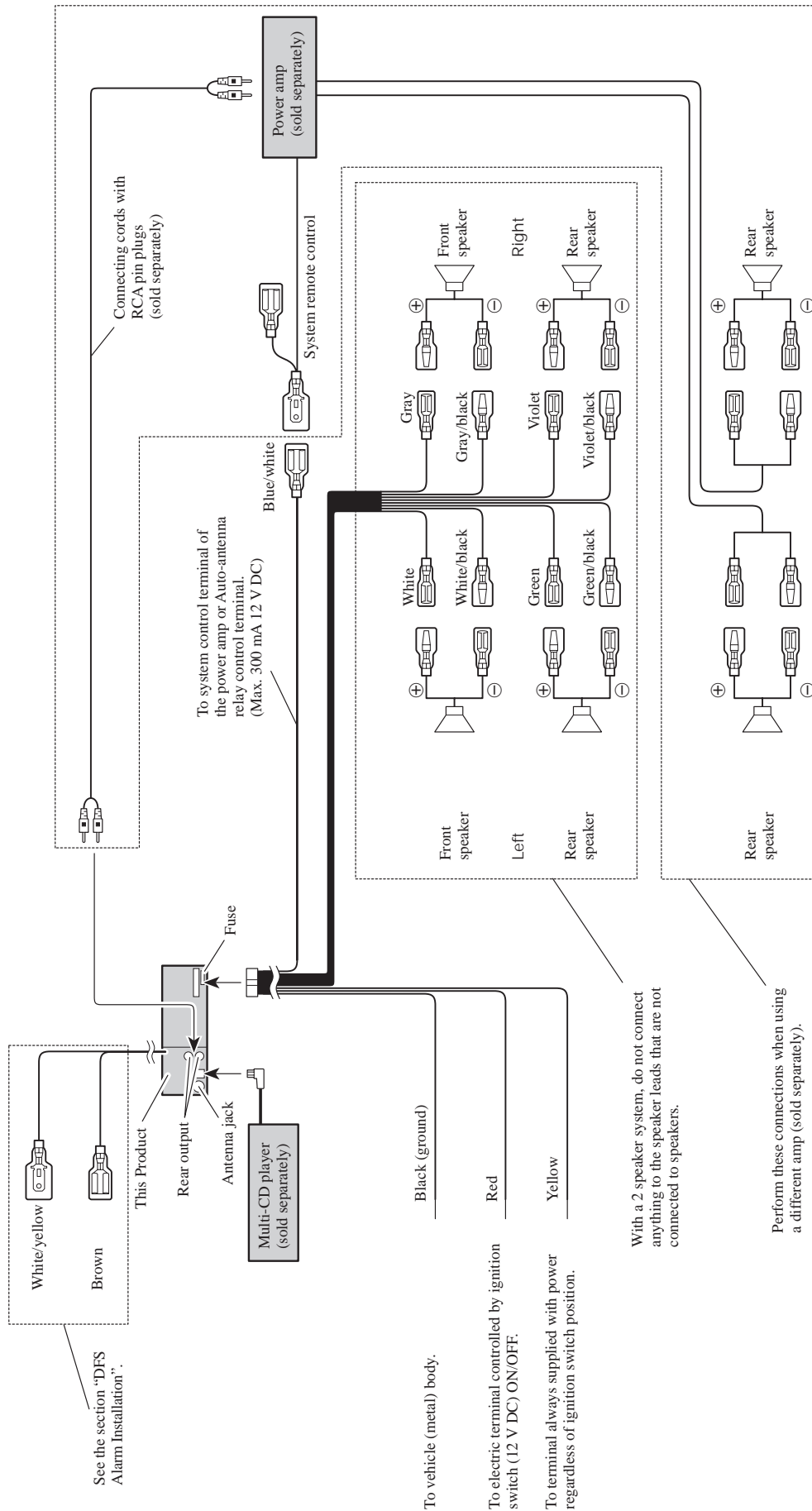
- 1** Removing the two screws.
- 2** Removing the three screws.
- 3** Removing the screw.
- 4** Unbend the tabs at three locations indicated by arrow until straight. Remove the Tuner Amp Unit.



7.3 BLOCK DIAGRAM

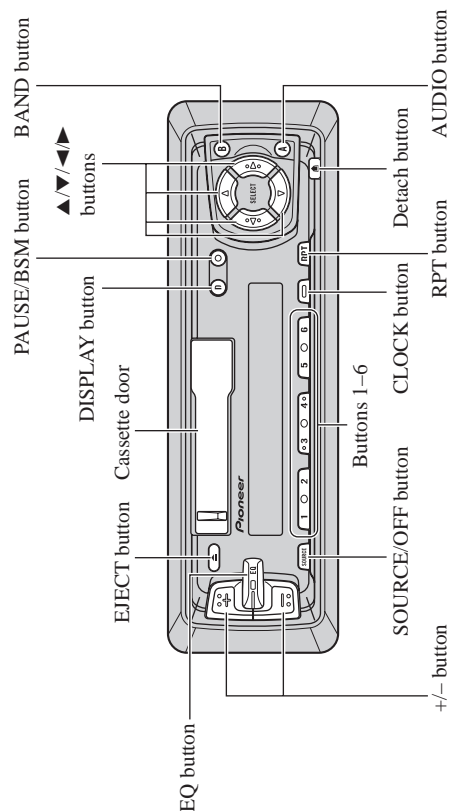


8. OPERATIONS AND SPECIFICATIONS



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.



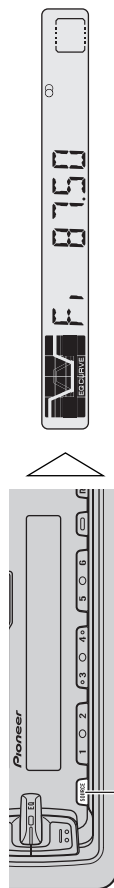
To Listen to Music

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 ...

■ Head Unit

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

■ Remote Controller

Each press of the button selects the desired source in the following order:

TUNER button : Tuner → OFF

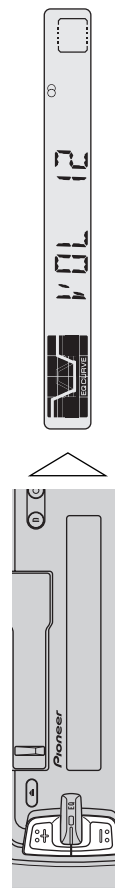
TAPE button : Tape → AUX → OFF

CD button : CD player (one disc only) → Multi-CD player → OFF

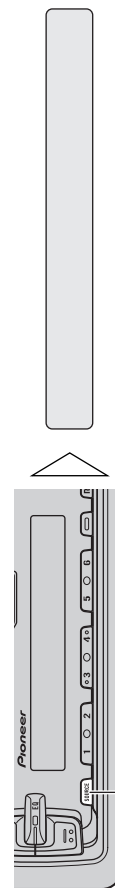
Note:

- 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 no disc is set in the 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

Reset the AM tuning step from 9 kHz (the factory preset step) to 10 kHz when using the tuner in North, Central or South America.

Manual and Seek Tuning

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

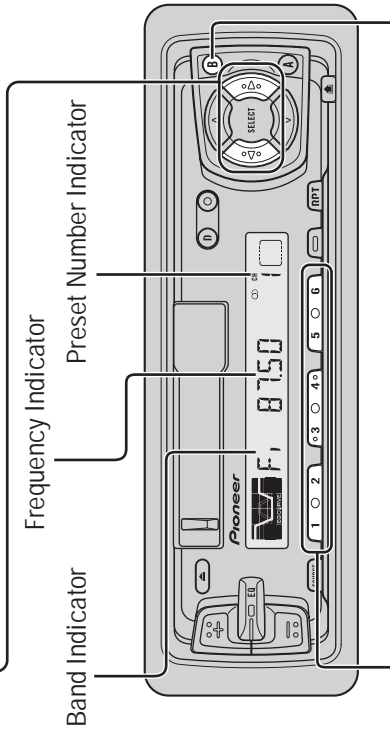
Manual Tuning (step by step)	0.5 seconds or less
Seek Tuning	0.5 seconds or more

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:

- “◻” 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), F11 (FM2) and F111 (FM3)) and 6 AM stations can be stored in memory.
- You can also use the ▲ or ▼ buttons to recall broadcast stations memorized in buttons 1 through 6.

Band
F1 (FM1) → F11 (FM2)
→ F111 (FM3) → AM

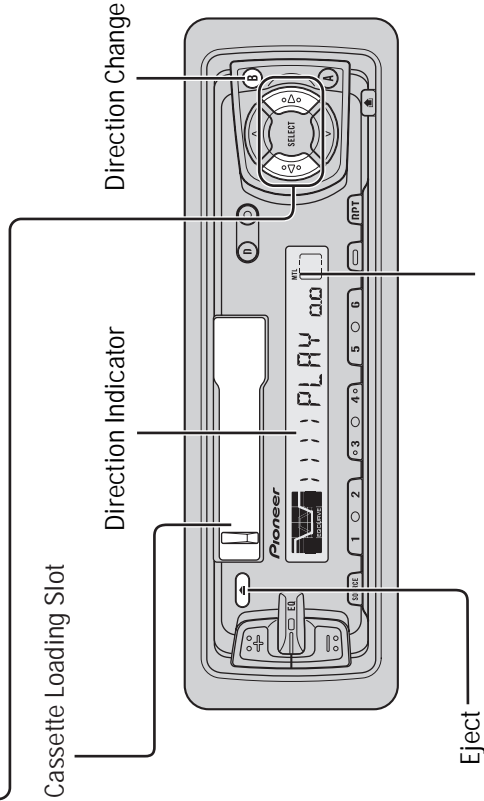
Basic Operation of Cassette Player

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.
- “MTL” indicator lights when a metal or chrome tape is inserted.

Basic Operation

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

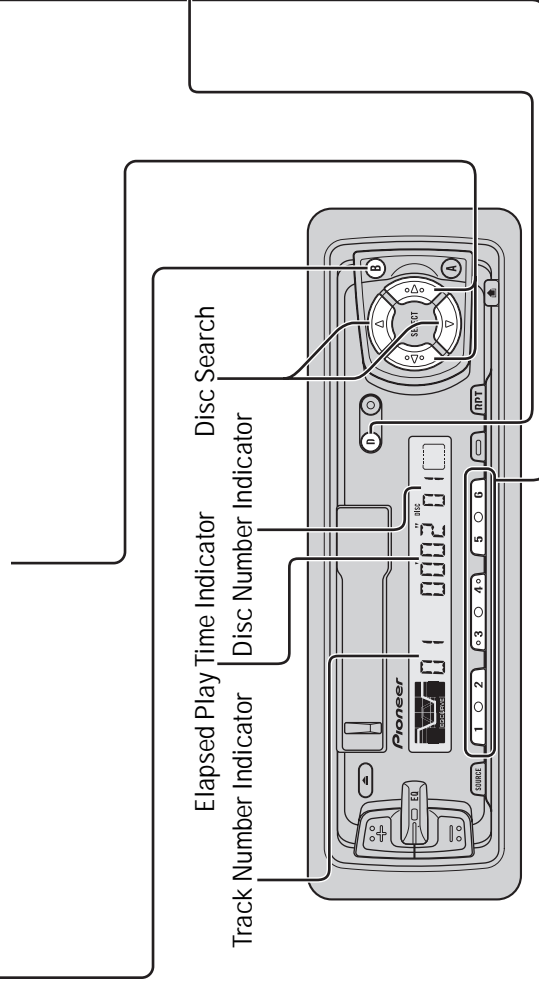
- Press the **DISPLAY** button, to change the **Disc Title display of the current disc**.

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.



Basic Operation of CD Player (one disc only)

This product can control a CD player (one disc only).

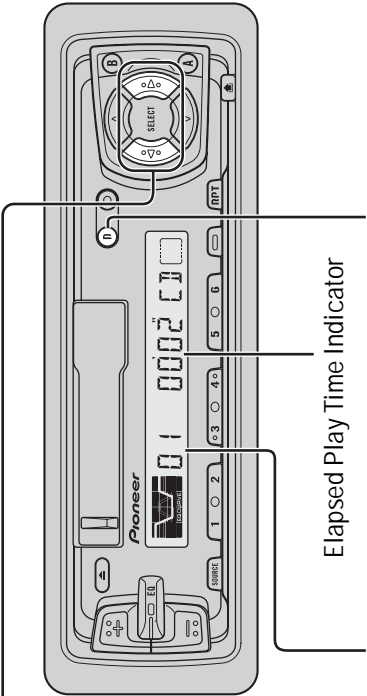
Track Search and Fast Forward/Reverse

- 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

Note:

- If the CD player cannot operate properly, an error message such as “ERROR-14” is displayed. Refer to the CD player owner’s manual.



Track Number Indicator Displaying Disc Titles

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

Note:

- When a Multi-CD player is not connected to this product, this function does not work.
- 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.

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

(DIN) (chassis) 178 (W) × 50 (H) × 155 (D) mm
 (nose) 188 (W) × 58 (H) × 19 (D) mm
 (D) (chassis) 178 (W) × 50 (H) × 160 (D) mm
 (nose) 170 (W) × 48 (H) × 14 (D) mm
 Weight 1.2 kg

Amplifier

Continuous power output is 17 W per channel min. into 4 ohms, both channels driven 50 to 15,000 Hz with no more than 5% THD.

Maximum power output 40 W × 4

Load impedance 4 Ω (4 – 8 Ω allowable)

Preout maximum output

level/output impedance 2.2 Vp-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 4.76 cm/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 – 19,000 Hz (±3 dB)

Stereo separation 45 dB

Signal-to-noise ratio

..... Metal: Dolby B NR IN: 67 dB (IEC-A network)

Dolby NR OUT: 61 dB (IEC-A network)

FM tuner

Frequency range(UCmodel)87.5 – 107.9 MHz

(ESmodel) 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)

Selectivity(UCmodel)70dB(2ACA)

Three-signal intermodulation(UCmodel)

(desired signal level)50dBf

(two undesire signal level : 100 dBf)

AM tuner

Frequency range 531 – 1,602 kHz (9 kHz)

(ESmodel) 530 – 1,710 kHz (10 kHz)

Usable sensitivity 18 μV (S/N: 20 dB)

Selectivity (ESmodel) 50 dB (±9 kHz)

50 dB (±10 kHz)

Note:

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