

ST-SDB900

SERVICE MANUAL

Ver 1.1 2004.08

*AEP Model
UK Model*



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SPECIFICATIONS

DAB tuner section

Frequency range	174.928 (5A) – 239.200 (13F) MHz For details, see “DAB frequency table” below.
Sensitivity	–99 dBm
Signal-to-noise ratio	97 dB
THD+N	0.009% (1 kHz)
Channel separation	87 dB (1 kHz)
Selectivity	40 dB (at adjacent channel)
Frequency response	+0.5/–0.5 dB (5 Hz – 20 kHz)
Digital output	Optical Sampling frequency: 48 kHz
Aerial terminal	75 Ω , F female
Analog output level	2 Vrms

FM tuner section

Frequency range	87.5 – 108.0 MHz (50 kHz step)
IHF Sensitivity	1.0 μ V
Signal-to-noise ratio	at 40 kHz deviation 70 dB (stereo)
THD+N	1 kHz, 40 kHz deviation 0.5% (stereo)
Channel separation	45 dB (1 kHz)
Selectivity	at 400 kHz 60 dB
Frequency response	+0.5/–2.0 dB (30 Hz – 15 kHz)
Aerial terminal	75 Ω , IEC male

AM tuner section

Frequency range	531 – 1,602 kHz (9 kHz step)
Sensitivity	(with AM loop aerial) 330 μ V/m
Signal-to-noise ratio	54 dB
THD+N	0.5% (400 Hz)
Selectivity	at 9 kHz 35 dB
Aerial terminal	Push lever

General

Power requirements	230 V AC, 50/60 Hz
Power consumption	12 W
Dimensions	430 x 85 x 300 mm (w/h/d)
Weight	4.5 kg
Remote control capability	IR
Station preset capacity	DAB maximum of 99 FM maximum of 30 AM maximum of 30

Supplied accessories

- Audio cord (1)
- AM loop aerial (1)
- FM wire aerial (1)
- DAB wire aerial (1)
- Remote commander (1)
- R6 (size AA) batteries (2)

Design and specifications are subject to change without notice.

DAB/FM/AM TUNER

9-879-012-02
2004H02-1

Sony Corporation
Audio Group

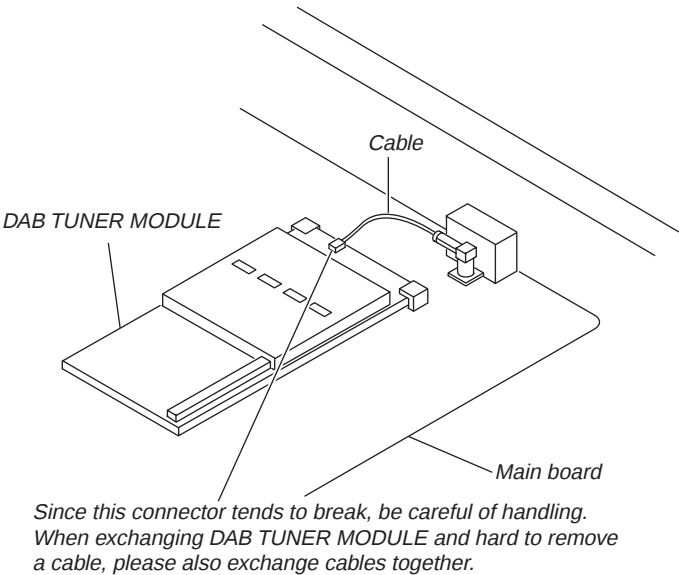
SONY®

DAB frequency table

Band-III (174 to 240 MHz)			
Frequency	Label	Frequency	Label
174.928MHz	5A	209.936MHz	10A
176.640MHz	5B	211.648MHz	10B
178.352MHz	5C	213.360MHz	10C
180.064MHz	5D	215.072MHz	10D
181.936MHz	6A	216.928MHz	11A
183.648MHz	6B	218.640MHz	11B
185.360MHz	6C	220.352MHz	11C
187.072MHz	6D	222.064MHz	11D
188.928MHz	7A	223.936MHz	12A
190.640MHz	7B	225.648MHz	12B
192.352MHz	7C	227.360MHz	12C
194.064MHz	7D	229.072MHz	12D
195.936MHz	8A	230.784MHz	13A
197.648MHz	8B	232.496MHz	13B
199.360MHz	8C	234.208MHz	13C
201.072MHz	8D	235.776MHz	13D
202.928MHz	9A	237.488MHz	13E
204.640MHz	9B	239.200MHz	13F
206.352MHz	9C		
208.064MHz	9D		

* This tuner does not support L-Band reception.

Note on DAB TUNER MODULE exchange



SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK OR DOTTED LINE WITH MARK ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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Unleaded solder
Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size.)

: **LEAD FREE MARK**
Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40°C higher than ordinary solder.
Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
Soldering irons using a temperature regulator should be set to about 350°C.
Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!

- Strong viscosity
Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

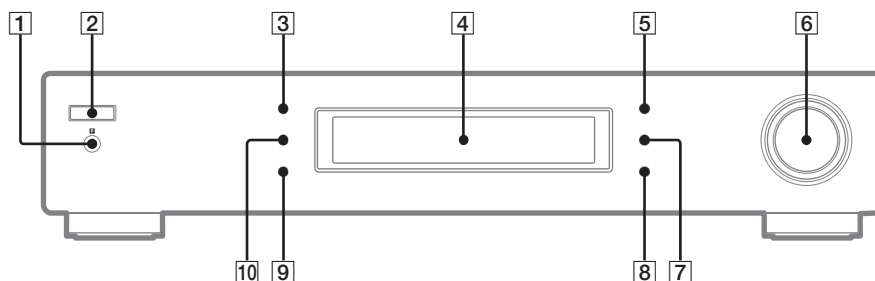
SECTION 1 GENERAL

This section is extracted
from instruction manual.

List of button locations and reference pages

Main unit

- 1  (remote sensor)
- 2 POWER switch
- 3 BAND
- 4 Display window
- 5 MENU
- 6 TUNING/SELECT
- 7 ENTER
- 8 MEMORY
- 9 DISPLAY
- 10 TUNING MODE



SECTION 2
TEST MODE

1. Entering test mode

- 1. Turn OFF the power.
- 2. While pressing [DISPLAY] button and [MENU] button together, turn ON the [POWER] button.
- 3. When test mode starts “DIAG MENU” is displayed for a few seconds, then test mode starts.

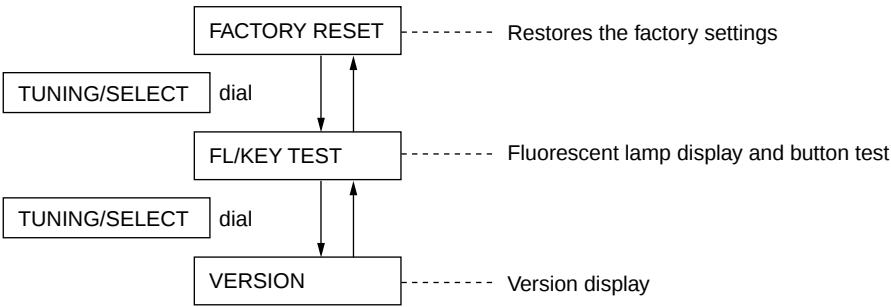


2. Leaving test mode

- 1. Turn OFF the power.

3. Selecting the test mode

When you enter test mode, if you turn the [TUNING/SELECT] JOG dial, this switches the display to the test menu.



3-1. Restoring the factory settings

- 1. Enter test mode, then turn the [TUNING/SELECT] dial to display “FACTORY RESET”.

Screen display



- 2. Press the [ENTER] button. The “Executing” display.

Screen display



- 3. After 3-4 seconds, the “Executing” disappears. Factory Reset is completed.

Screen display



[Contents of factory settings]

- BAND DAB
- DAB Module Service List Clear
..... DRC Off
..... DAB preset all clear
- FM Mode STEREO
- 30 FM Preset All 87.50 MHz
- 30 AM Preset All 531 kHz
- Preset Station Name All clear
- DIMMER Full (duty 100)

3-2. FL/KEY TEST MODE

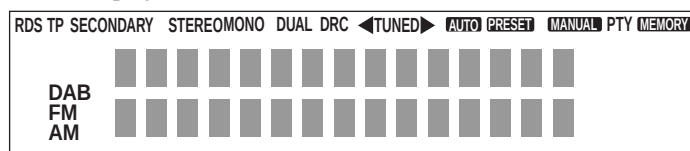
1. Enter test mode, then turn the **TUNING/SELECT** dial to display "FL/KEY TEST".

Screen display



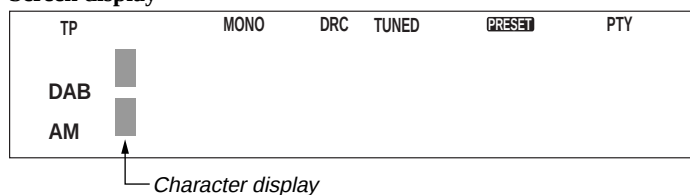
2. Press the **ENTER** button. The entire screen lights up.

Screen display



3. Turning the **TUNING/SELECT** dial displays the dial check screen. When you turn the **TUNING/SELECT** dial left and right, the character display moves left and right.

Screen display



4. To check operation of each button, press it and verify that the corresponding display goes out.
BAND button "TP" display
TUNING MODE button "MONO" display
DISPLAY button "DRC" display
MENU button "TUNED" display
ENTER button "PRESET" display
MEMORY button "PTY" display
5. Press the **DAB** button on remote control after checking front panel button, "O" and "K" light up on a character display.
6. Turn OFF the power.

3-3. VERSION display

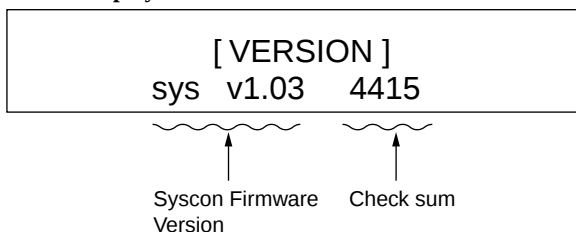
1. Enter test mode, then turn the **TUNING/SELECT** dial to display "VERSION".

Screen display



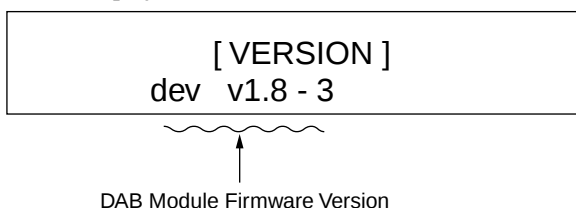
2. Press the **ENTER** button. The System Version is displayed.

Screen display



3. Turn the **TUNING/SELECT** to the right to display the DAB version.

Screen display



Turn the **TUNING/SELECT** dial to the left to display the System Version.

4. Press the **ENTER** button to return to test mode.

4. Temporary PRESET setting mode

This device is not adjusted but reception can be checked with the temporary Preset values.

- 1. Turn OFF the power.
- 2. While pressing [DISPLAY] button and [MEMORY] button together, turn ON [POWER] button.
- 3. When you enter temporary PRESET setting mode, the “MEMORY” display flashes. The only difference in this mode is the use of the temporary Preset values. Otherwise, operation is normal.
- 4. For the FM and AM band, the PRESET values are as follows.

FM band		AM band	
FM01	87.50 MHz	AM01	531 kHz
FM02	88.00 MHz	AM02	603 kHz
FM03	98.00 MHz	AM03	999 kHz
FM04	100.00 MHz	AM04	1404 kHz
FM05	106.00 MHz	AM05	1602 kHz
FM06	108.00 MHz	–	

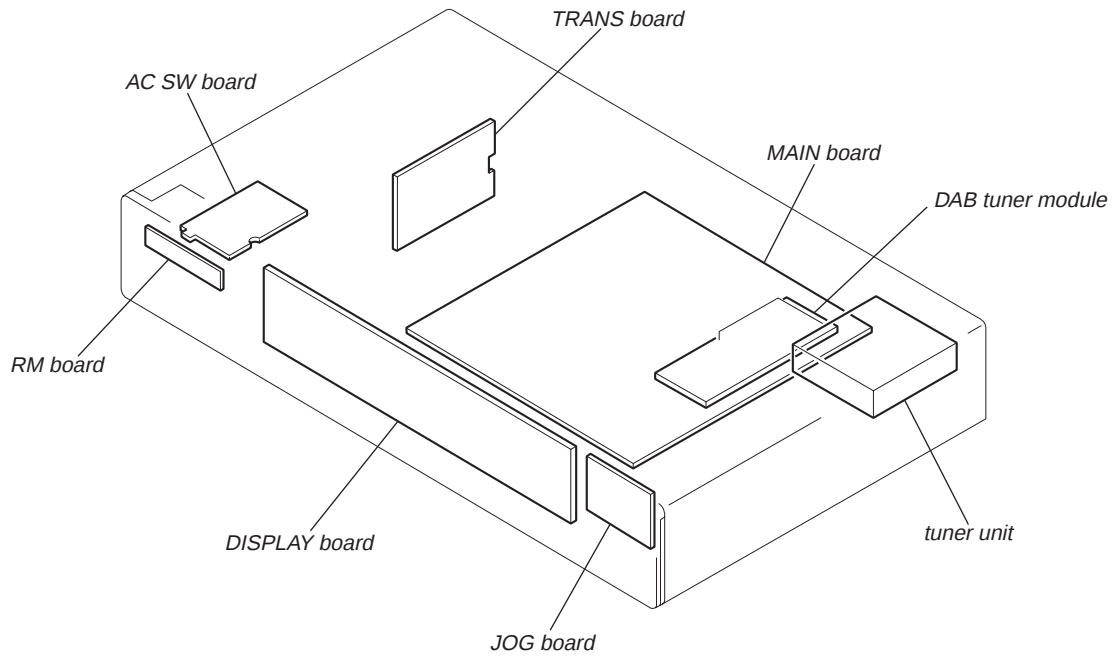
- 5. For the DAB band, there are no temporary Preset values.
Instead, the CH labels handle this with “MENU” - “DAB TUNE AID” as follows.

DAB band	
5A	(174.928 MHz)
5B	(176.640 MHz)
8D	(201.072 MHz)
12B	(225.648 MHz)
13F	(239.200 MHz)

- 6. End temporary PRESET mode with a Power OFF.

SECTION 3 DIAGRAMS

• Circuit Boards Location



NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS
(In addition to this necessary note is printed in each block.)

Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. (p: pF)
50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}W$ or less unless otherwise specified.
- % : indicates tolerance.
- Δ : internal component.
-  : nonflammable resistor.
-  : panel designation.

Note: The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

-  : B+ Line.
-  : B- Line.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
No mark : FM
- Voltages are taken with a VOM (Input impedance 10 M Ω).
Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
 : FM
 : ANALOG OUT
 : DIGITAL OUT

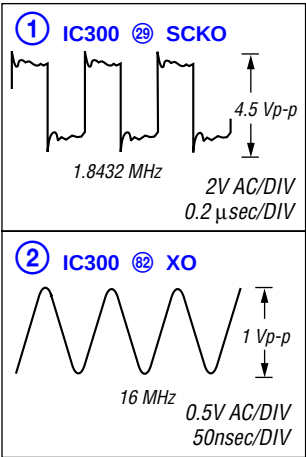
Note on Printed Wiring Board:

-  : parts extracted from the component side.
-  : Through hole.
-  : Pattern from the side which enables seeing.

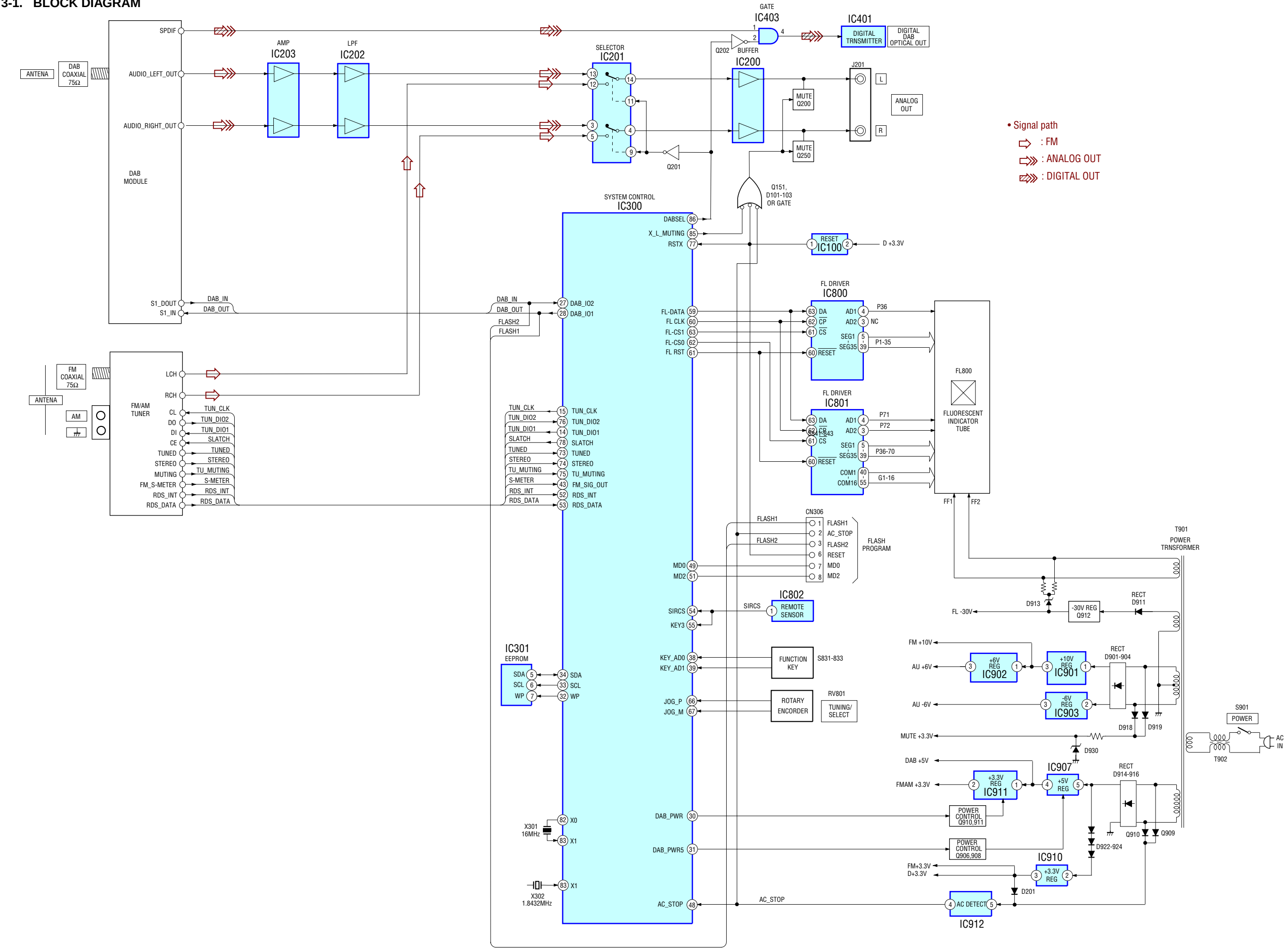
Caution:
Pattern face side: Parts on the parts face side seen from the parts face are indicated.
(Side A)
Parts face side: Parts on the pattern face side seen from the pattern face are indicated.
(Side B)

• Waveforms

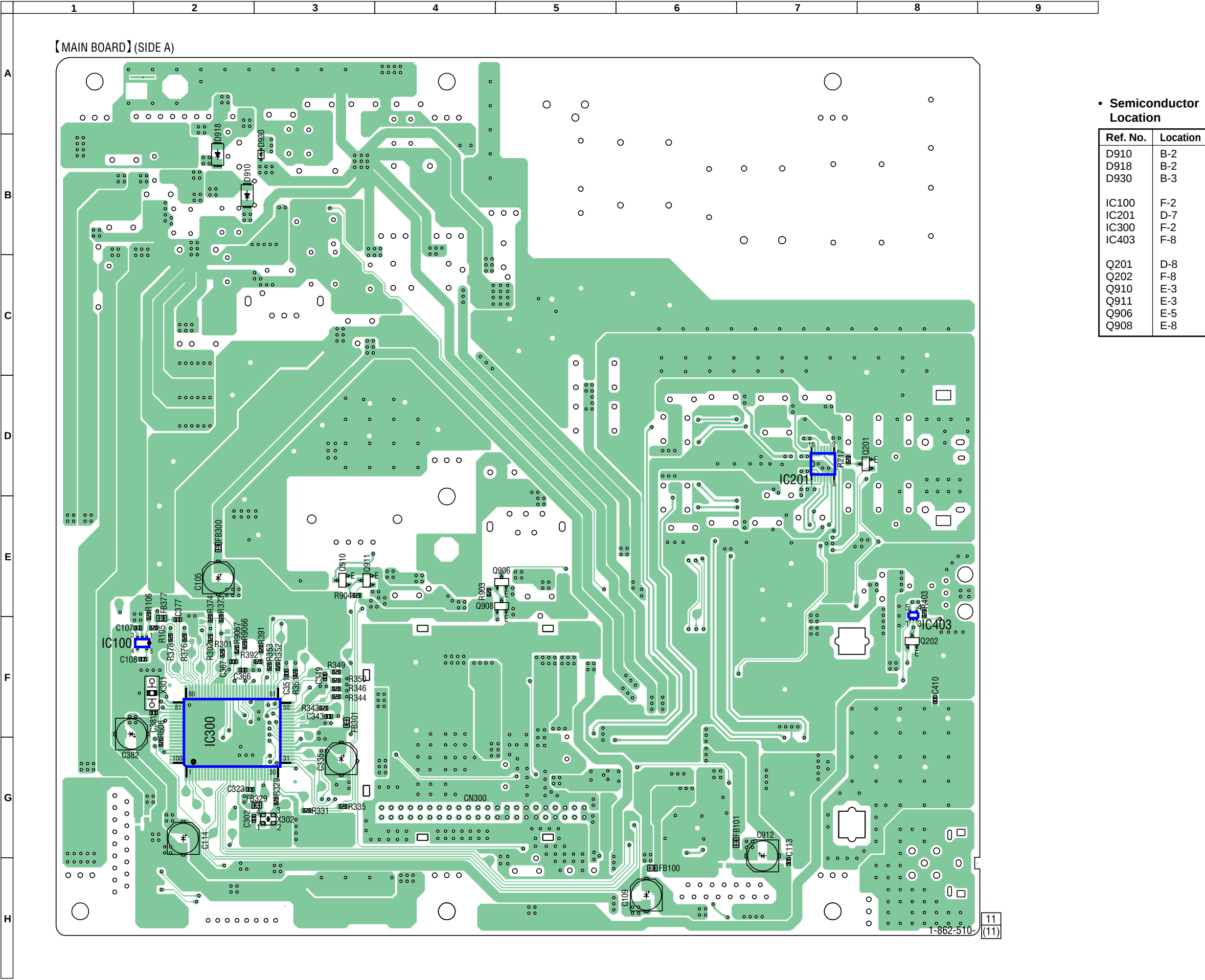
– MAIN Board –



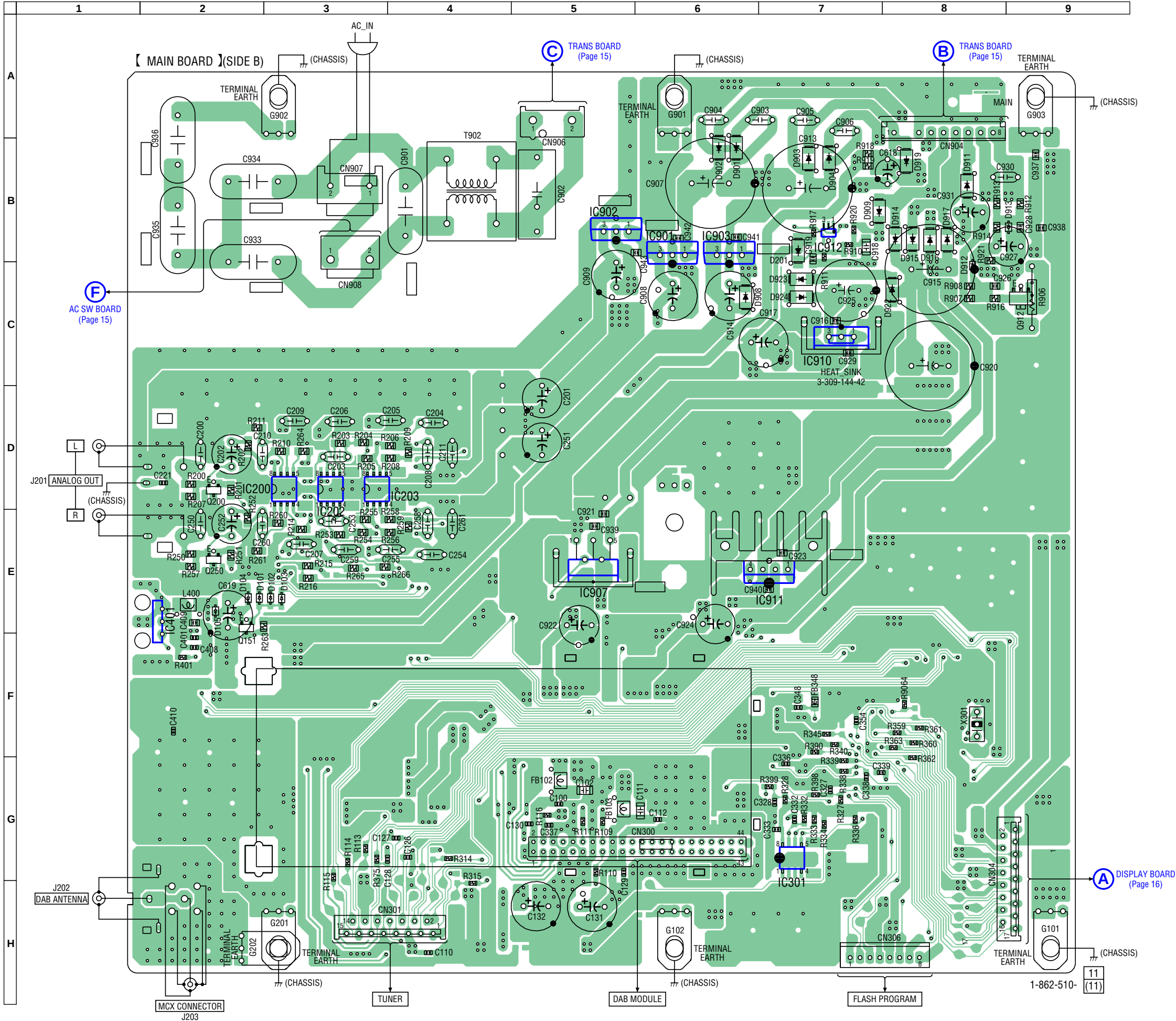
3-1. BLOCK DIAGRAM



3-2. PRINTED WIRING BOARD — MAIN BOARD (SIDE A) — • See page 7 for Circuit Boards Location. :Uses unleaded solder.



3-3. PRINTED WIRING BOARD — MAIN BOARD (SIDE B) — • See page 7 for Circuit Boards Location. :Uses unleaded solder.



• Semiconductor Location

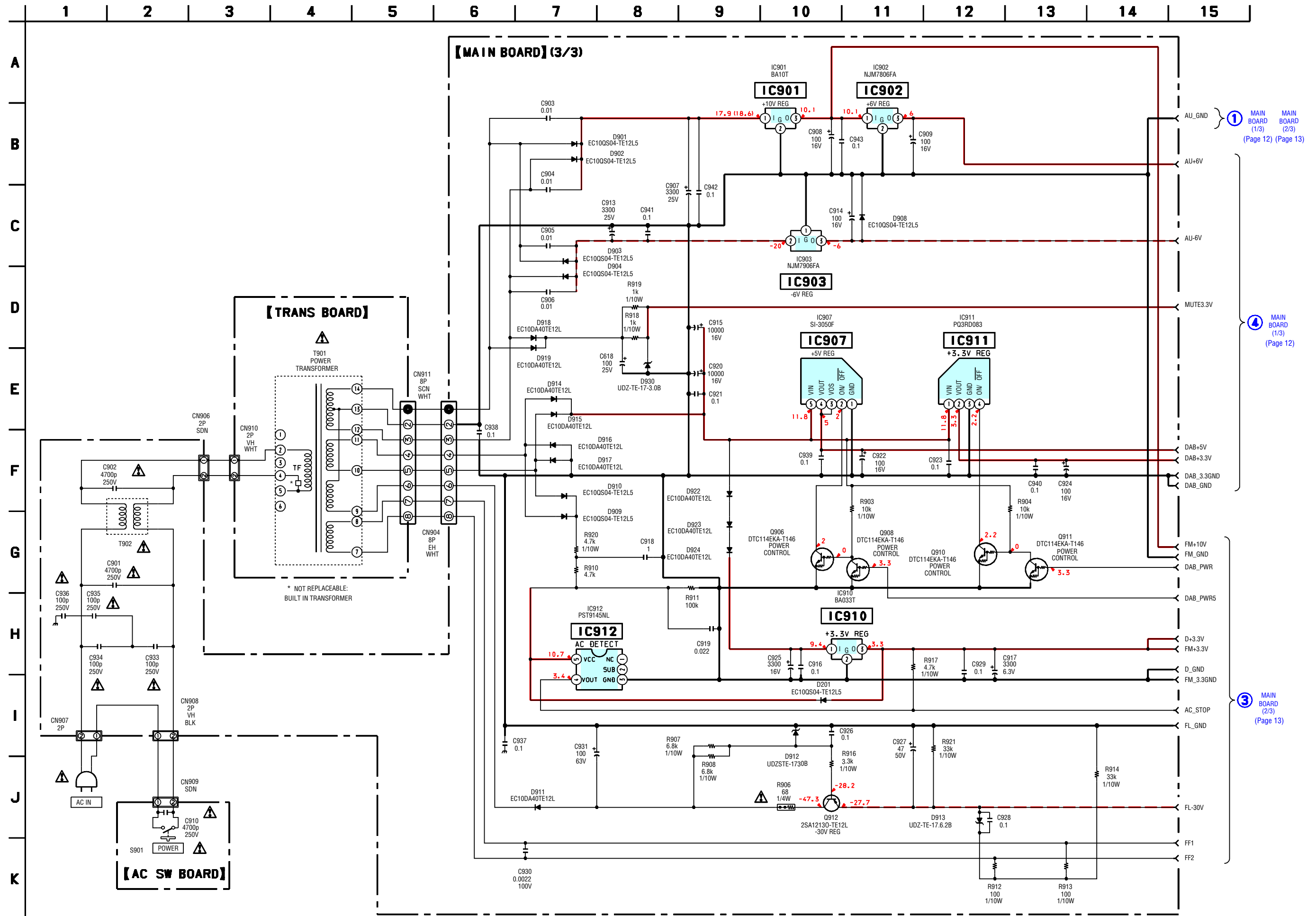
Ref. No.	Location
D101	E-2
D102	E-3
D103	E-3
D104	E-2
D105	E-2
D201	B-7
D901	B-6
D902	B-6
D903	B-7
D904	B-7
D908	C-6
D909	B-7
D911	B-8
D912	C-8
D913	B-9
D914	B-8
D915	B-8
D916	B-8
D917	B-8
D919	B-8
D922	C-8
D923	C-7
D924	C-7
IC200	D-3
IC202	D-3
IC203	D-3
IC301	G-7
IC401	E-2
IC901	B-6
IC902	B-5
IC903	B-6
IC907	E-5
IC910	C-7
IC911	E-7
IC912	B-7
Q151	E-2
Q200	D-2
Q250	E-2
Q912	C-9



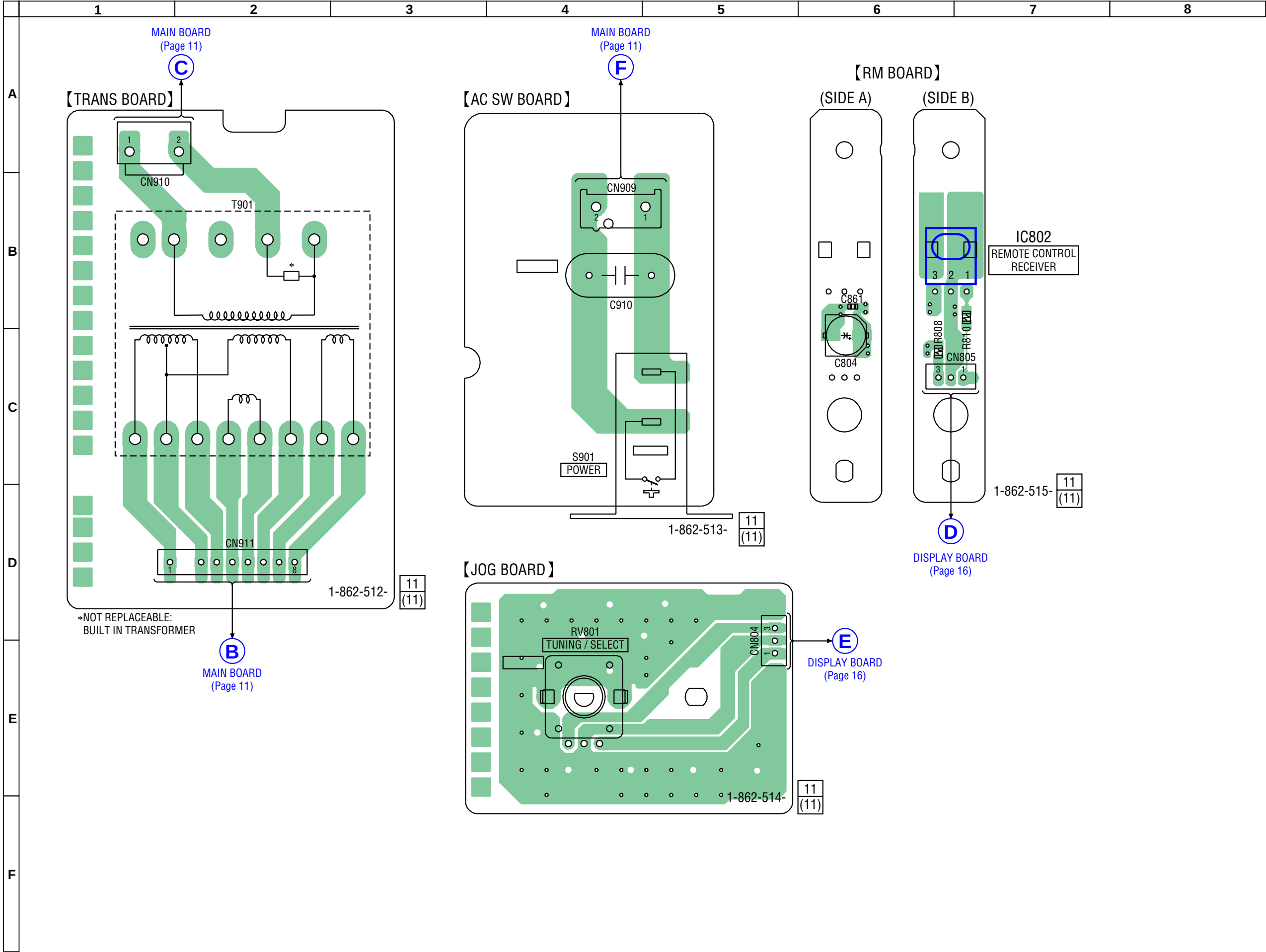
13

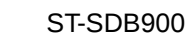


3-6. SCHEMATIC DIAGRAM — MAIN BOARD (3/3) —

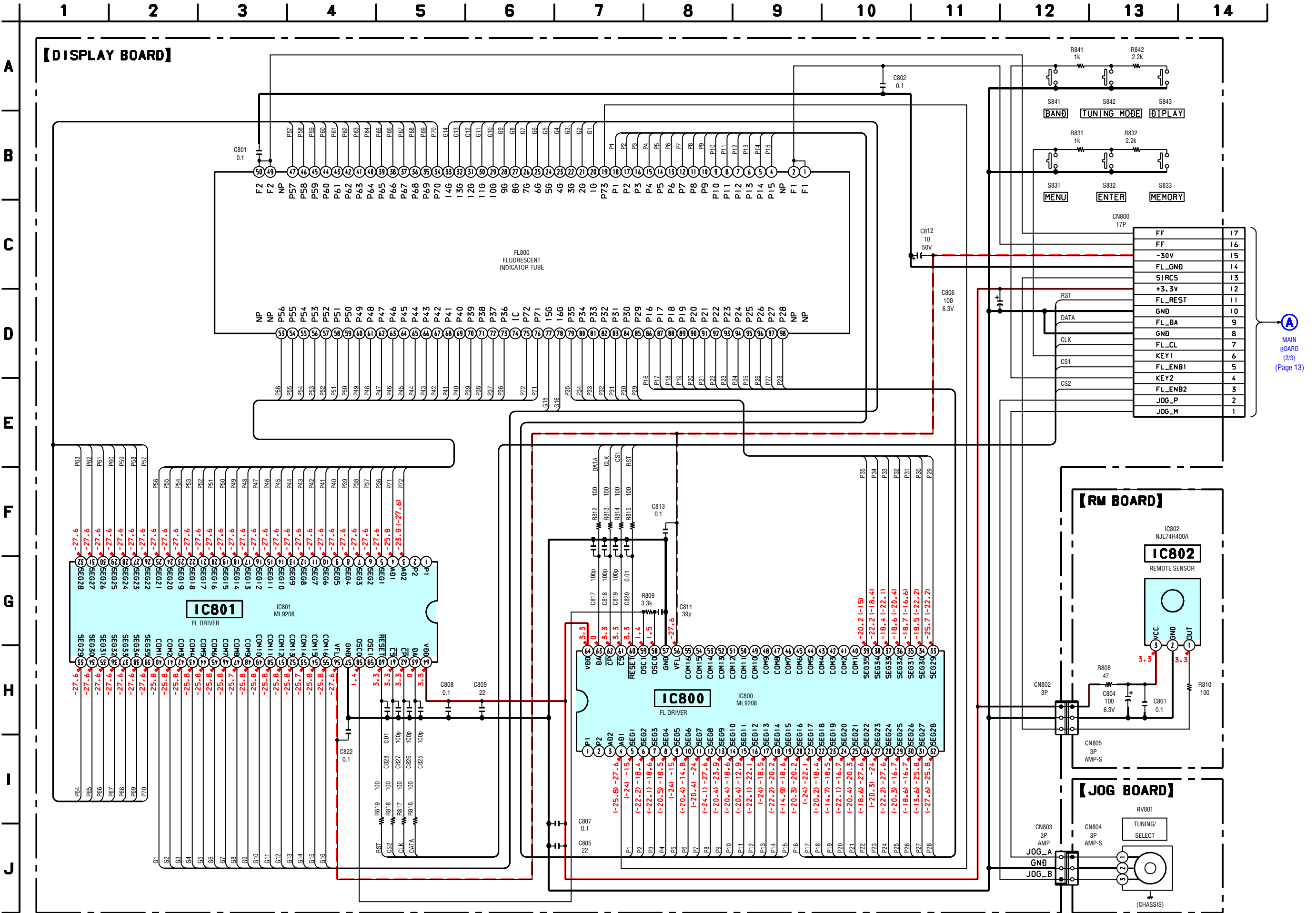


3-7. PRINTED WIRING BOARD — TRANS, AC SW, JOG, RM BOARD — • See page 7 for Circuit Boards Location. :Uses unleaded solder.





3-9. SCHEMATIC DIAGRAM — DISPLAY BOARD —



• IC Pin Function Description
MAIN BOARD IC300 MB90478PF-G-184-BNDE1 (SYSTEM CONTROL)

Pin No.	Pin Name	I/O	Description
1	MON0	O	Not used (open)
2	MON1	O	Not used (open)
3	MON2	O	Not used (open)
4	MON3	O	Not used (open)
5	P24	I	Not used (Connected to ground)
6	P25	I	Not used (Connected to ground)
7	P26	I	Not used (Connected to ground)
8	P27	I	Not used (Connected to ground)
9	P30	I	Not used (Connected to ground)
10	PWCONT2	I	Not used (Connected to ground)
11	VSS	—	Ground
12	PWCONT1	I	Not used (Connected to ground)
13	P33	I	Not used (Connected to ground)
14	TUN_DIO1	O	Serial data output to tuner unit
15	TUN_CLK	O	Serial clock output to tuner unit
16	P36	I	Not used (Connected to ground)
17	P37	I	Not used (Connected to ground)
18	P40	I	Not used (Connected to ground)
19	P41	I	Not used (Connected to ground)
20	P42	I	Not used (Connected to ground)
21	P43	I	Not used (Connected to ground)
22	P44	I	Not used (Connected to ground)
23	VCC5	—	Power supply (+3.3V)
24	P46	I	Not used (Connected to ground)
25	P47	I	Not used (Connected to ground)
26	BUSY	O	Busy signal output (Not used)
27	DAB_IO2	I	Serial data input from DAB module
28	DAB_IO1	O	Serial data output to DAB module
29	SCKO	I	UART baud rate clock input (1.8432MHz)
30	DAB_PWR	O	DAB module power(+3.3V) ON/OFF signal output to (H:on,L:off)
31	DAB-PWR5	O	DAB module power ON/OFF signal output to (H:on,L:off)
32	WP	O	Write protect signal output to EEPROM
33	SCL	O	Clock output to EEPROM
34	SDA	I/O	Data input/output to EEPROM
35	AVCC	—	Power supply (+3.3V)
36	AVRH	—	Referenc voltage input (connectrd to +3.3V)
37	AVSS	—	Ground
38	KEY_AD0	I	Key input 0
39	KEY_AD1	I	Key input 1
40	KEY_AD2	I	Key input 2
41	KEY_AD3	I	Key input 3
42	VSS	—	Ground
43	FM_SIG_OUT	I	FM signal intense input
44	X_DUAL	I	DAB band select input (L: Dual band,H:Band 3 only)
45	X_WITH_AMP	I	AMP select input (L:with amp,H:Tuner)
46	X_NOFMAM	I	FMAM /DAB select input (L:DAB only,H:DAB/FMAM)
47	P80	I	Not used (Connected to ground)

Pin No.	Pin Name	I/O	Description
48	AC_STOP	I	AC STOP Detection signal input
49	MD0	—	Mode setting (Fixed at “H”)
50	MD1	—	Mode setting (Fixed at “H”)
51	MD2	—	Mode setting (Fixed at “L”)
52	RDS-INT	I	RDS clock interrupt signal input
53	RDS-DATA	I	RDS data input
54	SIRCS	I	Sircs code input to remote commander
55	P85	I	Not used (Connected to ground)
56	X_NONSEL	I	Not used
57	P87	I	Not used (Connected to ground)
58	P90	I	Not used (Connected to ground)
59	FL_DATA	O	Serial data output to MLP9208
60	FL_CLK	O	Serial clock output to MLP9209
61	FL_RST	O	Reset signal output to MLP9208
62	FL_CS0	O	Cip select signal output to MLP9209
63	FL_CS1	O	Cip select signal output to MLP9210
64	SIRCS2	I	Sircs code input to remote commander
65	P97	I	Not used (Connected to ground)
66	JOG_P	I	Tuning/Select dial CW signal input
67	JOG_M	I	Tuning/Select dial CCW signal input
68	PA2	I	Not used (Connected to ground)
69	PA3	I	Not used (Connected to ground)
70	P50	I	Not used (Connected to ground)
71	P51	I	Not used (Connected to ground)
72	P52	I	Not used (Connected to ground)
73	TUNED	I	Tuned detection inout for auto tuning
74	STEREO	I	Stereo detection inout
75	TUN_MUTING	O	Tuner muting signal output
76	TUN_DIO2	I	Serial data input from tuner
77	RSTX	I	Sysem reset signal input
78	SLATCH	O	Latch signal outout to tuner
79	X1A	—	Not used (open)
80	X0A	—	Not used (Connected to ground)
81	VSS	—	Ground
82	X0	—	Connected to the crystal oscillator (16MHz)
83	X1	—	Connected to the crystal oscillator (16MHz)
84	VCC3	—	Not used (Connected to ground)
85	X_L_MUTING	O	Latch signal output to CPU
86	DABSEL	O	Latch signal input from CPU
87	P02	I	Not used (Connected to ground)
88	P03	I	Not used (Connected to ground)
89	P04	I	Not used (Connected to ground)
90	P05	I	Not used (Connected to ground)
91	P06	I	Not used (Connected to ground)
92	P07	I	Not used (Connected to ground)
93	P10	I	Not used (Connected to ground)
94	P11	I	Not used (Connected to ground)

Pin No.	Pin Name	I/O	Description
95	P12	I	Not used (Connected to ground)
96	P13	I	Not used (Connected to ground)
97	P14	I	Not used (Connected to ground)
98	P15	I	Not used (Connected to ground)
99	P16	I	Not used (Connected to ground)
100	P17	I	Not used (Connected to ground)

SECTION 4
EXPLODED VIEWS

- NOTE:**

 - XX and -X mean standardized parts, so they may have some difference from the original one.
 - Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
 - Color Indication of Appearance Parts

Example:
KNOB, BALANCE (WHITE) . . . (RED)

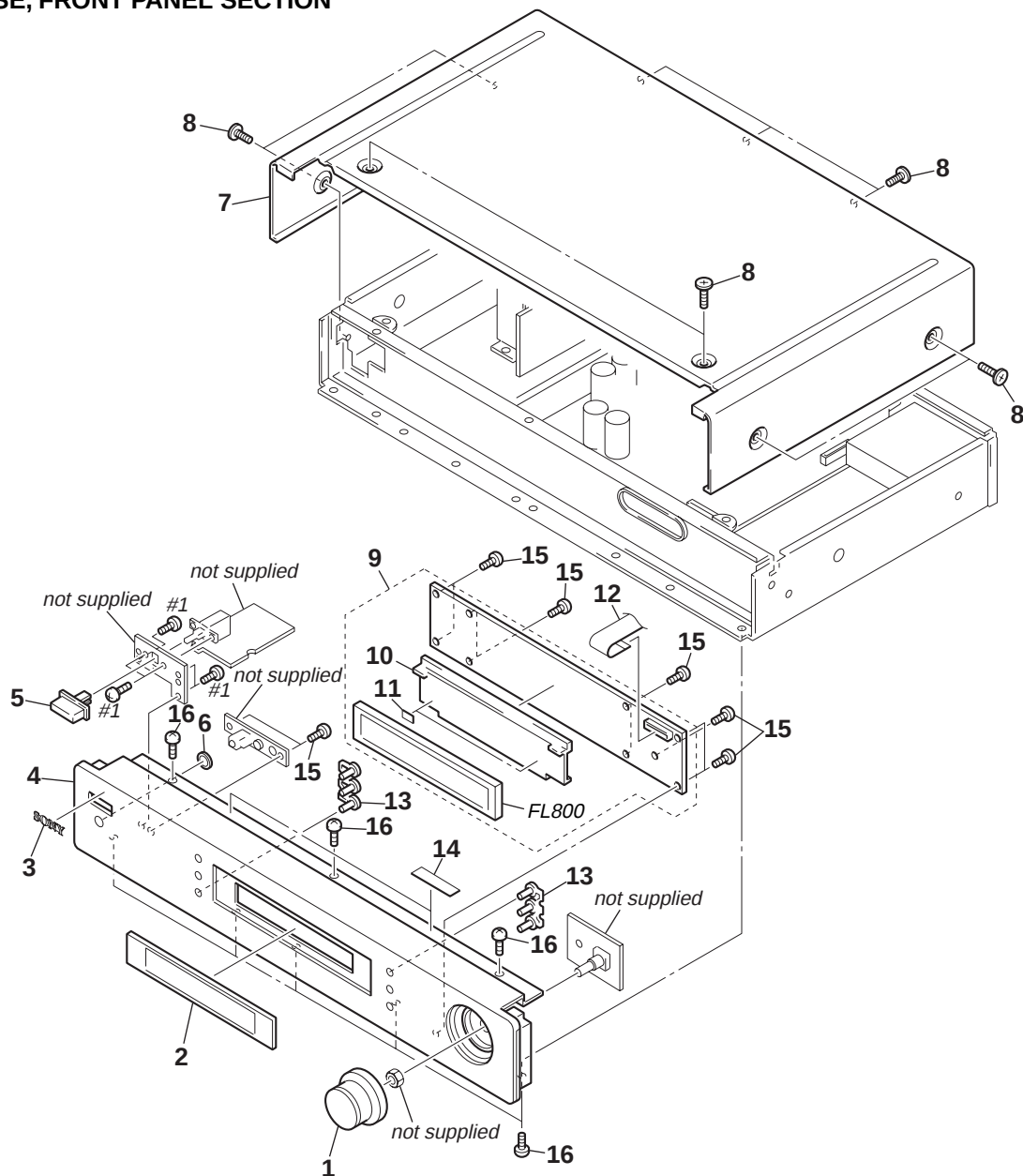
↑

Parts Color

↑

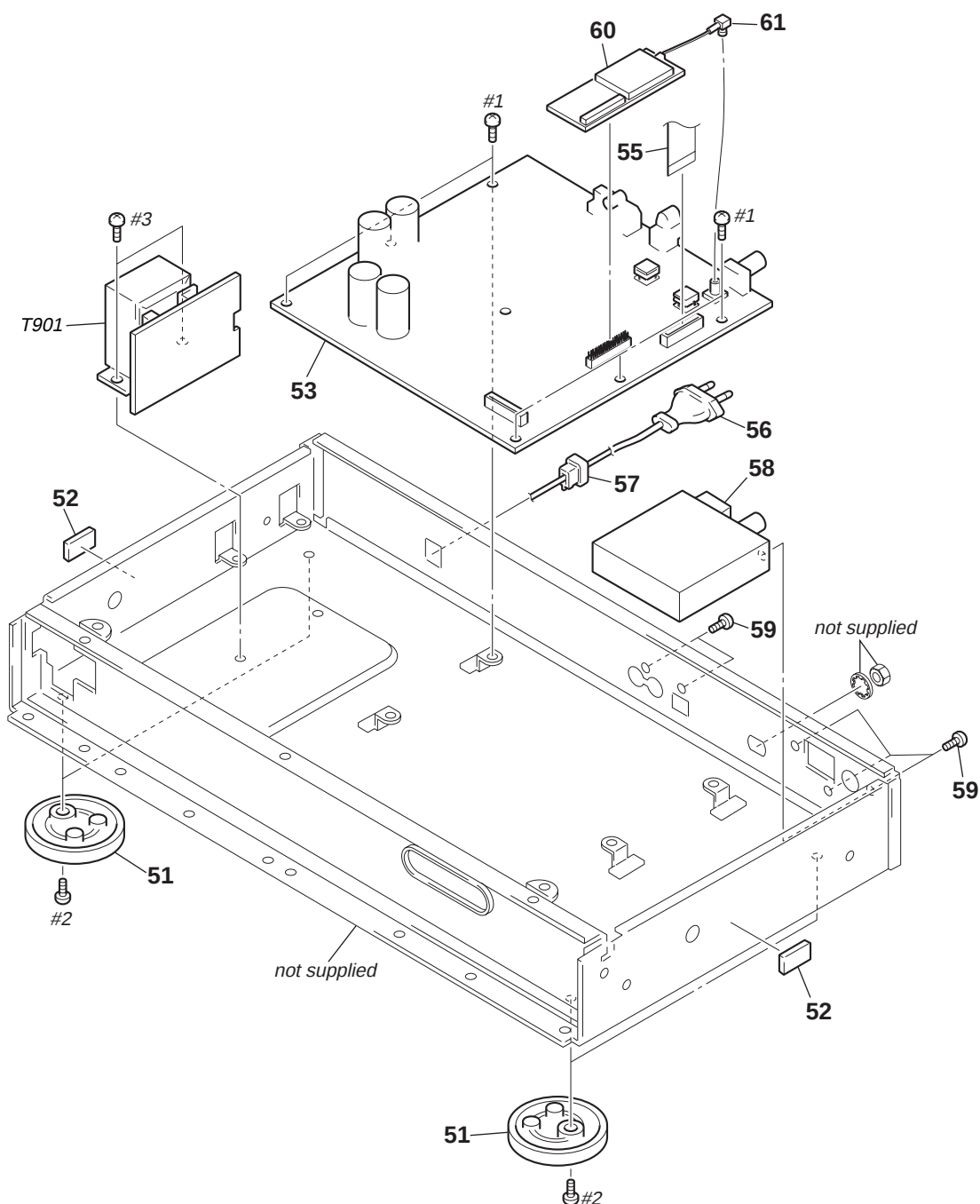
Cabinet's Color
- The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

4-1. CASE, FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	X-2023-286-2	KNOB (VOL) ASSY (BLACK)		8	4-227-843-03	SCREW (TP), FLAT HEAD (BLACK)	
1	X-4956-418-1	KNOB (VOL) ASSY (SILVER)		8	4-227-843-31	SCREW (TP), FLAT HEAD (SILVER)	
2	4-255-036-11	PLATE, INDICATION (SILVER)		9	A-4753-273-A	DISPLAY BOARD, COMPLETE	
2	4-255-036-21	PLATE, INDICATION (BLACK)		10	4-247-095-02	HOLDER (FL)	
3	4-942-568-41	EMBLEM (NO.5), SONY (BLACK)		* 11	4-921-941-11	CUSHION (FL)	
3	4-942-568-61	EMBLEM (NO.5), SONY (SILVER)		12	1-773-044-11	WIRE (FLAT TYPE) (17 CORE)	
4	4-255-034-31	PANEL, FRONT (SILVER)		13	4-255-045-01	BUTTON (DAB) (SILVER)	
4	4-255-034-41	PANEL, FRONT (BLACK)		13	4-255-045-11	BUTTON (DAB) (BLACK)	
5	4-255-041-01	BUTTON (POWER1) (SILVER)		14	4-860-518-00	CUSHION	
5	4-255-041-11	BUTTON (POWER1) (BLACK)		15	4-951-620-01	SCREW (2.6X8), +BVTP	
6	4-255-035-01	CONTROL, REMOTE, WINDOW (SILVER)		16	3-704-515-22	SCREW (BV/RING) (BLACK)	
6	4-255-035-11	CONTROL, REMOTE, WINDOW (BLACK)		16	3-704-515-32	SCREW (BV/RING) (SILVER)	
* 7	4-998-495-02	CASE (407026) (BLACK)		FL800	1-518-998-11	INDICATOR TUBE, FLUORESCENT	
7	4-998-495-41	CASE (407026) (SILVER)		#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	

4-2. CHASSIS SECTION



<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
51	X-4956-420-1	FOOT ASSY		59	4-974-510-11	SCREW (+BV 3X8 CU)	
52	4-985-642-01	CUSHION		60	1-478-669-11	MODULE (DAB TUNER)	
53	A-4753-271-A	MAIN BOARD, COMLETE		61	1-829-260-11	CABLE (WITH CONNECTOR)	
55	1-773-001-11	WIRE (FLAT TYPE) (15 CORE)		△ T901	1-443-338-11	TRANSFORMER, POWER	
△ 56	1-777-071-43	CORD, POWER		#1	7-685-646-79	SCREW +BVPT 3X8 TYPE2 IT-3	
57	4-966-267-04	BUSHING (FBS001), CORD		#2	7-685-881-09	SCREW +BVTT 4X8 (S)	
58	1-693-578-24	TUNER		#3	7-685-880-09	SCREW +BVTT 4X6 (S)	

The components identified by mark $\triangle$ or dotted line with mark $\triangle$ are critical for safety.
Replace only with part number specified.

SECTION 5
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms.
METAL: Metal-film resistor.
METAL OXIDE: Metal oxide-film resistor.
F: nonflammable
- CAPACITORS
uF: μ F
- COILS
uH: μ H
- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
In each case, u: μ , for example:
uA. . : μ A. . uPA. . : μ PA. .
uPB. . : μ PB. . uPC. . : μ PC. .
uPD. . : μ PD. .
- Accessories are given in the last of this parts list.

When indicating parts by reference number, please include the board name.

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
		AC SW BOARD *****				< IC >	
		< CAPACITOR >		IC800	6-705-899-01	IC ML9208-03MBZ03B	
				IC801	6-705-899-01	IC ML9208-03MBZ03B	
		< SWITCH >				< RESISTOR >	
C910	1-117-703-11	CERAMIC	0.0047uF 20% 250V	R809	1-216-827-11	METAL CHIP 3.3K 5% 1/10W	
				R812	1-216-809-11	METAL CHIP 100 5% 1/10W	
S901	1-572-267-21	SWITCH, PUSH (AC POWER) (1 KEY) (POWER)		R813	1-216-809-11	METAL CHIP 100 5% 1/10W	
*****				R814	1-216-809-11	METAL CHIP 100 5% 1/10W	
				R815	1-216-809-11	METAL CHIP 100 5% 1/10W	
A-4753-273-A		DISPLAY BOARD, COMPLETE *****		R816	1-216-809-11	METAL CHIP 100 5% 1/10W	
				R817	1-216-809-11	METAL CHIP 100 5% 1/10W	
				R818	1-216-809-11	METAL CHIP 100 5% 1/10W	
*	4-247-095-02	HOLDER (FL)		R819	1-216-809-11	METAL CHIP 100 5% 1/10W	
	4-921-941-11	CUSHION (FL)		R831	1-216-821-11	METAL CHIP 1K 5% 1/10W	
		< CAPACITOR >		R832	1-216-825-11	METAL CHIP 2.2K 5% 1/10W	
C801	1-115-339-11	CERAMIC CHIP	0.1uF 10% 50V	R841	1-216-821-11	METAL CHIP 1K 5% 1/10W	
C802	1-115-339-11	CERAMIC CHIP	0.1uF 10% 50V	R842	1-216-825-11	METAL CHIP 2.2K 5% 1/10W	
C805	1-100-159-91	CERAMIC CHIP	22uF 10% 6.3V			< SWITCH >	
C806	1-126-206-11	ELECT CHIP	100uF 20% 6.3V	S831	1-771-349-21	SWITCH, KEYBOARD (MENU)	
C807	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	S832	1-771-349-21	SWITCH, KEYBOARD (ENTER)	
C808	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	S833	1-771-349-21	SWITCH, KEYBOARD (MEMORY)	
C809	1-100-159-91	CERAMIC CHIP	22uF 10% 6.3V	S841	1-771-349-21	SWITCH, KEYBOARD (BAND)	
C811	1-162-922-11	CERAMIC CHIP	39PF 5% 50V	S842	1-771-349-21	SWITCH, KEYBOARD (TUNING MODE)	
C812	1-128-991-21	ELECT CHIP	10uF 20% 50V				
C813	1-115-339-11	CERAMIC CHIP	0.1uF 10% 50V	S843	1-771-349-21	SWITCH, KEYBOARD (DISPLAY)	
C817	1-162-927-11	CERAMIC CHIP	100PF 5% 50V	*****			
C818	1-162-927-11	CERAMIC CHIP	100PF 5% 50V			JOG BOARD	
C819	1-162-927-11	CERAMIC CHIP	100PF 5% 50V			*****	
C820	1-107-726-91	CERAMIC CHIP	0.01uF 10% 16V			< VARIABLE RESISTOR >	
C822	1-115-339-11	CERAMIC CHIP	0.1uF 10% 50V				
C825	1-162-927-11	CERAMIC CHIP	100PF 5% 50V	RV801	1-476-980-11	ENCODER (TUNING/SELECT)	
C826	1-162-927-11	CERAMIC CHIP	100PF 5% 50V	*****			
C827	1-162-927-11	CERAMIC CHIP	100PF 5% 50V			A-4753-271-A	MAIN BOARD, COMPLETE
C828	1-107-726-91	CERAMIC CHIP	0.01uF 10% 16V			*****	
		< CONNECTOR >				7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3
CN800	1-784-778-11	CONNECTOR, FFC 17P				< CAPACITOR >	
* CN802	1-568-941-11	PIN, CONNECTOR 3P		C100	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V
* CN803	1-568-941-11	PIN, CONNECTOR 3P		C102	1-165-875-11	CERAMIC CHIP	10uF 10% 10V
		< FLUORESCENT INDICATOR >		C105	1-126-206-11	ELECT CHIP	100uF 20% 6.3V
FL800	1-518-998-11	INDICATOR TUBE, FLUORESCENT					

MAIN

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
C107	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C381	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C108	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V	C382	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C109	1-126-204-11	ELECT CHIP	47uF	20%	16V	C401	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C110	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C408	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C111	1-165-875-11	CERAMIC CHIP	10uF	10%	10V	C409	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C112	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C410	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C113	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C618	1-104-665-11	ELECT	100uF	20%	25V
C114	1-126-206-11	ELECT CHIP	100uF	20%	6.3V	C619	1-104-656-11	ELECT	2200uF	20%	6.3V
C126	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V	△C901	1-117-703-11	CERAMIC	0.0047uF	20%	250V
C127	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V	△C902	1-117-703-11	CERAMIC	0.0047uF	20%	250V
C128	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V	C903	1-164-096-11	CERAMIC	0.01uF		50V
C129	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C904	1-164-096-11	CERAMIC	0.01uF		50V
C130	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C905	1-164-096-11	CERAMIC	0.01uF		50V
C131	1-135-658-11	ELECT	3300uF		6.3V	C906	1-164-096-11	CERAMIC	0.01uF		50V
C132	1-135-658-11	ELECT	3300uF		6.3V	C907	1-124-704-11	ELECT	3300uF	20%	25V
C200	1-130-467-00	MYLAR	470PF	5%	50V	C908	1-126-052-11	ELECT	100uF	20%	50V
C201	1-126-052-11	ELECT	100uF	20%	50V	C909	1-126-052-11	ELECT	100uF	20%	50V
C202	1-127-694-91	ELECT	47uF	20%	25V	C912	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C203	1-106-359-00	MYLAR	0.0047uF	5%	50V	C913	1-124-704-11	ELECT	3300uF	20%	25V
C204	1-104-987-11	MYLAR	0.001uF	5%	200V	C914	1-126-052-11	ELECT	100uF	20%	50V
C205	1-130-495-00	MYLAR	0.1uF	5%	50V	C915	1-126-939-11	ELECT	10000uF	20%	16V
C206	1-130-495-00	MYLAR	0.1uF	5%	50V	C916	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C207	1-130-495-00	MYLAR	0.1uF	5%	50V	C917	1-135-658-11	ELECT	3300uF		6.3V
C208	1-137-605-11	MYLAR	0.01uF	10%	250V	C918	1-107-682-11	CERAMIC CHIP	1uF	10%	16V
C209	1-130-495-00	MYLAR	0.1uF	5%	50V	C919	1-163-037-11	CERAMIC CHIP	0.022uF	10%	50V
C210	1-117-792-11	MYLAR	0.0001uF	5%	50V	C920	1-126-939-11	ELECT	10000uF	20%	16V
C211	1-130-495-00	MYLAR	0.1uF	5%	50V	C921	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C221	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C922	1-126-052-11	ELECT	100uF	20%	50V
C250	1-130-467-00	MYLAR	470PF	5%	50V	C923	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C251	1-126-052-11	ELECT	100uF	20%	50V	C924	1-126-052-11	ELECT	100uF	20%	50V
C252	1-127-694-91	ELECT	47uF	20%	25V	C925	1-126-936-11	ELECT	3300uF	20%	16V
C253	1-106-359-00	MYLAR	0.0047uF	5%	50V	C926	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C254	1-104-987-11	MYLAR	0.001uF	5%	200V	C927	1-126-967-11	ELECT	47uF	20%	50V
C255	1-130-495-00	MYLAR	0.1uF	5%	50V	C928	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C258	1-137-605-11	MYLAR	0.01uF	10%	250V	C929	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C259	1-130-495-00	MYLAR	0.1uF	5%	50V	C930	1-136-816-11	FILM	0.0022uF	5%	100V
C260	1-117-792-11	MYLAR	0.0001uF	5%	50V	C931	1-128-576-11	ELECT	100uF	20%	63V
C261	1-130-495-00	MYLAR	0.1uF	5%	50V	△C933	1-127-776-51	CERAMIC	100PF	10%	250V
C302	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	△C934	1-127-776-51	CERAMIC	100PF	10%	250V
C323	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	△C935	1-127-776-51	CERAMIC	100PF	10%	250V
C327	1-162-923-11	CERAMIC CHIP	47PF	5%	50V	△C936	1-127-776-51	CERAMIC	100PF	10%	250V
C328	1-162-923-11	CERAMIC CHIP	47PF	5%	50V	C937	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C332	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C938	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C333	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C939	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C335	1-126-206-11	ELECT CHIP	100uF	20%	6.3V	C940	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C336	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C941	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C337	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C942	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C338	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V	C943	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C339	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V	< CONNECTOR >					
C343	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	CN300	1-818-488-11	PIN, CONNECTOR (PC BOARD) 44P			
C348	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	CN301	1-784-776-11	CONNECTOR, FFC 15P			
C349	1-162-923-11	CERAMIC CHIP	47PF	5%	50V	CN304	1-784-778-11	CONNECTOR, FFC 17P			
C351	1-162-923-11	CERAMIC CHIP	47PF	5%	50V	* CN306	1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P			
C354	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V	CN904	1-691-770-11	PLUG (MICRO CONNECTOR) 8P			
C366	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V	* CN907	1-580-230-11	PIN, CONNECTOR (PC BOARD) 2P			
C367	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V	CN908	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P			
C377	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V						

The components identified by mark △ or dotted line with mark △ are critical for safety.
Replace only with part number specified.

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
< DIODE >				IC401	6-600-012-01	IC TOTX141L (DAB OPTICAL OUT)	
D101	8-719-049-09	DIODE 1SS367-T3SONY		IC403	8-759-649-33	IC SN74AHCT1G08DCKR	
D102	8-719-049-09	DIODE 1SS367-T3SONY		IC901	8-759-473-41	IC BA10T	
D103	8-719-049-09	DIODE 1SS367-T3SONY		IC902	8-759-332-39	IC uPC24M06HF	
D104	8-719-049-09	DIODE 1SS367-T3SONY		IC903	8-759-701-85	IC NJM7906FA	
D105	8-719-049-09	DIODE 1SS367-T3SONY		IC907	8-749-011-42	IC SI-3050F	
D201	8-719-210-39	DIODE EC10QS-04		IC910	8-759-445-59	IC BA033T	
D901	8-719-210-39	DIODE EC10QS-04		IC911	8-759-648-72	IC PQ3RD083	
D902	8-719-210-39	DIODE EC10QS-04		IC912	8-759-349-11	IC PST9145NL	
D903	8-719-210-39	DIODE EC10QS-04		< JACK >			
D904	8-719-210-39	DIODE EC10QS-04		J201	1-817-603-11	JACK, PIN 2P (ANALOG OUT)	
D908	8-719-210-39	DIODE EC10QS-04		J202	1-816-744-11	CONNECTOR, F TYPE (ANTENNA DAB)	
D909	8-719-210-39	DIODE EC10QS-04		J203	1-818-520-11	SOCKET, CONNECTOR 1P	
D910	8-719-210-39	DIODE EC10QS-04		< COIL >			
D911	8-719-075-77	DIODE EC10DA40-TE12		L400	1-412-058-11	INDUCTOR 10uH	
D912	8-719-083-71	DIODE UdzSTE-1730B		< TRANSISTOR >			
D913	8-719-056-82	DIODE UDZ-TE-17-6.2B		Q151	8-729-027-23	TRANSISTOR DTA114EKA-T146	
D914	8-719-075-77	DIODE EC10DA40-TE12		Q200	8-729-141-73	TRANSISTOR 2SC3624A-T1L15L16	
D915	8-719-075-77	DIODE EC10DA40-TE12		Q201	8-729-027-43	TRANSISTOR DTC114EKA-T146	
D916	8-719-075-77	DIODE EC10DA40-TE12		Q202	8-729-027-43	TRANSISTOR DTC114EKA-T146	
D917	8-719-075-77	DIODE EC10DA40-TE12		Q250	8-729-141-73	TRANSISTOR 2SC3624A-T1L15L16	
D918	8-719-075-77	DIODE EC10DA40-TE12		Q906	8-729-027-43	TRANSISTOR DTC114EKA-T146	
D919	8-719-075-77	DIODE EC10DA40-TE12		Q908	8-729-027-43	TRANSISTOR DTC114EKA-T146	
D922	8-719-075-77	DIODE EC10DA40-TE12		Q910	8-729-027-43	TRANSISTOR DTC114EKA-T146	
D923	8-719-075-77	DIODE EC10DA40-TE12		Q911	8-729-027-43	TRANSISTOR DTC114EKA-T146	
D924	8-719-075-77	DIODE EC10DA40-TE12		Q912	8-729-209-71	TRANSISTOR 2SA12130-TE12L	
D930	6-500-696-01	DIODE UDZSTE-173.0B		< RESISTOR >			
< FERRITE BEAD >				R105	1-216-864-11	SHORT CHIP 0	
FB100	1-469-981-21	INDUCTOR, FERRITE BEAD		R106	1-216-829-11	METAL CHIP 4.7K 5% 1/10W	
FB101	1-469-981-21	INDUCTOR, FERRITE BEAD		R109	1-216-809-11	METAL CHIP 100 5% 1/10W	
FB102	1-469-450-21	INDUCTOR, FERRITE BEAD (3225)		R110	1-216-809-11	METAL CHIP 100 5% 1/10W	
FB103	1-469-450-21	INDUCTOR, FERRITE BEAD (3225)		R111	1-216-817-11	METAL CHIP 470 5% 1/10W	
FB300	1-469-981-21	INDUCTOR, FERRITE BEAD		R113	1-216-809-11	METAL CHIP 100 5% 1/10W	
FB301	1-469-981-21	INDUCTOR, FERRITE BEAD		R114	1-216-809-11	METAL CHIP 100 5% 1/10W	
FB329	1-469-981-21	INDUCTOR, FERRITE BEAD		R115	1-216-809-11	METAL CHIP 100 5% 1/10W	
FB348	1-469-981-21	INDUCTOR, FERRITE BEAD		R116	1-216-791-11	METAL CHIP 3.3 5% 1/10W	
FB377	1-469-981-21	INDUCTOR, FERRITE BEAD		R200	1-208-774-11	METAL CHIP 470 0.5% 1/10W	
< EARTH TERMINAL >				R201	1-216-651-11	METAL CHIP 1K 0.5% 1/10W	
* G101	1-537-738-21	TERMINAL, EARTH		R202	1-208-774-11	METAL CHIP 470 0.5% 1/10W	
* G102	1-537-738-21	TERMINAL, EARTH		R203	1-216-655-11	METAL CHIP 1.5K 0.5% 1/10W	
* G201	1-537-738-21	TERMINAL, EARTH		R204	1-216-655-11	METAL CHIP 1.5K 0.5% 1/10W	
* G202	1-537-738-21	TERMINAL, EARTH		R205	1-216-677-11	METAL CHIP 12K 0.5% 1/10W	
* G901	1-537-738-21	TERMINAL, EARTH		R206	1-208-814-11	METAL CHIP 22K 0.5% 1/10W	
* G902	1-537-738-21	TERMINAL, EARTH		R207	1-216-699-11	METAL CHIP 100K 0.5% 1/10W	
* G903	1-537-738-21	TERMINAL, EARTH		R208	1-216-651-11	METAL CHIP 1K 0.5% 1/10W	
< IC >				R209	1-208-814-11	METAL CHIP 22K 0.5% 1/10W	
IC100	6-702-913-01	IC S-80929CNMC-G8ZT2G		R210	1-208-806-11	METAL CHIP 10K 0.5% 1/10W	
IC200	8-759-447-30	IC NJM2114M-TE2		R211	1-216-687-11	METAL CHIP 33K 0.5% 1/10W	
IC201	8-759-523-02	IC TC74HC4053AFT (EL)		R214	1-216-651-11	METAL CHIP 1K 0.5% 1/10W	
IC202	8-759-710-97	IC NJM4565M-D		R215	1-216-699-11	METAL CHIP 100K 0.5% 1/10W	
IC203	8-759-710-97	IC NJM4565M-D		R216	1-216-627-11	METAL CHIP 100 0.5% 1/10W	
IC300	6-804-388-01	IC MB90478PF-G-184-BNDE1		R217	1-216-833-11	METAL CHIP 10K 5% 1/10W	
IC301	6-704-004-01	IC BR24L16F-WE2					

The components identified by mark $\triangle$ or dotted line with mark $\triangle$ are critical for safety.
Replace only with part number specified.

ST-SDB900

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
△ 56	1-777-071-43	CORD, POWER	
58	1-693-578-24	TUNER	
60	1-478-669-11	MODULE (DAB TUNER)	
61	1-829-260-11	CABLE (WITH CONNECTOR)	
FL800	1-518-998-11	INDICATOR TUBE, FLUORESCENT	
△ T901	1-443-338-11	TRANSFORMER, POWER	

ACCESSORIES

1-478-759-11	COMMANDER, STANDARD (RM-S900D)
1-501-374-12	ANTENNA, LOOP (AM)
1-501-807-12	ANTENNA (FM) (for FM, 1.5m)
1-754-147-11	ANTENNA (FM) (for DAB, 2m)
1-790-735-12	CORD, CONNECTION (AUDIO)
4-255-834-11	MANUAL, INSTRUCTION (ENGLISH)
4-255-834-21	MANUAL, INSTRUCTION (FRENCH, SPANISH, GERMAN, ITALIAN, DUTCH, SWEDISH, POLISH) (AEP)
4-255-834-31	MANUAL, INSTRUCTION (PORTUGUESE, DANISH, FINNISH) (AEP)

The components identified by mark △ or dotted line with mark △ are critical for safety.
Replace only with part number specified.