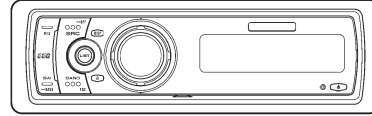


# Service Manual



DEH-P680MP/XN/UC

ORDER NO.  
**CRT3569**

MULTI-CD CONTROL HIGH POWER CD/MP3/WMA/AAC PLAYER WITH FM/AM TUNER

# DEH-P680MP /XN/UC

# DEH-P6800MP /XN/UC

# DEH-P6850MP /XN/ES

This service manual should be used together with the following manual(s):

Model No.	Order No.	Mech.Module	Remarks
CX-3164	CRT3583	S10.5COMP1	CD Mech. Module:Circuit Description, Mech. Description, Disassembly

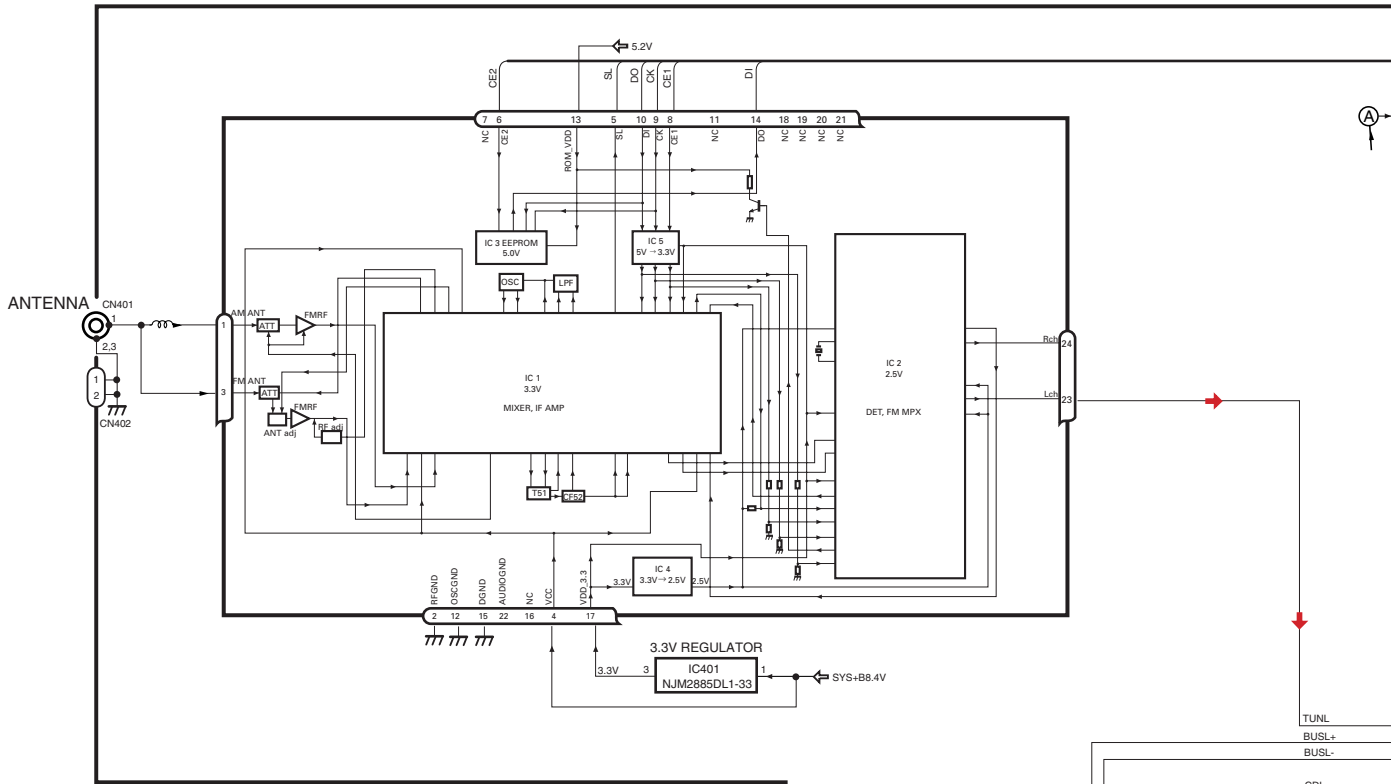


For details, refer to "Important Check Points for Good Servicing".

# 3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

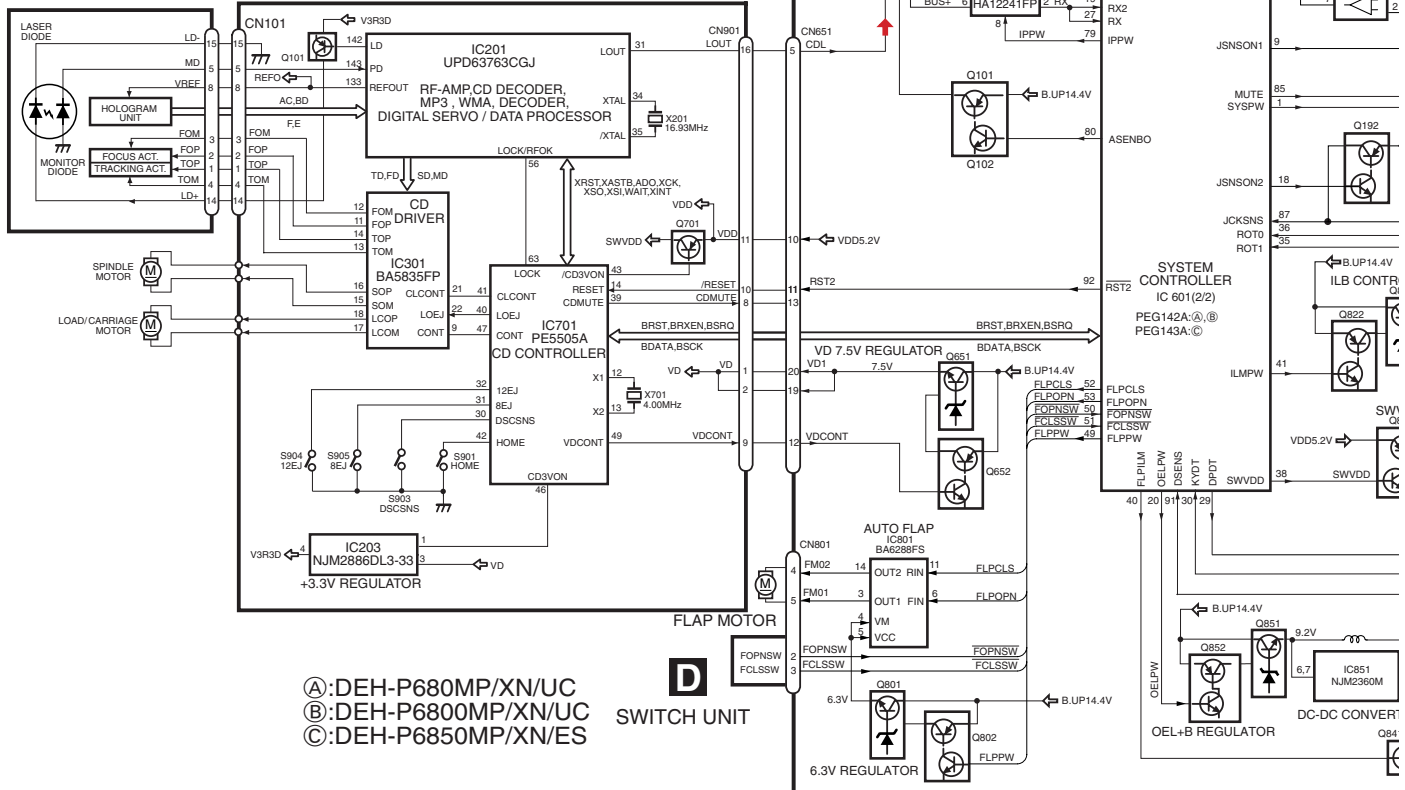
## 3.1 BLOCK DIAGRAM

### A TUNER AMP UNIT



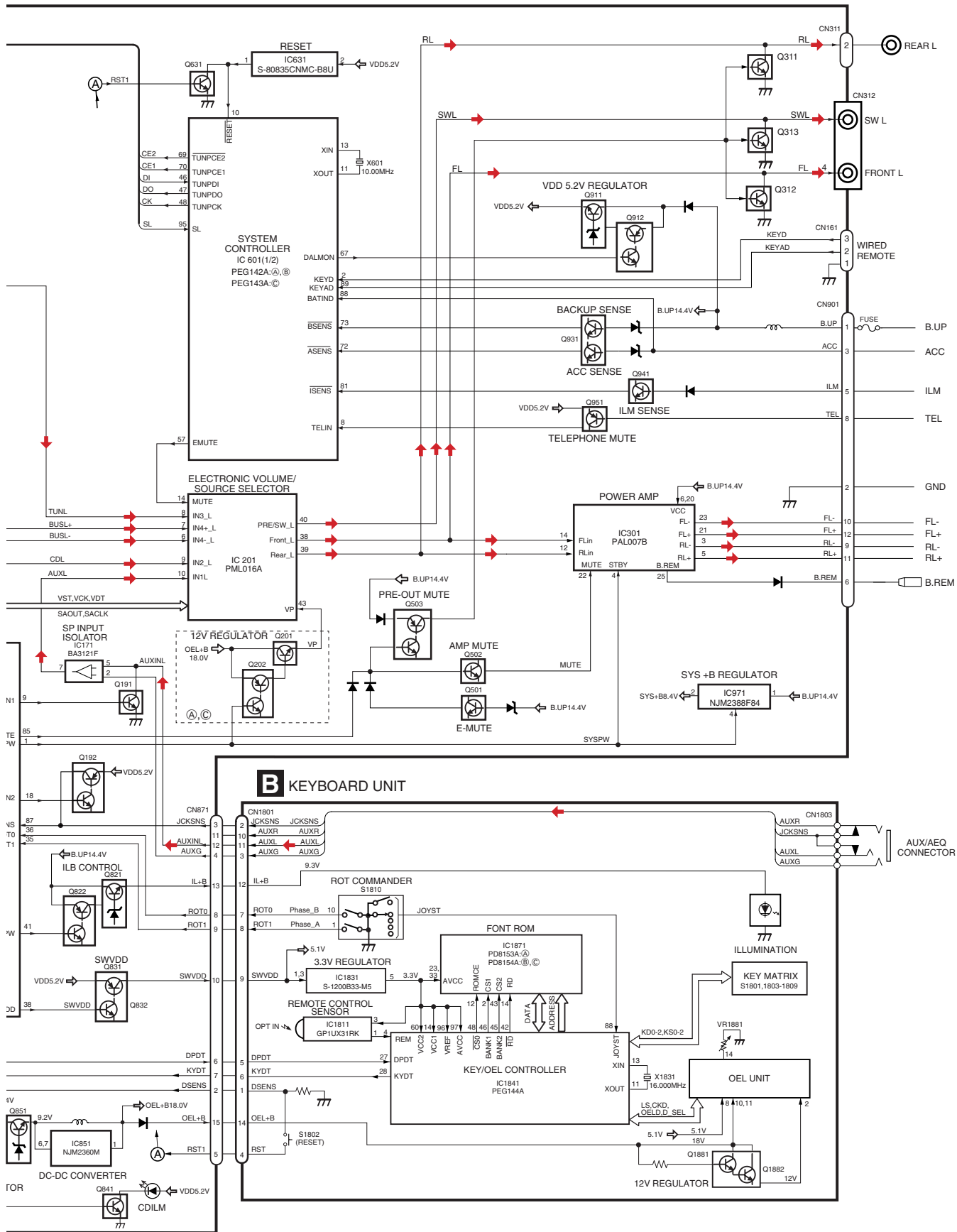
### PICKUP UNIT (P10.5)(SERVICE)

### C CD CORE UNIT(S10.5)



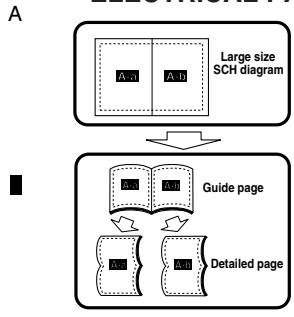
(A): DEH-P680MP/XN/UC  
 (B): DEH-P6800MP/XN/UC  
 (C): DEH-P6850MP/XN/ES

(D) SWITCH UNIT

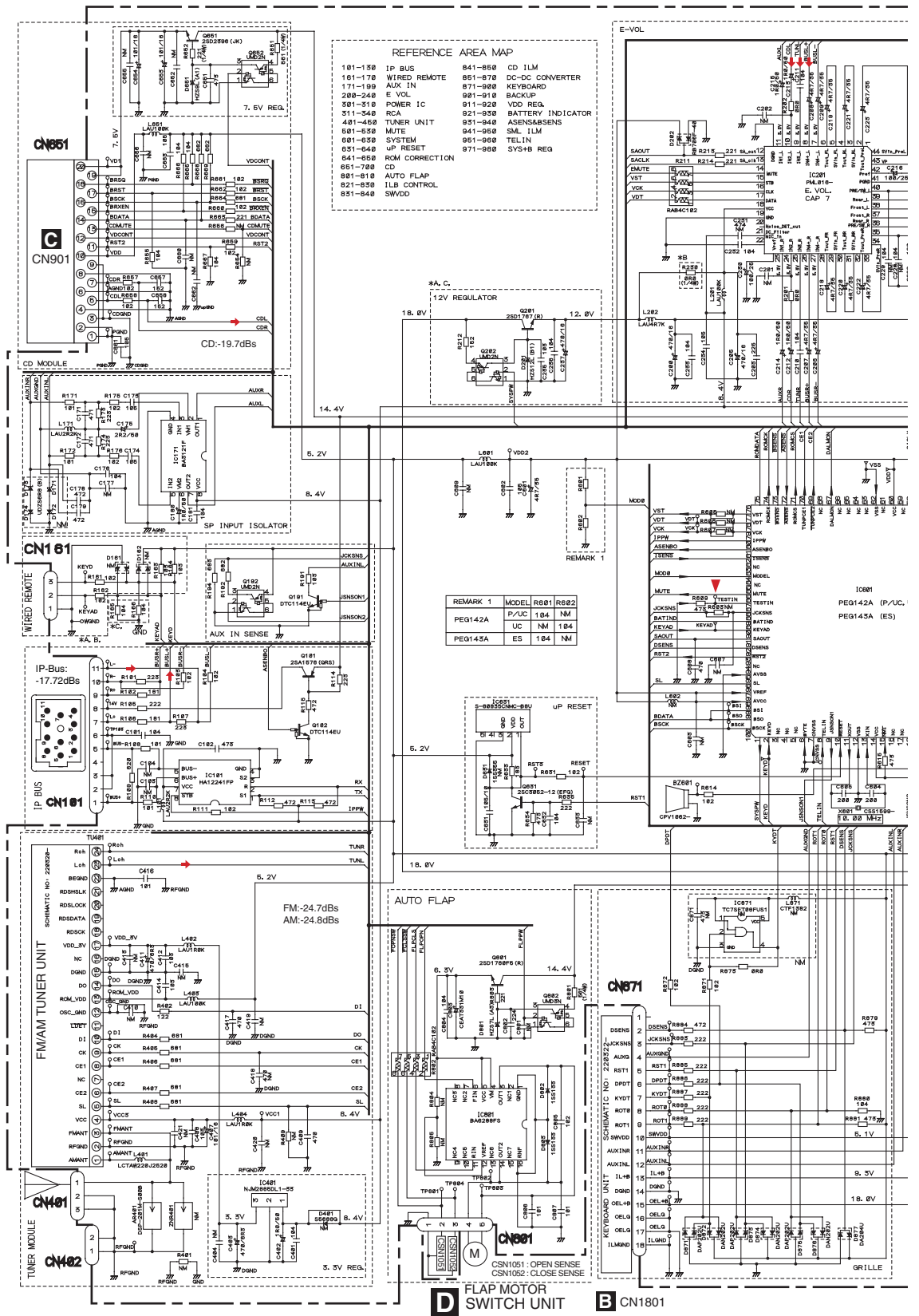


# 3.2 TUNER AMP UNIT(GUIDE PAGE)

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



**A-a**



B

C

D

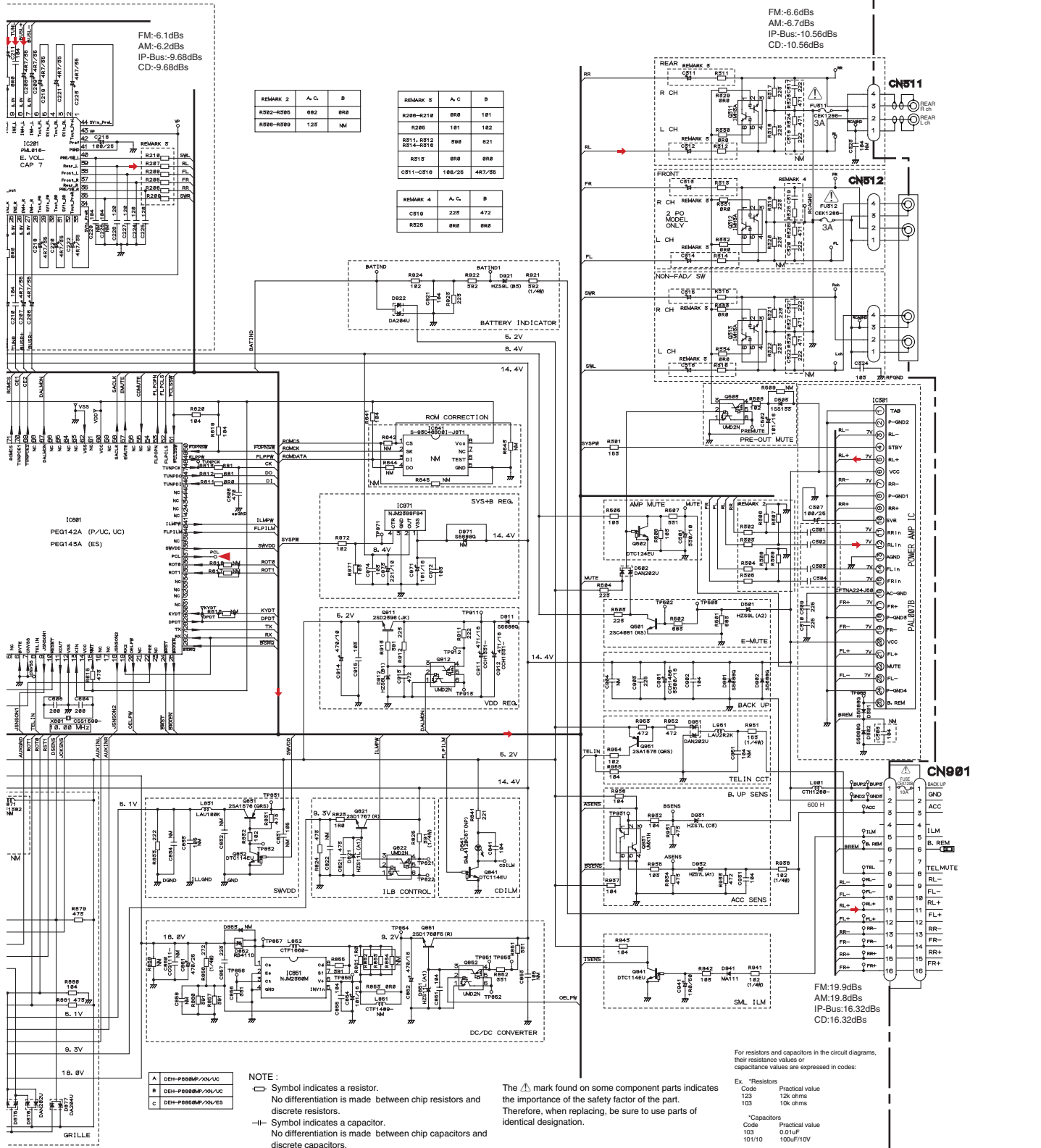
E

F

**A D**

# A-b

## A TUNER AMP UNIT

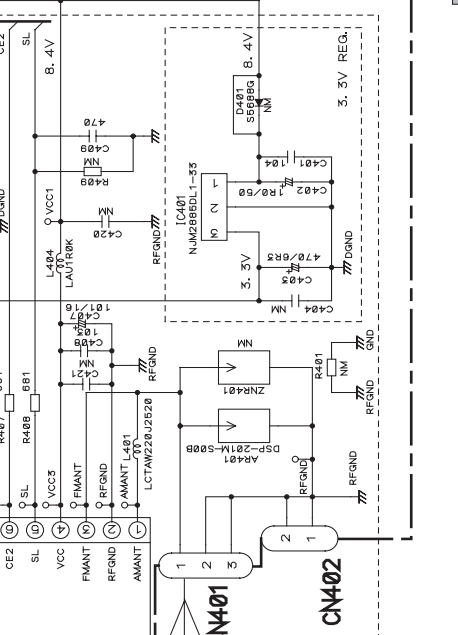
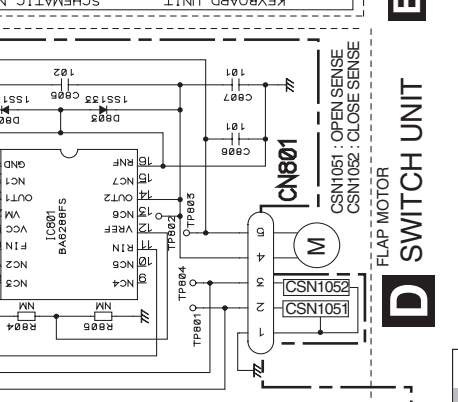
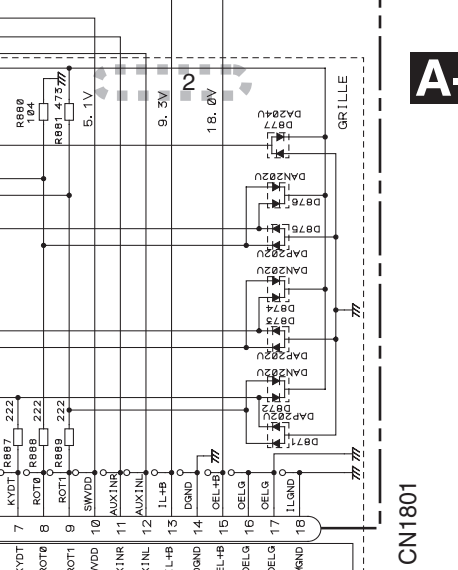
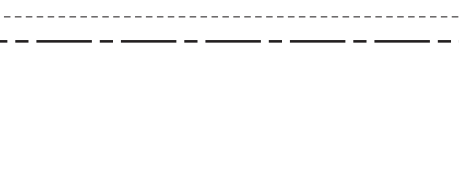
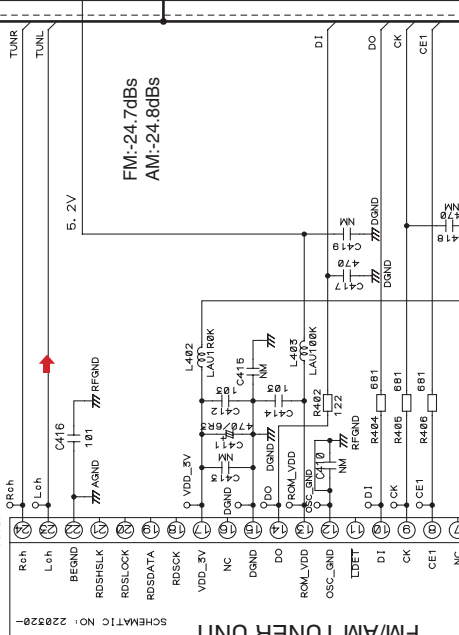
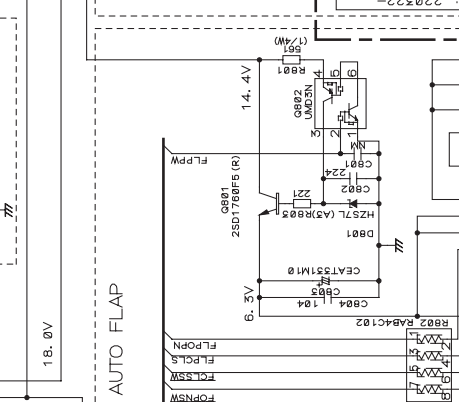
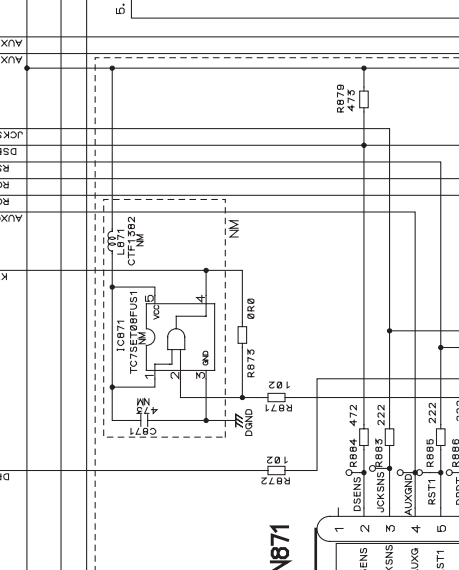
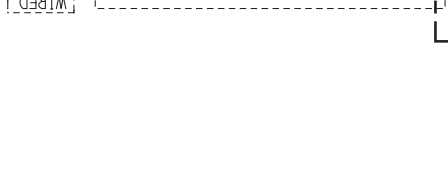
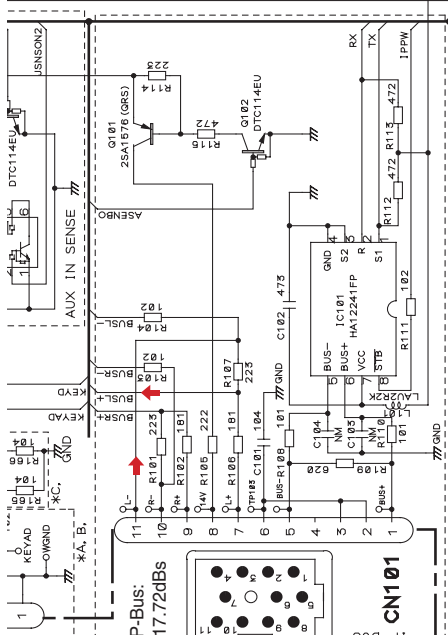
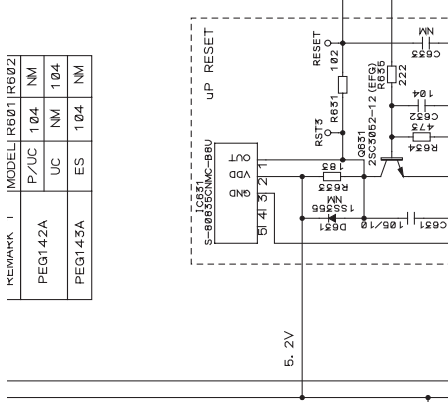
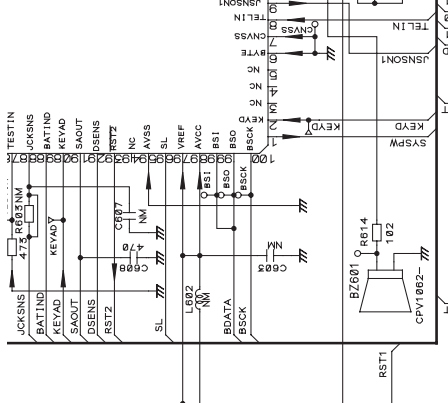


A  
B  
C  
D  
E  
F



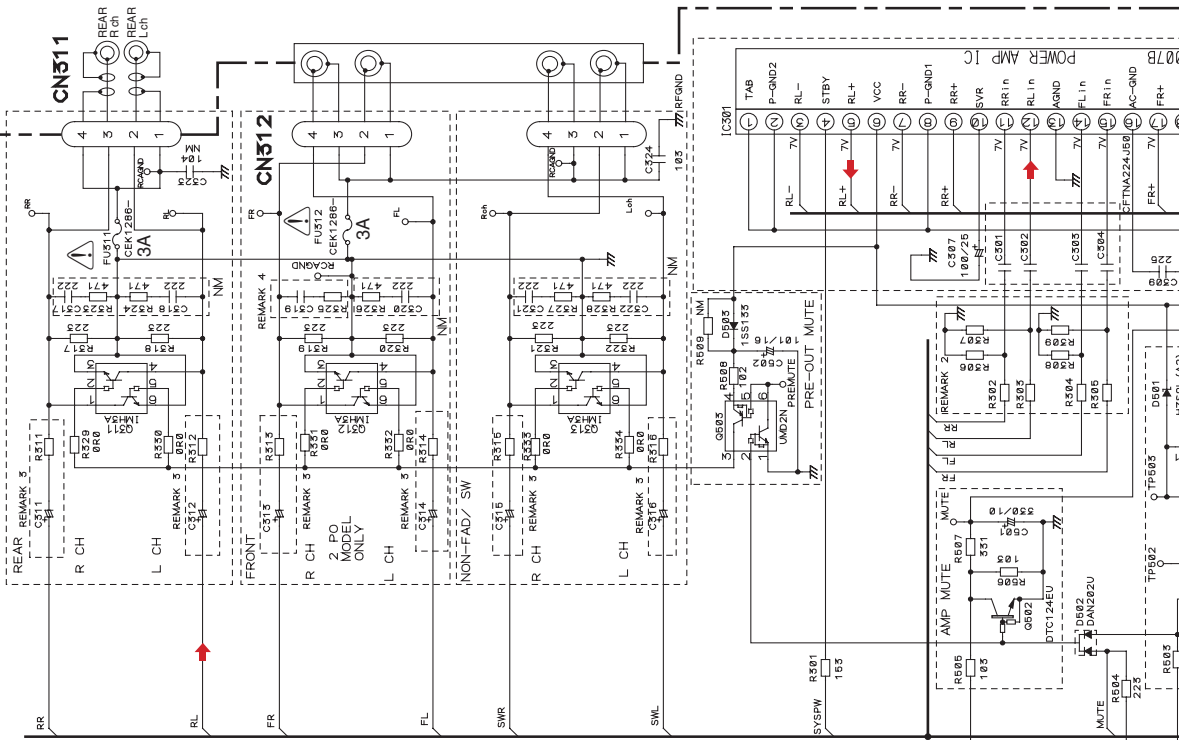


REMARK: 1 MODEL: R601 R602  
 PEG142A P/UC 104 NM  
 PEG143A UC NM 104  
 PEG143A ES 104 NM

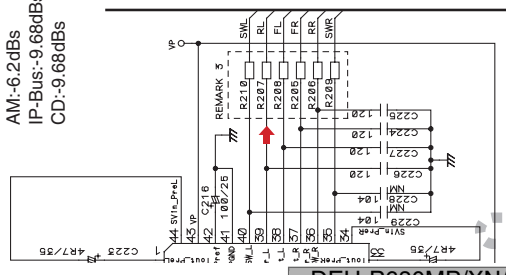


# A TUNER AMP UNIT

FM:-6.6dBs  
 AM:-6.7dBs  
 IP-Bus:-10.56dBs  
 CD:-10.56dBs



FM:-6.1dBs  
 AM:-6.2dBs  
 IP-Bus:-9.68dBs  
 CD:-9.68dBs



## DEH-P680MP/XN/UC

REMARK 3	A, C	B
R286-R210	0R0	101
R285	101	102
R311, R312	500	021
R314-R316	0R0	0R0
R315	0R0	0R0
C311-C316	100/25	4R7/56

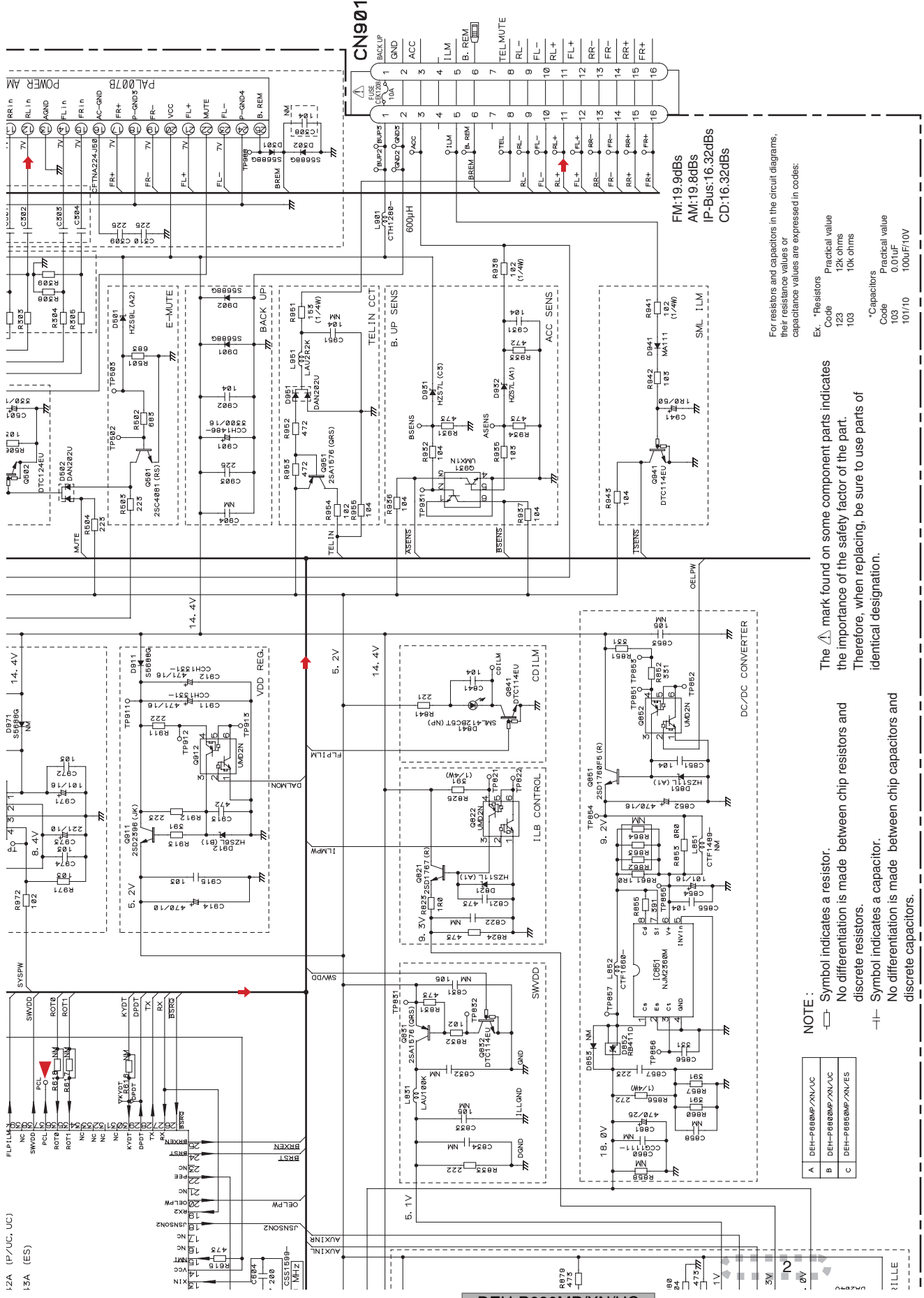
REMARK 4	A, C	B
C319	225	472
R325	0R0	0R0

REMARK 2	A, C	B
R302-R305	0R0	0R0
R306-R309	125	NM

A-a A-b

A-b





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

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.

**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.

A	DEH-P680MP/XN/UC
B	DEH-P680MP/XN/UC
C	DEH-P680MP/XN/ES

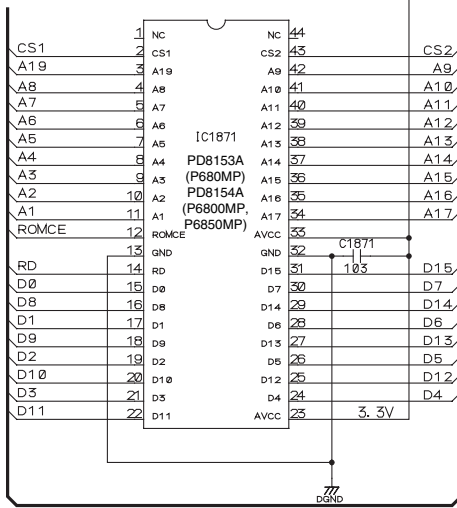
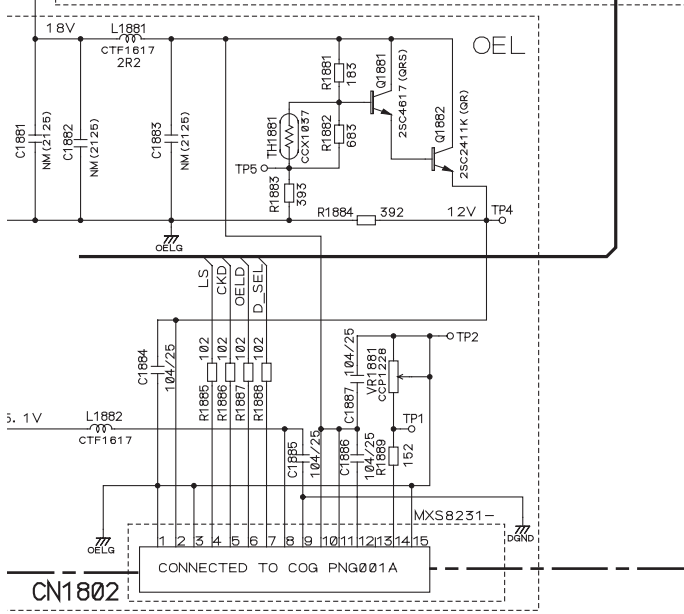
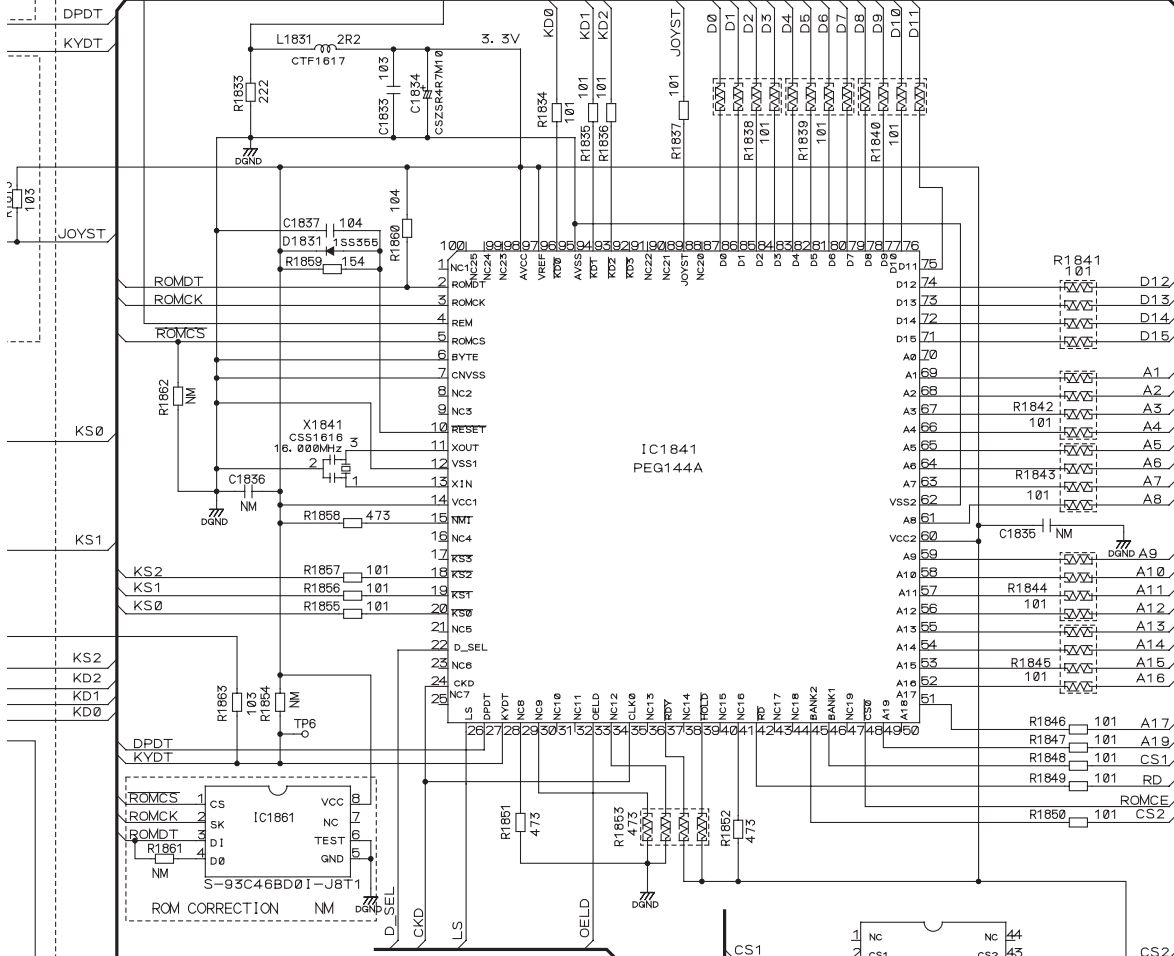
A-a A-b

A-b



3.3 V REGULATOR

**B** KEYBOARD UNIT SYSTEM MICRON



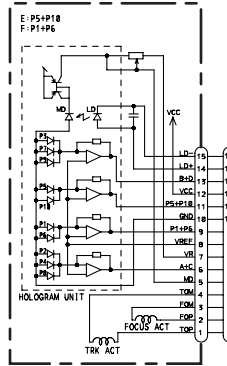
OEL UNIT

# 3.4 CD MECHANISM MODULE

A  
B  
C  
D  
E  
F

C-a

PICKUP UNIT(P10.5)(SERVICE)

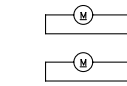


F: ACT: Applying positive voltage to POP.  
T: ACT: Applying positive voltage to TOP.  
The underlined indicates the switch position.

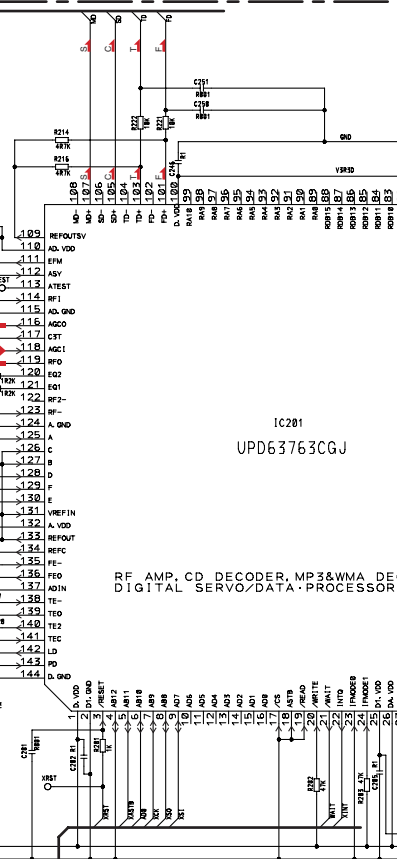
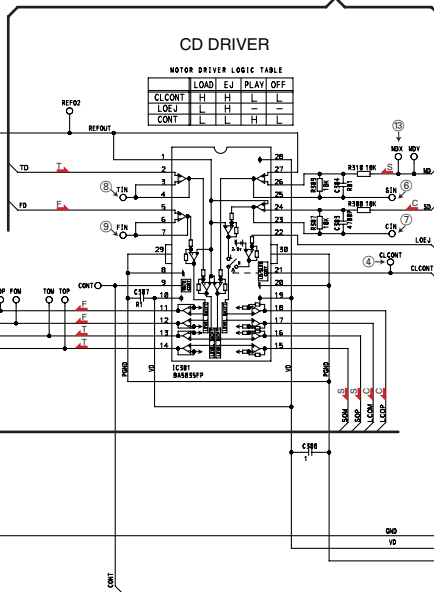
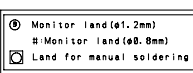
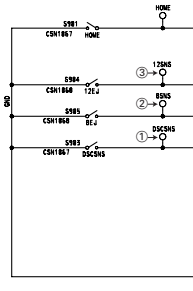
SWITCHES:  
CD CORE UNIT(S10.5COMP1)  
S901:HOME SWITCH.....ON-OFF  
S903:DSCSNS SWITCH.....ON-OFF  
S904:12EJ SWITCH.....ON-OFF  
S905:8EJ SWITCH.....ON-OFF

The underlined indicates the switch position.

M1 CXC4166 SPINDLE MOTOR



M2 CXC4026 LOADING/CARRIAGE MOTOR



NOTE1) GND ... CD LSI, RFAMP, CPU  
PGND ... Actuator, Motor Driver  
AGND ... Audio  
These GND's are not connected to each other on PCB.  
PGND is connected to a floating mechanism part by a screw.

C



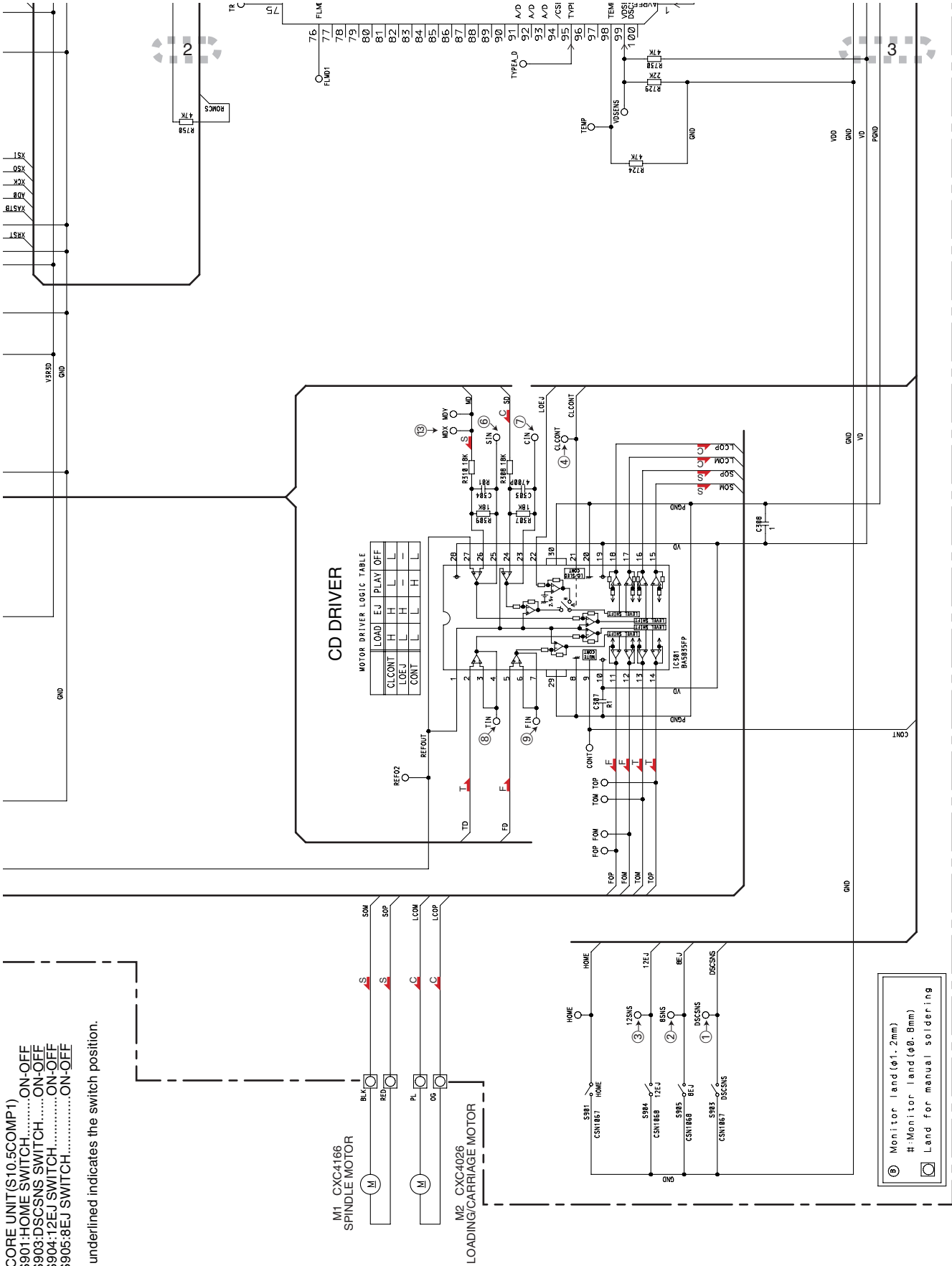


CD CORE UNIT(S10.5COMP1)  
 S901:HOME SWITCH.....ON-OFF  
 S903:DSCSNS SWITCH.....ON-OFF  
 S904:12EJ SWITCH.....ON-OFF  
 S905:8EJ SWITCH.....ON-OFF

The underlined indicates the switch position.

M1 CXC4166  
 SPINDLE MOTOR

M2 CXC4026  
 LOADING/CARRIAGE MOTOR



CD DRIVER

MOTOR DRIVER LOGIC TABLE

	LOAD	EJ	PLAY	OFF
CLCONT	H	H	L	L
LOEJ	L	L	L	L
CONT	L	L	H	L

Ⓑ Monitor land (φ1.2mm)  
 Ⓗ Monitor land (φ0.8mm)  
 □ Land for manual soldering

C-b

NOTE1) GND ...CD LSI, RFAMP, CPU  
 PGND ...Actuator, Motor Driver  
 AGND ...Audio  
 These GND's are not connected to each other on PCB.  
 PGND is connected to a floating mechanism part by a screw.

C-a C-b

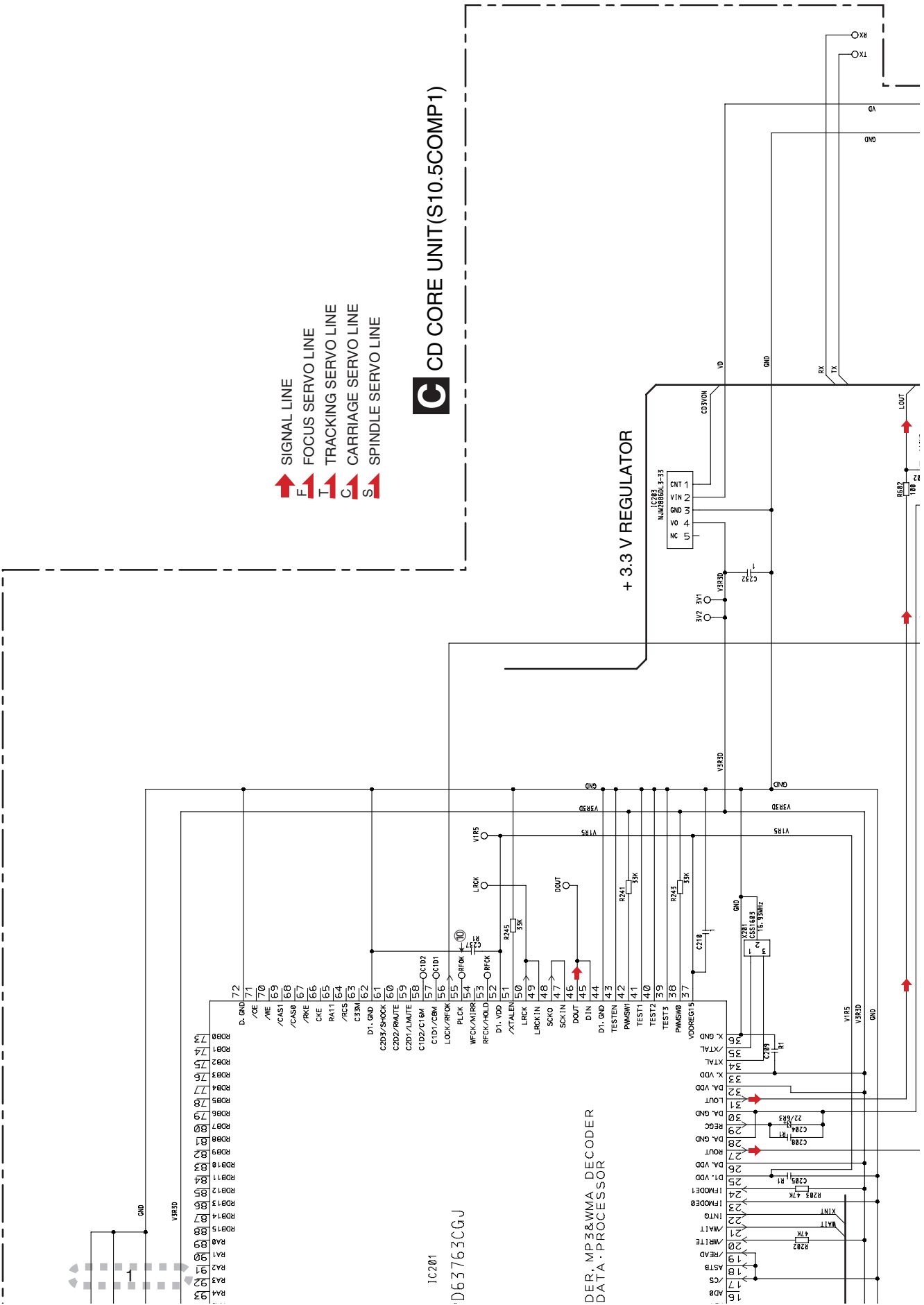
C-a

C-a C-b

C-b

- ↑ SIGNAL LINE
- ↑ FOCUS SERVO LINE
- ↑ TRACKING SERVO LINE
- ↑ CARRIAGE SERVO LINE
- ↑ SPINDLE SERVO LINE

CD CORE UNIT(S10.5COMP1)



DEH-P680MP/XN/UC

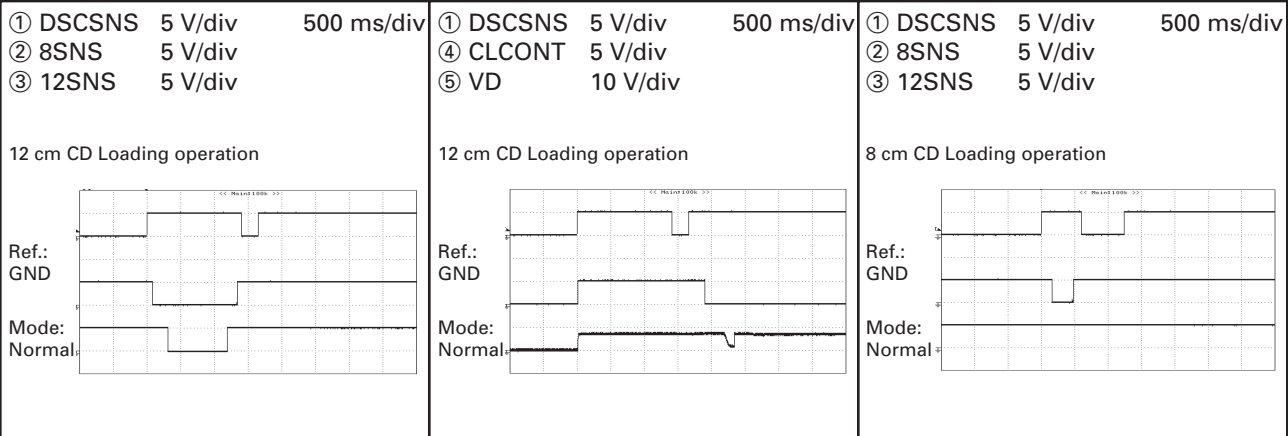




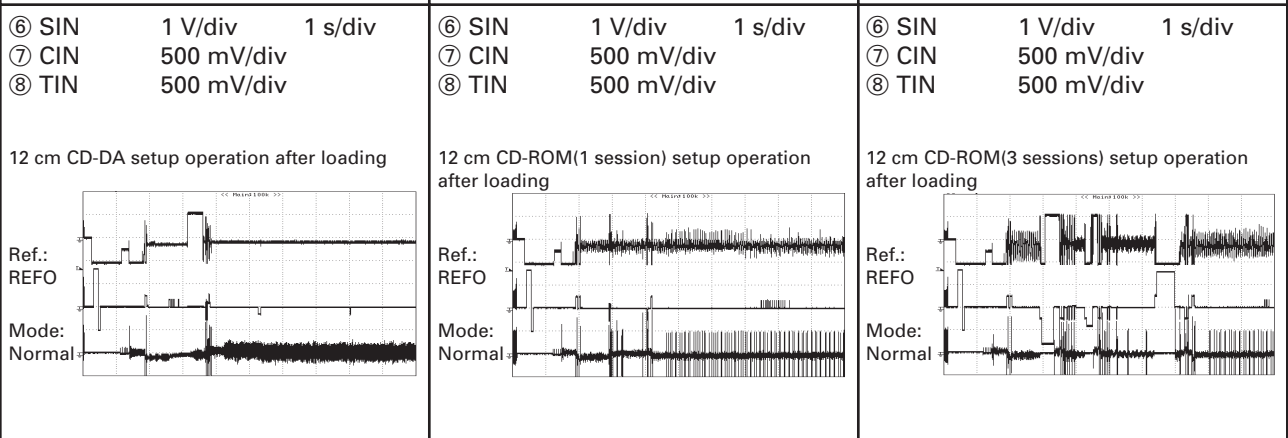
## Waveforms

Note : 1. The encircled numbers denote measuring points in the circuit diagram.  
2. Reference voltage REFO1(1.65 V)

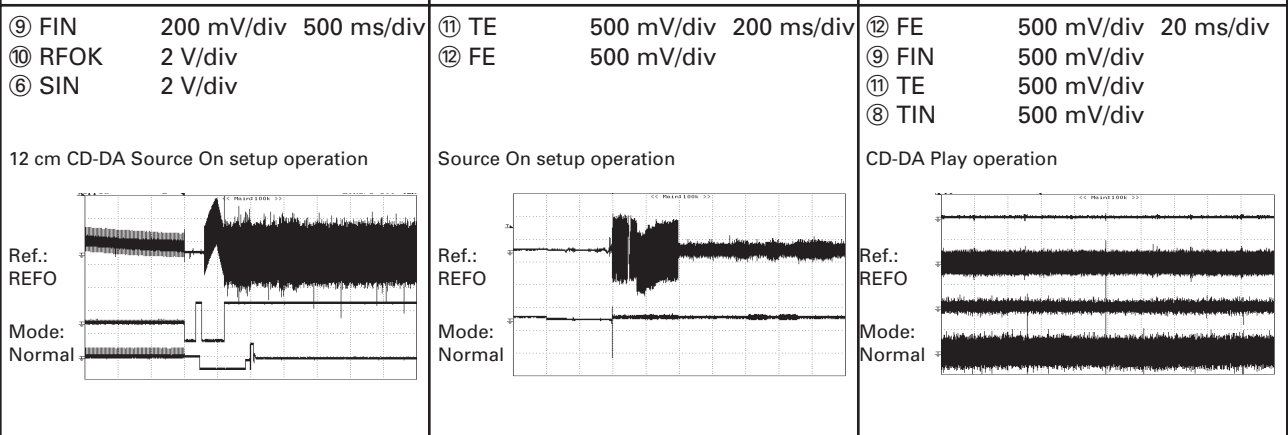
A



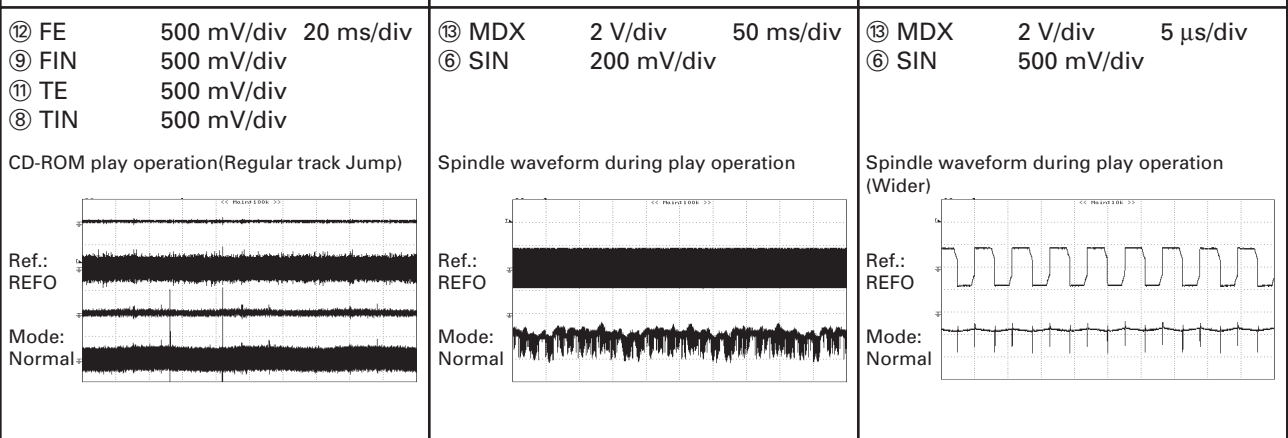
B



C



D



E

F

<p>⑨ FIN 500 mV/div 200 ms/div ⑫ FE 500 mV/div</p> <p>Focus Search waveform</p> <p>Ref.: REFO Mode: TEST</p>	<p>⑪ TE 500 mV/div 2 ms/div ⑭ RFAGC 500 mV/div</p> <p>Track Open waveform</p> <p>Ref.: REFO Mode: TEST</p>	<p>⑭ RFAGC 1 V/div 500 μs/div ⑪ TE 500 mV/div ⑧ TIN 500 mV/div</p> <p>1 Track Jump waveform</p> <p>Ref.: REFO Mode: TEST</p>
<p>⑭ RFAGC 1 V/div 500 μs/div ⑪ TE 500 mV/div ⑧ TIN 500 mV/div</p> <p>4 Tracks Jump waveform</p> <p>Ref.: REFO Mode: TEST</p>	<p>⑭ RFAGC 1 V/div 1 ms/div ⑪ TE 500 mV/div ⑧ TIN 500 mV/div</p> <p>10 Tracks Jump waveform</p> <p>Ref.: REFO Mode: TEST</p>	<p>⑭ RFAGC 1 V/div 2 ms/div ⑪ TE 500 mV/div ⑧ TIN 500 mV/div</p> <p>32 Tracks Jump waveform</p> <p>Ref.: REFO Mode: TEST</p>
<p>⑭ RFAGC 1 V/div 200 ms/div ⑪ TE 1 V/div ⑦ CIN 500 mV/div ⑥ SIN 2 V/div</p> <p>Search operation(Outer to Inner)</p> <p>Ref.: REFO Mode: Normal</p>	<p>⑮ LOUT 1 V/div 200 μs/div ⑯ ROUT 1 V/div</p> <p>Analog audio waveform</p> <p>Ref.: AGND Mode: Normal</p>	<p>① DSCSNS 5 V/div 500 ms/div ② 8SNS 5 V/div ③ 12SNS 5 V/div</p> <p>12 cm CD Eject operation</p> <p>Ref.: GND Mode: Normal</p>
<p>① DSCSNS 5 V/div 500 ms/div ⑤ CLCONT 5 V/div ④ LOEJ 5 V/div</p> <p>12 cm CD Eject operation</p> <p>Ref.: GND Mode: Normal</p>	<p>① DSCSNS 5 V/div 500 ms/div ② 8SNS 5 V/div ③ 12SNS 5 V/div</p> <p>8 cm CD Eject operation</p> <p>Ref.: GND Mode: Normal</p>	<p>⑥ SIN 1 V/div 500 ms/div ⑦ CIN 500 mV/div ⑧ TIN 500 mV/div</p> <p>CD-DA → CD-ROM mode change(Band key)</p> <p>Ref.: REFO Mode: Normal</p>

A  
B  
C  
D  
E  
F

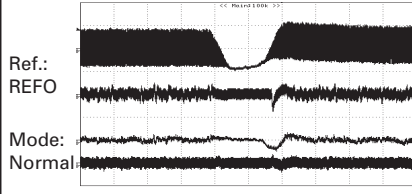
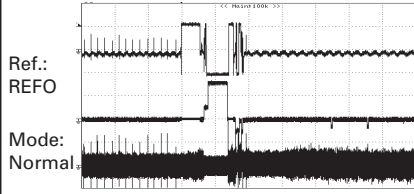
A

⑥ SIN 1 V/div 500 ms/div  
 ⑦ CIN 500 mV/div  
 ⑧ TIN 500 mV/div

⑭ RFAGC 1 V/div 500 μs/div  
 ⑧ TIN 1 V/div  
 ⑪ TE 1 V/div  
 ⑨ FIN 1 V/div

CD-ROM → CD-DA mode change(Band key)

Black dot(800 μm) during play



B

C

D

E

F

**Circuit Symbol and No.****Part No.****Circuit Symbol and No.****Part No.**

D 821	(A,70,12) Diode	HZS11L(A1)	R 162	(A,124,120) (P680MP/XN/UC)	RS1/16S102J
D 841	(A,94,10) LED	SML412BC5T(NP)	R 163	(A,124,122) (P680MP/XN/UC)	RS1/16S103J
D 851	(A,26,29) Diode	HZS11L(A1)	R 164	(A,124,127) (P680MP/XN/UC)	RS1/16S103J
A D 852	(B,63,26) Diode	RB411D	R 165	(A,128,122) (P6850MP/XN/ES)	RS1/16S104J
D 871	(B,100,29) Diode	DAP202U	R 166	(A,127,127) (P6850MP/XN/ES)	RS1/16S104J
D 872	(B,104,29) Diode	DAN202U	R 171	(B,66,42)	RS1/16S101J
D 873	(B,104,21) Diode	DAP202U	R 172	(B,49,42)	RS1/16S101J
D 874	(B,108,21) Diode	DAN202U	R 173	(A,66,35)	RS1/16S223J
D 875	(B,109,35) Diode	DAP202U	R 174	(A,49,49)	RS1/16S223J
D 876	(B,105,35) Diode	DAN202U	R 175	(A,63,42)	RS1/16S102J
			R 176	(A,53,50)	RS1/16S102J
D 877	(B,108,30) Diode Network	DA204U	R 191	(A,97,59)	RS1/16S103J
D 901	(A,57,108) Diode	S5688G	R 192	(A,85,58)	RS1/16S682J
D 902	(A,57,104) Diode	S5688G	R 194	(A,93,62)	RS1/16S683J
D 911	(A,35,82) Diode	S5688G	R 201	(B,81,93)	RS1/16S0R0J
B D 912	(A,31,77) Diode	HZS6L(B1)	R 202	(B,76,97)	RS1/16S0R0J
D 921	(A,85,113) Diode	HZS9L(B3)	R 205	(B,98,91)	RS1/16S101J
D 922	(B,149,65) Diode Network	DA204U	R 206	(B,98,90)	RS1/16S0R0J
D 931	(A,78,113) Diode	HZS7L(C3)	R 207	(B,98,96)	RS1/16S0R0J
D 932	(A,74,108) Diode	HZS7L(A1)	R 208	(B,98,95)	RS1/16S0R0J
D 941	(A,79,121) Diode	MA111	R 209	(B,98,88)	RS1/16S0R0J
D 951	(A,60,101) Diode	DAN202U	R 210	(B,98,93)	RS1/16S0R0J
L 101	(A,22,110) Inductor	LAU2R2K	R 211	(A,80,94)	RAB4C102J
L 171	(A,63,38) Inductor	LAU2R2K	R 212	(B,66,77)	RS1/16S152J
L 201	(A,68,69) Ferri-Inductor	LAU100K	R 213	(B,90,107)	RS1/16S221J
C L 202	(A,58,76) Ferri-Inductor	LAU4R7K	R 214	(A,76,96)	RS1/16S221J
L 401	(B,175,145) Inductor	LCTAW220J2520	R 301	(B,113,129)	RS1/16S153J
L 402	(A,164,97) Inductor	LAU1R0K	R 302	(B,114,91)	RS1/16S682J
L 403	(A,165,108) Ferri-Inductor	LAU100K	R 303	(B,103,95)	RS1/16S682J
L 404	(A,161,108) Inductor	LAU1R0K	R 304	(B,103,94)	RS1/16S682J
L 601	(A,96,50) Ferri-Inductor	LAU100K	R 305	(B,103,90)	RS1/16S682J
L 651	(A,76,45) Ferri-Inductor	LAU100K	R 306	(B,119,91)	RS1/16S123J
L 831	(A,131,27) Ferri-Inductor	LAU100K	R 307	(B,107,101)	RS1/16S123J
L 852	(A,42,21) Inductor	CTF1660	R 308	(B,113,103)	RS1/16S123J
L 901	(A,37,103) Choke Coil 600µH	CTH1280	R 309	(B,119,93)	RS1/16S123J
L 951	(A,57,99) Inductor	LAU2R2K	R 311	(B,153,109)	RS1/16S390J
D X 601	(A,109,55) Radiator 10.000MHz	CSS1599	R 312	(B,143,110)	RS1/16S390J
△FU311	(B,152,126) Fuse 3A	CEK1286	R 313	(B,134,121)	RS1/16S0R0J
△FU312	(B,152,130) Fuse 3A	CEK1286	R 314	(B,126,119)	RS1/16S390J
△	Fuse 10A	CEK1208	R 315	(B,147,121)	RS1/16S390J
BZ601	(A,62,13) Buzzer	CPV1062	R 316	(B,138,121)	RS1/16S390J
AR401	(A,162,146) Surge Protector	DSP-201M-S00B	R 317	(B,151,110)	RS1/16S223J

**RESISTORS**

R 101	(B,20,119)	RS1/16S223J	R 318	(B,146,110)	RS1/16S223J
R 102	(B,22,119)	RS1/16S181J	R 319	(B,137,128)	RS1/16S223J
E R 103	(B,18,119)	RS1/16S102J	R 320	(B,126,129)	RS1/16S223J
R 104	(B,16,120)	RS1/16S102J	R 321	(B,143,127)	RS1/16S223J
R 105	(B,24,119)	RS1/16S222J	R 322	(B,141,127)	RS1/16S223J
R 106	(B,15,133)	RS1/16S181J	R 325	(B,129,118)	RS1/16S0R0J
R 107	(B,14,120)	RS1/16S223J	R 329	(A,152,110)	RS1/16S0R0J
R 108	(B,27,127)	RS1/16S101J	R 330	(A,145,112)	RS1/16S0R0J
R 109	(B,26,134)	RS1/16S620J	R 331	(B,132,121)	RS1/16S0R0J
R 110	(B,28,121)	RS1/16S101J	R 332	(B,129,117)	RS1/16S0R0J
R 111	(A,12,120)	RS1/16S102J	R 333	(B,146,121)	RS1/16S0R0J
R 112	(A,12,116)	RS1/16S472J	R 334	(B,136,121)	RS1/16S0R0J
R 113	(A,14,113)	RS1/16S472J	R 402	(B,167,110)	RS1/16S122J
F R 114	(B,32,115)	RS1/16S223J	R 404	(B,169,125)	RS1/16S681J
R 115	(B,32,113)	RS1/16S472J	R 405	(B,169,131)	RS1/16S681J
R 161	(A,121,127) (P680MP/XN/UC)	RS1/16S102J	R 406	(B,167,125)	RS1/16S681J
			R 407	(B,169,137)	RS1/16S681J
			R 408	(B,167,137)	RS1/16S681J
			R 501	(A,54,72)	RS1/16S683J

5		6		7		8	
<u>Circuit Symbol and No.</u>		<u>Part No.</u>		<u>Circuit Symbol and No.</u>		<u>Part No.</u>	
R 502	(A,54,69)	RS1/16S683J		R 881	(B,101,34)	RS1/16S473J	
R 503	(A,54,66)	RS1/16S223J		R 883	(B,107,16)	RS1/16S222J	
R 504	(A,49,61)	RS1/16S223J		R 884	(B,113,27)	RS1/16S472J	A
R 505	(B,121,118)	RS1/16S103J		R 885	(B,106,14)	RS1/16S222J	
R 506	(B,121,120)	RS1/16S103J		R 886	(B,112,34)	RS1/16S222J	
R 507	(B,117,122)	RS1/16S331J		R 887	(B,115,15)	RS1/16S222J	
R 508	(A,133,115)	RS1/16S102J		R 888	(B,114,34)	RS1/16S222J	
R 601	(B,135,58)	RS1/16S104J		R 889	(B,118,14)	RS1/16S222J	
R 609	(A,124,72)	RS1/16S473J		R 911	(B,20,71)	RS1/16S222J	
R 611	(A,125,47)	RS1/16S0R0J		R 912	(B,22,71)	RS1/16S223J	
R 612	(A,127,47)	RS1/16S681J		R 913	(B,17,77)	RS1/16S391J	
R 613	(A,128,47)	RS1/16S681J		R 921	(A,81,108)	RD1/4PU392J	
R 614	(B,68,21)	RS1/16S102J		R 922	(B,147,60)	RS1/16S392J	
R 615	(B,112,51)	RS1/16S473J		R 923	(B,149,60)	RS1/16S223J	B
R 619	(A,135,48)	RS1/16S104J		R 924	(B,152,60)	RS1/16S102J	
R 620	(A,135,50)	RS1/16S104J		R 931	(A,90,110)	RS1/16S473J	
R 631	(B,139,41)	RS1/16S102J		R 932	(A,90,112)	RS1/16S104J	
R 633	(B,148,45)	RS1/16S183J		R 933	(A,95,112)	RS1/16S472J	
R 634	(B,145,41)	RS1/16S473J		R 934	(A,95,114)	RS1/16S473J	
R 635	(B,139,38)	RS1/16S222J		R 935	(A,95,117)	RS1/16S103J	
R 641	(A,144,63)	RS1/16S104J		R 936	(A,98,117)	RS1/16S104J	
R 651	(A,27,55)	RD1/4PU561J		R 937	(A,91,120)	RS1/16S104J	
R 652	(A,22,63)	RD1/4PU221J		R 938	(A,57,113)	RD1/4PU102J	
R 655	(B,87,45)	RS1/16S104J		R 941	(A,61,113)	RD1/4PU102J	
R 657	(B,91,32)	RS1/16S102J		R 942	(A,84,122)	RS1/16S103J	C
R 658	(B,91,30)	RS1/16S102J		R 943	(A,84,125)	RS1/16S104J	
R 659	(B,100,42)	RS1/16S102J		R 951	(A,64,118)	RD1/4PU153J	
R 660	(B,91,40)	RS1/16S102J		R 952	(A,64,102)	RS1/16S472J	
R 661	(A,73,40)	RS1/16S102J		R 953	(A,64,100)	RS1/16S472J	
R 662	(B,93,44)	RS1/16S102J		R 954	(A,75,104)	RS1/16S102J	
R 663	(A,74,32)	RS1/16S221J		R 955	(A,75,106)	RS1/16S104J	
R 664	(A,74,37)	RS1/16S681J		R 971	(B,19,87)	RS1/16S103J	
R 665	(B,73,39)	RS1/16S104J		R 972	(B,54,66)	RS1/16S102J	
R 666	(B,90,44)	RS1/16S104J		<b><u>CAPACITORS</u></b>			
R 667	(B,94,26)	RS1/16S104J		C 101	(B,21,135)	CKSRYB104K16	
R 668	(B,73,36)	RS1/16S682J		C 102	(A,25,119)	CKSRYB473K25	
R 669	(B,73,38)	RS1/16S682J		C 171	(A,68,35)	CCSRCH471J50	
R 801	(A,137,19)	RD1/4PU561J		C 172	(A,49,46)	CCSRCH471J50	
R 802	(A,134,44)	RAB4C102J		C 173	(A,60,42)	CKSRYB105K10	
R 803	(A,141,28)	RS1/16S221J		C 174	(A,55,50)	CKSRYB105K10	
R 823	(A,80,19)	RS1/16S1R0J		C 175	(A,54,45)	CEJQ2R2M50	
R 824	(A,80,17)	RS1/16S473J		C 176	(B,62,41)	CKSRYB104K16	
R 825	(A,74,12)	RD1/4PU391J		C 178	(B,49,40)	CKSRYB472K50	
R 831	(B,118,35)	RS1/16S473J		C 179	(B,66,37)	CKSRYB472K50	
R 832	(B,120,35)	RS1/16S102J		C 180	(A,67,52)	CEJQ1R0M50	E
R 833	(B,129,27)	RS1/16S222J		C 181	(A,58,53)	CKSRYB104K16	
R 841	(B,93,14)	RS1/16S221J		C 200	(A,122,79)	CEJQ470M16	
R 851	(B,30,43)	RS1/16S331J		C 203	(B,91,69)	CKSQYB225K10	
R 852	(B,30,41)	RS1/16S331J		C 205	(A,88,68)	CEJQ470M16	
R 853	(B,47,36)	RS1/16S0R0J		C 206	(A,69,88)	CEJQ4R7M35	
R 855	(B,36,29)	RS1/16S391J		C 207	(A,76,88)	CEJQ4R7M35	
R 856	(A,55,24)	RD1/4PU272J		C 208	(A,78,100)	CEJQ4R7M35	
R 857	(B,51,29)	RS1/16S391J		C 209	(A,81,105)	CEJQ4R7M35	
R 860	(B,49,29)	RS1/16S391J		C 210	(A,123,108)	CKSRYB104K16	
R 861	(A,33,23)	RS1/16S1R0J		C 211	(A,123,106)	CKSRYB104K16	F
R 871	(A,152,52)	RS1/16S102J		C 212	(A,69,94)	CEJQ1R0M50	
R 872	(A,113,41)	RS1/16S102J		C 213	(A,62,94)	CEJQ1R0M50	
R 873	(A,152,51)	RS1/16S0R0J		C 214	(A,75,80)	CEJQ1R0M50	
R 879	(B,108,26)	RS1/16S473J					
R 880	(B,109,32)	RS1/16S104J					

**Circuit Symbol and No.****Part No.****Circuit Symbol and No.****Part No.**

C 215	(A,71,100)	CEJQ1R0M50	C 661	(B,90,27)	CKSRYP105K10
			C 663	(A,73,42)	CKSRYP105K10
C 216	(A,109,79)	CEJQ100M25			
A C 218	(A,86,79)	CEJQ4R7M35	C 802	(B,133,23)	CKSRYP224K10
C 219	(A,85,105)	CEJQ4R7M35	C 803	(A,142,34)	CEAT331M10
C 220	(A,93,79)	CEJQ4R7M35	C 804	(B,154,35)	CKSRYP104K16
C 221	(A,91,105)	CEJQ4R7M35	C 805	(B,148,23)	CKSRYP102K50
			C 806	(B,155,17)	CCSRCH101J50
C 222	(A,100,79)	CEJQ4R7M35			
C 223	(A,97,105)	CEJQ4R7M35	C 807	(B,153,17)	CCSRCH101J50
C 224	(B,89,90)	CCSRCH120J50	C 821	(B,59,14)	CKSRYP473K25
C 225	(B,89,88)	CCSRCH120J50	C 841	(A,94,16)	CKSRYP104Z25
C 226	(B,93,96)	CCSRCH120J50	C 851	(B,27,40)	CKSRYP104K16
			C 852	(A,39,39)	CEJQ470M16
C 227	(B,89,92)	CCSRCH120J50			
C 230	(A,79,80)	CEJQ100M25	C 854	(A,39,31)	CEJQ101M16
B C 232	(A,80,91)	CKSRYP104K16	C 855	(B,35,23)	CKSRYP104K16
C 233	(B,121,77)	CKSRYP104K16	C 856	(B,49,21)	CCSRCH331J50
C 234	(B,87,64)	CKSRYP105K10	C 857	(B,52,29)	CKSRYP223K50
			C 861	(A,52,21)	CEJQ470M25
C 235	(B,61,85)	CKSRYP103K50			
C 236	(B,60,79)	CKSRYP104K16	C 901	(A,33,121) 3300µF/16V	CCH1486
C 237	(A,61,82)	CEJQ470M16	C 902	(B,42,127)	CKSRYP104K16
C 301	(A,116,100)	CFTNA224J50	C 903	(B,80,149)	CKSYB225K16
C 302	(A,109,110)	CFTNA224J50	C 911	(A,25,70) 470µF/16V	CCH1331
			C 912	(A,37,70) 470µF/16V	CCH1331
C 303	(A,116,110)	CFTNA224J50			
C 304	(A,109,100)	CFTNA224J50	C 913	(B,29,79)	CKSRYP472K50
C 307	(A,124,95)	CEJQ100M25	C 914	(A,33,60)	CEJQ470M10
C 309	(B,122,109)	CKSQYB225K10	C 915	(B,29,67)	CKSRYP103K50
C 310	(B,122,104)	CKSQYB225K10	C 921	(B,151,60)	CKSRYP104K16
			C 931	(A,95,110)	CKSRYP104K16
C 311	(A,148,105)	CEJQ100M25			
C 312	(A,141,104)	CEJQ100M25	C 941	(A,69,111)	CEJQ1R0M50
C 313	(A,128,112)	CEJQ100M25	C 971	(A,25,86)	CEJQ101M16
C 314	(A,128,103)	CEJQ100M25	C 972	(B,19,97)	CKSRYP103K50
C 315	(A,135,103)	CEJQ100M25	C 973	(A,41,82)	CEJQ221M10
			C 974	(B,19,92)	CKSRYP103K50
C 316	(A,137,109)	CEJQ100M25			
C 319	(B,128,122)	CKSRYP223K50			
C 324	(B,148,141)	CKSRYP103K50			
C 401	(B,147,75)	CKSRYP104K16			
D C 402	(A,144,71)	CEJQ1R0M50			
C 403	(A,153,71)	CEJQ470M6R3			
C 407	(A,161,113)	CEJQ101M16			
C 408	(B,175,140)	CKSRYP103K50			
C 409	(B,165,131)	CCSRCH470J50			
C 411	(A,157,95)	CEJQ470M6R3			
C 412	(B,160,93)	CKSRYP103K50			
C 414	(B,172,117)	CKSRYP103K50			
C 416	(B,174,96)	CCSRCH101J50			
C 417	(B,154,94)	CCSRCH470J50			
E C 501	(A,124,101)	CEJQ330M10			
C 502	(A,131,94)	CEJQ101M16			
C 601	(A,101,55)	CEJQ4R7M35			
C 602	(B,105,57)	CKSRYP105K10			
C 604	(B,115,55)	CCSRCH200J50			
C 605	(B,113,60)	CCSRCH200J50			
C 606	(B,132,52)	CCSRCH470J50			
C 608	(A,121,73)	CCSRCH470J50			
C 631	(B,143,41)	CKSRYP105K10			
C 632	(B,147,41)	CKSRYP104K16			
C 651	(B,25,61)	CKSRYP473K25			
F C 653	(A,36,51)	CEJQ101M16			
C 654	(A,44,59)	CEJQ101M16			
C 657	(B,95,32)	CKSRYP152K50			
C 658	(B,95,30)	CKSRYP152K50			

**A****Unit Number : XWM7115****(P6800MP/XN/UC)****Unit Name : Tuner Amp Unit****MISCELLANEOUS**

IC 101	(A,17,119) IC	HA12241FP
IC 171	(A,60,48) IC	BA3121F
IC 201	(A,90,92) IC	PML016A
IC 301	(A,84,132) IC	PAL007B
IC 401	(A,151,82) IC	NJM2885DL1-33
IC 601	(A,123,59) IC	PEG142A
IC 631	(A,154,66) IC	S-80835CNMC-B8U
IC 801	(A,147,26) IC	BA6288FS
IC 851	(B,43,26) IC	NJM2360M
IC 971	(A,16,96) IC	NJM2388F84
Q 101	(B,32,110) Transistor	2SA1576
Q 102	(B,32,107) Transistor	DTC114EU
Q 191	(A,96,62) Transistor	DTC114EU
Q 192	(A,87,57) Transistor	UMD2N
Q 311	(A,149,110) Transistor	IMH3A
Q 312	(B,128,125) Transistor	IMH3A
Q 313	(B,142,121) Transistor	IMH3A
Q 501	(A,49,65) Transistor	2SC4081
Q 502	(B,121,123) Transistor	DTC124EU
Q 503	(A,129,116) Transistor	UMD2N

5		6		7		8	
<u>Circuit Symbol and No.</u>		<u>Part No.</u>		<u>Circuit Symbol and No.</u>		<u>Part No.</u>	
Q 631	(B,150,40) Transistor	2SC3052-12		L 901	(A,37,103) Choke Coil 600µH	CTH1280	
Q 651	(A,16,56) Transistor	2SD2396		L 951	(A,57,99) Inductor	LAU2R2K	
Q 652	(B,32,57) Transistor	UMD2N		X 601	(A,109,55) Radiator 10.000MHz	CSS1599	A
Q 801	(A,151,39) Transistor	2SD1760F5		△FU311	(B,152,126) Fuse 3A	CEK1286	
Q 802	(B,138,29) Transistor	UMD3N		△FU312	(B,152,130) Fuse 3A	CEK1286	
Q 821	(A,72,23) Transistor	2SD1767		△	Fuse 10A	CEK1208	
Q 822	(B,66,13) Transistor	UMD2N		BZ601	(A,62,13) Buzzer	CPV1062	
Q 831	(B,124,37) Transistor	2SA1576		AR401	(A,162,146) Arrestor	DSP-201M-S00B	
Q 832	(B,125,33) Transistor	DTC114EU					
Q 841	(B,82,12) Transistor	DTC114EU					
				<b>RESISTORS</b>			
Q 851	(A,28,38) Transistor	2SD1760F5		R 101	(B,20,119)	RS1/16S223J	
Q 852	(B,30,38) Transistor	UMD2N		R 102	(B,22,119)	RS1/16S181J	
Q 911	(A,16,69) Transistor	2SD2396		R 103	(B,18,119)	RS1/16S102J	B
Q 912	(B,16,82) Transistor	UMD2N		R 104	(B,16,120)	RS1/16S102J	
Q 931	(A,90,116) Transistor	UMX1N		R 105	(B,24,119)	RS1/16S222J	
Q 941	(A,80,125) Transistor	DTC114EU		R 106	(B,15,133)	RS1/16S181J	
Q 951	(A,71,104) Transistor	2SA1576		R 107	(B,14,120)	RS1/16S223J	
D 202	(A,125,75) Diode	RB706F-40		R 108	(B,27,127)	RS1/16S101J	
D 301	(A,65,104) Diode	S5688G		R 109	(B,26,134)	RS1/16S620J	
D 302	(A,61,104) Diode	S5688G		R 110	(B,28,121)	RS1/16S101J	
D 501	(A,35,87) Diode	HZS9L(A2)		R 111	(A,12,120)	RS1/16S102J	
D 502	(A,52,62) Diode	DAN202U		R 112	(A,12,116)	RS1/16S472J	
D 503	(A,129,98) Diode	1SS133		R 113	(A,14,113)	RS1/16S472J	
D 651	(A,27,59) Diode	HZS9L(A1)		R 114	(B,32,115)	RS1/16S223J	C
D 801	(A,141,19) Diode	HZS7L(A3)		R 115	(B,32,113)	RS1/16S472J	
D 802	(A,151,15) Diode	1SS133		R 161	(A,121,127)	RS1/16S102J	
D 803	(A,147,15) Diode	1SS133		R 162	(A,124,120)	RS1/16S102J	
D 821	(A,70,12) Diode	HZS11L(A1)		R 163	(A,124,122)	RS1/16S103J	
D 841	(A,94,10) LED	SML412BC5T(NP)		R 164	(A,124,127)	RS1/16S103J	
D 851	(A,26,29) Diode	HZS11L(A1)		R 171	(B,66,42)	RS1/16S101J	
D 852	(B,63,26) Diode	RB411D		R 172	(B,49,42)	RS1/16S101J	
D 871	(B,100,29) Diode	DAP202U		R 173	(A,66,35)	RS1/16S223J	
D 872	(B,104,29) Diode	DAN202U		R 174	(A,49,49)	RS1/16S223J	
D 873	(B,104,21) Diode	DAP202U		R 175	(A,63,42)	RS1/16S102J	
D 874	(B,108,21) Diode	DAN202U		R 176	(A,53,50)	RS1/16S102J	D
D 875	(B,109,35) Diode	DAP202U		R 191	(A,97,59)	RS1/16S103J	
D 876	(B,105,35) Diode	DAN202U		R 192	(A,85,58)	RS1/16S682J	
D 877	(B,108,30) Diode Network	DA204U		R 194	(A,93,62)	RS1/16S683J	
D 901	(A,57,108) Diode	S5688G		R 201	(B,81,93)	RS1/16S0R0J	
D 902	(A,57,104) Diode	S5688G		R 202	(B,76,97)	RS1/16S0R0J	
D 911	(A,35,82) Diode	S5688G		R 205	(B,98,91)	RS1/16S102J	
D 912	(A,31,77) Diode	HZS6L(B1)		R 206	(B,98,90)	RS1/16S101J	
D 921	(A,85,113) Diode	HZS9L(B3)		R 207	(B,98,96)	RS1/16S101J	
D 922	(B,149,65) Diode Network	DA204U		R 208	(B,98,95)	RS1/16S101J	
D 931	(A,78,113) Diode	HZS7L(C3)		R 209	(B,98,88)	RS1/16S101J	
D 932	(A,74,108) Diode	HZS7L(A1)		R 210	(B,98,93)	RS1/16S101J	E
D 941	(A,79,121) Diode	MA111		R 211	(A,80,94)	RAB4C102J	
D 951	(A,60,101) Diode	DAN202U		R 213	(B,90,107)	RS1/16S221J	
L 101	(A,22,110) Inductor	LAU2R2K		R 214	(A,76,96)	RS1/16S221J	
L 171	(A,63,38) Inductor	LAU2R2K		R 230	(A,68,74)	RD1/4PU0R0J	
L 201	(A,68,69) Ferri-Inductor	LAU100K		R 301	(B,113,129)	RS1/16S153J	
L 202	(A,58,76) Ferri-Inductor	LAU4R7K		R 302	(B,114,91)	RS1/16S0R0J	
L 401	(B,175,145) Inductor	LCTAW220J2520		R 303	(B,103,95)	RS1/16S0R0J	
L 402	(A,164,97) Inductor	LAU1R0K		R 304	(B,103,94)	RS1/16S0R0J	
L 403	(A,165,108) Ferri-Inductor	LAU100K		R 305	(B,103,90)	RS1/16S0R0J	
L 404	(A,161,108) Inductor	LAU1R0K		R 311	(B,153,109)	RS1/16S821J	F
L 601	(A,96,50) Ferri-Inductor	LAU100K		R 312	(B,143,110)	RS1/16S821J	
L 651	(A,76,45) Ferri-Inductor	LAU100K		R 313	(B,134,121)	RS1/16S0R0J	
L 831	(A,131,27) Ferri-Inductor	LAU100K		R 314	(B,126,119)	RS1/16S821J	
L 852	(A,42,21) Inductor	CTF1660					



**Circuit Symbol and No.****Part No.****Circuit Symbol and No.****Part No.**

	R 315	(B,147,121)	RS1/16S821J	R 802	(A,134,44)	RAB4C102J
	R 316	(B,138,121)	RS1/16S821J	R 803	(A,141,28)	RS1/16S221J
A	R 317	(B,151,110)	RS1/16S223J	R 823	(A,80,19)	RS1/16S1R0J
	R 318	(B,146,110)	RS1/16S223J	R 824	(A,80,17)	RS1/16S473J
	R 319	(B,137,128)	RS1/16S223J	R 825	(A,74,12)	RD1/4PU391J
	R 320	(B,126,129)	RS1/16S223J	R 831	(B,118,35)	RS1/16S473J
	R 321	(B,143,127)	RS1/16S223J	R 832	(B,120,35)	RS1/16S102J
	R 322	(B,141,127)	RS1/16S223J	R 833	(B,129,27)	RS1/16S222J
	R 325	(B,129,118)	RS1/16S0R0J	R 841	(B,93,14)	RS1/16S221J
	R 329	(A,152,110)	RS1/16S0R0J	R 851	(B,30,43)	RS1/16S331J
	R 330	(A,145,112)	RS1/16S0R0J	R 852	(B,30,41)	RS1/16S331J
	R 331	(B,132,121)	RS1/16S0R0J	R 853	(B,47,36)	RS1/16S0R0J
	R 332	(B,129,117)	RS1/16S0R0J	R 855	(B,36,29)	RS1/16S391J
B	R 333	(B,146,121)	RS1/16S0R0J	R 856	(A,55,24)	RD1/4PU272J
	R 334	(B,136,121)	RS1/16S0R0J	R 857	(B,51,29)	RS1/16S391J
	R 402	(B,167,110)	RS1/16S122J	R 860	(B,49,29)	RS1/16S391J
	R 404	(B,169,125)	RS1/16S681J	R 861	(A,33,23)	RS1/16S1R0J
	R 405	(B,169,131)	RS1/16S681J	R 871	(A,152,52)	RS1/16S102J
	R 406	(B,167,125)	RS1/16S681J	R 872	(A,113,41)	RS1/16S102J
	R 407	(B,169,137)	RS1/16S681J	R 873	(A,152,51)	RS1/16S0R0J
	R 408	(B,167,137)	RS1/16S681J	R 879	(B,108,26)	RS1/16S473J
	R 501	(A,54,72)	RS1/16S683J	R 880	(B,109,32)	RS1/16S104J
	R 502	(A,54,69)	RS1/16S683J	R 881	(B,101,34)	RS1/16S473J
	R 503	(A,54,66)	RS1/16S223J	R 883	(B,107,16)	RS1/16S222J
C	R 504	(A,49,61)	RS1/16S223J	R 884	(B,113,27)	RS1/16S472J
	R 505	(B,121,118)	RS1/16S103J	R 885	(B,106,14)	RS1/16S222J
	R 506	(B,121,120)	RS1/16S103J	R 886	(B,112,34)	RS1/16S222J
	R 507	(B,117,122)	RS1/16S331J	R 887	(B,115,15)	RS1/16S222J
	R 508	(A,133,115)	RS1/16S102J	R 888	(B,114,34)	RS1/16S222J
	R 602	(B,133,58)	RS1/16S104J	R 889	(B,118,14)	RS1/16S222J
	R 609	(A,124,72)	RS1/16S473J	R 911	(B,20,71)	RS1/16S222J
	R 611	(A,125,47)	RS1/16S0R0J	R 912	(B,22,71)	RS1/16S223J
	R 612	(A,127,47)	RS1/16S681J	R 913	(B,17,77)	RS1/16S391J
	R 613	(A,128,47)	RS1/16S681J	R 921	(A,81,108)	RD1/4PU392J
	R 614	(B,68,21)	RS1/16S102J	R 922	(B,147,60)	RS1/16S392J
D	R 615	(B,112,51)	RS1/16S473J	R 923	(B,149,60)	RS1/16S223J
	R 619	(A,135,48)	RS1/16S104J	R 924	(B,152,60)	RS1/16S102J
	R 620	(A,135,50)	RS1/16S104J	R 931	(A,90,110)	RS1/16S473J
	R 631	(B,139,41)	RS1/16S102J	R 932	(A,90,112)	RS1/16S104J
	R 633	(B,148,45)	RS1/16S183J	R 933	(A,95,112)	RS1/16S472J
	R 634	(B,145,41)	RS1/16S473J	R 934	(A,95,114)	RS1/16S473J
	R 635	(B,139,38)	RS1/16S222J	R 935	(A,95,117)	RS1/16S103J
	R 641	(A,144,63)	RS1/16S104J	R 936	(A,98,117)	RS1/16S104J
	R 651	(A,27,55)	RD1/4PU561J	R 937	(A,91,120)	RS1/16S104J
	R 652	(A,22,63)	RD1/4PU221J	R 938	(A,57,113)	RD1/4PU102J
E	R 655	(B,87,45)	RS1/16S104J	R 941	(A,61,113)	RD1/4PU102J
	R 657	(B,91,32)	RS1/16S102J	R 942	(A,84,122)	RS1/16S103J
	R 658	(B,91,30)	RS1/16S102J	R 943	(A,84,125)	RS1/16S104J
	R 659	(B,100,42)	RS1/16S102J	R 951	(A,64,118)	RD1/4PU153J
	R 660	(B,91,40)	RS1/16S102J	R 952	(A,64,102)	RS1/16S472J
	R 661	(A,73,40)	RS1/16S102J	R 953	(A,64,100)	RS1/16S472J
	R 662	(B,93,44)	RS1/16S102J	R 954	(A,75,104)	RS1/16S102J
	R 663	(A,74,32)	RS1/16S221J	R 955	(A,75,106)	RS1/16S104J
	R 664	(A,74,37)	RS1/16S681J	R 971	(B,19,87)	RS1/16S103J
	R 665	(B,73,39)	RS1/16S104J	R 972	(B,54,66)	RS1/16S102J
	R 666	(B,90,44)	RS1/16S104J			
F	R 667	(B,94,26)	RS1/16S104J			
	R 668	(B,73,36)	RS1/16S682J			
	R 669	(B,73,38)	RS1/16S682J	C 101	(B,21,135)	CKSRYB104K16
	R 801	(A,137,19)	RD1/4PU561J	C 102	(A,25,119)	CKSRYB473K25

**CAPACITORS**

<u>Circuit Symbol and No.</u>		<u>Part No.</u>	<u>Circuit Symbol and No.</u>		<u>Part No.</u>
C 171	(A,68,35)	CCSRCH471J50	C 412	(B,160,93)	CKSRYPB103K50
C 172	(A,49,46)	CCSRCH471J50	C 414	(B,172,117)	CKSRYPB103K50
C 173	(A,60,42)	CKSRYPB105K10	C 416	(B,174,96)	CCSRCH101J50
			C 417	(B,154,94)	CCSRCH470J50
C 174	(A,55,50)	CKSRYPB105K10			
C 175	(A,54,45)	CEJQ2R2M50	C 501	(A,124,101)	CEJQ330M10
C 176	(B,62,41)	CKSRYPB104K16	C 502	(A,131,94)	CEJQ101M16
C 178	(B,49,40)	CKSRYPB472K50	C 601	(A,101,55)	CEJQ4R7M35
C 179	(B,66,37)	CKSRYPB472K50	C 602	(B,105,57)	CKSRYPB105K10
			C 604	(B,115,55)	CCSRCH200J50
C 180	(A,67,52)	CEJQ1R0M50			
C 181	(A,58,53)	CKSRYPB104K16	C 605	(B,113,60)	CCSRCH200J50
C 200	(A,122,79)	CEJQ470M16	C 606	(B,132,52)	CCSRCH470J50
C 203	(B,91,69)	CKSQYB225K10	C 608	(A,121,73)	CCSRCH470J50
C 205	(A,88,68)	CEJQ470M16	C 631	(B,143,41)	CKSRYPB105K10
			C 632	(B,147,41)	CKSRYPB104K16
C 206	(A,69,88)	CEJQ4R7M35			
C 207	(A,76,88)	CEJQ4R7M35	C 651	(B,25,61)	CKSRYPB473K25
C 208	(A,78,100)	CEJQ4R7M35	C 653	(A,36,51)	CEJQ101M16
C 209	(A,81,105)	CEJQ4R7M35	C 654	(A,44,59)	CEJQ101M16
C 210	(A,123,108)	CKSRYPB104K16	C 657	(B,95,32)	CKSRYPB152K50
			C 658	(B,95,30)	CKSRYPB152K50
C 211	(A,123,106)	CKSRYPB104K16			
C 212	(A,69,94)	CEJQ1R0M50	C 661	(B,90,27)	CKSRYPB105K10
C 213	(A,62,94)	CEJQ1R0M50	C 663	(A,73,42)	CKSRYPB105K10
C 214	(A,75,80)	CEJQ1R0M50	C 802	(B,133,23)	CKSRYPB224K10
C 215	(A,71,100)	CEJQ1R0M50	C 803	(A,142,34)	CEAT331M10
			C 804	(B,154,35)	CKSRYPB104K16
C 216	(A,109,79)	CEJQ100M25			
C 218	(A,86,79)	CEJQ4R7M35	C 805	(B,148,23)	CKSRYPB102K50
C 219	(A,85,105)	CEJQ4R7M35	C 806	(B,155,17)	CCSRCH101J50
C 220	(A,93,79)	CEJQ4R7M35	C 807	(B,153,17)	CCSRCH101J50
C 221	(A,91,105)	CEJQ4R7M35	C 821	(B,59,14)	CKSRYPB473K25
			C 841	(A,94,16)	CKSRYPF104Z25
C 222	(A,100,79)	CEJQ4R7M35			
C 223	(A,97,105)	CEJQ4R7M35	C 851	(B,27,40)	CKSRYPB104K16
C 224	(B,89,90)	CCSRCH120J50	C 852	(A,39,39)	CEJQ470M16
C 225	(B,89,88)	CCSRCH120J50	C 854	(A,39,31)	CEJQ101M16
C 226	(B,93,96)	CCSRCH120J50	C 855	(B,35,23)	CKSRYPB104K16
			C 856	(B,49,21)	CCSRCH331J50
C 227	(B,89,92)	CCSRCH120J50			
C 230	(A,79,80)	CEJQ100M25	C 857	(B,52,29)	CKSRYPB223K50
C 232	(A,80,91)	CKSRYPB104K16	C 861	(A,52,21)	CEJQ470M25
C 233	(B,121,77)	CKSRYPB104K16	C 901	(A,33,121)	3300µF/16V CCH1486
C 234	(B,87,64)	CKSRYPB105K10	C 902	(B,42,127)	CKSRYPB104K16
			C 903	(B,80,149)	CKSYB225K16
C 301	(A,116,100)	CFTNA224J50			
C 302	(A,109,110)	CFTNA224J50	C 911	(A,25,70)	470µF/16V CCH1331
C 303	(A,116,110)	CFTNA224J50	C 912	(A,37,70)	470µF/16V CCH1331
C 304	(A,109,100)	CFTNA224J50	C 913	(B,29,79)	CKSRYPB472K50
C 307	(A,124,95)	CEJQ100M25	C 914	(A,33,60)	CEJQ470M10
			C 915	(B,29,67)	CKSRYPB103K50
C 309	(B,122,109)	CKSQYB225K10			
C 310	(B,122,104)	CKSQYB225K10	C 921	(B,151,60)	CKSRYPB104K16
C 311	(A,148,105)	CEJQ4R7M35	C 931	(A,95,110)	CKSRYPB104K16
C 312	(A,141,104)	CEJQ4R7M35	C 941	(A,69,111)	CEJQ1R0M50
C 313	(A,128,112)	CEJQ4R7M35	C 971	(A,25,86)	CEJQ101M16
			C 972	(B,19,97)	CKSRYPB103K50
C 314	(A,128,103)	CEJQ4R7M35			
C 315	(A,135,103)	CEJQ4R7M35	C 973	(A,41,82)	CEJQ221M10
C 316	(A,137,109)	CEJQ4R7M35	C 974	(B,19,92)	CKSRYPB103K50
C 319	(B,128,122)	CKSRYPB472K50			
C 324	(B,148,141)	CKSRYPB103K50			
C 401	(B,147,75)	CKSRYPB104K16			
C 402	(A,144,71)	CEJQ1R0M50			
C 403	(A,153,71)	CEJQ470M6R3			
C 407	(A,161,113)	CEJQ101M16			
C 408	(B,175,140)	CKSRYPB103K50			
C 409	(B,165,131)	CCSRCH470J50			
C 411	(A,157,95)	CEJQ470M6R3			

**B****Unit Number :****Unit Name : Keyboard Unit****MISCELLANEOUS**

IC 1811	(A,12,74)	IC	GP1UX31RK
IC 1831	(A,38,109)	IC	S-1200B33-M5

**Circuit Symbol and No.****Part No.****Circuit Symbol and No.****Part No.**

IC 1841 (B,21,95) IC PEG144A  
 IC 1871 (A,22,147) IC(P680MP/XN/UC) PD8153A  
 IC 1871 (A,22,147) IC(P6800MP/XN/UC) PD8154A

R 1826 (B,8,34)  
 R 1827 (B,14,30)  
 R 1828 (B,8,30)  
 R 1829 (B,13,156)

RS1/16S221J  
 RS1/16S181J  
 RS1/16S221J  
 RS1/16S271J

A

IC 1871 (A,22,147) IC(P6850MP/XN/ES) PD8154A  
 Q 1881 (B,20,126) Transistor 2SC4617  
 Q 1882 (B,25,120) Transistor 2SC2411K  
 D 1811 (A,8,20) LED SML412BC5T(NP)  
 D 1812 (A,8,7) LED SML412BC5T(NP)

R 1830 (B,16,156)  
 R 1831 (B,19,159)  
 R 1833 (A,39,101)  
 R 1834 (B,28,66)  
 R 1835 (B,36,93)

RS1/16S221J  
 RS1/16S221J  
 RS1/16S222J  
 RS1/16S101J  
 RS1/16S101J

D 1813 (A,10,33) LED SML412BC5T(NP)  
 D 1814 (A,21,26) LED SML412BC5T(NP)  
 D 1815 (A,33,33) LED SML412BC5T(NP)  
 D 1816 (A,35,20) LED SML412BC5T(NP)  
 D 1817 (A,35,7) LED SML412BC5T(NP)

R 1836 (B,31,94)  
 R 1837 (B,39,92)  
 R 1838 (B,37,102)  
 R 1839 (A,12,141)  
 R 1840 (B,33,143)

RS1/16S101J  
 RS1/16S101J  
 RAB4C101J  
 RAB4C101J  
 RAB4C101J

B

D 1818 (A,21,10) LED SML412BC5T(NP)  
 D 1819 (A,21,72) LED SML412BC5T(NP)  
 D 1820 (A,4,55) LED SML412BC5T(NP)  
 D 1821 (A,39,55) LED SML412BC5T(NP)  
 D 1822 (A,21,38) LED SML412BC5T(NP)

R 1841 (B,33,107)  
 R 1842 (B,31,112)  
 R 1843 (A,26,104)  
 R 1844 (A,21,104)  
 R 1845 (B,24,141)

RAB4C101J  
 RAB4C101J  
 RAB4C101J  
 RAB4C101J  
 RAB4C101J

D 1823 (A,38,156) LED SML412BC5T(NP)  
 D 1831 (B,8,68) Diode 1SS355  
 L 1831 (A,36,99) Inductor CTF1617  
 L 1881 (B,14,145) Inductor CTF1617  
 L 1882 (A,27,125) Inductor CTF1617

R 1846 (B,12,104)  
 R 1847 (A,11,94)  
 R 1848 (A,12,104)  
 R 1849 (A,9,94)  
 R 1850 (B,9,104)

RS1/16S101J  
 RS1/16S101J  
 RS1/16S101J  
 RS1/16S101J  
 RS1/16S101J

C

TH1881 (B,24,128) Thermistor CCX1037  
 X 1841 (B,24,79) Ceramic Resonator 16.000MHz CSS1616  
 S 1801 (A,37,159) Push Switch CSG1155  
 S 1802 (A,38,148) Push Switch CSG1155  
 S 1803 (A,4,22) Push Switch CSG1155

R 1851 (B,10,91)  
 R 1852 (B,10,97)  
 R 1853 (B,10,94)  
 R 1855 (A,6,43)  
 R 1856 (A,35,41)

RS1/16S473J  
 RS1/16S473J  
 RAB4C473J  
 RS1/16S101J  
 RS1/16S101J

S 1804 (A,7,33) Push Switch CSG1155  
 S 1805 (A,4,7) Push Switch CSG1155  
 S 1806 (A,21,30) Push Switch CSG1155  
 S 1807 (A,36,33) Push Switch CSG1155  
 S 1808 (A,38,7) Push Switch CSG1155

R 1857 (A,24,75)  
 R 1858 (B,12,67)  
 R 1859 (B,10,67)  
 R 1860 (B,25,68)  
 R 1863 (A,9,106)

RS1/16S101J  
 RS1/16S473J  
 RS1/16S154J  
 RS1/16S104J  
 RS1/16S103J

S 1809 (A,38,22) Push Switch CSG1155  
 S 1810 (A,21,55) Switch(VOL/SEL) CSX1065  
 D VR1881 (B,29,119) Semi-fixed 6.8kΩ CCP1228

R 1881 (B,20,128)  
 R 1882 (B,24,127)  
 R 1883 (A,24,130)  
 R 1884 (A,22,130)  
 R 1885 (A,25,117)

RS1/16S183J  
 RS1/16S563J  
 RS1/16S333J  
 RS1/16S392J  
 RS1/16S102J

**RESISTORS**

R 1801 (A,8,114) RS1/16S222J  
 R 1802 (A,13,107) RS1/16S222J  
 R 1804 (B,22,41) RS1/16S104J  
 R 1808 (B,9,60) RS1/16S332J  
 R 1809 (B,11,50) RS1/16S103J

R 1886 (A,25,118)  
 R 1887 (A,25,120)  
 R 1888 (A,25,121)  
 R 1889 (B,24,112)

RS1/16S102J  
 RS1/16S102J  
 RS1/16S102J  
 RS1/16S152J

R 1810 (B,9,50) RS1/16S333J  
 R 1811 (B,19,38) RS1/16S103J  
 R 1812 (B,30,63) RS1/16S222J  
 R 1813 (B,28,63) RS1/16S103J  
 R 1814 (B,17,83) RS1/16S101J

**CAPACITORS**

C 1805 (B,8,74) CKSYF106Z10  
 C 1811 (A,10,20) CKSRYF104Z25  
 C 1812 (A,10,7) CKSRYF104Z25  
 C 1813 (A,12,33) CKSRYF104Z25  
 C 1814 (A,21,25) CKSRYF104Z25

R 1815 (B,16,82) RS1/16S103J  
 R 1816 (B,11,70) RS1/16S2R2J  
 R 1817 (B,14,19) RS1/16S181J  
 R 1818 (B,8,19) RS1/16S221J  
 R 1819 (B,14,25) RS1/16S181J

C 1815 (A,31,34) CKSRYF104Z25  
 C 1816 (A,33,20) CKSRYF104Z25  
 C 1817 (A,33,7) CKSRYF104Z25  
 C 1818 (A,21,12) CKSRYF104Z25  
 C 1819 (A,18,71) CKSRYF104Z25

R 1820 (B,8,25) RS1/16S221J  
 R 1821 (B,23,15) RS1/16S181J  
 R 1822 (B,23,9) RS1/16S221J  
 R 1823 (B,16,15) RS1/16S181J  
 R 1824 (B,16,8) RS1/16S221J

C 1820 (A,4,52) CKSRYF104Z25  
 C 1821 (A,38,60) CKSRYF104Z25  
 C 1822 (A,16,38) CKSRYF104Z25  
 C 1823 (A,37,154) CKSRYF104Z25  
 C 1824 (B,31,67) CKSRYB473K25

R 1825 (B,14,34) RS1/16S181J

**Circuit Symbol and No.**

**Part No.**

C 1831	(A,38,112)	CKSRYB224K10
C 1832	(A,37,103)	CKSRYB224K10
C 1833	(A,39,98)	CKSRYB103K50
C 1834	(A,37,95)	CSZSR4R7M10
C 1837	(B,7,71)	CKSRYB104K16
C 1871	(B,24,158)	CKSRYB103K50
C 1884	(A,20,130)	CKSRYB104K25
C 1885	(A,25,123)	CKSRYB104K16
C 1886	(A,22,127)	CKSRYB104K25
C 1887	(A,21,115)	CKSRYB104K25

**D**

**Unit Number : CWS1389**

**Unit Name : Switch Unit**

Switch(OPEN SENSE) CSN1051  
Spring Switch(CLOSE SENSE) CSN1052

**C**

**Unit Number : CWX3176**

**Unit Name : CD Core Unit**

**(S10.5COMP1)**

**MISCELLANEOUS**

IC 201	(B,39,70)	IC	UPD63763CGJ
IC 203	(A,12,16)	IC	NJM2886DL3-33
IC 301	(A,28,18)	IC	BA5835FP
IC 701	(A,32,48)	IC	PE5505A
Q 101	(B,60,89)	Transistor	2SA1577
Q 701	(B,24,41)	Transistor	UN2111
X 201	(B,28,57)	Ceramic Resonator 16.934MHz	CSS1603
X 701	(A,24,37)	Ceramic Resonator 4.000MHz	CSS1652
S 901	(A,57,57)	Switch(HOME)	CSN1067
S 903	(B,23,78)	Switch(DSCSNS)	CSN1067
S 904	(B,42,87)	Switch(12EJ)	CSN1068
S 905	(B,28,88)	Switch(8EJ)	CSN1068

**RESISTORS**

R 101	(B,61,92)	RS1/10SR2R4J
R 102	(B,63,92)	RS1/10SR2R4J
R 103	(B,63,89)	RS1/10SR2R7J
R 104	(A,52,73)	RS1/16SS102J
R 201	(B,44,57)	RS1/16SS102J
R 202	(A,38,62)	RS1/16SS473J
R 203	(A,37,62)	RS1/16SS473J
R 214	(A,46,79)	RS1/16SS472J
R 216	(A,46,81)	RS1/16SS472J
R 221	(A,44,81)	RS1/16SS103J
R 222	(A,45,81)	RS1/16SS103J
R 225	(B,52,78)	RS1/16SS103J
R 226	(B,52,77)	RS1/16SS393J
R 227	(A,44,75)	RS1/16SS562J
R 228	(A,46,72)	RS1/16SS122J
R 229	(A,44,72)	RS1/16SS472J
R 232	(A,46,75)	RS1/16SS122J
R 241	(B,26,63)	RS1/16SS333J
R 243	(B,26,62)	RS1/16SS333J
R 245	(B,26,69)	RS1/16SS333J

**Circuit Symbol and No.**

**Part No.**

R 248	(B,55,74)	RS1/16SS105J
R 307	(A,19,20)	RS1/16SS183J
R 308	(A,17,20)	RS1/16SS183J
R 309	(A,18,18)	RS1/16SS183J
R 310	(A,17,16)	RS1/16SS183J
R 601	(B,30,47)	RS1/16S101J
R 602	(B,28,50)	RS1/16S101J
R 606	(B,20,54)	RS1/16S0R0J
R 701	(B,26,44)	RS1/16SS221J
R 707	(B,32,45)	RS1/16SS473J
R 709	(A,36,35)	RS1/16SS222J
R 710	(B,41,46)	RS1/16SS102J
R 712	(A,45,57)	RS1/16SS222J
R 713	(B,40,57)	RS1/16SS222J
R 716	(B,29,37)	RS1/16SS472J
R 724	(B,31,36)	RS1/16S473J
R 726	(B,23,47)	RS1/16SS103J
R 727	(B,31,42)	RS1/16SS473J
R 729	(B,20,48)	RS1/16SS223J
R 730	(B,20,46)	RS1/16SS473J
R 740	(A,38,59)	RS1/16SS222J
R 746	(A,13,38)	RS1/16SS104J
R 750	(A,40,66)	RS1/16SS473J
R 902	(A,20,36)	RS1/16SS221J
R 905	(A,21,36)	RS1/16SS221J
R 906	(B,20,36)	RS1/16SS221J
R 907	(B,16,62)	RS1/16SS0R0J
R 908	(B,16,64)	RS1/16SS0R0J
R 911	(B,20,32)	RS1/16SS0R0J

**CAPACITORS**

C 103	(B,57,83)	CEVW101M16
C 108	(A,47,66)	CKSSYB104K10
C 201	(B,46,56)	CKSSYB102K50
C 202	(B,47,58)	CKSSYB104K10
C 204	(B,35,48)	CEVW220M6R3
C 205	(A,34,63)	CKSSYB104K10
C 208	(B,34,54)	CKSSYB104K10
C 209	(B,31,57)	CKSSYB104K10
C 210	(A,31,66)	CKSRYB105K10
C 216	(B,53,77)	CKSSYB332K50
C 217	(B,52,79)	CKSSYB104K10
C 218	(B,52,76)	CKSSYB473K10
C 219	(B,52,74)	CKSSYB104K10
C 220	(A,46,77)	CKSSYB182K50
C 221	(B,51,74)	CKSSYB104K10
C 222	(A,46,73)	CCSSCH560J50
C 223	(A,44,74)	CCSSCH4R0C50
C 224	(B,52,68)	CKSSYB104K10
C 225	(A,47,67)	CKSSYB103K16
C 226	(A,49,67)	CCSSCH680J50
C 227	(A,48,65)	CCSSCH470J50
C 228	(A,46,62)	CKSSYB103K16
C 232	(A,12,31)	CKSRYB105K10
C 237	(A,31,67)	CKSSYB104K10
C 239	(A,46,74)	CCSSCH220J50
C 246	(A,42,80)	CKSSYB104K10
C 250	(A,42,81)	CKSRYB102K50
C 251	(A,41,83)	CKSRYB102K50

**Circuit Symbol and No.****Part No.**

	C 303	(A,18,20)	CKSSYB472K25
	C 304	(A,17,17)	CKSSYB103K16
A	C 307	(A,34,15)	CKSSYB104K10
	C 308	(A,17,30)	CKSRYB105K10
	C 601	(B,25,50)	CCSRCH102J50
	C 602	(B,26,51)	CCSRCH102J50
	C 701	(B,25,47)	CKSSYB104K10
	C 703	(B,28,42)	CKSSYB103K16
	C 706	(B,34,43)	CKSSYB104K10
	C 707	(A,36,57)	CKSSYB104K10
	C 714	(A,24,41)	CKSSYB104K10
	C 722	(B,29,45)	CKSQYB475K6R3
	C 903	(B,14,54)	CKSSYB471K50
B	C 907	(B,14,62)	CKSSYB103K16

**Miscellaneous Parts List**

	Pickup Unit(P10.5)(Service)	CXX1942
M 1	Motor Unit(SPINDLE)	CXC4166
M 2	Motor Unit(LOADING/CARRIAGE)	CXC4026

C

D

E

F

# 6. ADJUSTMENT

## 6.1 CD ADJUSTMENT

### 1) Cautions on adjustments

• In this product the single voltage (3.3V) is used for the regulator. The reference voltage is the REFO1 (1.65V) instead of the GND.

If you should mistakenly short the REFO1 with the GND during adjustment, accurate voltage will not be obtained, and the servo's misoperation will apply excessive shock to the pickup. To avoid such problems:

a. Do not mix up the REFO1 with the GND when connecting the (-) probe of measuring instruments. Especially on an oscilloscope, avoid connecting the (-) probe for CH1 to the GND.

b. In many cases, measuring instruments have the same potential as that for the (-) probe. Be sure to set the measuring instruments to the floating state.

c. If you have mistakenly connected the REFO1 to the GND, turn off the regulator or the power immediately.

• Before mounting and removing filters or leads for adjustment, be sure to turn off the regulator.

• For stable circuit operation, keep the mechanism operating for about one minute or more after the regulator is turned on.

• In the test mode, any software protections will not work. Avoid applying any mechanical or electrical shock to the mechanism during adjustment.

• The RFI and RFO signals with a wide frequency range are easy to oscillate. When observing the signals, insert a resistor of 1k ohms in series.

• The load and eject operation is not guaranteed with the mechanism upside down. If the mechanism is blocked due to mistaken eject operation, reset the product or turn off and on the ACC to restore it.

### 2) Test mode

This mode is used to adjust the CD mechanism module.

• To enter the test mode.

While pressing the 4 and 6 keys at the same time, reset.

• To exit from the test mode.

Turn off the ACC and back up.

#### Notes:

a. During ejection, do not press any other keys than the EJECT key until the loaded disc is ejected.

b. If you have pressed the (→) key or (←) key during focus search, turn off the power immediately to protect the actuator from damage caused by the lens stuck.

c. For the TR jump modes except 100TR, the track jump operation will continue even if the key is released.

d. For the CRG move and 100TR jump modes, the tracking loop will be closed at the same time when the key is released.

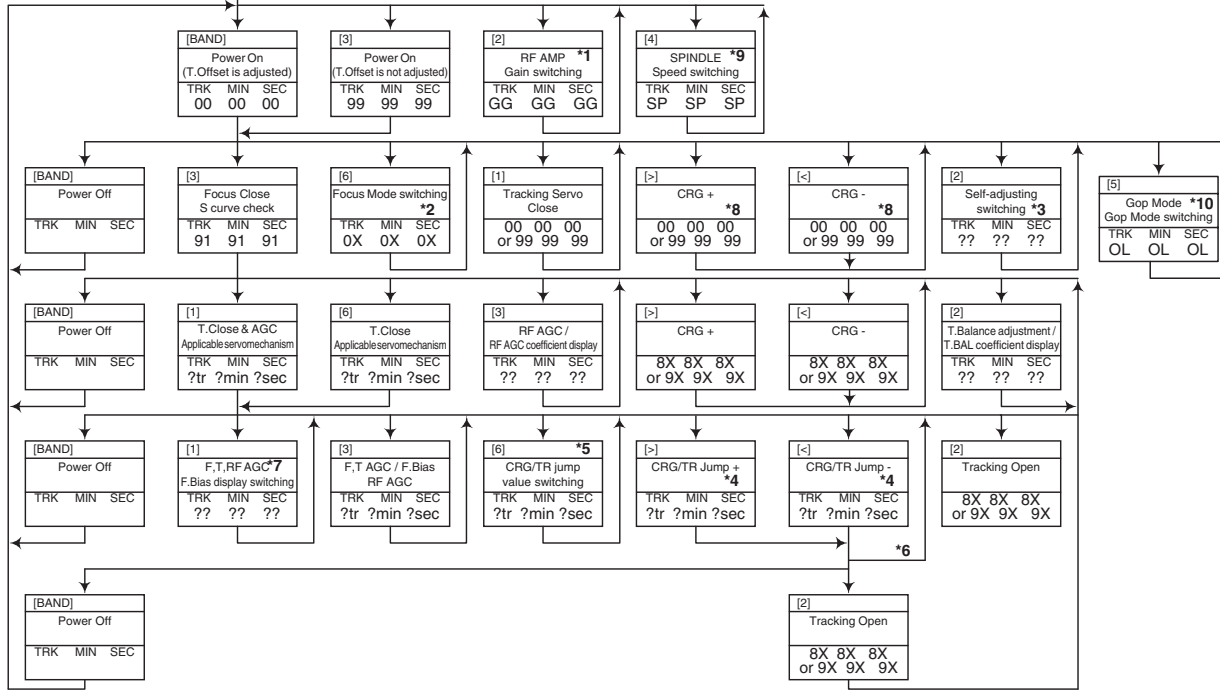
e. When the power is turned off and on, the jump mode is reset to the single TR (91), the RF amp gain is set to 0dB, and the auto-adjustment values are reset to the default settings.

[Key]
Contents
Display

[4] + [6] + Reset or [4] + [6] + BU + ACC Test Mode In
--

[CD] or [SOURCE]
Source On
TRK MIN SEC

Note) Test mode should use the key of remote control.



\*1) 

TRK	MIN	SEC
→	→	→
06	06	06
12	12	12

\*2) Focus Close → S Curve check setting → F EQ measurement setting  

TRK	MIN	SEC
00	00	00
01	01	01
02	02	02
99	99	99

\*3) F.Offset Display → RF.Offset → T.Offset Display → Switch to the order of the original display

\*4) 1TR/4TR/10TR/32TR/100TR

\*5) Single → 4TR → 10TR → 32TR → 100TR → CRG Move  
 9x(8x):91(81) 92(82) 93(83) 94(84) 95(85) 96(86)

\*6) Only at the time of CRG move, 100TR jump

\*7) TRK/MIN/SEC → F.AGC → T.AGC Gain → F.Bias → RF AGC

\*8) CRG motor voltage = 2 [V]

\*9) 

TRK	MIN	SEC
→	→	→
22	22	22
11	11	11

\*10) 

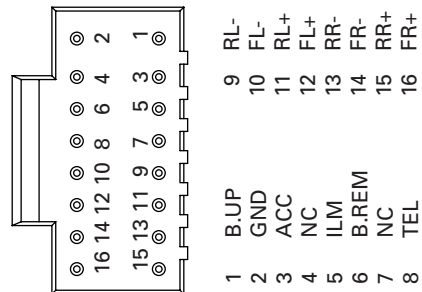
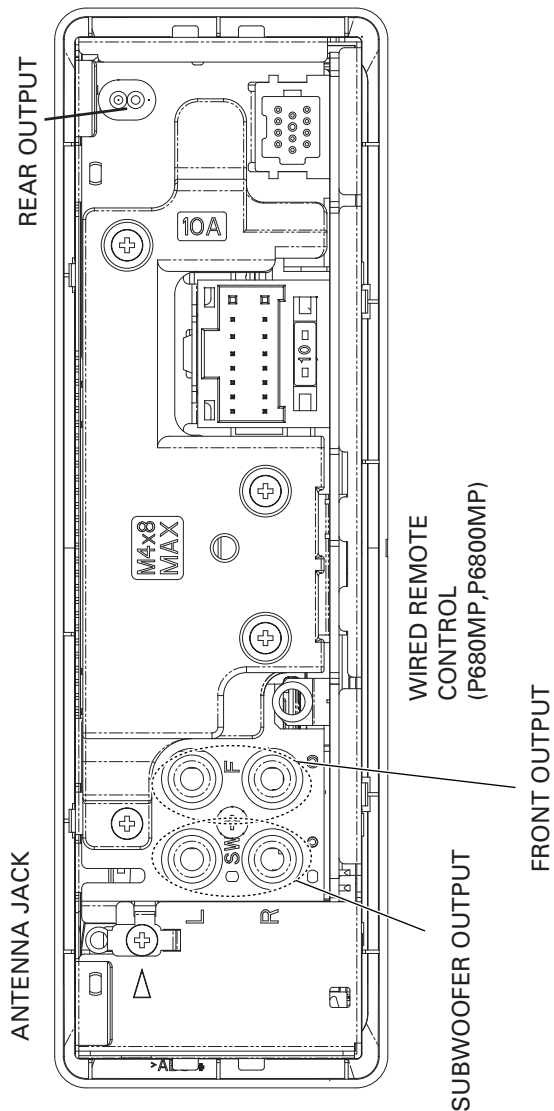
TRK	MIN	SEC
→	→	→
70	70	70
71	71	71

[Key]	Operation
[BAND]	Power On/Off
[>]	CRG + / TR Jump + (Direction of the external surface)
[<]	CRG - / TR Jump - (Direction of the internal surface)
[1]	T. CLS & AGC & Applicable servomechanism / AGC,AGC display setting
[2]	RF Gain switching / Offset adjustment display / T.Balance adjustment / T. Open
[3]	F. Close,S Curve / Rough Servo and RF AGC / F,T,RF AGC
[4]	SPDL 1X/2X switching As for the double speed(2x), audio output <u>cannot</u> be supported.
[5]	Error Rate measurement ON : ERR 30Counts Start BER display data[%]
[6]	F. Mode switching / Tracking Close / CRG•TR Jump Switching

• As for the double speed (2x), audio output cannot be supported

- \* After the [Eject] key is pressed keys other than the [Eject] key should not be pressed, until disc ejection is complete.
- When the key [2] or [3] is pressed during the Focus Search, the power supply should be immediately turned off (otherwise the lens sticks to Wall, causing the actuator to be damaged).
- In the case of TR jump other than to 100TR, the function shall continue to be processed even if the TR jump key is released. As for the CRG Move and 100TR Jump, the mechanism shall be set to the Tracking Close mode when the key is released.
- When the power is turned on/off the jump mode is reset to the Single TR (91) while the gain of the RFAMP is reset to 0 dB. At the same time all the self-adjusting values shall return to the default setting.

# 7.1.2 CONNECTOR FUNCTION DESCRIPTION





## 7.2 IC

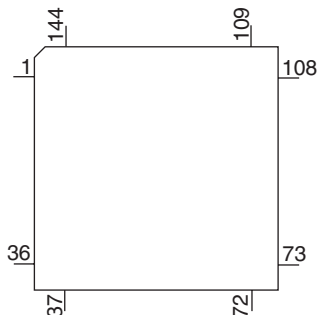
UPD63763CGJ      PEG142A      PAL007B      PD8153A      GP1UX31RK  
 PE5505A      PEG143A      PML016A      PD8154A  
 NJM2886DL3-33      S-1200B33-M5      PEG144A      HA12241FP

### ● Pin Functions (UPD63763CGJ)

Pin No.	Pin Name	I/O	Function and Operation
1	D.VDD		Power supply for digital circuits
2	D1.GND		Ground for 1.6 V digital circuits
3	RESET	I	Input of reset
4-8	AB12-8	I	Address bus 12-8 from the microcomputer
9-16	AD7-0	I/O	Address/data bus 7-0 to the microcomputer
17	CS	I	Chip selection
18	ASTB	I	Address strobe
19	READ	I	Control signals(read)
20	WRITE	I	Control signals(write)
21	WAIT	O	Control signals(wait)
22	INTQ	O	Interruption signals to the external microcomputer
23,24	IFMODE0,1	I	Switching the microcomputer I/F 0, 1
25	D1.VDD		Power supply for 1.6 V digital circuits
26	DA.VDD		Power supply for DAC
27	ROUT	O	Output of audio for the right channel
28	DA.GND		Ground for DAC
29	REGC		Connected to the capacitor for band gap
30	DA.GND		Ground for DAC
31	LOUT	O	Output of audio for the left channel
32	DA.VDD		Power supply for DAC
33	X.VDD		Power supply for the crystal oscillator
34	XTAL	I	Connected to the crystal oscillator(16.9344 MHz)
35	XTAL	O	Connected to the crystal oscillator(16.9344 MHz)
36	X.GND		Ground for the crystal oscillator
37	VDDREG15		Control of 1.6 V regulator
38	PWMSW0	I	Setup 0 for PWM output(SD, MD)
39-41	TEST3-1	I	Connected to Ground
42	PWMSW1	I	Setup 1 for PWM output(FD, TD)
43	TESTEN	I	Connected to Ground
44	D1.GND		Ground for 1.6 V digital circuits
45	DIN	I	Input of audio data
46	DOUT	O	Output of audio data
47	SCKIN	I	Clock input for audio data
48	SCKO	O	Clock output for audio data
49	LRCKIN	I	Input of LRCK for audio data
50	LRCK	O	Output LRCK for audio data
51	XTALEN	I	Permission to oscillate 16.9344 MHz
52	D1.VDD		Power supply for 1.6 V digital circuits
53	RFCK/HOLD	O	Output of RFCK/HOLD signal
54	WFCK/MIRR	O	Output of WFCK/MIRR signal
55	PLCK/RFOK	O	Output of PLCK/Output of RFOK
56	LOCK/RFOK	O	Output of LRCK/Output of RFOK
57	C1D1/C8M/(RA13)	O	Information on error correction/C8M : 8 MHz
58	C1D2/C16M/(RA12)	O	Information on error correction/C16M : 16 MHz
59	C2D1/RMUTE	O	Information on error correction/Mute for Rch
60	C2D2/LMUTE	O	Information on error correction/Mute for Lch
61	C2D3/SHOCK	O	Information on error correction/Detection of vibration
62	D1.GND		Ground for 1.6 V digital circuits
63	C33M	O	Output of 33.8688 MHz(CLK for SDRAM)
64	(RCS)	O	DRAM CS
65	RA11	O	Output of DRAM address 11
66	(CKE)	O	Output of DRAM CKE
67	RAS	O	Output of DRAM RAS
68	CAS0(LDQM)	O	Output of DRAM lower CAS(LDQM)
69	CAS1(UDQM)	O	Output of DRAM upper CAS(UDQM)

Pin No.	Pin Name	I/O	Function and Operation
70	WE	O	Output of DRAM WE
71	$\overline{OE}/\overline{CAS}$	O	Output of DRAM $\overline{OE}/\overline{CAS}$
72	D.GND		Ground for digital circuits
73-88	RDB0-15	I/O	Input/output of DRAM data0-15
89-99	RA0-10	O	Output of DRAM address0-10
100	D.VDD		Power supply for digital circuits
101	FD+	O	Output of focus drive PWM +
102	FD-	O	Output of focus drive PWM -
103	TD+	O	Output of tracking drive PWM +
104	TD-	O	Output of tracking drive PWM -
105	SD+	O	Output of thread drive PWM +
106	SD-	O	Output of thread drive PWM -
107	MD+	O	Output of spindle drive PWM +
108	MD-	O	Output of spindle drive PWM -
109	REFOUTSV	O	REFOUT for servo
110	AD.VDD		Power supply for ADC
111	EFM	O	Output of EFM signals
112	ASY	I	Input of asymmetry
113	ATEST	O	Analog tests
114	RFI	I	Input of RF
115	AD.GND		Ground for the analog system
116	AGCO	O	Output of RF
117	C3T	O	Connection to the capacitor for detecting 3T
118	AGCI	I	Input of AGC
119	RFO	O	Output of RF(AGC)
120,121	EQ2,1	I	Equalizer 2, 1
122	RF2-	I	Reversal input of RF2
123	RF-	I	Reversal input of RF
124	A.GND		Ground for the analog system
125	A	I	Input of A
126	C	I	Input of C
127	B	I	Input of B
128	D	I	Input of D
129	F	I	Input of F
130	E	I	Input of E
131	VREFIN	I	Input of reference voltage
132	A.VDD		Power supply for the analog system
133	REFOUT	O	Output of reference voltage
134	REFC	I	Connected to the capacitor for output of REFOUT
135	FE-	I	Reversal input of FE
136	FEO	O	Output of FE
137	ADIN	I	Input of FE, TE A/D converter
138	TE-	I	Reversal input of TE
139	TEO	O	Output of TE
140	TE2	O	TE2
141	TEC	I	TEC
142	LD	O	Output of LD
143	PD	I	Input of PD
144	D.GND		Ground for digital circuits

\* UPD63763CGJ



IC's marked by \* are MOS type.

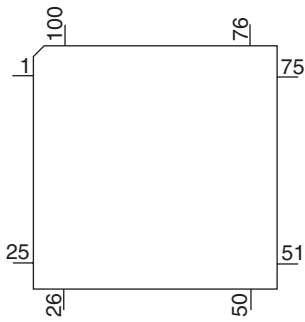
Be careful in handling them because they are very liable to be damaged by electrostatic induction.

## ● Pin Functions (PE5505A)

Pin No.	Pin Name	I/O	Format	Function and Operation
1	AVREF			A power supply / Positive power supply(5V)
2	AVSS			A power supply GND
3	TESTIN			Chip check test program starting input
4	CLAMP			Not used
5	EVDD			E power supply / Positive power supply
6	FMODE			For flash rewriting / L : flash rewriting mode
7	FLRQ			For flash rewriting / Reset voltage control
8	IC/FLMD0			IC : VSS direct connection/FLMOD0 : Pull-down
9	VDD			Positive power supply(5V)
10	REGC			Connected to the capacity stabilizing output of the regulator
11	VSS			GND
12	X1	I		Oscillator connection for mainclock
13	X2			Oscillator connection for mainclock
14	RESET	I		System reset input
15	XT1	I		Connected to the oscillator for subclock(connected to VSS via the resistor)
16	XT2			Connected to the oscillator for subclock(Open)
17	PULLDOWN	I		Connected to EVDD or EVSS via the resistor
18	EJSW			Not used
19	XINT		C	CD LSI interruption signal input
20	NC			Not used
21	BRST	I		Bus reset input
22	BSI	I		Bus serial data input
23	BSO	O	C	Bus serial data output
24	BSCK	I/O	/C	Bus serial clock input/output
25	FTxD	O	C	For flash rewriting(transmitted signal)
26	FRxD	I		For flash rewriting(received signal)
27	BRXEN	I/O	/C	Bus RX enable input/output
28	BSRQ	I/O	/C	Bus serial clock input/output
29	DSPOK			Not used
30	DSCSNS	I	C	Disc state sense input
31	8EJ(S905)	O	C	input of detection of 8 cm disc ejection
32	12EJ(S904)	O	C	input of detection of 12 cm disc ejection
33	EVSS			E power supply GND
34	EVDD			E power supply / Positive power supply
35,36	SRAMLEVEL0,1			SRAM level meter output
37	EMPH	O	C	Emphasis information output
38	EMPH			Not used
39	CDMUTE			Not used
40	LOEJ			Not used
41	CLCONT			Driver input switching output
42	HOME			Home SW sense input
43	ADENA	O	C	A/D reference voltage supply control output
44	LRCKOK	O	C	(DOUT mute output)
45	SRAMLEVEL2	O	C	SRAM level meter output
46	CD3VON(MCKRQ)	O	C	CD + 3.3 V power supply control output(Digital output : MCKRQ)
47	CONT	O	C	Servo driver power supply control output
48	XRST	O	C	CD LSI reset control output
49	VDCONT	O	C	VD power supply control output
50	XSI	I/O	/C	CD LSI serial data input
51	XSO	O	C	CD LSI serial data output
52	XCK	O	C	CD LSI serial clock output
53	XWAIT	O	C	CD LSI wait control signal output
54	XASTB	O	C	CD LSI address strobe output
55	AD0	O	C	Address/data Bus 0
56	INT			Not used

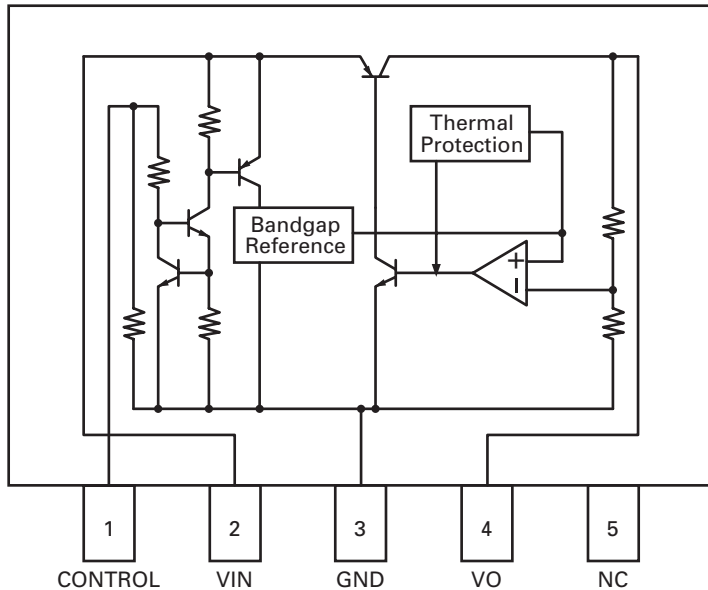
Pin No.	Pin Name	I/O	Format	Function and Operation
57	ROMDATA			E2PROM data input/output
58	ROMCK			E2PROM clock output
59	ROMCS	O	C	E2PROM chip selection output
60,61	NC			Not used
62	CLKOUT			Not used
63	LOCK	I		Spindle lock input
64-68	NC			Not used
69	BVSS			B power supply GND
70	BVDD			B power supply / Positive power supply
71-75	NC			Not used
76	FLMD1	I/O	/C	Address/Data Bus 5
77-90	NC			Not used
91-93	A/D			Not used
94	CSENS			Not used
95	TYPE_A/D			Not used
96,97	NC			Not used
98	TEMP			Not used
99	VDSENS			VD power supply short sense input
100	DSCSNS			Not used

\* PE5505A



Format	meaning
C	C MOS

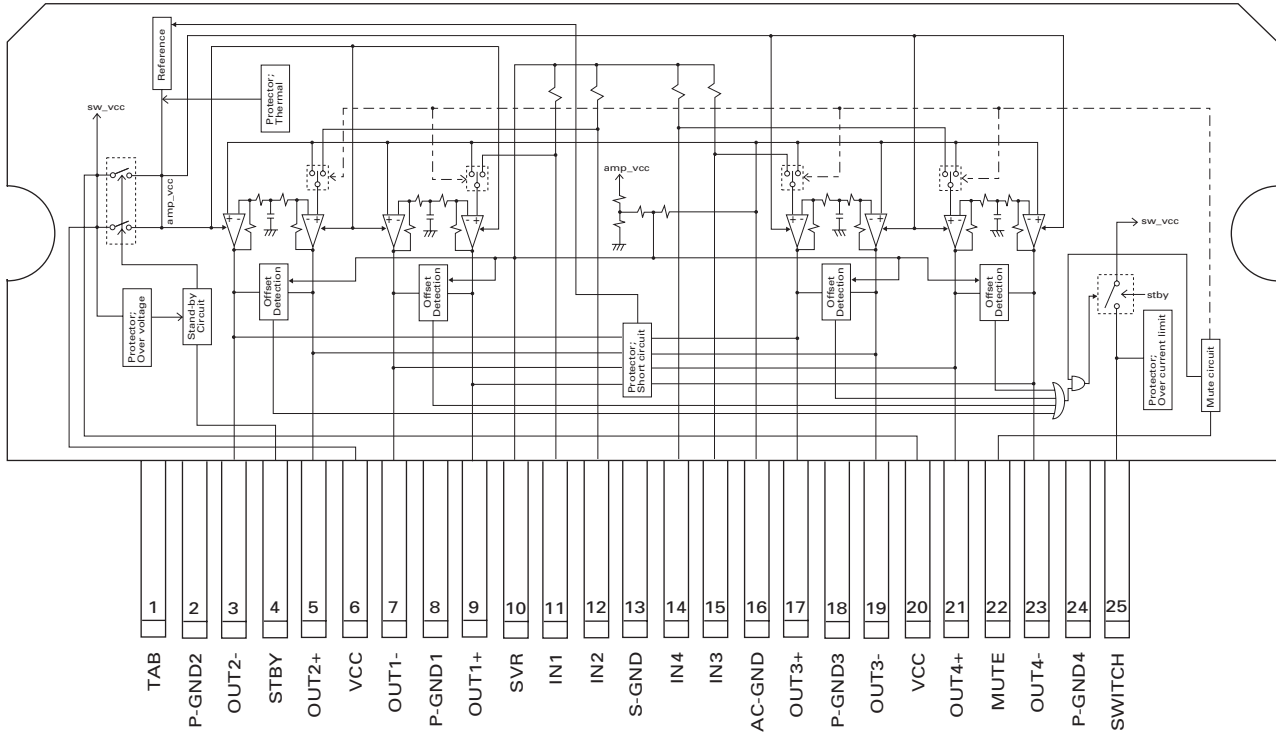
\* NJM2886DL3-33



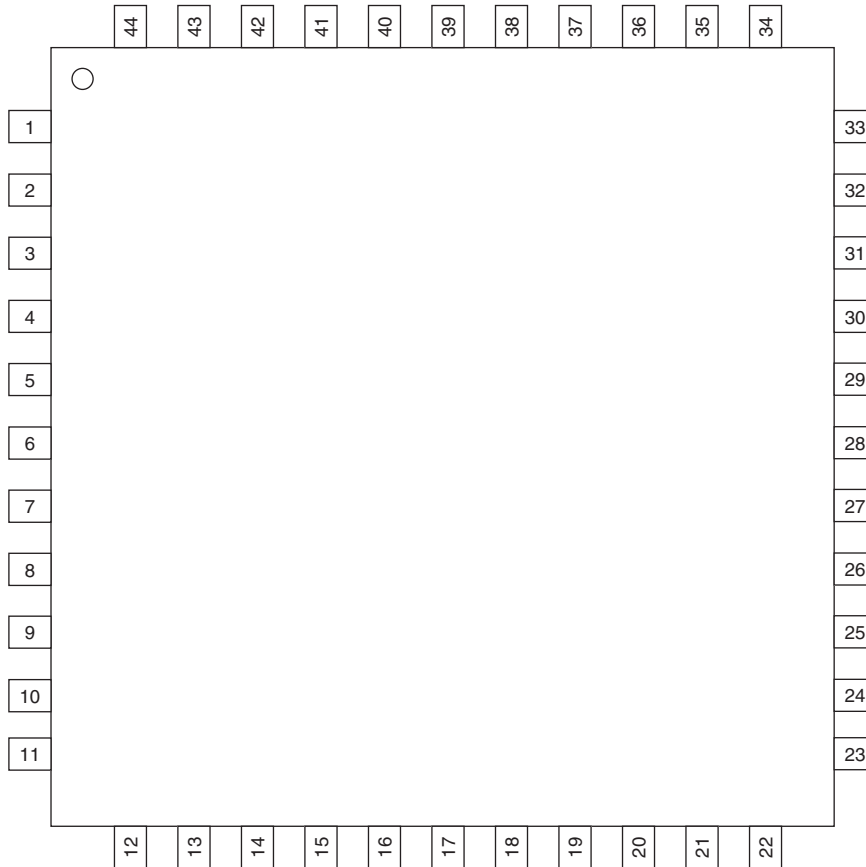
### ● Pin Functions(PEG142A,PEG143A)

Pin No.	Pin Name	I/O	Function and Operation
1	SYSPW	O	System power control output
2	KEYD	I	Key data input
3-5	NC		Not Used
6	BYTE	I	External data bus width change input
7	CNVss	I	Processor mode change input
8	TELIN	I	TEL : Cellular mute input
9	JSNSON	O	Jack sense output
10	RESET	I	Reset input
11	Xout	O	Clock output
12	Vss	I	GND
13	Xin	I	Clock input
14	Vcc	I	Power supply input
15	NMI	I	Not Used
16,17	NC		Not Used
18	JSNSON2		Jack sense
19	RX2	I	IPBUS : Input 2
20	OELPW		OEL power supply output
21	NC		Not Used
22	PEE	O	PEE sound output
23	NC		Not Used
24	BRST	O	P-BUS : Reset output
25	BRXEN	I/O	P-BUS : Reception enable input/output
26	BSRQ	I	P-BUS : Service request input
27	RX	I	IPBUS : Input
28	TX	O	IPBUS : Output
29	DPDT	O	GRILLE : Data output
30	KYDT	I	GRILLE : Data input
31-34	NC		Not Used
35	ROT1	I	Rotary encoder pulse input
36	ROT0	I	Rotary encoder pulse input
37	PCL	O	Output for clock adjustment
38	SWVDD	O	GRILLE : Chip enable output
39	NC		Not Used
40	FLPILM	O	Illumination output inside flap
41	ILMPW	O	Illumination output
42-45	NC		Not Used
46	TUNPDI	I	Tuner data input
47	TUNPDO	O	Tuner data output
48	TUNPCK	O	Tuner clock output
49	FLPPW		Flap motor operation
50	FOPNSW	I	Flap open sense input
51	FCLSSW	I	Flap close sense input
52	FLPCLS	O	Flap close operation output
53	FLPOPEN	O	Flap open operation output
54-56	NC		Not Used
57	EMUTE		EVOL : Mute output
58	SACLK	O	Level indicator clock output
59	NC		Not Used
60	Vcc	I	Power supply input
61	NC		Not Used
62	Vss	I	GND
63-66	NC		Not Used
67	DALMON		For consumption current reduction
68	NC		Not Used
69	TUNPCE2	O	TUNER : Chip enable output
70	TUNPCE1	O	TUNER : Chip enable output
71	ROMCS		ROM correction : Chip select output
72	ASENS	I	ACC sense input
73	BSENS	I	Back up sense input
74	ROMCK	O	ROM correction : Clock output

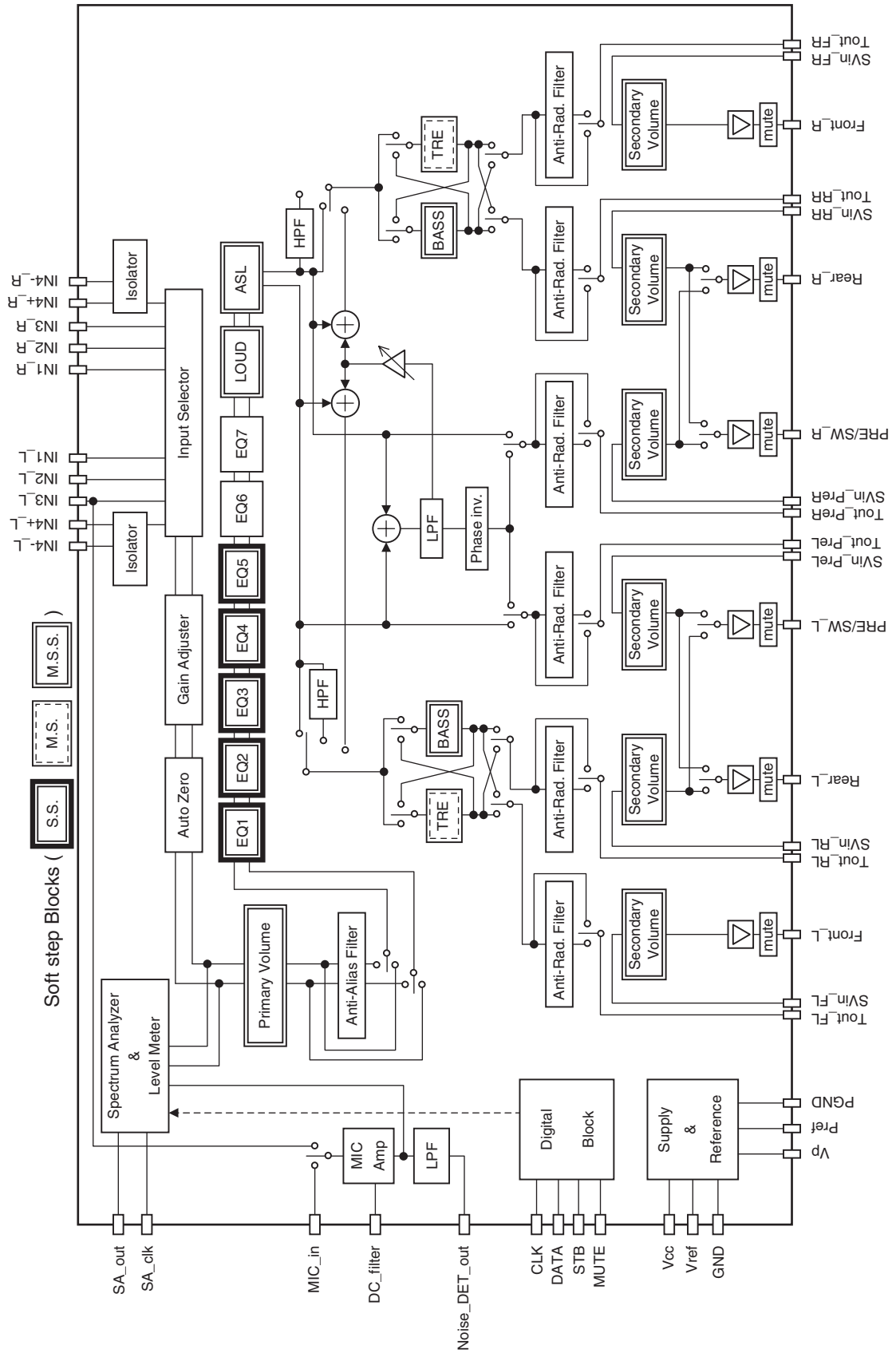
\*PAL007B



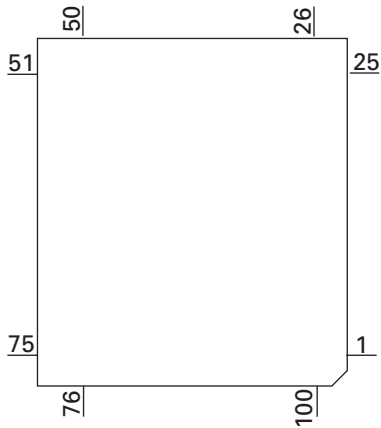
\*PML016A  
 ● Pin Layout



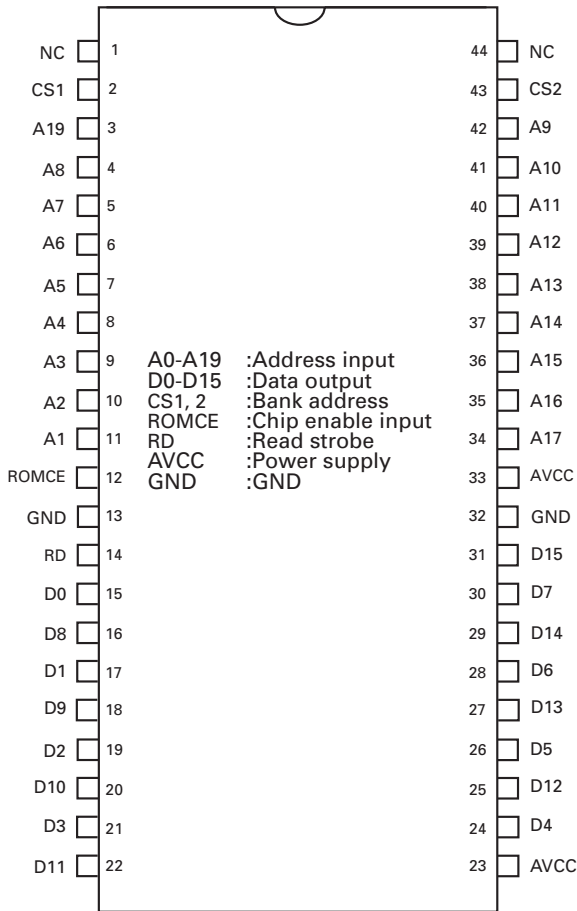
● Block Diagram



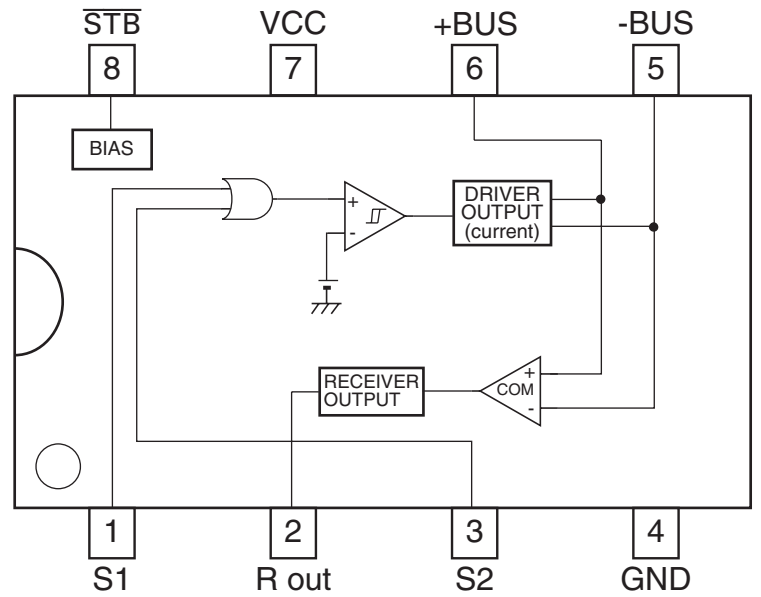
\* PEG144A



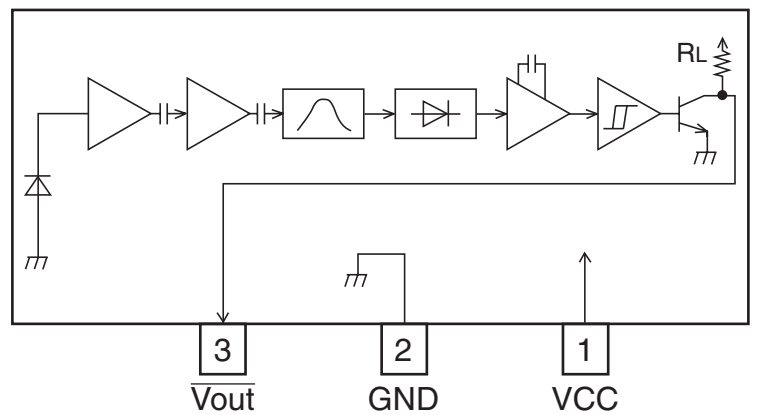
\* PD8153A,\*PD8154A



HA12241FP

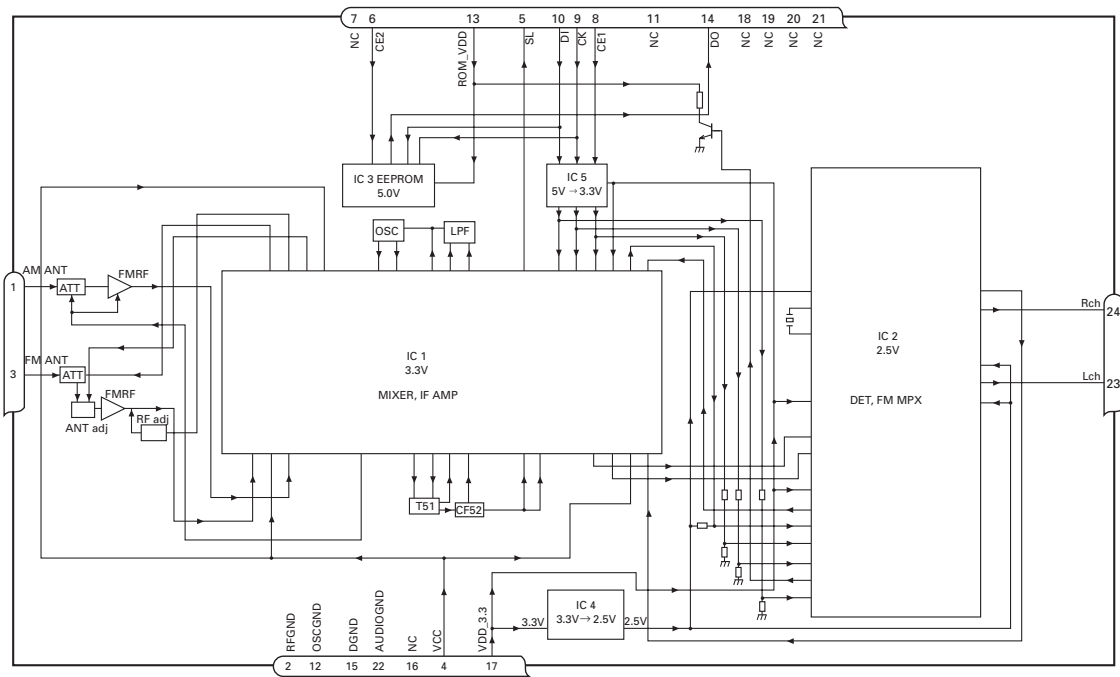


GP1UX31RK

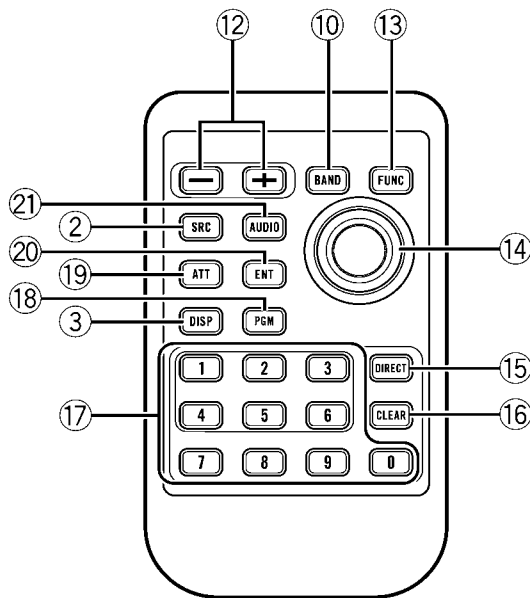




## FM/AM Tuner Unit



No.	Symbol	I/O	Explain	
1	AMANT	I	AM antenna input	AM antenna input high impedance AMANT pin is connected with an all antenna by way of 4.7μH. (LAU type inductor) A series circuit including an inductor and a resistor is connected with RF ground for the countermeasure against the hum of power transmission line.
2	RFGND		RF ground	Ground of antenna block
3	FMANT	I	FM antenna input	Input of FM antenna 75Ω Surge absorber(DSP-201M-S00B) is necessary.
4	VCC		power supply	The power supply for analog block. D.C 8.4V ± 0.3V
5	SL	O	signal level	Output of FM/AM signals level
6	CE2	I	chip enable-2	Chip enable for EEPROM "Low" active
7	NC		non connection	Not used
8	CE1	I	chip enable-1	Chip enable for AF•RF "High" active
9	CK	I	clock	Clock
10	DI	I	data in	Data input
11	NC		non connection	Not used
12	OSCGND		osc ground	Ground of oscillator block
13	ROM_VDD		power supply	Power supply for EEPROM pin 13 is connected with a power supply of micro computer.
14	DO	O	data out	Data output
15	DGND		digital ground	Ground of digital block
16	NC		non connection	Not used
17	VDD_3.3		power supply	The power supply for digital block. 3.3V ± 0.2V
18	NC		non connection	Not used
19	NC		non connection	Not used
20	NC		non connection	Not used
21	NC		non connection	Not used
22	AUDIOGND		audio ground	Ground of audio block
23	L ch	O	L channel output	FM stereo "L-ch" signal output or AM audio output
24	R ch	O	R channel output	FM stereo "R-ch" signal output or AM audio output



### ⑱ **ATT button**

Press to quickly lower the volume level, by about 90%. Press once more to return to the original volume level.

### ⑳ **ENTERTAINMENT button**

Press to change to the entertainment display.

### ㉑ **AUDIO button**

Press to select various sound quality controls. ■

### ⑭ **Joystick**

Move to perform manual seek tuning, fast forward, reverse and track search controls. Also used for controlling functions. Functions are the same as **MULTI-CONTROL** except for volume control.

### ⑮ **DIRECT button**

Press to directly select the desired track.

### ⑯ **CLEAR button**

Press to cancel the input number when **0–9** are used.

### ⑰ **0–9 buttons**

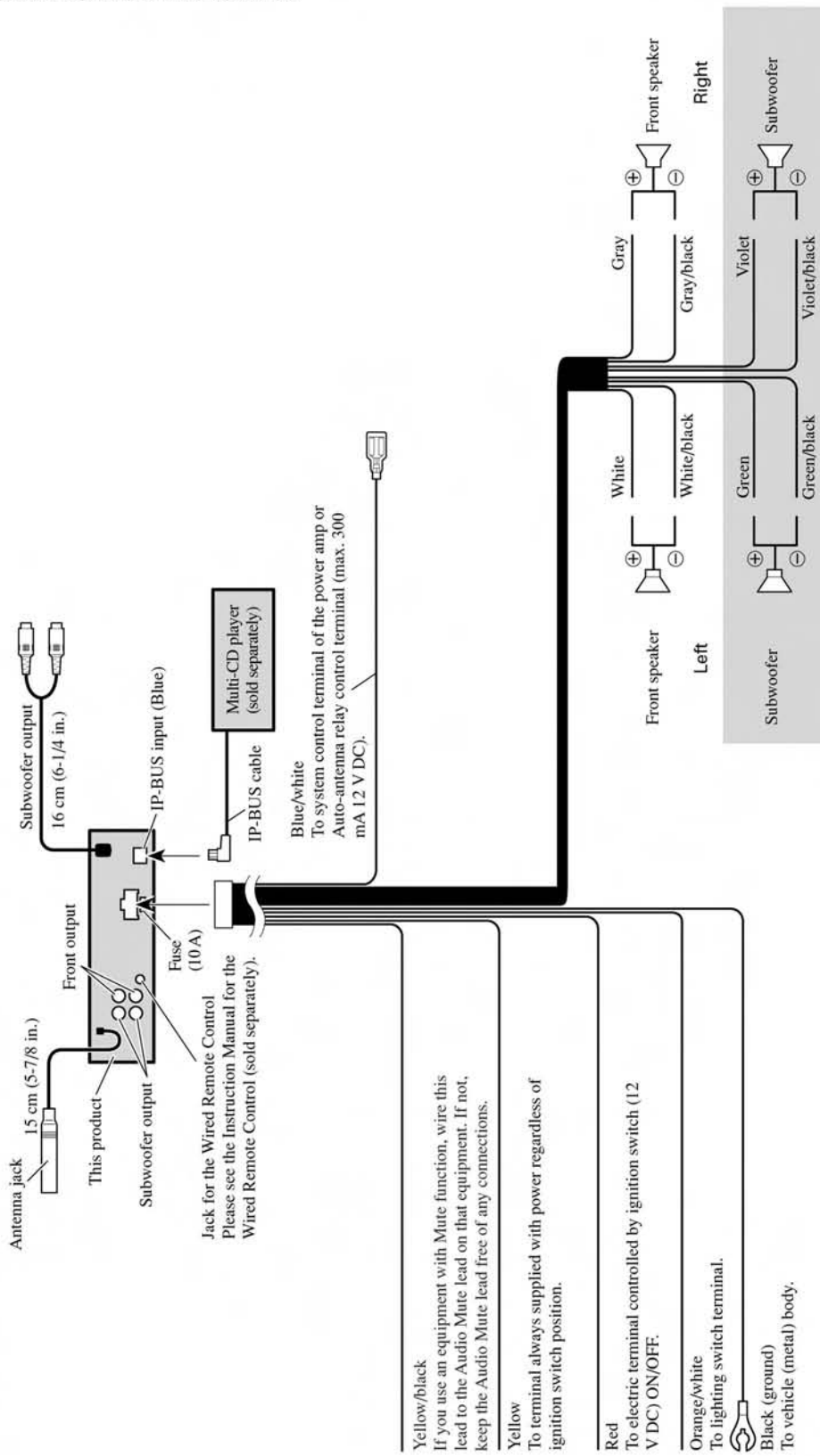
Press to directly select the desired track, preset tuning or disc. Buttons **1–6** can operate the preset tuning for the tuner or disc number search for the multi-CD player.

### ⑱ **PGM button**

Press to operate the preprogrammed functions for each source.

# ● CONNECTION DIAGRAM

## ■ When using a Subwoofer without using the optional amplifier



**Note:**  
Change the initial setting of this unit.  
The subwoofer output of this unit is monaural.