

# STR-DE315/DE415

## SERVICE MANUAL

AEP Model  
UK Model



Photo : STR-DE415 model

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### SPECIFICATIONS

#### Amplifier section

##### Power output

##### Stereo mode

(DIN 1kHz, 4ohms)  
STR-DE415 :  
80W + 80W  
STR-DE315 :  
80W + 80W

##### Surround mode

(DIN 1kHz, 4ohms)  
Front :  
STR-DE415 : 70W/ch  
STR-DE315 : 60W/ch  
Center :  
STR-DE415 : 70W  
STR-DE315 : 60W  
(only in PROLOG  
MODE)  
Rear :  
STR-DE415 :  
(DIN 1kHz, 4ohms)  
70W  
STR-DE315 :  
(DIN 1kHz, 4ohms)  
60W

##### Frequency response

PHOTO : RIAA  
equalization curve  
± 0.5dB  
TV/LD, CD, TAPE/MD,  
VIDEO :  
10Hz - 50kHz ± 1dB

#### Inputs

	Sensitivity	Impedance	S/N (Weighting network, input level)
<b>PHONO (MM)</b>	2.5mV	50 Kilohms	74dB 72dB*** (A, 2.5mV)
<b>CD,</b>	200mV	50 Kilohms	82dB 82dB*** (A, 150mV)
<b>TAPE/MD, TV/LD, VIDEO</b>	150mV		***78 IHF

#### Output

TAPE/MD REC OUT :  
Voltage : 150mV,  
Impedance : 10 kilohms  
VIDEO AUDIO OUT :  
Voltage : 150mV,  
Impedance : 10 kilohms  
MIX AUDIO  
OUT (STR-DE415 only)  
Voltage : 2V  
Impedance : 10 kilohms  
PHONES : Accepts low  
and high impedance  
headphones

#### Muting

Full mute

#### BASS BOOST

+ 10dB at 70Hz

#### TONE

± 8dB at 100Hz and  
10kHz

#### FM tuner section

##### Tuning range

87.5 - 108.0MHz (OTHER)  
65.0 - 74.0MHz  
(East European)

##### Aerial range

75ohms, unbalanced

##### Sensitivity

Mono : 18.3 dBf, 2.2µV  
/75ohms  
Stereo : 38.3 dBf, 22.5µV  
/75ohms

##### Usable sensitivity

11.2 dBf, 1µV  
/75ohms (IHF)

##### S/N

Mono : 76dB  
Stereo : 70dB

##### Harmonic distortion at 1kHz

Mono : 0.3%  
Stereo : 0.5%

##### Separation

45dB at 1kHz

##### Frequency response

30Hz - 15kHz <sup>+0.5</sup> <sub>-2</sub> dB  
— Continued on next page —

FM STEREO/FM-AM RECEIVER



**SONY**®

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**Selectivity** 60dB at 400kHz

### AM tuner section

**Tuning range** 522 - 1611 kHz

**Aerial** Loop aerial

**Usable sensitivity** 50dB/m (at 999kHz)

**S/N** 54dB (at 50mV/m)

**Harmonic distortion** 0.5% (50mV/m, 400Hz)

**Selectivity** 35dB

### General system

Tuner section : PLL  
quartz-locked digital  
synthesizer system  
Preamplifier section :  
Low-noise NF type  
equalizer  
Power amplifier section :  
Pure-complimentary  
SEPP

**Power requirements** 230VAC, 50/60Hz

**Power consumption** STR-DE415 : 175W  
STR-DE315 : 175W

**AC outputs** Switched 100W  
(except for the U.K.  
model)

**Dimensions** 430 × 145 × 295mm

**Mass (Approx.)** 6.4kg

**Supplied accessories** FM wire aerial (1)  
AM loop aerial (1)  
Remote controller  
(remote) (1)  
Size AA (R6) batteries (2)  
Scart adaptor (1)

Design and specifications are subject to change without notice.

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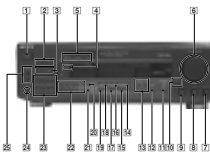
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### SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  $\triangle$  OR DOTTED LINE WITH MARK  $\triangle$  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.

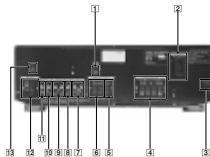
**SECTION 1  
GENERAL**

**LOCATION AND FUNCTION OF CONTROLS  
-FRONT-**



- 1 POWER switch
- 2 CENTER LEVEL +, - buttons
- 3 STANDBY indicator
- 4 MASTER VOLUME control
- 5 BALANCE control
- 6 TREBLE control
- 7 BASS control
- 8 TREBLE BOOST button/indicator
- 9 BASS BOOST button/indicator
- 10 SURROUND ON/OFF button
- 11 MODE button
- 12 EFFECT/DELAY TIME, SET UP buttons
- 13 SUPERMANO button
- 14 PHONO button
- 15 TUNED button
- 16 TUNER button
- 17 STANDBY indicator
- 18 FUNCTION indicators
- 19 CD button
- 20 DIRECT button
- 21 SHIFT button
- 22 Numeric buttons
- 23 Tuner control buttons
- 24 PHONES jack
- 25 SURROUND ON/OFF button
- 26 MODE button
- 27 SPEAKERS (A/B) buttons

**-REAR-**



- 1 WOOFER
- 2 AC OUTLET (EXCEPT UK)
- 3 AC power cord
- 4 FRONT SPEAKERS (A/B)
- 5 SURROUND SPEAKERS (CENTER)
- 6 SURROUND SPEAKERS (REAR)
- 7 VIDEO
- 8 TV/VIDEO
- 9 TUNING
- 10 CD
- 11 PHONO
- 12 ANTENNA (FM/AM)
- 13 SURROUND SPEAKERS (REAR)
- 14 SIGNAL IN

**SECTION 2  
EXPLANATION OF IC TERMINALS**

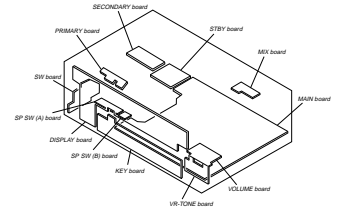
• IC201 (P07804GF-064-389)

Pin No.	Pin Name	I/O	Description
1	DECT	O	
2	DECO	O	
3	DECO	O	
4	DECO	O	Fluorescence indicator tube drive.
5	DECO	O	
6	DECO	O	
7	DECO	O	
8	VCC	—	Power supply (+5V).
9	SYSTEM	I	System clock.
10	SYSTEM	I	System data.
11	PLL_LOCK	I	PLL lock input from TVM01.
12	S_C1647280	O	Chip enable output.
13	S_C1647280	O	Chip enable output.
14	SHAR #	I	Input for model select.
15	SHAR #	I	Processor driver input.
16	POWERUP	I	Processor driver input.
17	RESET	I	System reset terminal.
18	STOP/STOP	I	Auto stop driver input.
19	STOP/STOP	I	System clock input.
20	AVC	—	Ground.
21	SP#	O	Speaker relay drive.
22	SWRBY	O	Speaker Relay.
23	POWER BY	O	Power relay drive.
24	AVC	—	Ground.
25	SIGNAL	I	A/D input signal terminal.
26	ASD	I	A/D input signal terminal.
27	ASD	I	A/D input signal terminal.
28	ASD	I	A/D input signal terminal.
29	AVDD	—	Power supply (+5V).
30	AV REF	—	Reference voltage (+5V).
31	AVDD	—	Ground.
32	NC	—	Not used (Open).
33	Vcc	—	Ground.
34	X1	I	System clock (4.096MHz).
35	X2	O	System clock (4.096MHz).
36	IC_MUTE	O	Mute drive output for SPEASIVE (IC701).
37	PHONO_LED	O	Phono LED.
38	SHAR#_LED	O	SHAR# LED.
39	SHAR#_LED	O	SHAR# LED.
40	IC_MUTE	O	Tuner mute drive output.

Pin No.	Pin Name	I/O	Description
41	VCC1_MP_UP	O	Volume up.
42	VOLUME_DOWN	O	Volume down.
43	STANDBY	O	Standby LED drive.
44	SVX_POWER	I	System power ON/OFF.
45	RES_CLK_IN	I	RES clock input.
46	RES_CLK_IN	I	RES clock input.
47	STOP	I	Stop signal input from NMC1010 (IC700).
48	Vcc	—	Ground.
49	SHAR#	I	Shar signal input.
50	POWER UP	I	Power on/off input terminal.
51	VCC_LED	—	VCC LED drive.
52	V	—	Power supply (+5V).
53	BASS_BOOST	I	Bass boost LED drive.
54	FMIC_MUTE	O	FM mute drive.
55	SR_MUTE	O	SR mute drive.
56	VIDEO_IN	I	Input for model select.
57	SL4	I	Key in 4.
58	SL3	I	Key in 3.
59	SL2	I	Key in 2.
60	SL1	I	Key in 1.
61	SR_MUTE	O	SR mute drive.
62	SL4	O	Key out 4.
63	SL4	O	Key out 4.
64	SL3	O	Key out 3.
65	SL2	O	Key out 2.
66	SL1	O	Key out 1.
67	SR_MUTE	O	SR mute drive.
68	SR	O	Key out 5.
69	SR	O	Key out 6.
70	SR	O	Key out 7.
71	VLAND	—	Connect to -24V.
72	SR	O	Key out 8.
73	SR	O	Key out 9.
74	SR	O	Key out 4.
75	SR	O	Key out 5.
76	SR	O	Key out 6.
77	SR	O	Key out 7.
78	SR	O	Key out 8.
79	DECO	O	Fluorescence indicator tube drive.
80	DECO	O	Fluorescence indicator tube drive.

**SECTION 3  
DIAGRAMS**

**3-1. CIRCUIT BOARDS LOCATION**

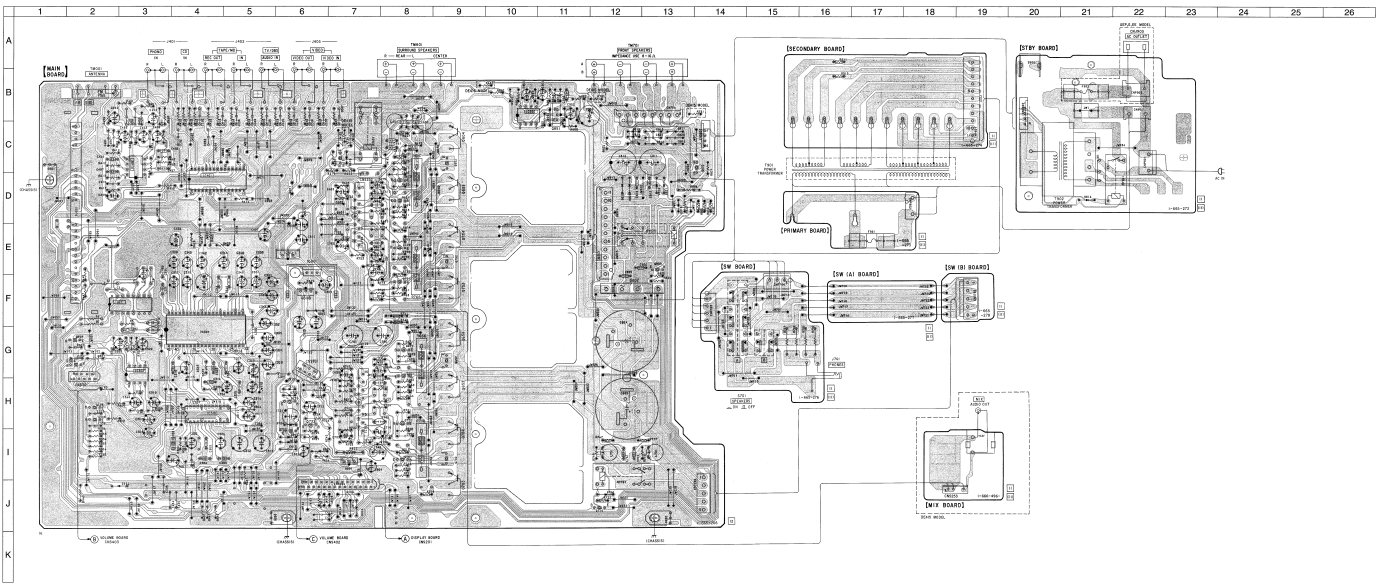


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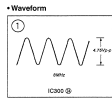
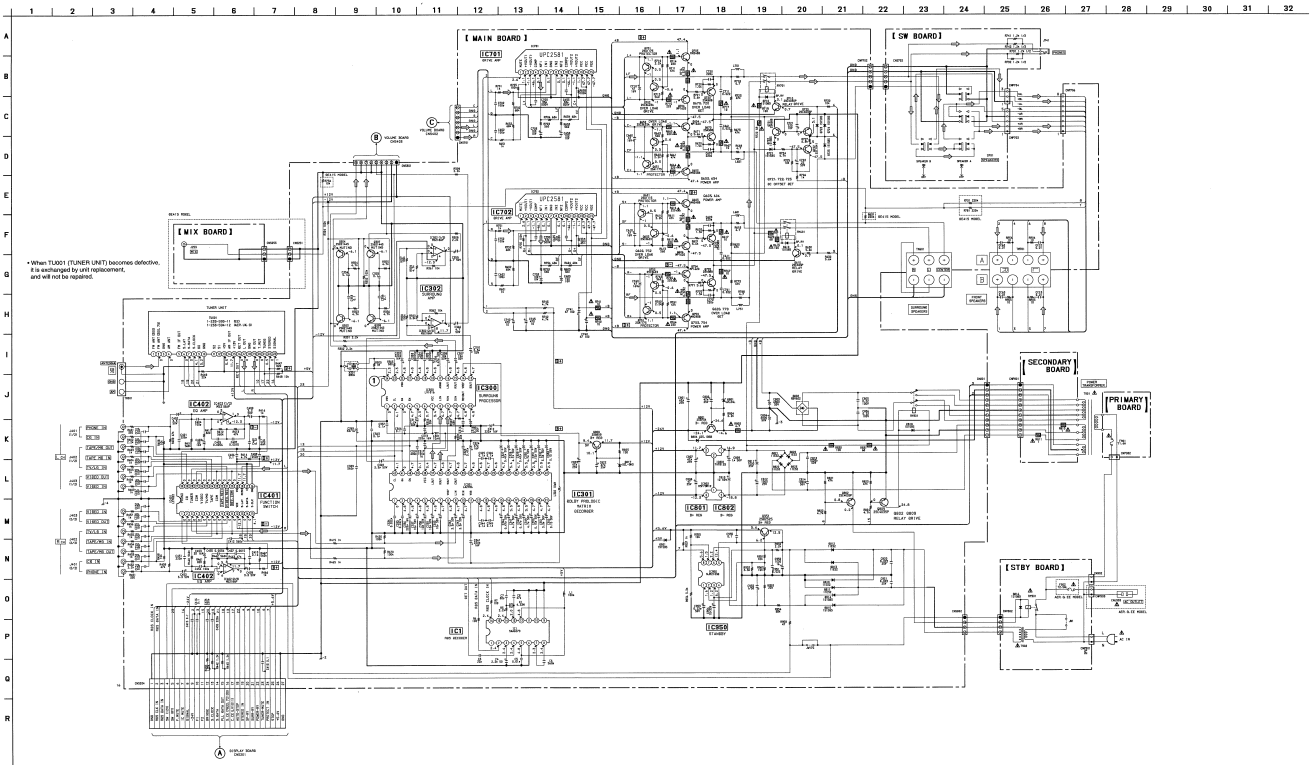
3-2. PRINTED WIRING BOARDS — MAIN SECTION —

Semiconductor Location			
Ref. No.	Location	Ref. No.	Location
D610	C-7	Q503	B-2
D710	B-2	Q504	G-2
D721	B-4	Q507	G-2
D722	B-4	Q508	B-2
D723	A-6	Q501	D-4
D724	A-6	Q502	C-9
D725	A-6	Q505	D-9
D801	A-6	Q506	C-9
D802	F-2	Q509	C-7
D804	F-7	Q509	D-4
D810	C-16	Q51	B-4
D811	C-15	Q502	G-9
D812	C-15	Q51	B-9
D813	C-15	Q504	G-9
D814	C-15	Q509	G-9
D815	C-12	Q701	B-8
D816	D-21	Q702	A-9
D817	F-6	Q705	A-9
D818	D-13	Q706	B-8
D821	D-13	Q709	B-4
D822	B-2	Q71	B-4
D823	B-12	Q712	A-4
D824	F-2	Q713	A-4
K1	F-3	Q714	B-4
K200	B-4	Q715	B-9
K201	G-4	Q716	B-9
K202	G-3	Q719	B-8
K203	B-4	Q814	B-4
K204	B-3	Q81	B-14
K205	B-7	Q88	F-6
K206	B-7	Q89	F-13
K207	B-4	Q91	B-11
K208	B-4		
K209	B-10		

Note:  
 \* Parts extracted from the component side.  
 \* Asterisk (\*) Pattern on the side which is seen.  
 EE - East European  
 G - German



3-3. SCHEMATIC DIAGRAM — MAIN SECTION — Refer to page 15 for IC Block Diagrams.



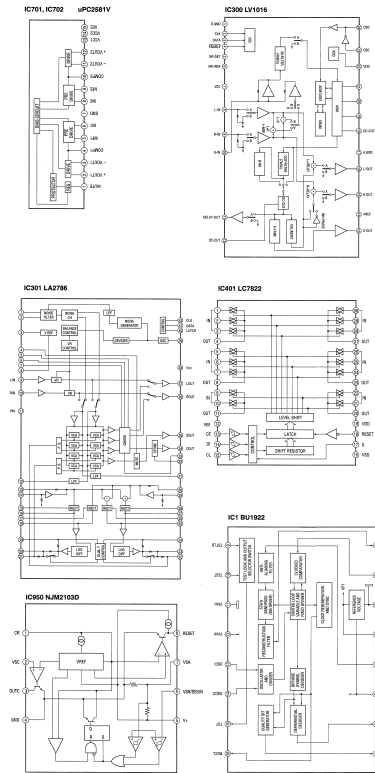
**Note:**

- All dimensions are in  $\mu$ m unless otherwise noted.  $\mu$  =  $\mu$ m,  $\mu$ WV =  $\mu$ V,  $\mu$  =  $\mu$  unless not indicated except for electrolytic and tantalum.
- All resistors are in  $\Omega$ ,  $k$  or  $M$  unless otherwise specified.
- $\odot$  : Internal component.
- $\square$  : In-line.
- $\square$  : In-line.
- Capacitors and waveforms are in  $\mu$  with respect to ground under no-signal (stand-by) conditions. Not marked  $\mu$ .
- $\square$  : AM.
- Waveforms are taken with a VOM (input impedance  $10M\Omega$ ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a rectifier. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- $\square$  : IFT.
- $\square$  : Antenna.
- $\square$  : Cabinet.
- $\square$  : East European.

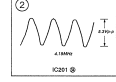
The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

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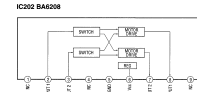
• IC BLOCK DIAGRAMS — MAIN SECTION —



• Waveform



• IC BLOCK DIAGRAM — DISPLAY SECTION —



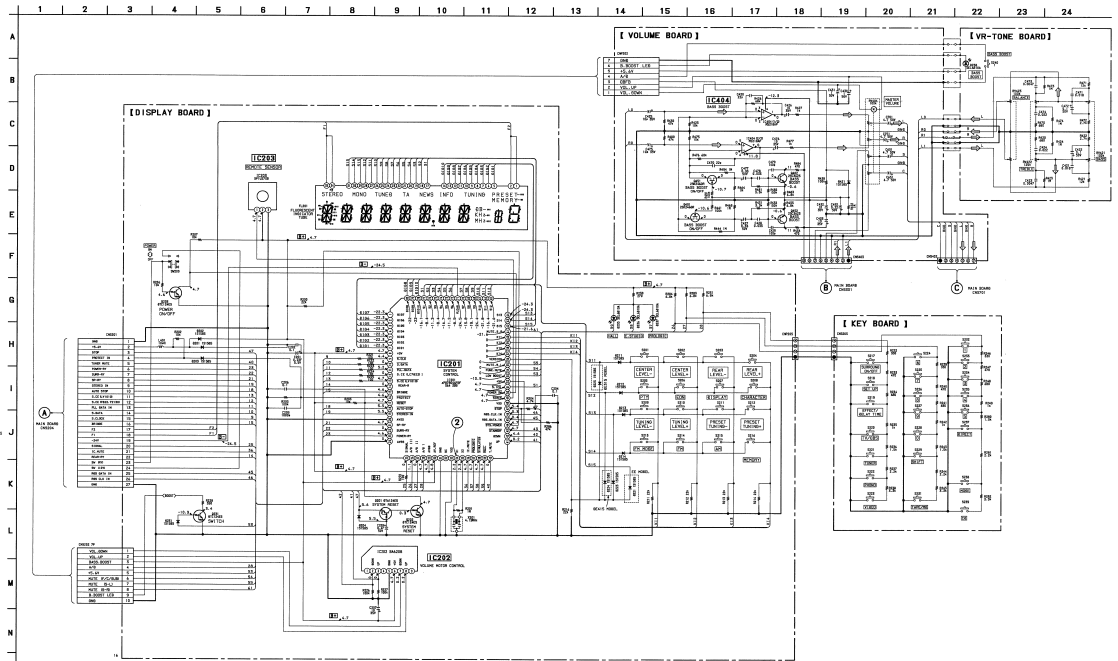
Note:

- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\mu\text{F} < 100\text{V}$  or less are not indicated except for electrolytic and tantalum.
- All resistors are in  $\Omega$  and  $100\text{k}$  or less unless otherwise specified.
- $\Delta$  : External component.
- $\square$  : Pin 1 line.
- $\square$  : 0 - Low.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.

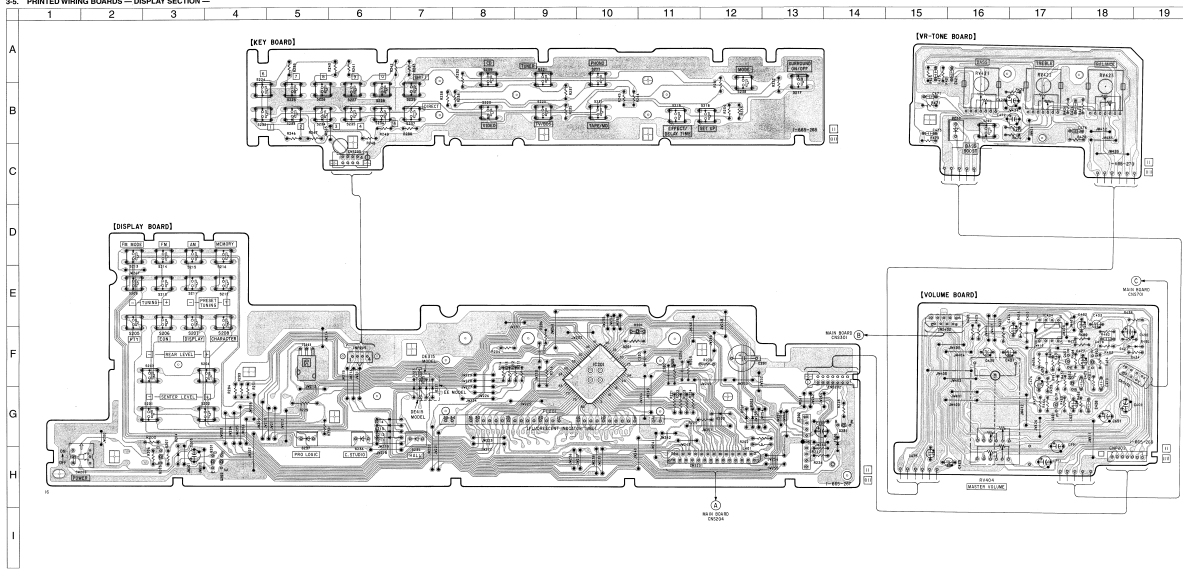
Reference: P14

- Voltages are taken with a VOM (input impedance  $10\text{k}\Omega$ ). 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.
- Circuit numbers refer to assemblies.
- Signal path:  $\rightarrow$  PA
- $\Delta$  : Attention
- EE: East European

3-4. SCHEMATIC DIAGRAM — DISPLAY SECTION —



35. PRINTED WIRING BOARDS — DISPLAY SECTION —



**Semiconductor Location**

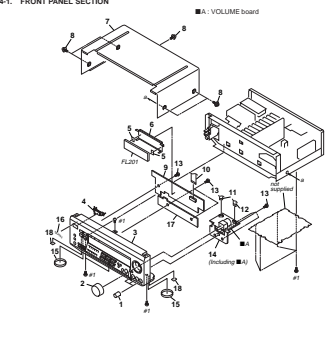
Ref. No.	Location	Ref. No.	Location
D001	G-12	D029	B-36
D002	G-12	D031	F-19
D003	G-12	D032	G-19
D004	B-3	D033	F-10
D005	G-7	D034	F-5
D006	G-7	D035	F-17
D007	G-7	D036	F-17
D008	G-7	D037	F-17
D009	G-7	D038	F-17
D010	G-7	D039	F-17
D011	F-7	D040	B-4
D012	F-7	D041	B-4
D013	F-7	D042	B-4
D014	F-7	D043	B-4
D015	F-7	D044	B-4
D016	F-7	D045	B-4
D017	F-7	D046	B-4
D018	F-7	D047	B-4
D019	F-7	D048	B-4
D020	F-7	D049	B-4
D021	F-7	D050	B-4
D022	F-7	D051	B-4
D023	F-7	D052	B-4
D024	F-7	D053	B-4
D025	F-7	D054	B-4
D026	F-7	D055	B-4
D027	F-7	D056	B-4
D028	F-7	D057	B-4

**Note:**  
 - Points extracted from the component side.  
 - Pattern on the side which is blank.  
 - Approximate.  
 - East European

### SECTION 4 EXPLODED VIEWS

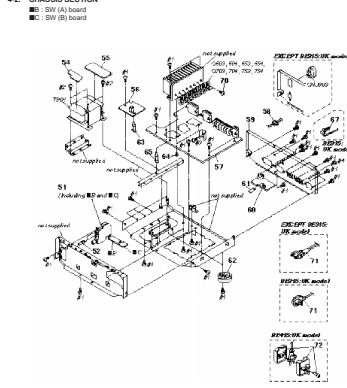
- XXX - Non-manufactured parts, or they may have some differences from the original one.
- Parts marked with \* are not included in the kit.
- Parts marked with \*\* are not included in the kit, they are sold separately.
- Parts marked with \*\*\* are not included in the kit, they are sold separately.
- Parts marked with \*\*\*\* are not included in the kit, they are sold separately.
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#### 4.1. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Quantity
1	4-090-010-01	KNIFE SWITCH	1
2	4-090-010-01	KNIFE SWITCH	1
3	4-090-010-01	KNIFE SWITCH	1
4	4-090-010-01	KNIFE SWITCH	1
5	4-090-010-01	KNIFE SWITCH	1
6	4-090-010-01	KNIFE SWITCH	1
7	4-090-010-01	KNIFE SWITCH	1
8	4-090-010-01	KNIFE SWITCH	1
9	4-090-010-01	KNIFE SWITCH	1
10	4-090-010-01	KNIFE SWITCH	1
11	4-090-010-01	KNIFE SWITCH	1
12	4-090-010-01	KNIFE SWITCH	1
13	4-090-010-01	KNIFE SWITCH	1
14	4-090-010-01	KNIFE SWITCH	1
15	4-090-010-01	KNIFE SWITCH	1
16	4-090-010-01	KNIFE SWITCH	1
17	4-090-010-01	KNIFE SWITCH	1
18	4-090-010-01	KNIFE SWITCH	1
19	4-090-010-01	KNIFE SWITCH	1
20	4-090-010-01	KNIFE SWITCH	1

### 4.2. CHASSIS SECTION



Ref. No.	Part No.	Description	Quantity
1	4-090-010-01	KNIFE SWITCH	1
2	4-090-010-01	KNIFE SWITCH	1
3	4-090-010-01	KNIFE SWITCH	1
4	4-090-010-01	KNIFE SWITCH	1
5	4-090-010-01	KNIFE SWITCH	1
6	4-090-010-01	KNIFE SWITCH	1
7	4-090-010-01	KNIFE SWITCH	1
8	4-090-010-01	KNIFE SWITCH	1
9	4-090-010-01	KNIFE SWITCH	1
10	4-090-010-01	KNIFE SWITCH	1
11	4-090-010-01	KNIFE SWITCH	1
12	4-090-010-01	KNIFE SWITCH	1
13	4-090-010-01	KNIFE SWITCH	1
14	4-090-010-01	KNIFE SWITCH	1
15	4-090-010-01	KNIFE SWITCH	1
16	4-090-010-01	KNIFE SWITCH	1
17	4-090-010-01	KNIFE SWITCH	1
18	4-090-010-01	KNIFE SWITCH	1
19	4-090-010-01	KNIFE SWITCH	1
20	4-090-010-01	KNIFE SWITCH	1

### SECTION 5 ELECTRICAL PARTS LIST

Ref. No.	Part No.	Description	Quantity	Ref. No.	Part No.	Description	Quantity
1	4-090-010-01	KNIFE SWITCH	1	101	4-090-010-01	KNIFE SWITCH	1
2	4-090-010-01	KNIFE SWITCH	1	102	4-090-010-01	KNIFE SWITCH	1
3	4-090-010-01	KNIFE SWITCH	1	103	4-090-010-01	KNIFE SWITCH	1
4	4-090-010-01	KNIFE SWITCH	1	104	4-090-010-01	KNIFE SWITCH	1
5	4-090-010-01	KNIFE SWITCH	1	105	4-090-010-01	KNIFE SWITCH	1
6	4-090-010-01	KNIFE SWITCH	1	106	4-090-010-01	KNIFE SWITCH	1
7	4-090-010-01	KNIFE SWITCH	1	107	4-090-010-01	KNIFE SWITCH	1
8	4-090-010-01	KNIFE SWITCH	1	108	4-090-010-01	KNIFE SWITCH	1
9	4-090-010-01	KNIFE SWITCH	1	109	4-090-010-01	KNIFE SWITCH	1
10	4-090-010-01	KNIFE SWITCH	1	110	4-090-010-01	KNIFE SWITCH	1
11	4-090-010-01	KNIFE SWITCH	1	111	4-090-010-01	KNIFE SWITCH	1
12	4-090-010-01	KNIFE SWITCH	1	112	4-090-010-01	KNIFE SWITCH	1
13	4-090-010-01	KNIFE SWITCH	1	113	4-090-010-01	KNIFE SWITCH	1
14	4-090-010-01	KNIFE SWITCH	1	114	4-090-010-01	KNIFE SWITCH	1
15	4-090-010-01	KNIFE SWITCH	1	115	4-090-010-01	KNIFE SWITCH	1
16	4-090-010-01	KNIFE SWITCH	1	116	4-090-010-01	KNIFE SWITCH	1
17	4-090-010-01	KNIFE SWITCH	1	117	4-090-010-01	KNIFE SWITCH	1
18	4-090-010-01	KNIFE SWITCH	1	118	4-090-010-01	KNIFE SWITCH	1
19	4-090-010-01	KNIFE SWITCH	1	119	4-090-010-01	KNIFE SWITCH	1
20	4-090-010-01	KNIFE SWITCH	1	120	4-090-010-01	KNIFE SWITCH	1



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
C345	1-136-165-00	FILM	0.1uF 5%	50V	C721	1-126-923-11	ELECT 220uF 20% 10V
C346	1-126-959-11	ELECT	0.47uF 20%	50V	C722	1-126-964-11	ELECT 10uF 20% 50V
C347	1-126-963-11	ELECT	4.7uF 20%	50V	C740	1-128-562-11	ELECT 47uF 20% 100V
C348	1-126-959-11	ELECT	0.47uF 20%	50V	C741	1-128-562-11	ELECT 47uF 20% 100V
C349	1-126-963-11	ELECT	4.7uF 20%	50V	C742	1-126-925-11	ELECT 470uF 20% 10V
C350	1-124-250-11	ELECT	0.15uF 20%	50V	C743	1-126-925-11	ELECT 470uF 20% 10V
C351	1-126-962-11	ELECT	3.3uF 20%	50V	C752	1-162-282-31	CERAMIC 100PF 10% 50V
C352	1-124-250-11	ELECT	0.15uF 20%	50V	C753	1-126-933-11	ELECT 100uF 20% 10V
C353	1-164-159-21	CERAMIC	0.1uF	50V	C755	1-102-233-00	CERAMIC 33PF 10% 500V
C354	1-164-159-21	CERAMIC	0.1uF	50V	C760	1-126-967-11	ELECT 47uF 20% 16V
C355	1-164-159-21	CERAMIC	0.1uF	50V	C761	1-137-372-11	FILM 0.022uF 5% 50V
C356	1-164-159-21	CERAMIC	0.1uF	50V	C770	1-162-286-21	CERAMIC 220PF 10% 50V
C357	1-164-159-21	CERAMIC	0.1uF	50V	C799	1-164-159-21	CERAMIC 0.1uF 50V
C359	1-126-963-11	ELECT	4.7uF 20%	50V	C801	1-104-664-11	ELECT 47uF 20% 25V
C360	1-126-963-11	ELECT	4.7uF 20%	50V	C802	1-104-664-11	ELECT 47uF 20% 25V
C363	1-164-159-21	CERAMIC	0.1uF	50V	C803	1-128-506-11	ELECT 6800uF 20% 50V
C365	1-126-966-11	ELECT	33uF 20%	16V	C804	1-128-506-11	ELECT 6800uF 20% 50V
C366	1-164-159-21	CERAMIC	0.1uF	50V	C805	1-130-781-00	FILM 0.22uF 10% 100V
C401	1-162-286-21	CERAMIC	220PF 10%	50V	C806	1-130-781-00	FILM 0.22uF 10% 100V
C402	1-126-962-11	ELECT	3.3uF 20%	50V	C807	1-104-664-11	ELECT 47uF 20% 25V
C403	1-126-966-11	ELECT	33uF 20%	16V	C808	1-104-664-11	ELECT 47uF 20% 25V
C404	1-162-282-31	CERAMIC	100PF 10%	50V	C809	1-126-960-11	ELECT 1uF 20% 50V
C405	1-137-459-11	FILM	0.0056uF 5%	100V	C810	1-126-960-11	ELECT 1uF 20% 50V
C406	1-164-159-21	CERAMIC	0.1uF	50V	C811	1-126-942-61	ELECT 1000uF 20% 25V
C407	1-137-365-11	FILM	0.0015uF 5%	50V	C812	1-126-942-61	ELECT 1000uF 20% 25V
C408	1-162-294-31	CERAMIC	0.001uF 10%	50V	C813	1-101-001-00	CERAMIC 0.001uF 50V
C409	1-126-962-11	ELECT	3.3uF 20%	50V	C814	1-101-001-00	CERAMIC 0.001uF 50V
C410	1-164-159-21	CERAMIC	0.1uF	50V	C820	1-161-494-00	CERAMIC 0.022uF 25V
C412	1-162-291-31	CERAMIC	560PF 10%	50V	C821	1-161-494-00	CERAMIC 0.022uF 25V
C413	1-164-159-21	CERAMIC	0.1uF	50V	C822	1-104-664-11	ELECT 47uF 20% 25V
C415	1-164-159-21	CERAMIC	0.1uF	50V	C823	1-104-664-11	ELECT 47uF 20% 25V
C416	1-164-159-21	CERAMIC	0.1uF	50V	C950	1-126-767-11	ELECT 1000uF 20% 16V
C434	1-162-286-21	CERAMIC	220PF 10%	50V	C951	1-164-097-11	CERAMIC 0.022uF 50V
C435	1-162-286-21	CERAMIC	220PF 10%	50V	C952	1-126-960-11	ELECT 1uF 20% 50V
C451	1-162-286-21	CERAMIC	220PF 10%	50V	C953	1-124-464-11	ELECT 0.22uF 20% 50V
C452	1-126-962-11	ELECT	3.3uF 20%	50V	C954	1-126-096-11	ELECT 10uF 20% 35V
C453	1-126-966-11	ELECT	33uF 20%	16V	C955	1-164-159-21	CERAMIC 0.1uF 50V
C454	1-162-282-31	CERAMIC	100PF 10%	50V	CC01	1-162-282-31	CERAMIC 100PF 10% 50V
C455	1-137-459-11	FILM	0.0056uF 5%	100V	CC02	1-162-282-31	CERAMIC 100PF 10% 50V
C457	1-137-365-11	FILM	0.0015uF 5%	50V	CC03	1-162-282-31	CERAMIC 100PF 10% 50V
C459	1-126-962-11	ELECT	3.3uF 20%	50V	CC04	1-162-282-31	CERAMIC 100PF 10% 50V
C460	1-164-159-21	CERAMIC	0.1uF	50V	CC05	1-162-282-31	CERAMIC 100PF 10% 50V
C602	1-162-282-31	CERAMIC	100PF 10%	50V	CC06	1-162-282-31	CERAMIC 100PF 10% 50V
C603	1-126-933-11	ELECT	100uF 20%	10V	CC07	1-162-282-31	CERAMIC 100PF 10% 50V
C605	1-102-233-00	CERAMIC	33PF 10%	500V	CC51	1-162-282-31	CERAMIC 100PF 10% 50V
C610	1-126-967-11	ELECT	47uF 20%	16V	CC52	1-162-282-31	CERAMIC 100PF 10% 50V
C611	1-137-372-11	FILM	0.022uF 5%	50V	CC53	1-162-282-31	CERAMIC 100PF 10% 50V
C620	1-162-286-21	CERAMIC	220PF 10%	50V	CC54	1-162-282-31	CERAMIC 100PF 10% 50V
C652	1-162-282-31	CERAMIC	100PF 10%	50V	CC55	1-162-282-31	CERAMIC 100PF 10% 50V
C653	1-126-933-11	ELECT	100uF 20%	10V	CC56	1-162-282-31	CERAMIC 100PF 10% 50V
C655	1-102-233-00	CERAMIC	33PF 10%	500V	CC57	1-162-282-31	CERAMIC 100PF 10% 50V
C660	1-126-967-11	ELECT	47uF 20%	16V	< CONNECTOR >		
C661	1-137-372-11	FILM	0.022uF 5%	50V	CNP702	1-750-388-11	PIN, CONNECTOR 5P
C670	1-162-286-21	CERAMIC	220PF 10%	50V	CNP706	1-764-477-11	PIN, CONNECTOR (PC BOARD) 8P
C702	1-162-282-31	CERAMIC	100PF 10%	50V	CNS204	1-569-327-11	SOCKET, CONNECTOR 27P
C703	1-126-933-11	ELECT	100uF 20%	10V	CNS301	1-568-442-11	SOCKET, CONNECTOR 9P
C705	1-102-233-00	CERAMIC	33PF 10%	500V	CNS701	1-568-439-11	SOCKET, CONNECTOR 7P
C710	1-126-967-11	ELECT	47uF 20%	16V	CNS802	1-770-480-11	SOCKET, CONNECTOR PIN 4P
C711	1-137-372-11	FILM	0.022uF 5%	50V			
C720	1-162-286-21	CERAMIC	220PF 10%	50V			

**MAIN**

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
< DIODE >				< TRANSISTOR >			
D610	8-719-815-85	DIODE 1S1585		Q303	8-729-922-37	TRANSISTOR 2SD2144S	
D710	8-719-815-85	DIODE 1S1585		Q304	8-729-922-37	TRANSISTOR 2SD2144S	
D721	8-719-815-85	DIODE 1S1585		Q307	8-729-922-37	TRANSISTOR 2SD2144S	
D722	8-719-815-85	DIODE 1S1585		Q308	8-729-922-37	TRANSISTOR 2SD2144S	
D723	8-719-815-85	DIODE 1S1585		Q601	8-729-119-76	TRANSISTOR 2SA1175-HFE	
D724	8-719-815-85	DIODE 1S1585		Q602	8-729-141-30	TRANSISTOR 2SC3623A-LK	
D725	8-719-815-85	DIODE 1S1585		Q603	8-749-010-25	IC MN2488-OPY-M	
D801	8-719-002-33	DIODE UZL-24L		Q604	8-749-010-26	IC MP1620-OPY-M	
D802	8-719-302-38	DIODE RBV-602-01		Q610	8-729-119-78	TRANSISTOR 2SC403SP-51	
D804	8-719-010-38	DIODE UZ-5.1BSB		Q620	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
D810	8-719-200-82	DIODE 11ES2		Q651	8-729-119-76	TRANSISTOR 2SA1175-HFE	
D811	8-719-200-82	DIODE 11ES2		Q652	8-729-141-30	TRANSISTOR 2SC3623A-LK	
D812	8-719-200-82	DIODE 11ES2		Q653	8-749-010-25	IC MN2488-OPY-M	
D813	8-719-200-82	DIODE 11ES2		Q654	8-749-010-26	IC MP1620-OPY-M	
D814	8-719-815-85	DIODE 1S1585		Q670	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
D815	8-719-815-85	DIODE 1S1585		Q701	8-729-119-76	TRANSISTOR 2SA1175-HFE	
D817	8-719-001-31	DIODE UZL-9H3-TA		Q702	8-729-141-30	TRANSISTOR 2SC3623A-LK	
D818	8-719-815-85	DIODE 1S1585		Q703	8-749-010-25	IC MN2488-OPY-M	
D820	8-719-200-82	DIODE 11ES2		Q704	8-749-010-26	IC MP1620-OPY-M	
D821	8-719-200-82	DIODE 11ES2		Q710	8-729-119-78	TRANSISTOR 2SC403SP-51	
D822	8-719-200-82	DIODE 11ES2		Q720	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
D823	8-719-200-82	DIODE 11ES2		Q721	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
D901	8-719-815-85	DIODE 1S1585		Q722	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
< TERMINAL >				Q723	8-729-119-78	TRANSISTOR 2SC403SP-51	
* G200	1-537-738-21	TERMINAL, EARTH		Q751	8-729-119-76	TRANSISTOR 2SA1175-HFE	
* G201	1-537-738-21	TERMINAL, EARTH		Q752	8-729-141-30	TRANSISTOR 2SC3623A-LK	
* G202	1-537-738-21	TERMINAL, EARTH		Q753	8-749-010-25	IC MN2488-OPY-M	
< IC >				Q754	8-749-010-26	IC MP1620-OPY-M	
IC1	8-759-450-86	IC BU1922		Q770	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
IC300	8-759-442-97	IC LV1016		Q801	8-729-140-97	TRANSISTOR 2SB734-34	
IC301	8-759-442-96	IC LA2786		Q802	8-729-119-78	TRANSISTOR 2SC403SP-51	
IC302	8-759-636-74	IC M5218AP-22		Q808	8-729-180-92	TRANSISTOR 2SD809-K	
IC401	8-759-805-14	IC LC7822		Q809	8-729-119-78	TRANSISTOR 2SC403SP-51	
IC402	8-759-636-74	IC M5218AP-22		Q951	8-729-030-18	TRANSISTOR 2SD2525	
IC701	8-759-326-52	IC uPC2581V		< RESISTOR >			
IC702	8-759-326-52	IC uPC2581V		R5	1-249-421-11	CARBON 2.2K 5%	1/4W F
IC801	8-759-231-58	IC TA7812S		R6	1-247-807-31	CARBON 100 5%	1/4W
IC802	8-759-604-45	IC M5F79M12		R7	1-247-807-31	CARBON 100 5%	1/4W
IC950	8-759-333-83	IC NJM2103D		R300	1-247-903-00	CARBON 1M 5%	1/4W
< JACK >				R301	1-249-421-11	CARBON 2.2K 5%	1/4W F
J401	1-770-614-11	JACK, PIN 4P (PHONO/CD)		R302	1-249-421-11	CARBON 2.2K 5%	1/4W F
J402	1-770-015-11	JACK, PIN 6P (TAPE/MD,TV DBS AUDIO IN)		R303	1-249-439-11	CARBON 68K 5%	1/4W
J403	1-770-614-11	JACK, PIN 4P (VIDEO)		R304	1-249-441-11	CARBON 100K 5%	1/4W
< COIL >				R306	1-249-436-11	CARBON 39K 5%	1/4W
L1	1-410-521-11	INDUCTOR 100uH		R307	1-247-862-11	CARBON 20K 5%	1/4W
L301	1-410-509-11	INDUCTOR 10uH		R308	1-249-421-11	CARBON 2.2K 5%	1/4W F
L302	1-410-509-11	INDUCTOR 10uH		R309	1-249-421-11	CARBON 2.2K 5%	1/4W F
L601	1-420-872-00	COIL, AIR-CORE		R352	1-249-441-11	CARBON 100K 5%	1/4W
L651	1-420-872-00	COIL, AIR-CORE		R353	1-249-425-11	CARBON 4.7K 5%	1/4W F
L701	1-420-872-00	COIL, AIR-CORE		R354	1-249-425-11	CARBON 4.7K 5%	1/4W F
L751	1-420-872-00	COIL, AIR-CORE		R355	1-249-425-11	CARBON 4.7K 5%	1/4W F
				R356	1-249-425-11	CARBON 4.7K 5%	1/4W F
				R357	1-249-441-11	CARBON 100K 5%	1/4W
				R358	1-249-441-11	CARBON 100K 5%	1/4W
				R359	1-249-425-11	CARBON 4.7K 5%	1/4W F

Ref. No.	Part No.	Description	Quantity	Material	Remarks	Ref. No.	Part No.	Description	Quantity	Material	Remarks
R360	1-247-843-11	CARBON	3.3K	5%	1/4W	R620	1-249-419-11	CARBON	1.5K	5%	1/4W F
R361	1-249-429-11	CARBON	10K	5%	1/4W	R621	1-249-426-11	CARBON	5.6K	5%	1/4W
R362	1-249-429-11	CARBON	10K	5%	1/4W	△ R622	1-249-403-11	CARBON	68	5%	1/4W F
R363	1-249-411-11	CARBON	330	5%	1/4W	R623	1-249-437-11	CARBON	47K	5%	1/4W
R401	1-249-411-11	CARBON	330	5%	1/4W	R630	1-249-426-11	CARBON	5.6K	5%	1/4W
R402	1-249-421-11	CARBON	2.2K	5%	1/4W F	R631	1-247-887-00	CARBON	220K	5%	1/4W (DE415)
R403	1-249-417-11	CARBON	1K	5%	1/4W F	R632	1-249-426-11	CARBON	5.6K	5%	1/4W
R404	1-249-417-11	CARBON	1K	5%	1/4W F	R651	1-249-417-11	CARBON	1K	5%	1/4W F
R405	1-249-417-11	CARBON	1K	5%	1/4W F	R652	1-249-439-11	CARBON	68K	5%	1/4W
R406	1-249-417-11	CARBON	1K	5%	1/4W F	R653	1-249-414-11	CARBON	560	5%	1/4W F
R407	1-249-417-11	CARBON	1K	5%	1/4W F	R654	1-249-439-11	CARBON	68K	5%	1/4W
R408	1-249-429-11	CARBON	10K	5%	1/4W	R655	1-249-441-11	CARBON	100K	5%	1/4W
R409	1-249-437-11	CARBON	47K	5%	1/4W	R660	1-249-421-11	CARBON	2.2K	5%	1/4W F
R410	1-247-897-11	CARBON	560K	5%	1/4W	R661	1-249-437-11	CARBON	47K	5%	1/4W
R411	1-249-416-11	CARBON	820	5%	1/4W F	R663	1-249-414-11	CARBON	560	5%	1/4W F
R412	1-247-897-11	CARBON	560K	5%	1/4W	△ R664	1-249-409-11	CARBON	220	5%	1/4W F
R413	1-249-437-11	CARBON	47K	5%	1/4W	△ R665	1-249-409-11	CARBON	220	5%	1/4W F
R414	1-249-425-11	CARBON	4.7K	5%	1/4W F	△ R666	1-233-352-41	ENCAPSULATED COMPONENT			
R415	1-249-417-11	CARBON	1K	5%	1/4W F	△ R667	1-249-393-11	CARBON	10	5%	1/4W F
R416	1-249-417-11	CARBON	1K	5%	1/4W F	R668	1-249-389-11	CARBON	4.7	5%	1/4W F
R417	1-247-897-11	CARBON	560K	5%	1/4W	R670	1-249-419-11	CARBON	1.5K	5%	1/4W F
R420	1-249-441-11	CARBON	100K	5%	1/4W	R671	1-249-426-11	CARBON	5.6K	5%	1/4W
R435	1-249-418-11	CARBON	1.2K	5%	1/4W F	R672	1-249-431-11	CARBON	15K	5%	1/4W
R442	1-249-418-11	CARBON	1.2K	5%	1/4W F	R673	1-249-437-11	CARBON	47K	5%	1/4W
R443	1-249-418-11	CARBON	1.2K	5%	1/4W F	R701	1-249-417-11	CARBON	1K	5%	1/4W F
R447	1-249-416-11	CARBON	820	5%	1/4W F	R702	1-249-439-11	CARBON	68K	5%	1/4W
R448	1-249-429-11	CARBON	10K	5%	1/4W	R703	1-249-414-11	CARBON	560	5%	1/4W F
R449	1-247-863-91	CARBON	22K	5%	1/4W	R704	1-249-439-11	CARBON	68K	5%	1/4W
R451	1-249-411-11	CARBON	330	5%	1/4W	R705	1-249-441-11	CARBON	100K	5%	1/4W
R452	1-249-421-11	CARBON	2.2K	5%	1/4W F	R710	1-249-421-11	CARBON	2.2K	5%	1/4W F
R453	1-249-417-11	CARBON	1K	5%	1/4W F	R711	1-249-437-11	CARBON	47K	5%	1/4W
R454	1-249-417-11	CARBON	1K	5%	1/4W F	R713	1-249-414-11	CARBON	560	5%	1/4W F
R455	1-249-417-11	CARBON	1K	5%	1/4W F	△ R714	1-249-409-11	CARBON	220	5%	1/4W F
R456	1-249-417-11	CARBON	1K	5%	1/4W F	△ R715	1-249-409-11	CARBON	220	5%	1/4W F
R457	1-249-417-11	CARBON	1K	5%	1/4W F	△ R716	1-233-352-41	ENCAPSULATED COMPONENT			
R458	1-249-429-11	CARBON	10K	5%	1/4W	△ R717	1-249-393-11	CARBON	10	5%	1/4W F
R459	1-249-437-11	CARBON	47K	5%	1/4W	R718	1-249-389-11	CARBON	4.7	5%	1/4W F
R460	1-247-897-11	CARBON	560K	5%	1/4W	△ R719	1-249-405-11	CARBON	100	5%	1/4W F
R461	1-249-416-11	CARBON	820	5%	1/4W F	R720	1-249-419-11	CARBON	1.5K	5%	1/4W F
R462	1-247-897-11	CARBON	560K	5%	1/4W	R721	1-249-426-11	CARBON	5.6K	5%	1/4W
R463	1-249-437-11	CARBON	47K	5%	1/4W	△ R722	1-249-403-11	CARBON	68	5%	1/4W F
R465	1-249-417-11	CARBON	1K	5%	1/4W F	R723	1-249-437-11	CARBON	47K	5%	1/4W
R466	1-249-417-11	CARBON	1K	5%	1/4W F	R724	1-249-425-11	CARBON	4.7K	5%	1/4W F
R467	1-247-897-11	CARBON	560K	5%	1/4W	R725	1-249-429-11	CARBON	10K	5%	1/4W
R470	1-249-441-11	CARBON	100K	5%	1/4W	R726	1-249-417-11	CARBON	1K	5%	1/4W F
R473	1-249-437-11	CARBON	47K	5%	1/4W	R727	1-249-427-11	CARBON	6.8K	5%	1/4W F
R601	1-249-417-11	CARBON	1K	5%	1/4W F	R730	1-249-429-11	CARBON	10K	5%	1/4W
R602	1-249-439-11	CARBON	68K	5%	1/4W	R731	1-247-887-00	CARBON	220K	5%	1/4W (DE415)
R603	1-249-414-11	CARBON	560	5%	1/4W F	R734	1-249-429-11	CARBON	10K	5%	1/4W (DE415)
R604	1-249-439-11	CARBON	68K	5%	1/4W	△ R740	1-249-393-11	CARBON	10	5%	1/4W F
R605	1-249-441-11	CARBON	100K	5%	1/4W	△ R741	1-249-393-11	CARBON	10	5%	1/4W F
R610	1-249-421-11	CARBON	2.2K	5%	1/4W F	R742	1-249-425-11	CARBON	4.7K	5%	1/4W F
R611	1-249-437-11	CARBON	47K	5%	1/4W	R743	1-249-425-11	CARBON	4.7K	5%	1/4W F
R613	1-249-414-11	CARBON	560	5%	1/4W F	R751	1-249-417-11	CARBON	1K	5%	1/4W F
△ R614	1-249-409-11	CARBON	220	5%	1/4W F	R752	1-249-439-11	CARBON	68K	5%	1/4W
△ R615	1-249-409-11	CARBON	220	5%	1/4W F						
△ R616	1-233-352-41	ENCAPSULATED COMPONENT									
△ R617	1-249-393-11	CARBON	10	5%	1/4W F						
R618	1-249-389-11	CARBON	4.7	5%	1/4W F						
△ R619	1-249-405-11	CARBON	100	5%	1/4W F						

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**MAIN**   **MIX**   **PRIMARY**   **SECONDARY**   **STBY**

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
R753	1-249-414-11	CARBON	560 5% 1/4W F	*	1-666-496-11	MIX BOARD (DE415)	
R754	1-249-439-11	CARBON	68K 5% 1/4W			*****	
R755	1-249-441-11	CARBON	100K 5% 1/4W			< CONNECTOR >	
R760	1-249-421-11	CARBON	2.2K 5% 1/4W F				
R761	1-249-437-11	CARBON	47K 5% 1/4W				
R763	1-249-414-11	CARBON	560 5% 1/4W F			CNS253 1-691-765-11 PLUG (MICRO CONNECTOR) 3P (DE415)	
△R764	1-249-409-11	CARBON	220 5% 1/4W F			< JACK >	
△R765	1-249-409-11	CARBON	220 5% 1/4W F				
△R766	1-233-352-41	ENCAPSULATED COMPONENT				J253 1-774-843-11 JACK, PIN 1P (MIX)(DE415)	
△R767	1-249-393-11	CARBON	10 5% 1/4W F			*****	
R768	1-249-389-11	CARBON	4.7 5% 1/4W F	*	1-665-273-11	PRIMARY BOARD	
R770	1-249-419-11	CARBON	1.5K 5% 1/4W F			*****	
R771	1-249-426-11	CARBON	5.6K 5% 1/4W				
R772	1-249-431-11	CARBON	15K 5% 1/4W			1-533-233-21 HOLDER, FUSE	
R773	1-249-437-11	CARBON	47K 5% 1/4W			< FUSE >	
R781	1-247-887-00	CARBON	220K 5% 1/4W (DE415)				
△R803	1-249-389-11	CARBON	4.7 5% 1/4W F			△ F901 1-532-259-00 FUSE TIME LAG 1.6A	
R804	1-249-421-11	CARBON	2.2K 5% 1/4W F			*****	
R821	1-249-437-11	CARBON	47K 5% 1/4W	*	1-665-274-11	SECONDARY BOARD	
R822	1-249-425-11	CARBON	4.7K 5% 1/4W F			*****	
R823	1-249-437-11	CARBON	47K 5% 1/4W			< CONNECTOR >	
R824	1-249-425-11	CARBON	4.7K 5% 1/4W F				
R825	1-249-407-11	CARBON	150 5% 1/4W F			CNP801 1-764-480-11 PIN, CONNECTOR (PC BOARD) 11P	
△R830	1-249-405-11	CARBON	100 5% 1/4W F				
△R831	1-249-403-11	CARBON	68 5% 1/4W F			< RESISTOR >	
R950	1-249-421-11	CARBON	2.2K 5% 1/4W F	△R810	1-249-381-11	CARBON	1 5% 1/4W F
R951	1-249-429-11	CARBON	10K 5% 1/4W	△R811	1-249-381-11	CARBON	1 5% 1/4W F
R952	1-247-843-11	CARBON	3.3K 5% 1/4W			*****	
R953	1-247-863-91	CARBON	22K 5% 1/4W	*	1-665-272-11	STBY BOARD	
R954	1-249-439-11	CARBON	68K 5% 1/4W			*****	
R955	1-249-429-11	CARBON	10K 5% 1/4W				
R956	1-247-843-11	CARBON	3.3K 5% 1/4W			1-533-233-11 HOLDER, FUSE	
R957	1-249-417-11	CARBON	1K 5% 1/4W F			< CONNECTOR >	
R958	1-249-401-11	CARBON	47 5% 1/4W F				
R960	1-249-429-11	CARBON	10K 5% 1/4W			CNP802 1-779-495-11 PLUG, CONNECTOR PIN 4P	
		< RELAY >				CNP901 1-564-321-00 PIN, CONNECTOR 2P	
RY601	1-515-921-11	RELAY (12V)				CNP903 1-580-230-11 PIN, CONNECTOR (PC BOARD) 2P (AEP,G,EE)	
RY701	1-515-921-11	RELAY (12V)				< DIODE >	
RY801	1-755-013-11	RELAY					
		< TERMINAL >				D816 8-719-815-85 DIODE 1S1585	
TM1	1-694-266-11	TERMINAL BOARD, ANT (ANTENNA)				< FUSE >	
TM601	1-537-510-11	TERMINAL BOARD (SPEAKER) (6P) (SURROUND SPEAKER)				△ F902 1-532-286-00 FUSE TIME LAG 2.5A (AEP,G,EE)	
TM701	1-537-376-11	TERMINAL BOARD (SPEAKER) (FRONT SPEAKER)				< RELAY >	
		< TUNER >				△ RY901 1-515-720-11 RELAY	
TU001	1-233-594-12	ENCAPSULATED COMPONENT (AEP,UK,G)				< TRANSFORMER >	
TU001	1-233-595-11	ENCAPSULATED COMPONENT (EE)					
		< VIBRATOR >				△ T902 1-450-358-11 TRANSFORMER, POWER	
X1	1-579-900-21	VIBRATOR, CRYSTAL 4.33MHz				*****	
X301	1-579-952-21	VIBRATOR, CERAMIC 8MHz				*****	

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Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
*	A-4392-965-A	SW BOARD, COMPLETE ***** SW (A) BOARD ***** SW (B) BOARD ***** < CONNECTOR >				< CONNECTOR >	
CNP703	1-764-474-11	PIN, CONNECTOR (PC BOARD) 5P		CNP202	1-770-391-11	PIN, CONNECTOR (PC BOARD) 7P	
CNP704	1-764-473-11	PIN, CONNECTOR (PC BOARD) 3P		CNS402	1-568-439-11	SOCKET, CONNECTOR 7P	
CNS205	1-770-397-11	HOUSING, CONNECTOR(PC BOARD)4P		CNS403	1-568-442-11	SOCKET, CONNECTOR 9P	
CNS702	1-770-378-11	CONNECTOR, BOARD TO BOARD 5P				< DIODE >	
		< JACK >		D238	8-719-313-50	DIODE SEL6810A-TH12 (BASS BOOST)	
J741	1-750-733-11	JACK (LARGE TYPE) (PHONES)		D421	8-719-815-85	DIODE 1S1585	
		< RESISTOR >				< IC >	
R741	1-260-100-11	CARBON 1.2K 5%	1/2W	IC404	8-759-636-74	IC M5218AP-22	
R742	1-260-100-11	CARBON 1.2K 5%	1/2W			< TRANSISTOR >	
R791	1-260-100-11	CARBON 1.2K 5%	1/2W	Q401	8-729-202-67	TRANSISTOR 2SK246-GR3	
R792	1-260-100-11	CARBON 1.2K 5%	1/2W	Q402	8-729-141-30	TRANSISTOR 2SC3623A-LK	
		< SWITCH >		Q451	8-729-202-67	TRANSISTOR 2SK246-GR3	
S701	1-762-319-11	SWITCH, PUSH (2 KEY) (SPEAKERS)		Q452	8-729-141-30	TRANSISTOR 2SC3623A-LK	
*****							
*	A-4392-964-A	VR-TONE BOARD, COMPLETE ***** VOLUME BOARD ***** < CAPACITOR >		R420	1-249-415-11	CARBON 680 5%	1/4W F
C420	1-162-207-31	CERAMIC 22PF 5%	50V	R421	1-249-430-11	CARBON 12K 5%	1/4W
C421	1-137-440-11	FILM 0.018uF 5%	50V	R422	1-249-422-11	CARBON 2.7K 5%	1/4W F
C422	1-124-463-00	ELECT 0.1uF 20%	50V	R423	1-247-903-00	CARBON 1M 5%	1/4W
C423	1-137-368-11	FILM 0.0047uF 5%	50V	R424	1-247-903-00	CARBON 1M 5%	1/4W
C424	1-137-372-11	FILM 0.022uF 5%	50V	R425	1-249-429-11	CARBON 10K 5%	1/4W
C425	1-126-096-11	ELECT 10uF 20%	35V	R426	1-249-439-11	CARBON 68K 5%	1/4W
C426	1-126-096-11	ELECT 10uF 20%	35V	R427	1-249-417-11	CARBON 1K 5%	1/4W F
C427	1-124-252-00	ELECT 0.33uF 20%	50V	R430	1-249-437-11	CARBON 47K 5%	1/4W
C428	1-130-489-00	MYLAR 0.033uF 5%	50V	R431	1-247-843-11	CARBON 3.3K 5%	1/4W
C429	1-102-973-00	CERAMIC 100PF 5%	50V	R432	1-247-883-00	CARBON 150K 5%	1/4W
C430	1-126-301-11	ELECT 1uF 20%	50V	R433	1-249-427-11	CARBON 6.8K 5%	1/4W F
C431	1-126-301-11	ELECT 1uF 20%	50V	R434	1-249-413-11	CARBON 470 5%	1/4W F
C432	1-126-096-11	ELECT 10uF 20%	35V	R438	1-249-441-11	CARBON 100K 5%	1/4W
C433	1-126-096-11	ELECT 10uF 20%	35V	R441	1-249-441-11	CARBON 100K 5%	1/4W
C470	1-162-207-31	CERAMIC 22PF 5%	50V	R444	1-247-903-00	CARBON 1M 5%	1/4W
C471	1-137-440-11	FILM 0.018uF 5%	50V	R464	1-247-903-00	CARBON 1M 5%	1/4W
C472	1-124-463-00	ELECT 0.1uF 20%	50V	R469	1-247-903-00	CARBON 1M 5%	1/4W
C473	1-137-368-11	FILM 0.0047uF 5%	50V	R470	1-249-415-11	CARBON 680 5%	1/4W F
C474	1-137-372-11	FILM 0.022uF 5%	50V	R471	1-249-430-11	CARBON 12K 5%	1/4W
C475	1-126-096-11	ELECT 10uF 20%	35V	R472	1-249-422-11	CARBON 2.7K 5%	1/4W F
C476	1-126-096-11	ELECT 10uF 20%	35V	R473	1-247-903-00	CARBON 1M 5%	1/4W
C477	1-124-252-00	ELECT 0.33uF 20%	50V	R474	1-247-903-00	CARBON 1M 5%	1/4W
C478	1-130-489-00	MYLAR 0.033uF 5%	50V	R475	1-249-429-11	CARBON 10K 5%	1/4W
C479	1-102-973-00	CERAMIC 100PF 5%	50V	R476	1-249-439-11	CARBON 68K 5%	1/4W
C492	1-124-464-11	ELECT 0.22uF 20%	50V	R477	1-249-417-11	CARBON 1K 5%	1/4W F
C601	1-126-163-11	ELECT 4.7uF 20%	50V	R480	1-249-437-11	CARBON 47K 5%	1/4W
C651	1-126-163-11	ELECT 4.7uF 20%	50V	R481	1-247-843-11	CARBON 3.3K 5%	1/4W
C701	1-126-163-11	ELECT 4.7uF 20%	50V	R482	1-247-883-00	CARBON 150K 5%	1/4W
C751	1-126-163-11	ELECT 4.7uF 20%	50V	R483	1-249-427-11	CARBON 6.8K 5%	1/4W F
		< VARIABLE RESISTOR >		R484	1-249-413-11	CARBON 470 5%	1/4W F
				R491	1-249-441-11	CARBON 100K 5%	1/4W
				R492	1-247-903-00	CARBON 1M 5%	1/4W
				R494	1-247-903-00	CARBON 1M 5%	1/4W
						< VARIABLE RESISTOR >	
				RV404	1-225-229-11	RES, VAR, CARBON 100KX4 (MASTER VOLUME)	
				RV421	1-223-362-11	RES, VAR, CARBON 100K/100K (BASS)	
				RV422	1-223-363-11	RES, VAR, CARBON 125K/125K (TREBLE)	
				RV423	1-225-447-11	RES, VAR, CARBON 100K/100K (BALANCE)	

**VOLUME**      **VR-TONE**

Ref. No.	Part No.	Description	Remarks
		< SWITCH >	
S240	1-554-937-11	SWITCH, KEY BOARD (BASS BOOST)	
*****			
		MISCELLANEOUS	
*****			
11	1-769-908-11	WIRE (FLAT TYPE) (9 CORE)	
12	1-765-314-11	WIRE (FLAT TYPE) (7 CORE)	
61	1-773-252-11	WIRE (FLAT TYPE) (27 CORE)	
△71	1-751-520-11	CORD, POWER (UK)	
△71	1-769-744-11	CORD, POWER (AEP,G,EE)	
△CNJ903	1-526-794-11	OUTLET, AC (AEP,G,EE)	
△T901	1-431-260-11	TRANSFORMER, POWER (DE315)	
△T901	1-431-266-11	TRANSFORMER, POWER (DE415)	
*****			

Ref. No.	Part No.	Description	Remarks
		ACCESSORIES & PACKING MATERIALS	
*****			
	1-475-042-11	ADAPTOR (21PIN D. SUB)	
	1-475-136-21	REMOTE COMMANDER (RM-U301) (DE315)	
	1-475-137-11	REMOTE COMMANDER (RM-P301) (DE415)	
	1-501-374-11	ANTENNA, LOOP	
	1-501-594-11	ANTENNA (FM)	
	3-859-657-11	MANUAL, INSTRUCTION (ENGLISH/FRENCH/GERMAN/DUTCH/ITALIAN)(AEP,UK,G)	
	3-859-657-41	MANUAL, INSTRUCTION (SPANISH/SWEDISH/FRENCH/DANISH/PORTUGUESE)(AEP)	
	3-859-657-51	MANUAL, INSTRUCTION (ENGLISH/RUSSIAN/POLISH)(EE)	
	4-981-643-01	COVER, BATTERY (for RM-P301/U301)	
*****			
*****			
HARDWARE LIST			
*****			
#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
#2	7-685-881-09	SCREW +BVTT 4X8 (S)	
#3	7-685-872-09	SCREW +BVTT 3X8 (S)	
#4	7-658-646-71	SCREW +BTP 3X8	

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