

# STR-D460Z/DE515/V505

## SERVICE MANUAL

US Model  
STR-D460Z/DE515

Canadian Model  
E Model  
Australian Model  
PX Model  
STR-DE515

Chinese Model  
STR-V505



Photo : STR-DE515

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### SPECIFICATIONS

#### Audio power specifications (US only)

#### POWER OUTPUT AND TOTAL HARMONIC DISTORTION

With 8-ohm load, both channels driven, from 20 - 20,000 Hz, rated 100 watts per channel minimum RMS power, with no more than 0.09 % total harmonic distortion from 250 milliwatts to rated output.

#### Amplifier section

**Stereo mode** **Malaysia, Singapore MODEL:**  
(4 ohms at 20Hz  
20kHz less than 0.09%  
total harmonic distortion)  
110W + 110W

**Chinese MODEL:**  
(6 ohms at 20Hz  
20kHz less than 0.09 %  
total harmonic distortion)  
110W + 110W

**EXCEPT MODEL:**  
(8 ohms at 20 Hz  
20 kHz less than 0.09%  
total harmonic distortion)  
100W + 100W

**Surround mode** **Malaysia, Singapore MODEL:**  
(4 ohms at 1kHz, THD 0.8 %)  
Front : 90W/ch  
Center : 90W/ch  
(8 ohms at 1kHz, THD 0.8 %)  
Rear : 30 W/ch

**Chinese MODEL:**  
(6 ohms at 1kHz, THD 0.8 %)  
Front : 90W/ch  
Center : 90W/ch  
(8 ohms at 1kHz, THD 0.8 %)  
Rear : 30W/ch

**EXCEPT MODEL:**  
(8 ohms at 1 kHz, THD 0.8 %)  
Front: 100 W/ch  
Center: (Pro Logic Mode)  
100 W  
Rear: 50 W/ch

**5.1/DVD\* mode** **Malaysia, Singapore MODEL:**  
(4 ohms at 1kHz, THD 0.8 %)  
Front : 90W/ch  
Center : 90W/ch  
(8 ohms at 1kHz, THD 0.8 %)  
Rear : 30 W/ch

**Chinese MODEL:**  
(6 ohms at 1kHz, THD 0.8 %)  
Front : 90W/ch  
Center : 90W/ch  
(8 ohms at 1kHz, THD 0.8 %)  
Rear : 30W/ch

**EXCEPT MODEL:**  
(8 ohm at 1 KHz, THD 0.8 %)  
Front: 100W/ch  
Center: 100W/ch  
Rear: 50W/ch

**Dynamic power output**  
(For US only) 8 ohms: 150 W + 150 W  
4 ohms: 200 W + 200 W

**Frequency response** PHONO\*\*: RIAA  
· equalization curve  
±0.5 dB  
TV/DBS, CD, TAPE/  
MD, VIDEO, 5.1/  
DVD\*  
10 Hz - 50 kHz ±1 dB

#### Inputs

	Sensitivity	Impedance	S/N (weighting network, input level)
PHONO** (MM)	2.5 mV	50 kilohms	74 dB 72 dB* (A, 2.5 mV)
CD, 5.1/DVD*	200 mV		
TAPE/MD, TV/ DBS, VIDEO	150 mV	50 kilohms	82 dB 82 dB* (A, 150 mV)

\* 78 IHF

#### Outputs

TAPE/MD REC OUT:  
Voltage 150 mV,  
Impedance 10 kilohms  
VIDEO AUDIO OUT:  
Voltage 150 mV,  
Impedance 10 kilohms  
WOOFER/MIX AUDIO  
OUT  
Voltage: 2 V  
Impedance: 10 kilohms  
PHONES: Accepts low  
and high impedance  
headphones

#### Muting

Full mute

#### BASS BOOST

+10 dB at 70 Hz

#### TONE

±8 dB at 100 Hz and 10 kHz

#### FM tuner section

Tuning range 87.5 - 108.0 MHz

#### Antenna terminals

75 ohms, unbalanced  
300 ohms, balanced  
(US, Canadian model)  
75 ohms, unbalanced  
(EXCEPT model)

#### Sensitivity

Mono: 18.3 dBf, 4.5  $\mu$ V  
Stereo: 38.3 dBf, 45  $\mu$ V

#### Usable sensitivity

11.2 dBf, 2  $\mu$ V (IHF)

#### S/N

Mono: 76 dB  
Stereo: 70 dB

#### Harmonic distortion at

Mono: 0.3 %  
Stereo: 0.5 %

#### 1 KHz Separation

45 dB at 1 kHz

#### Frequency response

30 Hz - 15 kHz<sup>-0.5</sup> dB

#### Selectivity

60 dB at 400 kHz

— Continued on next page —

## FM STEREO/FM-AM RECEIVER



# SONY®

## TABLE OF CONTENTS

<b>AM tuner section</b>	
<b>Tuning range</b>	US, Canadian MODEL: 530 - 1710 kHz (10kHz STEP)  Australian, Singapore, Malaysia, Chinese MODEL: 531 - 1602 kHz (9 kHz STEP)  E, PX, Saudi Arabia MODEL: 531-1602kHz (9kHz STEP) 530-1620kHz (10kHz STEP)
<b>Antenna</b>	Loop antenna
<b>Usable sensitivity</b>	50 dB/m (at 1,000 kHz 999 kHz)
<b>S/N</b>	54 dB (at 50 mV/m)
<b>Harmonic distortion</b>	0.5 % (50 mV/m, 400 Hz)
<b>Selectivity</b>	At 9 kHz: 35 dB At 10 kHz: 40 dB
<b>Video section</b>	
<b>Inputs</b>	VIDEO, TV/DBS, 5.1/ DVD*: 1 Vp-p 75 ohms
<b>Outputs</b>	VIDEO: 1 Vp-p 75 ohms MONITOR: 1 Vp-p 75 ohms
<b>General</b>	
<b>System</b>	Tuner section: PLL quartz-locked digital synthesizer system Preamplifier section: Low-noise NF type equalizer Power amplifier section: Pure-complimentary SEPP
<b>Power requirements</b>	US, Canadian : 120 V AC, 60 Hz  E, Saudi Arabia, PX : 120/220/240V AC, 50/60Hz  Australian : 240 V AC, 50/60 Hz  Singapore, Malaysia, Chinese : 230V AC, 50/60Hz
<b>Power consumption</b>	US, Canadian : 230 W
<b>AC outlets</b>	US, Canadian : 1 switched, total 120 W/1A Max  EXCEPT: 1 switched, total 100 W
<b>Dimensions</b>	17 x 5 <sup>7</sup> / <sub>8</sub> x 11 <sup>5</sup> / <sub>8</sub> inches (430 x 148 x 295 mm)
<b>Mass (Approx.)</b>	7.3 kg (16 lb 1 oz)
<b>Supplied accessories</b>	FM wire antenna (1) AM loop antenna (1) Remote controller (remote) (1) Size AA (R6) batteries (2)

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Design and specifications are subject to change without notice.

### SAFETY CHECK-OUT

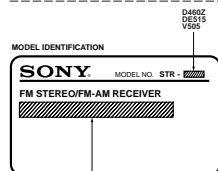
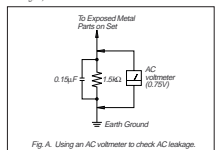
After correcting the original service problem, perform the following safety checks before releasing the set to the customer:  
 Check the antenna terminals, metal trim, "metalized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

#### LEAKAGE

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 259 or RCA WFC60A. Follow the manufacturer's instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 345 digital milliammeter is suitable for this job.

3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "mini" indication is 0.5V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sawa SH-63 Tri are examples of a positive VOM that is suitable. Nearly all battery-operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)



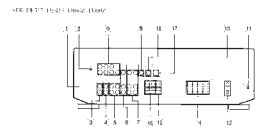
US, Canadian model : AC 120V 60Hz  
 Australian model : AC 240V -50/60Hz  
 E. Saudi Arabia, PK model : AC 120, 220, 240V selectable -50/60Hz  
 Singapore, Malaysia,  
 Chinese model : AC 230V -50/60Hz

**SAFETY-RELATED COMPONENT WARNING!**  
 COMPONENTS IDENTIFIED BY MARK  $\Delta$  OR DOTTED LINE WITH MARK  $\Delta$ , 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.

**ATTENTION AU COMPOSANT AYANT RAPPORT A LA SECURITE**  
 LES COMPOSANTS IDENTIFIES PAR UNE MARQUE  $\Delta$  SUR LES DIAGRAMMES SCHEMATIQUES ET LA LISTE DES PIECES SONT CRITIQUES POUR LA SECURITE DE FONCTIONNEMENT. NE REMPLACEZ CES COMPOSANTS QUE PAR DES PIECES SONY DONT LES NUMEROS SONT DONNES DANS CE MANUEL OU DANS LES SUPPLEMENTS PUBLIES PAR SONY.

### SECTION 1 GENERAL

#### LOCATION AND FUNCTION OF CONTROLS



- |                 |                  |                  |
|-----------------|------------------|------------------|
| 1. VOLUME UP    | 9. VOLUME DOWN   | 15. BRIDGE CABLE |
| 2. VOLUME DOWN  | 10. STANDBY      | 16. PROTECT      |
| 3. STANDBY      | 11. SYS. POWER   | 17. REPEAT       |
| 4. SYS. POWER   | 12. BIRD DATA IN |                  |
| 5. BIRD DATA IN | 13. BIRD CLK. IN |                  |
| 6. BIRD CLK. IN | 14. STOP         |                  |
| 7. STOP         |                  |                  |
| 8. VOLUME UP    |                  |                  |

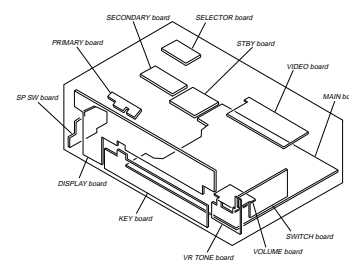
### SECTION 2 EXPLANATION OF IC TERMINALS

Pin No.	Pin Name	I/O	Description
1	DI07	O	
2	DI06	O	
3	DI05	O	
4	DI04	O	Fluorescent indicator tube drive.
5	DI03	O	
6	DI02	O	
7	DI01	O	
8	V <sub>CC</sub>	—	Power supply (+5V).
9	V <sub>EE</sub>	—	System clock.
10	S <sub>1</sub> DATA	—	System data.
11	PLL DATA	I	PLL data input from TU001.
12	S <sub>2</sub> CE (LCT208)	O	Chip enable output.
13	S <sub>2</sub> CE (LCT208)	O	Chip enable output.
14	REASRY	I	Input for model select.
15	BRIDGE CABLE	O	Standby relay ON/OFF control.
16	PROTECT	I	Protector detect input.
17	REPEAT	I	System reset terminal.
18	AUTO STOP	I	Auto stop detect input.
19	STEREO IN	I	Secure detect input.
20	V <sub>DIS</sub>	—	Ground.
21	SP-RY	O	Speaker relay drive.
22	SUBB-RY	O	Subwoofer relay drive.
23	POWER-RY	O	Power relay drive.
24	Not used	O	Not used.
25	SDIGNAL	I	A/D1 signal input terminal.
26	A/D1	I	A/D1 key input terminal.
27	A/D2	I	A/D2 key input terminal.
28	A/D1	I	A/D1 key input terminal.
29	A/D0	—	Power supply (+5V).
30	AV REF	—	Reference voltage (+5V).
31	GND	—	Ground.
32	NC	—	Not used (Open).
33	V <sub>DIS</sub>	—	Ground.
34	X1	—	System clock (4.1946MHz).
35	X2	—	System clock (4.1946MHz).
36	IC MUTE	O	Main drive output for $\mu$ PD2581V (IC701).
37	PROTECT	—	Protector LED drive.
38	STEREO	—	CINEMA STEREO LED drive.
39	TRIPLE	—	Half LED drive.
40	T MUTE	O	Tuner mute drive output.

Pin No.	Pin Name	I/O	Description
41	VOLUME UP	O	Volume up.
42	VOLUME DOWN	O	Volume down.
43	STANDBY	—	Standby LED drive.
44	SYS. POWER	I	System power ON/OFF.
45	BIRD DATA IN	I	BIRD data input terminal (EXCEPT Australian, E. Saudi Arabia, PK model).
46	BIRD CLK. IN	I	BIRD clock input terminal (EXCEPT Australian, E. Saudi Arabia, PK model).
47	STOP	I	Stop signal input from NIM2101D (IC500).
48	V <sub>CC</sub>	—	Ground.
49	SDIGNAL	I	Serial signal input.
50	POWER SW	I	Power switch input terminal.
51	S <sub>1</sub> LED	O	S <sub>1</sub> LED input LED.
52	V <sub>DIS</sub>	—	Power supply (+5V).
53	BASS BOOST	—	Bass boost LED drive.
54	PUNSC. MUTE	O	Laser mute drive.
55	SL MUTE	O	Surround Led mute.
56	VERSION	I	Input for model select.
57	K14	I	Key in 4.
58	K13	I	Key in 3.
59	K12	I	Key in 2.
60	K11	I	Key in 1.
61	SR MUTE	O	Surround left mute.
62	S15	O	Key out 1.
63	S14	O	Key out 2.
64	S13	O	Key out 3.
65	S12	O	Key out 4.
66	S11	O	
67	S10	O	
68	S9	O	
69	S8	O	
70	S7	O	Fluorescent indicator tube drive.
71	VLOAD	—	Connect to -24V.
72	S6	O	
73	S5	O	
74	S4	O	
75	S3	O	
76	S2	O	
77	S1	O	
78	DI010	O	
79	DI09	O	Fluorescent indicator tube drive.
80	DI08	O	

### SECTION 3 DIAGRAMS

#### 3-1. CIRCUIT BOARDS LOCATION

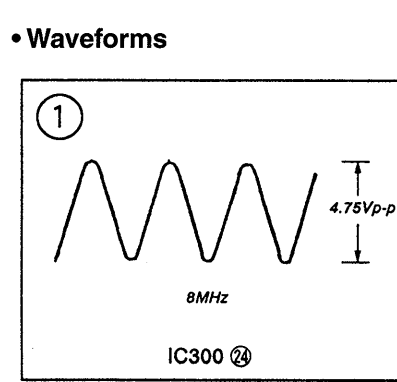
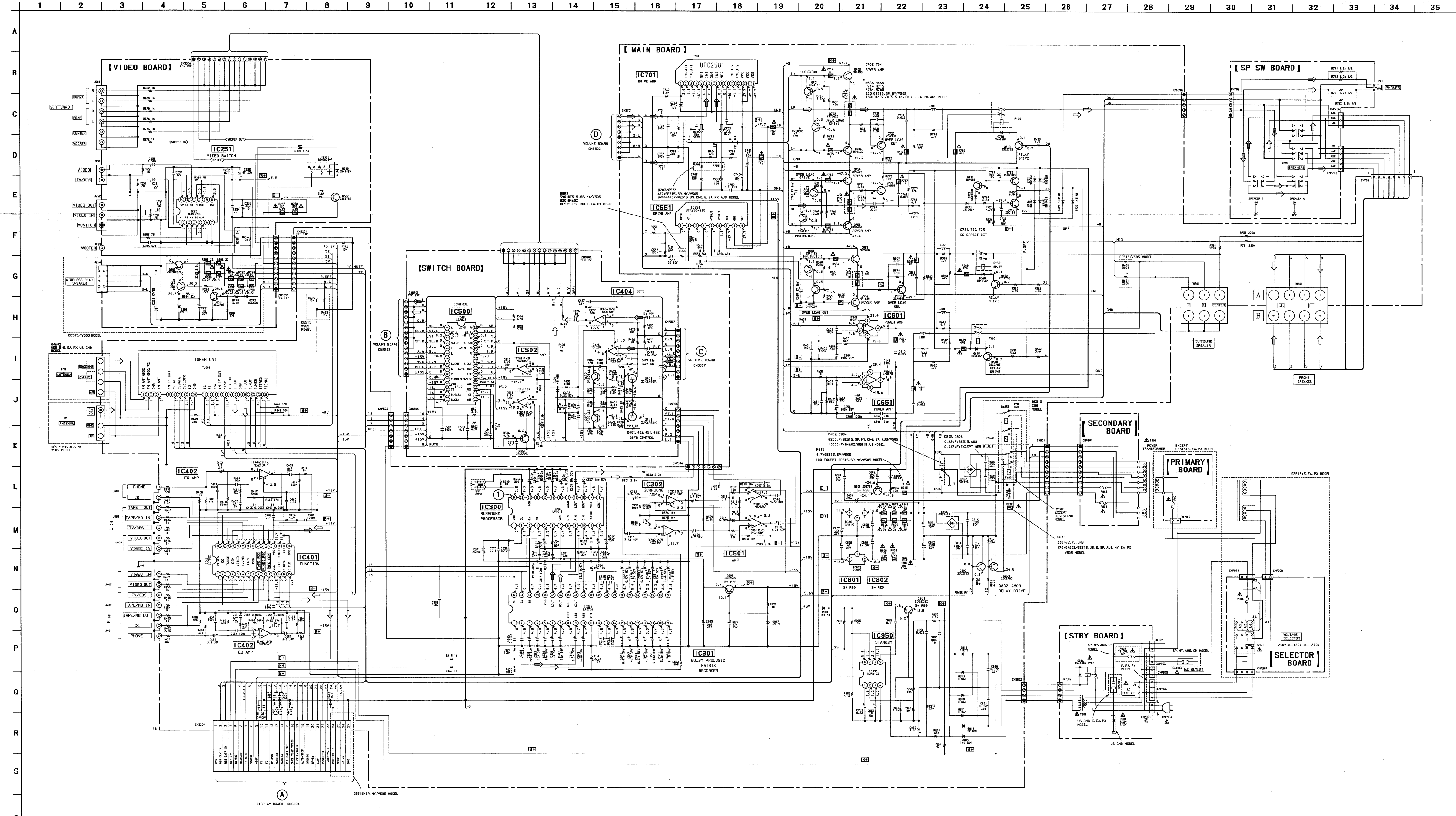








3-3. SCHEMATIC DIAGRAM (MAIN SECTION) • Refer to page 17 for IC Block Diagrams.



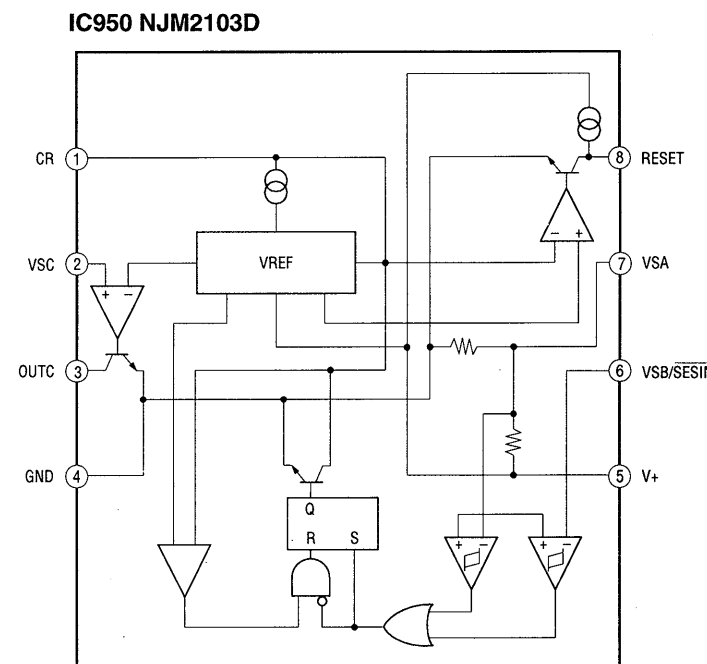
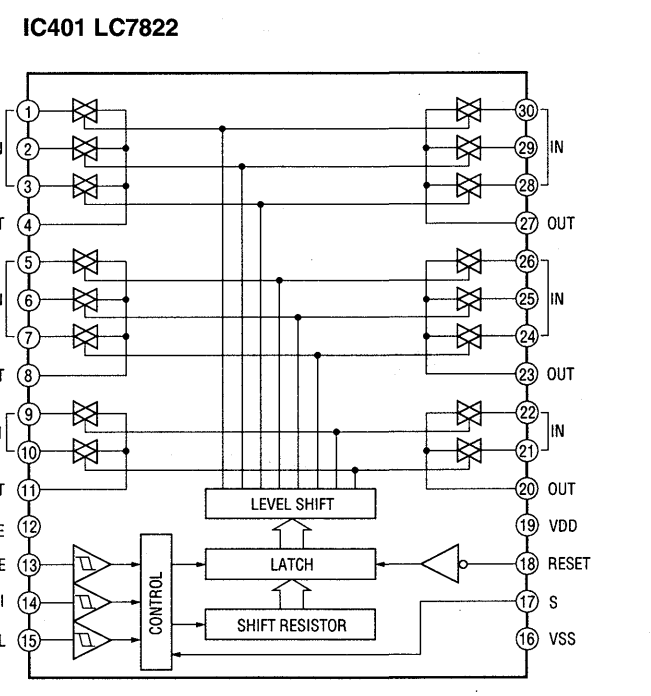
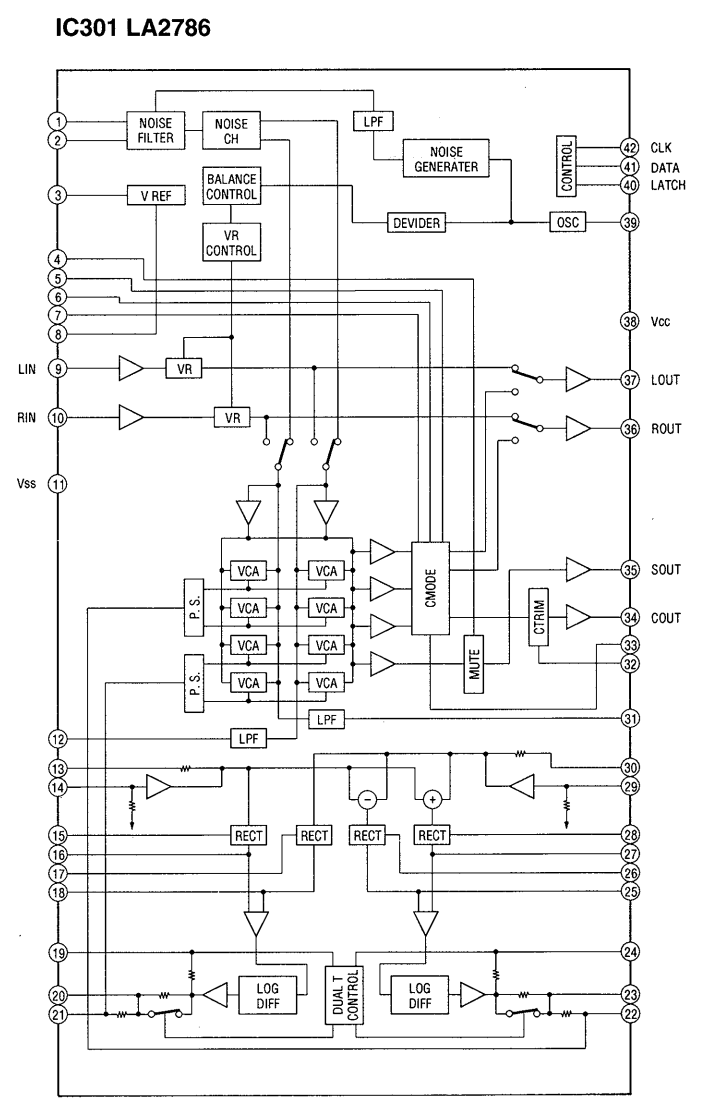
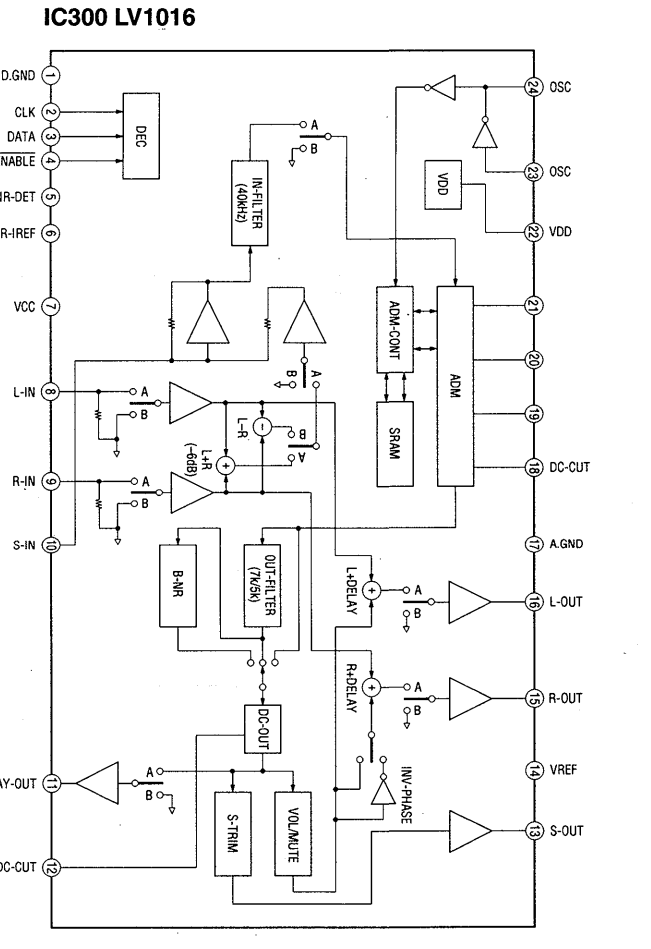
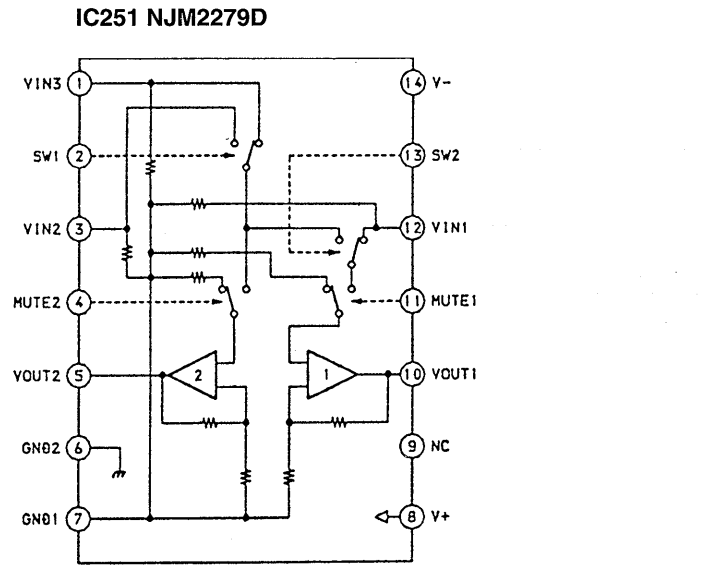
**Note:**

- All capacitors are in  $\mu\text{F}$  unless otherwise noted. pF:  $\mu\text{F}$  50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and 1/4W or less unless otherwise specified.
- $\Delta$ : Internal component.
- $\square$ : B+ Line.
- $\square$ : B- Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- No mark: FM
- ( ): AM
- Voltages are taken with a VOM (Input impedance 10M $\Omega$ ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
- $\rightarrow$ : FM
- Abbreviation
- SP : Singapore
- EA : Saudi Arabia
- MY : Malaysia
- AUS : Australian
- CND : Canadian
- CH : Chinese

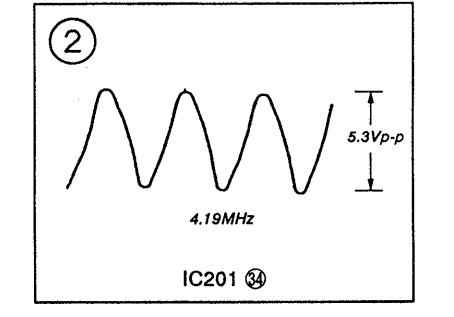
**Note:**  
The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

**Note:**  
Les composants identifiés par une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifique.

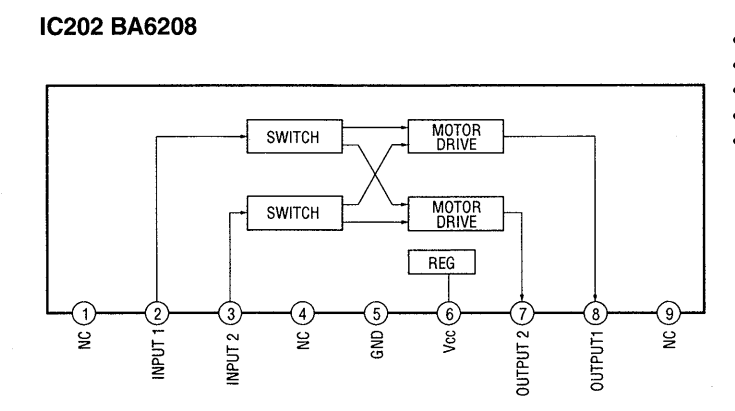
• IC BLOCK DIAGRAMS — MAIN SECTION —



• Waveforms



• IC BLOCK DIAGRAM — DISPLAY SECTION —

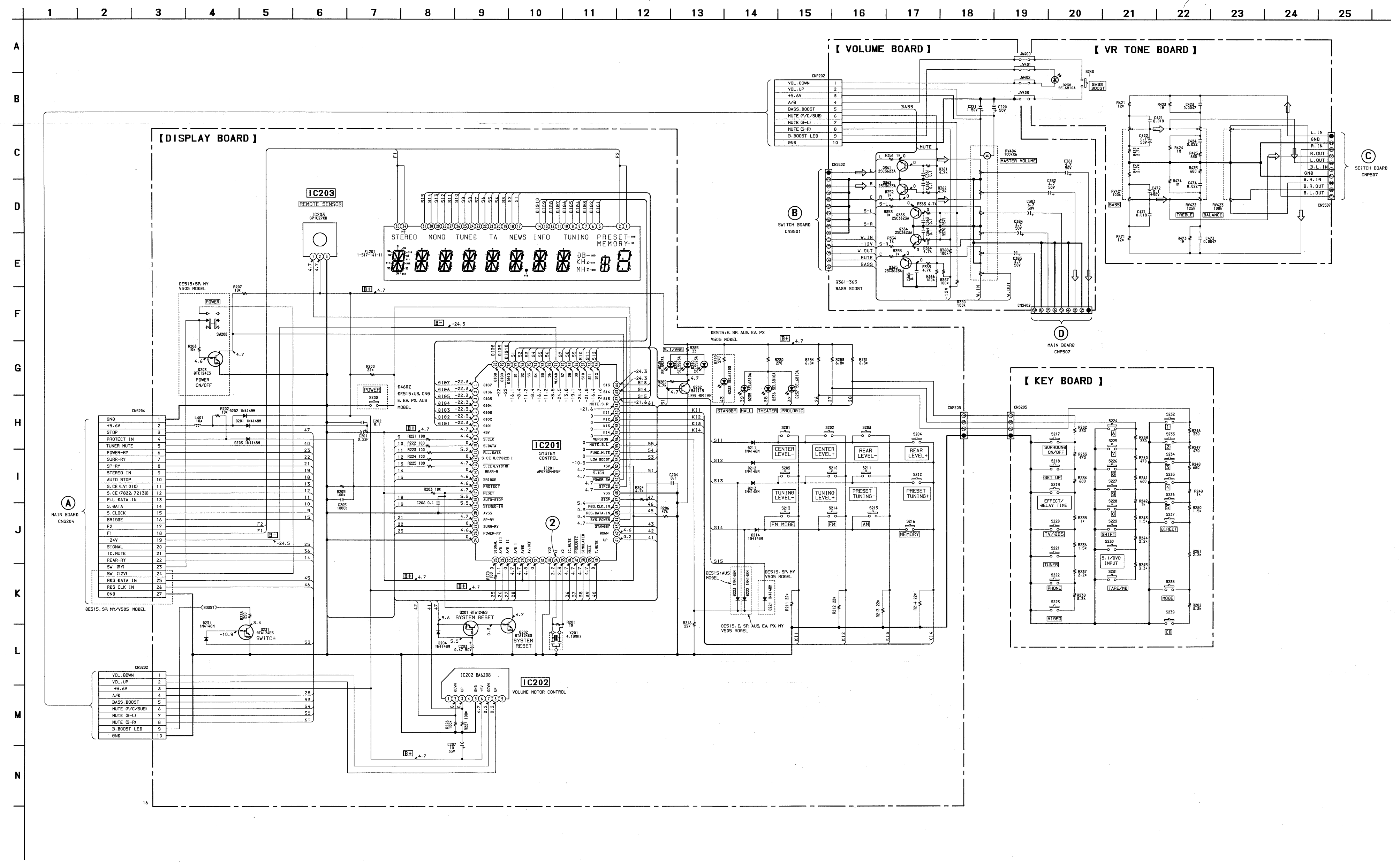


- All capacitors are in  $\mu\text{F}$  unless otherwise noted. pF:  $\mu\text{pF}$  50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and 1/4W or less unless otherwise specified.
- $\Delta$ : Internal component.
- $\square$ : B+ Line.
- $\square$ : 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 10M $\Omega$ ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
- $\rightarrow$ : FM

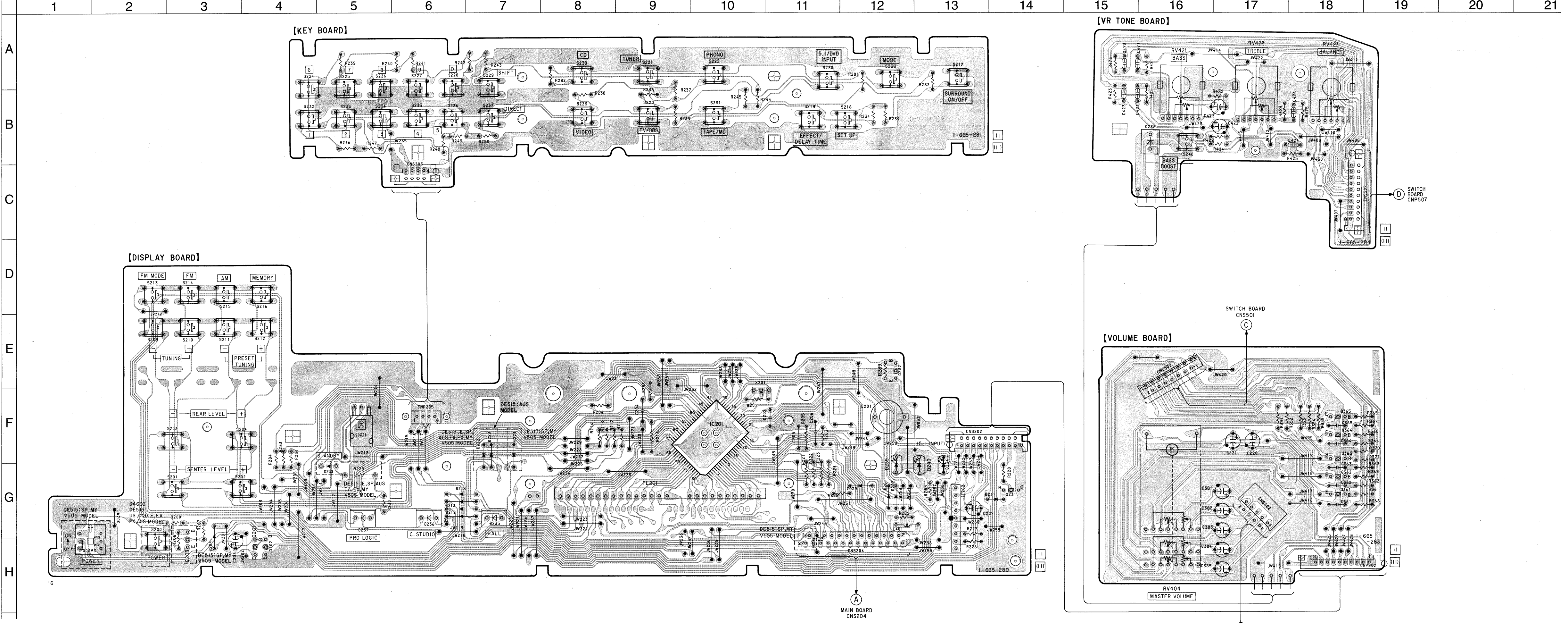
- Abbreviation
- SP : Singapore
- EA : Saudi Arabia
- MY : Malaysia
- AUS : Australian
- CND : Canadian

3-4. SCHEMATIC DIAGRAM (DISPLAY SECTION)





3-5. PRINTED WIRING BOARDS (DISPLAY SECTION)



• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D201	G-12	D239	G-12
D202	G-12	D240	G-12
D203	G-12		
D204	H-3	IC201	F-10
D211	G-6	IC202	G-13
D212	G-6	IC203	F-5
D213	G-6		
D214	G-6	Q201	H-4
D221	F-7	Q202	H-4
D222	F-7	Q203	H-3
D223	F-7	Q231	G-14
D231	G-13	Q232	E-12
D233	G-5	Q361	G-18
D234	G-13	Q362	G-18
D235	G-7	Q363	G-18
D236	G-6	Q364	F-18
D237	G-5	Q365	F-18
D238	B-16		

**Note:**  
 • — : Parts extracted from the component side.  
 • — : Pattern on the side which is seen.  
 • Abbreviation  
 SP : Singapore  
 EA : Saudi Arabia  
 MY : Malaysia  
 AUS : Australian  
 CND : Canadian



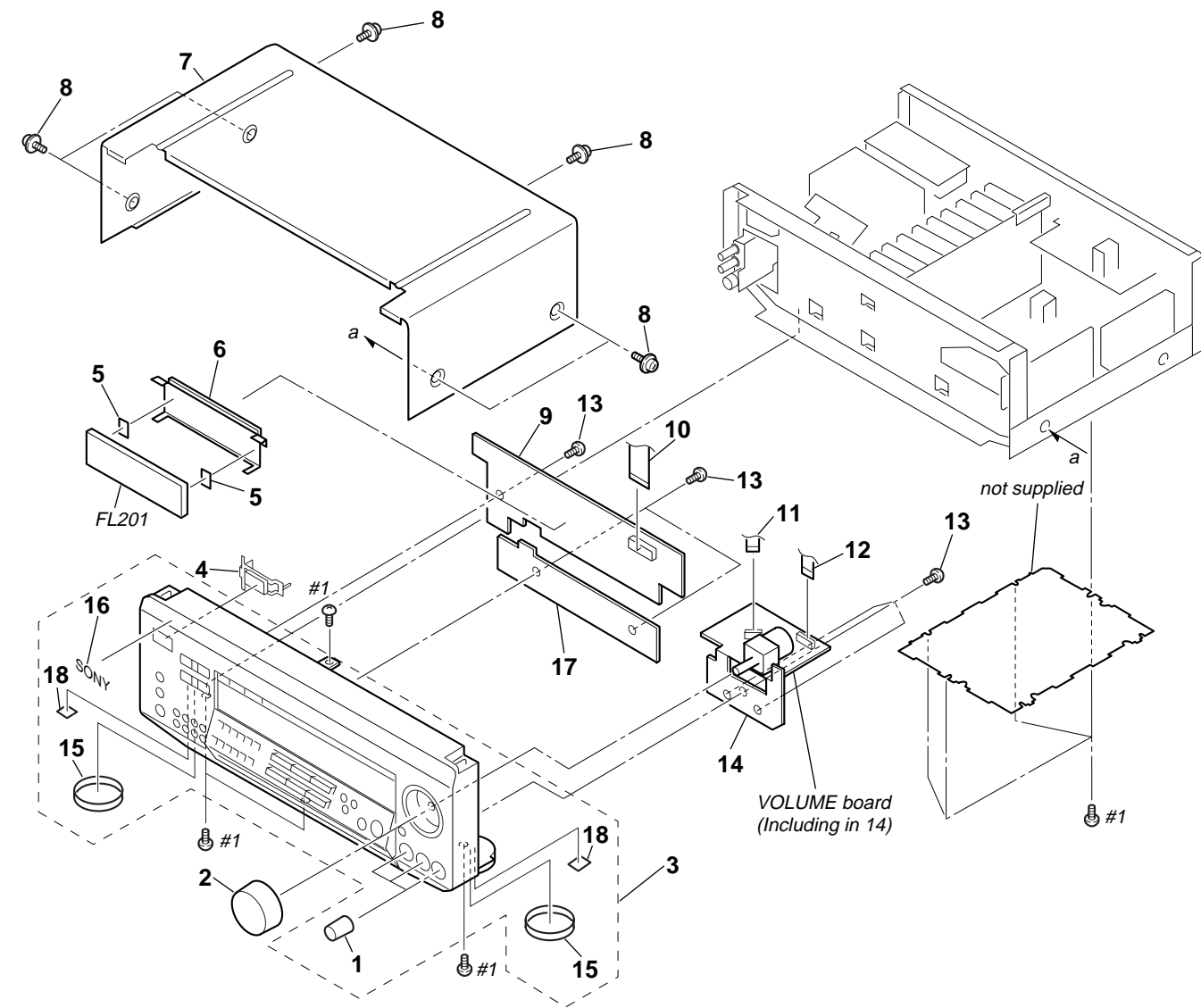
## SECTION 4 EXPLODED VIEWS

### NOTE:

- XX, -X mean standardized parts, so they may have some differences 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.
- Color Indication of Appearance Parts Example:  
KNOB, BALANCE (WHITE) . . . (RED)

Parts of Color Cabinet's Color

### 4-1. FRONT PANEL SECTION



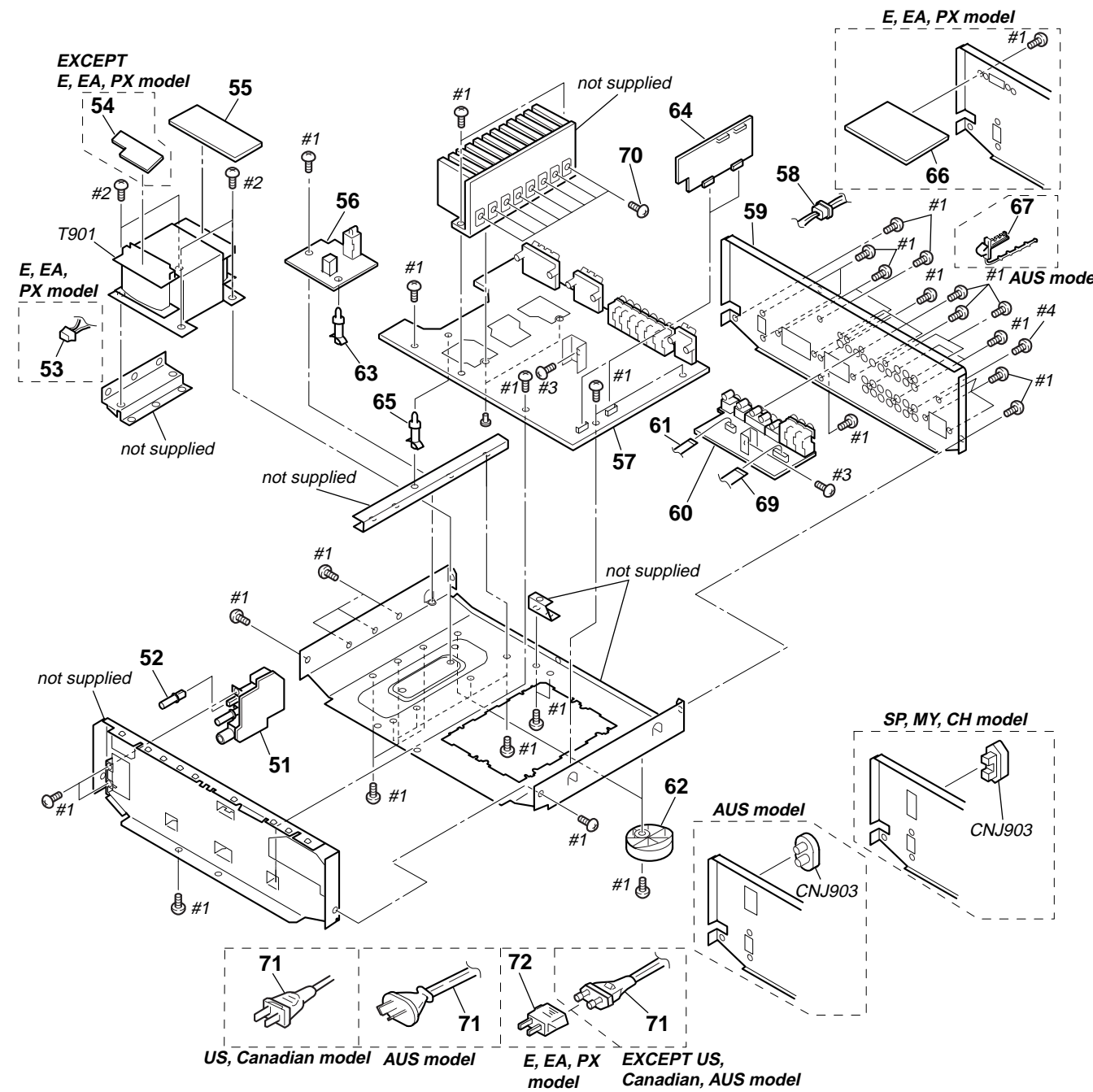
The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifique.

- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (#mark) list is given in the last of this parts list.
- Abbreviation  
SP : Singapore AUS : Australian  
CH : Chinese EA : Saudi Arabia  
MY : Malaysia

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
1	4-980-639-01	KNOB (R14)(BLACK)(D460Z/DE515)		* 9	A-4392-776-A	DISPLAY BOARD, COMPLETE (D460Z/DE515:US,Canadian)	
1	4-980-639-31	KNOB (R14)(GOLD)(V505)		* 9	A-4392-974-A	DISPLAY BOARD, COMPLETE (DE515:AUS)	
2	X-4946-873-1	KNOB (R48) ASSY (BLACK)(D460Z/DE515)		* 9	A-4392-977-A	DISPLAY BOARD, COMPLETE (DE515:SP,MY,V505)	
2	X-4948-385-1	KNOB ASSY (GOLD)(V505)		* 9	A-4392-980-A	DISPLAY BOARD, COMPLETE (DE515:E,EA,PX)	
3	X-4948-336-1	PANEL ASSY, FRONT (DE515:US,Canadian)		10	1-782-084-11	WIRE (FLAT TYPE) (23 CORE)	
3	X-4948-365-1	PANEL ASSY, FRONT (DE515:AUS)		11	1-782-075-11	WIRE (FLAT TYPE) (9 CORE)	
3	X-4948-366-1	PANEL ASSY, FRONT (DE515:SP,MY)		12	1-782-243-11	WIRE (FLAT TYPE) 15P	
3	X-4948-368-1	PANEL ASSY, FRONT (D460Z)		13	4-951-620-01	SCREW (2.6X8), +BVTP	
3	X-4948-386-1	PANEL ASSY, FRONT (V505)		* 14	A-4392-778-A	VR TONE BOARD, COMPLETE	
3	X-4948-472-1	PANEL ASSY, FRONT (DE515:E)		15	4-977-593-11	RING (DIA. 50), ORNAMENTAL (SILVER) .(BLACK)(DE515:E,SP,AUS,EA,PX,MY)	
4	4-980-109-01	BUTTON (P-M)(BLACK) (DE515:SP,MY)		15	4-977-593-21	RING (DIA. 50), ORNAMENTAL (GOLD) .(GOLD) (V505)	
4	4-980-109-41	BUTTON (P-M)(GOLD) (V505)		16	3-008-600-11	EMBLEM (5-AR), SONY (SILVER) .(BLACK)(D460Z/DE515)	
4	4-989-843-01	BUTTON (P-T)(BLACK) (D460Z/DE515:US,Canadian,E,EA,PX,AUS)		* 17	A-4392-781-A	KEY BOARD, COMPLETE	
* 5	4-921-941-01	CUSHION (FL)		18	4-977-358-11	CUSHION (8X12.5)	
* 6	4-943-107-11	HOLDER (FL TUBE)		FL201	1-517-141-11	INDICATOR TUBE, FLUORESCENT	
* 7	4-980-658-01	CASE (413226)(BLACK)(D460Z/DE515)					
* 7	4-980-658-71	CASE (413226)(GOLD)(V505)					
8	3-704-366-01	SCREW (CASE) (M3X8)(BLACK)(D460Z/DE515)					
8	3-704-366-71	SCREW (CASE)(M3X8)(GOLD) (V505)					

### 4-2. CHASSIS SECTION



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
* 51	1-665-289-11	SP SW BOARD		62	X-4947-207-1	FOOT ASSY (F50150S) (DE515:E,EA,PX,SP,AUS)	
52	4-951-801-01	BUTTON (S)(BLACK)(D460Z/DE515)		62	X-4947-208-1	FOOT ASSY (F50150S) (D460Z/DE515:US,Canadian)	
52	4-951-801-21	BUTTON (S)(GOLD)(V505)		* 63	X-4947-547-1	FOOT ASSY (F50150S) (V505)	
53	1-769-746-61	LEAD (WITH CONNECTOR) (2 CORE) (DE515:E,EA,PX)		* 63	4-924-098-21	HOLDER, PC BOARD	
* 54	1-665-286-11	PRIMARY BOARD (D460Z/DE515:US,Canadian,SP,MY,AUS/V505)		* 64	A-4392-780-A	SWITCH BOARD, COMPLETE	
* 55	1-665-287-11	SECONDARY BOARD		65	4-924-098-01	HOLDER, PC BOARD	
* 56	1-665-285-11	STBY BOARD		* 66	1-665-263-11	SELECTOR BOARD (DE515:E,EA,PX)	
* 57	A-4392-785-A	MAIN BOARD, COMPLETE (DE515:US)		67	4-956-370-12	BAND, PLUG FIXED (DE515:AUS)	
* 57	A-4392-973-A	MAIN BOARD, COMPLETE (DE515:Canadian)		69	1-782-244-11	WIRE (FLAT TYPE) 15P	
* 57	A-4392-976-A	MAIN BOARD, COMPLETE (DE515:AUS)		70	3-905-609-01	SCREW (TRANSISTOR)	
* 57	A-4392-979-A	MAIN BOARD, COMPLETE (DE515:SP,MY)		$\Delta$ 71	1-696-847-11	CORD, POWER (AUS)	
* 57	A-4392-983-A	MAIN BOARD, COMPLETE (DE515:E,EA,PX)		$\Delta$ 71	1-777-070-11	CORD, POWER (US,Canadian)	
* 57	A-4392-984-A	MAIN BOARD, COMPLETE (D460Z)		$\Delta$ 71	1-777-071-11	CORD, POWER (E,SP,EA,PX,MY,CH)	
* 57	A-4398-839-A	MAIN BOARD, COMPLETE (V505)		72	1-569-008-21	ADAPTOR, CONVERSION 2P (E,EA,PX)	
* 58	3-703-244-00	BUSHING (2104), CORD		$\Delta$ CNJ903	1-251-416-11	OUTLET, A.C. (AUS)	
* 59	4-989-899-01	PANEL, BACK (DE515:US)		$\Delta$ CNJ903	1-526-794-11	OUTLET, A.C. (SP,MY,CH)	
* 59	4-989-899-11	PANEL, BACK (DE515:Canadian)		$\Delta$ T901	1-431-267-11	TRANSFORMER, POWER (US)	
* 59	4-989-899-21	PANEL, BACK (DE515:AUS)		$\Delta$ T901	1-431-268-11	TRANSFORMER, POWER (Canadian)	
* 59	4-989-899-31	PANEL, BACK (DE515:E,EA,PX)		$\Delta$ T901	1-431-269-11	TRANSFORMER, POWER (SP,MY,CH)	
* 59	4-989-899-41	PANEL, BACK (DE515:SP,MY)		$\Delta$ T901	1-431-270-11	TRANSFORMER, POWER (AUS)	
* 59	4-989-899-51	PANEL, BACK (D460Z)		$\Delta$ T901	1-431-271-11	TRANSFORMER, POWER (E,EA,PX)	
* 59	4-989-899-71	PANEL, BACK (V505)					
* 60	1-665-261-11	VIDEO BOARD					
61	1-782-077-11	WIRE (FLAT TYPE) (11 CORE)					

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

Les composants identifiés par une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifique.



# SECTION 5 ELECTRICAL PARTS LIST

DISPLAY

**NOTE:**

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

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

Les composants identifiés par une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

SP : Singapore    EA : Saudi Arabia  
 AUS : Australian    MY : Malaysia  
 CH : Chinese

- 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, -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.
- CAPACITORS:  
   uF:  $\mu$ F
- RESISTORS  
   All resistors are in ohms.  
   METAL: metal-film resistor  
   METAL OXIDE: Metal Oxide-film resistor  
   F: nonflammable
- COILS  
   uH:  $\mu$ H
- SEMICONDUCTORS  
   In each case, u:  $\mu$ , for example:  
   uA...:  $\mu$ A..., uPA...,  $\mu$ PA...,  
   uPB...,  $\mu$ PB..., uPC...,  $\mu$ PC...,  
   uPD...,  $\mu$ PD...

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
*	A-4392-776-A	DISPLAY BOARD, COMPLETE (D460Z/DE515:***** US,Canadian)		D236	8-719-313-50	DIODE SEL6810A-TH12 (C.STUDIO)	
*	A-4392-980-A	DISPLAY BOARD, COMPLETE (DE515:E,EA,PX)*****		D237	8-719-313-50	DIODE SEL6810A-TH12 (PRO LOGIC)	
*	A-4392-977-A	DISPLAY BOARD, COMPLETE (DE515:SP,MY/V505)*****		D291	8-719-001-30	DIODE UZL-9H3	
*	A-4392-974-A	DISPLAY BOARD, COMPLETE (DE515:AUS)*****		D239	8-719-057-97	DIODE SEL5923 (5.1/DVD)	
				D240	8-719-057-97	DIODE SEL5923 (5.1/DVD)	
						< FILTER >	
				FL201	1-517-141-11	INDICATOR TUBE, FLUORESCENT	
						< IC >	
		< CAPACITOR >		IC201	8-759-462-31	IC uPD78044FGF-041-3B9	
C201	1-104-905-11	CAPACITOR    0.22F    5.5V		IC202	8-759-962-08	IC BA6208	
C202	1-164-159-11	CERAMIC    0.1uF    50V		IC203	8-759-332-18	IC GP1U27XB (REMOTE SENSOR)	
C203	1-124-465-00	ELECT    0.47uF    20%    50V				< COIL >	
C204	1-164-159-11	CERAMIC    0.1uF    50V		L401	1-410-509-11	INDUCTOR    10uH	
C205	1-162-294-31	CERAMIC    0.001uF    10%    50V				< TRANSISTOR >	
C206	1-164-159-11	CERAMIC    0.1uF    50V		Q201	8-729-900-63	TRANSISTOR DTA124ES	
C207	1-126-096-11	ELECT    10uF    20%    35V		Q202	8-729-900-36	TRANSISTOR DTC124ES	
		< CONNECTOR >		Q203	8-729-900-36	TRANSISTOR DTC124ES (DE515:SP,MY/V505)	
CNP205	1-779-366-11	CONNECTOR, BOARD TO BOARD 4P (D460Z/DE515:US,Canadian)		Q231	8-729-900-36	TRANSISTOR DTC124ES	
CNS202	1-770-403-11	HOUSING,CONNECTOR(PC BOARD)10P		Q232	8-729-900-36	TRANSISTOR DTC124ES	
CNS204	1-568-742-11	SOCKET, CONNECTOR 23P (D460Z/DE515:US,Canadian,E,EA,PX,AUS)				< RESISTOR >	
CNS204	1-569-327-11	SOCKET, CONNECTOR 27P (DE515:SP,MY/V505)		R200	1-249-433-11	CARBON    22K    5%    1/4W	
		< DIODE >		R201	1-247-903-00	CARBON    1M    5%    1/4W	
D201	8-719-987-63	DIODE 1N4148M		R202	1-249-429-11	CARBON    10K    5%    1/4W	
D202	8-719-987-63	DIODE 1N4148M		R203	1-249-429-11	CARBON    10K    5%    1/4W	
D203	8-719-987-63	DIODE 1N4148M		R204	1-249-425-11	CARBON    4.7K    5%    1/4W F	
D204	8-719-987-63	DIODE 1N4148M		R205	1-249-441-11	CARBON    100K    5%    1/4W	
D211	8-719-987-63	DIODE 1N4148M		R206	1-249-429-11	CARBON    10K    5%    1/4W (DE515:SP,MY/V505)	
D212	8-719-987-63	DIODE 1N4148M		R207	1-249-429-11	CARBON    10K    5%    1/4W	
D213	8-719-987-63	DIODE 1N4148M		R211	1-249-433-11	CARBON    22K    5%    1/4W	
D214	8-719-987-63	DIODE 1N4148M		R212	1-249-433-11	CARBON    22K    5%    1/4W	
D221	8-719-987-63	DIODE 1N4148M (DE515:SP,MY/V505)		R213	1-249-433-11	CARBON    22K    5%    1/4W	
D222	8-719-987-63	DIODE 1N4148M (DE515:E,SP,AUS,EA,PX,MY/V505)		R214	1-249-433-11	CARBON    22K    5%    1/4W	
D223	8-719-987-63	DIODE 1N4148M (DE515:AUS)		R216	1-249-433-11	CARBON    22K    5%    1/4W	
D231	8-719-987-63	DIODE 1N4148M		R221	1-247-807-31	CARBON    100    5%    1/4W	
D233	8-719-313-48	DIODE SEL6210S-TH12 (STANDBY) (DE515:E,SP,AUS,EA,PX,MY/V505)		R222	1-247-807-31	CARBON    100    5%    1/4W	
D234	8-719-057-97	DIODE SEL5923A (5.1/DVD)		R223	1-247-807-31	CARBON    100    5%    1/4W	
D235	8-719-313-50	DIODE SEL6810A-TH12 (HALL)		R224	1-247-807-31	CARBON    100    5%    1/4W	
				R225	1-247-807-31	CARBON    100    5%    1/4W	
				R226	1-249-441-11	CARBON    100K    5%    1/4W	
				R227	1-249-441-11	CARBON    100K    5%    1/4W	

**DISPLAY**   **KEY**   **MAIN**

Ref. No.	Part No.	Description	Remarks
R228	1-249-412-11	CARBON 390 5%	1/4W F
R229	1-249-410-11	CARBON 270 5%	1/4W F
(DE515:E,SP,AUS,EA,PX,MY/V505)			
R230	1-249-410-11	CARBON 270 5%	1/4W F
R231	1-249-427-11	CARBON 6.8K 5%	1/4W F
R262	1-247-839-11	CARBON 2.2K 5%	1/4W
R283	1-249-427-11	CARBON 6.8K 5%	1/4W F
R284	1-249-427-11	CARBON 6.8K 5%	1/4W F
R285	1-249-399-11	CARBON 33 5%	1/4W F
R286	1-249-437-11	CARBON 47K 5%	1/4W
R270	1-247-807-31	CARBON 100 5%	1/4W
< SWITCH >			
S200	1-762-751-11	SWITCH, TACTILE (POWER) (D460Z/DE515:US,Canadian,E,EA,PX,AUS)	
S201	1-762-751-11	SWITCH, TACTILE (CENTER LEVEL -)	
S202	1-762-751-11	SWITCH, TACTILE (CENTER LEVEL +)	
S203	1-762-751-11	SWITCH, TACTILE (REAR LEVEL -)	
S204	1-762-751-11	SWITCH, TACTILE (REAR LEVEL +)	
S209	1-762-751-11	SWITCH, TACTILE (TUNING LEVEL -)	
S210	1-762-751-11	SWITCH, TACTILE (TUNING LEVEL +)	
S211	1-762-751-11	SWITCH, TACTILE (PRESET TUNING -)	
S212	1-762-751-11	SWITCH, TACTILE (PRESET TUNING +)	
S213	1-762-751-11	SWITCH, TACTILE (FM MODE)	
S214	1-762-751-11	SWITCH, TACTILE (FM)	
S215	1-762-751-11	SWITCH, TACTILE (AM)	
S216	1-762-751-11	SWITCH, TACTILE (MEMORY)	
SW200	1-771-054-11	SWITCH, PUSH (1 KEY) (POWER) (DE515:SP,MY/V505)	
< VIBRATOR >			
X201	1-577-101-11	VIBRATOR, CERAMIC 4.19MHz	
*****			
*	A-4392-781-A	KEY BOARD, COMPLETE *****	
< CONNECTOR >			
CNS205	1-770-397-11	HOUSING, CONNECTOR(PC BOARD)4P	
< RESISTOR >			
R232	1-249-411-11	CARBON 330 5%	1/4W
R233	1-249-413-11	CARBON 470 5%	1/4W F
R234	1-249-415-11	CARBON 680 5%	1/4W F
R235	1-249-417-11	CARBON 1K 5%	1/4W F
R236	1-249-419-11	CARBON 1.5K 5%	1/4W F
R237	1-249-421-11	CARBON 2.2K 5%	1/4W F
R238	1-247-843-11	CARBON 3.3K 5%	1/4W
R239	1-249-411-11	CARBON 330 5%	1/4W
R240	1-249-413-11	CARBON 470 5%	1/4W F
R241	1-249-415-11	CARBON 680 5%	1/4W F
R242	1-249-417-11	CARBON 1K 5%	1/4W F
R243	1-249-419-11	CARBON 1.5K 5%	1/4W F
R244	1-249-421-11	CARBON 2.2K 5%	1/4W F
R245	1-247-843-11	CARBON 3.3K 5%	1/4W
R246	1-249-411-11	CARBON 330 5%	1/4W
R247	1-249-413-11	CARBON 470 5%	1/4W F
R248	1-249-415-11	CARBON 680 5%	1/4W F
R249	1-249-417-11	CARBON 1K 5%	1/4W F
R280	1-249-419-11	CARBON 1.5K 5%	1/4W F
R281	1-249-421-11	CARBON 2.2K 5%	1/4W F

Ref. No.	Part No.	Description	Remarks
R282	1-247-843-11	CARBON 3.3K 5%	1/4W
< SWITCH >			
S217	1-762-751-11	SWITCH, TACTILE (SURROUND ON/OFF)	
S218	1-762-751-11	SWITCH, TACTILE (SET UP)	
S219	1-762-751-11	SWITCH, TACTILE (EFFECT/DELAY TIME)	
S220	1-762-751-11	SWITCH, TACTILE (TV/DBS)	
S221	1-762-751-11	SWITCH, TACTILE (TUNER)	
S222	1-762-751-11	SWITCH, TACTILE (PHONE)	
S223	1-762-751-11	SWITCH, TACTILE (VIDEO)	
S224	1-762-751-11	SWITCH, TACTILE (6)	
S225	1-762-751-11	SWITCH, TACTILE (7)	
S226	1-762-751-11	SWITCH, TACTILE (8)	
S227	1-762-751-11	SWITCH, TACTILE (9)	
S228	1-762-751-11	SWITCH, TACTILE (0)	
S229	1-762-751-11	SWITCH, TACTILE (SHIFT)	
S230	1-762-751-11	SWITCH, TACTILE (5.1/DVD INPUT)	
S231	1-762-751-11	SWITCH, TACTILE (TAPE/MD)	
S232	1-762-751-11	SWITCH, TACTILE (1)	
S233	1-762-751-11	SWITCH, TACTILE (2)	
S234	1-762-751-11	SWITCH, TACTILE (3)	
S235	1-762-751-11	SWITCH, TACTILE (4)	
S236	1-762-751-11	SWITCH, TACTILE (5)	
S237	1-762-751-11	SWITCH, TACTILE (DIRECT)	
S238	1-762-751-11	SWITCH, TACTILE (MODE)	
S239	1-762-751-11	SWITCH, TACTILE (CD)	
*****			
*	A-4398-839-A	MAIN BOARD, COMPLETE (V505) *****	
*	A-4392-976-A	MAIN BOARD, COMPLETE (DE515:AUS) *****	
*	A-4392-979-A	MAIN BOARD, COMPLETE (DE515:SP,MY) *****	
*	A-4392-984-A	MAIN BOARD, COMPLETE (D460Z) *****	
*	A-4392-785-A	MAIN BOARD, COMPLETE (DE515:US) *****	
*	A-4392-973-A	MAIN BOARD, COMPLETE (DE515:Canadian) *****	
*	A-4392-983-A	MAIN BOARD, COMPLETE (DE515:E,EA,PX) *****	
3-905-609-01		SCREW (TRANSISTOR)	
4-812-134-00		RIVET (DIA. 3.5), NYLON	
7-685-646-79		SCREW +BVTP 3X8 TYPE2 IT-3	
7-685-872-09		SCREW +BVTT 3X8 (S)	
< CAPACITOR >			
C302	1-126-934-11	ELECT 220uF 20%	16V
C303	1-130-494-11	MYLAR 0.082uF 5%	50V
C304	1-137-367-11	FILM 0.0033uF 5%	50V
C305	1-130-494-11	MYLAR 0.082uF 5%	50V
C306	1-126-959-11	ELECT 0.47uF 20%	50V
C307	1-126-964-11	ELECT 10uF 20%	50V
C308	1-126-964-11	ELECT 10uF 20%	50V
C309	1-162-291-31	CERAMIC 560PF 10%	50V
C310	1-126-962-11	ELECT 3.3uF 20%	50V
C311	1-126-961-11	ELECT 2.2uF 20%	50V
C312	1-126-934-11	ELECT 220uF 20%	16V
C313	1-126-934-11	ELECT 220uF 20%	16V
C314	1-136-165-00	FILM 0.1uF 5%	50V
C316	1-124-252-00	ELECT 0.33uF 20%	50V
C317	1-126-933-11	ELECT 100uF 20%	16V



Ref. No.	Part No.	Description	Remarks			Ref. No.	Part No.	Description	Remarks		
C318	1-137-363-91	FILM	680PF	5%	50V	C451	1-162-282-31	CERAMIC	100PF	10%	50V
C322	1-126-962-11	ELECT	3.3uF	20%	50V	C452	1-126-962-11	ELECT	3.3uF	20%	50V
C323	1-136-173-00	FILM	0.47uF	5%	50V	C453	1-126-966-11	ELECT	33uF	20%	16V
C324	1-126-967-11	ELECT	47uF	20%	16V	C454	1-162-282-31	CERAMIC	100PF	10%	50V
C325	1-136-165-00	FILM	0.1uF	5%	50V	C455	1-137-459-11	FILM	0.0056uF	5%	100V
C326	1-136-165-00	FILM	0.1uF	5%	50V	C457	1-137-365-11	FILM	0.0015uF	5%	50V
C327	1-126-959-11	ELECT	0.47uF	20%	50V	C459	1-126-962-11	ELECT	3.3uF	20%	50V
C328	1-126-963-11	ELECT	4.7uF	20%	50V	C460	1-164-159-11	CERAMIC	0.1uF		50V
C329	1-126-959-11	ELECT	0.47uF	20%	50V	C513	1-126-963-11	ELECT	4.7uF	20%	50V
C330	1-126-963-11	ELECT	4.7uF	20%	50V	C514	1-126-960-11	ELECT	1uF	20%	50V
C331	1-124-250-11	ELECT	0.15uF	20%	50V	C515	1-164-159-11	CERAMIC	0.1uF		50V
C332	1-126-962-11	ELECT	3.3uF	20%	50V	C516	1-126-963-11	ELECT	4.7uF	20%	50V
C333	1-124-250-11	ELECT	0.15uF	20%	50V	C517	1-162-193-11	CERAMIC	3.3PF	10%	50V
C334	1-137-372-11	FILM	0.022uF	5%	50V	C552	1-162-282-31	CERAMIC	100PF	10%	50V
C335	1-136-161-00	FILM	0.047uF	5%	50V	C553	1-126-933-11	ELECT	100uF	20%	10V
C336	1-126-934-11	ELECT	220uF	20%	16V	C554	1-164-040-11	CERAMIC	4PF	0.25PF	50V
C337	1-126-964-11	ELECT	10uF	20%	50V	C555	1-102-989-00	CERAMIC	68PF	5%	500V
C338	1-126-964-11	ELECT	10uF	20%	50V	C556	1-102-989-00	CERAMIC	68PF	5%	500V
C339	1-126-964-11	ELECT	10uF	20%	50V	C560	1-126-967-11	ELECT	47uF	20%	16V
C340	1-126-964-11	ELECT	10uF	20%	50V	C561	1-137-372-11	FILM	0.022uF	5%	50V
C341	1-126-934-11	ELECT	220uF	20%	16V	C567	1-162-193-11	CERAMIC	3.3P	10%	50V
C342	1-126-962-11	ELECT	3.3uF	20%	50V	C570	1-162-286-31	CERAMIC	220PF	10%	50V
C343	1-126-962-11	ELECT	3.3uF	20%	50V	C601	1-162-282-31	CERAMIC	100PF	10%	50V
C344	1-136-165-00	FILM	0.1uF	5%	50V	C602	1-162-282-31	CERAMIC	100PF	10%	50V
C345	1-136-165-00	FILM	0.1uF	5%	50V	C604	1-126-933-11	ELECT	100uF	20%	10V
C346	1-126-959-11	ELECT	0.47uF	20%	50V	C605	1-162-294-31	CERAMIC	0.001uF	10%	50V
C347	1-126-963-11	ELECT	4.7uF	20%	50V	C610	1-137-372-11	FILM	0.022uF	5%	50V
C348	1-126-959-11	ELECT	0.47uF	20%	50V	C641	1-162-282-31	CERAMIC	100PF	10%	50V
C349	1-126-963-11	ELECT	4.7uF	20%	50V	C642	1-162-282-31	CERAMIC	100PF	10%	50V
C350	1-124-250-11	ELECT	0.15uF	20%	50V	C643	1-162-282-31	CERAMIC	100PF	10%	50V
C351	1-126-962-11	ELECT	3.3uF	20%	50V	C651	1-162-282-31	CERAMIC	100PF	10%	50V
C352	1-124-250-11	ELECT	0.15uF	20%	50V	C652	1-162-282-31	CERAMIC	100PF	10%	50V
C357	1-164-159-11	CERAMIC	0.1uF		50V	C654	1-126-933-11	ELECT	100uF	20%	10V
C359	1-126-963-11	ELECT	4.7uF	20%	50V	C660	1-137-372-11	FILM	0.022uF	5%	50V
C360	1-126-963-11	ELECT	4.7uF	20%	50V	C702	1-162-282-31	CERAMIC	100PF	10%	50V
C365	1-126-966-11	ELECT	33uF	20%	16V (DE515:E,SP,EA,PX,MY/V505)	C703	1-126-933-11	ELECT	100uF	20%	10V
C366	1-164-159-11	CERAMIC	0.1uF		50V	C705	1-102-233-00	CERAMIC	33PF	10%	500V
C370	1-164-159-11	CERAMIC	0.1uF		50V	C710	1-126-967-11	ELECT	47uF	20%	16V
C371	1-126-966-11	ELECT	33uF	20%	16V	C711	1-137-372-11	FILM	0.022uF	5%	50V
C401	1-162-282-31	CERAMIC	100PF	10%	50V	C720	1-162-286-31	CERAMIC	220PF	10%	50V
C402	1-126-962-11	ELECT	3.3uF	20%	50V	C721	1-126-923-11	ELECT	220uF	20%	10V
C403	1-126-966-11	ELECT	33uF	20%	16V	C722	1-126-964-11	ELECT	10uF	20%	50V
C404	1-162-282-31	CERAMIC	100PF	10%	50V	C740	1-128-562-11	ELECT	47uF	20%	100V
C405	1-137-459-11	FILM	0.0056uF	5%	100V	C741	1-128-562-11	ELECT	47uF	20%	100V
C406	1-164-159-11	CERAMIC	0.1uF		50V	C742	1-126-925-11	ELECT	470uF	20%	10V
C407	1-137-365-11	FILM	0.0015uF	5%	50V	C752	1-162-282-31	CERAMIC	100PF	10%	50V
C408	1-162-294-31	CERAMIC	0.001uF	10%	50V	C753	1-126-933-11	ELECT	100uF	20%	10V
C409	1-126-962-11	ELECT	3.3uF	20%	50V	C755	1-102-233-00	CERAMIC	33PF	10%	500V
C410	1-164-159-11	CERAMIC	0.1uF		50V	C760	1-126-967-11	ELECT	47uF	20%	16V
C412	1-162-291-31	CERAMIC	560PF	10%	50V	C761	1-137-372-11	FILM	0.022uF	5%	50V
C413	1-164-159-11	CERAMIC	0.1uF		50V	C770	1-162-286-31	CERAMIC	220PF	10%	50V
C415	1-164-159-11	CERAMIC	0.1uF		50V	C799	1-164-159-11	CERAMIC	0.1uF		50V
C416	1-164-159-11	CERAMIC	0.1uF		50V	C801	1-104-664-11	ELECT	47uF	20%	25V
C434	1-162-286-31	CERAMIC	220PF	10%	50V	C802	1-104-664-11	ELECT	47uF	20%	25V
C435	1-162-286-31	CERAMIC	220PF	10%	50V	C803	1-125-556-11	ELECT(BLOCK)	8200uF	20%	56V (DE515:SP/V505)
						C803	1-107-766-11	ELECT	8200uF	20%	71V (DE515:Canadian,E,EA,PX,AUS)
						C803	1-109-932-11	ELECT	10000uF	20%	71V (D460Z/DE515:US)

# MAIN

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
C804	1-125-556-11	ELECT(BLOCK)	8200uF 20% 56V (DE515:SP,MY/V505)	D810	8-719-024-99	DIODE 11ES2-NTA2B	
C804	1-107-766-11	ELECT	8200uF 20% 71V (DE515:Canadian,E,EA,PX,AUS)	D811	8-719-024-99	DIODE 11ES2-NTA2B	
C804	1-109-932-11	ELECT	10000uF 20% 71V (D460Z/DE515:US)	D812	8-719-024-99	DIODE 11ES2-NTA2B	
C805	1-130-781-00	FILM	0.22uF 10% 100V (DE515:AUS)	D813	8-719-024-99	DIODE 11ES2-NTA2B	
C805	1-137-420-11	FILM	0.047uF 10% 100V (D460Z/DE515:US,Canadian,E,SP,EA,PX,MY/V505)	D814	8-719-987-63	DIODE 1N4148M	
C806	1-130-781-00	FILM	0.22uF 10% 100V (DE515:AUS)	D815	8-719-987-63	DIODE 1N4148M	
C806	1-137-420-11	FILM	0.047uF 10% 100V (D460Z/DE515:US,Canadian,E,SP,EA,PX,MY/V505)	D817	8-719-001-30	DIODE UZL-9H3	
C807	1-104-664-11	ELECT	47uF 20% 25V	D818	8-719-987-63	DIODE 1N4148M	
C808	1-104-664-11	ELECT	47uF 20% 25V	D901	8-719-987-63	DIODE 1N4148M	
C809	1-126-960-11	ELECT	1uF 20% 50V			< TERMINAL >	
C810	1-126-960-11	ELECT	1uF 20% 50V	* G200	1-537-738-21	TERMINAL, EARTH	
C811	1-126-974-11	ELECT	3300uF 20% 50V	* G201	1-537-738-21	TERMINAL, EARTH	
C812	1-126-974-11	ELECT	3300uF 20% 50V	* G202	1-537-738-21	TERMINAL, EARTH	
C813	1-101-001-00	CERAMIC	0.001uF 50V			< IC >	
C814	1-101-001-00	CERAMIC	0.001uF 50V	IC300	8-759-442-97	IC LV1016	
C820	1-161-494-00	CERAMIC	0.022uF 25V	IC301	8-759-442-96	IC LA2786	
C821	1-161-494-00	CERAMIC	0.022uF 25V	IC302	8-759-636-74	IC M5218AP-22	
C822	1-104-664-11	ELECT	47uF 20% 25V	IC401	8-759-805-14	IC LC7822	
C823	1-104-664-11	ELECT	47uF 20% 25V	IC402	8-759-636-74	IC M5218AP-22	
C950	1-126-767-11	ELECT	1000uF 20% 16V	IC501	8-759-636-74	IC M5218AP-22	
C951	1-164-097-11	CERAMIC	0.022uF 50V	IC551	8-749-011-16	IC STK350-230	
C952	1-126-960-11	ELECT	1uF 20% 50V	IC601	8-759-085-89	IC LM3875-S	
C953	1-124-464-11	ELECT	0.22uF 20% 50V	IC651	8-759-085-89	IC LM3875-S	
C954	1-126-795-11	ELECT	10uF 20% 50V	IC701	8-759-326-52	IC uPC2581V	
C955	1-164-159-11	CERAMIC	0.1uF 50V	IC801	8-759-604-40	IC TA7812S	
		< CONNECTOR >		IC802	8-759-604-46	IC M5F79M12L	
CNP503	1-695-087-11	PIN, CONNECTOR (PC BOARD) 7P		IC950	8-759-333-83	IC NJM2103D	
CNP504	1-695-087-11	PIN, CONNECTOR (PC BOARD) 7P				< JACK >	
CNP702	1-764-474-11	PIN, CONNECTOR (PC BOARD) 5P		J401	1-770-614-11	JACK, PIN 4P (PHONO/CD)	
CNS204	1-569-327-11	SOCKET, CONNECTOR 27P(DE515:SP,MY/V505)		J402	1-580-825-11	JACK, PIN 6P (TAPE/MD, TV DBS AUDIO IN)	
CNS204	1-568-742-11	SOCKET, CONNECTOR 23P (D460Z/DE515:US,Canadian,E,AUS,EA,PX)		J403	1-770-613-11	JACK, PIN 4P (VIDEO)	
CNS251	1-569-060-11	SOCKET, CONNECTOR 11P				< COIL >	
CNS701	1-568-442-11	SOCKET, CONNECTOR 9P		L301	1-410-509-11	INDUCTOR 10uH	
CNS802	1-770-480-12	SOCKET, CONNECTOR PIN 4P		L302	1-410-509-11	INDUCTOR 10uH	
		< DIODE >		L551	1-420-872-00	COIL, AIR-CORE	
D560	8-719-987-63	DIODE 1N4148M		L601	1-420-872-00	COIL, AIR-CORE	
D610	8-719-987-63	DIODE 1N4148M		L651	1-420-872-00	COIL, AIR-CORE	
D710	8-719-987-63	DIODE 1N4148M				< TRANSISTOR >	
D721	8-719-815-85	DIODE 1S1585		L701	1-420-872-00	COIL, AIR-CORE	
D722	8-719-815-85	DIODE 1S1585		L751	1-420-872-00	COIL, AIR-CORE	
D723	8-719-987-63	DIODE 1N4148M					
D724	8-719-987-63	DIODE 1N4148M		Q551	8-729-119-76	TRANSISTOR 2SA1175-HFE	
D725	8-719-987-63	DIODE 1N4148M		Q552	8-729-141-30	TRANSISTOR 2SC3623A-LK	
D726	8-719-987-63	DIODE 1N4148M		Q553	8-749-010-25	IC MN2488-OPY-M	
D727	8-719-987-63	DIODE 1N4148M		Q554	8-749-010-26	IC MP1620-OPY-M	
D728	8-719-987-63	DIODE 1N4148M		Q560	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D801	8-719-002-33	DIODE UZL-24L					
D802	8-719-302-38	DIODE RBV-602-01		Q570	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
D803	8-719-028-23	DIODE D3SBA20-4101		Q610	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D804	8-719-010-38	DIODE UZ-5.1BSB		Q701	8-729-119-76	TRANSISTOR 2SA1175-HFE	
				Q702	8-729-141-30	TRANSISTOR 2SC3623A-LK	
				Q703	8-749-010-25	IC MN2488-OPY-M	
				Q704	8-749-010-26	IC MP1620-OPY-M	
				Q710	8-729-119-78	TRANSISTOR 2SC2785-HFE	
				Q720	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
				Q721	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
				Q722	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
Q723	8-729-119-78	TRANSISTOR 2SC403SP-51		R453	1-249-417-11	CARBON 1K 5%	1/4W F
Q751	8-729-119-76	TRANSISTOR 2SA1175-HFE		R454	1-249-417-11	CARBON 1K 5%	1/4W F
Q752	8-729-141-30	TRANSISTOR 2SC3623A-LK		R455	1-249-417-11	CARBON 1K 5%	1/4W F
Q753	8-749-010-25	IC MN2488-OPY-M		R456	1-249-417-11	CARBON 1K 5%	1/4W F
Q754	8-749-010-26	IC MP1620-OPY-M		R457	1-249-417-11	CARBON 1K 5%	1/4W F
Q770	8-729-140-82	TRANSISTOR 2SA988-PAFAEA		R458	1-249-429-11	CARBON 10K 5%	1/4W
Q801	8-729-140-97	TRANSISTOR 2SB734-34		R459	1-249-437-11	CARBON 47K 5%	1/4W
Q802	8-729-119-78	TRANSISTOR 2SC2785-HFE		R460	1-247-897-11	CARBON 560K 5%	1/4W
Q808	8-729-030-18	TRANSISTOR 2SD809-K		R461	1-249-416-11	CARBON 820 5%	1/4W F
Q809	8-729-119-78	TRANSISTOR 2SC2785-HFE		R462	1-247-897-11	CARBON 560K 5%	1/4W
Q951	8-729-030-18	TRANSISTOR 2SD809-K		R463	1-249-437-11	CARBON 47K 5%	1/4W
		< RESISTOR >		R465	1-249-417-11	CARBON 1K 5%	1/4W F
				R466	1-249-417-11	CARBON 1K 5%	1/4W F
R300	1-247-903-00	CARBON 1M 5%	1/4W	R467	1-247-897-11	CARBON 560K 5%	1/4W
R301	1-249-421-11	CARBON 2.2K 5%	1/4W F	R470	1-249-441-11	CARBON 100K 5%	1/4W
R302	1-249-421-11	CARBON 2.2K 5%	1/4W F	R513	1-249-429-11	CARBON 10K 5%	1/4W
R303	1-249-439-11	CARBON 68K 5%	1/4W	R514	1-249-429-11	CARBON 10K 5%	1/4W
R304	1-249-411-11	CARBON 330 5%	1/4W	R515	1-249-419-11	CARBON 1.5K 5%	1/4W F
R306	1-249-436-11	CARBON 39K 5%	1/4W	R516	1-249-419-11	CARBON 1.5K 5%	1/4W F
R307	1-247-862-11	CARBON 20K 5%	1/4W	R517	1-249-429-11	CARBON 10K 5%	1/4W
R308	1-249-421-11	CARBON 2.2K 5%	1/4W F	R518	1-249-429-11	CARBON 10K 5%	1/4W
R309	1-249-421-11	CARBON 2.2K 5%	1/4W F	R551	1-249-417-11	CARBON 1K 5%	1/4W F
R357	1-249-441-11	CARBON 100K 5%	1/4W	R552	1-249-438-11	CARBON 56K 5%	1/4W
R358	1-249-441-11	CARBON 100K 5%	1/4W	R553	1-249-412-11	CARBON 390 5%	1/4W F
R359	1-249-425-11	CARBON 4.7K 5%	1/4W F				(DE515:SP,MY/V505)
R360	1-249-425-11	CARBON 4.7K 5%	1/4W F	R553	1-249-411-11	CARBON 330 5%	1/4W
R363	1-249-411-11	CARBON 330 5%	1/4W				(D460Z/DE515:US,Canadian,E,EA,PX)
				R554	1-249-438-11	CARBON 56K 5%	1/4W
							(DE515:SP,MY/V505)
R372	1-249-425-11	CARBON 4.7K 5%	1/4W F	R555	1-249-413-11	CARBON 470 5%	1/4W F
R373	1-249-417-11	CARBON 1K 5%	1/4W F	R560	1-249-421-11	CARBON 2.2K 5%	1/4W F
R374	1-249-429-11	CARBON 10K 5%	1/4W	R561	1-249-437-11	CARBON 47K 5%	1/4W
R375	1-249-429-11	CARBON 10K 5%	1/4W	R562	1-249-431-11	CARBON 15K 5%	1/4W
R401	1-249-411-11	CARBON 330 5%	1/4W	R563	1-249-414-11	CARBON 560 5%	1/4W F
R402	1-249-421-11	CARBON 2.2K 5%	1/4W F	△R564	1-249-409-11	CARBON 220 5%	1/4W F
R403	1-249-417-11	CARBON 1K 5%	1/4W F				(DE515:SP,MY/V505)
R404	1-249-417-11	CARBON 1K 5%	1/4W F	△R564	1-249-408-11	CARBON 180 5%	1/4W F
R405	1-249-417-11	CARBON 1K 5%	1/4W F				(D460Z/DE515:US,Canadian,E,EA,PX,AUS)
R406	1-249-417-11	CARBON 1K 5%	1/4W F	△R565	1-249-409-11	CARBON 220 5%	1/4W F
R407	1-249-417-11	CARBON 1K 5%	1/4W F				(DE515:SP,MY/V505)
R408	1-249-429-11	CARBON 10K 5%	1/4W	△R565	1-249-408-11	CARBON 180 5%	1/4W F
R409	1-249-437-11	CARBON 47K 5%	1/4W				(D460Z/DE515:US,Canadian,E,EA,PX,AUS)
R410	1-247-897-11	CARBON 560K 5%	1/4W	△R566	1-233-352-21	ENCAPSULATED COMPONENT	
R411	1-249-416-11	CARBON 820 5%	1/4W F	△R567	1-249-393-11	CARBON 10 5%	1/4W F
R412	1-247-897-11	CARBON 560K 5%	1/4W	R568	1-249-389-11	CARBON 4.7 5%	1/4W F
R413	1-249-437-11	CARBON 47K 5%	1/4W	△R569	1-249-413-11	CARBON 470 5%	1/4W F
R414	1-249-425-11	CARBON 4.7K 5%	1/4W F	R570	1-249-419-11	CARBON 1.5K 5%	1/4W F
R415	1-249-417-11	CARBON 1K 5%	1/4W F	R571	1-249-427-11	CARBON 6.8K 5%	1/4W F
R416	1-249-417-11	CARBON 1K 5%	1/4W F	R573	1-249-437-11	CARBON 47K 5%	1/4W
R417	1-247-897-11	CARBON 560K 5%	1/4W	R580	1-249-426-11	CARBON 5.6K 5%	1/4W
R420	1-249-441-11	CARBON 100K 5%	1/4W	R581	1-247-887-00	CARBON 220K 5%	1/4W
R435	1-249-418-11	CARBON 1.2K 5%	1/4W F	R582	1-249-426-11	CARBON 5.6K 5%	1/4W
R442	1-249-418-11	CARBON 1.2K 5%	1/4W F	R601	1-249-417-11	CARBON 1K 5%	1/4W F
R443	1-249-418-11	CARBON 1.2K 5%	1/4W F	R602	1-249-438-11	CARBON 56K 5%	1/4W
R447	1-249-416-11	CARBON 820 5%	1/4W F	R603	1-249-438-11	CARBON 56K 5%	1/4W
R448	1-249-429-11	CARBON 10K 5%	1/4W				
R449	1-249-433-11	CARBON 22K 5%	1/4W				
R450	1-249-400-11	CARBON 39 5%	1/4W F				
R451	1-249-411-11	CARBON 330 5%	1/4W				
R452	1-249-421-11	CARBON 2.2K 5%	1/4W F				

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
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# MAIN

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
R604	1-249-412-11	CARBON	390 5% 1/4W F (DE515:SP,MY/V505)	R751	1-249-417-11	CARBON	1K 5% 1/4W F
R604	1-249-411-11	CARBON	330 5% 1/4W (D460Z/DE515:US,Canadian,E,EA,PX,AUS)	R752	1-249-439-11	CARBON	68K 5% 1/4W
△ R610	1-249-393-11	CARBON	10 5% 1/4W F	R753	1-249-413-11	CARBON	470 5% 1/4W F (DE515:SP,MY/V505)
R611	1-249-389-11	CARBON	4.7 5% 1/4W F	R753	1-249-412-11	CARBON	390 5% 1/4W F (D460Z/DE515:US,Canadian,E,AUS,EA,PX)
R612	1-249-437-11	CARBON	47K 5% 1/4W	R754	1-249-439-11	CARBON	68K 5% 1/4W
△ R619	1-249-413-11	CARBON	470 5% 1/4W F	R760	1-249-421-11	CARBON	2.2K 5% 1/4W F
R630	1-249-426-11	CARBON	5.6K 5% 1/4W	R761	1-249-437-11	CARBON	47K 5% 1/4W
R631	1-247-887-00	CARBON	220K 5% 1/4W (DE515/V505)	R763	1-249-414-11	CARBON	560 5% 1/4W F
R632	1-249-426-11	CARBON	5.6K 5% 1/4W	△ R764	1-249-409-11	CARBON	220 5% 1/4W F (DE515:SP,MY/V505)
R635	1-249-429-11	CARBON	10K 5% 1/4W (DE515/V505)	△ R764	1-249-408-11	CARBON	180 5% 1/4W F (D460Z/DE515:US,Canadian,E,AUS,EA,PX)
R651	1-249-417-11	CARBON	1K 5% 1/4W F	△ R765	1-249-409-11	CARBON	220 5% 1/4W F (DE515:SP,MY/V505)
R652	1-249-438-11	CARBON	56K 5% 1/4W	△ R765	1-249-408-11	CARBON	180 5% 1/4W F (D460Z/DE515:US,Canadian,E,AUS,EA,PX)
R653	1-249-438-11	CARBON	56K 5% 1/4W	△ R766	1-233-352-21	ENCAPSULATED COMPONENT	
R654	1-249-412-11	CARBON	390 5% 1/4W F (DE515:SP,MY/V505)	△ R767	1-249-393-11	CARBON	10 5% 1/4W F
R654	1-249-411-11	CARBON	330 5% 1/4W (D460Z/DE515:US,Canadian,E,EA,PX,AUS)	R768	1-249-389-11	CARBON	4.7 5% 1/4W F
△ R660	1-249-393-11	CARBON	10 5% 1/4W F	R770	1-249-419-11	CARBON	1.5K 5% 1/4W F
R661	1-249-389-11	CARBON	4.7 5% 1/4W F	R771	1-249-427-11	CARBON	6.8K 5% 1/4W F
R662	1-249-437-11	CARBON	47K 5% 1/4W	R772	1-249-431-11	CARBON	15K 5% 1/4W
R681	1-247-887-00	CARBON	220K 5% 1/4W (DE515/V505)	R773	1-249-437-11	CARBON	47K 5% 1/4W
R685	1-249-429-11	CARBON	10K 5% 1/4W (DE515/V505)	R781	1-247-887-00	CARBON	220K 5% 1/4W
R701	1-249-417-11	CARBON	1K 5% 1/4W F	△ R801	1-215-883-11	METAL OXIDE	33 5% 2W F
R702	1-249-439-11	CARBON	68K 5% 1/4W	△ R802	1-215-883-11	METAL OXIDE	33 5% 2W F
R703	1-249-413-11	CARBON	470 5% 1/4W F (DE515:SP,MY/V505)	△ R803	1-215-883-11	METAL OXIDE	33 5% 2W F
R703	1-249-412-11	CARBON	390 5% 1/4W F (D460Z/DE515:US,Canadian,E,AUS,EA,PX)	△ R804	1-215-883-11	METAL OXIDE	33 5% 2W F
R704	1-249-439-11	CARBON	68K 5% 1/4W	△ R805	1-215-883-11	METAL OXIDE	33 5% 2W F
R710	1-249-421-11	CARBON	2.2K 5% 1/4W F	△ R806	1-215-883-11	METAL OXIDE	33 5% 2W F
R711	1-249-437-11	CARBON	47K 5% 1/4W	△ R807	1-249-405-11	CARBON	100 5% 1/4W F
R713	1-249-414-11	CARBON	560 5% 1/4W F	△ R808	1-249-405-11	CARBON	100 5% 1/4W F
△ R714	1-249-409-11	CARBON	220 5% 1/4W F (DE515:SP,MY/V505)	△ R809	1-249-405-11	CARBON	100 5% 1/4W F
△ R714	1-249-408-11	CARBON	180 5% 1/4W F (D460Z/DE515:US,Canadian,E,AUS,EA,PX)	△ R815	1-249-389-11	CARBON	4.7 5% 1/4W F (DE515:SP,MY/V505)
△ R715	1-249-409-11	CARBON	220 5% 1/4W F (DE515:SP,MY/V505)	△ R815	1-247-739-11	CARBON	100 5% 1/2W F (D460Z/DE515:US,Canadian,E,AUS,EA,PX)
△ R715	1-249-408-11	CARBON	180 5% 1/4W F (D460Z/DE515:US,Canadian,E,AUS,EA,PX)	R816	1-249-429-11	CARBON	10K 5% 1/4W
△ R716	1-233-352-21	ENCAPSULATED COMPONENT		R821	1-249-437-11	CARBON	47K 5% 1/4W
△ R717	1-249-393-11	CARBON	10 5% 1/4W F	R822	1-249-425-11	CARBON	4.7K 5% 1/4W F
R718	1-249-389-11	CARBON	4.7 5% 1/4W F	R823	1-249-437-11	CARBON	47K 5% 1/4W
△ R719	1-249-413-11	CARBON	470 5% 1/4W F	R824	1-249-425-11	CARBON	4.7K 5% 1/4W F
R720	1-249-419-11	CARBON	1.5K 5% 1/4W F	R825	1-249-417-11	CARBON	1K 5% 1/4W F
R721	1-249-427-11	CARBON	6.8K 5% 1/4W F	△ R830	1-249-411-11	CARBON	330 5% 1/4W (DE515:Canadian)
R722	1-249-431-11	CARBON	15K 5% 1/4W	△ R830	1-249-413-11	CARBON	470 5% 1/4W F (D460Z/DE515:US,E,SP,AUS,EA,PX,MY/V505)
R723	1-249-437-11	CARBON	47K 5% 1/4W	R950	1-249-421-11	CARBON	2.2K 5% 1/4W F
R724	1-249-425-11	CARBON	4.7K 5% 1/4W F	R951	1-249-429-11	CARBON	10K 5% 1/4W
R725	1-249-427-11	CARBON	6.8K 5% 1/4W F	R952	1-247-843-11	CARBON	3.3K 5% 1/4W
R726	1-249-417-11	CARBON	1K 5% 1/4W F	R953	1-249-433-11	CARBON	22K 5% 1/4W
R727	1-249-427-11	CARBON	6.8K 5% 1/4W F	R954	1-249-439-11	CARBON	68K 5% 1/4W
R730	1-249-429-11	CARBON	10K 5% 1/4W	R955	1-249-429-11	CARBON	10K 5% 1/4W
R731	1-247-887-00	CARBON	220K 5% 1/4W	R956	1-247-843-11	CARBON	3.3K 5% 1/4W
R734	1-249-429-11	CARBON	10K 5% 1/4W	R957	1-249-417-11	CARBON	1K 5% 1/4W F
△ R740	1-249-393-11	CARBON	10 5% 1/4W F	R958	1-249-401-11	CARBON	47 5% 1/4W F
△ R741	1-249-393-11	CARBON	10 5% 1/4W F	R960	1-249-429-11	CARBON	10K 5% 1/4W
R742	1-249-427-11	CARBON	6.8K 5% 1/4W F				

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<b>MAIN</b>	<b>PRIMARY</b>	<b>SECONDARY</b>	<b>SELECTOR</b>	<b>SP SW</b>	<b>STBY</b>
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Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
		< RELAY >		*	1-665-263-11	SELECTOR BOARD (DE515:E,EA,PX) *****	
RY551	1-515-920-11	RELAY (24V)			1-533-233-21	HOLDER, FUSE	
RY601	1-515-920-11	RELAY (24V)				< CONNECTOR >	
RY701	1-515-920-11	RELAY (24V)					
RY801	1-515-894-11	RELAY (D460Z/DE515:US,E,SP,AUS,EA,PX,MY/V505)					
RY851	1-515-918-11	RELAY (DE515:Canadian)		* CNP907	1-565-395-11	PIN, CONNECTOR 3P	
RY852	1-515-918-11	RELAY (DE515:Canadian)		CNP908	1-564-321-00	PIN, CONNECTOR 2P	
		< TERMINAL >		* CNP910	1-564-687-11	PIN, CONNECTOR 3P	
TM1	1-537-714-11	TERMINAL BOARD (ANTENNA) (DE515:SP,AUS,MY/V505)				< FUSE >	
TM1	1-694-265-11	TERMINAL BOARD (ANTENNA)(DE515:E,EA,PX)		△ F904	1-532-464-51	FUSE (T2.5AL/250V)	
TM1	1-537-240-51	TERMINAL BOARD (ANTENNA) (D460Z/DE515:US,Canadian)				< SWITCH >	
TM601	1-537-510-11	TERMINAL BOARD (6P) (SURROUND SPEAKERS)		△ S901	1-571-437-11	SWITCH, POWER (VOLTAGE SELECTOR) *****	
TM701	1-537-376-11	TERMINAL BOARD (FRONT SPEAKERS)					
		< TUNER >		*	1-665-289-11	SP SW BOARD *****	
TU001	1-233-594-11	ENCAPSULATED COMPONENT (DE515:E,SP,AUS,EA,PX,MY/V505)				< CONNECTOR >	
TU001	1-233-593-11	ENCAPSULATED COMPONENT (D460Z/DE515:US,Canadian)		CNP703	1-764-474-11	PIN, CONNECTOR (PC BOARD) 5P	
		< VIBRATOR >		CNP704	1-764-473-11	PIN, CONNECTOR (PC BOARD) 3P	
X301	1-579-952-21	VIBRATOR, CERAMIC 8MHz *****				< JACK >	
*	1-665-286-11	PRIMARY BOARD ***** (D460Z/DE515:US,Canadian,SP,MY,AUS/V505)		J741	1-750-735-11	JACK (LARGE TYPE)(PHONES)(V505)	
	1-533-233-21	HOLDER, FUSE		J741	1-750-733-11	JACK (LARGE TYPE)(PHONES)(D460Z/DE515)	
		< FUSE >				< RESISTOR >	
△ F901	1-532-464-51	FUSE (T2.5AL/250V) (DE515:AUS/V505)		R741	1-247-753-11	CARBON 1.2K 5% 1/2W	
△ F901	1-533-310-11	FUSE (6.3A/125V) (D460Z/DE515:US,Canadian) *****		R742	1-247-753-11	CARBON 1.2K 5% 1/2W	
				R791	1-247-753-11	CARBON 1.2K 5% 1/2W	
				R792	1-247-753-11	CARBON 1.2K 5% 1/2W	
*	1-665-287-11	SECONDARY BOARD *****				< SWITCH >	
	1-533-233-21	HOLDER, FUSE		S701	1-762-319-11	SWITCH, PUSH (2 KEY)(SPEAKERS) *****	
		< CONNECTOR >		*	1-665-285-11	STBY BOARD *****	
CNP801	1-764-479-11	PIN, CONNECTOR (PC BOARD) 10P			1-533-233-21	HOLDER, FUSE	
		< FUSE >				< JACK >	
△ F801	1-532-464-51	FUSE (T3.15A/250V) (DE515:SP,MY/V505)		△ CNJ902	1-540-057-11	OUTLET, AC (POLAR) (US,Canadian,E,EA,PX)	
△ F801	1-576-108-11	FUSE, GLASS TUBE (4A/125V) (D460Z/DE515:US,Canadian)				< CONNECTOR >	
△ F801	1-532-504-51	FUSE (T4AL) (DE515:E,EA,PX,AUS)		CNP802	1-779-495-11	PLUG, CONNECTOR PIN 4P	
△ F802	1-532-464-51	FUSE (T3.15AL) (DE515:SP,MY/V505)		CNP901	1-564-321-00	PIN, CONNECTOR 2P	
△ F802	1-532-504-51	FUSE (T4AL) (DE515:E,EA,PX,AUS)		CNP902	1-564-321-00	PIN, CONNECTOR 2P (DE515:E,EA,PX)	
△ F802	1-576-108-11	FUSE, GLASS TUBE (4A/125V) (D460Z/DE515:US,Canadian) *****		CNP903	1-580-230-11	PIN, CONNECTOR (PC BOARD) 2P (DE515:SP,MY,AUS/V505)	
				CNP905	1-564-320-00	PIN, CONNECTOR (B2P-VH) 2P (DE515:E,EA,PX)	
				* CNP906	1-564-687-11	PIN, CONNECTOR 3P (DE515:E)	
						< DIODE >	
				D816	8-719-987-63	DIODE 1N4148M	

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<b>STBY</b>	<b>SWITCH</b>	<b>VIDEO</b>
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Ref. No.	Part No.	Description	Remarks
		< FUSE >	
△ F902	1-532-464-51	FUSE (T2.5AL) (SP,MY,AUS,CH)	
		< TERMINAL >	
* G900	1-537-738-21	TERMINAL,EARTH (US,Canadian)	
		< RESISTOR >	
△ R901	1-202-725-00	SOLID 3.3M 10% 1/2W (US,Canadian)	
		< RELAY >	
△ RY901	1-515-720-11	RELAY	
		< TRANSFORMER >	
△ T902	1-450-358-11	TRANSFORMER, POWER (E,SP,AUS,EA,PX,MY,CH)	
△ T902	1-450-361-11	TRANSFORMER, POWER (US,Canadian)	
*****			
*	A-4392-780-A	SWITCH BOARD, COMPLETE *****	
		< CAPACITOR >	
C425	1-126-096-11	ELECT 10uF 20% 35V	
C426	1-126-096-11	ELECT 10uF 20% 35V	
C427	1-162-207-31	CERAMIC 22PF 5% 50V	
C428	1-124-252-00	ELECT 0.33uF 20% 50V	
C429	1-130-489-00	MYLAR 0.033uF 5% 50V	
C430	1-102-973-00	CERAMIC 100PF 5% 50V	
C432	1-126-096-11	ELECT 10uF 20% 35V	
C433	1-126-096-11	ELECT 10uF 20% 35V	
C475	1-126-096-11	ELECT 10uF 20% 35V	
C476	1-126-096-11	ELECT 10uF 20% 35V	
C477	1-162-207-31	CERAMIC 22PF 5% 50V	
C478	1-124-252-00	ELECT 0.33uF 20% 50V	
C479	1-130-489-00	MYLAR 0.033uF 5% 50V	
C480	1-102-973-00	CERAMIC 100PF 5% 50V	
C492	1-124-464-11	ELECT 0.22uF 20% 50V	
C500	1-164-159-11	CERAMIC 0.1uF 50V	
C501	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C503	1-162-282-31	CERAMIC 100PF 10% 50V	
C511	1-126-163-11	ELECT 4.7uF 20% 50V	
C512	1-126-163-11	ELECT 4.7uF 20% 50V	
		< CONNECTOR >	
* CN501	1-569-306-11	SOCKET, CONNECTOR (L TYRE) 15P	
* CN505	1-569-306-11	SOCKET, CONNECTOR (L TYRE) 15P	
* CNP507	1-770-394-11	PIN, CONNECTOR (PC BOARD) 10P	
CNS503	1-695-092-11	SOCKET, CONNECTOR 7P	
CNS504	1-695-092-11	SOCKET, CONNECTOR 7P	
		< DIODE >	
D421	8-719-987-63	DIODE 1N4148M	
		< IC >	
IC404	8-759-636-74	IC M5218AP-22	
IC500	8-759-805-14	IC LC7822	
IC502	8-759-636-74	IC M5218AP-22	

Ref. No.	Part No.	Description	Remarks
		< TRANSISTOR >	
Q401	8-729-202-67	TRANSISTOR 2SK246-GR3	
Q402	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q451	8-729-202-67	TRANSISTOR 2SK246-GR3	
Q452	8-729-141-30	TRANSISTOR 2SC3623A-LK	
		< RESISTOR >	
R426	1-249-429-11	CARBON 10K 5% 1/4W	
R427	1-249-439-11	CARBON 68K 5% 1/4W	
R428	1-249-417-11	CARBON 1K 5% 1/4W	F
R430	1-249-437-11	CARBON 47K 5% 1/4W	
R431	1-247-843-11	CARBON 3.3K 5% 1/4W	
R432	1-247-883-00	CARBON 150K 5% 1/4W	
R433	1-249-427-11	CARBON 6.8K 5% 1/4W	F
R434	1-249-413-11	CARBON 470 5% 1/4W	F
R438	1-249-441-11	CARBON 100K 5% 1/4W	
R441	1-249-441-11	CARBON 100K 5% 1/4W	
R444	1-247-903-00	CARBON 1M 5% 1/4W	
R464	1-247-903-00	CARBON 1M 5% 1/4W	
R469	1-247-903-00	CARBON 1M 5% 1/4W	
R476	1-249-429-11	CARBON 10K 5% 1/4W	
R477	1-249-439-11	CARBON 68K 5% 1/4W	
R478	1-249-417-11	CARBON 1K 5% 1/4W	F
R480	1-249-437-11	CARBON 47K 5% 1/4W	
R481	1-247-843-11	CARBON 3.3K 5% 1/4W	
R482	1-247-883-00	CARBON 150K 5% 1/4W	
R483	1-249-427-11	CARBON 6.8K 5% 1/4W	F
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	
R501	1-247-843-11	CARBON 3.3K 5% 1/4W	
R502	1-249-425-11	CARBON 4.7K 5% 1/4W	F
R503	1-249-429-11	CARBON 10K 5% 1/4W	
R504	1-249-425-11	CARBON 4.7K 5% 1/4W	F
R505	1-249-421-11	CARBON 2.2K 5% 1/4W	
R507	1-249-417-11	CARBON 1K 5% 1/4W	F
R508	1-247-849-11	CARBON 5.6K 5% 1/4W	
R511	1-249-441-11	CARBON 100K 5% 1/4W	
R512	1-249-441-11	CARBON 100K 5% 1/4W	
R519	1-249-429-11	CARBON 10K 5% 1/4W	
R520	1-249-417-11	CARBON 1K 5% 1/4W	F
*****			
*	1-665-261-11	VIDEO BOARD *****	
	7-685-872-09	SCREW +BVTT 3X8 (S)	
		< CAPACITOR >	
C250	1-126-960-11	ELECT 1uF 20% 50V	
C251	1-126-960-11	ELECT 1uF 20% 50V	
C252	1-164-159-11	CERAMIC 0.1uF 50V	
C253	1-104-664-11	ELECT 47uF 20% 25V	
C254	1-164-159-11	CERAMIC 0.1uF 50V	

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Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
C255	1-126-924-11	ELECT	330uF 20% 10V	R278	1-249-417-11	CARBON	1K 5% 1/4W F
C256	1-162-215-31	CERAMIC	47PF 5% 50V	R280	1-249-417-11	CARBON	1K 5% 1/4W F
C257	1-162-215-31	CERAMIC	47PF 5% 50V	R282	1-249-417-11	CARBON	1K 5% 1/4W F
C258	1-126-960-11	ELECT	1uF 20% 50V	R287	1-249-437-11	CARBON	47K 5% 1/4W
C291	1-126-795-11	ELECT	10uF 20% 50V (DE515,MY/V505)	R287	1-247-871-11	CARBON	47K 5% 1/4W (DE515:US,Canadian,E,EA,PX,AUS)
C292	1-104-664-11	ELECT	47uF 20% 25V (DE515,MY/V505)	R288	1-249-425-11	CARBON	4.7K 5% 1/4W F (DE515:SP,MY/V505)
< CONNECTOR >				R288	1-247-847-11	CARBON	4.7K 5% 1/4W (DE515:US,Canadian,E,EA,PX,AUS)
CNS250	1-569-060-11	SOCKET, CONNECTOR 11P		△R290	1-215-882-00	METAL OXIDE	22 5% 2W F (DE515/V505)
CNS506	1-569-321-11	SOCKET, CONNECTOR 15P		△R291	1-215-882-00	METAL OXIDE	22 5% 2W F (DE515/V505)
< DIODE >				△R292	1-215-882-00	METAL OXIDE	22 5% 2W F (DE515/V505)
D291	8-719-001-30	DIODE UZL-9H3 (DE515/V505)		△R293	1-215-882-00	METAL OXIDE	22 5% 2W F (DE515/V505)
D292	8-719-987-63	DIODE 1N4148M (DE515/V505)		△R294	1-215-882-00	METAL OXIDE	22 5% 2W F (DE515/V505)
D310	8-719-987-63	DIODE 1N4148M (DE515/V505)		△R295	1-215-882-00	METAL OXIDE	22 5% 2W F (DE515/V505)
< IC >				△R296	1-215-882-00	METAL OXIDE	22 5% 2W F (DE515/V505)
IC251	8-759-333-84	IC NJM2279D		△R297	1-215-882-00	METAL OXIDE	22 5% 2W F (DE515/V505)
IC290	8-759-634-65	IC M5278D09 (DE515/V505)		△R298	1-215-882-00	METAL OXIDE	22 5% 2W F (DE515/V505)
< JACK >				△R299	1-215-882-00	METAL OXIDE	22 5% 2W F (DE515/V505)
J251	1-695-317-21	JACK, PIN 2P (VIDEO/TV DBS)		R397	1-249-419-11	CARBON	1.5K 5% 1/4W
J252	1-766-199-11	JACK, PIN 3P (VIDEO/MONITOR)		R399	1-249-426-11	CARBON	5.6K 5% 1/4W
J253	1-774-843-11	JACK, PIN 1P (WOOFER)		< RELAY >			
J254	1-774-136-11	CONNECTOR, ROUND TYPE 6P (REAR SPEAKER) (DE515/V505)		RY301	1-515-793-11	RELAY	
J501	1-779-380-11	JACK, PIN 6P (FRONT/REAR/WOOFER/CENTER)		*****			
< TRANSISTOR >				* A-4392-778-A VR TONE BOARD, COMPLETE ***** (Including VOLUME BOARD)			
Q291	8-729-119-78	TRANSISTOR	2SC403SP-51 (DE515/V505)	< CAPACITOR >			
Q292	8-729-030-19	TRANSISTOR	2SB1640 (DE515/V505)	C220	1-126-301-11	ELECT	1uF 20% 50V
Q293	8-729-209-15	TRANSISTOR	2SB2012 (DE515/V505)	C221	1-126-301-11	ELECT	1uF 20% 50V
Q367	8-729-119-78	TRANSISTOR	2SC403SP-51 (DE515/V505)	C361	1-164-159-11	CERAMIC	0.1uF 50V
< RESISTOR >				C362	1-164-159-11	CERAMIC	0.1uF 50V
R251	1-247-804-11	CARBON	75 5% 1/4W	C363	1-164-159-11	CERAMIC	0.1uF 50V
R252	1-247-804-11	CARBON	75 5% 1/4W	C364	1-164-159-11	CERAMIC	0.1uF 50V
R253	1-247-804-11	CARBON	75 5% 1/4W	C365	1-164-159-11	CERAMIC	0.1uF 50V
R254	1-247-804-11	CARBON	75 5% 1/4W	C381	1-126-963-11	ELECT	4.7uF 20% 50V
R255	1-249-429-11	CARBON	10K 5% 1/4W	C382	1-126-963-11	ELECT	4.7uF 20% 50V
R256	1-249-429-11	CARBON	10K 5% 1/4W	C383	1-126-963-11	ELECT	4.7uF 20% 50V
△R257	1-249-407-11	CARBON	150 5% 1/4W F	C384	1-126-963-11	ELECT	4.7uF 20% 50V
△R258	1-249-411-11	CARBON	330 5% 1/4W	C385	1-126-963-11	ELECT	4.7uF 20% 50V
R259	1-247-804-11	CARBON	75 5% 1/4W	C421	1-137-440-11	FILM	0.018uF 5% 50V
R262	1-249-433-11	CARBON	22K 5% 1/4W (DE515/V505)	C422	1-124-463-00	ELECT	0.1uF 20% 50V
R263	1-249-421-11	CARBON	2.2K 5% 1/4W (DE515/V505)	C423	1-137-368-11	FILM	0.0047uF 5% 50V
R264	1-249-433-11	CARBON	22K 5% 1/4W (DE515/V505)				
R272	1-249-417-11	CARBON	1K 5% 1/4W F				
R274	1-249-417-11	CARBON	1K 5% 1/4W F				
R276	1-249-417-11	CARBON	1K 5% 1/4W F				

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**VR TONE**  
**(VOLUME)**

Ref. No.	Part No.	Description	Remarks
C424	1-137-372-11	FILM 0.022uF 5%	50V
C471	1-137-440-11	FILM 0.018uF 5%	50V
C472	1-124-463-00	ELECT 0.1uF 20%	50V
C473	1-137-368-11	FILM 0.0047uF 5%	50V
C474	1-137-372-11	FILM 0.022uF 5%	50V
< CONNECTOR >			
* CNP202	1-770-394-11	PIN, CONNECTOR (PC BOARD) 10P	
CNS402	1-568-442-11	SOCKET, CONNECTOR 9P	
CNS502	1-569-321-11	SOCKET, CONNECTOR 15P	
CNS507	1-770-403-11	HOUSING,CONNECTOR(PC BOARD)10P	
< DIODE >			
D238	8-719-313-50	DIODE SEL6810A-TH12 (BASS BOOST)	
< TRANSISTOR >			
Q361	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q362	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q363	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q364	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q365	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q366	8-729-141-30	TRANSISTOR 2SC3623A-LK	
< RESISTOR >			
R351	1-249-417-11	CARBON 1K 5%	1/4W F
R352	1-249-417-11	CARBON 1K 5%	1/4W F
R353	1-249-417-11	CARBON 1K 5%	1/4W F
R354	1-249-417-11	CARBON 1K 5%	1/4W F
R355	1-249-417-11	CARBON 1K 5%	1/4W F
R361	1-249-425-11	CARBON 4.7K 5%	1/4W F
R362	1-249-425-11	CARBON 4.7K 5%	1/4W F
R363	1-249-425-11	CARBON 4.7K 5%	1/4W F
R364	1-249-425-11	CARBON 4.7K 5%	1/4W F
R365	1-249-425-11	CARBON 4.7K 5%	1/4W F
R366	1-249-441-11	CARBON 100K 5%	1/4W
R367	1-249-441-11	CARBON 100K 5%	1/4W
R368	1-249-441-11	CARBON 100K 5%	1/4W
R369	1-249-441-11	CARBON 100K 5%	1/4W
R370	1-249-441-11	CARBON 100K 5%	1/4W
R371	1-249-441-11	CARBON 100K 5%	1/4W
< RESISTOR >			
R421	1-249-430-11	CARBON 12K 5%	1/4W
R422	1-249-422-11	CARBON 2.7K 5%	1/4W F
R423	1-247-903-00	CARBON 1M 5%	1/4W
R424	1-247-903-00	CARBON 1M 5%	1/4W
R425	1-249-415-11	CARBON 680 5%	1/4W F
R471	1-249-430-11	CARBON 12K 5%	1/4W
R472	1-249-422-11	CARBON 2.7K 5%	1/4W F
R473	1-247-903-00	CARBON 1M 5%	1/4W
R474	1-247-903-00	CARBON 1M 5%	1/4W
R475	1-249-415-11	CARBON 680 5%	1/4W F

Ref. No.	Part No.	Description	Remarks
		< VARIABLE RESISTOR >	
RV404	1-225-446-11	RES, VAR, CARBON 100KX6	(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)
< SWITCH >			
S240	1-762-751-11	SWITCH, TACTILE (BASS BOOST)	
*****			
MISCELLANEOUS			
*****			
10	1-782-084-11	WIRE (FLAT TYPE) (23 CORE)	
11	1-782-075-11	WIRE (FLAT TYPE) (9 CORE)	
12	1-782-243-11	WIRE (FLAT TYPE) 15P	
53	1-769-746-61	LEAD (WITH CONNECTOR)	(2 CORE)(DE515:E,EA,PX)
61	1-782-077-11	WIRE (FLAT TYPE) (11 CORE)	
△ 71	1-696-847-11	CORD, POWER (AUS)	
△ 71	1-777-070-11	CORD, POWER (US,CND)	
△ 71	1-777-071-11	CORD, POWER (E,SP,EA,PX,MY,CH)	
72	1-569-008-21	ADAPTOR, CONVERSION 2P (E,EA,PX)	
△ CNJ903	1-251-416-11	OUTLET, A.C. (AUS)	
△ CNJ903	1-526-794-11	OUTLET, A.C. (SP,MY,CH)	
△ T901	1-431-267-11	TRANSFORMER, POWER (US)	
△ T901	1-431-268-11	TRANSFORMER, POWER (Canadian)	
△ T901	1-431-269-11	TRANSFORMER, POWER (SP,MY,CH)	
△ T901	1-431-270-11	TRANSFORMER, POWER (AUS)	
△ T901	1-431-271-11	TRANSFORMER, POWER (E,EA,PX)	
*****			
ACCESSORIES & PACKING MATERIALS			
*****			
	1-475-136-11	REMOTE COMMANDER (RM-U301)	
	1-501-594-11	ANTENNA (FM) (DE515:SP,MY,AUS/V505)	
	1-501-659-11	ANTENNA (FM)	(D460Z/DE515:US,Canadian,E,EA,PX)
	1-501-721-11	ANTENNA (LOOP)	
	3-859-657-21	MANUAL, INSTRUCTION (ENGLISH)	(D460Z/DE515:US,AUS)
	3-859-657-31	MANUAL, INSTRUCTION (ENGLISH/FRENCH)	(DE515:Canadian)
	3-859-657-61	MANUAL, INSTRUCTION	(ENGLISH/FRENCH/SPANISH/CHINESE)
			(DE515:E,SP,EA,PX,MY/V505)
	4-981-643-01	COVER,BATTERY (FOR RM-U301)	
*****			
*****			
HARDWARE LIST			
*****			
#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
#2	7-685-880-09	SCREW +BVTT 4X8 (S)	
#3	7-685-872-09	SCREW +BVTT 3X8 (S)	
#4	7-658-646-71	SCREW +BTP 3X8	

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
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