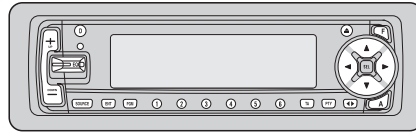


# Service Manual

Pioneer

KEH-P8800R/EW



ORDER NO.  
CRT2341

MULTI-CD/MD/DAB CONTROL HIGH POWER CASSETTE PLAYER WITH RDS TUNER

# KEH-P8800R

EW

# KEH-P8800R-W

EW

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

# KEH-P8850

ES

- 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.

## SERVICE PRECAUTION : (KEH-P8850/ES only)

In the first production, the following parts had been mounted temporarily to support the microcomputer IC601 (PD5496A): R631 (RS1/10S102J), R632 (RS1/10S473J), and IC631 (Non spare part).

When replacing IC601 PD5496A, use PD5496B as IC601, and then remove the 3 parts listed above.

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4. PCB CONNECTION DIAGRAM .....	30	7.2 IC .....	54
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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.** 253 Alexandra Road, #04-01, Singapore 159936

# 1. SAFETY INFORMATION

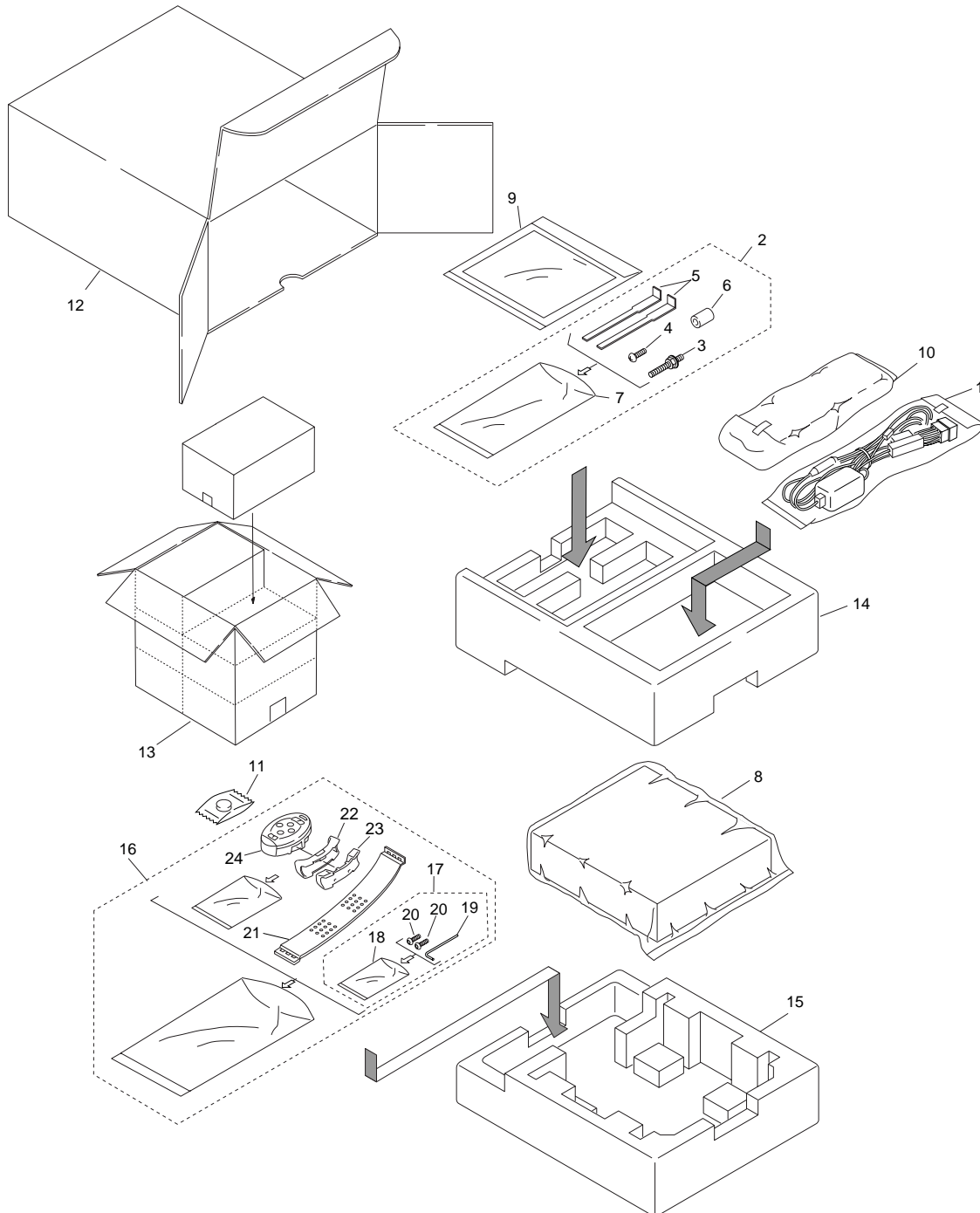
This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.

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

● KEH-P8800R/EW, KEH-P8800R-W/EW



**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.

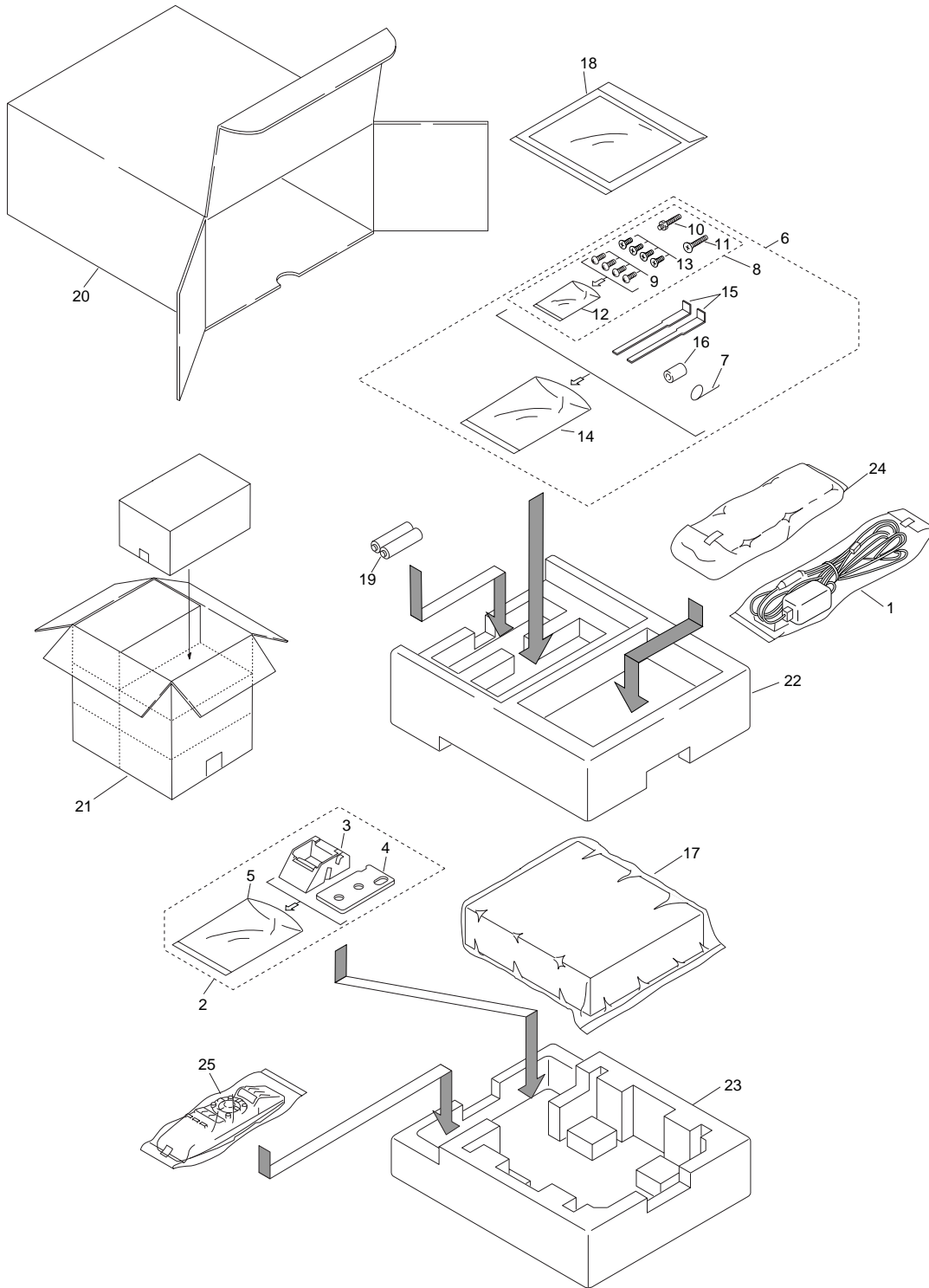
**● PACKING SECTION PARTS LIST**

Mark	No.	Description	Part No.	
			KEH-P8800R/EW	KEH-P8800R-W/EW
	1	Cord Assy	CDE6007	CDE6007
	2	Accessory Assy	CEA2538	CEA2538
	3	Screw	CBA1002	CBA1002
	4	Screw	CBA1120	CBA1120
	5	Handle	CNC5395	CNC5395
	6	Bush	CNV1917	CNV1917
*	7	Polyethylene Bag	E36-615	E36-615
*	8	Cover	CEG1088	CEG1088
	9-1	Polyethylene Bag	CEG1116	CEG1116
	9-2	Owner’s Manual	CRD2956	CRD2956
	9-3	Owner’s Manual	CRD2957	CRD2957
	9-4	Owner’s Manual	CRD2958	CRD2958
	9-5	Installation Manual	CRD2959	CRD2959
*	9-6	Caution Card	CRP1207	CRP1207
	9-7	Passport	CRY1013	CRY1013
*	9-8	Warranty Card	CRY1087	CRY1087
	9-9	Caution Card	CRP1208	CRP1208
	10	Case Assy	CXB3520	CXB3520
	11	Battery	CEX1030	CEX1030
	12	Carton	CHG3778	CHG3779
	13	Contain Box	CHL3778	CHL3779
	14	Protector	CHP2186	CHP2186
	15	Protector	CHP2187	CHP2187
	16	Remote Control Assy	CXB3488	CXB3488
	17	Screw Assy	CZE3169	CZE3169
*	18	Polyethylene Bag	CEG-127	CEG-127
*	19	Hexagonal Wrench	CZE3176	CZE3176
*	20	Screw	RMZ30H060FBK	RMZ30H060FBK
	21	Belt	CZN6416	CZN6416
	22	Holder Assy	CZX3172	CZX3172
	23	Holder Assy	CZX3173	CZX3173
	24	Remote Control Assy	CZX3231	CZX3231

**● Owner's Manual, Installation Manual**

Model	Part No.	Language
KEH-P8800R/EW	CRD2956	English, Spanish
KEH-P8800R-W/EW	CRD2957	German, French
	CRD2958	Italian, Dutch
	CRD2959	English, Spanish, German, French, Italian, Dutch

● KEH-P8850/ES



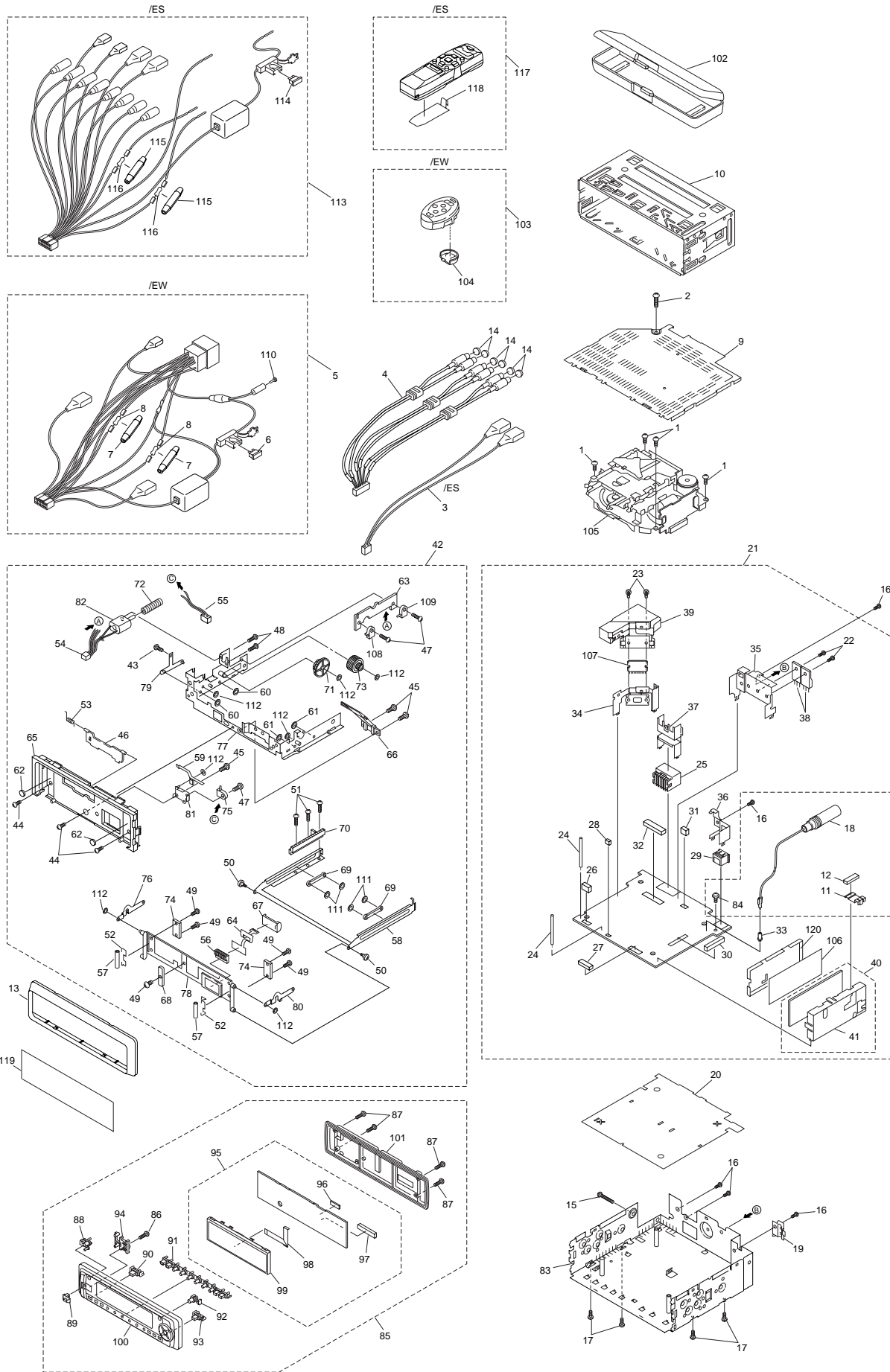
● **PACKING SECTION PARTS LIST**

Mark No.	Description	Part No.	Mark No.	Description	Part No.
	1 Cord Assy	CDE5867		16 Bush	CNV1917
	2 Base Assy	CEA2426	*	17 Cover	CEG1088
*	3 Base	CNS5031		18-1 Polyethylene Bag	CEG1116
*	4 Sheet	CZA3371		18-2 Owner's Manual	CRD2962
	5 Polyethylene Bag	CZE3188		18-3 Owner's Manual	CRD2963
*	6 Accessory Assy	CEA2431		18-4 Installation Manual	CRD2964
	7 Spring	CBH-865	*	18-5 Caution Card	CRP1207
*	8 Screw Assy	CEA2434		19 Battery	CEX1006
	9 Screw	BMZ50P060FMC		20 Carton	CHG3777
	10 Screw	CBA1002		21 Contain Box	CHL3777
	11 Screw	CBA1120		22 Protector	CHP2186
*	12 Polyethylene Bag	CEG-127		23 Protector	CHP2187
	13 Screw	CMZ50P060FMC		24 Case Assy	CXB3520
*	14 Polyethylene Bag	CEG-158		25 Remote Control Assy	CXB3875
	15 Handle	CNC5395			

● **Owner's Manual, Installation Manual**

Model	Part No.	Language
KEH-P8850/ES	CRD2962	English, Spanish
	CRD2963	Portuguese, Arabic
	CRD2964	English, Spanish, Portuguese, Arabic

2.2 EXTERIOR



## (1) EXTERIOR SECTION PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Screw	BSZ26P050FMC	51	Screw	CBA1454
2	Screw	BSZ30P120FMC	52	Spring	CBH2130
3	Cord Assy	See Contrast table(2)	53	Spring	CBH2251
4	Cord Assy	CDE5863	54	Cord	CDE5960
5	Cord Assy	See Contrast table(2)	55	Cord	CDE6003
6	Fuse(10A)	See Contrast table(2)	56	Connector(CN9001)	CKS3997
7	Cap	See Contrast table(2)	57	Roller	CLA3583
8	Resistor	See Contrast table(2)	58	Frame	CNC8201
9	Case	CNB2427	59	Arm	CNC8293
10	Holder	CNC6798	60	Spacer	CNM6155
11	Earth Terminal	See Contrast table(2)	61	Spacer	CNM6156
12	Cushion	See Contrast table(2)	62	Spacer	CNM6419
13	Panel	See Contrast table(2)	63	PCB	CNP5321
14	Cap	CNV2680	64	PCB	CNP5355
15	Screw	BMZ30P230FMC	65	Panel	CNS5249
16	Screw	BSZ30P050FMC	66	Lighting Conductor	CNV5608
17	Screw	CBA1447	67	Cover	CNV5610
18	Antenna Cable	CDH1263	68	Guide	CNV5672
19	Holder	CNC4963	69	Guide	CNV5696
20	Insulator	CNM6137	70	Rack	CNV5697
21	Tuner Amp Unit	See Contrast table(2)	71	Gear	CNV5698
22	Screw	ASZ26P080FMC	72	Gear	CNV5761
23	Screw	BMZ26P200FMC	73	Torque Limiter Unit	CNV5762
24	Clamper	CEF1007	74	Holder	CNV5763
25	Plug(CN901)	CKM1278	75	Switch(S953)	CSN1022
26	Plug(CN851)	CKS-786	76	Arm Unit	CXB3574
27	Connector(CN801)	CKS1532	77	Frame Unit	CXB3575
28	Connector(CN902)	CKS3124	78	Holder Unit	CXB3576
29	Connector(CN101)	CKS3408	79	Bracket Unit	CXB3577
30	Connector(CN651)	CKS3568	80	Arm Unit	CXB3866
31	Connector(CN681)	See Contrast table(2)	81	Holder Unit	CXB3867
32	Connector(CN351)	CKS3606	82	Motor(M951)	CXM1085
33	Mini Jack(CN451)	CKX1046	83	Chassis Unit	See Contrast table(2)
34	Holder	CNC8171	84	Screw	ISS26P055FUC
35	Holder	CNC8174	85	Detach Grille Assy	See Contrast table(2)
36	Holder	CNC8176	86	Screw	BPZ20P060FMC
37	Holder	See Contrast table(2)	87	Screw	BPZ20P080FZK
38	Transistor(Q803,921)	2SD2396	88	Button(D)	CAC5891
39	Heat Sink	CNR1536	89	Button(EQ)	See Contrast table(2)
40	FM/AM Tuner Unit	See Contrast table(2)	90	Button(SOURCE)	See Contrast table(2)
41	Holder	CNC7532	91	Button(1-6)	See Contrast table(2)
42	Panel Assy	CXB3581	92	Button( $\triangle$ )	See Contrast table(2)
43	Screw	BMZ20P030FMC	93	Button( $\triangleleft$ )	See Contrast table(2)
44	Screw	CBA1154	94	Housing	CNV5606
45	Screw	BPZ20P060FMC	95	Keyboard Unit	See Contrast table(2)
46	Door	CAT2016	96	Connector(CN1902)	CKS3995
47	Screw	CBA1060	97	Connector(CN1901)	CKS3996
48	Screw	CBA1061	98	PCB	CNP5508
49	Screw	CBA1082	99	OEL Module	MXK8002
50	Screw	CBA1430	100	Grille Unit	See Contrast table(2)

\*

# KEH-P8800R,P8800R-W,P8850

Mark No.	Description	Part No.	Mark No.	Description	Part No.
101	Cover Unit	See Contrast table(2)	111	Washer	2-1816-0035-D2-00
102	Case Assy	CXB3520	112	Washer	2-1821-0045-D2-00
103	Remote Control Assy	See Contrast table(2)	113	Cord Assy	See Contrast table(2)
104	Battery Cover	See Contrast table(2)	114	Fuse(10A)	See Contrast table(2)
105	Cassette Mechanism Module	EXK3990	115	Cap	See Contrast table(2)
106	Insulator	See Contrast table(2)	116	Resistor	See Contrast table(2)
107	IC(IC301)	PAL005A	117	Remote Control Assy	See Contrast table(2)
108	Switch(S952)	CNS1022	118	Battery Cover	See Contrast table(2)
109	Switch(S951)	CNS1012	119	Cover	See Contrast table(2)
110	Terminal Cap	See Contrast table(2)	120	Holder	CNC7533

## (2) CONTRAST TABLE

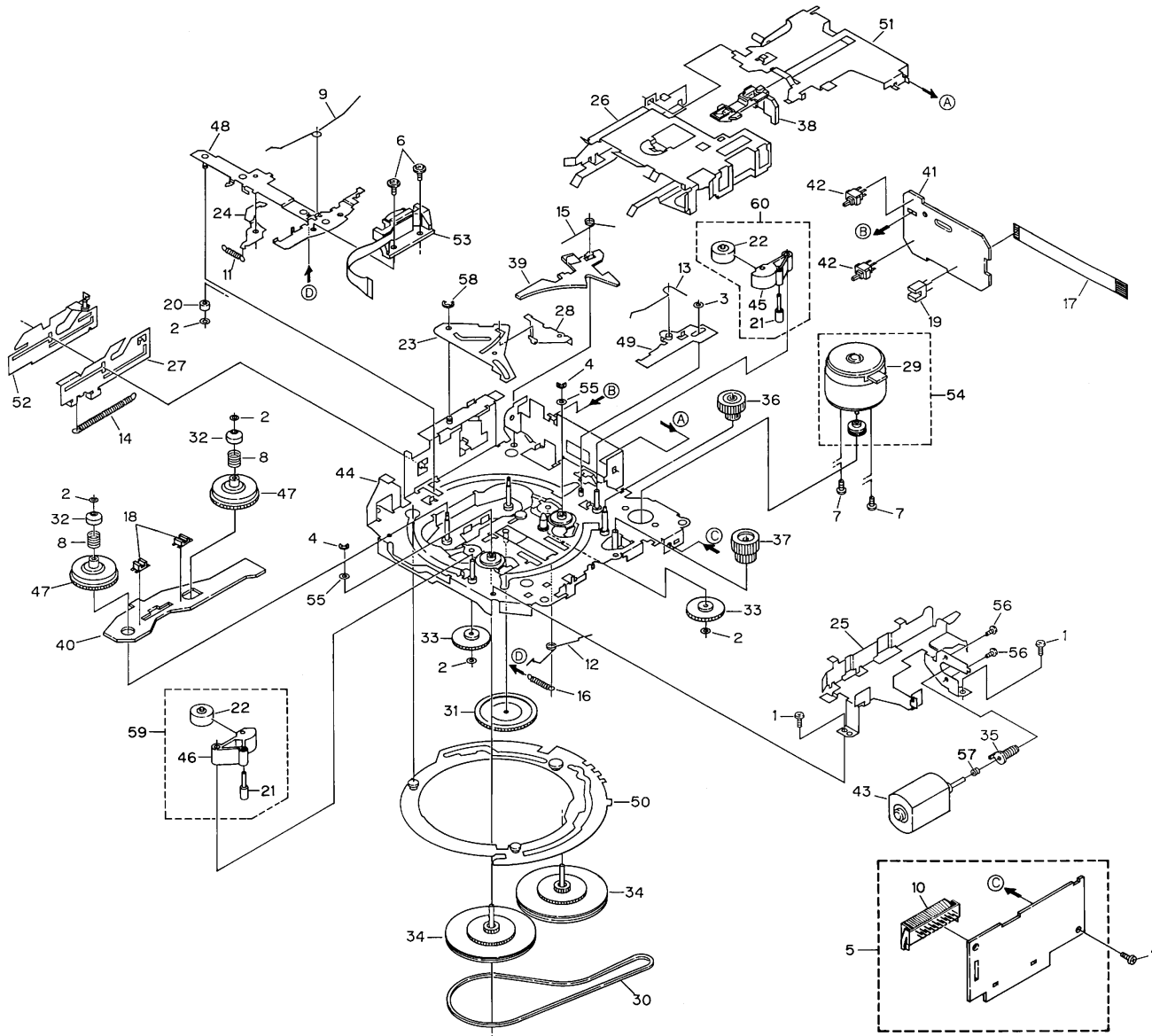
KEH-P8800R/EW, KEH-P8800R-W/EW and KEH-P8850/ES are constructed same except for the following:

Mark No.	Description	Part No.		
		KEH-P8800R/EW	KEH-P8800R-W/EW	KEH-P8850/ES
3	Cord Assy	Not used	Not used	CDE5853
5	Cord Assy	CDE6007	CDE6007	Not used
6	Fuse(10A)	CEK1136	CEK1136	Not used
7	Cap	CNS1472	CNS1472	Not used
8	Resistor	RS1/2PMF102J	RS1/2PMF102J	Not used
11	Earth Terminal	CNC8019	CNC8019	CNC7358
12	Spacer	CNM6482	CNM6482	CNM4870(Cushion)
13	Panel	CNS5256	CSN5581	CNS5548
21	Tuner Amp Unit	CWM6305	CWM6305	CWM6307
31	Connector(CN681)	Not used	Not used	CKS3582
37	Holder	CNC8172	CNC8172	CNC8178
40	FM/AM Tuner Unit	CWE1500	CWE1500	CWE1501
83	Chassis Unit	CXB3563	CXB4040	CXB3586
85	Detach Grille Assy	CXB3291	CXB3981	CXB3293
89	Button(EQ)	CNC5894	CNC6200	CAC5899
90	Button(SOURCE)	CNC5892	CNC5892	CAC5901
91	Button(1-6)	CNC5896	CNC6201	CAC5911
92	Button( $\triangle$ )	CNC5890	CNC6199	CAC6126
93	Button( $\triangleleft$ )	CNC5926	CNC5926	CAC6146
95	Keyboard Unit	CWM6225	CWM6225	CWM6226
100	Grille Unit	CXB3289	CXB4951	CXB3292
101	Cover Unit	CXB4309	CXB4311	CXB4310
103	Remote Control Assy	CZX3231	CZX3231	Not used
104	Cover	CZN6410	CZN6410	Not used
106	Insulator	CNM5967	CNM5967	Not used
110	Terminal Cap	Not used	Not used	CKX-003
113	Cord Assy	Not used	Not used	CDE5867
114	Fuse(10A)	Not used	Not used	CEK1136
115	Cap	Not used	Not used	CNS1472
116	Resistor	Not used	Not used	RS1/2PMF102J
117	Remote Control Assy	Not used	Not used	CXB3875
118	Battery Cover	Not used	Not used	CNS5032
119	Cover	Not used	CNM4710	Not used





## 2.3 CASSETTE MECHANISM MODULE



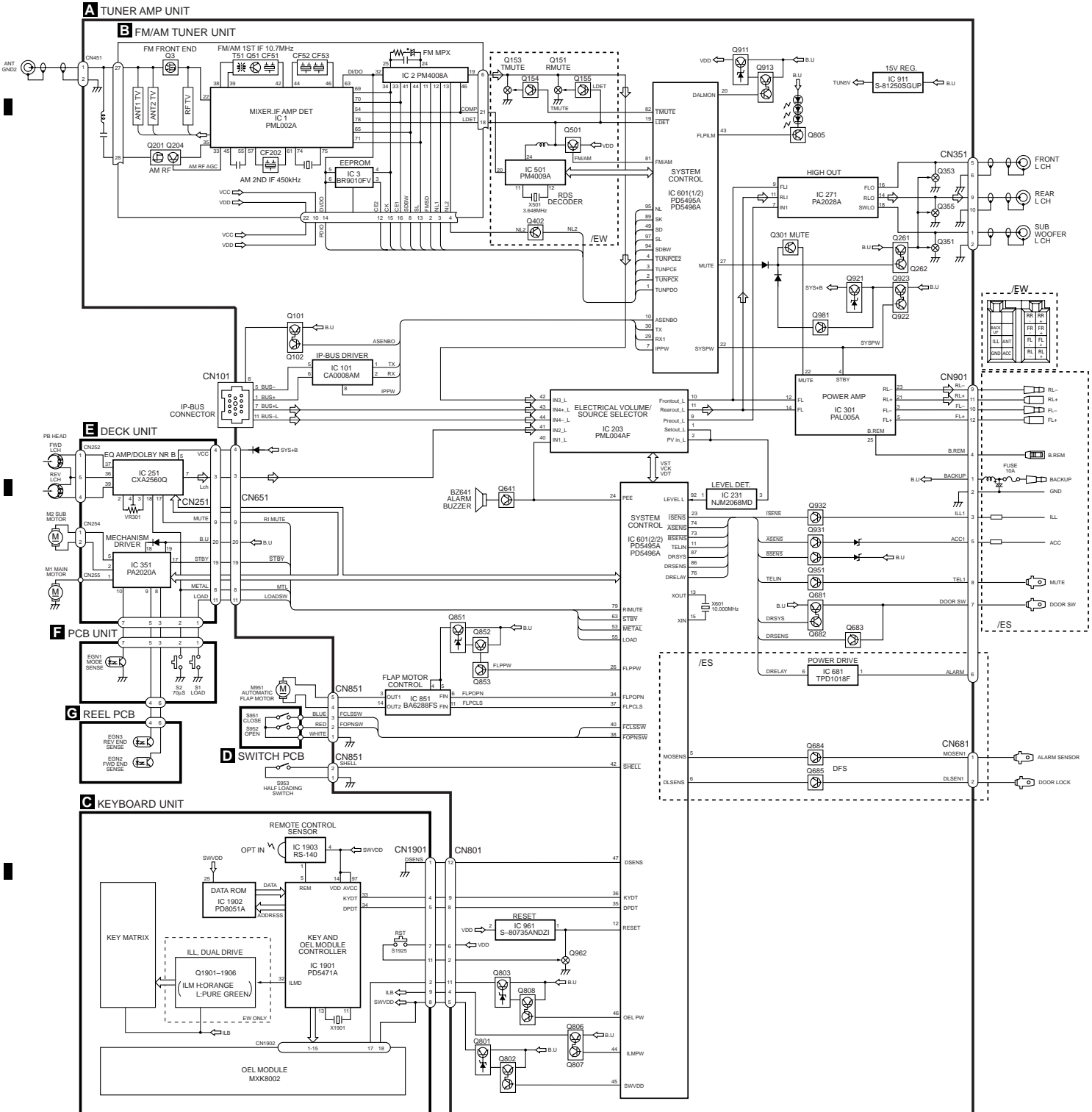
● CASSETTE MECHANISM MODULE SECTION PARTS LIST

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	EXM1027			
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	ENR1037			
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	EXA1567			
45	Pinch Holder	ENV1485			

# 3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

## 3.1 BLOCK DIAGRAM

A

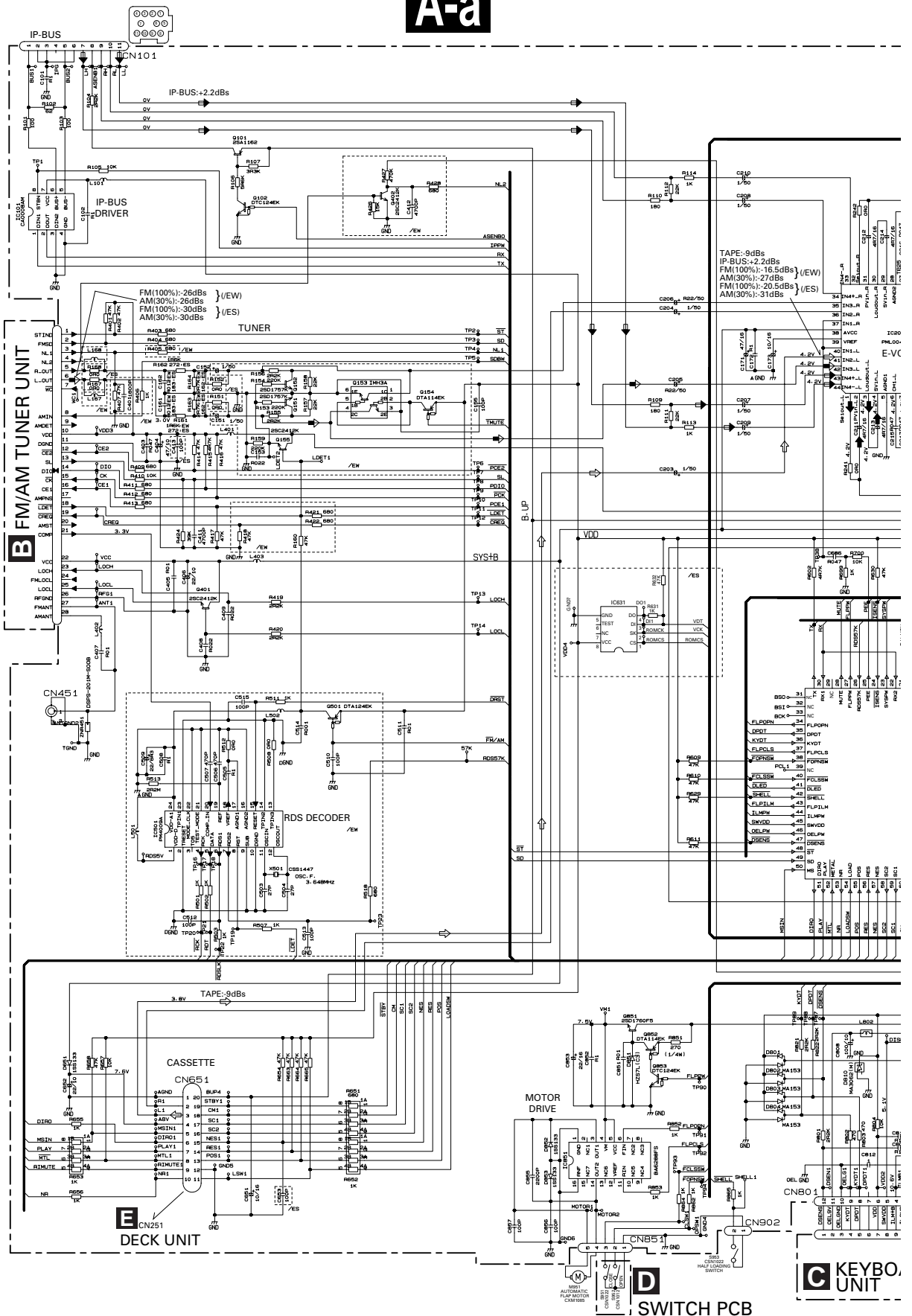
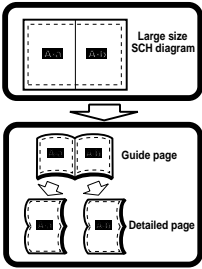




3.2 OVERALL CONNECTION DIAGRAM(GUIDE PAGE)

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

A-a



A

B

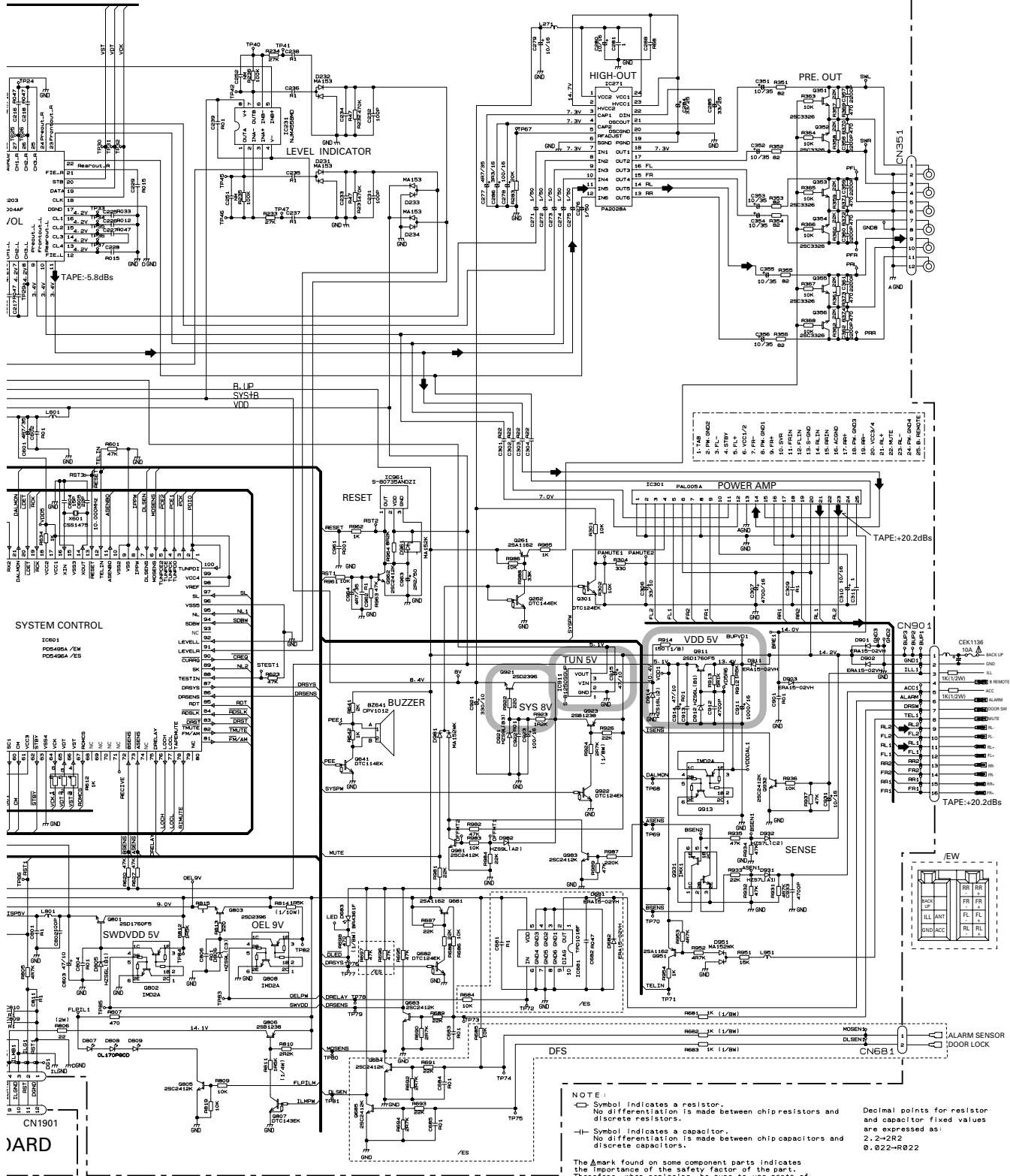
C

D

# A-b

## A TUNER AMP UNIT

- ▶ TAPE/TUNER/IP-BUS SIGNAL
- ◆ TUNER SIGNAL
- ◀ IP-BUS SIGNAL
- ↺ TAPE SIGNAL



**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  $\Delta$  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

The power supply is shown with the marked box.



A

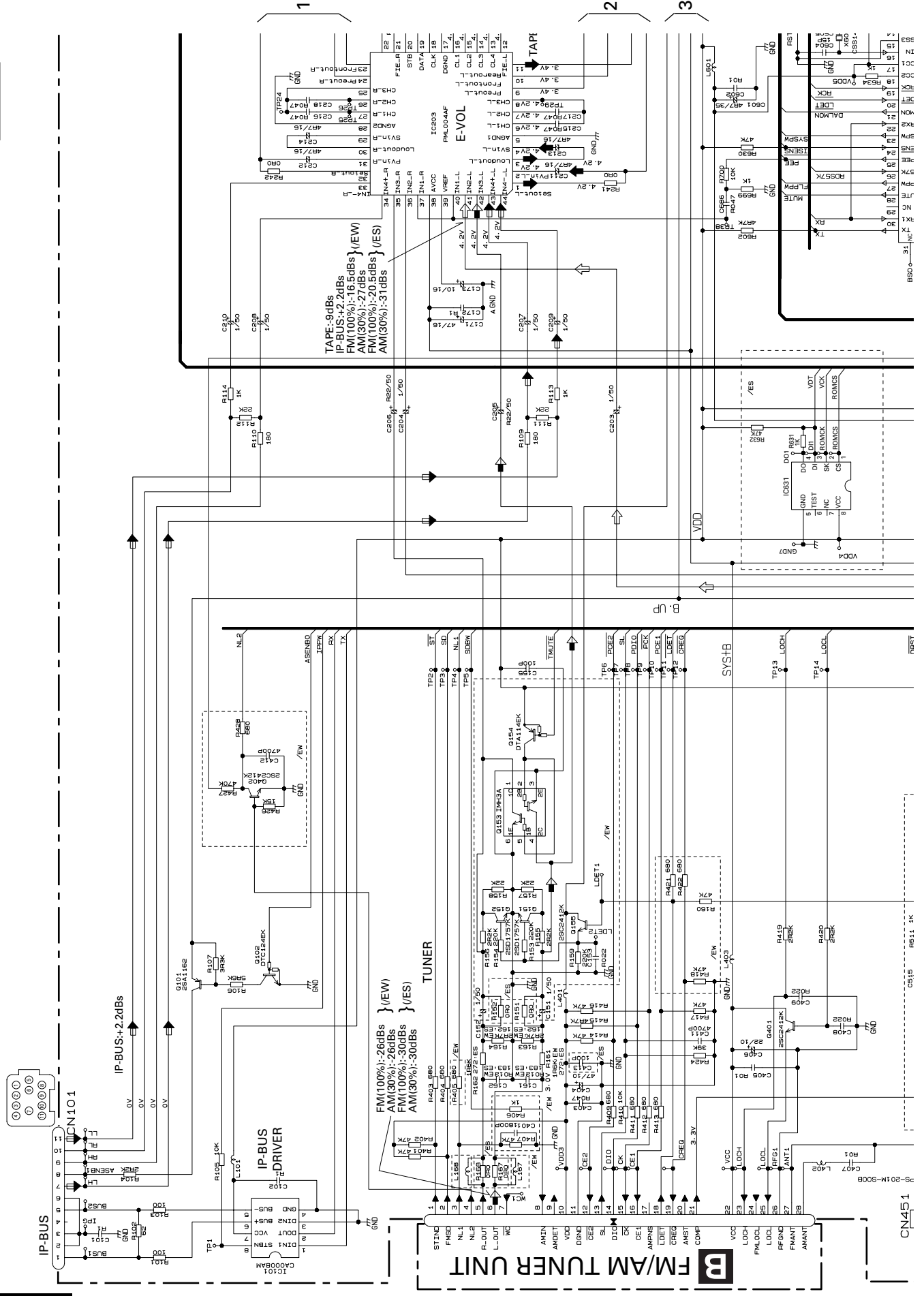
A-a A-b

B

C

D

A-a



A

B

C

D

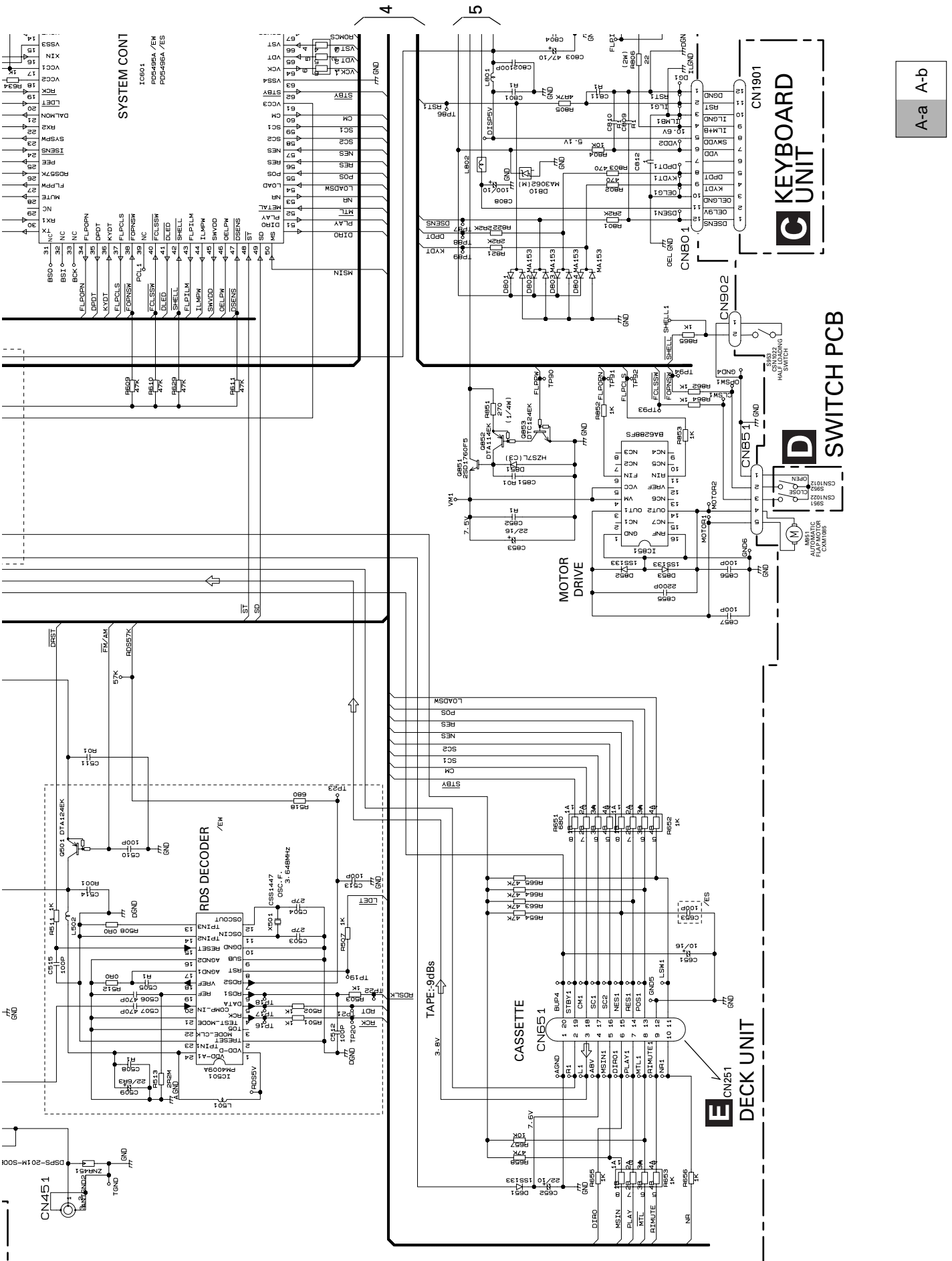
A

2

3

4





SYSTEM CONT

KEYBOARD UNIT

SWITCH PCB

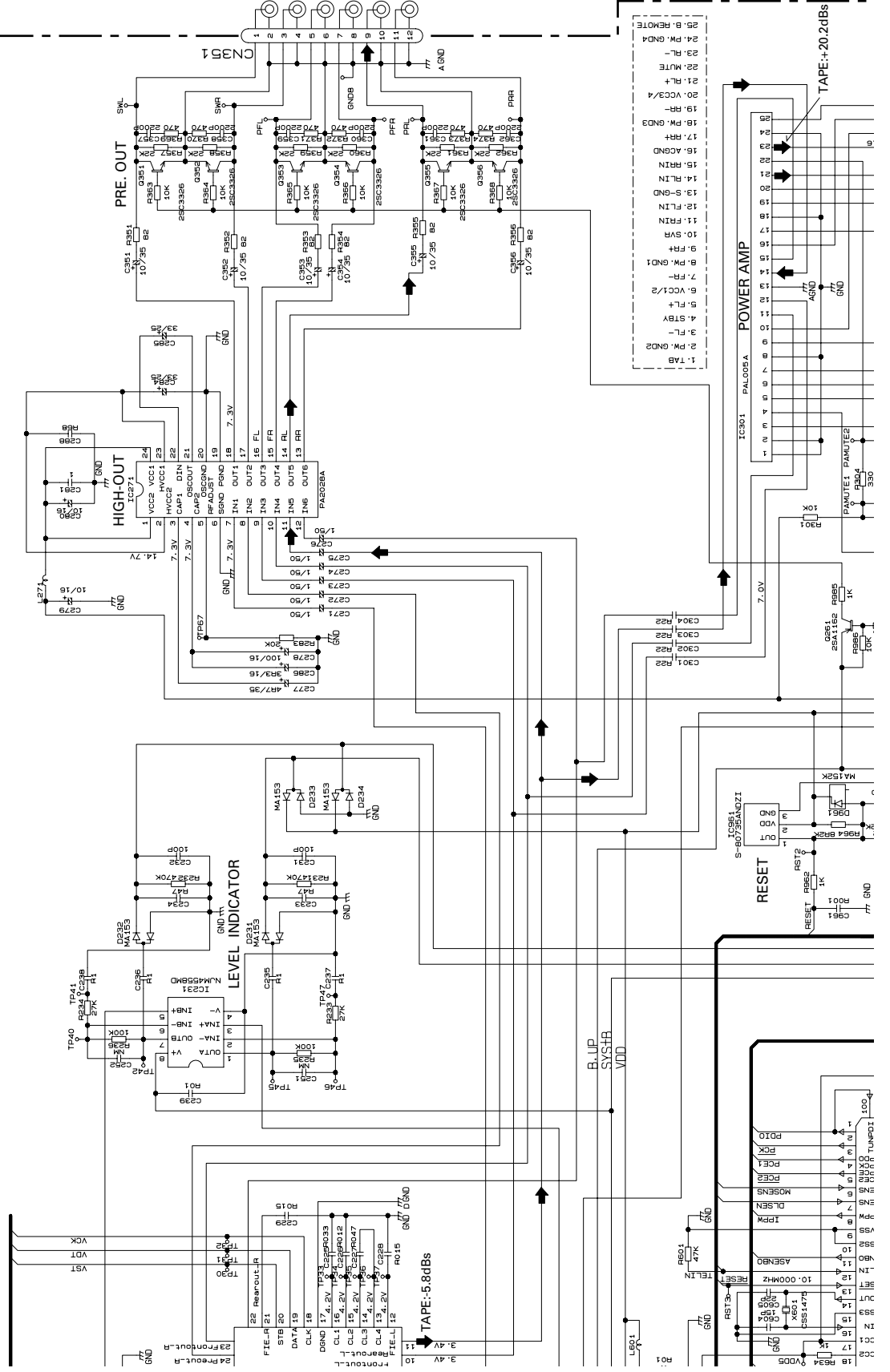
DECK UNIT

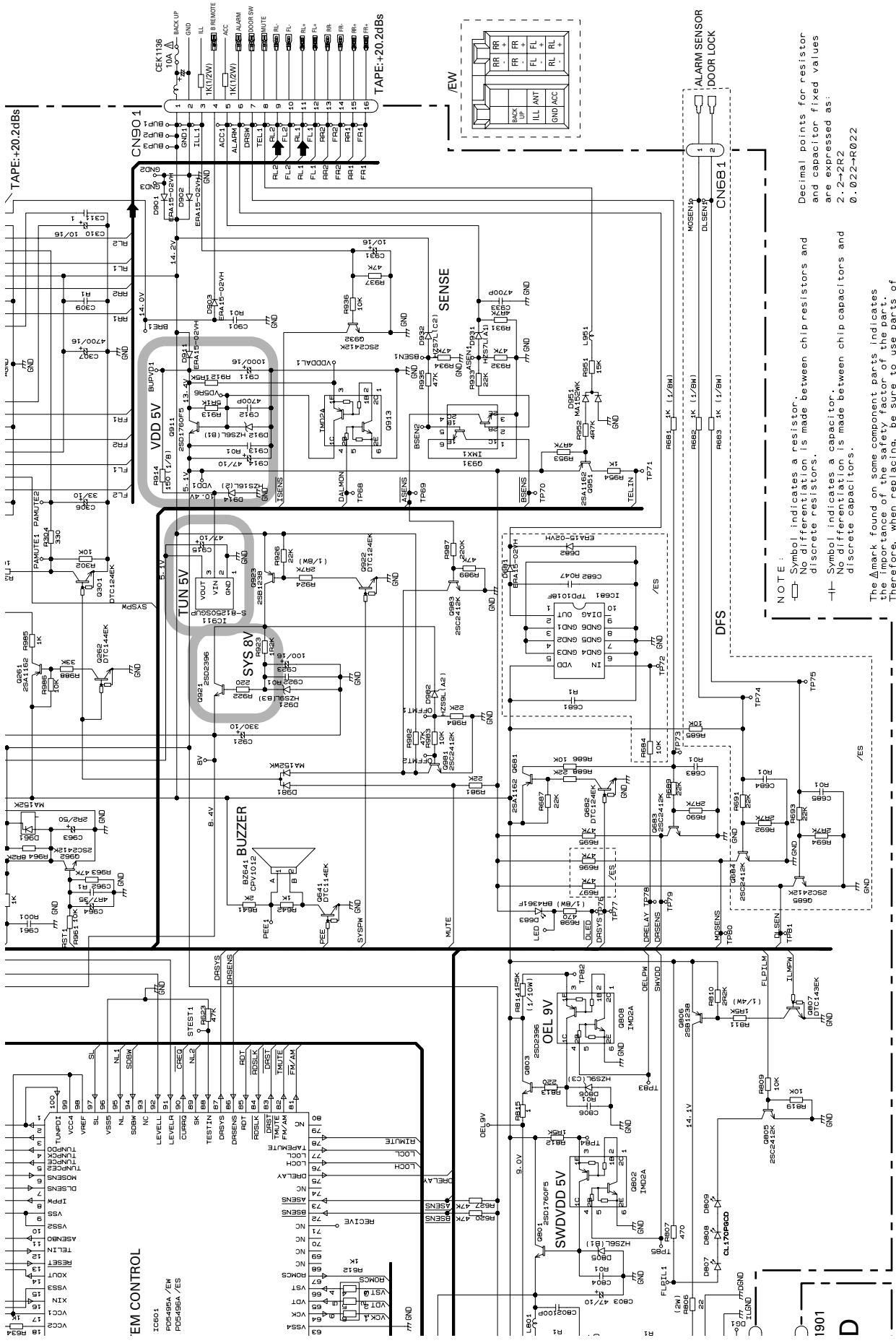
A-a A-b

A-a D

**A** TUNER AMP UNIT

▲ TAPE,TUNER,IP-BUS SIGNAL  
 ▼ TUNER SIGNAL  
 ◀ IP-BUS SIGNAL  
 ▶ TAPE SIGNAL





NOTE:

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

Decimal points for resistor and capacitor fixed values are expressed as:  
 0.022-R022

The  $\Delta$  mark found on some component parts indicates the location of the safety section of the part. Therefore, when replacing, be sure to use parts of identical designation.

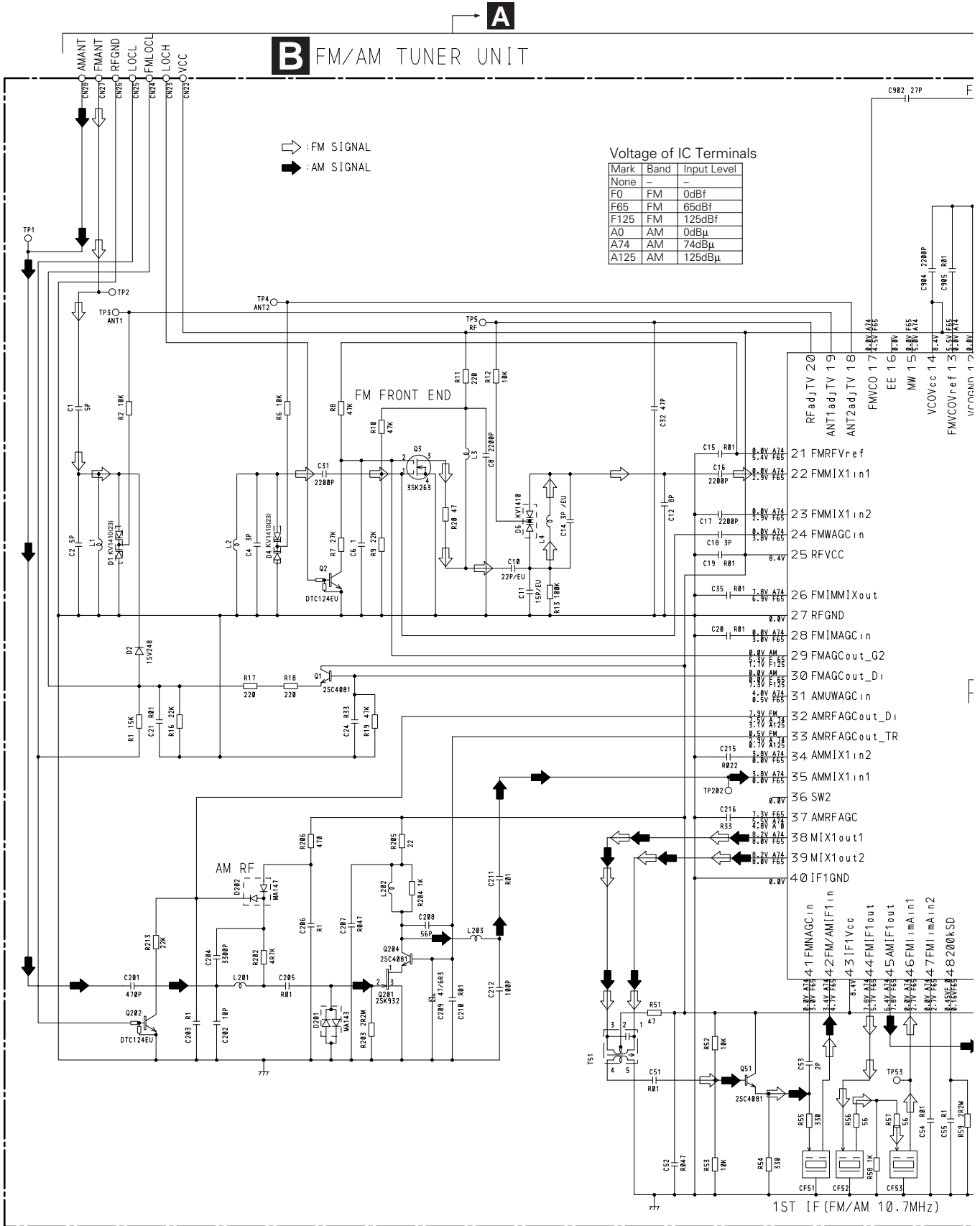
: The power supply is shown with the marked box.

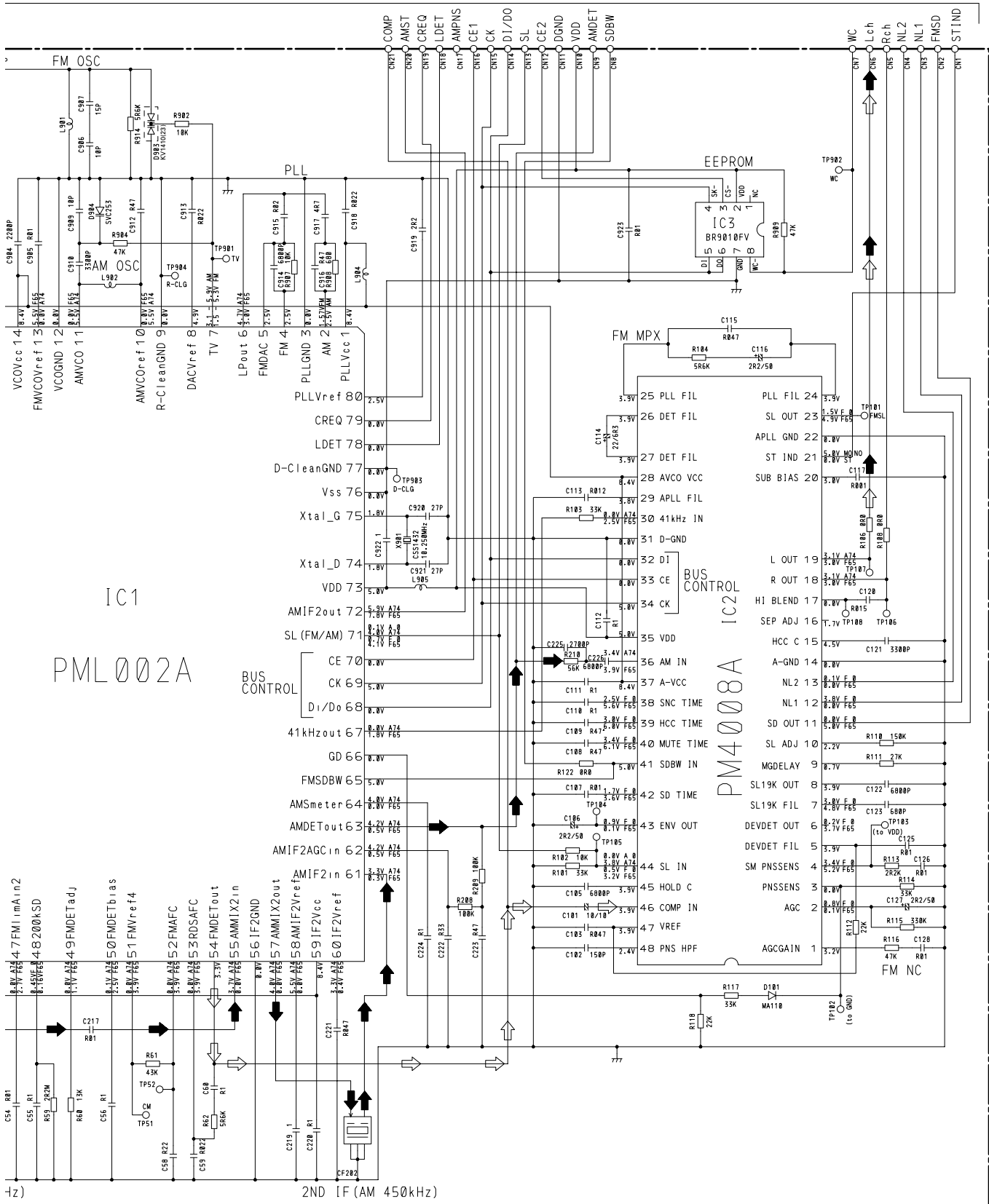
A-a A-b

A-b

### 3.3 FM/AM TUNER UNIT

● KEH-P8800R/EW, KEH-P8800R-W/EW





A

B

C

D



● KEH-P8850/ES

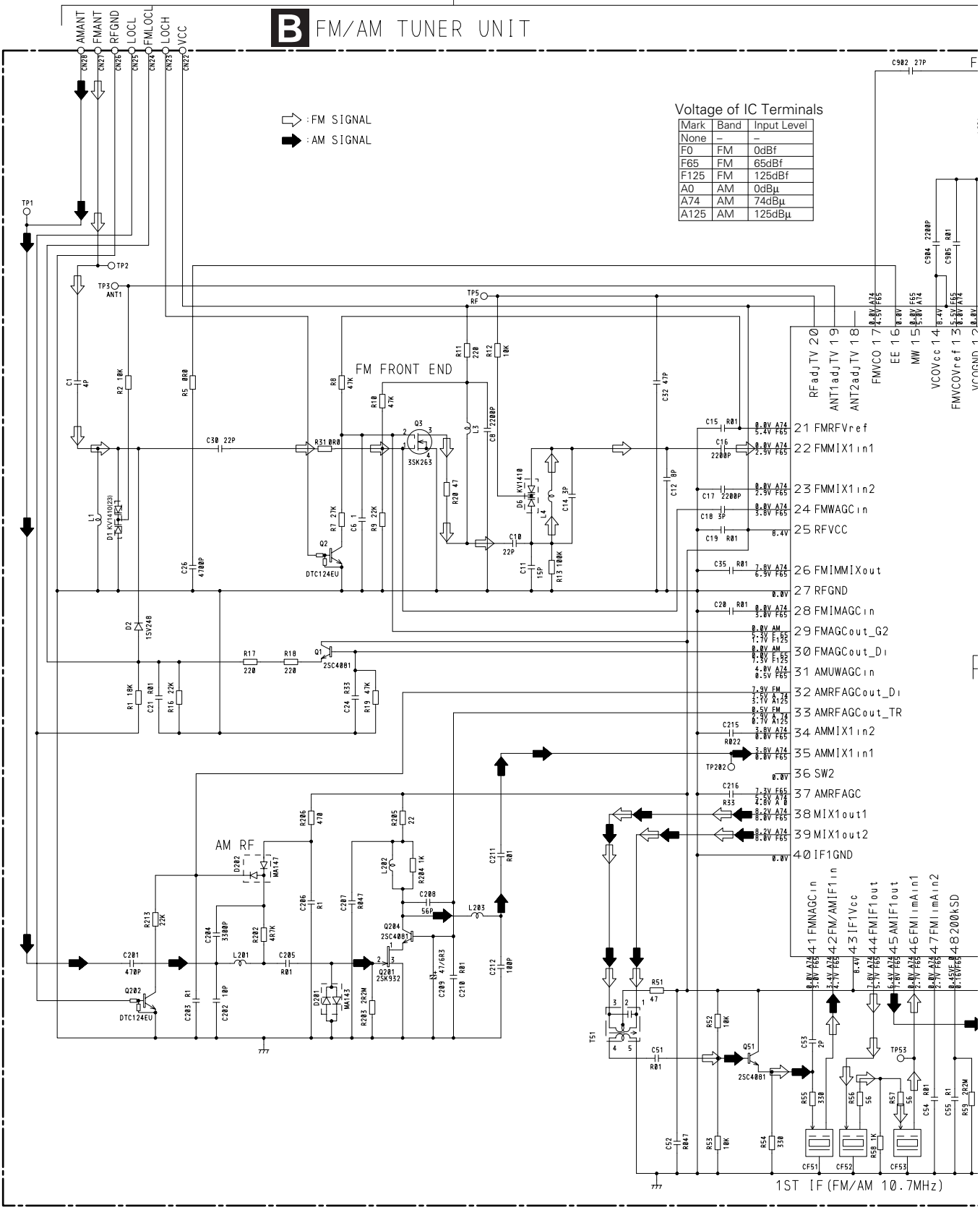
A

B

C

D

**B** FM/AM TUNER UNIT



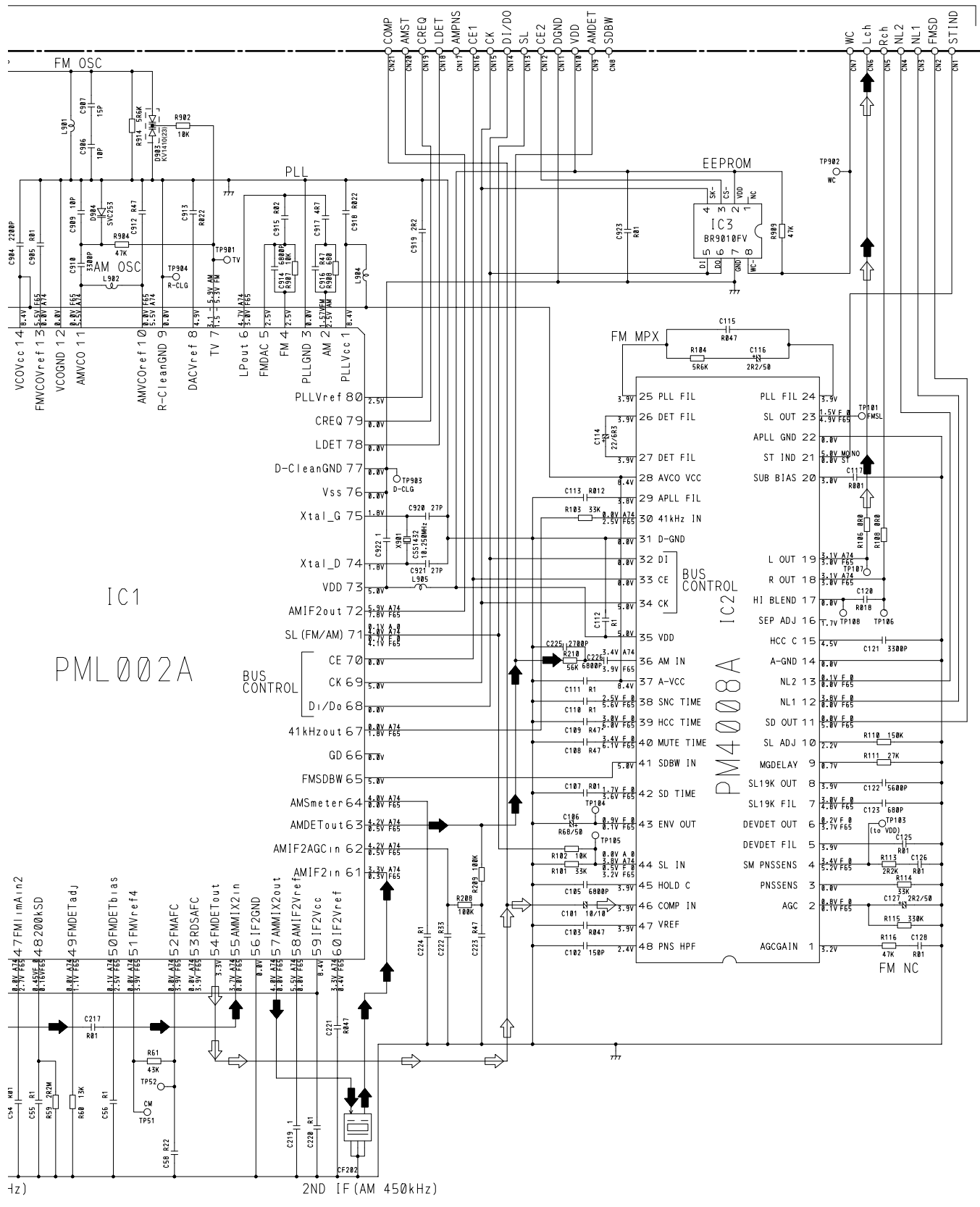
⇨ : FM SIGNAL  
 ⇩ : AM SIGNAL

Voltage of IC Terminals

Mark	Band	Input Level
None	-	-
F0	FM	0dBf
F65	FM	65dBf
F125	FM	125dBf
A0	AM	0dBμ
A74	AM	74dBμ
A125	AM	125dBμ

1ST IF (FM/AM 10.7MHz)





A

B

C

D



### 3.4 KEYBOARD UNIT

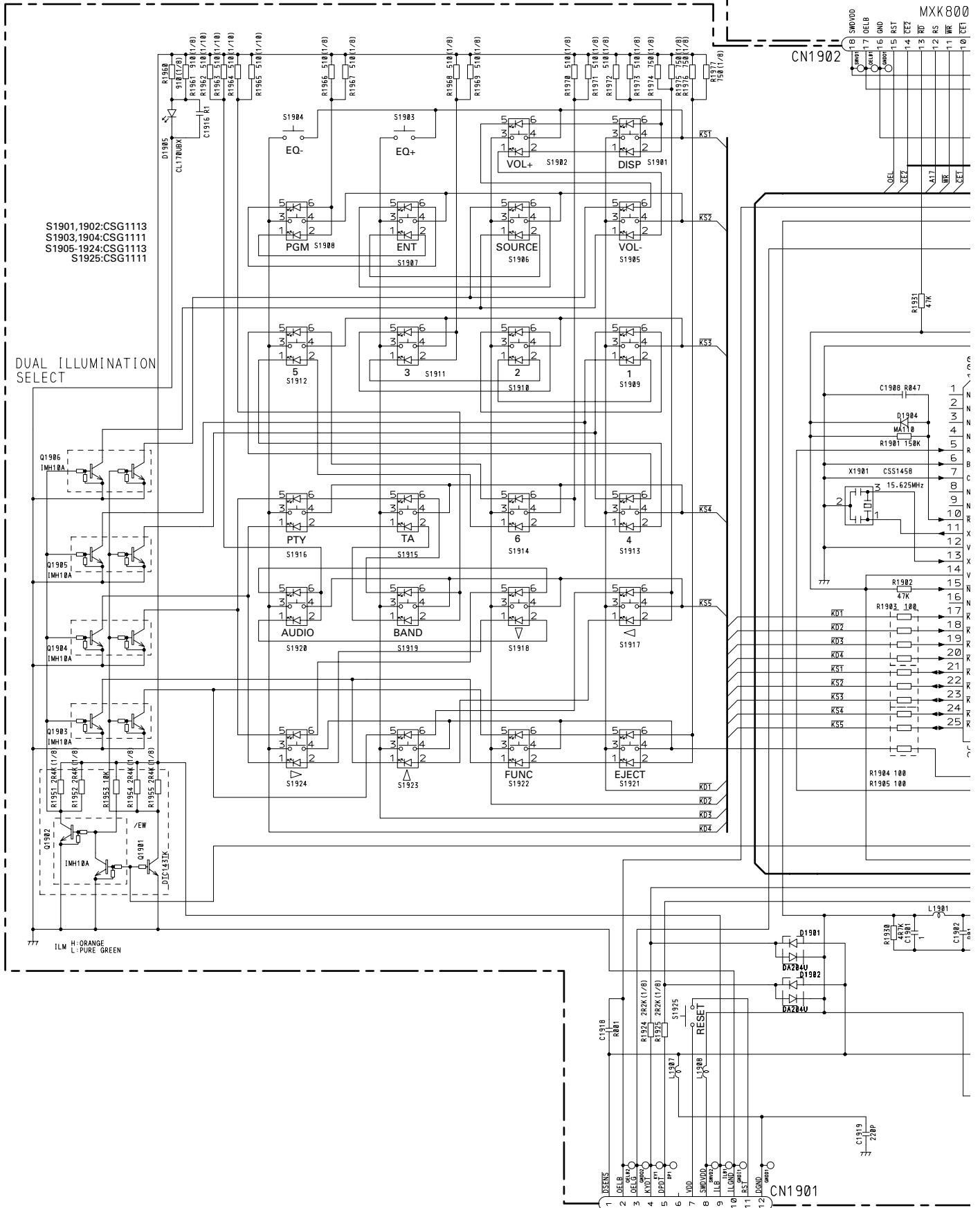
● KEH-P8800R/EW

A

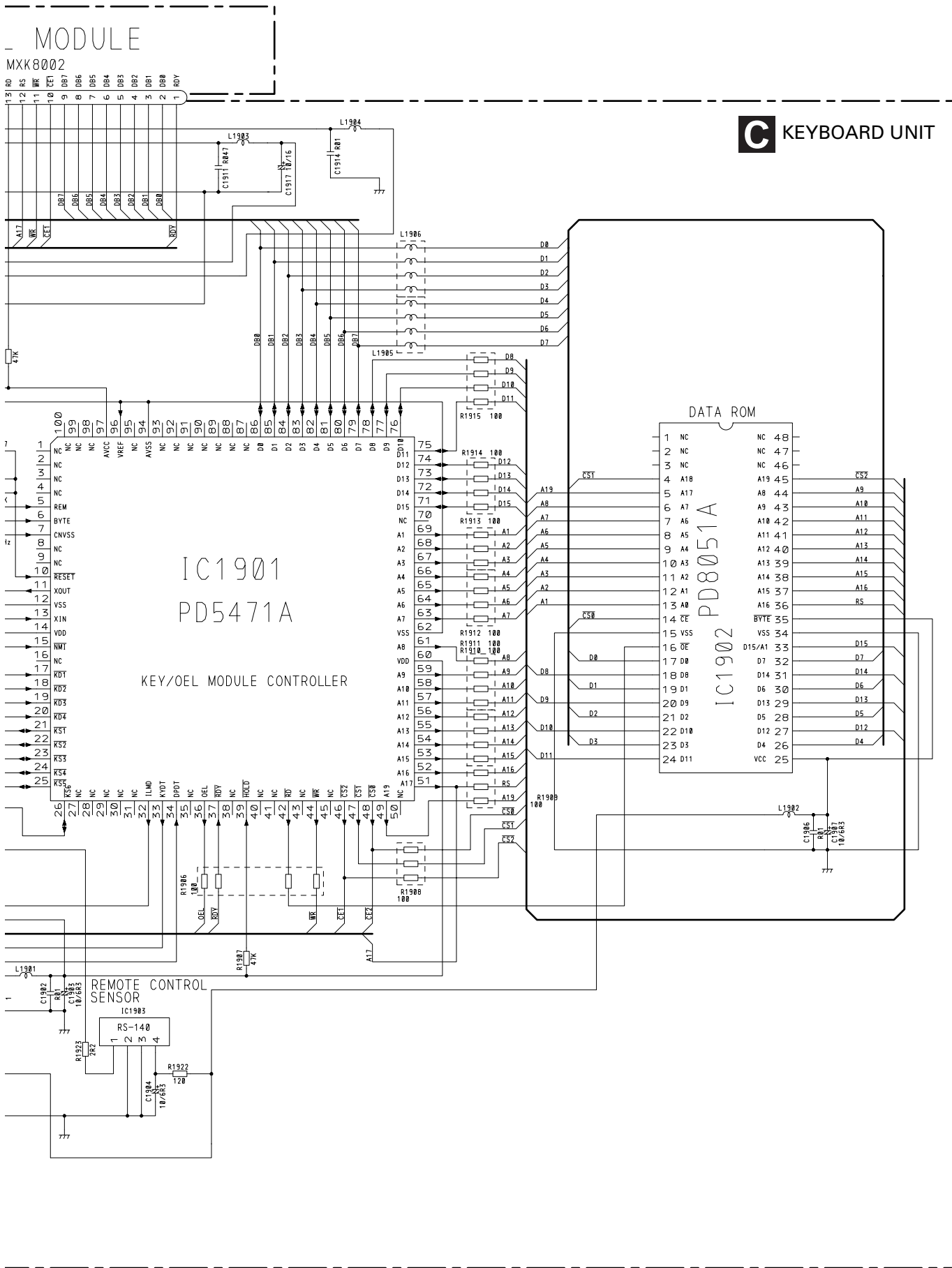
B

C

D







**C** KEYBOARD UNIT

A  
B  
C  
D

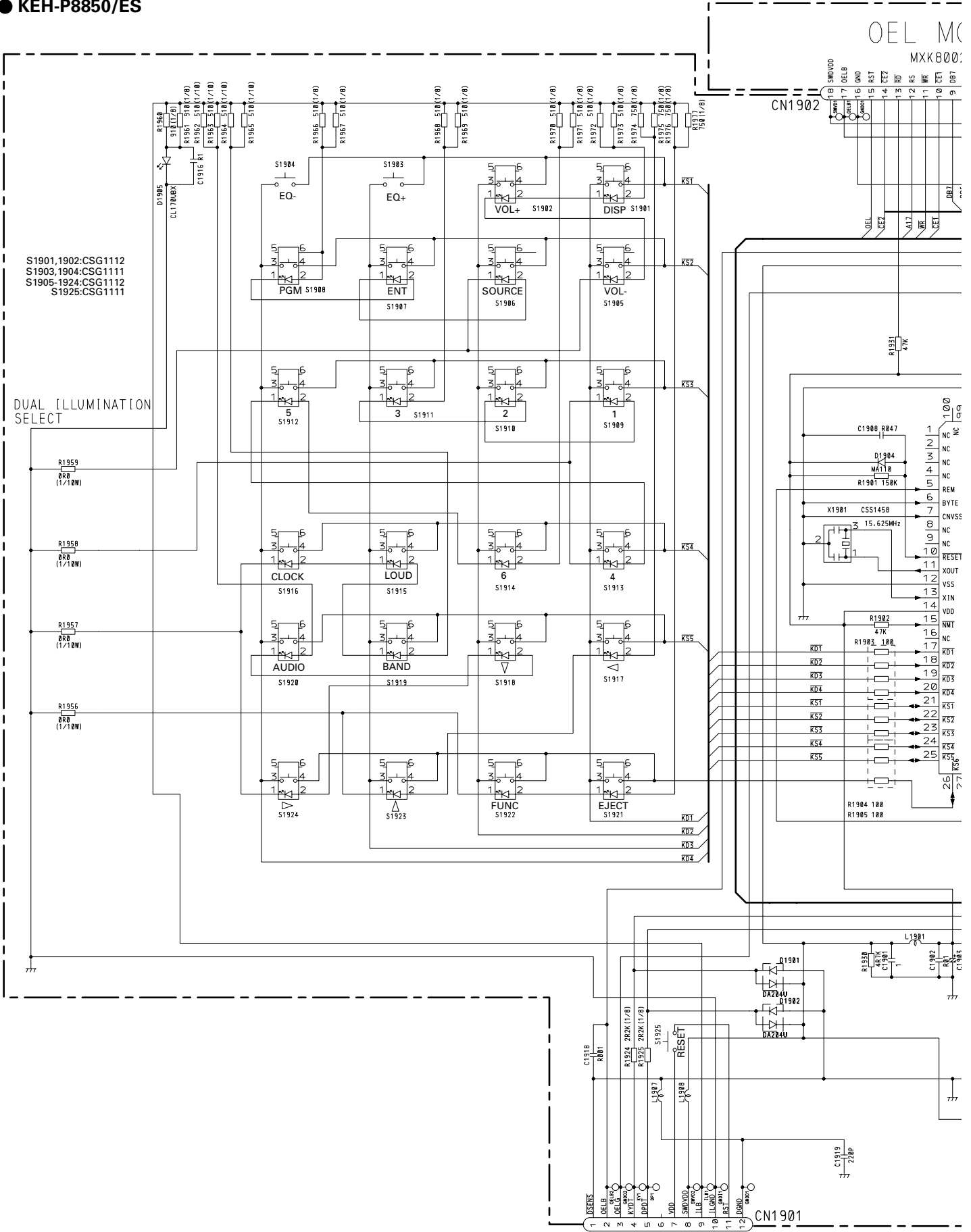
● KEH-P8850/ES

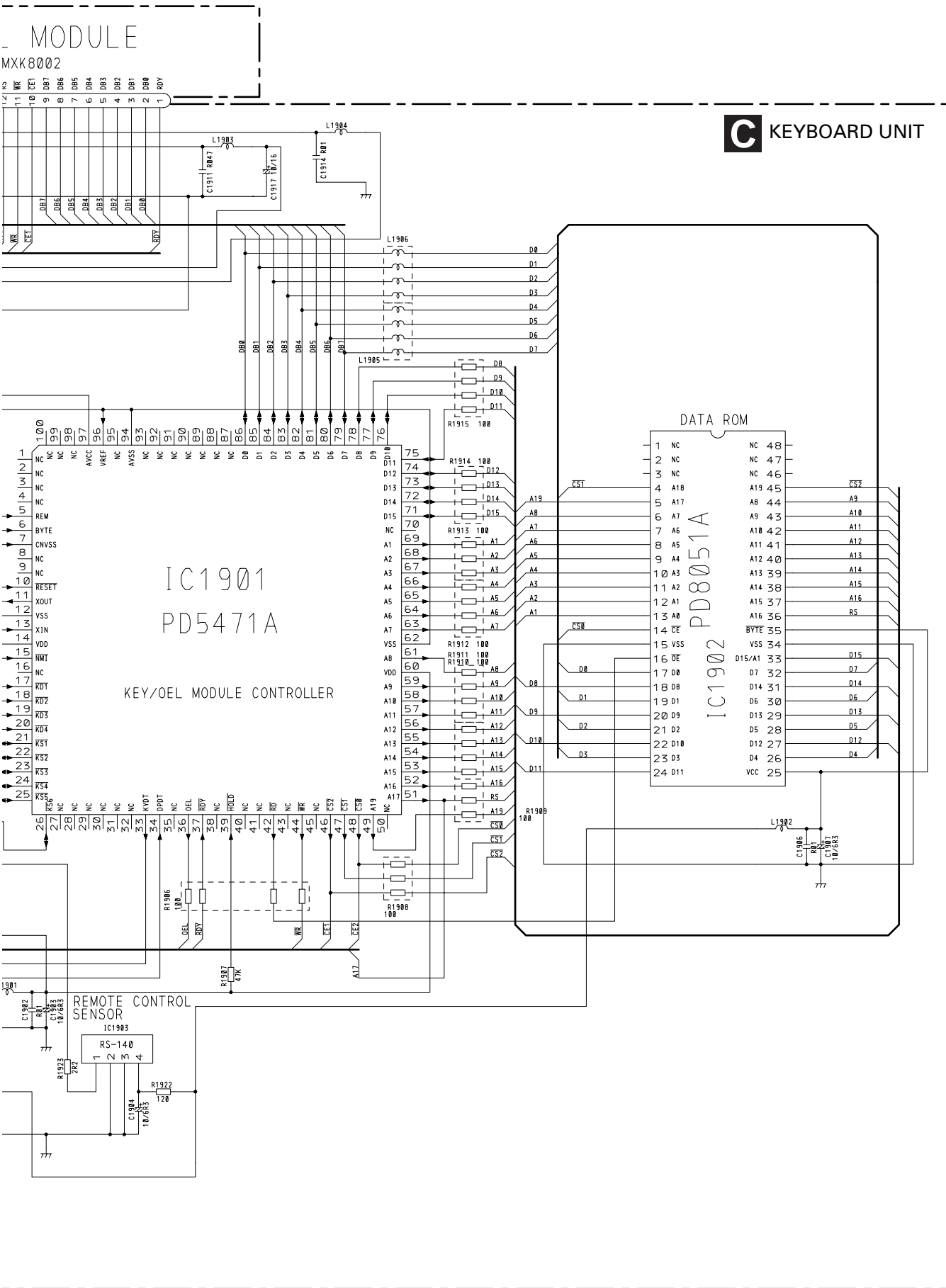
A

B

C

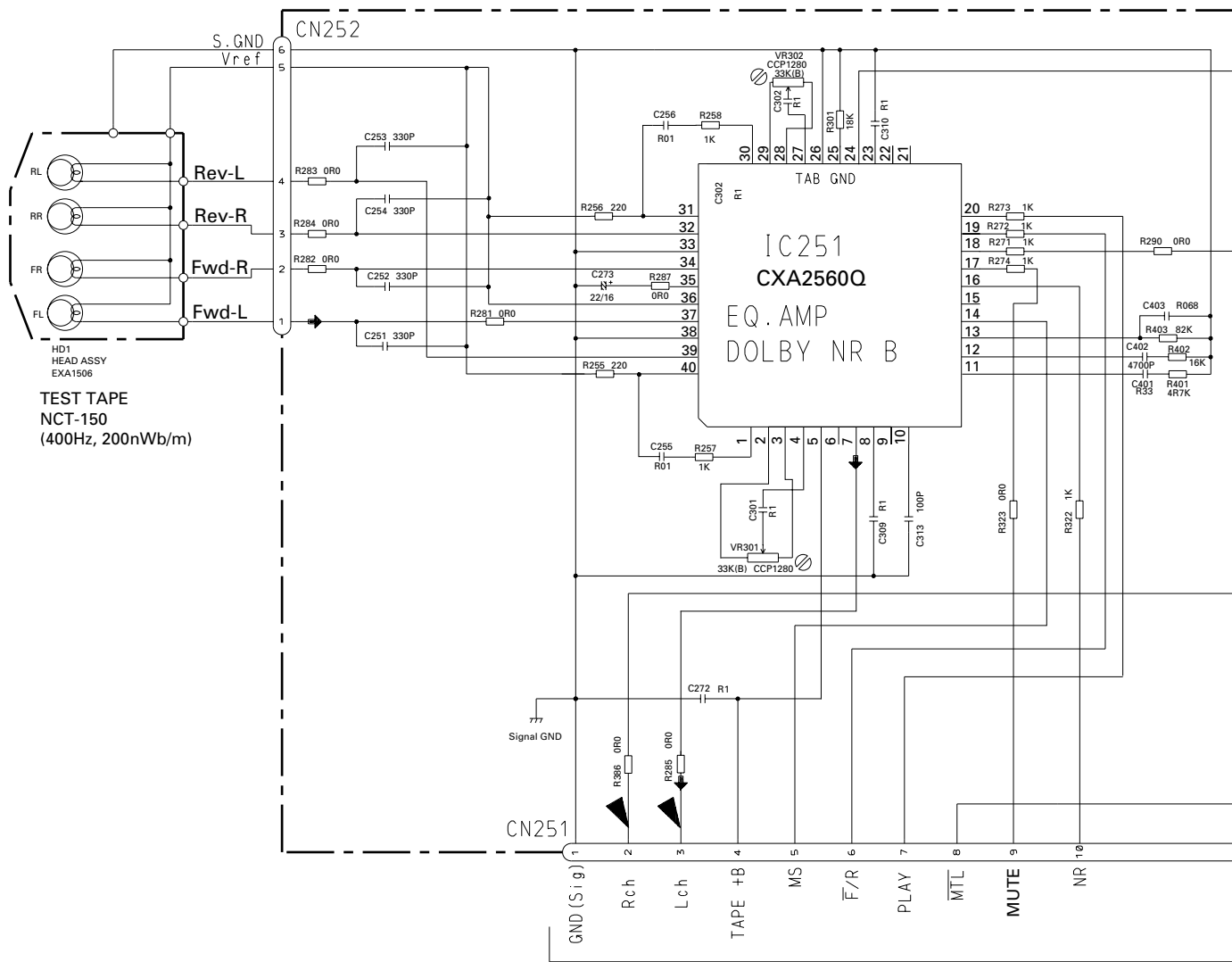
D



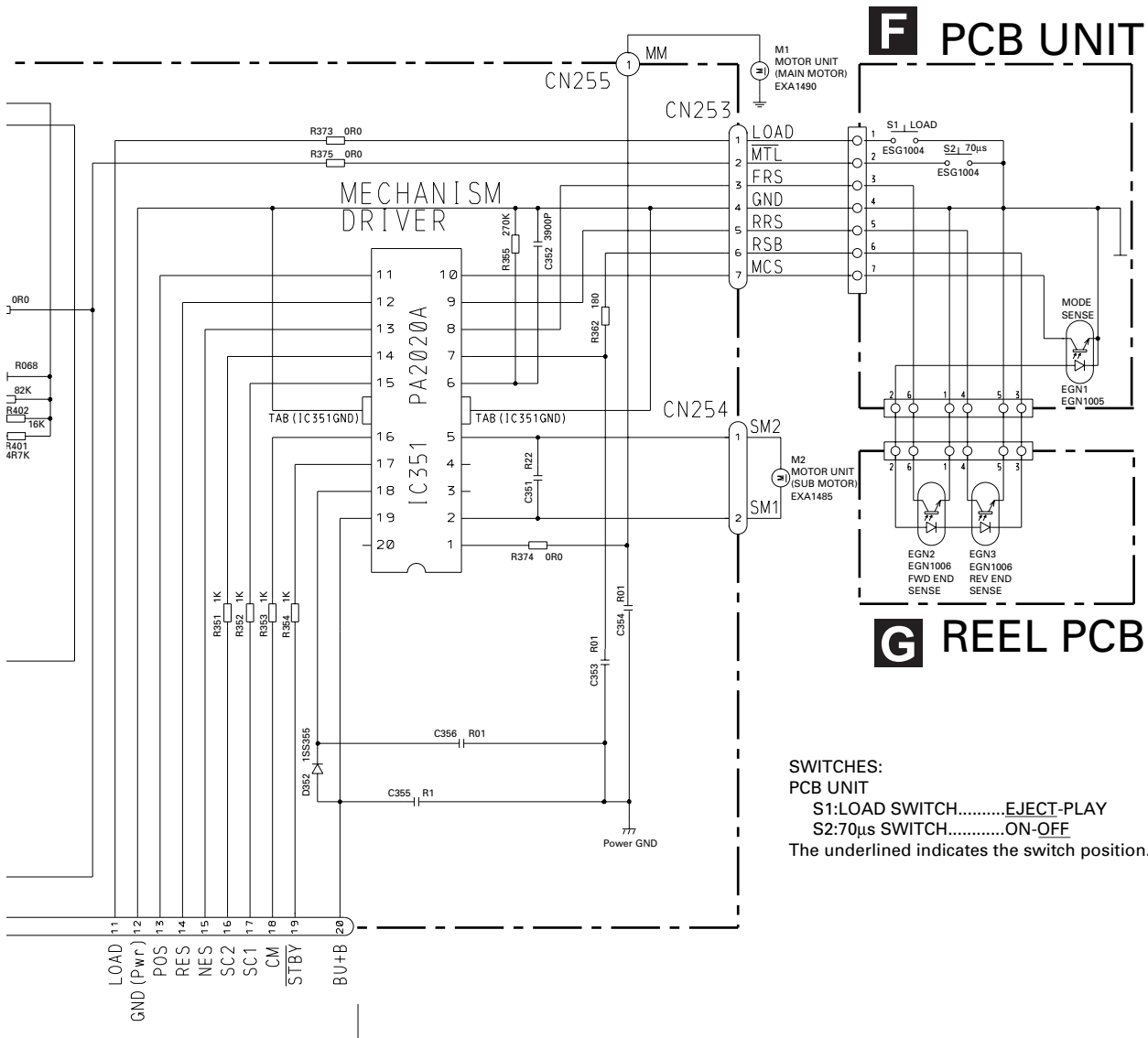


3.5 DECK UNIT

**E** DECK UNIT



-6dBs(388mV)±1dB **A** CN651

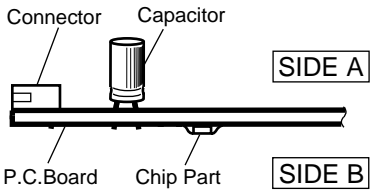


# 4. PCB CONNECTION DIAGRAM

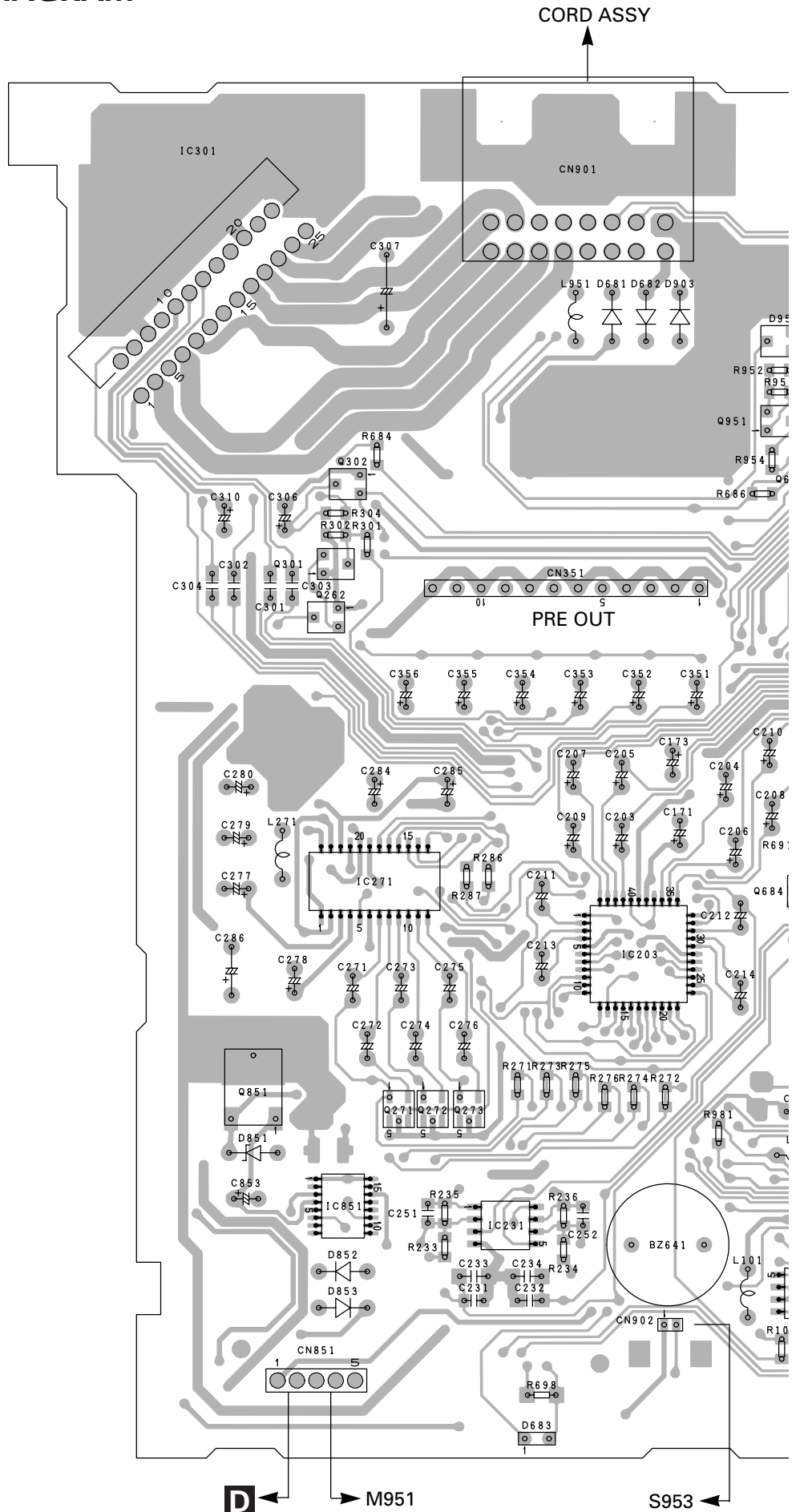
## 4.1 TUNER AMP UNIT

### 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

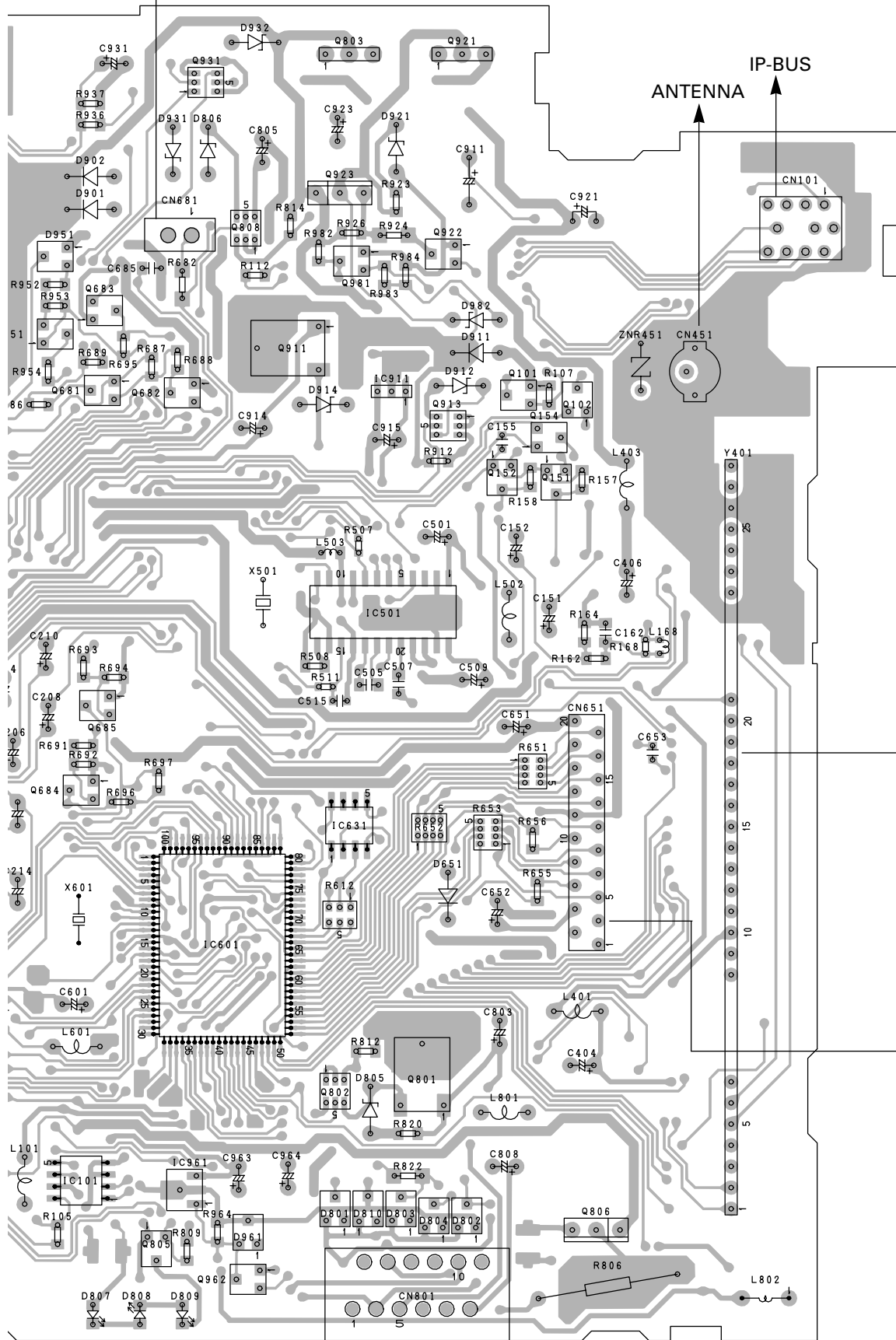


### A TUNER AMP UNIT



CORD ASSY

SIDE A



- Q803 Q921
- Q931
- IC301
- Q923
- Q808 Q922
- Q981 Q683
- Q951
- Q911
- Q302 Q101 IC911
- Q681 Q682 Q913 Q102
- Q154
- Q301 Q152 Q151
- Q262
- IC501
- Q685
- IC271
- Q684
- IC631
- IC203
- IC601
- Q851
- Q271 Q272 Q273
- Q801
- Q802 IC851
- IC231
- IC961
- IC101
- Q806
- Q805
- Q962

A

B

C

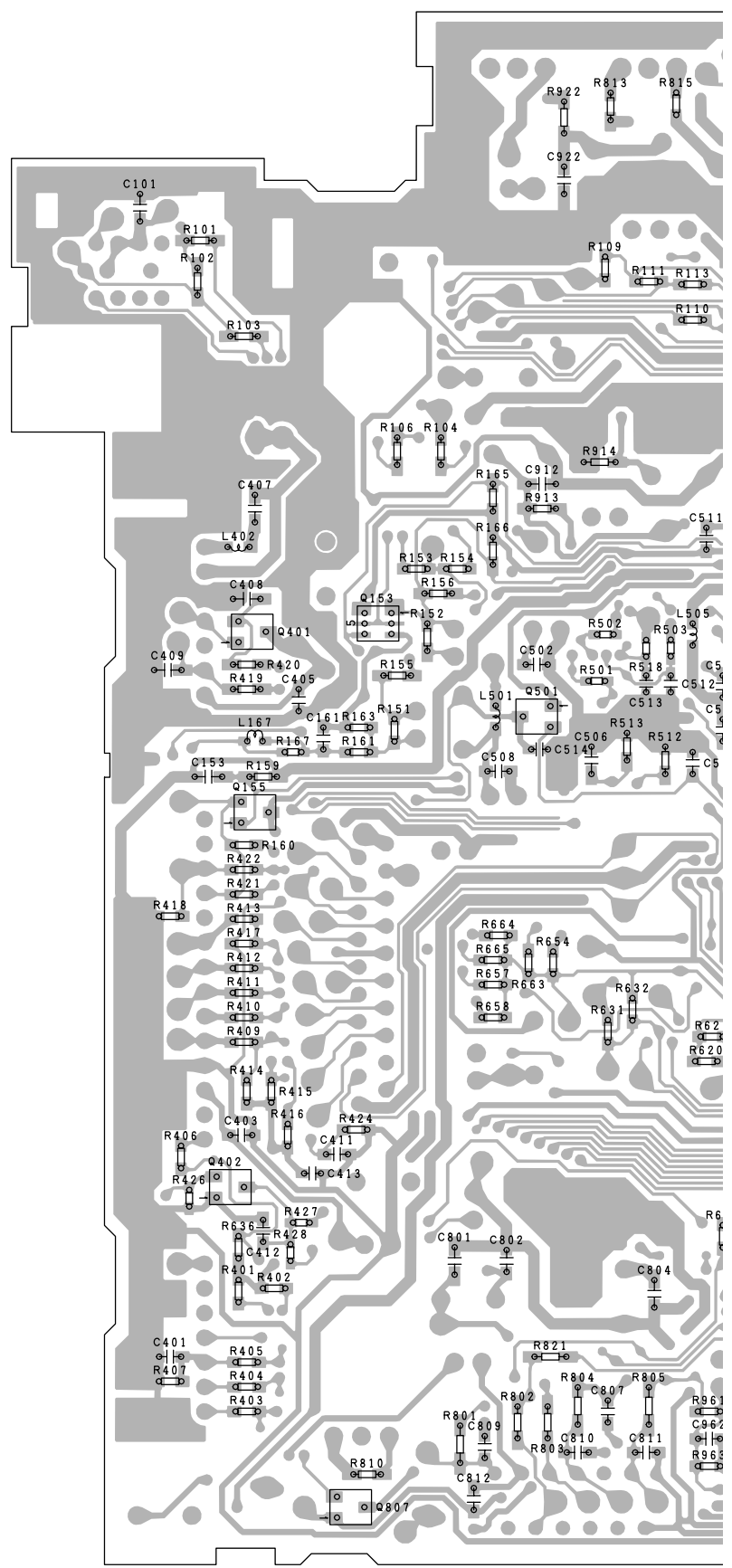
D

C CN1901

A

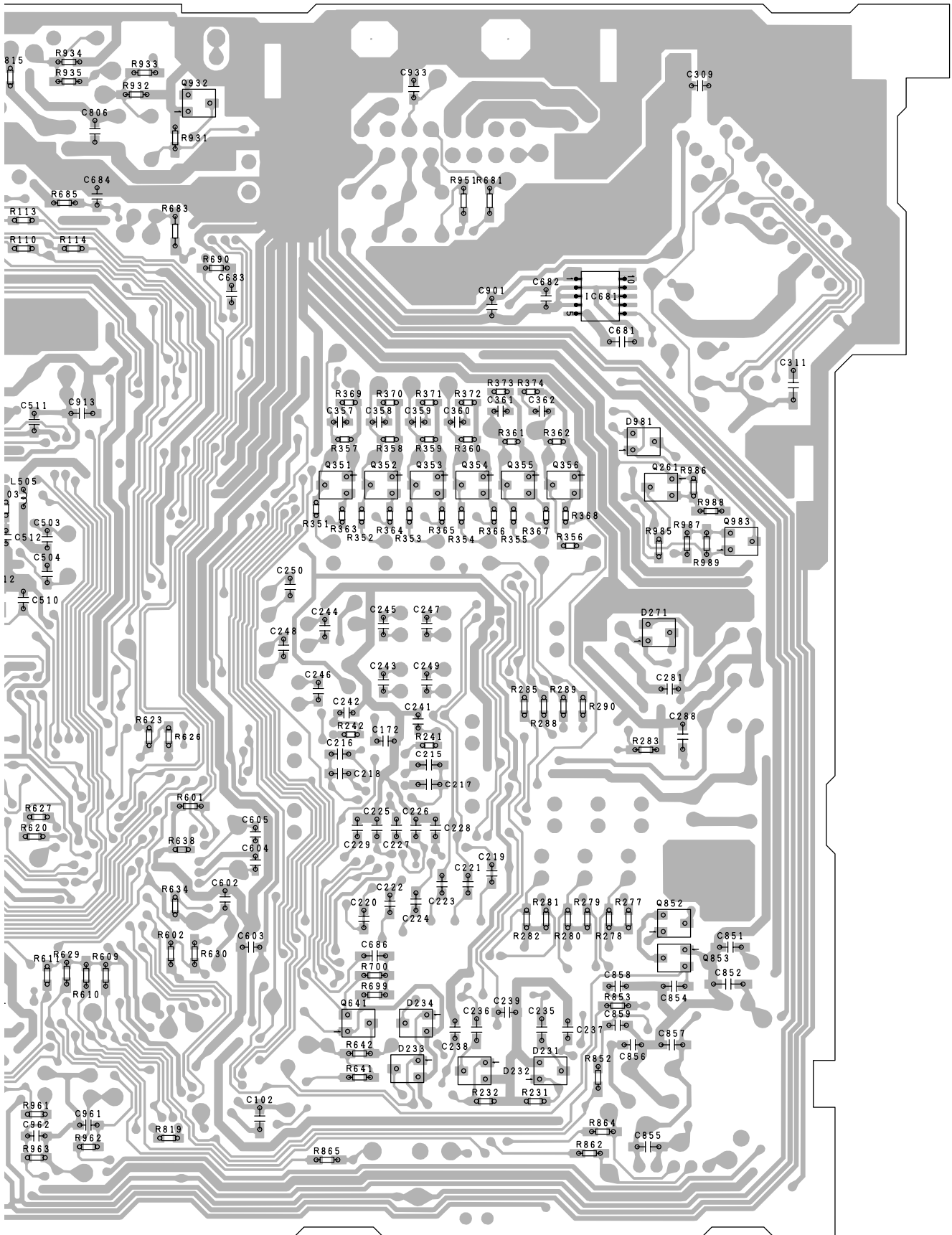
A **A** TUNER AMP UNIT

- Q932
- IC681
- Q352 Q353 Q354 Q355 Q356
- Q153 Q261 Q351
- Q401
- Q983
- Q501
- Q155
- Q852
- Q402
- Q853
- Q641
- Q807





SIDE B



A

B

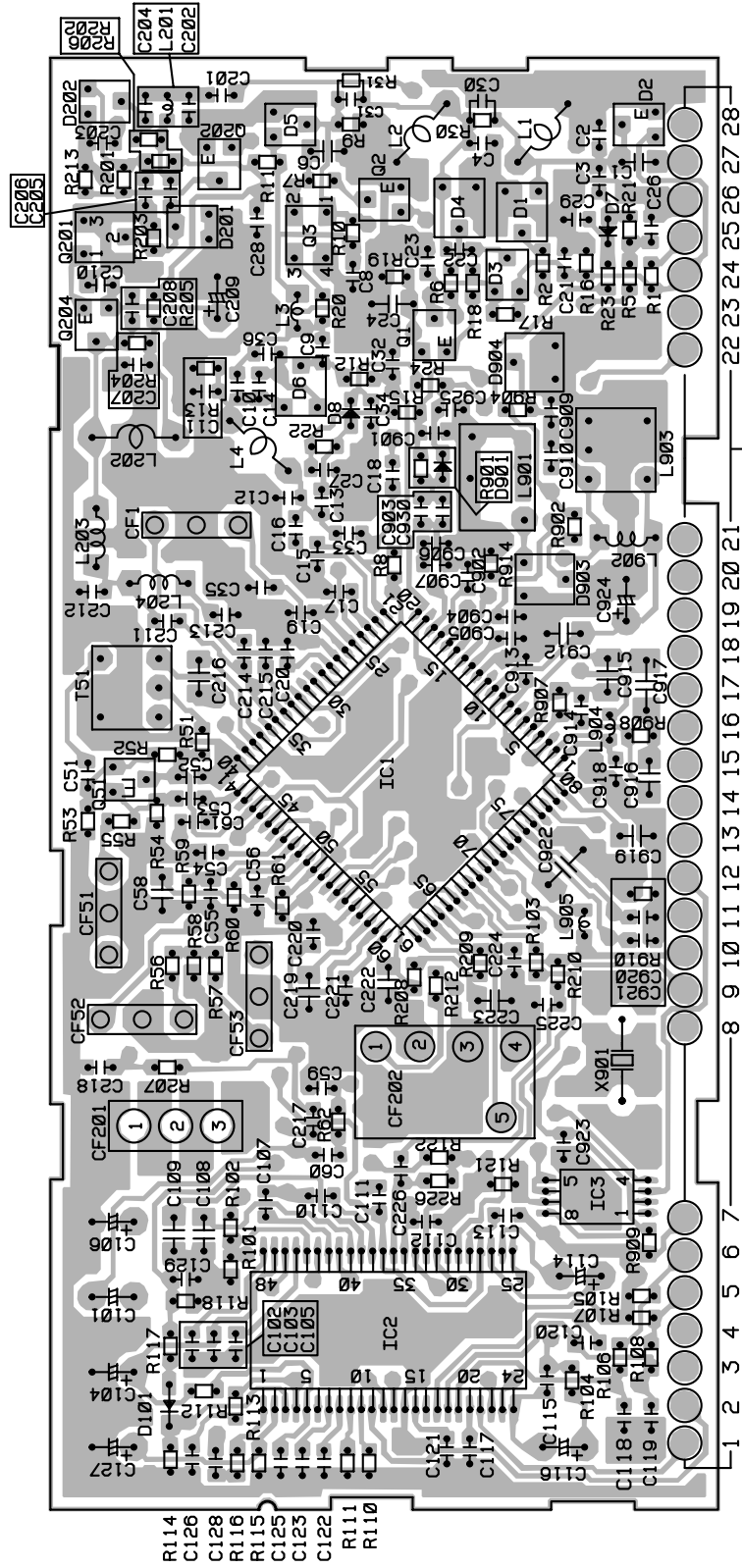
C

D

### 4.2 FM/AM TUNER UNIT

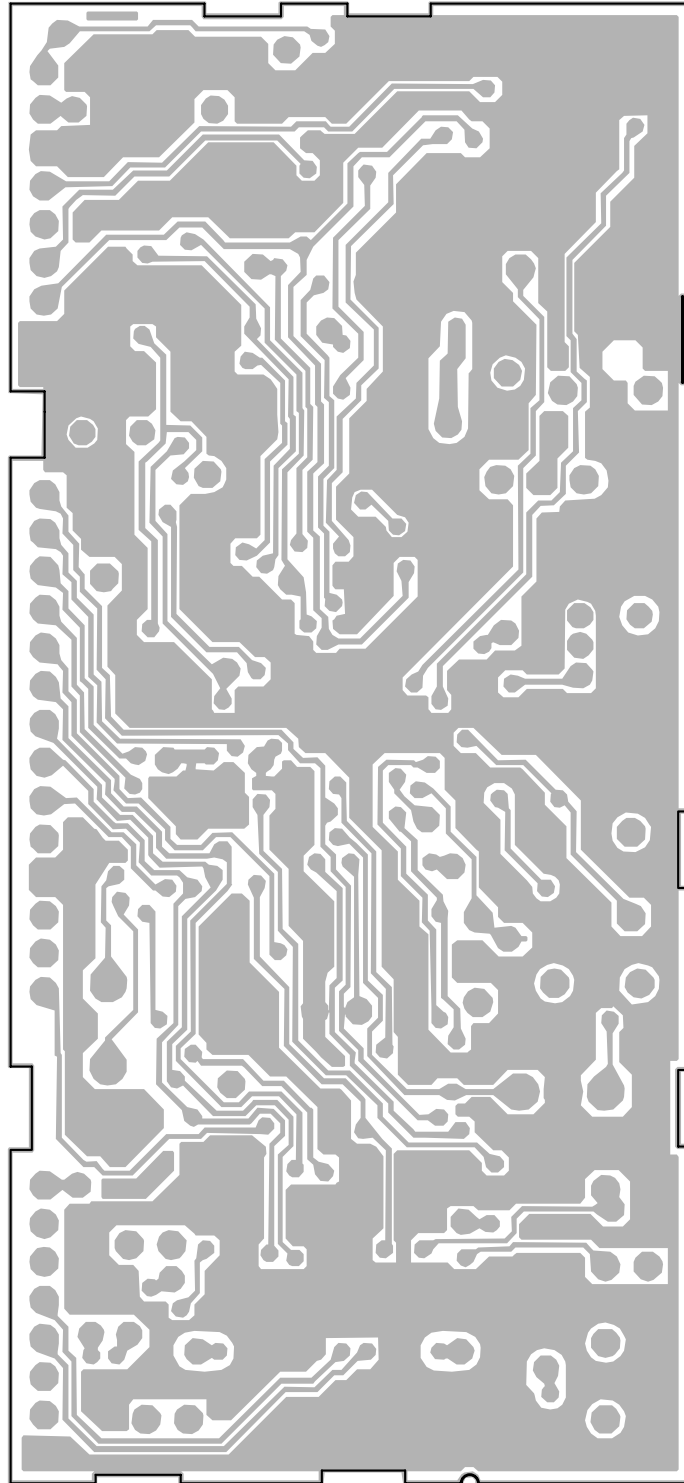
SIDE A

FM/AM TUNER UNIT



- IC, Q
- Q204 Q201
- Q51
- Q202
- Q3
- IC2 IC1
- Q1
- Q2
- IC3

SIDE B



B FM/AM TUNER UNIT

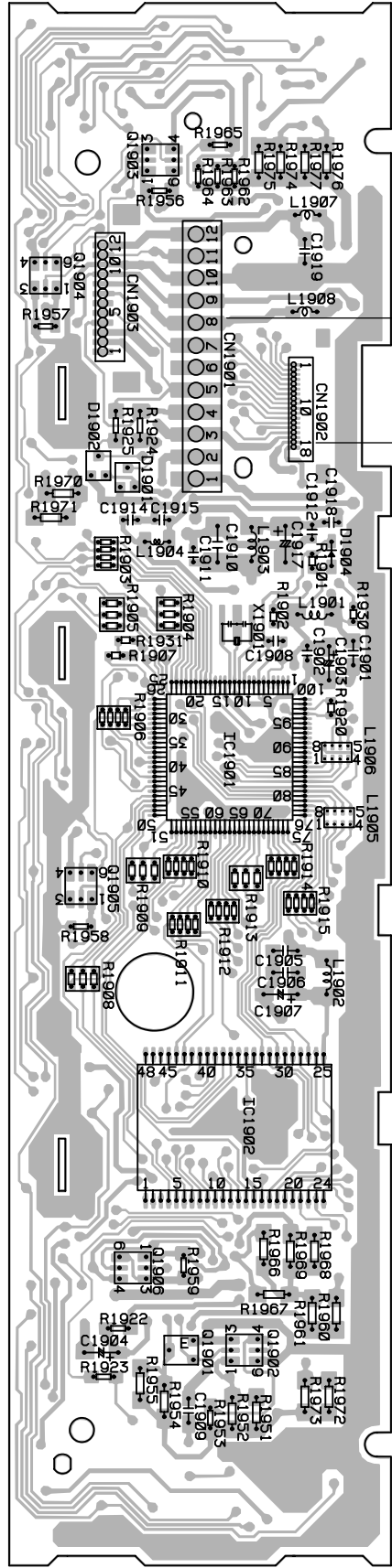
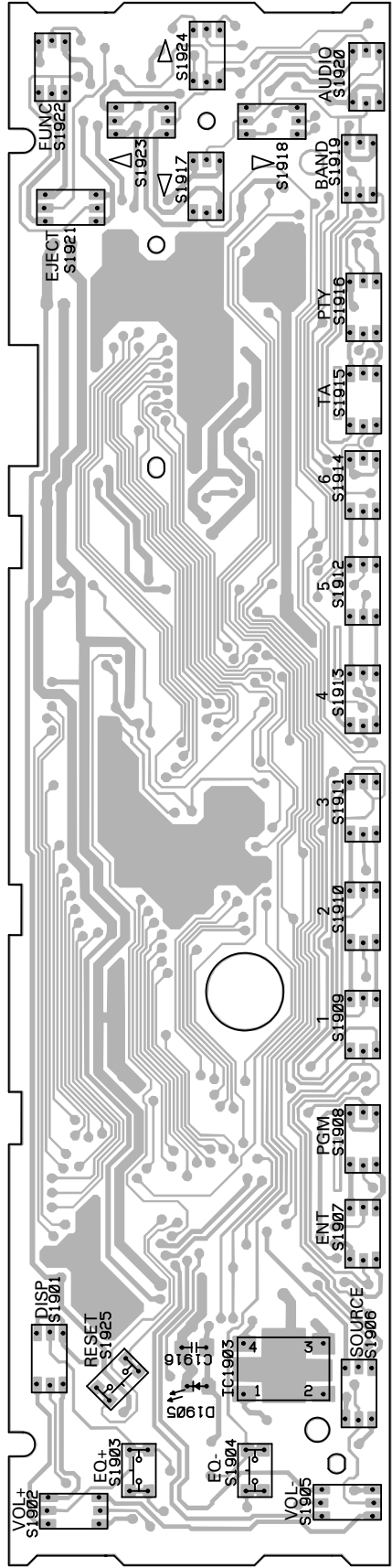
B

B

4.3 KEYBOARD UNIT

SIDE A

SIDE B



**C** KEYBOARD UNIT

**C** KEYBOARD UNIT

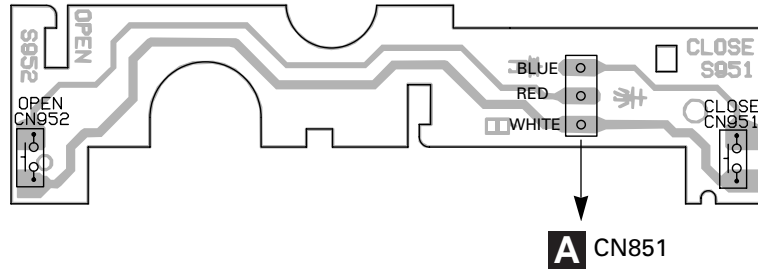
**A** CN801

OEL MODULE



### 4.4 SWITCH PCB

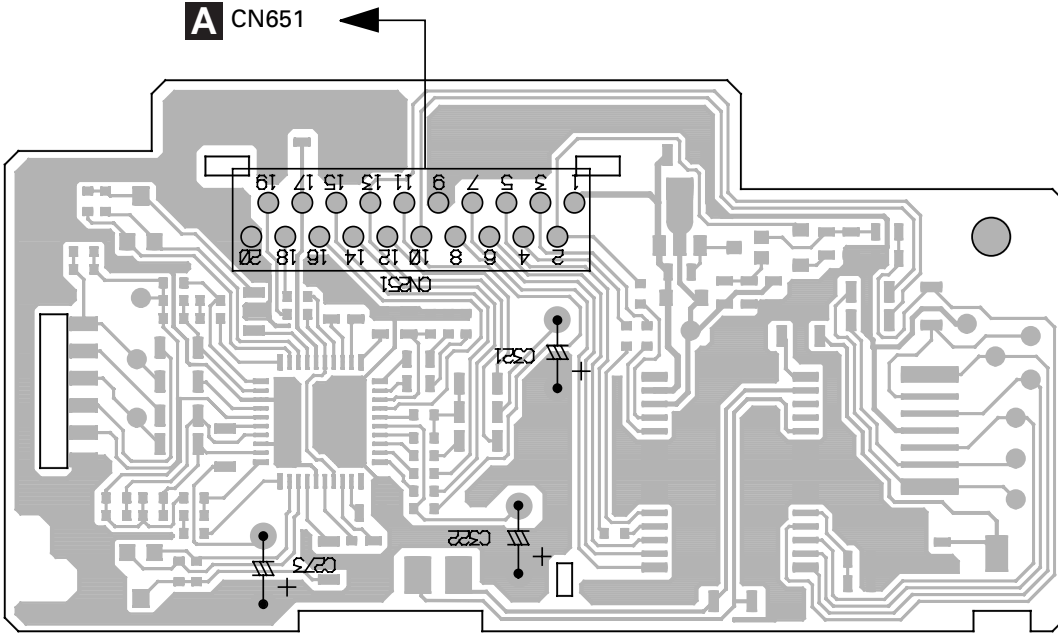
#### **D** SWITCH PCB



4.5 DECK UNIT

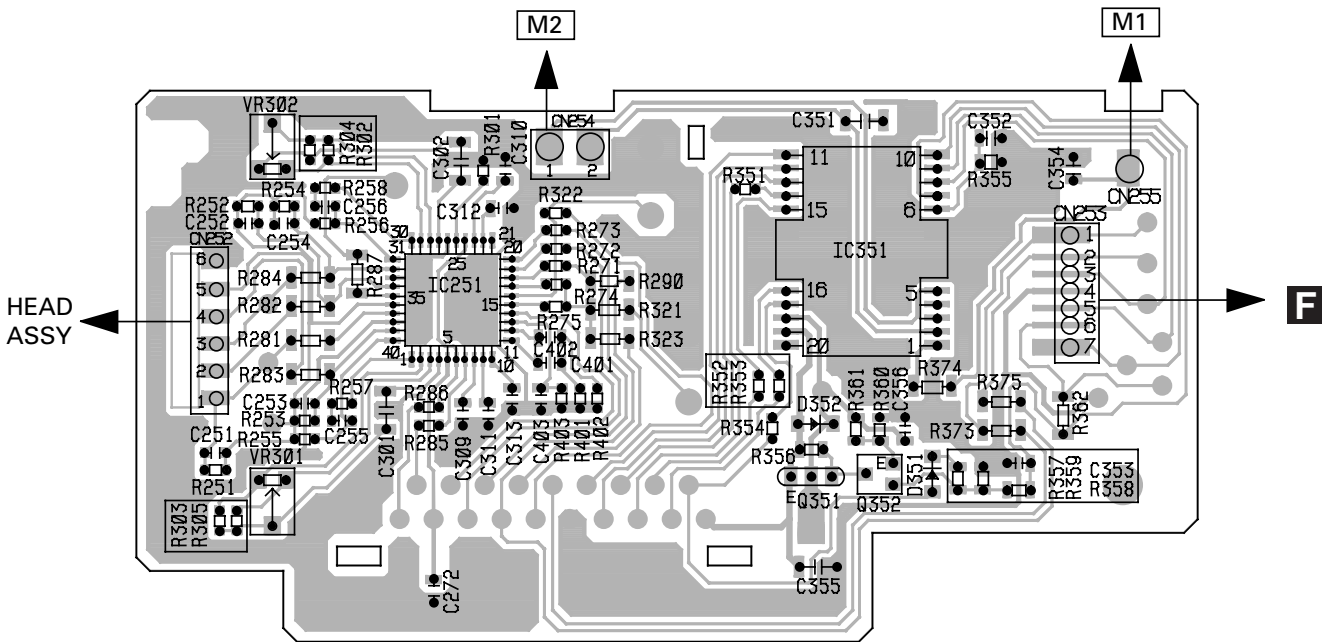
SIDE A

**E** DECK UNIT



SIDE B

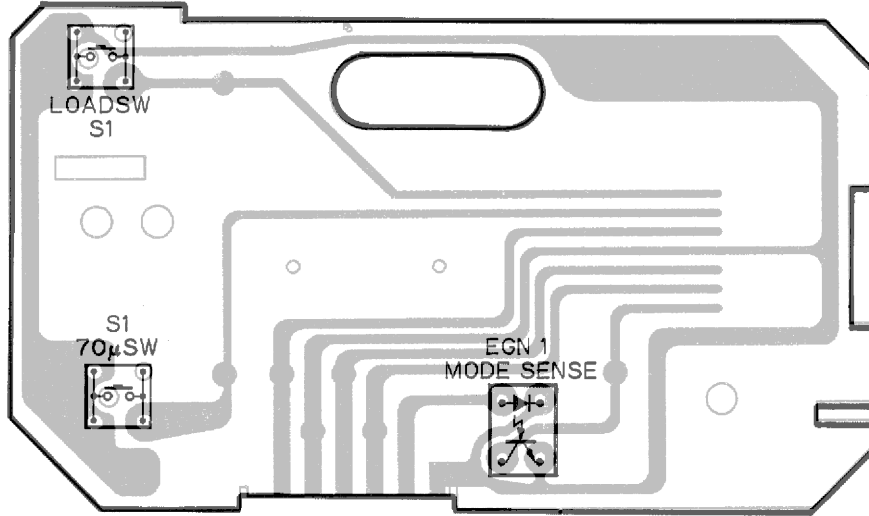
**E** DECK UNIT



4.6 PCB UNIT

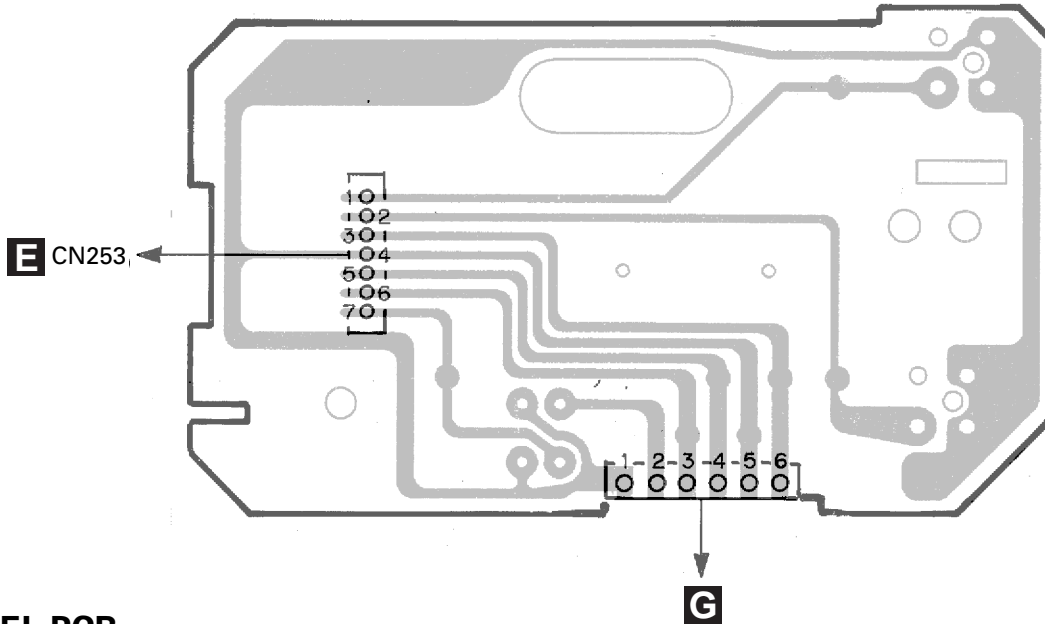
**F** PCB UNIT

**SIDE A**



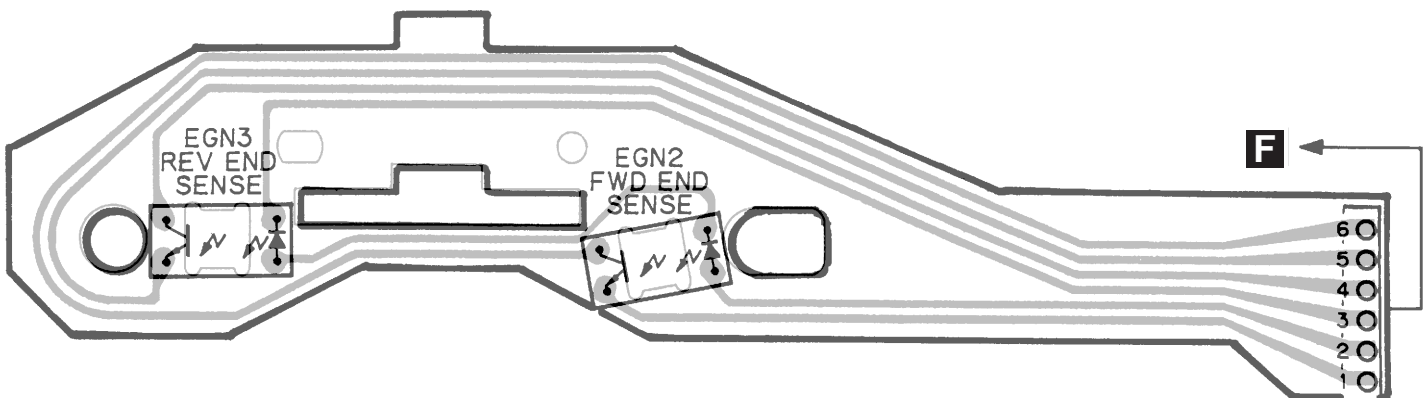
**F** PCB UNIT

**SIDE B**



4.7 REEL PCB

**G** REEL PCB



## 5. ELECTRICAL PARTS LIST

**NOTES:**

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

Chip Resistor

RS1/○○○○○J,RS1/○○○○○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.
<b>A</b> Unit Number : CWM6305(KEH-P8800R/EW) (KEH-P8800R-W/EW)		Q 951 Transistor	2SA1162
Unit Name : Tuner Amp Unit		Q 962 Transistor	2SC2412K
MISCELLANEOUS		Q 981 Transistor	2SC2412K
IC 101 IC	CA0008AM	Q 983 Transistor	2SC2412K
IC 203 IC	PML004AF	D 231 Diode	MA153
IC 231 IC	NJM4558MD	D 232 Diode	MA153
IC 271 IC	PA2028A	D 233 Diode	MA153
IC 301 IC	PAL005A	D 234 Diode	MA153
		D 651 Diode	1SS133
		D 683 LED	BR4361F
IC 501 IC	PM4009A	D 801 Diode	MA153
IC 601 IC	PD5495A	D 802 Diode	MA153
IC 851 IC	BA6288FS	D 803 Diode	MA153
IC 911 IC	S-81250SGUP	D 804 Diode	MA153
IC 961 IC	S-80735ANDZI	D 805 Diode	HZS6L(B1)
Q 101 Transistor	2SA1162	D 806 Diode	HZS9L(C3)
Q 102 Transistor	DTC124EK	D 807 LED	CL170PGCD
Q 151 Transistor	2SD1757K	D 808 LED	CL170PGCD
Q 152 Transistor	2SD1757K	D 809 LED	CL170PGCD
Q 153 Transistor	IMH3A	D 810 Diode	MA3062(M)
Q 154 Transistor	DTA114EK	D 851 Diode	HZS7L(C3)
Q 155 Transistor	2SC2412K	D 852 Diode	1SS133
Q 261 Transistor	2SA1162	D 853 Diode	1SS133
Q 262 Transistor	DTC144EK	D 901 Diode	ERA15-02VH
Q 301 Transistor	DTC124EK	D 902 Diode	ERA15-02VH
Q 351 Transistor	2SC3326	D 903 Diode	ERA15-02VH
Q 352 Transistor	2SC3326	D 911 Diode	ERA15-02VH
Q 353 Transistor	2SC3326	D 912 Diode	HZS6L(B1)
Q 354 Transistor	2SC3326	D 914 Diode	HZS16(2)
Q 355 Transistor	2SC3326	D 921 Diode	HZS9L(B3)
Q 356 Transistor	2SC3326	D 931 Diode	HZS7L(A1)
Q 401 Transistor	2SC2412K	D 932 Diode	HZS7L(C2)
Q 402 Transistor	2SC2412K	D 951 Diode	MA152WK
Q 501 Transistor	DTA124EK	D 961 Diode	MA152K
Q 641 Transistor	DTC114EK	D 981 Diode	MA152WK
Q 681 Transistor	2SA1162	D 982 Diode	HZS9L(A2)
Q 682 Transistor	DTC124EK	ZNR 451 Surge Protector	DSPS-201M-S00B
Q 683 Transistor	2SC2412K	L 101 Inductor	LAU3R3K
Q 801 Transistor	2SD1760F5	L 167 Inductor	LCTB2R2K1608
Q 802 Transistor	IMD2A	L 168 Inductor	LCTB2R2K1608
Q 803 Transistor	2SD2396	L 271 Ferri-Inductor	LAU101K
Q 805 Transistor	2SC2412K	L 401 Ferri-Inductor	LAU2R2K
Q 806 Transistor	2SB1238	L 402 Inductor	LCTB4R7K2125
Q 807 Transistor	DTC143EK	L 403 Ferri-Inductor	LAU1R0M
Q 808 Transistor	IMD2A	L 501 Inductor	CTF1420
Q 851 Transistor	2SD1760F5	L 502 Ferri-Inductor	LAU101K
Q 852 Transistor	DTA114EK	L 601 Inductor	LAU100K
Q 853 Transistor	DTC124EK	L 801 Inductor	LAU100K
Q 911 Transistor	2SD1760F5	L 802 Inductor	CTF1489
Q 913 Transistor	IMD2A	L 951 Ferri-Inductor	LAU2R2K
Q 921 Transistor	2SD2396	X 501 Crystal Resonator 3.648MHz	CSS1447
Q 922 Transistor	DTC124EK	X 601 Radiator 10.00MHz	CSS1475
Q 923 Transistor	2SB1238	BZ 641 Buzzer	CPV1012
Q 931 Transistor	IMX1		FM/AM Tuner Unit
Q 932 Transistor	2SC2412K		CWE1500



====Circuit Symbol and No.====Part Name	Part No.	====Circuit Symbol and No.====Part Name	Part No.
<b>RESISTORS</b>			
R 101	RS1/10S101J	R 405	RS1/10S681J
R 102	RS1/10S620J	R 406	RS1/10S102J
R 103	RS1/10S101J	R 407	RS1/10S473J
R 104	RS1/10S222J	R 409	RS1/10S681J
R 105	RS1/10S103J	R 410	RS1/10S103J
R 106	RS1/10S562J	R 411	RS1/10S681J
R 107	RS1/10S332J	R 412	RS1/10S681J
R 109	RS1/10S181J	R 413	RS1/10S681J
R 110	RS1/10S181J	R 414	RS1/10S473J
R 111	RS1/10S223J	R 415	RS1/10S472J
R 112	RS1/10S223J	R 416	RS1/10S473J
R 113	RS1/10S102J	R 417	RS1/10S473J
R 114	RS1/10S102J	R 418	RS1/10S473J
R 153	RS1/10S224J	R 419	RS1/10S222J
R 154	RS1/10S224J	R 420	RS1/10S222J
R 155	RS1/10S222J	R 421	RS1/10S681J
R 156	RS1/10S222J	R 422	RS1/10S681J
R 157	RS1/10S223J	R 424	RS1/10S393J
R 158	RS1/10S223J	R 426	RS1/16S153J
R 159	RS1/10S224J	R 427	RS1/16S474J
R 160	RS1/10S473J	R 428	RS1/16S681J
R 161	RS1/10S162J	R 501	RS1/16S102J
R 162	RS1/10S162J	R 502	RS1/16S102J
R 163	RS1/10S272J	R 503	RS1/16S102J
R 164	RS1/10S272J	R 507	RS1/16S102J
R 231	RS1/10S474J	R 508	RS1/10S0R0J
R 232	RS1/10S474J	R 511	RS1/16S102J
R 233	RS1/10S273J	R 512	RS1/10S0R0J
R 234	RS1/10S273J	R 513	RS1/10S225J
R 235	RS1/10S104J	R 518	RS1/16S681J
R 236	RS1/10S104J	R 601	RS1/10S473J
R 241	RS1/16S0R0J	R 602	RS1/10S472J
R 242	RS1/16S0R0J	R 609	RS1/10S473J
R 283	RS1/10S203J	R 610	RS1/10S473J
R 301	RS1/10S103J	R 611	RS1/10S473J
R 302	RS1/10S103J	R 612	RA3C102J
R 304	RS1/10S331J	R 620	RS1/10S473J
R 351	RS1/16S820J	R 623	RS1/10S473J
R 352	RS1/16S820J	R 627	RS1/10S473J
R 353	RS1/16S820J	R 629	RS1/10S473J
R 354	RS1/16S820J	R 630	RS1/10S473J
R 355	RS1/16S820J	R 634	RS1/10S102J
R 356	RS1/16S820J	R 641	RS1/10S202J
R 357	RS1/16S223J	R 642	RS1/10S102J
R 358	RS1/16S223J	R 651	RA4C681J
R 359	RS1/16S223J	R 652	RA4C102J
R 360	RS1/16S223J	R 653	RA4C102J
R 361	RS1/16S223J	R 654	RS1/10S473J
R 362	RS1/16S223J	R 655	RS1/10S102J
R 363	RS1/16S103J	R 656	RS1/10S102J
R 364	RS1/16S103J	R 657	RS1/10S103J
R 365	RS1/16S103J	R 658	RS1/10S473J
R 366	RS1/16S103J	R 663	RS1/10S473J
R 367	RS1/16S103J	R 664	RS1/10S473J
R 368	RS1/16S103J	R 665	RS1/10S473J
R 369	RS1/16S471J	R 681	RS1/8S102J
R 370	RS1/16S471J	R 686	RS1/10S103J
R 371	RS1/16S471J	R 687	RS1/10S223J
R 372	RS1/16S471J	R 688	RS1/10S223J
R 373	RS1/16S471J	R 689	RS1/10S223J
R 374	RS1/16S471J	R 690	RS1/10S272J
R 401	RS1/10S473J	R 695	RS1/10S473J
R 402	RS1/10S473J	R 698	RS1/8S471J
R 403	RS1/10S681J	R 699	RS1/10S102J
R 404	RS1/10S681J	R 700	RS1/10S103J

# KEH-P8800R,P8800R-W,P8850

====Circuit Symbol and No.====Part Name	Part No.	====Circuit Symbol and No.====Part Name	Part No.
R 801	RS1/8S222J	C 173	CEJA100M16
R 802	RS1/8S471J	C 203	CEJA1R0M50
R 803	RS1/8S471J	C 204	CEJA1R0M50
R 804	RS1/8S103J	C 205	CEJAR22M50
R 805	RS1/8S472J	C 206	CEJAR22M50
R 806	RS2PMF220J	C 207	CEJA1R0M50
R 807	RS1/4S471J	C 208	CEJA1R0M50
R 809	RS1/10S103J	C 209	CEJA1R0M50
R 810	RS1/10S222J	C 210	CEJA1R0M50
R 811	RS1/4S152J	C 211	CEJANP4R7M16
R 812	RS1/10S152J	C 212	CEJANP4R7M16
R 813	RS1/10S221J	C 213	CEJANP4R7M16
R 814	RS1/10S152J	C 214	CEJANP4R7M16
R 815	RS1/10S1R0J	C 215	CKSQYB473K25
R 819	RS1/10S103J	C 216	CKSQYB473K25
R 821	RS1/8S222J	C 217	CKSQYB473K25
R 822	RS1/8S222J	C 218	CKSQYB473K25
R 851	RS1/4S271J	C 225	CKSQYB333K50
R 852	RS1/10S102J	C 226	CKSQYB123K25
R 853	RS1/10S102J	C 227	CKSQYB473K25
R 862	RS1/10S102J	C 228	CKSQYB153K50
R 864	RS1/10S102J	C 229	CKSQYB153K50
R 865	RS1/10S102J	C 231	CCSQCH101J50
R 912	RS1/10S152J	C 232	CCSQCH101J50
R 913	RS1/10S512J	C 233	CKSYB474K16
R 914	RS1/8S151J	C 234	CKSYB474K16
R 922	RS1/8S221J	C 235	CKSQYB104K16
R 923	RS1/10S122J	C 236	CKSQYB104K16
R 924	RS1/8S272J	C 237	CKSQYB104K16
R 926	RS1/10S223J	C 238	CKSQYB104K16
R 931	RS1/10S472J	C 239	CKSQYB103K50
R 932	RS1/10S473J	C 271	CEJANP1R0M50
R 933	RS1/10S223J	C 272	CEJANP1R0M50
R 934	RS1/10S473J	C 273	CEJANP1R0M50
R 935	RS1/10S473J	C 274	CEJANP1R0M50
R 936	RS1/10S103J	C 275	CEJANP1R0M50
R 937	RS1/10S473J	C 276	CEJANP1R0M50
R 951	RS1/8S153J	C 277	CEJA4R7M35
R 952	RS1/10S472J	C 278	CEJA101M16
R 953	RS1/10S472J	C 279	CEJA100M16
R 954	RS1/10S102J	C 280	CEJA100M16
R 961	RS1/10S103J	C 281	CKSQYB105K16
R 962	RS1/10S102J	C 284	CEJA330M25
R 963	RS1/10S473J	C 285	CEJA330M25
R 964	RS1/10S822J	C 286	CASAQ3R3M16
R 981	RS1/10S223J	C 288	CKSYB684K25
R 982	RS1/10S473J	C 301	CKSQYB224K16
R 983	RS1/10S103J	C 302	CKSQYB224K16
R 984	RS1/10S223J	C 303	CKSQYB224K16
R 985	RS1/10S102J	C 304	CKSQYB224K16
R 986	RS1/10S103J	C 306	CEHAR330M10
R 987	RS1/10S224J	C 307	CCH1178
R 988	RS1/10S333J	C 309	CKSQYB104K16
R 989	RS1/10S473J	C 310	CEHAR100M16
		C 311	CKSYB105K16
<b>CAPACITORS</b>			
C 101	CKSQYB104K16	C 351	CEJA100M35
C 102	CKSQYB104K16	C 352	CEJA100M35
C 151	CEJA1R0M50	C 353	CEJA100M35
C 152	CEJA1R0M50	C 354	CEJA100M35
C 153	CKSQYB223K50	C 355	CEJA100M35
C 155	CCSRCH101J50	C 356	CEJA100M35
C 161	CKSQYB123K25	C 357	CKSRYB222K50
C 162	CKSQYB123K25	C 358	CKSRYB222K50
C 171	CEJA470M16	C 359	CKSRYB222K50
C 172	CKSQYB104K16	C 360	CKSRYB222K50

4700μF/16V

====Circuit Symbol and No.====Part Name	Part No.	====Circuit Symbol and No.====Part Name	Part No.
C 361	CKSRYP222K50	<b>A</b> Unit Number : CWM6307(KEH-P8850/ES)	
C 362	CKSRYP222K50	Unit Name : Tuner Amp Unit	
C 401	CKSQYB182K50		
C 403	CKSQYB473K25		
C 404	CEJA470M10	MISCELLANEOUS	
C 405	CKSQYB103K50	IC 101 IC	CA0008AM
C 406	CEJA220M10	IC 203 IC	PML004AF
C 407	CKSQYB103K50	IC 231 IC	NJM4558MD
C 408	CKSQYB223K50	IC 271 IC	PA2028A
C 409	CKSQYB223K50	IC 301 IC	PAL005A
C 411	CKSQYB472K50	IC 601 IC	PD5496A
C 412	CKSQYB472K50	IC 681 IC	TPD1018F
C 503	CCSQCH270J50	IC 851 IC	BA6288FS
C 504	CCSQCH270J50	IC 911 IC	S-81250SGUP
C 505	CKSQYB104K16	IC 961 IC	S-80735ANDZI
C 506	CKSQYB471K50	Q 101 Transistor	2SA1162
C 507	CKSQYB471K50	Q 102 Transistor	DTC124EK
C 508	CKSQYB104K16	Q 261 Transistor	2SA1162
C 509	CEJA220M6R3	Q 262 Transistor	DTC144EK
C 510	CCSQCH101J50	Q 301 Transistor	DTC124EK
C 511	CKSQYB103K50	Q 351 Transistor	2SC3326
C 512	CCSRCH101J50	Q 352 Transistor	2SC3326
C 513	CCSRCH101J50	Q 353 Transistor	2SC3326
C 514	CKSRYP102K50	Q 354 Transistor	2SC3326
C 515	CCSRCH101J50	Q 355 Transistor	2SC3326
C 601	CEJA4R7M35	Q 356 Transistor	2SC3326
C 602	CKSQYB103K50	Q 401 Transistor	2SC2412K
C 604	CCSRCH150J50	Q 641 Transistor	DTC114EK
C 605	CCSRCH220J50	Q 681 Transistor	2SA1162
C 651	CEJA100M16	Q 682 Transistor	DTC124EK
C 652	CEJA220M10	Q 683 Transistor	2SC2412K
C 683	CKSQYB103K50	Q 684 Transistor	2SC2412K
C 686	CKSQYB473K25	Q 685 Transistor	2SC2412K
C 801	CKSQYB104K16	Q 801 Transistor	2SD1760F5
C 802	CCSQCH101J50	Q 802 Transistor	IMD2A
C 803	CEJA470M10	Q 803 Transistor	2SD2396
C 804	CKSQYB103K50	Q 805 Transistor	2SC2412K
C 806	CKSQYB103K50	Q 806 Transistor	2SB1238
C 808	CEJA101M10	Q 807 Transistor	DTC143EK
C 809	CKSQYB104K16	Q 808 Transistor	IMD2A
C 810	CKSQYB104K16	Q 851 Transistor	2SD1760F5
C 811	CKSQYB104K16	Q 852 Transistor	DTA114EK
C 812	CKSQYB105K16	Q 853 Transistor	DTC124EK
C 851	CKSQYB103K50	Q 911 Transistor	2SD1760F5
C 852	CKSYB104K25	Q 913 Transistor	IMD2A
C 853	CEJA220M16	Q 921 Transistor	2SD2396
C 855	CKSQYB222K50	Q 922 Transistor	DTC124EK
C 856	CCSQCH101J50	Q 923 Transistor	2SB1238
C 857	CCSQCH101J50	Q 931 Transistor	IMX1
C 901	CKSQYB103K50	Q 932 Transistor	2SC2412K
C 911	CEAS102M16	Q 951 Transistor	2SA1162
C 912	CKSQYB472K50	Q 962 Transistor	2SC2412K
C 913	CKSQYB103K50	Q 981 Transistor	2SC2412K
C 914	CEJA470M10	Q 983 Transistor	2SC2412K
C 915	CEJA470M10	D 231 Diode	MA153
C 921 330μF/10V	CCH1181	D 232 Diode	MA153
C 922	CKSQYB103K50	D 233 Diode	MA153
C 923	CEJA101M16	D 234 Diode	MA153
C 931	CEJA100M16	D 651 Diode	1SS133
C 933	CKSQYB472K50	D 681 Diode	ERA15-02VH
C 961	CKSQYB102K50	D 682 Diode	ERA15-02VH
C 962	CKSQYB104K16	D 683 LED	BR4361F
C 963	CEJA2R2M50	D 801 Diode	MA153
C 964	CEJA4R7M35	D 802 Diode	MA153
		D 803 Diode	MA153
		D 804 Diode	MA153
		D 805 Diode	HZS6L(B1)
		D 806 Diode	HZS9L(C3)
		D 807 LED	CL170PGCD
		D 808 LED	CL170PGCD

# KEH-P8800R,P8800R-W,P8850

====Circuit Symbol and No.====Part Name	Part No.	====Circuit Symbol and No.====Part Name	Part No.
D 809 LED	CL170PGCD	R 353	RS1/16S820J
D 810 Diode	MA3062(M)	R 354	RS1/16S820J
D 851 Diode	HZS7L(C3)	R 355	RS1/16S820J
D 852 Diode	1SS133	R 356	RS1/16S820J
D 853 Diode	1SS133	R 357	RS1/16S223J
D 901 Diode	ERA15-02VH	R 358	RS1/16S223J
D 902 Diode	ERA15-02VH	R 359	RS1/16S223J
D 903 Diode	ERA15-02VH	R 360	RS1/16S223J
D 911 Diode	ERA15-02VH	R 361	RS1/16S223J
D 912 Diode	HZS6L(B1)	R 362	RS1/16S223J
D 914 Diode	HZS16(2)	R 363	RS1/16S103J
D 921 Diode	HZS9L(B3)	R 364	RS1/16S103J
D 931 Diode	HZS7L(A1)	R 365	RS1/16S103J
D 932 Diode	HZS7L(C2)	R 366	RS1/16S103J
D 951 Diode	MA152WK	R 367	RS1/16S103J
D 961 Diode	MA152K	R 368	RS1/16S103J
D 981 Diode	MA152WK	R 369	RS1/16S471J
D 982 Diode	HZS9L(A2)	R 370	RS1/16S471J
ZNR 451 Surge Protector	DSPS-201M-S00B	R 371	RS1/16S471J
L 101 Inductor	LAU3R3K	R 372	RS1/16S471J
L 271 Ferri-Inductor	LAU101K	R 373	RS1/16S471J
L 401 Ferri-Inductor	LAU2R2K	R 374	RS1/16S471J
L 402 Inductor	LCTB4R7K2125	R 401	RS1/10S473J
L 403 Ferri-Inductor	LAU1R0M	R 402	RS1/10S473J
L 601 Inductor	LAU100K	R 403	RS1/10S681J
L 801 Inductor	LAU100K	R 404	RS1/10S681J
L 802 Inductor	CTF1489	R 409	RS1/10S681J
L 951 Ferri-Inductor	LAU2R2K	R 410	RS1/10S103J
X 601 Radiator 10.00MHz	CSS1475	R 411	RS1/10S681J
BZ 641 Buzzer	CPV1012	R 412	RS1/10S681J
FM/AM Tuner Unit	CWE1501	R 413	RS1/10S681J
		R 414	RS1/10S473J
		R 415	RS1/10S472J
		R 416	RS1/10S473J
		R 417	RS1/10S473J
		R 418	RS1/10S473J
		R 419	RS1/10S222J
		R 420	RS1/10S222J
		R 424	RS1/10S393J
		R 601	RS1/10S473J
		R 602	RS1/10S472J
		R 609	RS1/10S473J
		R 610	RS1/10S473J
		R 611	RS1/10S473J
		R 612	RA3C102J
		R 620	RS1/10S473J
		R 623	RS1/10S473J
		R 627	RS1/10S473J
		R 629	RS1/10S473J
		R 630	RS1/10S473J
		R 631	RS1/10S102J
		R 632	RS1/10S473J
		R 634	RS1/10S102J
		R 641	RS1/10S202J
		R 642	RS1/10S102J
		R 651	RA4C681J
		R 652	RA4C102J
		R 653	RA4C102J
		R 654	RS1/10S473J
		R 655	RS1/10S102J
		R 656	RS1/10S102J
		R 657	RS1/10S103J
		R 658	RS1/10S473J
		R 663	RS1/10S473J
		R 664	RS1/10S473J
		R 665	RS1/10S473J
		R 681	RS1/8S102J
		R 682	RS1/8S102J
		R 683	RS1/8S102J
		R 684	RS1/10S103J

====Circuit Symbol and No.====Part Name	Part No.	====Circuit Symbol and No.====Part Name	Part No.
R 685	RS1/10S103J	R 985	RS1/10S102J
R 686	RS1/10S103J	R 986	RS1/10S103J
R 687	RS1/10S223J	R 987	RS1/10S224J
R 688	RS1/10S223J	R 988	RS1/10S333J
R 689	RS1/10S223J	R 989	RS1/10S473J
R 690	RS1/10S272J		
R 691	RS1/10S223J		
R 692	RS1/10S272J		
R 693	RS1/10S223J		
R 694	RS1/10S272J		
R 695	RS1/10S473J		
R 696	RS1/10S473J		
R 697	RS1/10S473J		
R 698	RS1/8S471J		
R 699	RS1/10S102J		
R 700	RS1/10S103J		
R 801	RS1/8S222J		
R 802	RS1/8S471J		
R 803	RS1/8S471J		
R 804	RS1/8S103J		
R 805	RS1/8S472J		
R 806	RS2PMF220J		
R 807	RS1/4S471J		
R 809	RS1/10S103J		
R 810	RS1/10S222J		
R 811	RS1/4S152J		
R 812	RS1/10S152J		
R 813	RS1/10S221J		
R 814	RS1/10S152J		
R 815	RS1/10S1R0J		
R 819	RS1/10S103J		
R 821	RS1/8S222J		
R 822	RS1/8S222J		
R 851	RS1/4S271J		
R 852	RS1/10S102J		
R 853	RS1/10S102J		
R 862	RS1/10S102J		
R 864	RS1/10S102J		
R 865	RS1/10S102J		
R 912	RS1/10S152J		
R 913	RS1/10S512J		
R 914	RS1/8S151J		
R 922	RS1/8S221J		
R 923	RS1/10S122J		
R 924	RS1/8S272J		
R 926	RS1/10S223J		
R 931	RS1/10S472J		
R 932	RS1/10S473J		
R 933	RS1/10S223J		
R 934	RS1/10S473J		
R 935	RS1/10S473J		
R 936	RS1/10S103J		
R 937	RS1/10S473J		
R 951	RS1/8S153J		
R 952	RS1/10S472J		
R 953	RS1/10S472J		
R 954	RS1/10S102J		
R 961	RS1/10S103J		
R 962	RS1/10S102J		
R 963	RS1/10S473J		
R 964	RS1/10S822J		
R 981	RS1/10S223J		
R 982	RS1/10S473J		
R 983	RS1/10S103J		
R 984	RS1/10S223J		

## CAPACITORS

C 101	CKSQYB104K16
C 102	CKSQYB104K16
C 155	CCSRCH101J50
C 161	CKSQYB183K50
C 162	CKSQYB183K50
C 171	CEJA470M16
C 172	CKSQYB104K16
C 173	CEJA100M16
C 203	CEJA1R0M50
C 204	CEJA1R0M50
C 205	CEJAR22M50
C 206	CEJAR22M50
C 207	CEJA1R0M50
C 208	CEJA1R0M50
C 209	CEJA1R0M50
C 210	CEJA1R0M50
C 211	CEJANP4R7M16
C 212	CEJANP4R7M16
C 213	CEJANP4R7M16
C 214	CEJANP4R7M16
C 215	CKSQYB473K25
C 216	CKSQYB473K25
C 217	CKSQYB473K25
C 218	CKSQYB473K25
C 225	CKSQYB333K50
C 226	CKSQYB123K25
C 227	CKSQYB473K25
C 228	CKSQYB153K50
C 229	CKSQYB153K50
C 231	CCSQCH101J50
C 232	CCSQCH101J50
C 233	CKSYB474K16
C 234	CKSYB474K16
C 235	CKSQYB104K16
C 236	CKSQYB104K16
C 237	CKSQYB104K16
C 238	CKSQYB104K16
C 239	CKSQYB103K50
C 271	CEJANP1R0M50
C 272	CEJANP1R0M50
C 273	CEJANP1R0M50
C 274	CEJANP1R0M50
C 275	CEJANP1R0M50
C 276	CEJANP1R0M50
C 277	CEJA4R7M35
C 278	CEJA101M16
C 279	CEJA100M16
C 280	CEJA100M16
C 281	CKSQYB105K16
C 284	CEJA330M25
C 285	CEJA330M25
C 286	CASAQ3R3M16
C 288	CKSYB684K25
C 301	CKSQYB224K16
C 302	CKSQYB224K16

**KEH-P8800R,P8800R-W,P8850**

====Circuit Symbol and No.====	Part Name	Part No.
C 303		CKSQYB224K16
C 304		CKSQYB224K16
C 306		CEHAR330M10
C 307	4700µF/16V	CCH1178
C 309		CKSQYB104K16
C 310		CEHAR100M16
C 311		CKSYB105K16
C 351		CEJA100M35
C 352		CEJA100M35
C 353		CEJA100M35
C 354		CEJA100M35
C 355		CEJA100M35
C 356		CEJA100M35
C 357		CKSRYP222K50
C 358		CKSRYP222K50
C 359		CKSRYP222K50
C 360		CKSRYP222K50
C 361		CKSRYP222K50
C 362		CKSRYP222K50
C 403		CKSQYB473K25
C 404		CEJA470M10
C 405		CKSQYB103K50
C 406		CEJA220M10
C 407		CKSQYB103K50
C 408		CKSQYB223K50
C 409		CKSQYB223K50
C 411		CKSQYB472K50
C 413		CCSRCH101J50
C 511		CKSQYB103K50
C 601		CEJA4R7M35
C 602		CKSQYB103K50
C 604		CCSRCH150J50
C 605		CCSRCH220J50
C 651		CEJA100M16
C 652		CEJA220M10
C 653		CCSRCH101J50
C 681		CKSYB104K25
C 682		CKSQYB473K25
C 683		CKSQYB103K50
C 684		CKSQYB103K50
C 685		CKSQYB103K50
C 686		CKSQYB473K25
C 801		CKSQYB104K16
C 802		CCSQCH101J50
C 803		CEJA470M10
C 804		CKSQYB103K50
C 806		CKSQYB103K50
C 808		CEJA101M10
C 809		CKSQYB104K16
C 810		CKSQYB104K16
C 811		CKSQYB104K16
C 812		CKSQYB105K16
C 851		CKSQYB103K50
C 852		CKSYB104K25
C 853		CEJA220M16
C 855		CKSQYB222K50
C 856		CCSQCH101J50
C 857		CCSQCH101J50
C 901		CKSQYB103K50
C 911		CEAS102M16
C 912		CKSQYB472K50
C 913		CKSQYB103K50
C 914		CEJA470M10
C 915		CEJA470M10
C 921	330µF/10V	CCH1181

====Circuit Symbol and No.====	Part Name	Part No.
C 922		CKSQYB103K50
C 923		CEJA101M16
C 931		CEJA100M16
C 933		CKSQYB472K50
C 961		CKSQYB102K50
C 962		CKSQYB104K16
C 963		CEJA2R2M50
C 964		CEJA4R7M35

**B** Unit Number : CWE1500(KEH-P8800R/EW)  
 (KEH-P8800R-W/EW)  
 Unit Name : FM/AM Tuner Unit

**MISCELLANEOUS**

IC 1	IC	PML002A
IC 2	IC	PM4008A
IC 3	IC	BR9010FV
Q 1	Transistor	2SC4081
Q 2	Transistor	DTC124EU
Q 3	FET	3SK263
Q 51	Transistor	2SC4081
Q 201	FET	2SK932
Q 202	Transistor	DTC124EU
Q 204	Transistor	2SC4081
D 1	Diode	KV1410(23)
D 2	Diode	1SV248
D 4	Diode	KV1410(23)
D 6	Diode	KV1410(23)
D 101	Diode	MA110
D 201	Diode	MA143
D 202	Diode	MA147
D 903	Diode	KV1410(23)
D 904	Diode	SVC253
L 1	Coil	CTC1155
L 2	Coil	CTC1155
L 3	Inductor	LCTB100K2125
L 4	Coil	CTC1155
L 201	Inductor	LCTB330K1608
L 202	Inductor	CTF1287
L 203	Inductor	LCTA121J3225
L 901	Coil	CTC1154
L 902	Inductor	LCTA3R3J3225
L 904	Inductor	LCTBR47K1608
L 905	Inductor	LCTBR47K1608
T 51	Coil	CTE1132
CF 51	Ceramic Filter	CTF1442
CF 52	Ceramic Filter	CTF1442
CF 53	Ceramic Filter	CTF1442
CF 202	Ceramic Filter	CTF1476
X 901	Crystal Resonator 10.250MHz	CSS1432

**RESISTORS**

R 1		RS1/16S153J
R 2		RS1/16S103J
R 6		RS1/16S103J
R 7		RS1/16S273J
R 8		RS1/16S473J
R 9		RS1/16S223J
R 10		RS1/16S473J
R 11		RS1/16S221J
R 12		RS1/16S103J
R 13		RS1/16S104J
R 16		RS1/16S223J
R 17		RS1/16S221J
R 18		RS1/16S221J
R 19		RS1/16S473J
R 20		RS1/16S470J

====Circuit Symbol and No.====Part Name	Part No.	====Circuit Symbol and No.====Part Name	Part No.
R 51	RS1/16S470J	C 51	CKSRYP103K50
R 52	RS1/16S103J	C 52	CKSRYP473K16
R 53	RS1/16S103J	C 53	CCSRCK2R0C50
R 54	RS1/16S331J	C 54	CKSRYP103K50
R 55	RS1/16S331J	C 55	CKSRYP104K16
R 56	RS1/16S560J	C 56	CKSRYP104K16
R 57	RS1/16S560J	C 58	CKSQYB224K16
R 58	RS1/16S102J	C 59	CKSRYP223K25
R 59	RS1/16S225J	C 60	CKSRYP104K16
R 60	RS1/16S133J	C 101	CEALNP100M10
R 61	RS1/16S433J	C 102	CCSRCH151J50
R 62	RS1/16S562J	C 103	CKSRYP473K16
R 101	RS1/16S333J	C 105	CKSRYP682K25
R 102	RS1/16S103J	C 106	CEAL2R2M50
R 103	RS1/16S333J	C 107	CKSRYP103K50
R 104	RS1/16S562J	C 108	CKSQYB474K16
R 106	RS1/16S0R0J	C 109	CKSQYB474K16
R 108	RS1/16S0R0J	C 110	CKSRYP104K16
R 110	RS1/16S154J	C 111	CKSRYP104K16
R 111	RS1/16S273J	C 112	CKSRYP104K16
R 112	RS1/16S223J	C 113	CKSRYP123K25
R 113	RS1/16S222J	C 114	CEAL220M6R3
R 114	RS1/16S333J	C 115	CKSRYP473K16
R 115	RS1/16S334J	C 116	CEAL2R2M50
R 116	RS1/16S473J	C 117	CKSRYP102K50
R 117	RS1/16S333J	C 120	CKSRYP153K25
R 118	RS1/16S223J	C 121	CKSRYP332K50
R 122	RS1/16S0R0J	C 122	CKSRYP682K25
R 202	RS1/16S472J	C 123	CKSRYP681K50
R 203	RS1/16S225J	C 125	CKSRYP103K50
R 204	RS1/16S102J	C 126	CKSRYP103K50
R 205	RS1/16S220J	C 127	CEAL2R2M50
R 206	RS1/16S471J	C 128	CKSRYP103K50
R 208	RS1/16S104J	C 201	CCSRCH471J50
R 209	RS1/16S104J	C 202	CCSRCH100D50
R 210	RS1/16S563J	C 203	CKSRYP104K16
R 213	RS1/16S223J	C 204	CKSRYP332K50
R 902	RS1/16S103J	C 205	CKSRYP103K50
R 904	RS1/16S473J	C 206	CKSRYP104K16
R 907	RS1/16S103J	C 207	CKSRYP473K16
R 908	RS1/16S681J	C 208	CCSRCH560J50
R 909	RS1/16S473J	C 209	CEAL470M6R3
R 914	RS1/16S562J	C 210	CKSRYP103K50
		C 211	CKSRYP103K50
		C 212	CCSRCH101J50
<b>CAPACITORS</b>			
C 1	CCSQCH5R0C50	C 215	CKSRYP223K25
C 2	CCSRCH5R0C50	C 216	CKSQYB334K16
C 4	CCSRCJ3R0C50	C 217	CKSRYP103K50
C 6	CKSQYB105K10	C 219	CKSQYB105K10
C 8	CKSRYP222K50	C 220	CKSRYP104K16
C 10	CCSRCH220J50	C 221	CKSRYP473K16
C 11	CCSRCH150J50	C 222	CKSQYB334K16
C 12	CCSRCH8R0D50	C 223	CKSQYB474K16
C 14	CCSRCJ3R0C50	C 224	CKSRYP104K16
C 15	CKSRYP103K50	C 225	CKSRYP272K50
C 16	CKSRYP222K50	C 226	CKSRYP682K25
C 17	CKSRYP222K50	C 902	CCSRCH270J50
C 18	CCSRCJ3R0C50	C 904	CKSRYP223K25
C 19	CKSRYP103K50	C 905	CKSRYP103K50
C 20	CKSRYP103K50	C 906	CCSRTH100D50
C 21	CKSRYP103K50	C 907	CCSRTH150J50
C 24	CKSQYB334K16	C 909	CCSRTH100D50
C 31	CKSRYP222K50	C 910	CKSRYP332K50
C 32	CCSRCH470J50	C 912	CKSQYB474K16
C 35	CKSRYP103K50	C 913	CKSRYP223K25
		C 914	CKSRYP682K25
		C 915	CKSQYB223K25
		C 916	CKSQYB474K16
		C 917	CKSYB475K10
		C 918	CKSRYP223K25

# KEH-P880OR,P880OR-W,P8850

====Circuit Symbol and No.====Part Name	Part No.	====Circuit Symbol and No.====Part Name	Part No.
C 919	CKSQYB225K10	R 60	RS1/16S133J
C 920	CCSRCH270J50	R 61	RS1/16S433J
C 921	CCSRCH270J50	R 101	RS1/16S333J
C 922	CKSYB105K16	R 102	RS1/16S103J
C 923	CKSRYB103K50	R 103	RS1/16S333J
<b>B</b> Unit Number : CWE1501(KEH-P8850/ES)		R 104	RS1/16S562J
Unit Name : FM/AM Tuner Unit		R 106	RS1/16S0R0J
MISCELLANEOUS		R 108	RS1/16S0R0J
IC 1 IC	PML002A	R 110	RS1/16S154J
IC 2 IC	PM4008A	R 111	RS1/16S273J
IC 3 IC	BR9010FV	R 113	RS1/16S222J
Q 1 Transistor	2SC4081	R 114	RS1/16S333J
Q 2 Transistor	DTC124EU	R 115	RS1/16S334J
		R 116	RS1/16S473J
		R 202	RS1/16S472J
Q 3 FET	3SK263		
Q 51 Transistor	2SC4081	R 203	RS1/16S225J
Q 201 FET	2SK932	R 204	RS1/16S102J
Q 202 Transistor	DTC124EU	R 205	RS1/16S220J
Q 204 Transistor	2SC4081	R 206	RS1/16S471J
		R 208	RS1/16S104J
D 1 Diode	KV1410(23)		
D 2 Diode	1SV248	R 209	RS1/16S104J
D 6 Diode	KV1410(23)	R 210	RS1/16S563J
D 201 Diode	MA143	R 213	RS1/16S223J
D 202 Diode	MA147	R 902	RS1/16S103J
		R 904	RS1/16S473J
D 903 Diode	KV1410(23)		
D 904 Diode	SVC253	R 907	RS1/16S103J
L 1 Coil	CTC1155	R 908	RS1/16S681J
L 3 Inductor	LCTB1R5K2125	R 909	RS1/16S473J
L 4 Coil	CTC1155	R 914	RS1/16S562J
L 201 Inductor	LCTB330K1608	<b>CAPACITORS</b>	
L 202 Inductor	CTF1287	C 1	CCSQCH4R0C50
L 203 Inductor	LCTA121J3225	C 6	CKSQYB105K10
L 901 Coil	CTC1154	C 8	CKSRYB222K50
L 902 Inductor	LCTA3R3J3225	C 10	CCSRCH220J50
		C 11	CCSRCH150J50
L 904 Inductor	LCTBR47K1608		
L 905 Inductor	LCTBR47K1608	C 12	CCSRCH8R0D50
T 51 Coil	CTE1132	C 14	CCSRCJ3R0C50
CF 51 Ceramic Filter	CTF1442	C 15	CKSRYB103K50
CF 52 Ceramic Filter	CTF1442	C 16	CKSRYB222K50
		C 17	CKSRYB222K50
CF 53 Ceramic Filter	CTF1442		
CF 202 Ceramic Filter	CTF1476	C 18	CCSRCJ3R0C50
X 901 Crystal Resonator 10.250MHz	CSS1432	C 19	CKSRYB103K50
<b>RESISTORS</b>		C 20	CKSRYB103K50
R 1	RS1/16S183J	C 21	CKSRYB103K50
R 2	RS1/16S103J	C 24	CKSQYB334K16
R 5	RS1/16S0R0J		
R 7	RS1/16S273J	C 26	CKSRYB472K50
R 8	RS1/16S473J	C 30	CCSRCH220J50
		C 32	CCSRCH470J50
		C 35	CKSRYB103K50
		C 51	CKSRYB103K50
R 9	RS1/16S223J		
R 10	RS1/16S473J		
R 11	RS1/16S221J	C 52	CKSRYB473K16
R 12	RS1/16S103J	C 53	CCSRCK2R0C50
R 13	RS1/16S104J	C 54	CKSRYB103K50
		C 55	CKSRYB104K16
		C 56	CKSRYB104K16
R 16	RS1/16S223J		
R 17	RS1/16S221J		
R 18	RS1/16S221J	C 58	CKSQYB224K16
R 19	RS1/16S473J	C 101	CEALNP100M10
R 20	RS1/16S470J	C 102	CCSRCH151J50
		C 103	CKSRYB473K16
		C 105	CKSRYB682K25
R 31	RS1/16S0R0J		
R 51	RS1/16S470J		
R 52	RS1/16S103J	C 106	CEALR68M50
R 53	RS1/16S103J	C 107	CKSRYB103K50
R 54	RS1/16S331J	C 108	CKSQYB474K16
		C 109	CKSQYB474K16
		C 110	CKSRYB104K16
R 55	RS1/16S331J		
R 56	RS1/16S560J		
R 57	RS1/16S560J		
R 58	RS1/16S102J		
R 59	RS1/16S225J		



====Circuit Symbol and No.====Part Name	Part No.	====Circuit Symbol and No.====Part Name	Part No.
C 111	CKSRYP104K16	Q 1903	Transistor
C 112	CKSRYP104K16	Q 1904	Transistor
C 113	CKSRYP123K25	Q 1905	Transistor
C 114	CEAL220M6R3	Q 1906	Transistor
C 115	CKSRYP473K16	D 1901	Diode Network
C 116	CEAL2R2M50	D 1902	Diode Network
C 117	CKSRYP102K50	D 1904	Diode
C 120	CKSRYP183K25	D 1905	LED
C 121	CKSRYP332K50	L 1901	Chip Inductor
C 122	CKSRYP562K25	L 1902	Chip Inductor
C 123	CKSRYP681K50	L 1903	Inductor
C 125	CKSRYP103K50	L 1904	Inductor
C 126	CKSRYP103K50	L 1905	Inductor Array
C 127	CEAL2R2M50	L 1906	Inductor Array
C 128	CKSRYP103K50	L 1907	Inductor
C 201	CCSRCH471J50	L 1908	Inductor
C 202	CCSRCH100D50	X 1901	Ceramic Resonator 15.62MHz
C 203	CKSRYP104K16	S 1901	Push Switch
C 204	CKSRYP332K50	S 1902	Push Switch
C 205	CKSRYP103K50	S 1903	Push Switch
C 206	CKSRYP104K16	S 1904	Push Switch
C 207	CKSRYP473K16	S 1905	Push Switch
C 208	CCSRCH560J50	S 1906	Push Switch
C 209	CEAL470M6R3	S 1907	Push Switch
C 210	CKSRYP103K50	S 1908	Push Switch
C 211	CKSRYP103K50	S 1909	Push Switch
C 212	CCSRCH101J50	S 1910	Push Switch
C 215	CKSRYP223K25	S 1911	Push Switch
C 216	CKSQYB334K16	S 1912	Push Switch
C 217	CKSRYP103K50	S 1913	Push Switch
C 219	CKSQYB105K10	S 1914	Push Switch
C 220	CKSRYP104K16	S 1915	Push Switch
C 221	CKSRYP473K16	S 1916	Push Switch
C 222	CKSQYB334K16	S 1917	Push Switch
C 223	CKSQYB474K16	S 1918	Push Switch
C 224	CKSRYP104K16	S 1919	Push Switch
C 225	CKSRYP272K50	S 1920	Push Switch
C 226	CKSRYP682K25	S 1921	Push Switch
C 902	CCSRCH270J50	S 1922	Push Switch
C 904	CKSRYP223K25	S 1923	Push Switch
C 905	CKSRYP103K50	S 1924	Push Switch
C 906	CCSRTH100D50	S 1925	Push Switch
C 907	CCSRTH150J50		
C 909	CCSRTH100D50		
C 910	CKSRYP332K50		
C 912	CKSQYB474K16		
C 913	CKSRYP223K25		
C 914	CKSRYP682K25		
C 915	CKSQYB223K25		
C 916	CKSQYB474K16		
C 917	CKSYB475K10		
C 918	CKSRYP223K25		
C 919	CKSQYB225K10		
C 920	CCSRCH270J50		
C 921	CCSRCH270J50		
C 922	CKSYB105K16		
C 923	CKSRYP103K50		
<b>RESISTORS</b>			
		R 1901	RS1/16S154J
		R 1902	RS1/16S473J
		R 1903	RA4C101J
		R 1904	RA3C101J
		R 1905	RA3C101J
		R 1906	RA4C101J
		R 1907	RS1/16S473J
		R 1908	RA3C101J
		R 1909	RA3C101J
		R 1910	RA4C101J
		R 1911	RA4C101J
		R 1912	RA4C101J
		R 1913	RA3C101J
		R 1914	RA4C101J
		R 1915	RA4C101J
		R 1922	RS1/10S121J
		R 1923	RS1/10S2R2J
		R 1924	RS1/8S222J
		R 1925	RS1/8S222J
		R 1930	RS1/16S472J
		R 1931	RS1/16S473J
		R 1951	RS1/8S242J
		R 1952	RS1/8S242J
		R 1953	RS1/10S103J
		R 1954	RS1/8S242J

**C** Unit Number : CWM6225(KEH-P8800R/EW)  
 (KEH-P8800R-W/EW)  
 Unit Name : Keyboard Unit

**MISCELLANEOUS**

IC 1901	IC	PD5471A
IC 1902	IC	PD8051A
IC 1903	HIC Module	RS-140
Q 1901	Transistor	DTC143TK
Q 1902	Transistor	IMH10A

# KEH-P8800R,P8800R-W,P8850

====Circuit Symbol and No.====Part Name	Part No.	====Circuit Symbol and No.====Part Name	Part No.
R 1955	RS1/8S242J	S 1914	Push Switch
R 1960	RS1/8S911J	S 1915	Push Switch
R 1961	RS1/8S911J	S 1916	Push Switch
R 1962	RS1/10S511J	S 1917	Push Switch
R 1963	RS1/10S511J	S 1918	Push Switch
R 1964	RS1/10S511J	S 1919	Push Switch
R 1965	RS1/10S511J	S 1920	Push Switch
R 1966	RS1/8S511J	S 1921	Push Switch
R 1967	RS1/8S511J	S 1922	Push Switch
R 1968	RS1/8S511J	S 1923	Push Switch
R 1969	RS1/8S511J	S 1924	Push Switch
R 1970	RS1/8S511J	S 1925	Push Switch
R 1971	RS1/8S511J		
R 1972	RS1/8S511J		
R 1973	RS1/8S511J		
R 1974	RS1/8S751J		
R 1975	RS1/8S751J		
R 1976	RS1/8S751J		
R 1977	RS1/8S751J		
<b>CAPACITORS</b>		<b>RESISTORS</b>	
C 1901	CKSQYB105K10	R 1901	RS1/16S154J
C 1902	CKSRYB103K25	R 1902	RS1/16S473J
C 1903	CSZS100M6R3	R 1903	RA4C101J
C 1904	CSZS100M6R3	R 1904	RA3C101J
C 1906	CKSQYB103K25	R 1905	RA3C101J
C 1907	CSZS100M6R3	R 1906	RA4C101J
C 1908	CKSRYB473K16	R 1907	RS1/16S473J
C 1911	CKSRYB473K16	R 1908	RA3C101J
C 1914	CKSRYB103K25	R 1909	RA3C101J
C 1916	CKSQYB104K25	R 1910	RA4C101J
C 1917	CSZSR100M16	R 1911	RA4C101J
C 1918	CKSRYB102K50	R 1912	RA4C101J
C 1919	CCSQCH221J50	R 1913	RA3C101J
		R 1914	RA4C101J
		R 1915	RA4C101J
		R 1922	RS1/10S121J
		R 1923	RS1/10S2R2J
		R 1924	RS1/8S222J
		R 1925	RS1/8S222J
		R 1930	RS1/16S472J
		R 1931	RS1/16S473J
		R 1956	RS1/10S0R0J
		R 1957	RS1/10S0R0J
		R 1958	RS1/10S0R0J
		R 1959	RS1/10S0R0J
		R 1960	RS1/8S911J
		R 1961	RS1/8S911J
		R 1962	RS1/10S511J
		R 1963	RS1/10S511J
		R 1964	RS1/10S511J
		R 1965	RS1/10S511J
		R 1966	RS1/8S511J
		R 1967	RS1/8S511J
		R 1968	RS1/8S511J
		R 1969	RS1/8S511J
		R 1970	RS1/8S511J
		R 1971	RS1/8S511J
		R 1972	RS1/8S511J
		R 1973	RS1/8S511J
		R 1974	RS1/8S751J
		R 1975	RS1/8S751J
		R 1976	RS1/8S751J
		R 1977	RS1/8S751J
		<b>CAPACITORS</b>	
S 1905	Push Switch	C 1901	CKSQYB105K10
S 1906	Push Switch	C 1902	CKSRYB103K25
S 1907	Push Switch	C 1903	CSZS100M6R3
S 1908	Push Switch	C 1904	CSZS100M6R3
S 1909	Push Switch	C 1906	CKSQYB103K25
S 1910	Push Switch	C 1907	CSZS100M6R3
S 1911	Push Switch	C 1908	CKSRYB473K16
S 1912	Push Switch	C 1911	CKSRYB473K16
S 1913	Push Switch	C 1914	CKSRYB103K25
		C 1916	CKSQYB104K25

**C** Unit Number : CWM6226(KEH-P8850/ES)  
Unit Name : Keyboard Unit

## MISCELLANEOUS

IC 1901	IC	PD5471A
IC 1902	IC	PD8051A
IC 1903	HIC Module	RS-140
D 1901	Diode Network	DA204U
D 1902	Diode Network	DA204U
D 1904	Diode	MA110
D 1905	LED	CL170UBX
L 1901	Chip Inductor	LCTA2R2J3225
L 1902	Chip Inductor	LCTA2R2J3225
L 1903	Inductor	CTF1484
L 1904	Inductor	LCTA220J2520
L 1905	Inductor Array	CTF1421
L 1906	Inductor Array	CTF1421
L 1907	Inductor	CTF1295
L 1908	Inductor	CTF1295
X 1901	Ceramic Resonator 15.62MHz	CSS1458
S 1901	Push Switch	CSG1112
S 1902	Push Switch	CSG1112
S 1903	Push Switch	CSG1111
S 1904	Push Switch	CSG1111
S 1905	Push Switch	CSG1112
S 1906	Push Switch	CSG1112
S 1907	Push Switch	CSG1112
S 1908	Push Switch	CSG1112
S 1909	Push Switch	CSG1112
S 1910	Push Switch	CSG1112
S 1911	Push Switch	CSG1112
S 1912	Push Switch	CSG1112
S 1913	Push Switch	CSG1112

====Circuit Symbol and No.====Part Name	Part No.
C 1917	CSZSR100M16
C 1918	CKSRYB102K50
C 1919	CCSQCH221J50

**D** Unit Number :  
Unit Name : Switch PCB

S 951	Switch(CLOSE)	CSN1012
S 952	Switch(OPEN)	CSN1022

**E** Unit Number : EWM1018  
Unit Name : Deck Unit

MISCELLANEOUS

IC 251	IC	CXA2560Q
IC 351	IC	PA2020A
D 352	Diode	1SS355
VR 301	Semi-fixed 33kΩ(B)	CCP1280
VR 302	Semi-fixed 33kΩ(B)	CCP1280

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 322	RS1/16S102J
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 375	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 309	CKSQYB104K16
C 310	CKSQYB104K16
C 313	CCSQCH101K50
C 351	CKSYB224K25
C 352	CKSQYB392K50

====Circuit Symbol and No.====Part Name	Part No.
C 353	CKSQYB103K50
C 354	CKSQYB103K50
C 355	CKSYB104K50
C 356	CKSQYB103K50
C 401	CKSQYB334K16

C 402	CKSQYB472K50
C 403	CKSQYB683K16

**F** Unit Number :  
Unit Name : PCB Unit

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

**G** Unit Number :  
Unit Name : Reel PCB

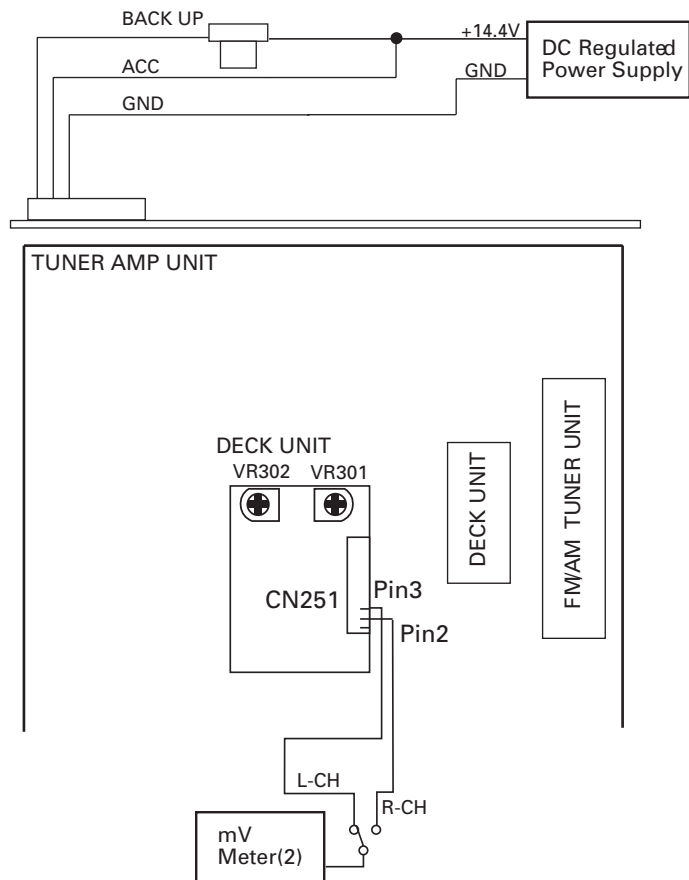
EGN 2	Photo-Interrupter	EGN1006
EGN 3	Photo-Interrupter	EGN1006

Miscellaneous Parts List

M 1	Motor Unit (MAIN)	EXA1490
M 2	Motor Unit (SUB)	EXA1485
M 951	Motor(AUTO FLAP)	CXM1085
HD 1	Head Assy	EXA1506
S 953	Switch (HALF LOADING)	CSN1022

## 6. ADJUSTMENT

### ● Connection Diagram



### 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) : $-6\text{dB}\pm 1.0\text{dB}$ (DOLBY NR Switch : OFF)

## 7. GENERAL INFORMATION

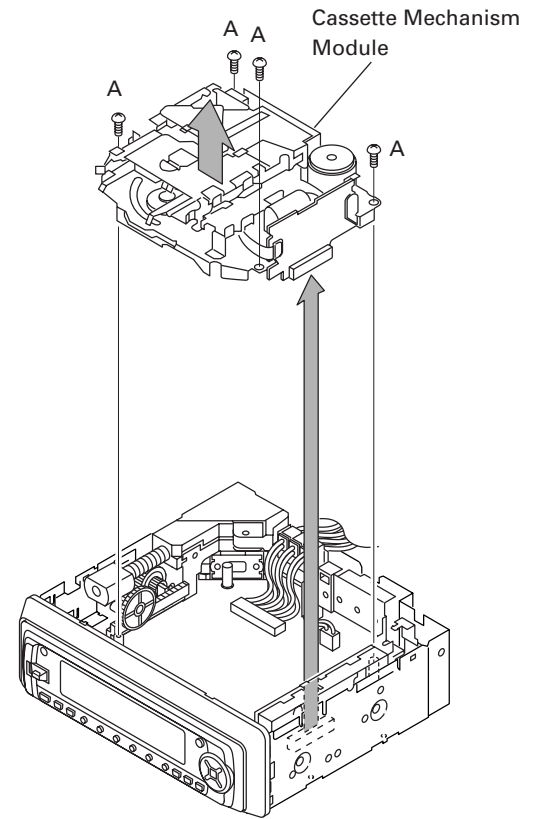
### 7.1 DISASSEMBLY

#### ● Removing the Case (Not shown)

1. Remove the screw, and then remove the Case.

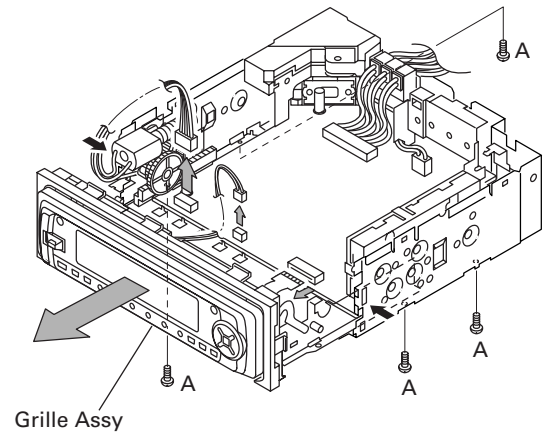
#### ● Removing the Cassette Mechanism Module

1. Remove the four screws A.
2. Disconnect the connector, and then remove the Cassette Mechanism Module.



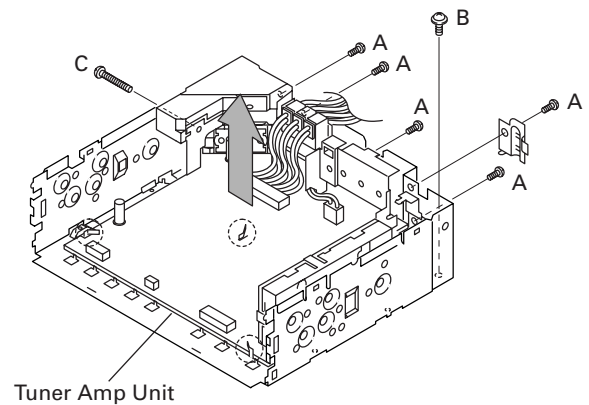
#### ● Removing the Tuner Amp Unit (1/2)

1. Disconnect the three connectors.
2. Remove the four screws A.
3. Disconnect the two stoppers indicated by arrows, and then remove the Grille Assy.



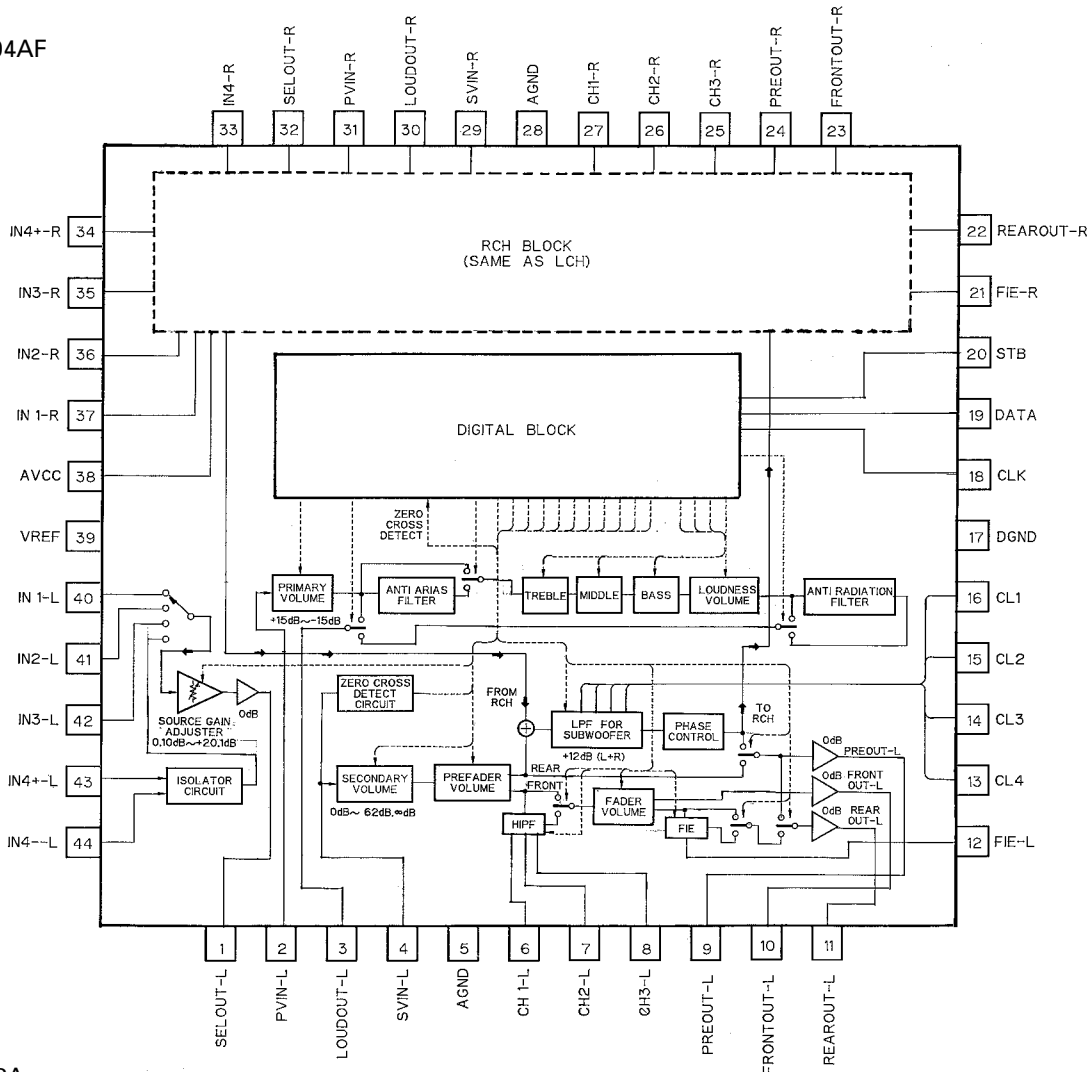
#### ● Removing the Tuner Amp Unit (2/2)

1. Remove the five screws A.
2. Remove the screw B, and C.
3. Stretch the three tabs, and then remove the Tuner Amp Unit.

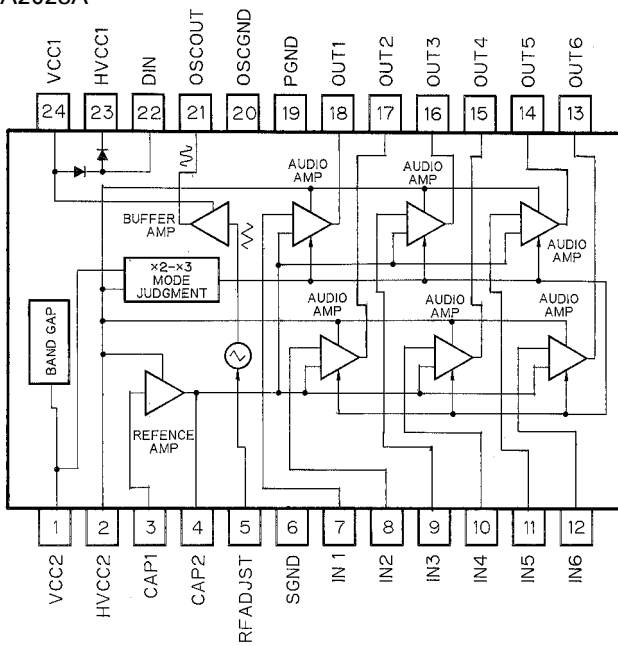


7.2 IC

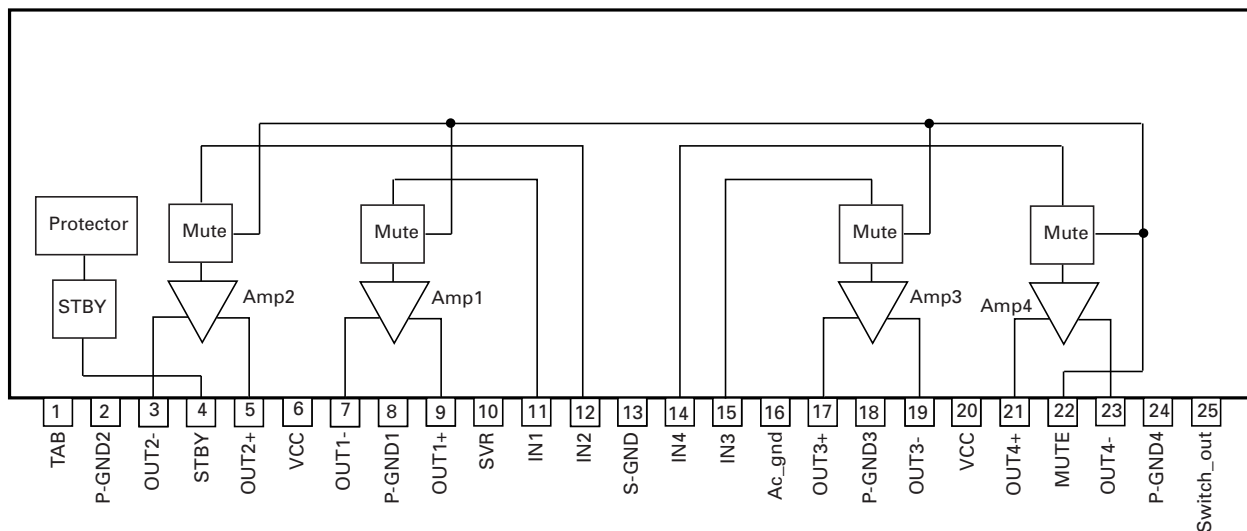
PML004AF



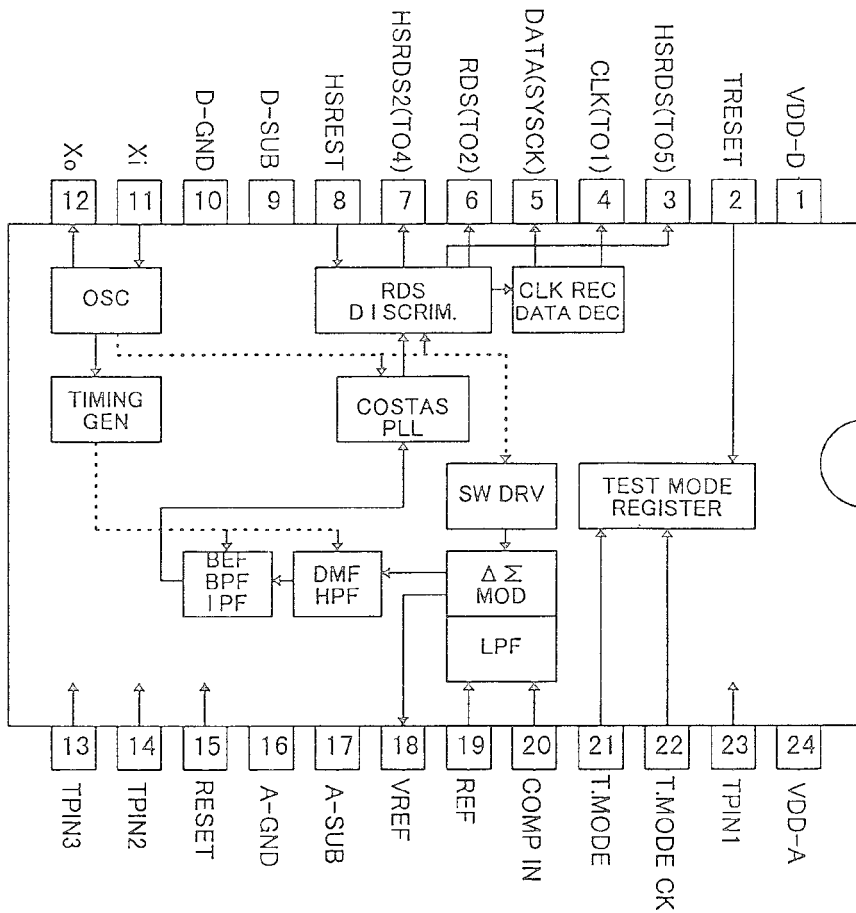
PA2028A



PAL005A



PM4009A



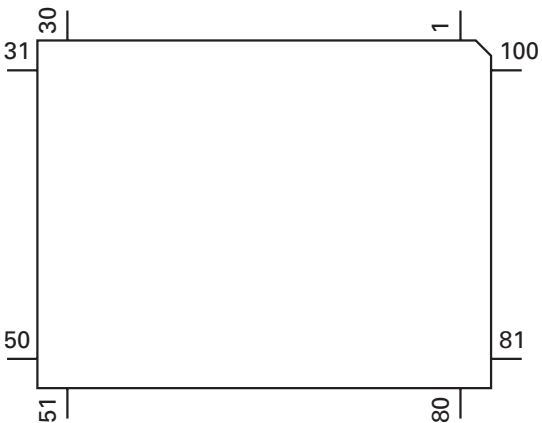
## ● Pin Functions (PD5495A, PD5496A)

Pin No.	Pin Name	I/O	Function and Operation
1	TUNPDO	O	PLL data output
2	TUNPCK	O	PLL clock output
3	TUNPCE	O	PLL chip enable output
4	TUNPCE2	O	PLL chip enable output 2
5	MOSENS	I	Motion/window damage sensor input
6	DLSSENS	I	Door lock sense input
7	IPPW	O	IP-BUS power supply control output
8,9	VSS1,2		GND
10	ASENBO	O	IP-BUS slave power supply control output
11	TELIN	I	Cellular mute input
12	RESET	I	Reset input
13	XOUT	O	Oscillator connection pin 1
14	VSS3		GND
15	XIN	I	Oscillator connection pin 2
16,17	VCC1, 2		5V
18	RCK	I	RDS clock input
19	LDET	I	PLL lock sense input
20	DALMON	O	DFS alarm output
21	RX2	I	IP-BUS data input 2
22	SYSPW	O	System power supply control output
23	ISENS	I	Illumination sense input
24	PEE	O	Beep tone output
25	RDS57K	I	57kHzBP-OUT sense input
26	FLPPW	O	Flap motor driver power ON/OFF output
27	MUTE	O	Mute output
28	NC		Not used
29	RX1	I	IP-BUS data input
30	TX	O	IP-BUS data output
31-33	NC		Not used
34	FLPOPN	O	Flap motor open output
35	DPDT	O	Display serial data output
36	KYDT	I	Display enable data input
37	FLPCLS	O	Flap motor close output
38	FOPNSW	I	Flap open switch input
39	NC		Not used
40	FCLSSW	I	Flap close switch input
41	DLED	O	Alarm LED output
42	SHELL	I	Shell sense input
43	FLPILM	O	Inside of flap illumination output
44	ILMPW	O	Illumination power supply control output
45	SWVDD	O	Display chip select output
46	OELPW	O	OEL module power supply control output
47	DSSENS	I	Grille detach sense input
48	ST	I	FM stereo input
49	SD	I	SD input
50	MS	I	MS sense input
51	DIRO	O	Head F/R select output
52	PLAY	O	MS gain select output
53	METAL	I	Metal switch sense input
54	NR	O	Noise reduction output
55	LOAD	I	Load switch sense input
56	POS	I	Position sense input
57	RES	I	Reverse sense input
58	NES	I	Normal reel sense input
59,60	SC2, 1	O	Sub motor control output
61	CM	O	Not used
62	VCC3		5V
63	STBY	O	Stand-by output



Pin No.	Pin Name	I/O	Function and Operation
64	VSS4		GND
65	VCK	O	E-VOL clock output
66	VDT	I	E-VOL data input
67	VST	I	E-VOL strobe pulse input
68	ROMCS	O	ROM correction chip select output
69-72	NC		Not used
73	$\overline{\text{BSENS}}$	I	Back up power sense input
74	$\overline{\text{ASENS}}$	I	ACC power sense input
75	NC		Not used
76	DRELAY	O	External relay output
77	LOCH	O	Local "H" output
78	LOCL	O	Local "L" output
79	TAPEMUTE	O	RINT mute output
80	NC		Not used
81	FM/AM	O	FM/AM power select output
82	$\overline{\text{TMUTE}}$	O	Tuner mute output
83	$\overline{\text{DRST}}$	O	RDS decoder reset output
84	$\overline{\text{RDSLK}}$	I	RDS lock signal input
85	RDT	I	RDS data input
86	DRSENS	I	Door open/close sense input
87	DRSYS	O	Door system select output
88	TESTIN	I	Test mode IN/test enable
89	SK	I	SK signal input
90	$\overline{\text{CURRO}}$	O	Tuner voltage FIX output
91	LEVELR	I	Level meter "R" AD input
92	LEVELL	I	Level meter "L" AD input
93	NC		Not used
94	SDBW	I	SD input
95	NL	I	Noise level input
96	VSS5		GND
97	SL	I	Signal level input
98	VREF		A/D converter reference voltage
99	VCC4		5V
100	TUNPDI	I	PLL data input

\*PD5495A,PD5496A

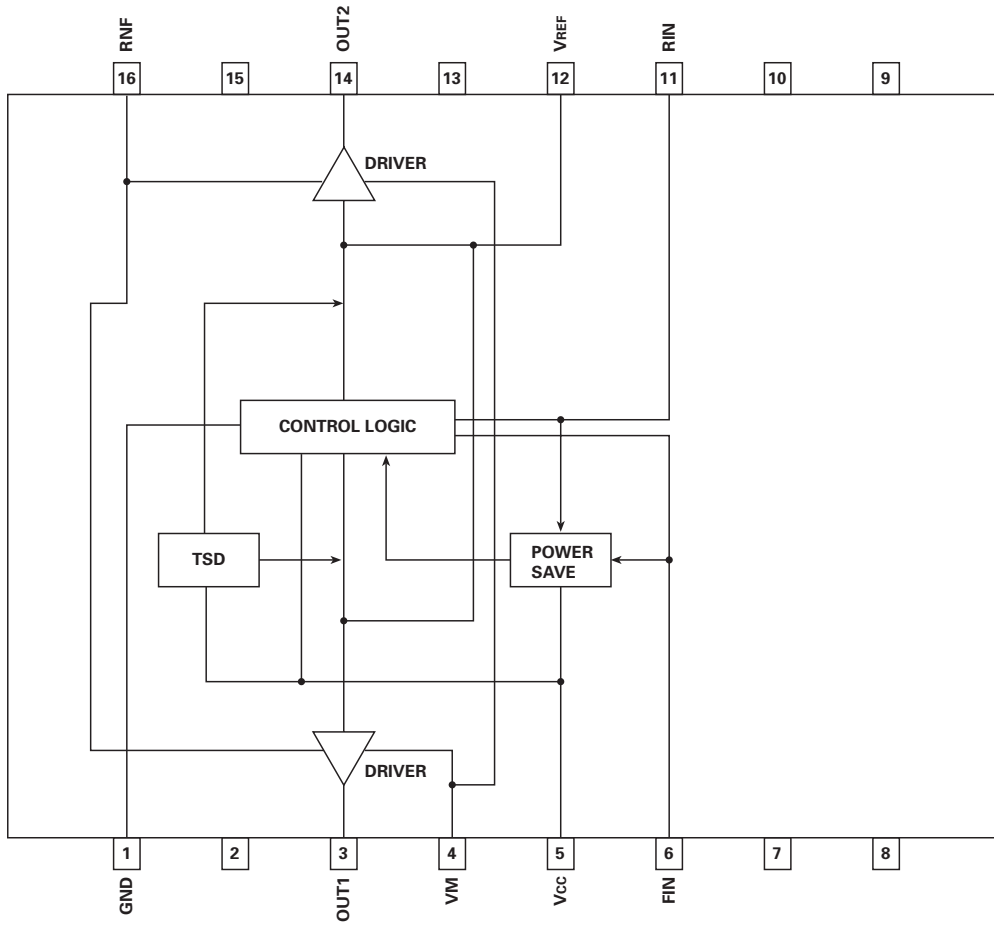


IC's marked by\* are MOS type.

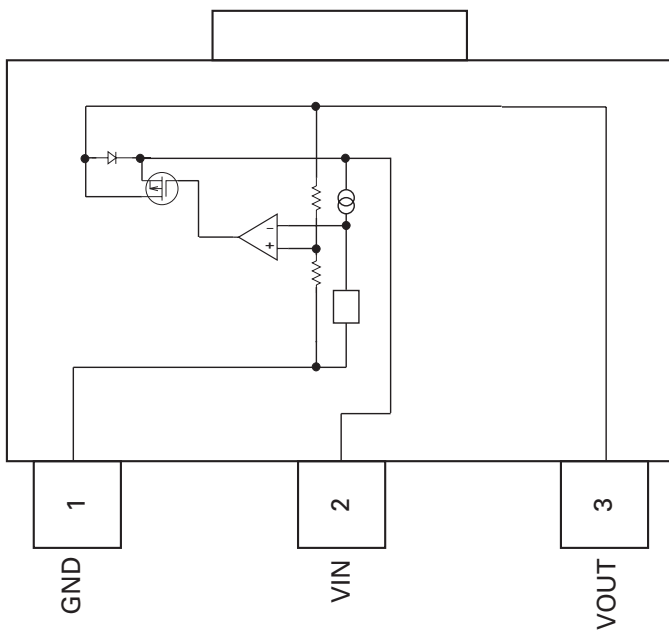
Be careful in handling them because they are very liable to be damaged by electrostatic induction.

# KEH-P8800R,P8800R-W,P8850

BA6288FS

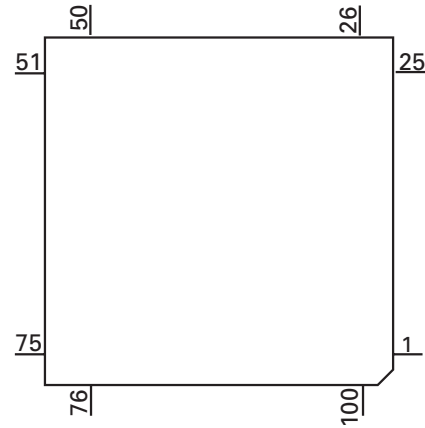
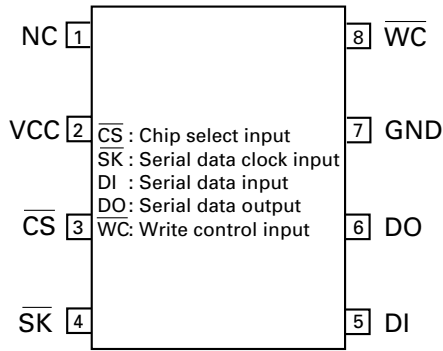


S-81250SGUP



BR9010FV

\*PD5471A

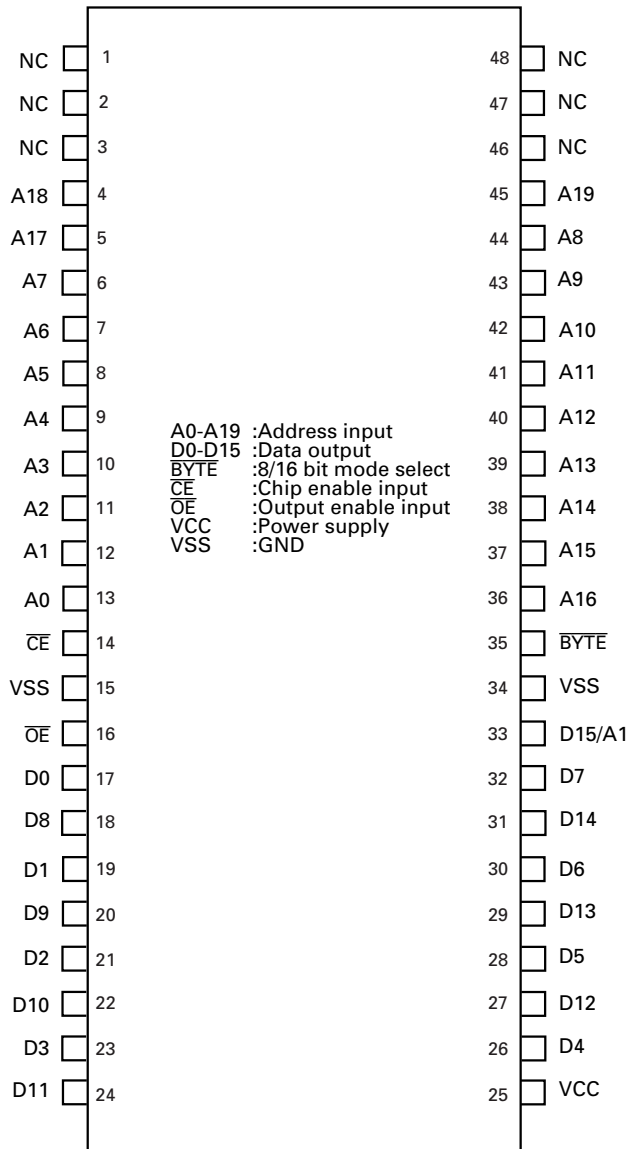


● Pin Functions (PD5471A)

Pin No.	Pin Name	I/O	Format	Function and Operation
1-4	NC			Not used
5	REM	I		Remote control reception
6	BYTE	I		External data BUS width select input
7	CNVSS	I		Processor mode select input
8,9	NC			Not used
10	RESET	I		Reset input
11	XOUT	O		Crystal oscillating element connection pin
12	VSS			GND
13	XIN	I		Crystal oscillating element connection pin
14	VDD			VDD
15	NMI	I		NMI input
16	NC			Not used
17-20	KD1-4	I		Key data 1-4
21-26	KS1-6	I/O		Key strobe input/output 1-6
27-31	NC			Not used
32	ILMD	O	C	Dual illumination
33	KYDT	O	C	Key data output
34	DPDT	I		Display data input
35	NC			Not used
36	OEL	O	C	OEL controller ON
37	RDY	I		OEL controller ready input
38	NC			Not used
39	HOLD	I		Hold input
40,41	NC			Not used
42	RD	O	C	Read strobe
43	BHE	O	C	Write High byte enable
44	WR	O	C	Write strobe
45	NC			Not used
46	CS2	O	C	Bank address (High)
47	CS1	O	C	Bank address (Low)
48	CS0	O	C	External ROM chip select
49-59	A19-9	O	C	Address bus Output 19bit-9bit
60	VDD			VDD
61	A8	O	C	Address bus Output 8bit
62	VSS			GND
63-70	A7-0	O	C	Address bus Output 7bit-0bit
71-86	D15-0	I/O		Data bus 15bit-0bit
87-100	NC			Not used

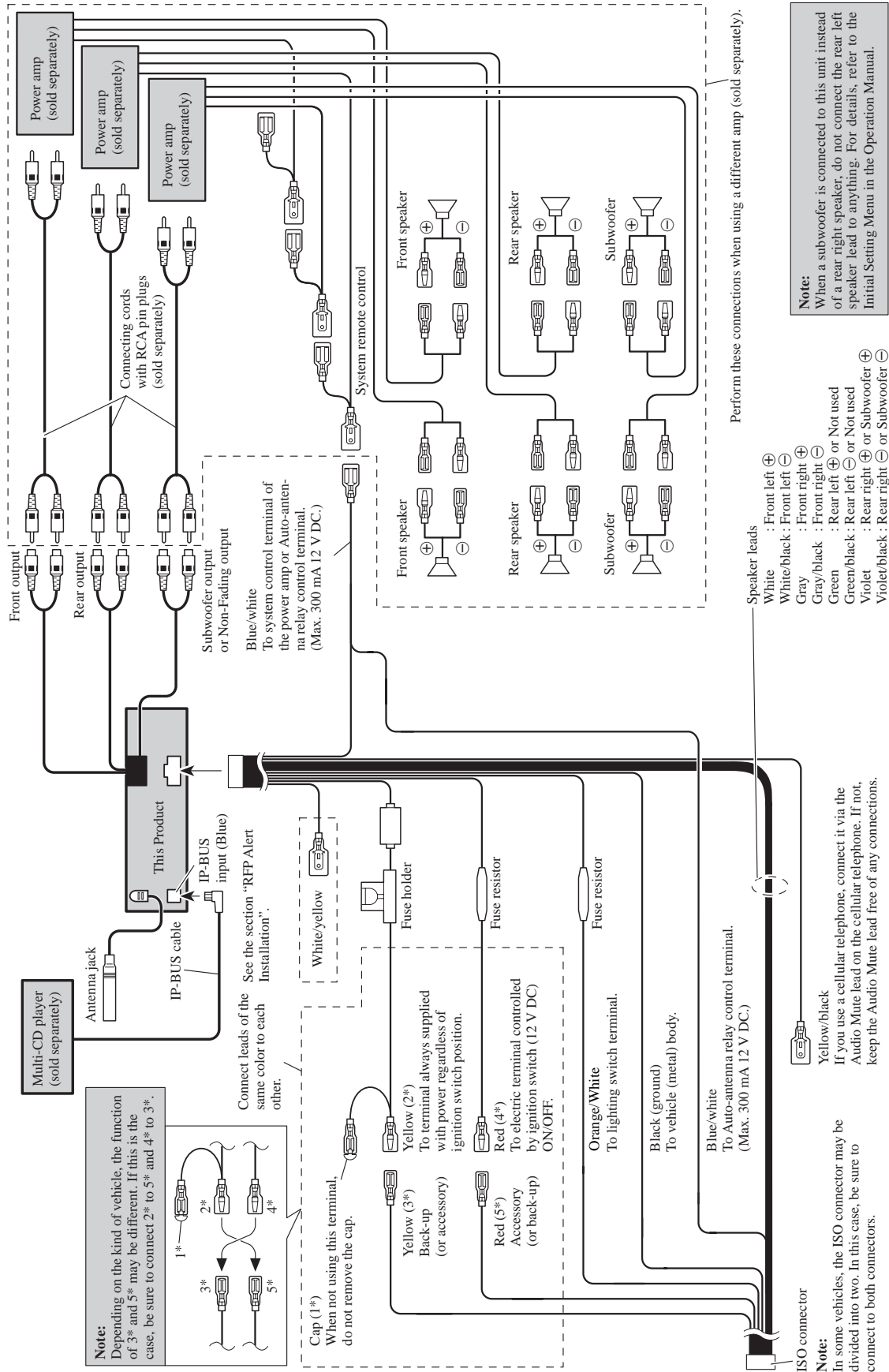
Format	Meaning
C	C MOS

PD8051A

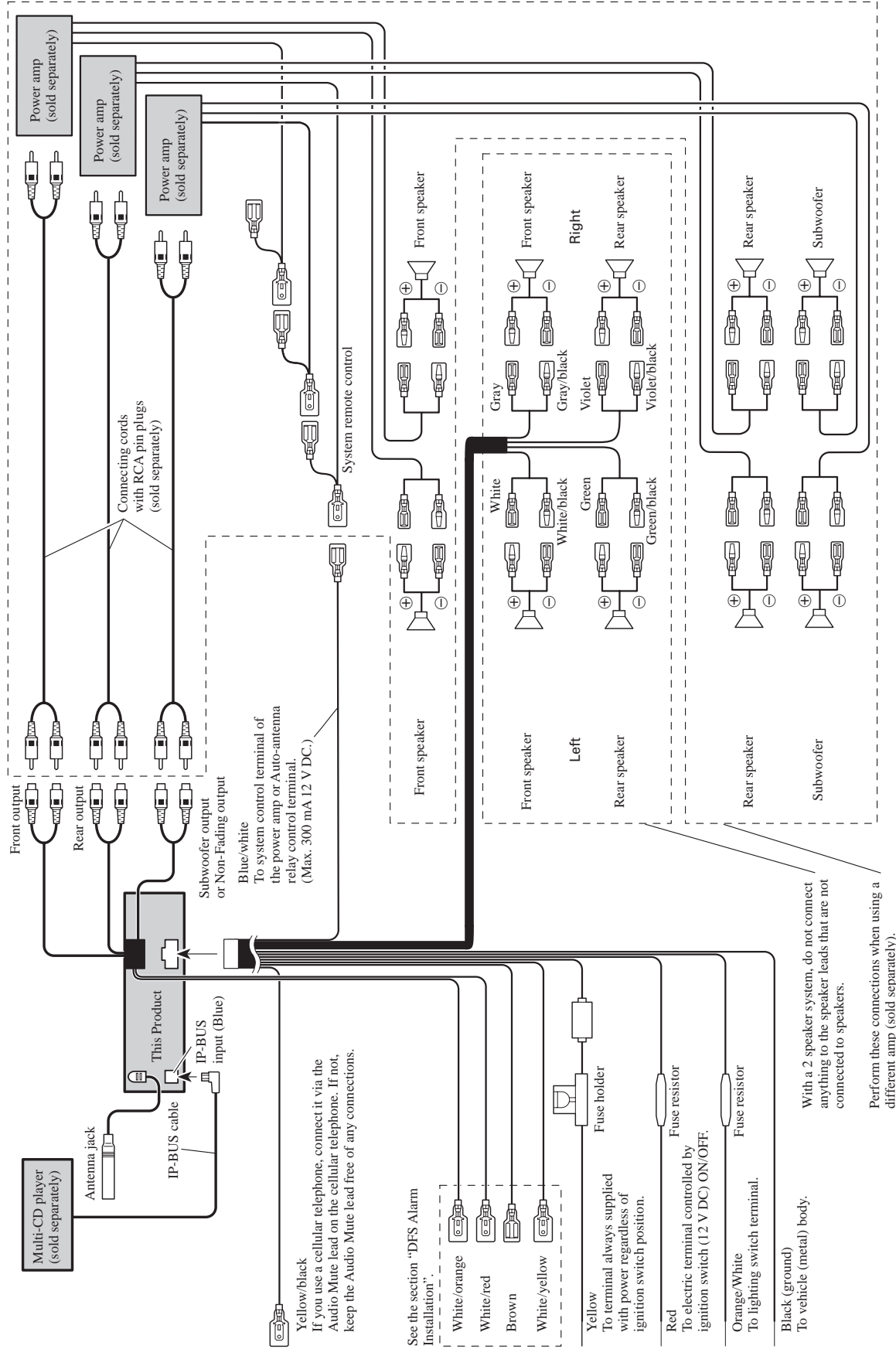


# 8. OPERATIONS AND SPECIFICATIONS

## ● Connection Diagram (KEH-P8800R/EW, KEH-P8800R-W/EW)

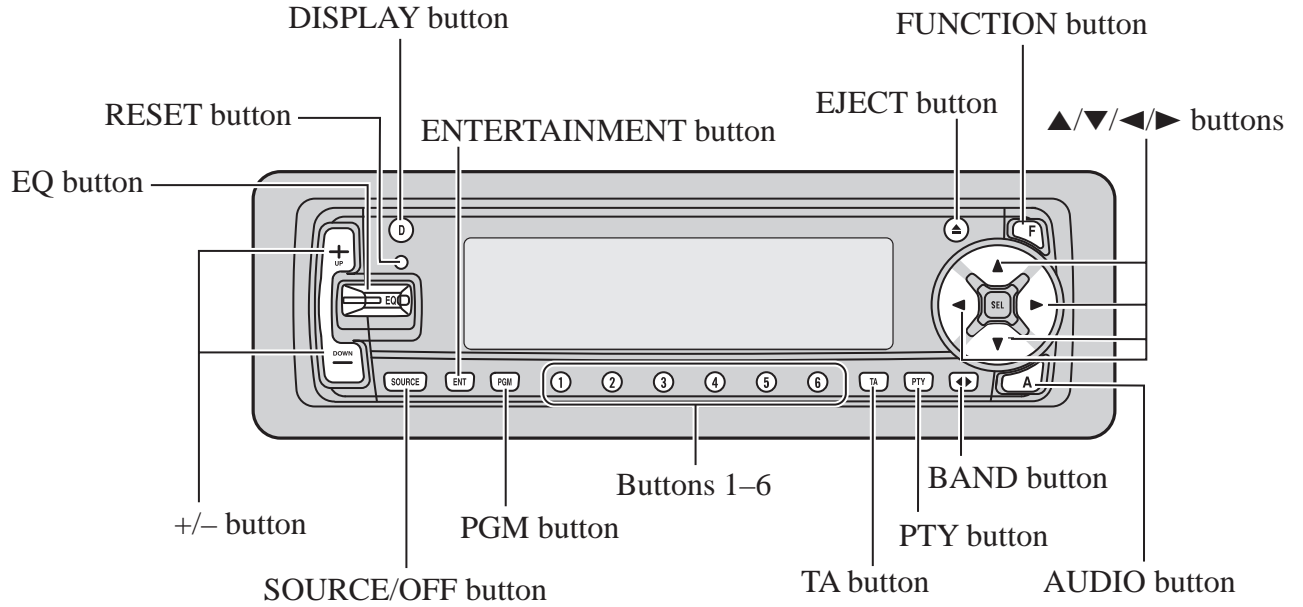


# ● Connection Diagram (KEH-P8800R,P8800R-W,P8850/ES)

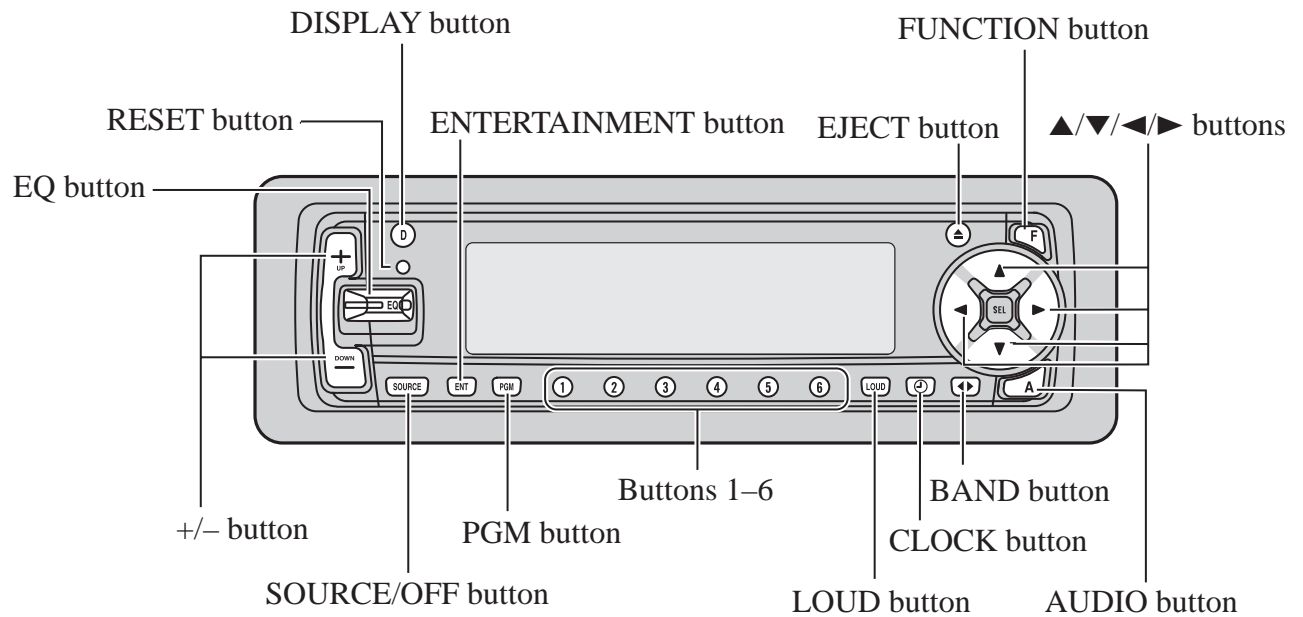


## 8.1 OPERATIONS

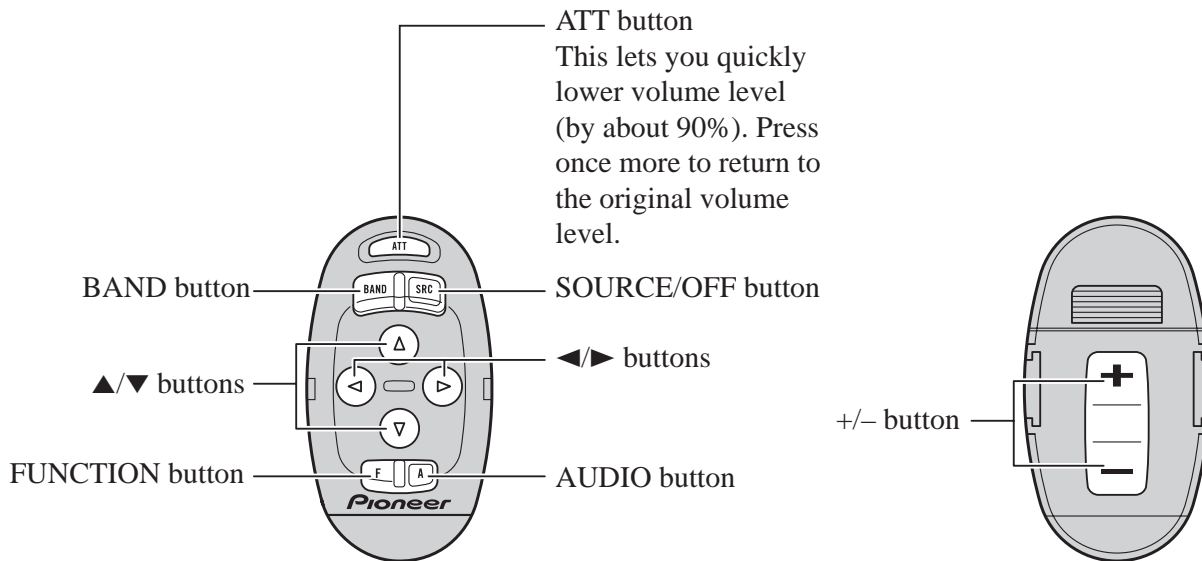
● KEH-P8800R/EW, KEH-P8800R-W/EW



● KEH-P8850/ES

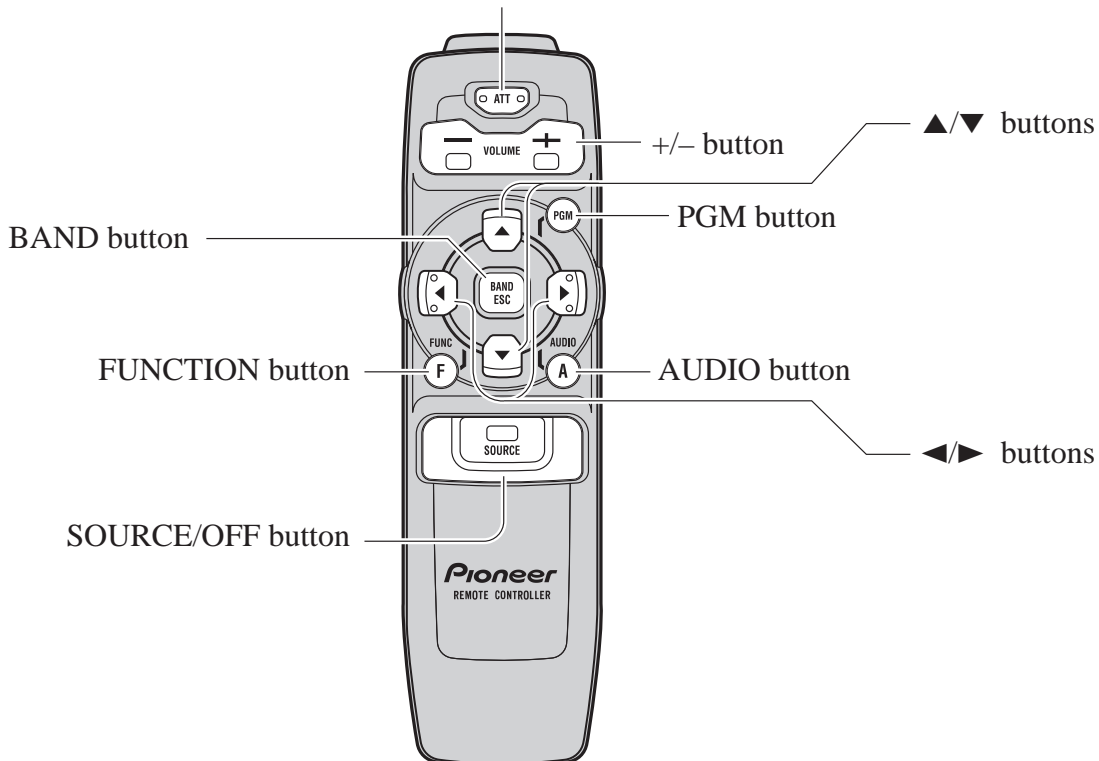


● KEH-P8800R/EW, KEH-P8800R-W/EW



● KEH-P8850/ES

ATT button  
This lets you quickly lower volume level (by about 90%).  
Press once more to return to the original volume level.





# Basic Operation

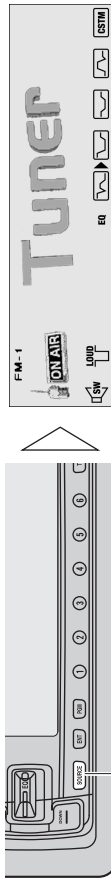
## To Listen to Music

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

**Note:**

- Loading a cassette in this product.

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



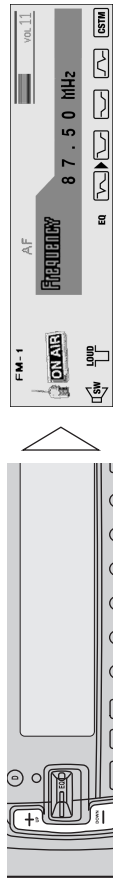
Each press changes the Source ...

Each press of the SOURCE/OFF button selects the desired source in the following order:  
 Tuner → DAB (Digital Audio Broadcasting) Tuner → Cassette player  
 → Multi-MD player → Multi-CD player → AUX

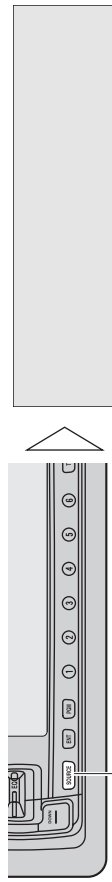
**Note:**

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

**2. Raise or lower the volume.**



**3. Source OFF.**



Hold for 1 second or more

## Basic Operation of Tuner

This product's AF function can be switched ON and OFF. AF should be switched OFF for normal tuning operations.

### 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

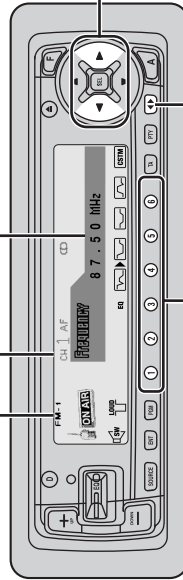
**Note:**

- 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.
- "O" stereo indicator lights when a stereo station is selected.

### Preset Number Indicator

### Band Indicator

### Frequency Indicator



### 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 FM-1, FM-2 and FM-3) 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.

**Band**  
 FM-1 → FM-2 → FM-3  
 → MW/LW

## Basic Operation of Cassette Player

**Note:**

- Be sure to close the front panel after loading or ejecting a cassette.

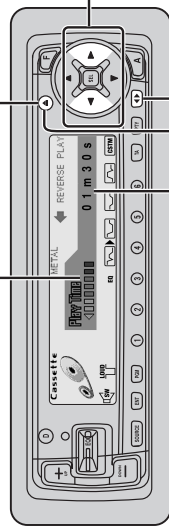
**Eject**

Press the EJECT button, and you can open the front panel before ejection.

In case of opening the front panel, you can just eject a cassette tape.

**Note:**

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

**Direction Indicator****Direction Change****Open**

- Press the EJECT button for 1 second or more, and you can open the front panel without ejecting a cassette tape.
- In case of opening the front panel, you can close it.
- Note:**
- The continuous playback time count starts at "00m00s" at the following times.
    - \* When a tape is inserted.
    - \* When the tape direction is changed.
    - \* When you rewind the tape side currently playing back to the beginning.
  - The continuous playback time count is halted when fast-forwarding/rewinding and while the Music Search function is operating.

**Elapsed Play Time Indicator****Fast Forward/Rewind and Music Search**

- Each press of the **▶** button selects **Fast forward** or **Forward-Music Search**.

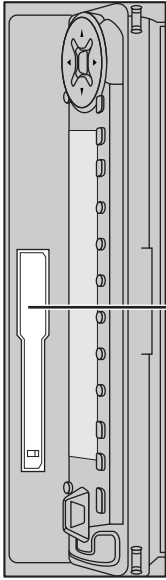
Fast Forward → FF M-Search (Forward-Music Search) → Normal Playback

- Each press of the **◀** button selects **Rewind-Music Search**.

Rewind → REW M-Search (Rewind-Music Search) → Normal Playback

**Note:**

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

**Cassette Loading Slot**

If a cassette tape is inserted, the front panel is closed automatically.

**Note:**

- "METAL" appears on the display when a metal or chrome tape is inserted. Nothing is displayed for a normal tape.

**WARNING:**

- Do not use with the front panel left open. If you do leave it open, it may result in injury in the event of an accident.

## Basic Operation of Multi-CD Player

This product can control a Multi-CD player. (With certain old type Multi-CD players, using a multiple connection adapter lets you connect multiple units which you can control with this product.)

### 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.

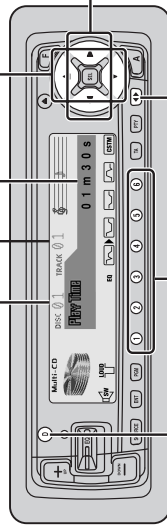
Track Search	0.5 seconds or less
Fast Forward/Reverse	Continue pressing

### Track Number Indicator

#### Disc Number Indicator

#### Play Time Indicator

#### Disc Search



### Switching the Display

Each press of the DISPLAY button changes the display in the following order:

- Play mode (Play Time)
- Disc Title

#### Note:

- If you switch displays when disc titles have not been input, "No Title" is displayed.

### Switching the Multi-CD Player

When two or more Multi-CD players are connected using a multiple connection adapter, you can select the Multi-CD player by pressing the BAND button.

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

### 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 buttons.

#### Note:

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

#### 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. This will prevent you from using the ITS function. (If you try and use this function, "Not Ready" is displayed.) If this happens, reading of information begins again when you switch to a component other than the 50-Disc Type Multi-CD Player.
- If the Multi-CD player cannot operate properly, an error message such as "ERROR-14" is displayed. Refer to Multi-CD Player Owner's Manual.
- If there are no discs in the Multi-CD player magazine, "No Disc" is displayed.
- "LOADING" 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.

### When playing a CD TEXT disc on a CD TEXT compatible Multi-CD Player:

- You can use the following two functions. Refer to Multi-CD Player's Owner's Manual for operation details.
  - \* Title display switching
  - \* Title scroll
- You cannot switch to the Disc Title Input mode in the Detailed Setting Menu.

**General**

Power source ..... 14.4 V DC (10.8 – 15.1 V allowable)  
 Grounding system ..... Negative type  
 Max. current consumption ..... 10.0 A  
 Dimensions  
 (mounting size) ..... 178 (W) × 50 (H) × 155 (D) mm  
 (front face) ..... 188 (W) × 58 (H) × 20 (D) mm  
 Weight ..... 1.6 kg

**Audio**

Maximum power output ..... 45 W × 4  
 45 W × 2 ch/4 Ω + 70 W × 1 ch/2 Ω (for Subwoofer)  
 Continuous power output ..... 27 W × 4  
 (DIN45324, +B = 14.4 V)  
 Load impedance ..... 4 Ω (4 – 8 Ω [2 for 1 ch] allowable)  
 Preout maximum output level/output impedance ..... 4.0 V/100 Ω  
 Equalizer (3-Band Parametric Equalizer)  
 (Low) ..... Frequency: 40/80/100/160 Hz  
 Q Factor: 0.35/0.59/0.95/1.15  
 (+6 dB when boosted)  
 Gain: ±12 dB  
 (Mid) ..... Frequency: 200/500/1k/2k Hz  
 Q Factor: 0.35/0.59/0.95/1.15  
 (+6 dB when boosted)  
 Gain: ±12 dB  
 (High) ..... Frequency: 3.15k/8k/10k/12.5k Hz  
 Q Factor: 0.35/0.59/0.95/1.15  
 (+6 dB when boosted)  
 Gain: ±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)

**HPF**

Frequency ..... 50/80/125 Hz  
 Slope ..... -12 dB/oct.

**Subwoofer**

Frequency ..... 50/80/125 Hz  
 Slope ..... -18 dB/oct.  
 Gain ..... ±12 dB  
 Phase ..... Normal/Reverse

**Cassette player**

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

**General**

Power source ..... 14.4 V DC (10.8 – 15.1 V allowable)  
 Grounding system ..... Negative type  
 Max. current consumption ..... 10.0 A  
 Dimensions  
 (DIN) (chassis) ..... 178 (W) × 50 (H) × 155 (D) mm  
 (nose) ..... 188 (W) × 58 (H) × 20 (D) mm  
 (chassis) ..... 178 (W) × 50 (H) × 160 (D) mm  
 (nose) ..... 170 (W) × 46 (H) × 15 (D) mm  
 Weight ..... 1.6 kg

**Audio**

Continuous power output is 22 W per channel min. into 4 ohms, both channels driven 50 to 15,000 Hz with no more than 5% THD.  
 Maximum power output ..... 45 W × 4  
 45 W × 2 ch/4 Ω + 70 W × 1 ch/2 Ω (for Subwoofer)  
 Load impedance ..... 4 Ω (4 – 8 Ω [2 for 1 ch] allowable)  
 Preout maximum output level/output impedance ..... 4.0 V/100 Ω  
 Equalizer (3-Band Parametric Equalizer)  
 (Low) ..... Frequency: 40/80/100/160 Hz  
 Q Factor: 0.35/0.59/0.95/1.15  
 (+6 dB when boosted)  
 Gain: ±12 dB  
 (Mid) ..... Frequency: 200/500/1k/2k Hz  
 Q Factor: 0.35/0.59/0.95/1.15  
 (+6 dB when boosted)  
 Gain: ±12 dB  
 (High) ..... Frequency: 3.15k/8k/10k/12.5k Hz  
 Q Factor: 0.35/0.59/0.95/1.15  
 (+6 dB when boosted)  
 Gain: ±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)

**HPF**

Frequency ..... 50/80/125 Hz  
 Slope ..... -12 dB/oct.

**Subwoofer output**

Frequency ..... 50/80/125 Hz  
 Slope ..... -18 dB/oct.  
 Gain ..... ±12 dB  
 Phase ..... Normal/Reverse

**Cassette player**

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

**FM tuner**

Frequency range ..... 87.5 – 108 MHz  
 Usable sensitivity ..... 10 dBf (0.9 μV/75 Ω, mono, S/N: 30 dB)  
 50 dB quieting sensitivity ..... 15 dBf (1.5 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)

**AM tuner**

Frequency range ..... 531 – 1,602 kHz (9 kHz)  
 Usable sensitivity ..... 530 – 1,710 kHz (10 kHz)  
 Selectivity ..... 18 μV (S/N: 20 dB)  
 ..... 50 dB (±9 kHz)  
 ..... 50 dB (±10 kHz)