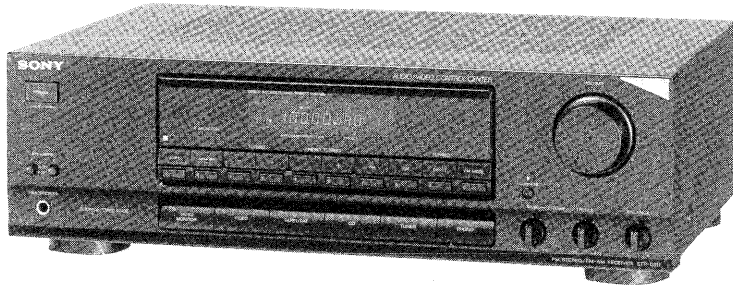


STR-D311

SERVICE MANUAL

*US Model
Canadian Model
UK Model
E Model
Australian Model*



SPECIFICATIONS

Audio Power Specifications (US and Canadian Models)

POWER OUTPUT AND TOTAL HARMONIC DISTORTION

With 8-ohm load, both channels driven, from 40 - 20,000 Hz, rated 70 watts per channel minimum RMS power, with less than 0.8% total harmonic distortion from 250 milliwatts to rated output.

Other Specifications (for All Models)

Amplifier section

Continuous RMS power output (8 ohms, at 40 Hz - 20 kHz less than 0.8% total harmonic distortion)

75 W + 75 W

60 W + 60 W (UK, E, Australian model)

Dynamic power (at 1 kHz, IHF)

90 W + 90 W (8 ohms)

80 W + 80 W (8 ohms) (UK, E, Australian model)

120 W + 120 W (4 ohms)

110 W + 110 W (4 ohms) (UK, E, Australian model)

Harmonic distortion

Less than 0.8% at rated output

Frequency response

PHONO: RIAA equalization curve ± 0.5 dB

CD

VIDEO

TAPE

10 Hz - 50 kHz ± 1 dB

Inputs

	Sensitivity	Impedance	S/N (weighting network, input level)
PHONO	2.5 mV	50 kilohms	74 dB 72 dB* (A, 2.5 mV)
CD, VIDEO TAPE 1/DAT, TAPE 2 MONITOR	200 mV	50 kilohms	95 dB 80 dB* (A, 200 mV)

* '78 IHF

Outputs

REC OUT, VIDEO (AUDIO) OUT	Voltage 200 mV Impedance 10 kilohms
HEADPHONES	Accepts low and high impedance headphones

Tone controls

BASS: ± 10 dB at 100 Hz

TREBLE: ± 8 dB at 10 kHz

Loudness control

+6 dB (at 100 Hz)

— Continued on next page —

FM STEREO/FM-AM RECEIVER
SONY®

Tuner section

	FM tuner section	AM tuner section
Tuning range	87.5 – 108 MHz	530 – 1710 kHz (10 kHz step) 531 – 1602 kHz (9 kHz step)
Antenna terminals	300 ohms, balanced 75 ohms, unbalanced	External antenna terminal
Sensitivity at 50 dB quieting (US and Canadian models) and 46 dB (UK, E, Australian model)	18.3 dBf, 4.5 μ V (mono) 38.3 dBf, 45 μ V (stereo)	—
Usable sensitivity	11.2 dBf, 2 μ V (IHF)	Loop antenna: 500 μ V (at 1,000 kHz)
Signal-to-noise ratio	76 dB (mono) 70 dB (stereo)	54 dB (at 50 mV/m)
Harmonic distortion	0.3% (mono), 0.5% (stereo) at 1 kHz	0.5% (at 50 mV/m, 400 Hz)
Selectivity	60 dB at 400 kHz	40 dB at 10 kHz
Separation	45 dB at 1 kHz	—
Frequency response	30 Hz — 15 kHz +0.5 -2 dB	—

General

System

Tuner section: PLL quartz-locked digital synthesizer system

Preamplifier section: low-noise NF type equalizer amp

Power amplifier section: pure complementary SEPP

Power requirements

US, Canadian model : 120V AC, 60Hz

UK, Australian model : 240V AC, 50Hz

E model : 120V, 220V or 240V AC, adjustable 50/60Hz

Power consumption

US model: 135 W

Canadian model: 150 W

UK, E, Australian model: 125 W

In standby condition: 5 W

AC outlet

US and Canadian models : One switched (120W/1A Max.)

Australian model: 100 W switched

E model : One switched (100 W Max.)

Dimensions

Approx. 430 x 135 x 295 mm (w/h/d)

(17 x 5 $\frac{3}{8}$ x 11 $\frac{5}{8}$ inches)

including projecting parts and controls

Weight

Approx. 6.2 kg (13 lb 1 oz)

Accessories supplied

FM wire antenna (1)

AM loop antenna (1)

Remote commander RM-S103 (1)

Sony batteries SUM-3(NS) (2)

Design and specifications are subject to change without notice.

SAFETY-RELATED COMPONENT WARNING!!

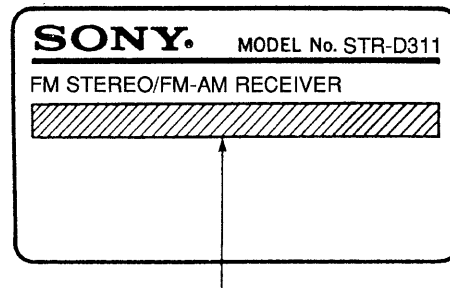
COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

TABLE OF CONTENTS

Section	Title	Page
SECTION 1.	GENERAL	
	Identifying the Parts and Controls	3
SECTION 2.	DIAGRAMS	
2-1.	Circuit Boards Location	5
2-2.	Semiconductor Lead Layouts	5
2-3.	Block Diagram	6
2-4.	Printed Wiring Board — Main Section —	9
2-5.	Schematic Diagram — Main Section —	13
2-6.	Printed Wiring Board — Display Section —	18
2-7.	Schematic Diagram — Display Section —	20
2-8.	IC Block Diagrams	23
SECTION 3.	EXPLODED VIEWS	
3-1.	Front Panel Section	24
3-2.	Chassis Section	25
SECTION 4.	ELECTRICAL PARTS LIST	26

MODEL IDENTIFICATION

—Model Number Label—



US, Canadian model : AC 120V, 60Hz, 135W (US), 150W (CND)

UK, Australian model : AC 240V, 50Hz

E model : AC 120V, 220/240V, 50/60Hz, 125W

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ

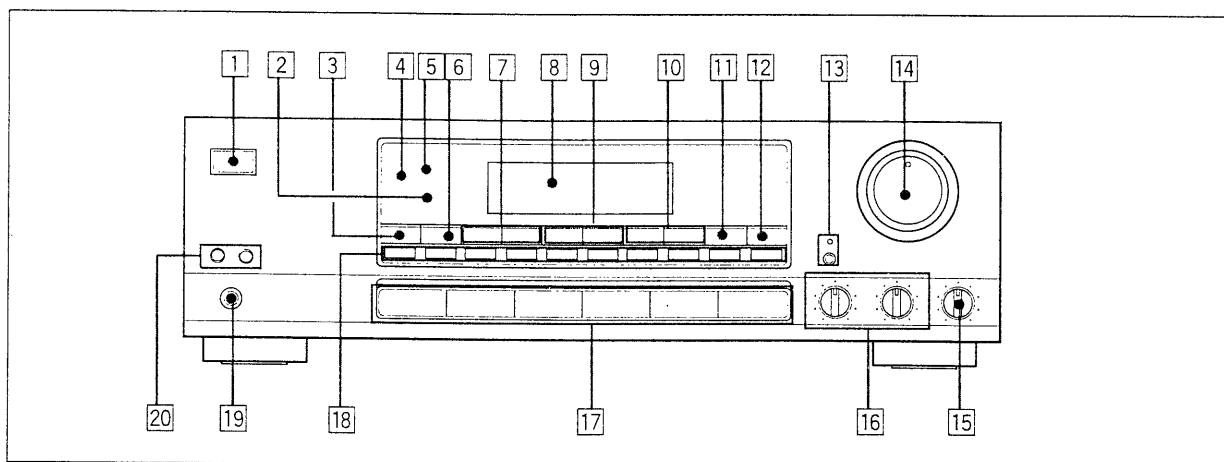
LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE  SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SECTION 1 GENERAL

This section is extracted from instruction manual.

Identifying the Parts and Controls

Front Panel



1 POWER switch

2 TAPE 2 MONITOR indicator

3 SHIFT button

4 Remote sensor

5 STANDBY indicator (for UK, E, Australian model only)
The STANDBY indicator lights up when the power cord is connected.

6 MEMORY button

7 TUNING +/- buttons

8 Display window

9 PRESET TUNING +/- buttons

10 FM/AM band selectors

11 TUNING DIRECT button

12 FM MODE button

13 LOUDNESS button and indicator

14 VOLUME control

15 BALANCE control

16 BASS/TREBLE controls

17 Function selectors

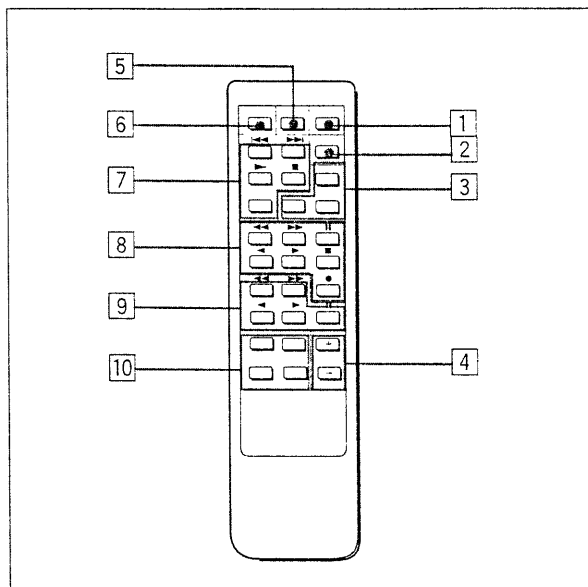
When the TAPE 2 MONITOR is pressed, the indicator of the last selected function also remains lit. But the TAPE 2 MONITOR button has priority and the taped or digital audio taped program can be heard.

18 Numeric buttons

19 HEADPHONES jack

20 SPEAKERS A/B buttons

Remote Commander RM-S103



1 POWER button

2 DBFB button*

3 TUNER PRESET +/- and SHIFT buttons

4 VOLUME +/- buttons

5 SURROUND button*

6 MUTING button*

7 CD player operation buttons

D. (disc) SKIP: When your CD player is equipped with a multi-disc changer, use this button to select loaded disc.

CD ►: Selects the CD function and starts CD playback.

I◀◀/▶▶I: Locates a desired selection.

■: Stop

8 DECK B operation buttons (also for single tape deck)

DECK B ◀/▶: Select tape function and start tape playback on deck B.

◀◀/▶▶: Fast winding

II: Pause

■: Stop

●: Recording

9 DECK A operation buttons

DECK A ◀/▶: Select tape function and start tape playback on deck A.

◀◀/▶▶: Fast winding

II: Pause

10 Function select buttons

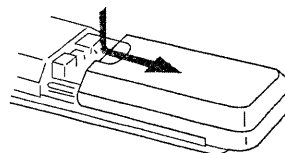
* These buttons does not function for the unit.

Notes on the remote commander

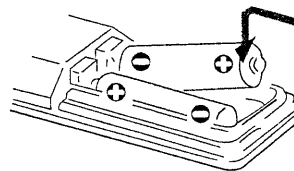
For the functions other than the receiver's own ones, the remote commander is effective only with Sony components having a remote sensor with a  mark.

Inserting the Batteries into the Remote Commander

1 Open the cover.



2 Insert two size AA (R6) batteries with correct polarity.



To avoid damage caused by battery leakage and corrosion

When the commander will not be used for a long time, remove the batteries.

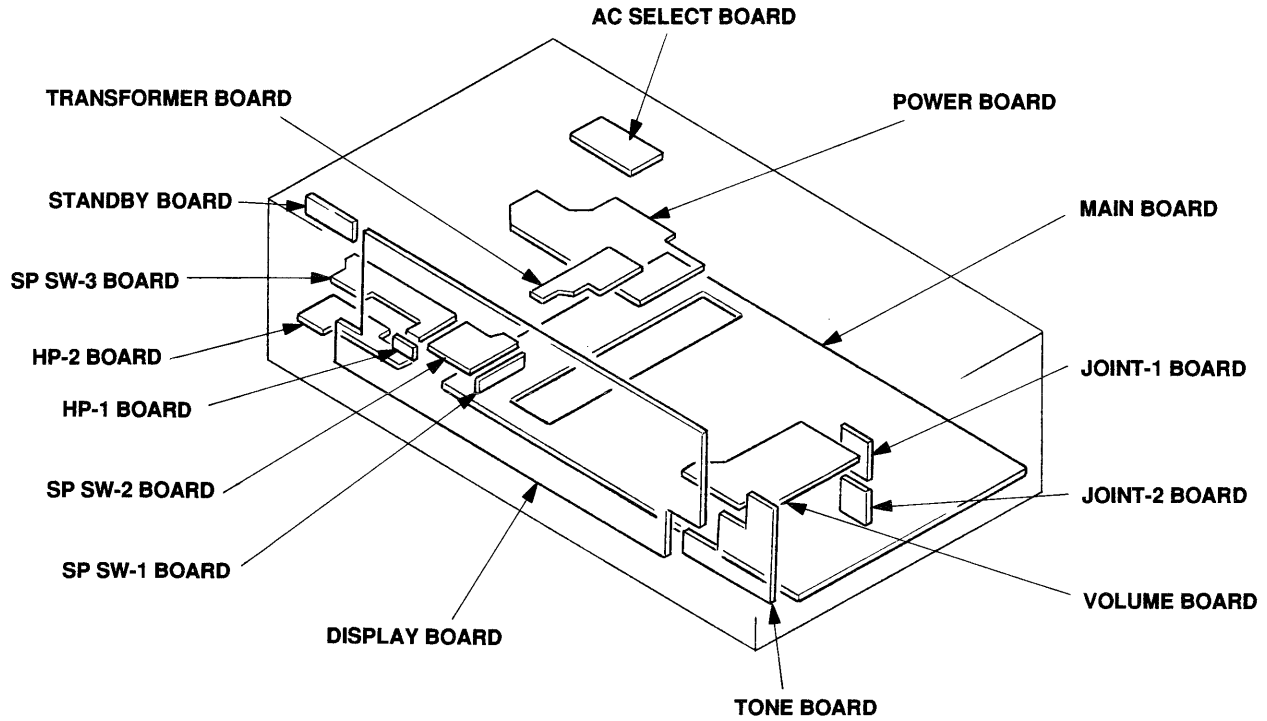
Battery life

Normal operation can be expected about a half year using Sony SUM-3 (NS), and a year using Sony AM-3 (NW) alkaline batteries.

When the batteries are run down, the remote commander will not operate the unit. In this case, replace both batteries with new ones.

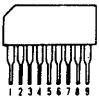
SECTION 2 DIAGRAMS

2-1. CIRCUIT BOARDS LOCATION

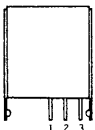


2-2. SEMICONDUCTOR LEAD LAYOUTS

BA6208
uPC4570HA-1

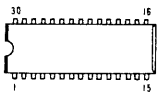


GP1U58XB



1 Vout
2 Vcc
3 GND

LC7822

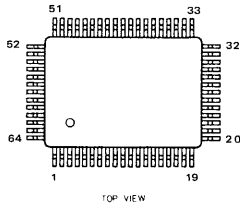


(Top view)

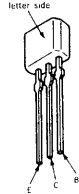
M5218AL



uPD75206GF-731-3BE



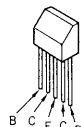
DTA124ES
DTC114TS
2SA1175-HFE
2SC2785-HFE
2SC3623A-LK



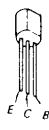
DTC124ES



2SA979-FG



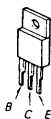
2SA988-PAFAEA



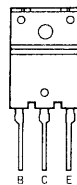
2SA1221-T-KLM
2SC2958



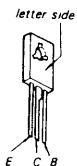
2SB1375-LC
2SD2012



2SB1588-OPY
2SD2439-OPY



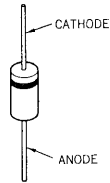
2SD809-K



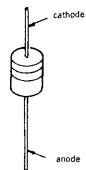
2SK246-GR3



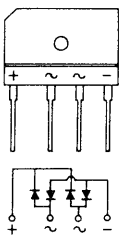
HZS4ALL
UZ-12BSB
UZ-13BSB
UZL-24L
UZ-6.2BSB
1N4148M
1S1585



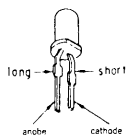
HZS6C3L
UZ-4.3BSB
11ES2



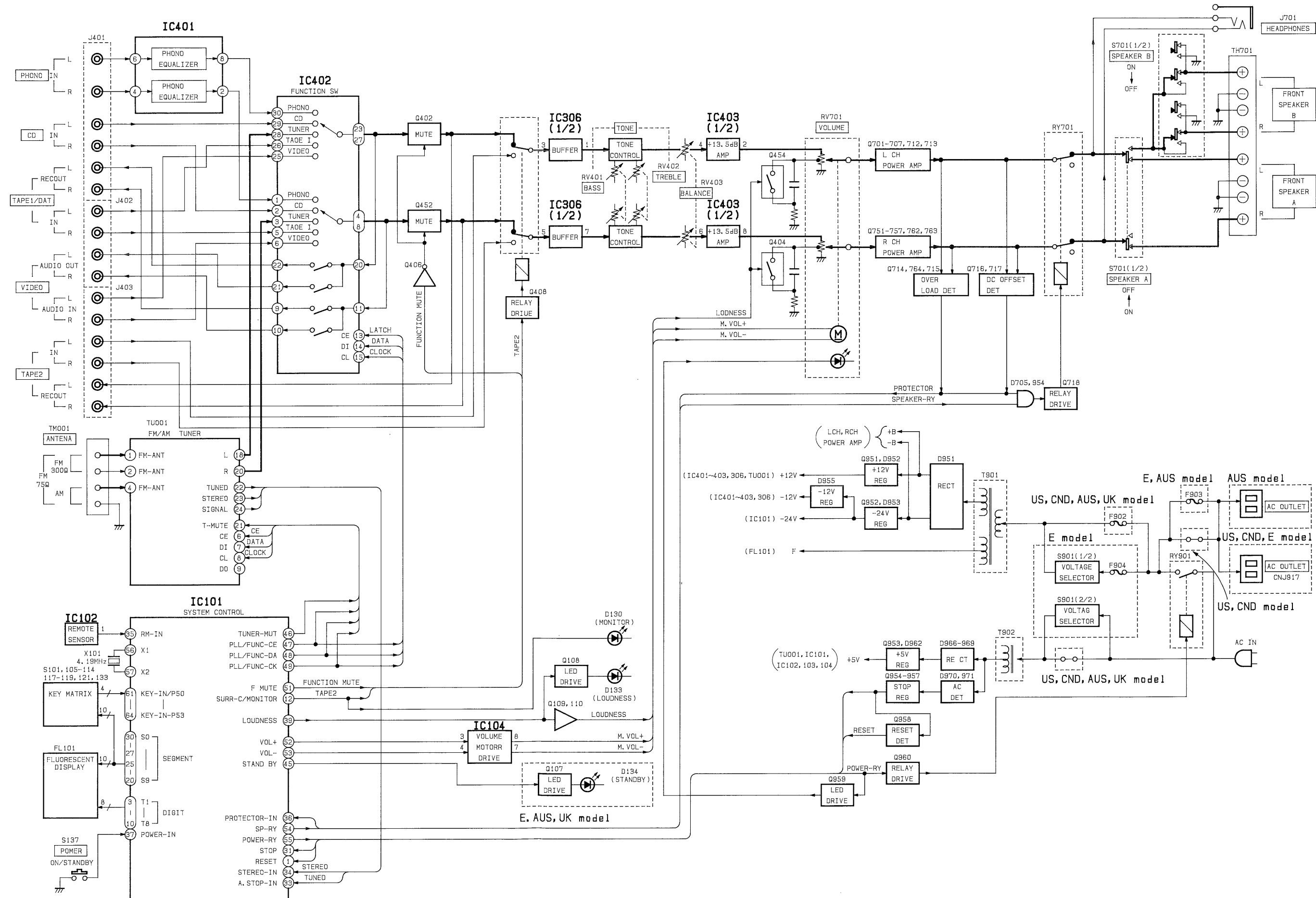
RBV-602-01



SEL3210S-CD
SEL3810A-CD



2-3. BLOCK DIAGRAM



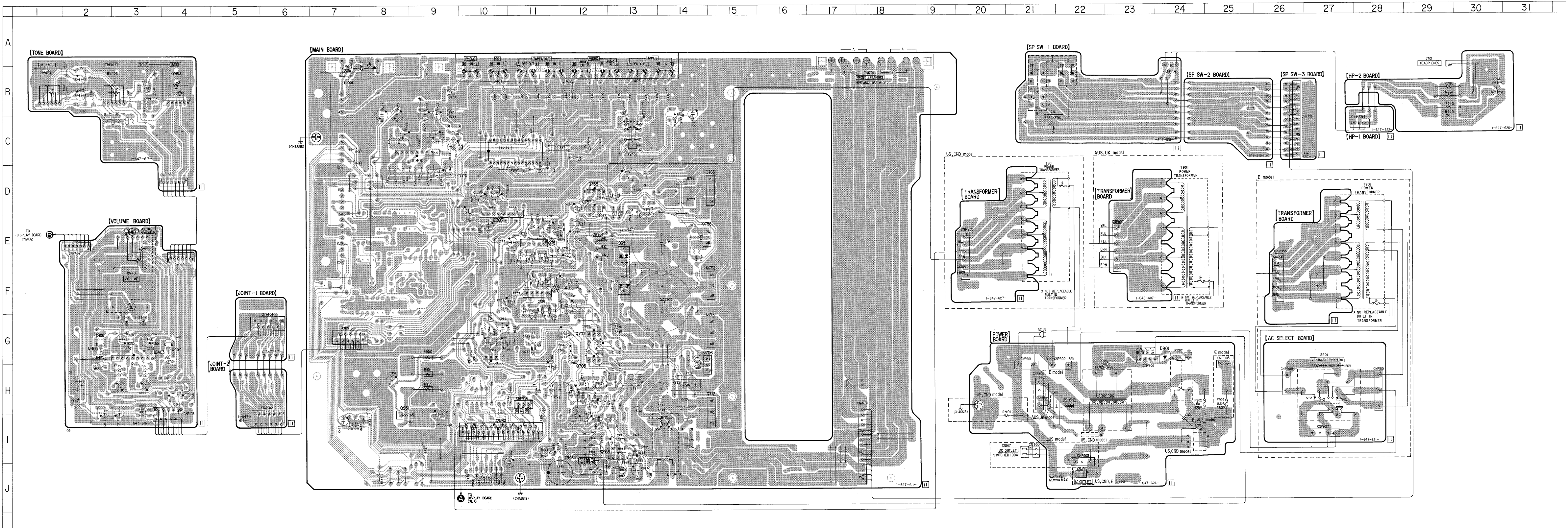
2-4. PRINTED WIRING BOARD — MAIN SECTION —
• See page 5 for Circuit Boards Location and Semiconductor Lead Layouts.

• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D401	J-10	Q717	G-11
D403	C-14	Q718	H-11
D404	H-2	Q751	E-11
D701	F-11	Q752	C-12
D702	G-11	Q753	E-12
D703	H-13	Q754	E-11
D704	J-14	Q755	D-12
D705	G-12	Q756	E-14
D751	E-11	Q757	D-12
D752	E-11	Q762	F-15
D753	D-13	Q763	D-15
D901	G-24	Q764	E-13
D951	E-13	Q951	H-8
D952	I-9	Q952	H-10
D953	G-10	Q953	I-12
D954	G-12	Q954	I-13
D955	G-10	Q955	I-12
D956	H-11	Q956	I-12
D962	I-13	Q957	H-12
D963	J-13	Q958	H-12
D964	I-13	Q959	G-10
D965	H-12	Q960	I-11
D966	I-12		
D967	I-12		
D968	I-12		
D969	I-12		
D970	J-12		
D971	J-12		
IC306	E-10		
IC401	C-9		
IC402	C-10		
IC403	G-3		
Q402	C-12		
Q404	G-2		
Q406	I-8		
Q408	C-14		
Q452	C-12		
Q454	G-4		
Q701	F-11		
Q702	F-11		
Q703	F-12		
Q704	F-11		
Q705	H-12		
Q706	G-14		
Q707	G-12		
Q712	H-15		
Q713	G-15		
Q714	H-13		
Q715	H-12		
Q716	G-11		

Note:

- : parts extracted from the components side.
- : parts extracted from the components side.
- ⋯ : Pattern from the side which enable seeing.
- AUS : Australian model
- CND : Canadian model



2-5. SCHEMATIC DIAGRAM — MAIN SECTION —
• See page 23 for IC Block Diagrams.

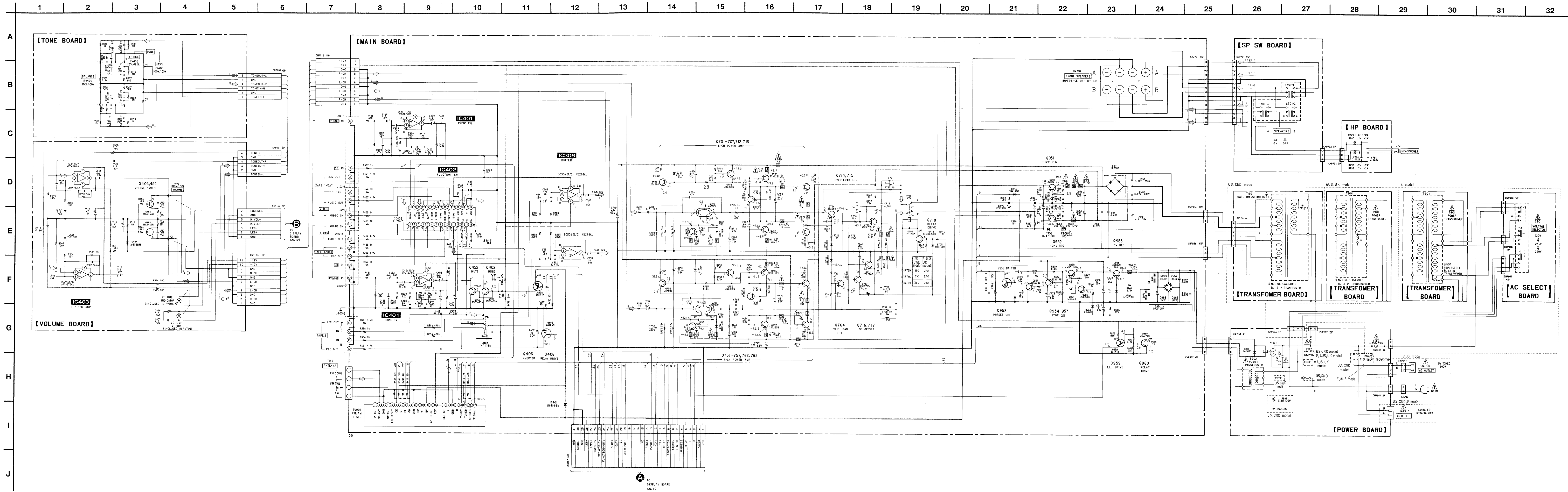
- Note:**
- All capacitors are in μF unless otherwise noted. pF ; μF ; μF 50WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.
 - % : indicates tolerance.
 - **FR** : nonflammable resistor.

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

Note: Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- $\text{---}\text{B+}$ Line
- $\text{---}\text{B-}$ Line
- Voltage 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 $10\text{M}\Omega$). Voltage variations may be noted due to normal production tolerances.
- Signal path.
- $\Rightarrow$: FM

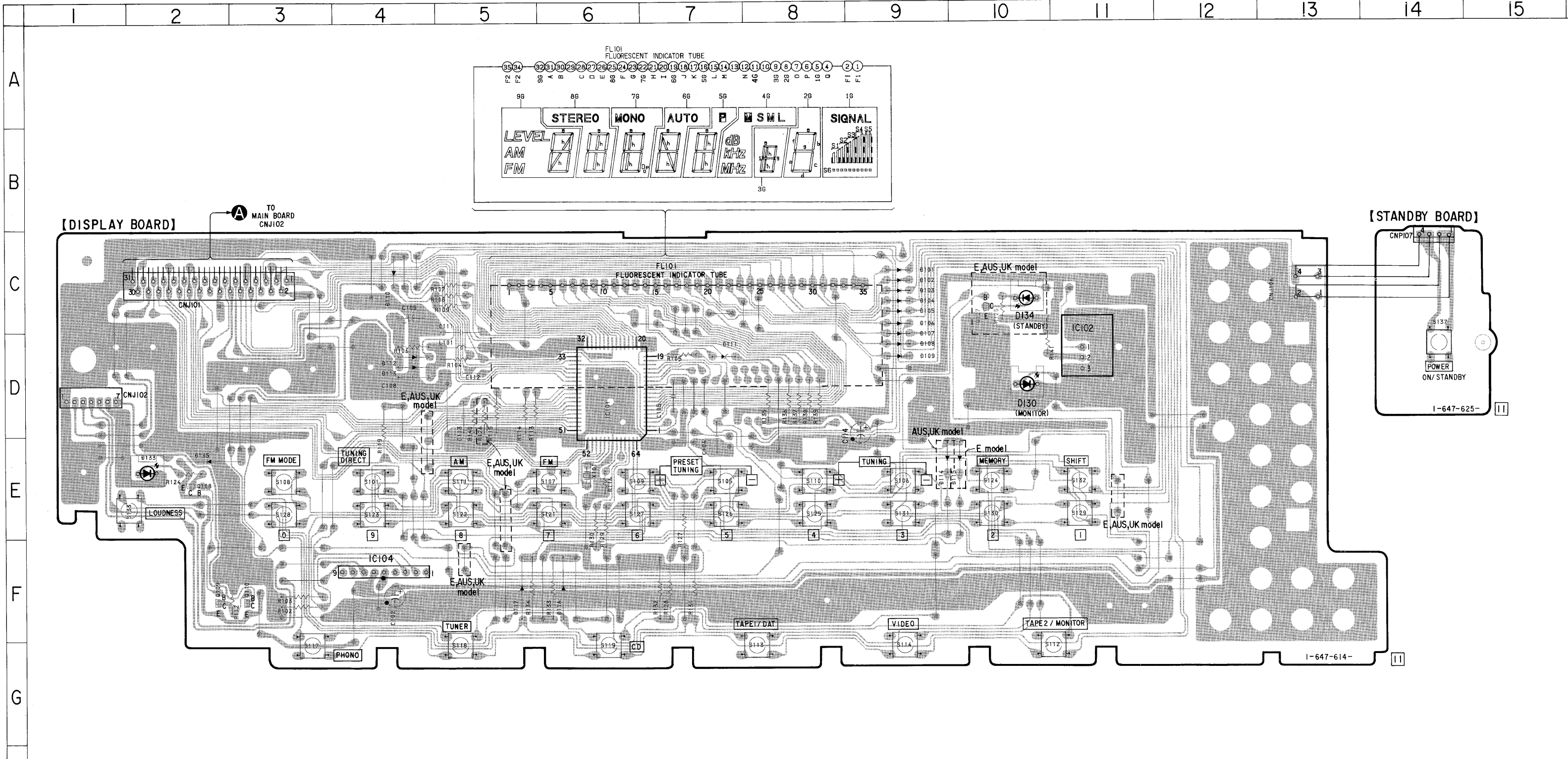
- AUS : Australian model
- CND : Canadian model



2-6. PRINTED WIRING BOARD — DISPLAY SECTION —
• See page 5 for Circuit Boards Location and Semiconductor Lead Layouts.

• Semiconductor Location

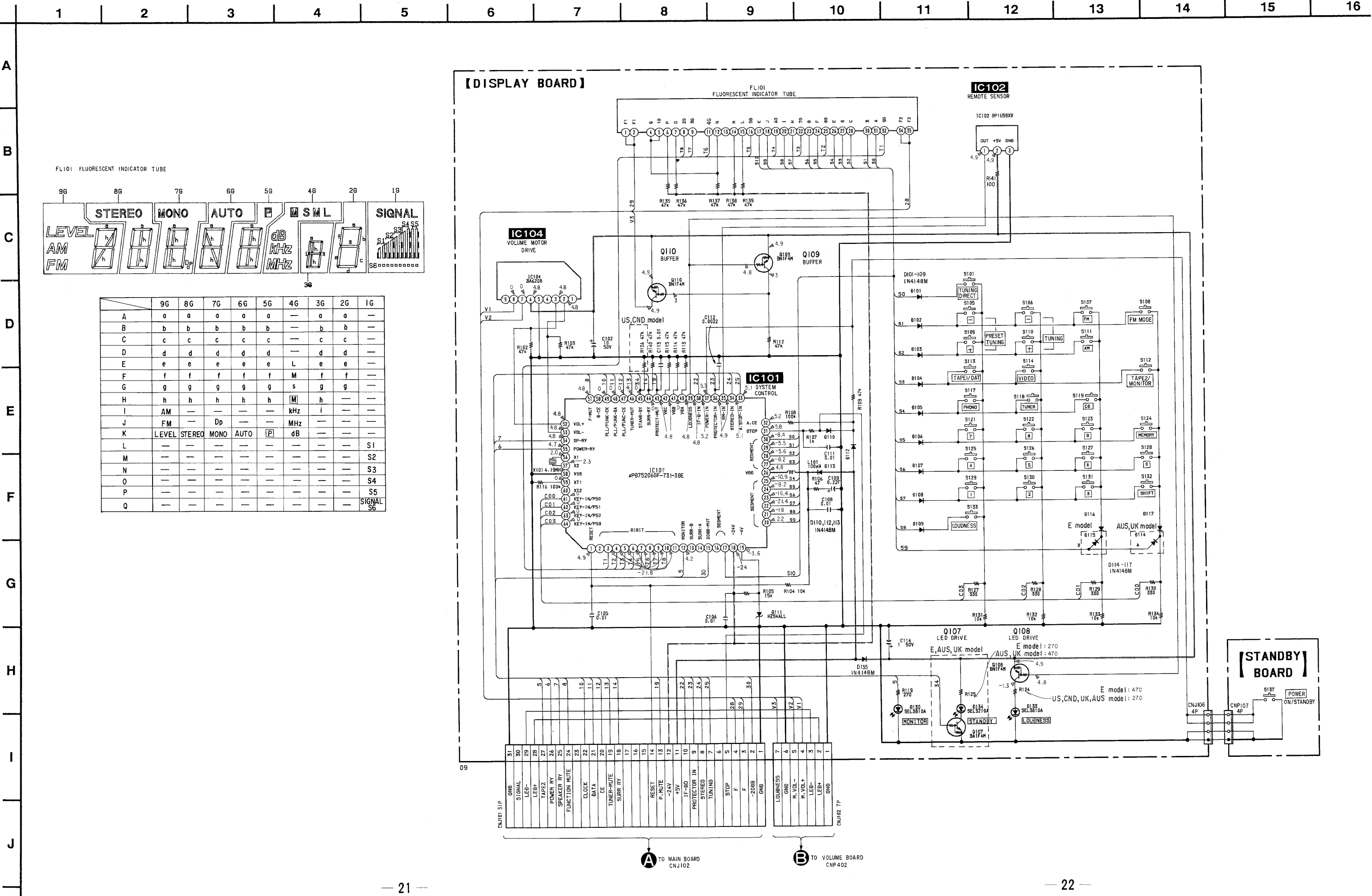
Ref. No.	Location
D101	C-9
D102	C-9
D103	C-9
D104	C-9
D105	C-9
D106	C-9
D107	D-9
D108	D-9
D109	D-9
D110	C-4
D111	D-7
D112	D-4
D113	D-4
D114	E-9
D115	E-10
D116	F-6
D117	F-5
D130	D-10
D133	E-2
D134	C-10
D135	E-2
IC101	D-6
IC102	C-11
IC104	F-4
Q107	C-10
Q108	E-2
Q109	F-2
Q110	F-3



- Note:**
- : parts extracted from the components side.
 - : parts extracted from the components side.
 - : Pattern from the side which enable seeing.
 - AUS : Australian model
 - CND : Canadian model

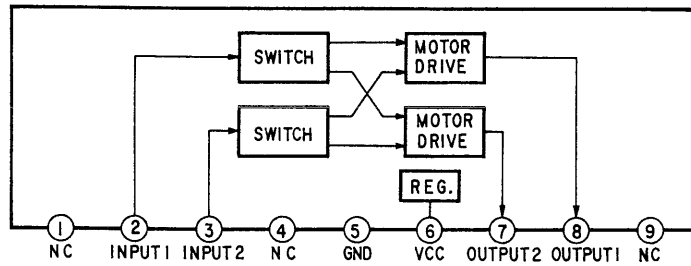
- Note:**
- All capacitors are in μF unless otherwise noted. $\text{pF} = \mu\text{F} \times 10^{-6}$
 - All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.
 - % : indicates tolerance.
 - AUS : Australian model
 - CND : Canadian model
- : B+ Line
----- : B- Line
Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
no mark : FM
Voltages are taken with a VOM (input impedance 10 M Ω). Voltage variations may be noted due to normal production tolerances.

2-7. SCHEMATIC DIAGRAM — DISPLAY SECTION —
• See page 23 for IC Block Diagrams.

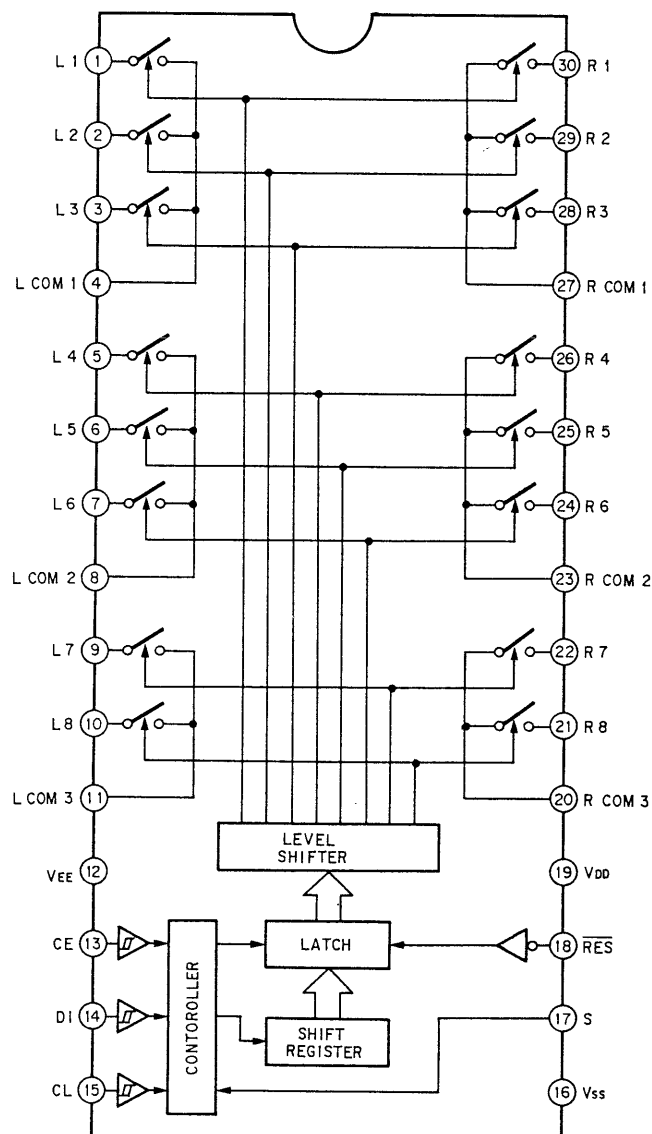


2-8. IC BLOCK DIAGRAMS

IC104 BA6208



IC402 LC7822



SECTION 3 EXPLODED VIEWS

NOTE:

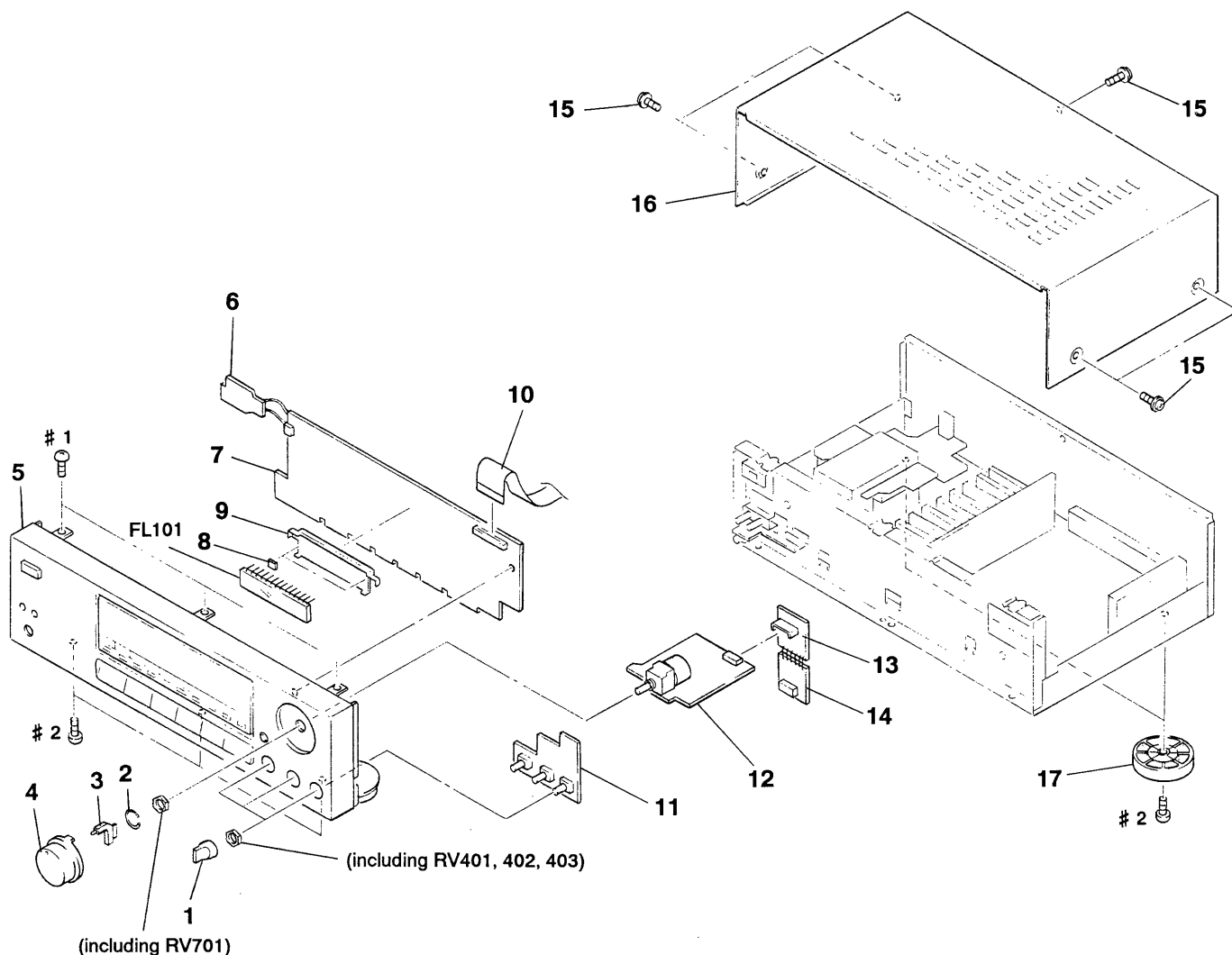
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- 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.
- CND : Canadian model
- AUS : Australian model

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.

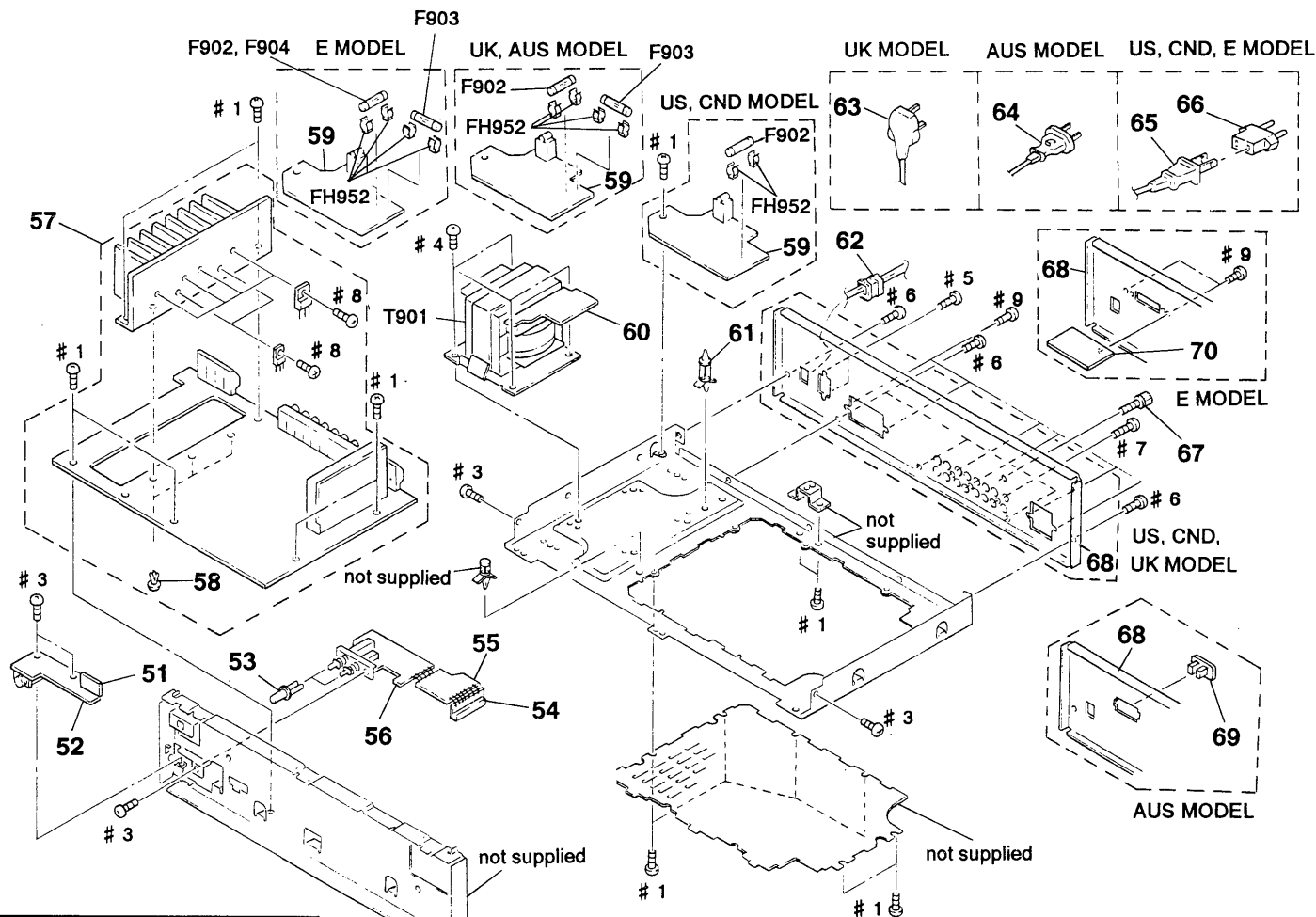
3-1. FRONT PANEL SECTION



Ref. No.	Part No.	Description
1	4-957-383-01	KNOB (F14)
2	3-350-426-01	SPRING, RING
3	4-958-991-01	PLATE (VOL), LIGHT GUIDE
4	4-949-659-01	KNOB (VOL-NEW)
5	X-4943-599-1	PANEL ASSY, FRONT (US, CND)
5	X-4943-600-1	PANEL ASSY, FRONT (UK, E, AUS)
* 6	1-647-625-11	STANDBY BOARD
* 7	A-4360-408-A	DISPLAY BOARD, COMPLETE (US, CND)
* 7	A-4360-419-A	DISPLAY BOARD, COMPLETE (E)
* 7	A-4360-421-A	DISPLAY BOARD, COMPLETE (UK, AUS)
* 8	4-921-941-01	CUSHION (FL)

Remark	Ref. No.	Part No.	Description	Remark
	* 9	4-943-107-11	HOLDER (FL TUBE)	
	10	1-696-456-11	WIRE (FLAT TYPE) (31 CORE)	
	* 11	1-647-617-11	tone BOARD	
	* 12	A-4360-409-A	VOLUME BOARD, COMPLETE	
	* 13	1-647-612-11	JOINT-1 BOARD	
	* 14	1-647-613-11	JOINT-2 BOARD	
	15	3-704-366-01	SCREW (CASE) (M3X8)	
	* 16	4-951-795-01	CASE	
	17	X-4941-291-1	FOOT ASSY (F58175S) (US, CND)	
	17	X-4941-292-1	FOOT ASSY (F58175S) (UK, E, AUS)	
	FL101	1-519-731-11	INDICATOR TUBE, FLUORESCENT	

3-2. CHASSIS SECTION



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.

Ref.No. Part No. Description

* 51	1-647-622-11	HP-1 BOARD
* 52	1-647-626-11	HP-2 BOARD
53	4-951-801-02	BUTTON (S)
* 54	1-647-618-11	SP SW-1 BOARD
* 55	1-647-619-11	SP SW-2 BOARD
* 56	1-647-620-11	SP SW-3 BOARD
* 57	A-4360-399-A	MAIN BOARD, COMPLETE (US)
* 57	A-4360-418-A	MAIN BOARD, COMPLETE (CND)
* 57	A-4365-113-A	MAIN BOARD, COMPLETE (UK, E, AUS)
58	4-812-134-00	RIVET NYLON 3.5
* 59	1-647-624-11	POWER BOARD
* 60	1-647-627-11	TRANSFORMER BOARD (US, CND, E)
* 60	1-648-407-11	TRANSFORMER BOARD (AUS)
* 61	4-924-098-31	HOLDER, PC BOARD
* 62	3-703-244-00	BUSHING (2104), CORD (US, CND, UK, AUS)
62	3-703-571-11	BUSHING (S) (4516), CORD (E)
	1-696-570-21	CORD, POWER (UK)
	1-696-848-21	CORD, POWER (AUS)
	1-575-653-51	CORD, POWER (E)
	1-690-609-11	CORD, POWER (US, CND)

Remark

Ref.No. Part No. Description

△66	1-526-565-00	AC PLUG ADAPTOR (E)
67	4-947-010-01	SCREW, FEEDER FIXED
* 68	4-957-708-01	PANEL, BACK (US)
* 68	4-957-708-11	PANEL, BACK (CND)
* 68	4-957-708-21	PANEL, BACK (UK)
* 68	4-957-708-31	PANEL, BACK (AUS)
* 68	4-957-708-41	PANEL, BACK (E)
△69	1-251-078-11	OUTLET, AC. (AUS)
* 70	1-647-621-11	AC SELECT BOARD (E)
△F902	1-532-259-00	FUSE (T1. 6AL) (UK, AUS)
△F902	1-532-286-00	FUSE (T2. 5AL) (E)
△F902	1-576-110-11	FUSE (125V 6A) (US, CND)
△F903	1-532-259-00	FUSE (T1. 6AL) (UK, AUS)
△F903	1-532-286-00	FUSE (T2. 5AL) (E)
△F904	1-576-107-11	FUSE (3. 15A 250V) (E)
* FH952	1-533-293-11	HOLDER, FUSE
△T901	1-423-568-11	TRANSFORMER, POWER (US, CND)
△T901	1-423-569-11	TRANSFORMER, POWER (UK, AUS)
△T901	1-423-573-11	TRANSFORMER, POWER (E)

Remark

AC DISPLAY

SECTION 4 ELECTRICAL PARTS LIST

NOTE:

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

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

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

- 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.
- RESISTORS
All resistors are in ohms
METAL: Metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F: nonflammable
- CND: Canadian model
- AUS: Australian model

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
In each case, u: μ , for example:
uA...: μ A..., uPA...: μ PA...,
uPB...: μ PB..., uPC...: μ PC...,
uPD...: μ PD...
- CAPACITORS
uF: μ F
- COILS
uH: μ H
- Hardware (# mark) list is given in the last of this parts list.

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
*	1-647-621-11	AC SELECT BOARD (E) *****		D103	8-719-987-63	DIODE 1N4148M	
		< CONNECTOR >		D104	8-719-987-63	DIODE 1N4148M	
* CNP907	1-564-241-00	PIN, CONNECTOR (B4P-VH) 4P (E)		D105	8-719-987-63	DIODE 1N4148M	
* CNP908	1-564-321-00	PIN, CONNECTOR 2P (E)		D106	8-719-987-63	DIODE 1N4148M	
* CNP910	1-564-687-11	PIN, CONNECTOR 3P (E)		D107	8-719-987-63	DIODE 1N4148M	
		< SWITCH >		D108	8-719-987-63	DIODE 1N4148M	
Δ S901	1-571-437-11	SWITCH, POWER VOLTAGE CHANGE (VOLTAGE SELECTOR) (E)		D109	8-719-987-63	DIODE 1N4148M	
		*****		D110	8-719-987-63	DIODE 1N4148M	
*	A-4360-408-A	DISPLAY BOARD, COMPLETE (US, CND) *****		D111	8-719-985-53	DIODE HZS4ALL	
*	A-4360-419-A	DISPLAY BOARD, COMPLETE (E) *****		D112	8-719-987-63	DIODE 1N4148M	
*	A-4360-421-A	DISPLAY BOARD, COMPLETE (UK, AUS) *****		D113	8-719-987-63	DIODE 1N4148M	
				D114	8-719-987-63	DIODE 1N4148M (UK, AUS)	
				D115	8-719-987-63	DIODE 1N4148M (E)	
*	4-921-941-01	CUSHION (FL)		D116	8-719-987-63	DIODE 1N4148M	
*	4-942-204-01	PLATE, GROUND		D117	8-719-987-63	DIODE 1N4148M	
*	4-943-107-11	HOLDER (FL TUBE)		D130	8-719-313-72	LED SEL3810A-CD (MONITOR)	
		< CAPACITOR >		D133	8-719-313-72	LED SEL3810A-CD (LOUDNESS)	
C102	1-124-261-00	ELECT 10uF 20% 50V		D134	8-719-313-69	LED SEL3210S-CD (STANDBY) (UK, E, AUS)	
C105	1-161-379-00	CERAMIC 0.01uF 20% 25V		D135	8-719-987-63	DIODE 1N4148M	
C106	1-161-379-00	CERAMIC 0.01uF 20% 25V				< FILTER >	
C108	1-161-379-00	CERAMIC 0.01uF 20% 25V		FL101	1-519-731-11	INDICATOR TUBE, FLUORESCENT	
C109	1-104-905-11	CAP, DOUBLE LAYERS 0.22F				< IC >	
C111	1-161-379-00	CERAMIC 0.01uF 20% 25V		IC101	8-759-167-28	IC uPD75206GF-731-3BE	
C112	1-161-375-00	CERAMIC 0.0022uF 20% 50V		IC102	8-749-923-11	IC GP1U58XB	
C113	1-161-379-00	CERAMIC 0.01uF 20% 25V		IC104	8-759-962-08	IC BA6208	
C114	1-126-301-11	ELECT 1uF 20% 50V				< COIL >	
		< CONNECTOR >		L101	1-410-521-11	INDUCTOR 100uH	
* CNJ101	1-568-873-11	SOCKET, CONNECTOR 31P				< TRANSISTOR >	
* CNJ102	1-566-969-11	HOUSING, CONNECTOR(PC BOARD)7P		Q107	8-729-900-36	TRANSISTOR DTC124ES (UK, E, AUS)	
* CNJ106	1-565-480-11	CONNECTOR, BOARD TO BOARD 4P		Q108	8-729-900-63	TRANSISTOR DTA124ES	
		< DIODE >		Q109	8-729-900-63	TRANSISTOR DTA124ES	
D101	8-719-987-63	DIODE 1N4148M		Q110	8-729-900-63	TRANSISTOR DTA124ES	
D102	8-719-987-63	DIODE 1N4148M				< RESISTOR >	
				R102	1-249-437-11	CARBON 47K 5% 1/4W	
				R103	1-249-437-11	CARBON 47K 5% 1/4W	
				R104	1-249-429-11	CARBON 10K 5% 1/4W	
				R105	1-249-431-11	CARBON 15K 5% 1/4W	
				R106	1-249-401-11	CARBON 47 5% 1/4W	

DISPLAY

HP-1

HP-2

JOINT-1

Ref.No.	Part No.	Description	Remark
R107	1-249-417-11	CARBON 1K 5% 1/4W	
R108	1-249-441-11	CARBON 100K 5% 1/4W	
R109	1-249-437-11	CARBON 47K 5% 1/4W	
R112	1-249-437-11	CARBON 47K 5% 1/4W	
R113	1-249-437-11	CARBON 47K 5% 1/4W	
R114	1-249-437-11	CARBON 47K 5% 1/4W	
R115	1-249-437-11	CARBON 47K 5% 1/4W	
R116	1-249-441-11	CARBON 100K 5% 1/4W	
R119	1-249-410-11	CARBON 270 5% 1/4W	
R124	1-249-410-11	CARBON 270 5% 1/4W	(US, CND, UK, AUS)
R124	1-249-413-11	CARBON 470 5% 1/4W (E)	
R125	1-249-410-11	CARBON 270 5% 1/4W (E)	
R125	1-249-413-11	CARBON 470 5% 1/4W (UK, AUS)	
R126	1-249-437-11	CARBON 47K 5% 1/4W (US, CND)	
R127	1-249-411-11	CARBON 330 5% 1/4W	
R128	1-249-411-11	CARBON 330 5% 1/4W	
R129	1-249-411-11	CARBON 330 5% 1/4W	
R130	1-249-411-11	CARBON 330 5% 1/4W	
R131	1-249-429-11	CARBON 10K 5% 1/4W	
R132	1-249-429-11	CARBON 10K 5% 1/4W	
R133	1-249-429-11	CARBON 10K 5% 1/4W	
R134	1-249-429-11	CARBON 10K 5% 1/4W	
R135	1-249-437-11	CARBON 47K 5% 1/4W	
R136	1-249-437-11	CARBON 47K 5% 1/4W	
R137	1-249-437-11	CARBON 47K 5% 1/4W	
R138	1-249-437-11	CARBON 47K 5% 1/4W	
R139	1-249-437-11	CARBON 47K 5% 1/4W	
R140	1-249-437-11	CARBON 47K 5% 1/4W	
R141	1-249-405-11	CARBON 100 5% 1/4W	
< SWITCH >			
S101	1-554-303-21	SWITCH, TACTILE (TUNING DIRECT)	
S105	1-554-303-21	SWITCH, TACTILE (PRESET TUNING -)	
S106	1-554-303-21	SWITCH, TACTILE (TUNING -)	
S107	1-554-303-21	SWITCH, TACTILE (FM)	
S108	1-554-303-21	SWITCH, TACTILE (FM MODE)	
S109	1-554-303-21	SWITCH, TACTILE (PRESET TUNING +)	
S110	1-554-303-21	SWITCH, TACTILE (TUNING +)	
S111	1-554-303-21	SWITCH, TACTILE (AM)	
S112	1-554-303-21	SWITCH, TACTILE (TAPE2/MONITOR)	
S113	1-554-303-21	SWITCH, TACTILE (TAPE1/DAT)	
S114	1-554-303-21	SWITCH, TACTILE (VIDEO)	
S117	1-554-303-21	SWITCH, TACTILE (PHONO)	
S118	1-554-303-21	SWITCH, TACTILE (TUNER)	
S119	1-554-303-21	SWITCH, TACTILE (CD)	
S121	1-554-303-21	SWITCH, TACTILE (7)	
S122	1-554-303-21	SWITCH, TACTILE (8)	
S123	1-554-303-21	SWITCH, TACTILE (9)	
S124	1-554-303-21	SWITCH, TACTILE (MEMORY)	
S125	1-554-303-21	SWITCH, TACTILE (4)	

Ref.No.	Part No.	Description	Remark
S126	1-554-303-21	SWITCH, TACTILE (5)	
S127	1-554-303-21	SWITCH, TACTILE (6)	
S128	1-554-303-21	SWITCH, TACTILE (0)	
S129	1-554-303-21	SWITCH, TACTILE (1)	
S130	1-554-303-21	SWITCH, TACTILE (2)	
S131	1-554-303-21	SWITCH, TACTILE (3)	
S132	1-554-303-21	SWITCH, TACTILE (SHIFT)	
S133	1-554-303-21	SWITCH, TACTILE (LOUDNESS)	
< VIBRATOR >			
X101	1-567-775-11	VIBRATOR, CERAMIC (4.19MHz)	

*	1-647-622-11	HP-1 BOARD	

< CONNECTOR >			
CNP704	1-691-160-11	PIN, CONNECTOR 3P	

*	1-647-626-11	HP-2 BOARD	

< CAPACITOR >			
C714	1-164-089-11	CERAMIC 0.0022uF 50V	
C764	1-164-089-11	CERAMIC 0.0022uF 50V	
< JACK >			
J701	1-568-151-11	JACK (LARGE TYPE) (HEADPHONES)	
< RESISTOR >			
R740	1-247-753-11	CARBON 1.2K 5% 1/2W	
R749	1-247-753-11	CARBON 1.2K 5% 1/2W	
R790	1-247-753-11	CARBON 1.2K 5% 1/2W	
R799	1-247-753-11	CARBON 1.2K 5% 1/2W	

*	1-647-612-11	JOINT-1 BOARD	

< CONNECTOR >			
* CNP404	1-750-384-11	CONNECTOR, BOARD TO BOARD 11P	

JOINT-2 MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	1-647-613-11	JOINT-2 BOARD *****		C703	1-102-116-00	CERAMIC 680PF 10% 50V	
		< CONNECTOR >		C704	1-124-477-11	ELECT 47uF 20% 25V	
* CNJ402	1-750-383-11	CONNECTOR, BOARD TO BOARD 11P		C705	1-164-039-11	CERAMIC 3PF 0.25PF 50V	
*****				C706	1-102-989-00	CERAMIC 68PF 5% 500V	
*	A-4360-399-A	MAIN BOARD, COMPLETE (US) *****		C707	1-102-989-00	CERAMIC 68PF 5% 500V	
*	A-4360-418-A	MAIN BOARD, COMPLETE (CND) *****		C708	1-124-120-11	ELECT 220uF 20% 25V	
*	A-4365-113-A	MAIN BOARD, COMPLETE (UK, E, AUS) *****		C709	1-124-477-11	ELECT 47uF 20% 25V	
	4-812-134-00	RIVET NYLON, 3.5		C710	1-164-159-11	CERAMIC 0.1uF 50V	
*	4-942-204-01	PLATE, GROUND (US, CND)		C711	1-164-159-11	CERAMIC 0.1uF 50V	
*	4-953-350-01	PLATE, GROUND		C712	1-137-372-11	FILM 0.022uF 5% 50V	
	7-682-548-04	SCREW +BVT 3X8 (S)		C726	1-162-215-31	CERAMIC 47PF 5% 50V	
	7-685-647-79	SCREW +BVP 3X10 TYPE2 IT-3		C727	1-124-919-11	ELECT 220uF 20% 63V	
		< CAPACITOR >		C749	1-124-919-11	ELECT 220uF 20% 63V	
C301	1-124-907-11	ELECT 10uF 20% 50V		C751	1-124-927-11	ELECT 4.7uF 20% 100V	
C302	1-162-215-31	CERAMIC 47PF 5% 50V		C752	1-162-286-31	CERAMIC 220PF 10% 50V	
C303	1-124-907-11	ELECT 10uF 20% 50V		C753	1-102-116-00	CERAMIC 680PF 10% 50V	
C351	1-124-907-11	ELECT 10uF 20% 50V		C754	1-124-477-11	ELECT 47uF 20% 25V	
C352	1-162-215-31	CERAMIC 47PF 5% 50V		C755	1-164-039-11	CERAMIC 3PF 0.25PF 50V	
C353	1-124-907-11	ELECT 10uF 20% 50V		C756	1-102-989-00	CERAMIC 68PF 5% 500V	
C402	1-123-382-00	ELECT 3.3uF 20% 100V		C757	1-102-989-00	CERAMIC 68PF 5% 500V	
C403	1-162-282-31	CERAMIC 100PF 10% 50V		C758	1-124-120-11	ELECT 220uF 20% 25V	
C404	1-162-282-31	CERAMIC 100PF 10% 50V		C759	1-124-477-11	ELECT 47uF 20% 25V	
C405	1-124-034-51	ELECT 33uF 20% 16V		C760	1-164-159-11	CERAMIC 0.1uF 50V	
C406	1-137-437-11	FILM 0.0056uF 5% 50V		C761	1-124-472-11	ELECT 470uF 20% 10V	
C407	1-137-365-11	FILM 0.0015uF 5% 50V		C762	1-137-372-11	FILM 0.022uF 5% 50V	
C408	1-123-382-00	ELECT 3.3uF 20% 100V		C776	1-162-215-31	CERAMIC 47PF 5% 50V	
C420	1-164-159-11	CERAMIC 0.1uF 50V		C951	1-106-375-12	MYLAR 0.022uF 5% 200V	
C422	1-124-477-11	ELECT 47uF 20% 25V		C952	1-106-375-12	MYLAR 0.022uF 5% 200V	
C423	1-124-477-11	ELECT 47uF 20% 25V		C953	1-128-591-11	ELECT 6800uF 20% 56V	
C430	1-162-294-31	CERAMIC 0.001uF 10% 50V		C954	1-128-591-11	ELECT 6800uF 20% 56V	
C431	1-137-364-91	FILM 0.001uF 5% 50V		C955	1-124-478-11	ELECT 100uF 20% 25V	
C433	1-124-925-11	ELECT 2.2uF 20% 100V		C956	1-124-910-11	ELECT 47uF 20% 50V	
C437	1-124-907-11	ELECT 10uF 20% 50V		C957	1-124-477-11	ELECT 47uF 20% 25V	
C452	1-123-382-00	ELECT 3.3uF 20% 100V		C958	1-124-910-11	ELECT 47uF 20% 50V	
C453	1-162-282-31	CERAMIC 100PF 10% 50V		C959	1-124-907-11	ELECT 10uF 20% 50V	
C454	1-162-282-31	CERAMIC 100PF 10% 50V		C960	1-161-494-00	CERAMIC 0.022uF 25V	
C455	1-124-034-51	ELECT 33uF 20% 16V		C961	1-161-494-00	CERAMIC 0.022uF 25V	
C456	1-137-437-11	FILM 0.0056uF 5% 50V		C962	1-124-927-11	ELECT 4.7uF 20% 100V	
C457	1-137-365-11	FILM 0.0015uF 5% 50V		C975	1-124-477-11	ELECT 47uF 20% 25V	
C458	1-123-382-00	ELECT 3.3uF 20% 100V		C976	1-124-477-11	ELECT 47uF 20% 25V	
C701	1-124-927-11	ELECT 4.7uF 20% 100V		C977	1-124-903-11	ELECT 1uF 20% 50V	
C702	1-162-286-31	CERAMIC 220PF 10% 50V		C978	1-124-464-11	ELECT 0.22uF 20% 50V	
				C979	1-124-902-00	ELECT 0.47uF 20% 50V	
				C980	1-124-903-11	ELECT 1uF 20% 50V	
				C981	1-161-494-00	CERAMIC 0.022uF 25V	
				C982	1-161-494-00	CERAMIC 0.022uF 25V	
				C983	1-161-494-00	CERAMIC 0.022uF 25V	
				C984	1-124-557-11	ELECT 1000uF 20% 25V	

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
< CONNECTOR >				< TRANSISTOR >			
* CNJ102	1-568-845-11	SOCKET, CONNECTOR 31P		Q402	8-729-141-30	TRANSISTOR 2SC3623A-LK	
CNJ701	1-573-095-11	SOCKET, CONNECTOR 15P		Q406	8-729-900-63	TRANSISTOR DTA124ES	
* CNP113	1-750-384-11	CONNECTOR, BOARD TO BOARD 11P		Q408	8-729-900-36	TRANSISTOR DTC124ES	
* CNP952	1-564-507-11	PLUG, CONNECTOR 4P		Q452	8-729-141-30	TRANSISTOR 2SC3623A-LK	
* CNP954	1-564-104-00	PIN, CONNECTOR (B3P-VH) 3P		Q701	8-729-620-18	TRANSISTOR 2SA979-FG	
* CNP956	1-564-506-11	PLUG, CONNECTOR 3P		Q702	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
< DIODE >				Q703	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D401	8-719-987-63	DIODE 1N4148M		Q704	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D403	8-719-987-63	DIODE 1N4148M		Q705	8-729-122-13	TRANSISTOR 2SA1221-K	
D701	8-719-933-41	DIODE HZS6C3L		Q706	8-729-209-15	TRANSISTOR 2SD2012	
D702	8-719-987-63	DIODE 1N4148M		Q707	8-729-195-82	TRANSISTOR 2SC2958	
D703	8-719-815-85	DIODE 1S1585		Q712	8-729-020-52	TRANSISTOR 2SD2439-OPY	
D704	8-719-987-63	DIODE 1N4148M		Q713	8-729-020-48	TRANSISTOR 2SB1588-OPY	
D705	8-719-987-63	DIODE 1N4148M		Q714	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
D751	8-719-933-41	DIODE HZS6C3L		Q715	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D752	8-719-987-63	DIODE 1N4148M		Q716	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D753	8-719-815-85	DIODE 1S1585		Q717	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D951	8-719-302-38	DIODE RBV-602-01		Q718	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D952	8-719-010-78	DIODE UZ-13BSB		Q751	8-729-620-18	TRANSISTOR 2SA979-FG	
D953	8-719-002-33	DIODE UZL-24L		Q752	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
D954	8-719-987-63	DIODE 1N4148M		Q753	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D955	8-719-010-74	DIODE UZ-12BSB		Q754	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D956	8-719-010-29	DIODE UZ-4.3BSB		Q755	8-729-122-13	TRANSISTOR 2SA1221-K	
D962	8-719-010-47	DIODE UZ-6.2BSC		Q756	8-729-209-15	TRANSISTOR 2SD2012	
D963	8-719-933-41	DIODE HZS6C3L		Q757	8-729-195-82	TRANSISTOR 2SC2958	
D964	8-719-985-53	DIODE HZS4ALL		Q762	8-729-020-52	TRANSISTOR 2SD2439-OPY	
D965	8-719-987-63	DIODE 1N4148M		Q763	8-729-020-48	TRANSISTOR 2SB1588-OPY	
D966	8-719-200-82	DIODE 11ES2		Q764	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
D967	8-719-200-82	DIODE 11ES2		Q951	8-729-209-15	TRANSISTOR 2SD2012	
D968	8-719-200-82	DIODE 11ES2		Q952	8-729-018-59	TRANSISTOR 2SB1375-LC	
D969	8-719-200-82	DIODE 11ES2		Q953	8-729-180-92	TRANSISTOR 2SD809-K	
D970	8-719-987-63	DIODE 1N4148M		Q954	8-729-119-78	TRANSISTOR 2SC2785-HFE	
D971	8-719-987-63	DIODE 1N4148M		Q955	8-729-119-76	TRANSISTOR 2SA1175-HFE	
< IC >				Q956	8-729-119-76	TRANSISTOR 2SA1175-HFE	
IC306	8-759-634-50	IC M5218AL		Q957	8-729-119-78	TRANSISTOR 2SC2785-HFE	
IC401	8-759-112-93	IC uPC4570HA-1		Q958	8-729-900-36	TRANSISTOR DTC124ES	
IC402	8-759-805-14	IC LC7822		Q959	8-729-904-39	TRANSISTOR DTC114TS	
< JACK >				Q960	8-729-119-78	TRANSISTOR 2SC2785-HFE	
J401	1-691-887-11	JACK, PIN 6P (PHONO, CD, TAPE1/DAT)		< RESISTOR >			
J402	1-573-028-21	JACK, PIN 4P (TAPE1/DAT, VIDEO)		R302	1-247-887-00	CARBON 220K 5% 1/4W	
J403	1-580-825-11	JACK, PIN 6P (VIDEO, TAPE2)		R303	1-247-887-00	CARBON 220K 5% 1/4W	
< COIL >				R305	1-249-416-11	CARBON 820 5% 1/4W	
L701	1-420-872-00	COIL, AIR CORE		R352	1-247-887-00	CARBON 220K 5% 1/4W	
L751	1-420-872-00	COIL, AIR CORE		R353	1-247-887-00	CARBON 220K 5% 1/4W	
				R355	1-249-416-11	CARBON 820 5% 1/4W	
				R401	1-249-411-11	CARBON 330 5% 1/4W	
				R402	1-249-417-11	CARBON 1K 5% 1/4W	
				R403	1-249-417-11	CARBON 1K 5% 1/4W	

MAIN

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
R404	1-249-425-11	CARBON	4. 7K 5% 1/4W	△R710	1-249-409-11	CARBON	220 5% 1/4W F
R405	1-249-417-11	CARBON	1K 5% 1/4W	R711	1-249-409-11	CARBON	220 5% 1/4W
R407	1-249-425-11	CARBON	4. 7K 5% 1/4W	R712	1-249-435-11	CARBON	33K 5% 1/4W
R413	1-249-437-11	CARBON	47K 5% 1/4W	△R713	1-249-397-11	CARBON	22 5% 1/4W F
R414	1-247-897-11	CARBON	560K 5% 1/4W	R714	1-249-428-11	CARBON	8. 2K 5% 1/4W
R415	1-249-416-11	CARBON	820 5% 1/4W	R715	1-249-409-11	CARBON	220 5% 1/4W
R416	1-247-897-11	CARBON	560K 5% 1/4W	△R716	1-249-397-11	CARBON	22 5% 1/4W F
R417	1-249-437-11	CARBON	47K 5% 1/4W	△R717	1-249-393-11	CARBON	10 5% 1/4W F
R418	1-249-417-11	CARBON	1K 5% 1/4W	△R718	1-249-393-11	CARBON	10 5% 1/4W F
R419	1-247-897-11	CARBON	560K 5% 1/4W	△R726	1-208-601-21	WIREWOUND	0. 1 10% 2W F
R421	1-249-408-11	CARBON	180 5% 1/4W	△R727	1-208-601-21	WIREWOUND	0. 1 10% 2W F
R425	1-249-425-11	CARBON	4. 7K 5% 1/4W	R728	1-249-417-11	CARBON	1K 5% 1/4W
R426	1-249-437-11	CARBON	47K 5% 1/4W	R729	1-249-431-11	CARBON	15K 5% 1/4W
R427	1-249-437-11	CARBON	47K 5% 1/4W	R730	1-249-429-11	CARBON	10K 5% 1/4W
R430	1-249-437-11	CARBON	47K 5% 1/4W	R731	1-249-441-11	CARBON	100K 5% 1/4W
R431	1-249-425-11	CARBON	4. 7K 5% 1/4W	R732	1-249-417-11	CARBON	1K 5% 1/4W
R432	1-247-883-00	CARBON	150K 5% 1/4W	R733	1-249-435-11	CARBON	33K 5% 1/4W
R434	1-249-425-11	CARBON	4. 7K 5% 1/4W	R734	1-249-427-11	CARBON	6. 8K 5% 1/4W
R436	1-249-417-11	CARBON	1K 5% 1/4W	△R735	1-249-397-11	CARBON	22 5% 1/4W F
R437	1-249-437-11	CARBON	47K 5% 1/4W	△R736	1-249-397-11	CARBON	22 5% 1/4W F
R438	1-249-429-11	CARBON	10K 5% 1/4W	R737	1-249-393-11	CARBON	10 5% 1/4W
R439	1-249-437-11	CARBON	47K 5% 1/4W	R738	1-249-393-11	CARBON	10 5% 1/4W
R440	1-249-437-11	CARBON	47K 5% 1/4W	R739	1-249-411-11	CARBON	330 5% 1/4W (US, CND)
R441	1-249-413-11	CARBON	470 5% 1/4W	R739	1-249-410-11	CARBON	270 5% 1/4W (UK, E, AUS)
R444	1-249-437-11	CARBON	47K 5% 1/4W	R743	1-249-441-11	CARBON	100K 5% 1/4W
R451	1-249-411-11	CARBON	330 5% 1/4W	R744	1-249-429-11	CARBON	10K 5% 1/4W
R452	1-249-417-11	CARBON	1K 5% 1/4W	△R745	1-249-399-11	CARBON	33 5% 1/4W F
R453	1-249-417-11	CARBON	1K 5% 1/4W	△R749	1-249-399-11	CARBON	33 5% 1/4W F
R454	1-249-425-11	CARBON	4. 7K 5% 1/4W	R751	1-249-417-11	CARBON	1K 5% 1/4W
R455	1-249-417-11	CARBON	1K 5% 1/4W	R752	1-249-434-11	CARBON	27K 5% 1/4W
R457	1-249-425-11	CARBON	4. 7K 5% 1/4W	R753	1-249-435-11	CARBON	33K 5% 1/4W
R463	1-249-437-11	CARBON	47K 5% 1/4W	R754	1-249-421-11	CARBON	2. 2K 5% 1/4W
R464	1-247-897-11	CARBON	560K 5% 1/4W	R755	1-249-426-11	CARBON	5. 6K 5% 1/4W
R465	1-249-416-11	CARBON	820 5% 1/4W	R756	1-249-414-11	CARBON	560 5% 1/4W
R466	1-247-897-11	CARBON	560K 5% 1/4W	R757	1-249-423-11	CARBON	3. 3K 5% 1/4W
R467	1-249-437-11	CARBON	47K 5% 1/4W	R758	1-249-411-11	CARBON	330 5% 1/4W
R468	1-249-417-11	CARBON	1K 5% 1/4W	△R759	1-249-409-11	CARBON	220 5% 1/4W F
R469	1-247-897-11	CARBON	560K 5% 1/4W	△R760	1-249-409-11	CARBON	220 5% 1/4W F
R471	1-249-408-11	CARBON	180 5% 1/4W	R761	1-249-409-11	CARBON	220 5% 1/4W
R481	1-249-425-11	CARBON	4. 7K 5% 1/4W	△R762	1-249-435-11	CARBON	33K 5% 1/4W
R486	1-249-417-11	CARBON	1K 5% 1/4W	△R763	1-249-397-11	CARBON	22 5% 1/4W F
R701	1-249-417-11	CARBON	1K 5% 1/4W	R764	1-249-428-11	CARBON	8. 2K 5% 1/4W
R702	1-249-434-11	CARBON	27K 5% 1/4W	R765	1-249-409-11	CARBON	220 5% 1/4W
R703	1-249-435-11	CARBON	33K 5% 1/4W	△R766	1-249-397-11	CARBON	22 5% 1/4W F
R704	1-249-421-11	CARBON	2. 2K 5% 1/4W	△R767	1-249-393-11	CARBON	10 5% 1/4W F
R705	1-249-426-11	CARBON	5. 6K 5% 1/4W	△R768	1-249-393-11	CARBON	10 5% 1/4W F
R706	1-249-414-11	CARBON	560 5% 1/4W	△R776	1-208-601-21	WIREWOUND	0. 1 10% 2W F
R707	1-249-423-11	CARBON	3. 3K 5% 1/4W	△R777	1-208-601-21	WIREWOUND	0. 1 10% 2W F
R708	1-249-411-11	CARBON	330 5% 1/4W	R778	1-249-417-11	CARBON	1K 5% 1/4W
△R709	1-249-409-11	CARBON	220 5% 1/4W F	R779	1-249-431-11	CARBON	15K 5% 1/4W

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.

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
R781	1-249-440-11	CARBON 82K 5% 1/4W				< ENCAPSULATED COMPONENT >	
△R785	1-249-397-11	CARBON 22 5% 1/4W F		TU001	1-239-561-11	ENCAPSULATED COMPONENT (FCC)	
△R786	1-249-397-11	CARBON 22 5% 1/4W F				(FM/AM TUNER) (US, CND)	
R787	1-249-393-11	CARBON 10 5% 1/4W		TU001	1-239-611-11	ENCAPSULATED COMPONENT (FM/AM TUNER)	
R788	1-249-393-11	CARBON 10 5% 1/4W				(UK, E, AUS)	
R794	1-249-410-11	CARBON 270 5% 1/4W (UK, E, AUS)				*****	
R794	1-249-411-11	CARBON 330 5% 1/4W (US, CND)					
R799	1-249-410-11	CARBON 270 5% 1/4W (UK, E, AUS)		*	1-647-624-11	POWER BOARD	
R799	1-249-411-11	CARBON 330 5% 1/4W (US, CND)				*****	
R801	1-249-415-11	CARBON 680 5% 1/4W				< CAPACITOR >	
R804	1-247-895-00	CARBON 470K 5% 1/4W		△C901	1-161-744-00	CERAMIC 0.01uF 400V	
R851	1-249-415-11	CARBON 680 5% 1/4W				< CONNECTOR >	
R854	1-247-895-00	CARBON 470K 5% 1/4W					
△R950	1-216-472-00	METAL OXIDE 39 5% 3W F		CNJ917	1-540-057-11	OUTLET, AC (POLAR) (US, CND)	
△R951	1-216-472-00	METAL OXIDE 39 5% 3W F		CNJ917	1-540-038-11	OUTLET, AC (NONPOLAR) (E)	
△R952	1-247-743-11	CARBON 220 5% 1/2W F		*	CNP901	1-564-321-00	PIN, CONNECTOR 2P
R953	1-249-422-11	CARBON 2.7K 5% 1/4W		*	CNP902	1-580-230-11	PIN, CONNECTOR (PC BOARD) 3P
R954	1-249-423-11	CARBON 3.3K 5% 1/4W		*	CNP903	1-580-230-11	PIN, CONNECTOR (PC BOARD) 3P (AUS)
△R955	1-216-472-00	METAL OXIDE 39 5% 3W F					
△R956	1-249-405-11	CARBON 100 5% 1/4W F		CNP905	1-564-320-00	PIN, CONNECTOR (B2P-VH) 2P (E)	
R957	1-249-410-11	CARBON 270 5% 1/4W		*	CNP906	1-564-241-00	PIN, CONNECTOR (B4P-VH) 4P (E)
R958	1-249-410-11	CARBON 270 5% 1/4W		*	CNP951	1-564-507-11	PLUG, CONNECTOR 4P
R959	1-249-441-11	CARBON 100K 5% 1/4W				< DIODE >	
R960	1-249-429-11	CARBON 10K 5% 1/4W		D901	8-719-987-63	DIODE 1N4148M	
△R963	1-249-395-11	CARBON 15 5% 1/4W F				< FUSE HOLDER >	
R964	1-249-423-11	CARBON 3.3K 5% 1/4W					
R965	1-249-437-11	CARBON 47K 5% 1/4W		*	FH902	1-533-293-11	HOLDER, FUSE
R966	1-249-429-11	CARBON 10K 5% 1/4W		*	FH903	1-533-293-11	HOLDER, FUSE (E)
R967	1-249-429-11	CARBON 10K 5% 1/4W		*	FH904	1-533-293-11	HOLDER, FUSE (E)
R968	1-249-417-11	CARBON 1K 5% 1/4W		*	FH952	1-533-293-11	HOLDER, FUSE
R969	1-249-429-11	CARBON 10K 5% 1/4W		*	FH953	1-533-293-11	HOLDER, FUSE (E)
R970	1-249-426-11	CARBON 5.6K 5% 1/4W		*	FH954	1-533-293-11	HOLDER, FUSE (E)
R971	1-249-417-11	CARBON 1K 5% 1/4W				< RESISTOR >	
R972	1-249-426-11	CARBON 5.6K 5% 1/4W		R901	1-202-725-00	SOLID 3.3M 10% 1/2W (US, CND)	
R973	1-247-830-11	CARBON 910 5% 1/4W				< RELAY >	
R974	1-249-425-11	CARBON 4.7K 5% 1/4W		RY901	1-515-738-11	RELAY, POWER	
R975	1-249-437-11	CARBON 47K 5% 1/4W				< TRASFORMER >	
R999	1-249-397-11	CARBON 22 5% 1/4W		△T902	1-450-358-11	TRANSFORMER, POWER (UK, E, AUS)	
		< RELAY >		△T902	1-450-361-11	TRANSFORMER, POWER (US, CND)	
RY401	1-515-614-11	RELAY				*****	
RY701	1-515-533-11	RELAY					
		< TERMINAL >					
TM1	1-537-240-51	TERMINAL BOARD (CHECKER PIN) (ANTENNA)					
TM701	1-537-376-11	TERMINAL BOARD (SP) (SPEAKERS)					

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.

STAND BY	SW-1	SW-2	SW-3	tone	TRANSFORMER	VOLUME
----------	------	------	------	------	-------------	--------

Ref.No.	Part No.	Description	Remark
*	1-647-625-11	STAND BY BOARD *****	
		< CONNECTOR >	
* CNP107	1-565-295-11	PLUG, CONNECTOR 4P	
		< SWITCH >	
S137	1-554-303-21	SWITCH, TACTILE (POWER)	

*	1-647-618-11	SW-1 BOARD *****	
		< CONNECTOR >	
CNP702	1-691-173-11	CONNECTOR (BOARD TO BOARD) 3P	
		< SWITCH >	
S701	1-571-485-11	SWITCH, PUSH (2 KEY) (SPEAKERS)	

*	1-647-619-11	SW-2 BOARD *****	

*	1-647-620-11	SW-3 BOARD *****	
		< CONNECTOR >	
CNP701	1-573-109-11	PIN, CONNECTOR 15P	

*	1-647-617-11	tone BOARD *****	
		< CAPACITOR >	
C501	1-130-489-00	MYLAR 0.033uF 5% 50V	
C502	1-124-250-00	ELECT 0.15uF 20% 50V	
C503	1-130-481-00	MYLAR 0.0068uF 5% 50V	
C504	1-137-441-91	FILM 0.027uF 5% 50V	
C551	1-130-489-00	MYLAR 0.033uF 5% 50V	
C552	1-124-250-00	ELECT 0.15uF 20% 50V	
C553	1-130-481-00	MYLAR 0.0068uF 5% 50V	
C554	1-137-441-91	FILM 0.027uF 5% 50V	
		< CONNECTOR >	
* CNP109	1-566-968-11	HOUSING, CONNECTOR(PC BOARD)6P	

Ref.No.	Part No.	Description	Remark
		< RESISTOR >	
R501	1-249-429-11	CARBON 10K 5% 1/4W	
R502	1-249-422-11	CARBON 2.7K 5% 1/4W	
R507	1-249-415-11	CARBON 680 5% 1/4W	
R508	1-247-903-00	CARBON 1M 5% 1/4W	
R510	1-247-903-00	CARBON 1M 5% 1/4W	
R551	1-249-429-11	CARBON 10K 5% 1/4W	
R552	1-249-422-11	CARBON 2.7K 5% 1/4W	
R557	1-249-415-11	CARBON 680 5% 1/4W	
R558	1-247-903-00	CARBON 1M 5% 1/4W	
R560	1-247-903-00	CARBON 1M 5% 1/4W	
		< VARIABLE RESISTOR >	
RV401	1-223-362-11	RES, VAR, CARBON 100K/100K (BALANCE)	
RV402	1-223-363-11	RES, VAR, CARBON 125K/125K (TREBLE)	
RV403	1-238-965-21	RES, VAR, CARBON 100K/100K (BASS)	

*	1-647-627-11	TRANSFORMER BOARD (US, CND, E) *****	
*	1-648-407-11	TRANSFORMER BOARD (UK, AUS) *****	

*	A-4360-409-A	VOLUME BOARD, COMPLETE *****	
		< CAPACITOR >	
C436	1-137-371-11	FILM 0.015uF 5% 50V	
C438	1-124-927-11	ELECT 4.7uF 20% 100V	
C439	1-124-927-11	ELECT 4.7uF 20% 100V	
C486	1-137-371-11	FILM 0.015uF 5% 50V	
C505	1-162-206-31	CERAMIC 20PF 5% 50V	
C506	1-124-925-11	ELECT 2.2uF 20% 100V	
C507	1-162-196-31	CERAMIC 5.6PF 10% 50V	
C508	1-123-382-00	ELECT 3.3uF 20% 100V	
C511	1-124-464-11	ELECT 0.22uF 20% 50V	
C513	1-123-382-00	ELECT 3.3uF 20% 100V	
C516	1-124-477-11	ELECT 47uF 20% 25V	
C517	1-124-477-11	ELECT 47uF 20% 25V	
C555	1-162-206-31	CERAMIC 20PF 5% 50V	
C556	1-124-925-11	ELECT 2.2uF 20% 100V	
C557	1-162-196-31	CERAMIC 5.6PF 10% 50V	
C558	1-123-382-00	ELECT 3.3uF 20% 100V	
C563	1-123-382-00	ELECT 3.3uF 20% 100V	
		< CONNECTOR >	
* CNP103	1-750-383-11	CONNECTOR, BOARD TO BOARD 11P	
* CNP401	1-566-971-11	PIN, CONNECTOR (PC BOARD) 6P	

Ref.No.	Part No.	Description	Remark
* CNP402	1-566-972-11	PIN, CONNECTOR (PC BOARD) 7P	
		< DIODE >	
D404	8-719-987-63	DIODE 1N4148M	
		< IC >	
IC403	8-759-112-93	IC uPC4570HA-1	
		< TRANSISTOR >	
Q404	8-729-202-67	TRANSISTOR 2SK246-GR3	
Q454	8-729-202-67	TRANSISTOR 2SK246-GR3	
		< RESISTOR >	
R445	1-249-431-11	CARBON 15K 5% 1/4W	
R495	1-249-431-11	CARBON 15K 5% 1/4W	
R503	1-249-441-11	CARBON 100K 5% 1/4W	
R504	1-249-431-11	CARBON 15K 5% 1/4W	
R505	1-249-438-11	CARBON 56K 5% 1/4W	
R506	1-249-441-11	CARBON 100K 5% 1/4W	
R511	1-249-441-11	CARBON 100K 5% 1/4W	
R513	1-247-903-00	CARBON 1M 5% 1/4W	
R514	1-249-405-11	CARBON 100 5% 1/4W	
R515	1-249-405-11	CARBON 100 5% 1/4W	
R553	1-249-441-11	CARBON 100K 5% 1/4W	
R554	1-249-431-11	CARBON 15K 5% 1/4W	
R555	1-249-438-11	CARBON 56K 5% 1/4W	
R556	1-249-441-11	CARBON 100K 5% 1/4W	
		< VARIABLE RESISTOR >	
RV701	1-241-850-11	RES, VAR, CARBON 100K/100K (VOLUME)	

		MISCELLANEOUS	

10	1-696-456-11	WIRE (FLAT TYPE) (31 CORE)	
△63	1-696-570-21	CORD, POWER (UK)	
△64	1-696-848-21	CORD, POWER (AUS)	
△65	1-575-653-51	CORD, POWER (E)	
△65	1-690-609-11	CORD, POWER (US, CND)	
△66	1-526-565-00	AC PLUG ADAPTOR (E)	
△69	1-251-078-11	OUTLET, AC. (AUS)	
△F902	1-532-259-00	FUSE (T1. 6AL) (UK, AUS)	
△F902	1-532-286-00	FUSE (T2. 5AL) (E)	
△F902	1-576-110-11	FUSE (125V 6A) (US, CND)	
△F903	1-532-259-00	FUSE (T1. 6AL) (UK, AUS)	
△F903	1-532-286-00	FUSE (T2. 5AL) (E)	
△F904	1-576-107-11	FUSE (3. 15A 250V) (E)	
△T901	1-423-568-11	TRANSFORMER, POWER (US, CND)	
△T901	1-423-569-11	TRANSFORMER, POWER (UK, AUS)	

Ref.No.	Part No.	Description	Remark
△T901	1-423-573-11	TRANSFORMER, POWER (E)	

		ACCESSORIES & PACKING MATERIALS	

	1-465-423-22	REMOTE COMMANDER (RM-S103)	
	1-501-374-11	ANTENNA, LOOP	
	1-501-374-11	ANTENNA, LOOP	
	2-181-754-01	COVER (MLY), BATTERY	
	3-756-536-11	MANUAL, INSTRUCTION	
		(ENGLISH, FRENCH, SPANISH, CHINESE) (E)	
	3-756-536-21	MANUAL, INSTRUCTION (ENGLISH)	
		(US, CND, AUS)	
	3-756-536-31	MANUAL, INSTRUCTION (FRENCH) (CND)	
	3-756-536-41	MANUAL, INSTRUCTION (ENGLISH) (UK)	
*	4-952-676-01	CUSHION	
*	4-957-597-01	INDIVIDUAL CARTON (US, CND, E, AUS)	
*	4-957-598-01	INDIVIDUAL CARTON (UK)	

		HARDWARE LIST	

#1	7-682-548-04	SCREW +BVTT 3X8 (S)	
#2	7-682-548-09	SCREW +BVTT 3X8 (S)	
#3	7-685-871-01	SCREW +BVTT 3X6 (S)	
#4	7-682-560-04	SCREW +BVTT 4X6 (S)	
#5	7-685-646-79	SCREW +BTP 3X8 TYPE2 N-S	
#6	7-682-547-09	SCREW +BVTT 3X6 (S)	
#7	7-621-849-00	SCREW, TAPPING	
#8	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3	
#9	7-685-646-19	SCREW +BVTP 3X8 TYPE2 NS BZN	

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.

