

HCD-A17K

SERVICE MANUAL

E Model



- HCD-A17K is the CDP and STEREO DECK RECEIVER in LBT-A17CDK.

Subject :

- The HCD-A17K is developed from HCD-A17 by adding the echo and multiplex functions.
- This service manual contains only the points which differ from HCD-A17, please refer to the HCD-A17 service manual (9-957-723-11) for information not contained in this service manual.

SPECIFICATIONS

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Tuner

AM tuner section
Tuning range

(Saudi Arabia model)
SW: 5.95 to 17.90 MHz
MW: 531 to 1,602 kHz
(Except Saudi Arabia model)
531 to 1,602 kHz (at 9 kHz step)
530 to 1,710 kHz (at 10 kHz step)

Antenna

AM loop antenna
External antenna terminal

Intermediate frequency

450 kHz

Amplifier

Input	Jack type	Sensitivity	Impedance
PHONO IN	Phono	3 mV	47 kohms
MIC 1	Phone	1 mV	10 kohms
MIC 2	Phone	1 mV	10 kohms

Design and specifications are subject to change without notice.

For other specifications, refer to the HCD-A17 Service Manual.

COMPACT HiFi STEREO SYSTEM
SONY®



• Differences between HCD-A17 and HCD-A17K in exploded views

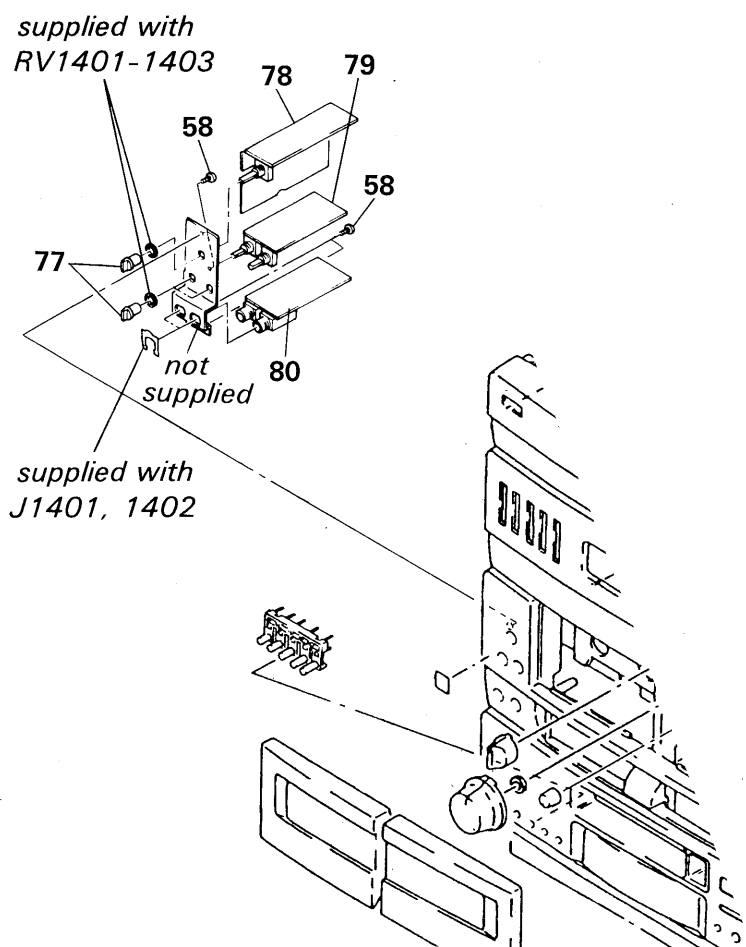
Page	Ref. No.	HCD-A17	HCD-A17K
37	*3	3-703-244-00 BUSHING (2104), CORD (AUS) 3-703-571-11 BUSHING (S)(4516), CORD (E, PX)	3-703-244-00 BUSHING (2104), CORD (EA, MY, SP) 3-703-571-11 BUSHING (S)(4516), CORD (E)
37	*8	4-955-701-11 PANEL, BACK (E2) 4-955-701-41 PANEL, BACK (PX) 4-955-701-51 PANEL, BACK (E3) 4-957-666-71 PANEL, BACK (AUS)	4-955-701-01 PANEL, BACK (EA) 4-955-701-21 PANEL, BACK (E) 4-955-701-31 PANEL, BACK (MY) 4-955-701-61 PANEL, BACK (SP)
37	*11	A-4356-540-A MAIN BOARD, COMPLETE	A-4356-541-A MAIN BOARD, COMPLETE (E, MY, SP) A-4360-778-A MAIN BOARD, COMPLETE (EA)
37	△ 17	1-569-007-11 ADAPTER, CONVERSION 2P (E3, PX)	1-569-007-11 ADAPTER, CONVERSION 2P (E) 1-569-008-11 ADAPTER, CONVERSION 2P (EA)
37	△ CNP1301	1-575-653-51 CORD, POWER (E, PX) 1-696-848-21 CORD, POWER (AUS)	1-575-653-51 CORD, POWER (E) 1-575-651-11 CORD, POWER (EA, MY, SP)
38	56	X-4943-167-1 PANEL ASSY, FRONT	X-4943-168-1 PANEL ASSY, FRONT
38	*60	A-4356-530-A PANEL BOARD, COMPLETE	A-4356-531-A PANEL BOARD, COMPLETE (E, MY, SP) A-4360-776-A PANEL BOARD, COMPLETE (EA)
38	77	_____	4-943-521-01 KNOB (K)
38	*78	_____	A-4356-554-A ECHO BOARD, COMPLETE
38	*79	_____	1-646-350-11 MIC VOL BOARD
38	*80	_____	1-646-351-11 MIC JACK BOARD

NOTE :

● Abbreviations
EA : Saudi Arabia
MY : Malaysia
SP : Singapore

● Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

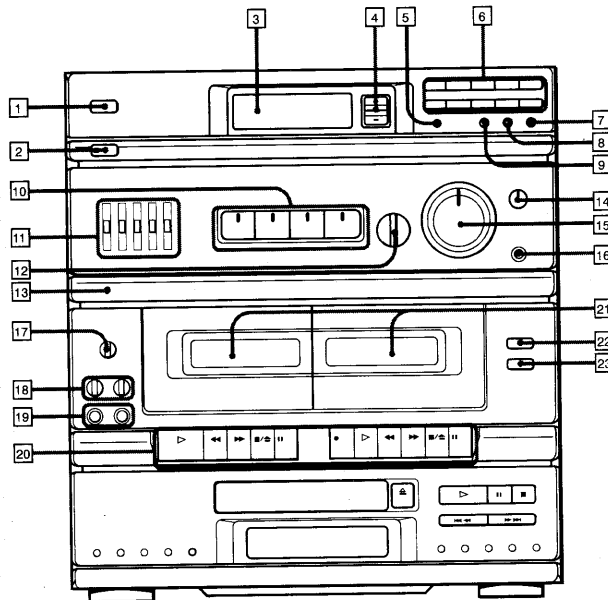
The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.



SECTION 1 GENERAL

This section is extracted
from instruction manual.

Location of Controls



Tuner

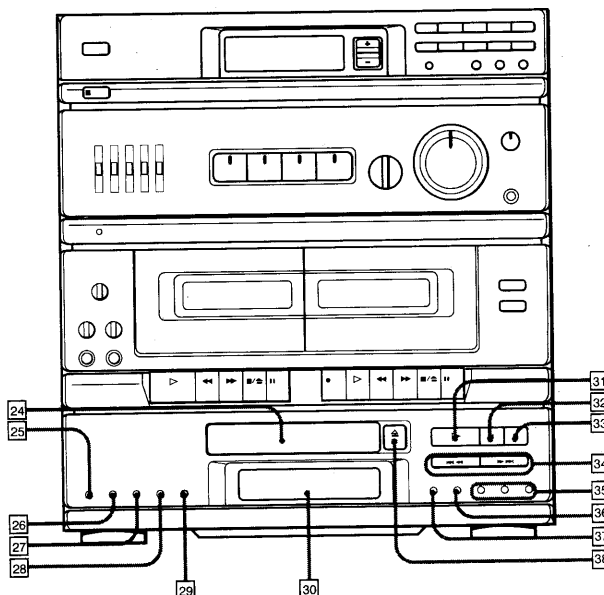
- 1 POWER switch
- 2 Remote control sensor
- 3 Display window
- 4 DUAL MODE TUNING + / - buttons
- 5 MEMORY button
- 6 Numeric buttons
- 7 SHIFT button
- 8 BAND SELECT button
- 9 ST/MUTE button

Amplifier

- 10 Function selectors and indicators (TAPE/CD/TUNER/PHONO)
- 11 5 BAND GRAPHIC EQUALIZER controls
- 12 DBFB (dynamic bass feedback) control
- 13 MULTIPLEX button
- 14 SURROUND control
- 15 VOLUME control
- 16 HEADPHONES jack
- 17 ECHO LEVEL control
- 18 MIC LEVEL controls (MIC1/MIC2)
- 19 MIC jacks (MIC1/MIC2)

Cassette Deck

- 20 Tape operation buttons
 - ◀◀ Leftward fast winding
 - ▶▶ Rightward fast winding
 - ▶ Forward play
 - /▲ Stop/eject
 - || PAUSE Pause
 - REC Record
- 21 Cassette holders
- 22 TAPE SELECT button
- 23 DUBBING SPEED (HIGH/NORMAL) button



Compact Disc Player

- 24 Disc Tray
- 25 TIME button
- 26 REPEAT button
- 27 FADE button
- 28 CHECK (program check) button
- 29 CLEAR (program clear) button
- 30 Display window
- 31 ▶ (play) button
- 32 || (pause) button
- 33 ■ (stop) button
- 34 ◀◀◀▶▶▶▶ (AMS*) buttons
- 35 PLAY MODE button
 - PROGRAM button
 - SHUFFLE button
 - CONTINUE button
- 36 MUSIC SCAN button
- 37 EDIT button
- 38 ▲ OPEN/CLOSE button

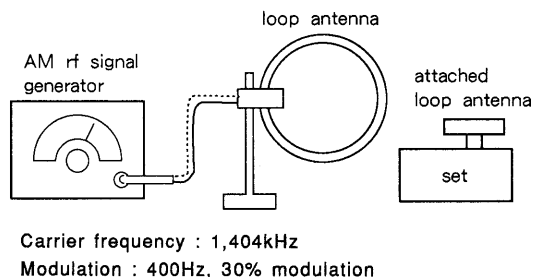
* AMS is the abbreviation of Automatic Music Sensor.

SECTION 2 ADJUSTMENTS

TUNER SECTION

• AM SECTION

Adjustment Location : main board — component side —



AM Tuned Level Adjustment

BAND SELECT : AM(MW)

Procedure :

1. Set loop antenna input level to 94dB μ /m and no signal tuned light should not on.
2. Tune the set to 1,404kHz
3. Adjust RV301 to the point where "TUNED" sign on FL601 just turns right.

SW OSC Voltage Adjustment

(Saudi Arabia Model Only)

BAND SELECT : SW

Procedure :

1. Connect the VOM to JW249 (OSC).
2. Tune the set to 5.95MHz.
3. Adjust L352 for 0.9 to 1.1V reading on the VOM.
4. Tune the set to 17.90MHz.
5. Adjust CT352 for 8.3 to 8.7V reading on the VOM.

SW Tracking Adjustment

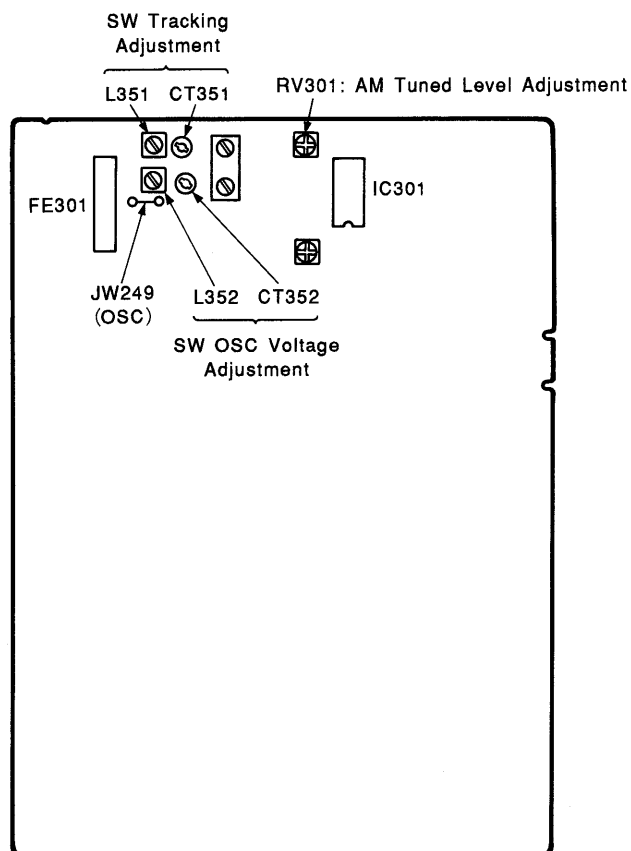
(Saudi Arabia Model Only)

BAND SELECT : SW

Procedure :

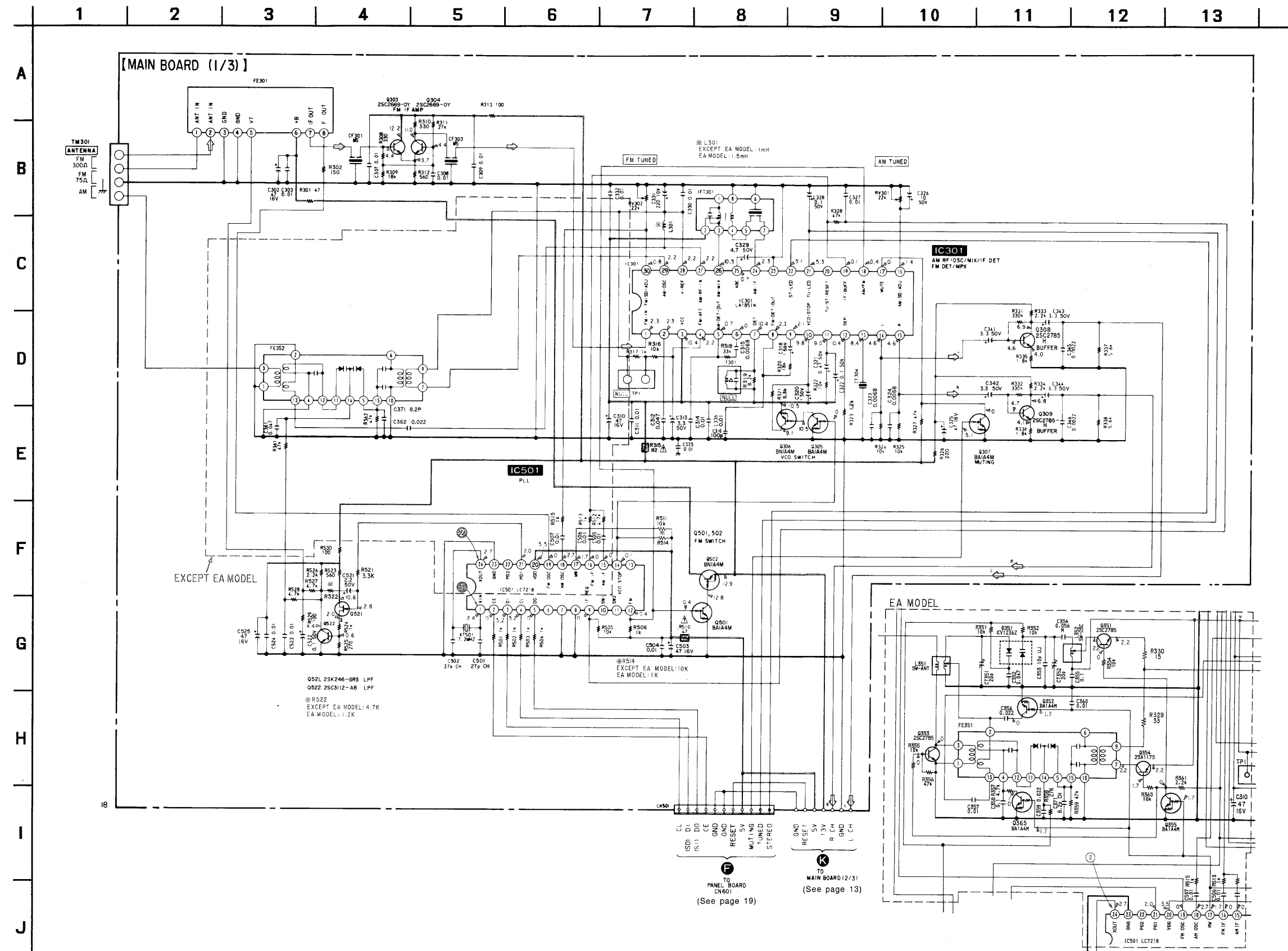
1. Connect the VOM to speaker terminal.
2. Adjust for a maximum reading on VOM(CN1201).

Signal generator and Set frequency	Adjustment part
7.0MHz	L351
17.0MHz	CT351



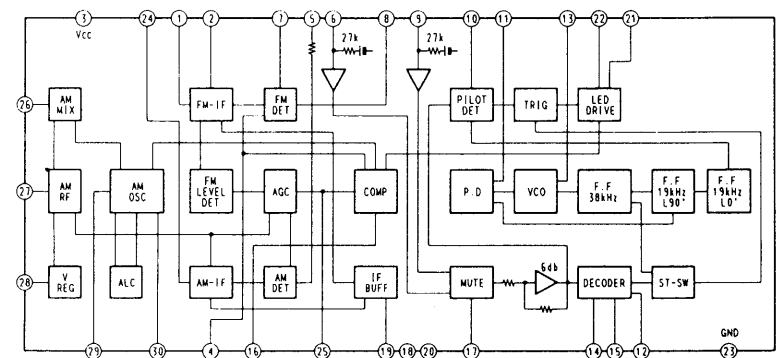
SECTION 3 DIAGRAMS

3-1. SCHEMATIC DIAGRAM –TUNER Section–

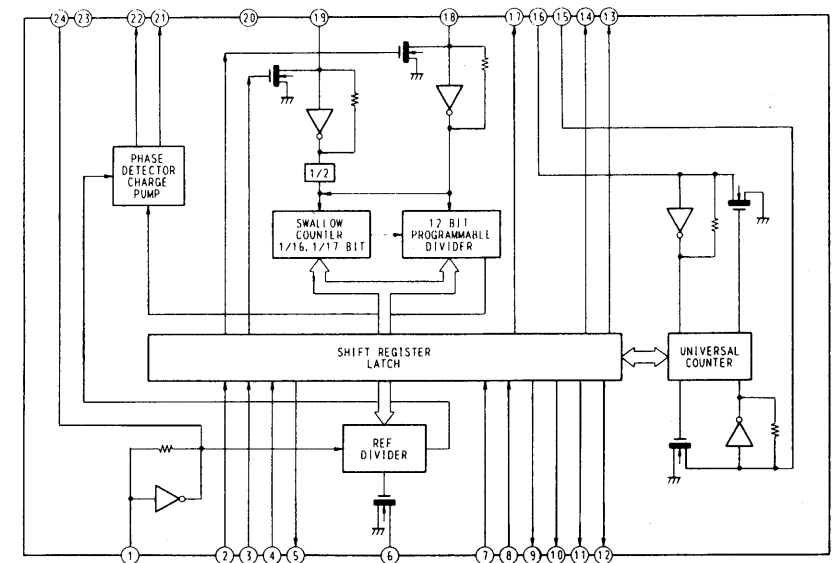


- **IC Block Diagrams**

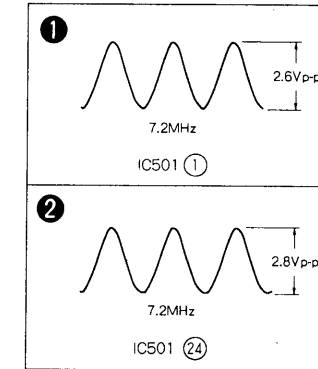
IC301 LA1851N



IC501 LC7218



- **Waveforms**



Note:

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

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

-  : B+ line.
-  : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- Voltages are taken with a VOM. (Input impedance 10M Ω)
Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
 : FM
- Abbreviation
EA : Saudi Arabia

3-2. PRINTED WIRING BOARDS –AUDIO Section–

● Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D351	H-2	IC1303	H-11
D1201	C-2	IC1304	I-11
D1202	C-14	IC1305	G-11
D1203	C-14		
D1204	H-13	○ Q303	E-6
D1251	E-2	※ Q303	I-3
D1301	C-12	○ Q304	E-6
D1302	D-11	※ Q304	I-3
D1303	D-11	Q305	I-6
D1304	E-11	Q306	I-6
D1305	E-11	Q307	H-8
D1306	G-12	Q308	H-7
D1307	C-11	Q309	H-7
D1308	D-11	※ Q351	H-2
D1309	C-11	※ Q352	I-1
D1310	G-11	※ Q353	H-1
D1311	D-11	※ Q354	I-2
D1312	D-11	※ Q355	I-2
D1313	D-10	Q413	J-14
D1314	D-10	Q414	J-14
D1315	D-12	Q415	J-14
D1316	D-12	○ Q501	F-5
		※ Q501	J-1
IC301	G-6	○ Q502	F-5
IC400	B-15	※ Q502	J-1
IC401	C-16	Q521	C-8
IC402	G-15	Q522	B-8
IC403	E-15	Q1001	H-10
IC404	E-16	Q1005	H-9
IC406	D-16	Q1051	B-10
IC407	D-15	Q1201	B-2
IC501	E-7	Q1202	B-2
IC1001	C-9	Q1203	I-3
IC1002	E-9	Q1204	E-13
IC1003	H-9	Q1251	D-2
IC1004	G-9	Q1301	D-11
IC1201	B-1	Q1302	G-12
IC1202	H-13		

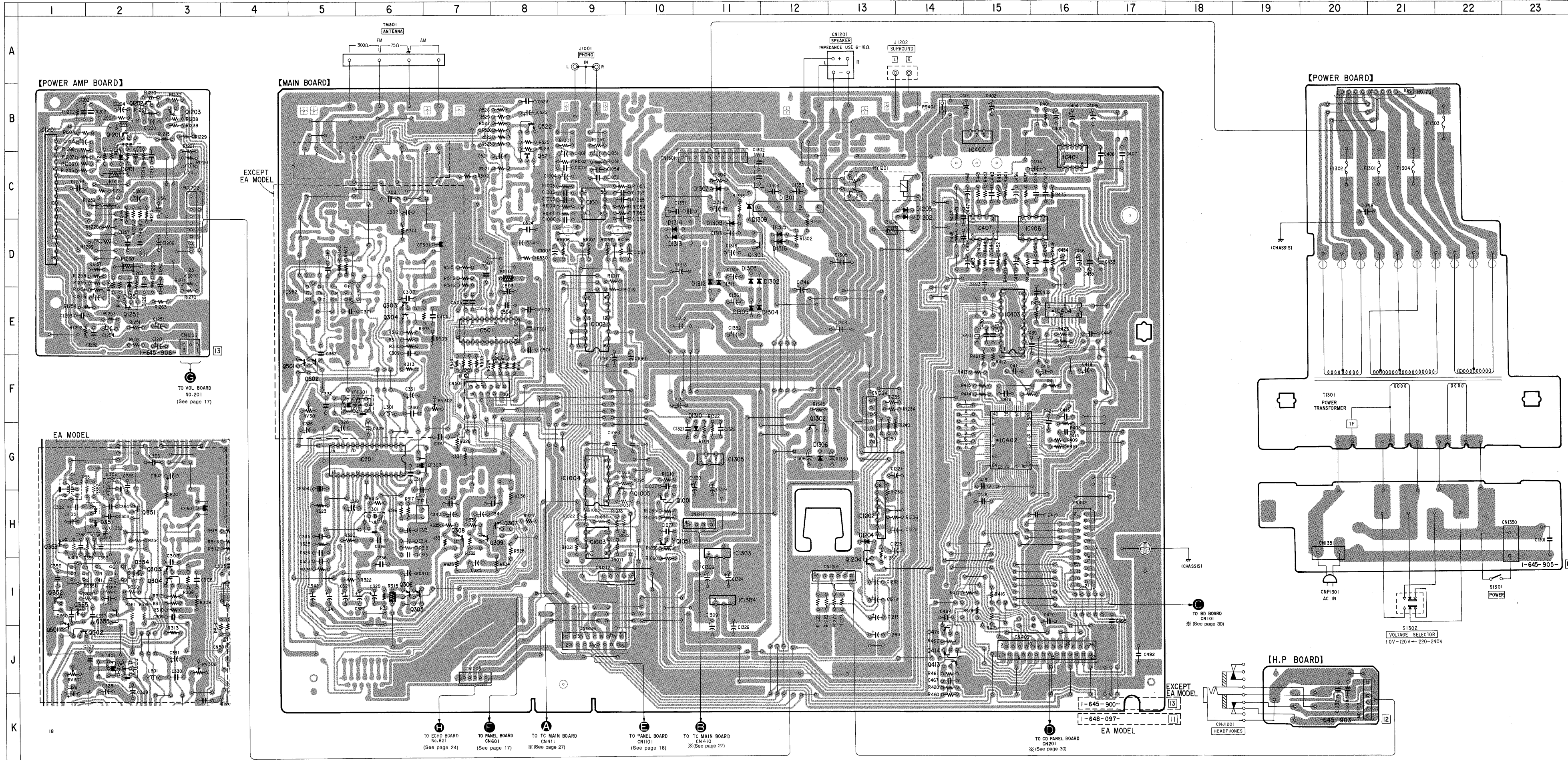
Note:

- mark: E, Malaysia, Singapore Models
- ※ mark: SudiArabia Model only.

Note:

- : parts extracted from the component side
- : parts mounted on the conductor side.
- → indicates side identified with part number.
- ▨ : Pattern on the side which is seen.
- Abbreviation
EA : Saudi Arabia

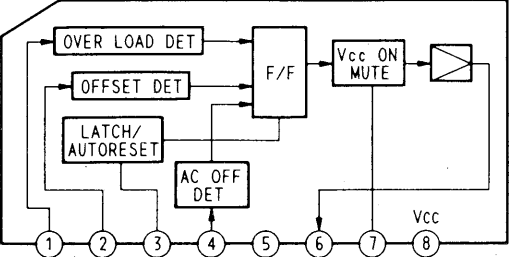
- Pages marked with ※ indicate pages in HCD-A17 service manual.



3-3. SCHEMATIC DIAGRAM —AUDIO Section—

• IC Block Diagram

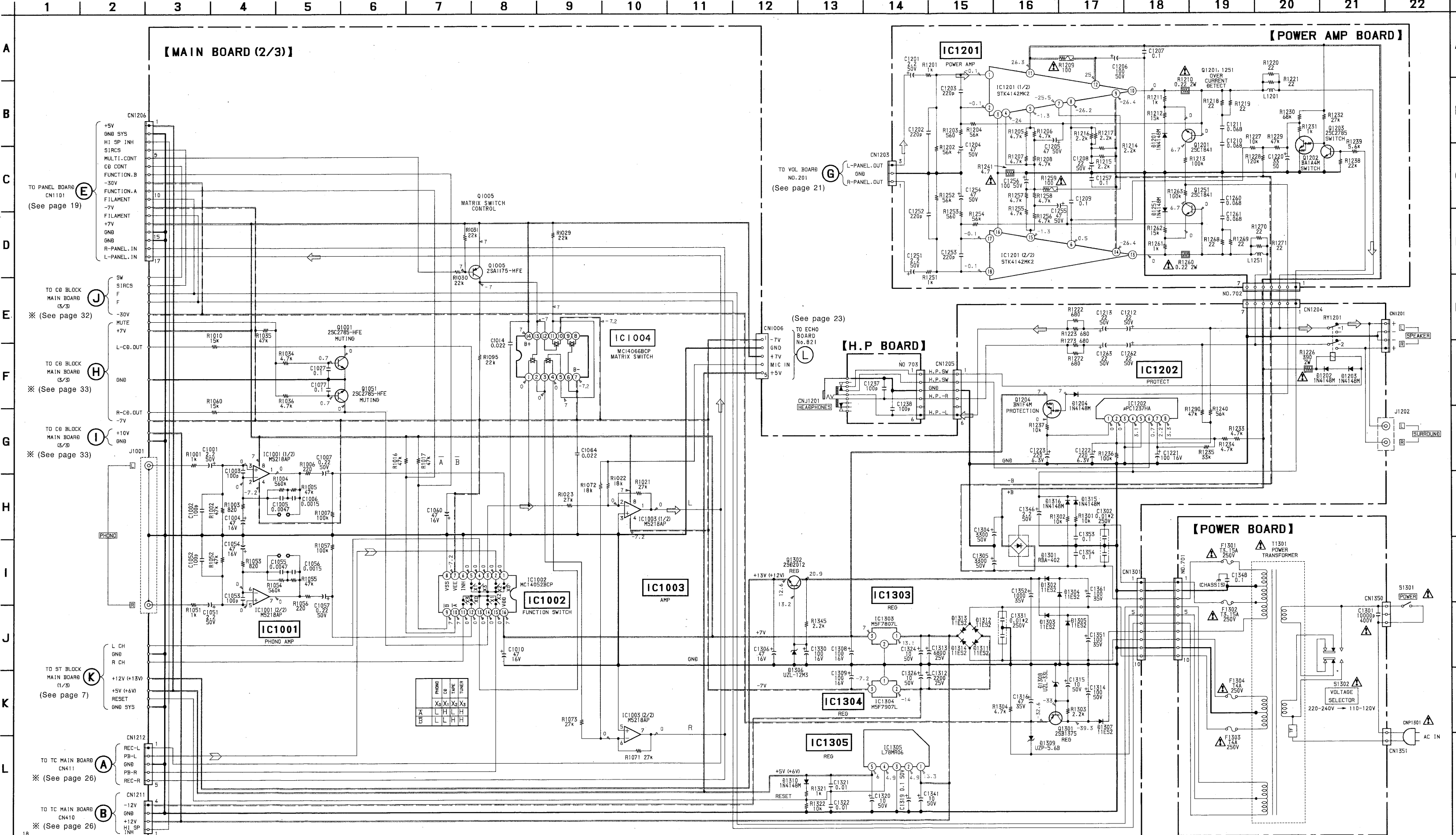
IC1202 μ PC1237HA



- Note:**
- All capacitors are in μ F unless otherwise noted. pF: μ F 50WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $\frac{1}{4}$ W or less unless otherwise specified.
 - : nonflammable resistor.
 - : fusible resistor.

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

- : B+ line.
- : B- line.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- Voltages are taken with a VOM. (Input impedance 10M Ω) Voltage variations may be noted due to normal production tolerances.
- Signal path.
 : FM : PB (DECK A)
- Pages marked with * indicate pages in HCD-A17 service manual.



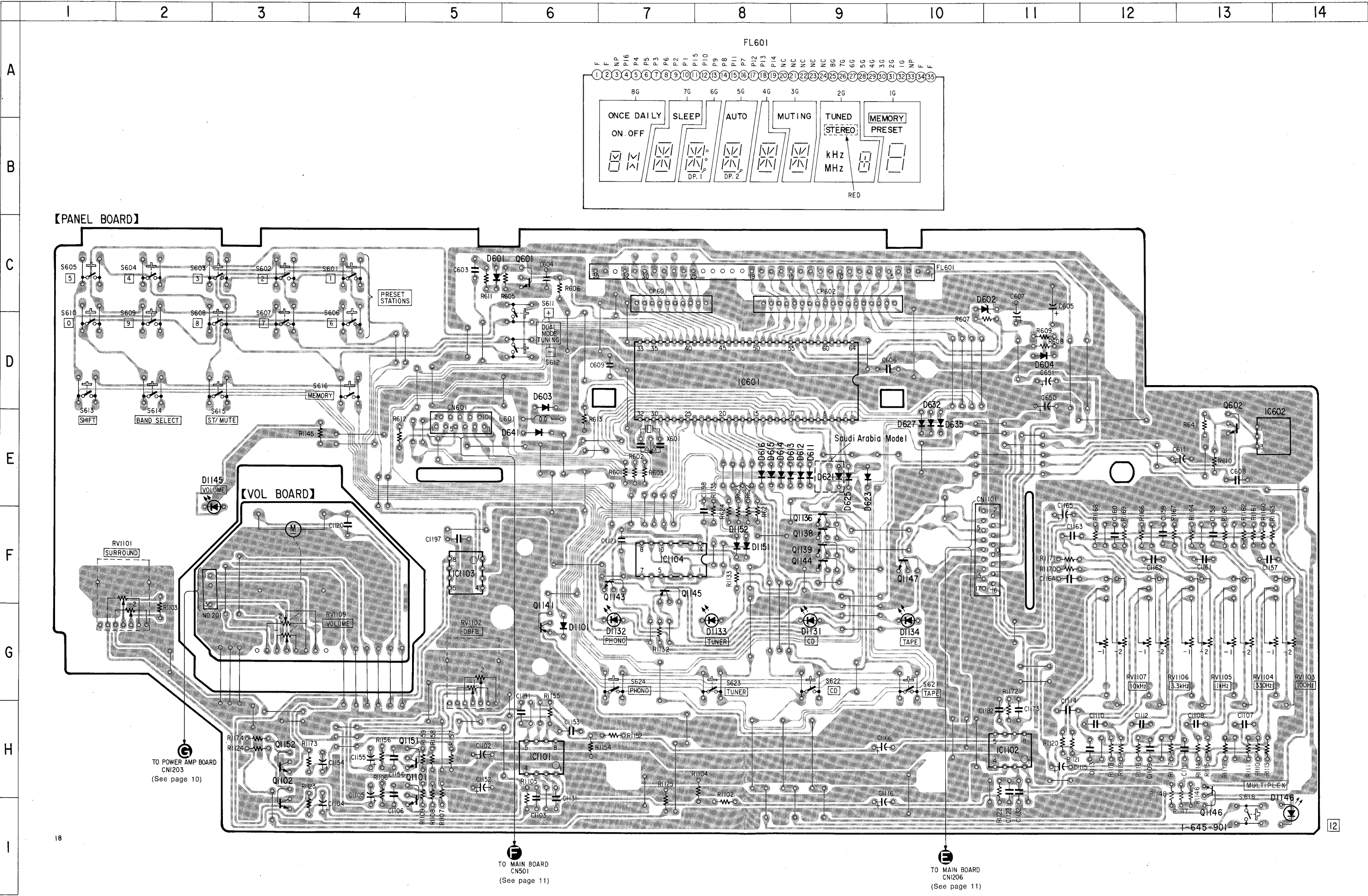
3-4. PRINTED WIRING BOARDS –PANEL Section–

● Semiconductor Location

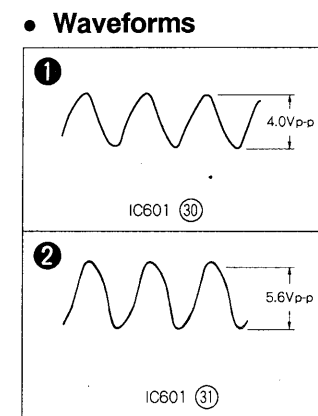
Ref. No.	Location	Ref. No.	Location
D601	C-5	IC601	D-8
D602	C-11	IC602	E-13
D603	D-6	IC1101	H-6
D604	D-11	IC1102	H-11
D611	E-9	IC1103	F-5
D612	E-9	IC1104	F-7
D613	E-9		
D614	E-8	Q601	C-6
D615	E-8	Q602	E-13
D616	E-8	Q1101	H-5
D621	E-9	Q1102	H-3
D623	E-9	Q1136	F-9
D625	E-9	Q1138	F-9
D627	E-10	Q1139	F-9
D632	E-10	Q1141	G-6
D635	E-10	Q1143	F-7
D641	E-6	Q1144	F-9
D1101	G-6	Q1145	F-7
D1131	G-9	Q1146	H-13
D1132	G-7	Q1147	F-10
D1133	G-8	Q1151	H-5
D1134	G-10	Q1152	H-3
D1145	E-3		
D1146	I-14		
D1151	F-8		
D1152	F-8		

Note:

- ○ — : parts extracted from the component side.
- ■ ■ ■ : Pattern on the side which is seen.

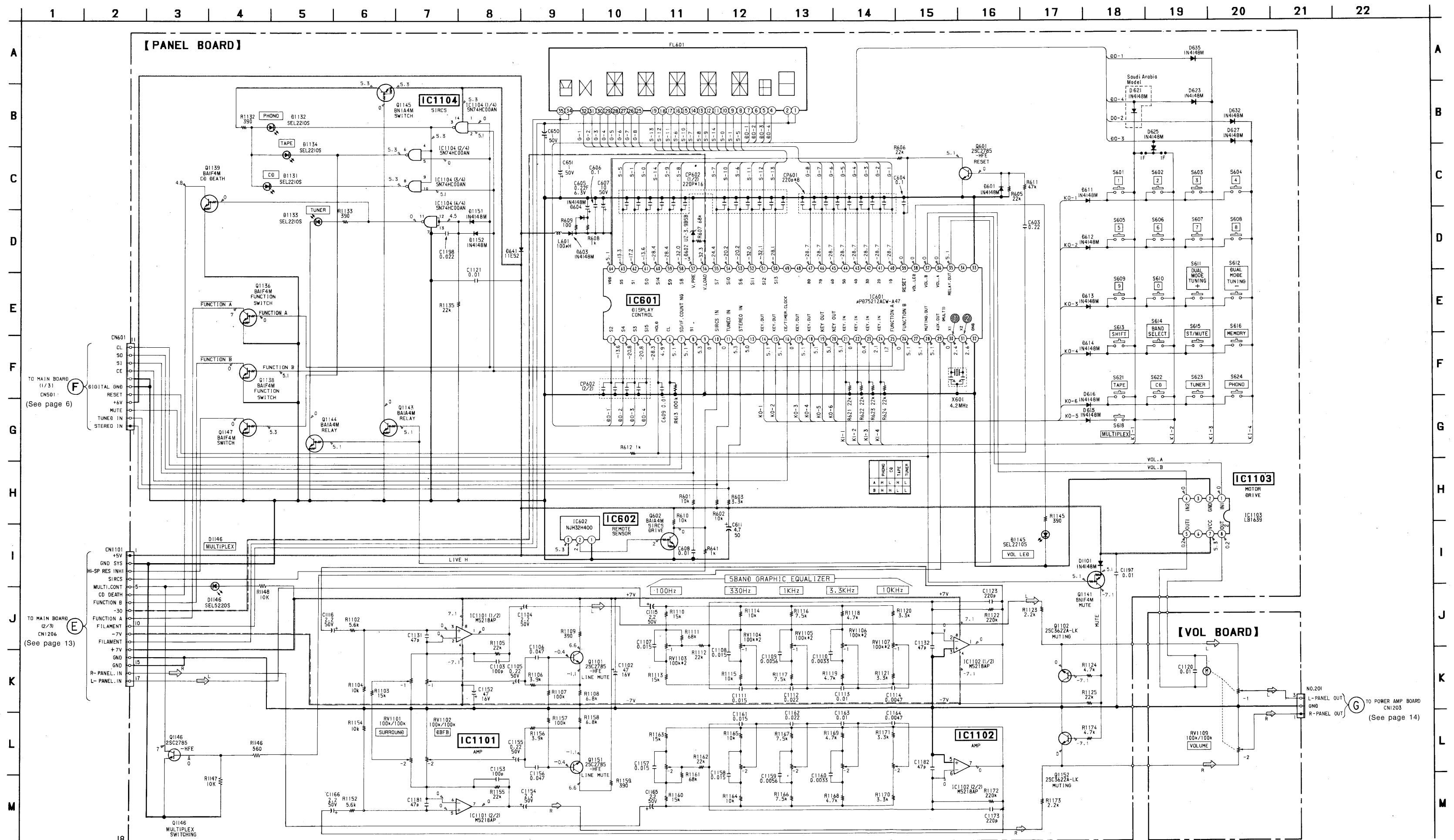


3-5. SCHEMATIC DIAGRAM —PANEL Section—

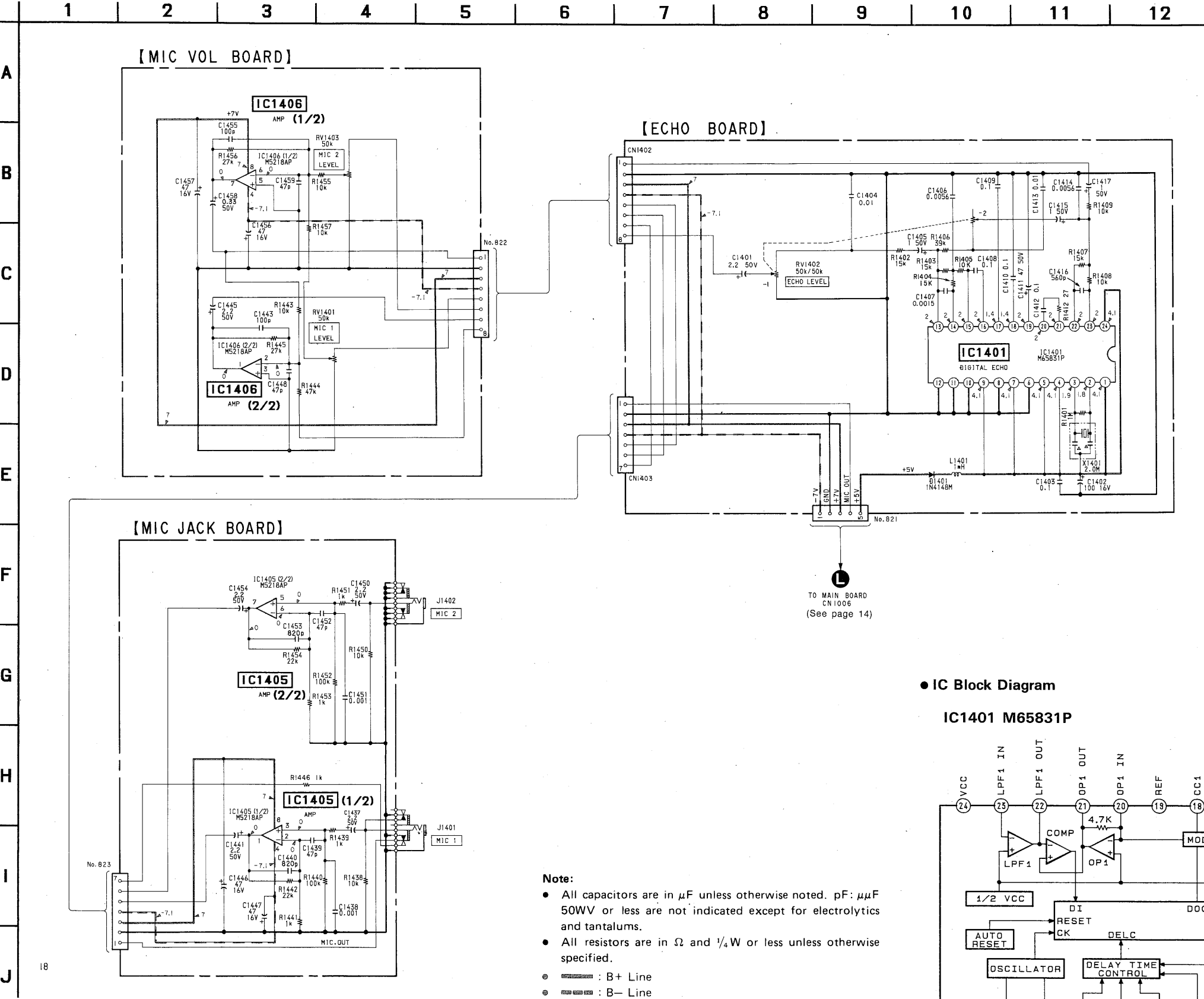


Note:

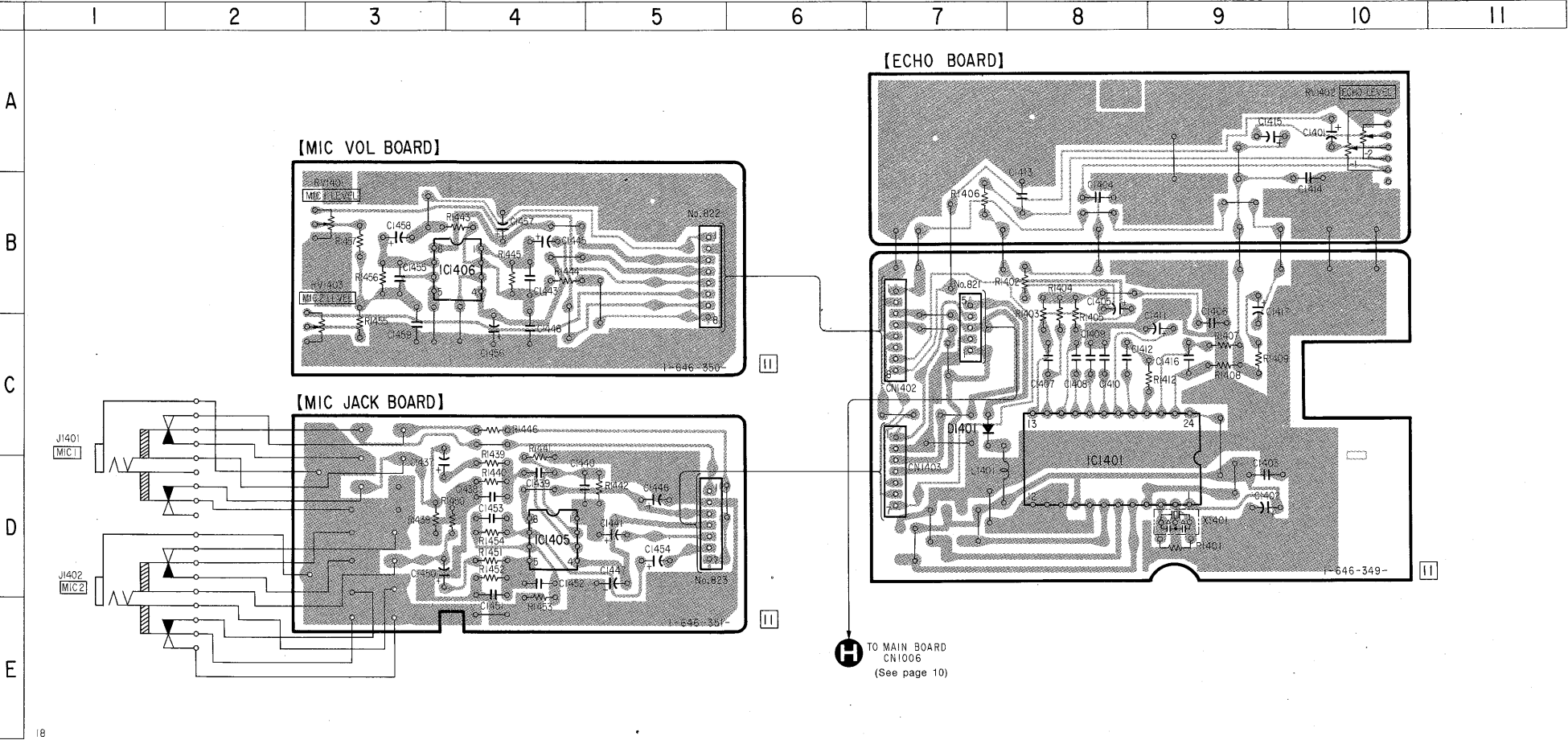
- All capacitors are in μF unless otherwise noted. pF : μF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
- $\triangle$: internal component.
-  : B+ line.
-  : B- line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- Voltages are taken with a VOM. (Input impedance $10\text{M}\Omega$)
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.
 : FM



3-6. SCHEMATIC DIAGRAM –ECHO Section–



3-7. PRINTED WIRING BOARDS—ECHO Section—



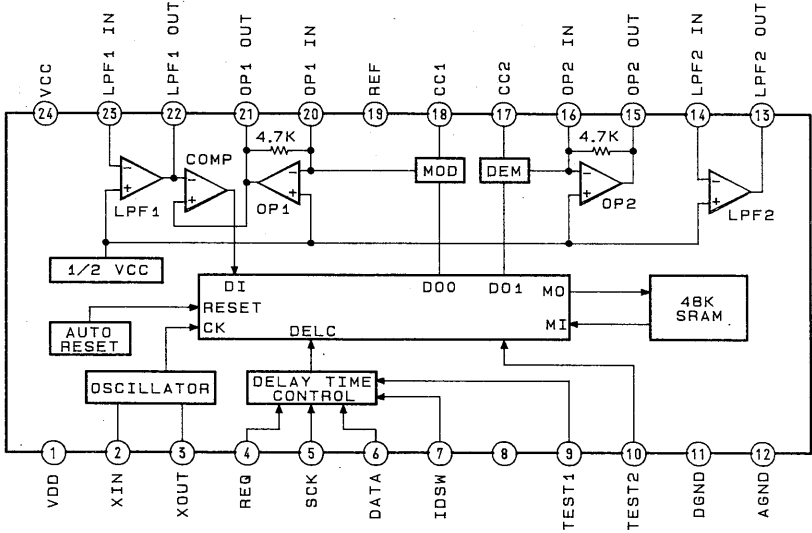
Ref. No.	Location
D1401	C-7
IC1401	D-8
IC1405	D-4
IC1406	B-4

Note:

- ○ — : parts extracted from the component side.
- ■ ■ ■ : Pattern on the side which is seen.

● IC Block Diagram

IC1401 M65831P



SECTION 4 ELECTRICAL PARTS LIST

ECHO

MIC VOL

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms.
METAL: Metal-film resistor.
METAL OXIDE: Metal oxide-film resistor.
F: nonflammable

- 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
- Abbreviation
EA: Saudi Arabia
MY: Malaysia
SP: Singapore

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

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

Ref. No.	Part No.	Description	Remark		
*	A-4356-554-A	ECHO BOARD, COMPLETE *****			
< CAPACITOR >					
C1401	1-124-925-11	ELECT	2.2uF	20%	100V
C1402	1-126-101-11	ELECT	100uF	20%	16V
C1403	1-164-159-11	CERAMIC	0.1uF		50V
C1404	1-161-379-00	CERAMIC	0.01uF	20%	25V
C1405	1-124-903-11	ELECT	1uF	20%	50V
C1406	1-130-480-00	MYLAR	0.0056uF	5%	50V
C1407	1-161-374-11	CERAMIC	0.0015uF	20%	50V
C1408	1-164-159-11	CERAMIC	0.1uF		50V
C1409	1-164-159-11	CERAMIC	0.1uF		50V
C1410	1-164-159-11	CERAMIC	0.1uF		50V
C1411	1-124-910-11	ELECT	47uF	20%	50V
C1412	1-164-159-11	CERAMIC	0.1uF		50V
C1413	1-161-379-00	CERAMIC	0.01uF	20%	25V
C1414	1-130-480-00	MYLAR	0.0056uF	5%	50V
C1415	1-124-903-11	ELECT	1uF	20%	50V
C1416	1-162-291-31	CERAMIC	560PF	10%	50V
C1417	1-124-903-11	ELECT	1uF	20%	50V
< CONNECTOR >					
* CN1402	1-568-935-11	PIN, CONNECTOR 8P			
* CN1403	1-568-934-11	PIN, CONNECTOR 7P			
< DIODE >					
D1401	8-719-987-63	DIODE	1N4148M		
< IC >					
IC1401	8-759-053-12	IC	M65831P		
< COIL >					
L1401	1-410-171-11	INDUCTOR	1mH		
< RESISTOR >					
R1401	1-247-903-00	CARBON	1M	5%	1/4W
R1402	1-249-431-11	CARBON	15K	5%	1/4W

Ref. No.	Part No.	Description	Remark		
R1403	1-249-431-11	CARBON	15K	5%	1/4W
R1404	1-249-431-11	CARBON	15K	5%	1/4W
R1405	1-249-429-11	CARBON	10K	5%	1/4W
R1406	1-249-436-11	CARBON	39K	5%	1/4W
R1407	1-249-431-11	CARBON	15K	5%	1/4W
R1408	1-249-429-11	CARBON	10K	5%	1/4W
R1409	1-249-429-11	CARBON	10K	5%	1/4W
R1412	1-249-398-11	CARBON	27	5%	1/4W
< VARIABLE RESISTOR >					
RV1402	1-241-511-11	RES, VAR, CARBON 50K/50K (ECHO LEVEL)			
< VIBRATOR >					
X1401	1-577-358-21	VIBRATOR, CERAMIC (2MHz)			

*	1-646-350-11	MIC VOL BOARD			

< CAPACITOR >					
C1443	1-162-282-31	CERAMIC	100PF	10%	50V
C1445	1-124-925-11	ELECT	2.2uF	20%	100V
C1448	1-162-215-31	CERAMIC	47PF	5%	50V
C1455	1-162-282-31	CERAMIC	100PF	10%	50V
C1456	1-124-477-11	ELECT	47uF	20%	25V
C1457	1-124-477-11	ELECT	47uF	20%	25V
C1458	1-124-252-00	ELECT	0.33uF	20%	50V
C1459	1-162-215-31	CERAMIC	47PF	5%	50V
< IC >					
IC1406	8-759-634-51	IC M5218AP			
< RESISTOR >					
R1443	1-249-429-11	CARBON	10K	5%	1/4W
R1444	1-249-437-11	CARBON	47K	5%	1/4W
R1445	1-249-434-11	CARBON	27K	5%	1/4W
R1455	1-249-429-11	CARBON	10K	5%	1/4W
R1456	1-249-434-11	CARBON	27K	5%	1/4W
R1457	1-249-429-11	CARBON	10K	5%	1/4W

MIC VOL

MIC JACK

MAIN

Ref. No.	Part No.	Description	Remark			
< VARIABLE RESISTOR >						
	RV1401	1-241-903-11 RES, VAR, CARBON 50K (MIC 1 LEVEL)				
	RV1403	1-241-903-11 RES, VAR, CARBON 50K (MIC 2 LEVEL)				

*	1-646-351-11	MIC JACK BOARD				

< CAPACITOR >						
C1437	1-124-925-11	ELECT	2. 2uF	20%	100V	
C1438	1-162-294-31	CERAMIC	0. 001uF	10%	50V	
C1439	1-162-215-31	CERAMIC	47PF	5%	50V	
C1440	1-162-293-31	CERAMIC	820PF	10%	50V	
C1441	1-124-925-11	ELECT	2. 2uF	20%	100V	
C1446	1-124-477-11	ELECT	47uF	20%	25V	
C1447	1-124-477-11	ELECT	47uF	20%	25V	
C1450	1-124-925-11	ELECT	2. 2uF	20%	100V	
C1451	1-162-294-31	CERAMIC	0. 001uF	10%	50V	
C1452	1-162-215-31	CERAMIC	47PF	5%	50V	
C1453	1-162-293-31	CERAMIC	820PF	10%	50V	
C1454	1-124-925-11	ELECT	2. 2uF	20%	100V	
< IC >						
IC1405	8-759-634-51	IC M5218AP				
< JACK >						
J1401	1-573-151-11	JACK, LARGE TYPE (MIC 1)				
J1402	1-573-151-11	JACK, LARGE TYPE (MIC 2)				
< RESISTOR >						
R1438	1-249-429-11	CARBON	10K	5%	1/4W	
R1439	1-249-417-11	CARBON	1K	5%	1/4W	
R1440	1-249-441-11	CARBON	100K	5%	1/4W	
R1441	1-249-417-11	CARBON	1K	5%	1/4W	
R1442	1-249-433-11	CARBON	22K	5%	1/4W	
R1446	1-249-417-11	CARBON	1K	5%	1/4W	
R1450	1-249-429-11	CARBON	10K	5%	1/4W	
R1451	1-249-417-11	CARBON	1K	5%	1/4W	
R1452	1-249-441-11	CARBON	100K	5%	1/4W	
R1453	1-249-417-11	CARBON	1K	5%	1/4W	
R1454	1-249-433-11	CARBON	22K	5%	1/4W	

*	A-4356-541-A	MAIN BOARD, COMPLETE				(E, MY, SP)
*	A-4360-778-A	MAIN BOARD, COMPLETE				(EA)

*	4-942-204-01	PLATE, GROUND				
	7-685-646-79	SCREW +BVTP	3X8	TYPE2	N-S	

Ref. No.	Part No.	Description	Remark		
< CAPACITOR >					
C302	1-124-477-11	ELECT	47uF	20%	25V
C303	1-161-379-00	CERAMIC	0.01uF	20%	25V
C307	1-161-379-00	CERAMIC	0.01uF	20%	25V
C308	1-161-379-00	CERAMIC	0.01uF	20%	25V
C309	1-161-379-00	CERAMIC	0.01uF	20%	25V
C310	1-124-477-11	ELECT	47uF	20%	25V
C311	1-161-379-00	CERAMIC	0.01uF	20%	25V
C312	1-101-006-00	CERAMIC	0.047uF		50V
C313	1-123-382-00	ELECT	3.3uF	20%	100V
C314	1-161-379-00	CERAMIC	0.01uF	20%	25V
C315	1-161-329-00	CERAMIC	0.0068uF	30%	16V
C316	1-162-282-31	CERAMIC	100PF	10%	50V
C318	1-124-903-11	ELECT	1uF	20%	50V
C320	1-124-903-11	ELECT	1uF	20%	50V
C321	1-124-902-00	ELECT	0.47uF	20%	50V
C322	1-124-463-00	ELECT	0.1uF	20%	50V
C323	1-161-329-00	CERAMIC	0.0068uF	20%	16V
C324	1-161-329-00	CERAMIC	0.0068uF	20%	16V
C325	1-124-477-11	ELECT	47uF	20%	25V
C326	1-124-907-11	ELECT	10uF	20%	50V
C327	1-161-379-00	CERAMIC	0.01uF	20%	25V
C328	1-124-463-00	ELECT	0.1uF	20%	50V
C329	1-124-927-11	ELECT	4.7uF	20%	100V
C330	1-161-379-00	CERAMIC	0.01uF	20%	25V
C331	1-126-176-11	ELECT	220uF	20%	10V
C332	1-161-379-00	CERAMIC	0.01uF	20%	25V
C335	1-161-379-00	CERAMIC	0.01uF	20%	25V
C336	1-161-379-00	CERAMIC	0.01uF	20%	25V
C341	1-123-382-00	ELECT	3.3uF	20%	100V
C342	1-123-382-00	ELECT	3.3uF	20%	100V
C343	1-123-382-00	ELECT	3.3uF	20%	100V
C344	1-123-382-00	ELECT	3.3uF	20%	100V
C345	1-161-375-00	CERAMIC	0.0022uF	20%	50V
C346	1-161-375-00	CERAMIC	0.0022uF	20%	50V
C352	1-164-098-11	CERAMIC	0.047uF		12V (EA)
C353	1-162-199-31	CERAMIC	10PF	5%	50V (EA)
C354	1-136-162-00	FILM	0.056uF	5%	50V (EA)
C355	1-164-159-11	CERAMIC	0.1uF		50V (EA)
C356	1-161-494-00	CERAMIC	0.022uF		25V (EA)
C357	1-161-379-00	CERAMIC	0.01uF	20%	25V (EA)
C358	1-164-159-11	CERAMIC	0.1uF		50V (EA)
C359	1-161-494-00	CERAMIC	0.022uF		25V (EA)
C360	1-161-379-00	CERAMIC	0.01uF	20%	25V (EA)
C361	1-164-098-11	CERAMIC	0.047uF	12V	(E, MY, SP)
C362	1-161-494-00	CERAMIC	0.022uF	25V	(E, MY, SP)
C371	1-162-198-31	CERAMIC	8.2PF	10%	50V
C401	1-124-907-11	ELECT	10uF	20%	50V

Ref. No.	Part No.	Description	Remark		
C402	1-126-176-11	ELECT	220uF	20%	10V
C403	1-124-907-11	ELECT	10uF	20%	50V
C404	1-124-903-11	ELECT	1uF	20%	50V
C405	1-124-443-00	ELECT	100uF	20%	10V
C406	1-124-472-11	ELECT	470uF	20%	10V
C407	1-164-159-11	CERAMIC	0.1uF		50V
C408	1-164-159-11	CERAMIC	0.1uF		50V
C410	1-124-902-00	ELECT	0.47uF	20%	50V
C411	1-136-153-00	FILM	0.01uF	5%	50V
C412	1-164-159-11	CERAMIC	0.1uF		50V
C413	1-161-374-11	CERAMIC	0.0015uF	20%	50V
C414	1-136-161-00	FILM	0.047uF	5%	50V
C415	1-164-159-11	CERAMIC	0.1uF		50V
C416	1-164-159-11	CERAMIC	0.1uF		50V
C418	1-124-443-00	ELECT	100uF	20%	10V
C419	1-164-159-11	CERAMIC	0.1uF		50V
C420	1-164-159-11	CERAMIC	0.1uF		50V
C421	1-164-159-11	CERAMIC	0.1uF		50V
C430	1-162-207-31	CERAMIC	22PF	5%	50V
C431	1-162-207-31	CERAMIC	22PF	5%	50V
C432	1-164-159-11	CERAMIC	0.1uF		50V
C433	1-124-443-00	ELECT	100uF	20%	10V
C434	1-124-443-00	ELECT	100uF	20%	10V
C435	1-164-159-11	CERAMIC	0.1uF		50V
C436	1-124-443-00	ELECT	100uF	20%	10V
C437	1-164-159-11	CERAMIC	0.1uF		50V
C438	1-164-159-11	CERAMIC	0.1uF		50V
C439	1-164-159-11	CERAMIC	0.1uF		50V
C440	1-164-159-11	CERAMIC	0.1uF		50V
C443	1-162-293-31	CERAMIC	820PF	10%	50V
C444	1-162-293-31	CERAMIC	820PF	10%	50V
C447	1-164-159-11	CERAMIC	0.1uF		50V
C448	1-164-159-11	CERAMIC	0.1uF		50V
C456	1-124-903-11	ELECT	1uF	20%	50V
C457	1-124-903-11	ELECT	1uF	20%	50V
C458	1-137-363-91	FILM	680PF	5%	50V
C459	1-137-363-91	FILM	680PF	5%	50V
C462	1-124-907-11	ELECT	10uF	20%	50V
C463	1-124-907-11	ELECT	10uF	20%	50V
C467	1-162-294-31	CERAMIC	0.001uF	10%	50V
C492	1-164-159-11	CERAMIC	0.1uF		50V
C493	1-164-159-11	CERAMIC	0.1uF		50V
C494	1-161-494-00	CERAMIC	0.022uF		25V
C495	1-164-159-11	CERAMIC	0.1uF		50V
C501	1-102-961-00	CERAMIC	27PF	5%	50V
C502	1-102-961-00	CERAMIC	27PF	5%	50V
C503	1-124-477-11	ELECT	47uF	20%	25V
C504	1-161-379-00	CERAMIC	0.01uF	20%	25V

Ref. No.	Part No.	Description	Remark		
C505	1-161-379-00	CERAMIC	0.01uF	20%	25V
C506	1-161-379-00	CERAMIC	0.01uF	20%	25V
C507	1-161-379-00	CERAMIC	0.01uF	20%	25V
C521	1-124-925-11	ELECT	2.2uF	20%	100V
C522	1-124-463-00	ELECT	0.1uF	20%	50V
C523	1-161-379-00	CERAMIC	0.01uF	20%	25V
C524	1-161-379-00	CERAMIC	0.01uF	20%	25V
C525	1-124-477-11	ELECT	47uF	20%	25V
C1001	1-124-257-00	ELECT	2.2uF	20%	50V
C1002	1-162-282-31	CERAMIC	100PF	10%	50V
C1003	1-162-282-31	CERAMIC	100PF	10%	50V
C1004	1-124-477-11	ELECT	47uF	20%	25V
C1005	1-161-377-00	CERAMIC	0.0047uF	20%	16V
C1006	1-161-374-11	CERAMIC	0.0015uF	20%	50V
C1007	1-124-464-11	ELECT	0.22uF	20%	50V
C1010	1-124-477-11	ELECT	47uF	20%	25V
C1014	1-161-494-00	CERAMIC	0.022uF		25V
C1027	1-164-159-11	CERAMIC	0.1uF		50V
C1051	1-124-257-00	ELECT	2.2uF	20%	50V
C1052	1-162-282-31	CERAMIC	100PF	10%	50V
C1053	1-162-282-31	CERAMIC	100PF	10%	50V
C1054	1-124-477-11	ELECT	47uF	20%	25V
C1055	1-161-377-00	CERAMIC	0.0047uF	20%	16V
C1056	1-161-374-11	CERAMIC	0.0015uF	20%	50V
C1057	1-124-464-11	ELECT	0.22uF	20%	50V
C1060	1-124-477-11	ELECT	47uF	20%	25V
C1064	1-161-494-00	CERAMIC	0.022uF		25V
C1077	1-164-159-11	CERAMIC	0.1uF		50V
C1212	1-124-916-11	ELECT	22uF	20%	63V
C1213	1-124-916-11	ELECT	22uF	20%	63V
C1221	1-126-101-11	ELECT	100uF	20%	16V
C1222	1-126-176-11	ELECT	220uF	20%	10V
C1223	1-126-176-11	ELECT	220uF	20%	10V
C1262	1-124-916-11	ELECT	22uF	20%	63V
C1263	1-124-916-11	ELECT	22uF	20%	63V
C1302	1-102-394-11	CERAMIC	0.01uF		250V
C1304	1-126-974-11	ELECT	3300uF	20%	50V
C1305	1-126-974-11	ELECT	3300uF	20%	50V
C1306	1-124-477-11	ELECT	47uF	20%	25V
C1308	1-126-101-11	ELECT	100uF	20%	16V
C1309	1-126-101-11	ELECT	100uF	20%	16V
C1312	1-124-563-11	ELECT	2200uF	20%	25V
C1313	1-126-946-11	ELECT	6800uF	20%	25V
C1314	1-124-122-11	ELECT	100uF	20%	50V
C1315	1-124-907-11	ELECT	10uF	20%	50V
C1316	1-124-910-11	ELECT	47uF	20%	50V
C1319	1-124-463-00	ELECT	0.1uF	20%	50V
C1320	1-124-907-11	ELECT	10uF	20%	50V
C1321	1-161-379-00	CERAMIC	0.01uF	20%	25V

MAIN

Ref. No.	Part No.	Description	Remark
C1322	1-161-379-00	CERAMIC 0.01uF	20% 25V
C1324	1-124-907-11	ELECT 10uF	20% 50V
C1326	1-124-907-11	ELECT 10uF	20% 50V
C1330	1-126-101-11	ELECT 100uF	20% 16V
C1331	1-102-394-11	CERAMIC 0.01uF	250V
C1341	1-124-907-11	ELECT 10uF	20% 50V
C1346	1-124-925-11	ELECT 2.2uF	20% 100V
C1351	1-124-122-11	ELECT 100uF	20% 50V
C1352	1-126-105-11	ELECT 1000uF	20% 35V
C1353	1-136-165-00	FILM 0.1uF	5% 50V
C1354	1-136-165-00	FILM 0.1uF	5% 50V
C1361	1-124-122-11	ELECT 100uF	20% 50V

< FILTER >

CF301	1-577-070-81	FILTER, CERAMIC
CF303	1-577-070-81	FILTER, CERAMIC
CF304	1-577-075-11	OSCILLATOR, CERAMIC

< CONNECTOR >

* CN402	1-568-822-11	SOCKET, CONNECTOR 22P
* CN403	1-568-842-11	SOCKET, CONNECTOR 27P
* CN501	1-568-830-11	SOCKET, CONNECTOR 11P
* CN1006	1-568-954-11	PIN, CONNECTOR 5P
* CN1201	1-537-327-11	TERMINAL BOARD (SPEAKER)
* CN1204	1-564-510-11	PLUG, CONNECTOR 7P
* CN1205	1-564-509-11	PLUG, CONNECTOR 6P
* CN1206	1-568-836-11	SOCKET, CONNECTOR 17P
* CN1211	1-564-507-11	PLUG, CONNECTOR 4P
* CN1212	1-564-508-11	PLUG, CONNECTOR 5P
* CN1301	1-564-513-11	PLUG, CONNECTOR 10P

< TRIMMER >

CT351	1-141-227-00	CAP, TRIMMER 20PF	(EA)
CT352	1-141-227-00	CAP, TRIMMER 20PF	(EA)

< DIODE >

D351	8-719-902-79	DIODE KV1236Z	(EA)
D1202	8-719-987-63	DIODE 1N4148M	
D1203	8-719-987-63	DIODE 1N4148M	
D1204	8-719-987-63	DIODE 1N4148M	
D1301	8-719-312-09	DIODE RBA-402	
D1302	8-719-200-82	DIODE 11ES2	
D1303	8-719-200-82	DIODE 11ES2	
D1304	8-719-200-82	DIODE 11ES2	
D1305	8-719-200-82	DIODE 11ES2	
D1306	8-719-001-76	DIODE UZL-12M3	
D1307	8-719-200-82	DIODE 11ES2	

Ref. No.	Part No.	Description	Remark
D1308	8-719-002-60	DIODE UZL-33L	
D1309	8-719-014-66	DIODE UZP-5.6B	
D1310	8-719-987-63	DIODE 1N4148M	
D1311	8-719-200-82	DIODE 11ES2	
D1312	8-719-200-82	DIODE 11ES2	
D1313	8-719-200-82	DIODE 11ES2	
D1314	8-719-200-82	DIODE 11ES2	
D1315	8-719-987-63	DIODE 1N4148M	
D1316	8-719-987-63	DIODE 1N4148M	

< FRONTEND >

FE301	1-693-090-21	FRONT END (FM) (2 GANG)	
FE351	1-239-262-11	ENCAPSULATED COMPONENT (MW)	(EA)
FE352	1-239-260-11	ENCAPSULATED COMPONENT (AM)	(E, MY, SP)

< IC >

IC301	8-759-821-45	IC LA1851N
IC400	8-759-071-48	IC TA7807S
IC401	8-759-821-93	IC LA5601
IC402	8-752-352-93	IC CXD2500BQ
IC403	8-759-098-28	IC MSM6538-01-RS
IC404	8-759-155-52	IC PCM-67U-B
IC406	8-759-634-51	IC M5218AP
IC407	8-759-634-51	IC M5218AP
IC501	8-759-820-91	IC LC7218
IC1001	8-759-634-51	IC M5218AP
IC1002	8-759-000-48	IC MC14052BCP
IC1003	8-759-634-51	IC M5218AP
IC1004	8-759-000-49	IC MC14066BCP
IC1202	8-759-111-68	IC uPC1237HA
IC1303	8-759-071-48	IC TA7807S
IC1304	8-759-604-95	IC M5F79M07L
IC1305	8-759-820-13	IC L78MR06

< IFT >

IFT301	1-404-713-11	TRANSFORMER, IF
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< JACK >

* J1001	1-580-691-11	JACK, PIN 2P (PHONO)
J1202	1-569-130-11	JACK, PIN 2P (SURROUND SPEAKER)

< COIL >

L301	1-410-686-11	INDUCTOR 1mH	(E, MY, SP)
L301	1-410-688-31	INDUCTOR 1.5mH	(EA)
L351	1-402-424-11	COIL (ANT, SW3)	(EA)
L352	1-406-346-11	COIL (OSC, SW3)	(EA)

Ref. No.	Part No.	Description	Remark
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< IC LINK >

△PS401	1-532-675-00	LINK, IC ICP-F38 (1.5A)	
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< TRANSISTOR >

Q303	8-729-230-99	TRANSISTOR	2SC2669-OY
Q304	8-729-230-99	TRANSISTOR	2SC2669-OY
Q305	8-729-900-80	TRANSISTOR	DTC114ES
Q306	8-729-900-61	TRANSISTOR	DTA114ES
Q307	8-729-900-80	TRANSISTOR	DTC114ES

Q308	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q309	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q351	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q352	8-729-900-80	TRANSISTOR	DTC114ES
Q353	8-729-119-78	TRANSISTOR	2SC2785-HFE

Q354	8-729-119-76	TRANSISTOR	2SA1175-HFE
Q355	8-729-900-80	TRANSISTOR	DTC114ES
Q365	8-729-900-80	TRANSISTOR	DTC114ES
Q413	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q414	8-729-900-61	TRANSISTOR	DTA114ES

Q415	8-729-900-61	TRANSISTOR	DTA114ES
Q501	8-729-900-80	TRANSISTOR	DTC114ES
Q502	8-729-900-61	TRANSISTOR	DTA114ES
Q521	8-729-202-67	TRANSISTOR	2SK246-GR3
Q522	8-729-201-84	TRANSISTOR	2SC3112-B

Q1001	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q1005	8-729-119-76	TRANSISTOR	2SA1175-HFE
Q1051	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q1204	8-729-900-63	TRANSISTOR	DTA124ES
Q1301	8-729-141-83	TRANSISTOR	2SB1094-LK

Q1302	8-729-209-15	TRANSISTOR	2SD2012
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< RESISTOR >

R301	1-249-401-11	CARBON	47	5%	1/4W
R302	1-249-407-11	CARBON	150	5%	1/4W
R308	1-249-411-11	CARBON	330	5%	1/4W
R309	1-249-432-11	CARBON	18K	5%	1/4W
R310	1-249-411-11	CARBON	330	5%	1/4W

R311	1-249-434-11	CARBON	27K	5%	1/4W
R312	1-249-414-11	CARBON	560	5%	1/4W
R313	1-249-405-11	CARBON	100	5%	1/4W
△R315	1-249-404-00	CARBON	82	5%	1/4W
R316	1-249-429-11	CARBON	10K	5%	1/4W

R317	1-249-417-11	CARBON	1K	5%	1/4W
R318	1-249-435-11	CARBON	33K	5%	1/4W
R319	1-249-428-11	CARBON	8.2K	5%	1/4W
R320	1-249-432-11	CARBON	18K	5%	1/4W
R321	1-249-423-11	CARBON	3.3K	5%	1/4W

Ref. No.	Part No.	Description	Remark
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R322	1-249-429-11	CARBON	10K 5% 1/4W
R323	1-249-418-11	CARBON	1.2K 5% 1/4W
R324	1-249-429-11	CARBON	10K 5% 1/4W
R325	1-249-429-11	CARBON	10K 5% 1/4W
R326	1-249-409-11	CARBON	220 5% 1/4W

R327	1-249-437-11	CARBON	47K 5% 1/4W
R328	1-249-437-11	CARBON	47K 5% 1/4W
R329	1-249-399-11	CARBON	33 5% 1/4W (EA)
R330	1-249-395-11	CARBON	15 5% 1/4W (EA)
R331	1-247-891-00	CARBON	330K 5% 1/4W

R332	1-247-891-00	CARBON	330K 5% 1/4W
R333	1-249-421-11	CARBON	2.2K 5% 1/4W
R334	1-249-421-11	CARBON	2.2K 5% 1/4W
R335	1-249-420-11	CARBON	1.8K 5% 1/4W
R336	1-249-420-11	CARBON	1.8K 5% 1/4W

R337	1-249-426-11	CARBON	5.6K 5% 1/4W
R338	1-249-426-11	CARBON	5.6K 5% 1/4W
R351	1-249-429-11	CARBON	10K 5% 1/4W (EA)
R352	1-249-429-11	CARBON	10K 5% 1/4W (EA)
R354	1-249-429-11	CARBON	10K 5% 1/4W (EA)

R355	1-249-429-11	CARBON	10K 5% 1/4W (EA)
R356	1-249-437-11	CARBON	47K 5% 1/4W (EA)
R357	1-249-425-11	CARBON	4.7K 5% 1/4W (EA)
R358	1-249-434-11	CARBON	27K 5% 1/4W (EA)
R359	1-249-437-11	CARBON	47K 5% 1/4W (EA)

R360	1-249-429-11	CARBON	10K 5% 1/4W (EA)
R361	1-249-437-11	CARBON	47K 5% 1/4W (E, MY, SP)
R361	1-249-421-11	CARBON	2.2K 5% 1/4W (EA)
R362	1-249-437-11	CARBON	47K 5% 1/4W (E, MY, SP)
R401	1-249-405-11	CARBON	100 5% 1/4W

R408	1-249-429-11	CARBON	10K 5% 1/4W
R409	1-249-423-11	CARBON	3.3K 5% 1/4W
R410	1-249-423-11	CARBON	3.3K 5% 1/4W
R411	1-249-441-11	CARBON	100K 5% 1/4W
R412	1-249-429-11	CARBON	10K 5% 1/4W

R413	1-249-417-11	CARBON	1K 5% 1/4W
R414	1-249-417-11	CARBON	1K 5% 1/4W
R415	1-249-420-11	CARBON	1.8K 5% 1/4W
R416	1-249-417-11	CARBON	1K 5% 1/4W
R417	1-249-417-11	CARBON	1K 5% 1/4W

R418	1-249-417-11	CARBON	1K 5% 1/4W
R419	1-249-417-11	CARBON	1K 5% 1/4W
R420	1-249-433-11	CARBON	22K 5% 1/4W
R421	1-249-413-11	CARBON	470 5% 1/4W
R422	1-249-413-11	CARBON	470 5% 1/4W

R423	1-249-417-11	CARBON	1K 5% 1/4W
R424	1-249-417-11	CARBON	1K 5% 1/4W
R425	1-249-417-11	CARBON	1K 5% 1/4W
R435	1-249-420-11	CARBON	1.8K 5% 1/4W

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

MAIN

Ref. No.	Part No.	Description	Remark
R436	1-249-420-11	CARBON	1.8K 5% 1/4W
R437	1-247-836-11	CARBON	1.6K 5% 1/4W
R438	1-247-836-11	CARBON	1.6K 5% 1/4W
R441	1-249-441-11	CARBON	100K 5% 1/4W
R442	1-249-441-11	CARBON	100K 5% 1/4W
R443	1-249-417-11	CARBON	1K 5% 1/4W
R444	1-249-417-11	CARBON	1K 5% 1/4W
R445	1-249-420-11	CARBON	1.8K 5% 1/4W
R446	1-249-420-11	CARBON	1.8K 5% 1/4W
R447	1-249-441-11	CARBON	100K 5% 1/4W
R448	1-249-441-11	CARBON	100K 5% 1/4W
R451	1-249-419-11	CARBON	1.5K 5% 1/4W
R452	1-249-419-11	CARBON	1.5K 5% 1/4W
R460	1-249-441-11	CARBON	100K 5% 1/4W
R461	1-249-441-11	CARBON	100K 5% 1/4W
R467	1-249-429-11	CARBON	10K 5% 1/4W
R501	1-249-417-11	CARBON	1K 5% 1/4W
R502	1-249-417-11	CARBON	1K 5% 1/4W
R503	1-249-417-11	CARBON	1K 5% 1/4W
R504	1-249-417-11	CARBON	1K 5% 1/4W
R505	1-249-429-11	CARBON	10K 5% 1/4W
R506	1-249-417-11	CARBON	1K 5% 1/4W
△R510	1-249-401-11	CARBON	47 5% 1/4W F
R511	1-249-429-11	CARBON	10K 5% 1/4W
R512	1-249-425-11	CARBON	4.7K 5% 1/4W
R513	1-249-417-11	CARBON	1K 5% 1/4W
R514	1-249-429-11	CARBON	10K 5% 1/4W (E, MY, SP)
R514	1-249-417-11	CARBON	1K 5% 1/4W (EA)
R515	1-249-417-11	CARBON	1K 5% 1/4W
R521	1-249-423-11	CARBON	3.3K 5% 1/4W
R522	1-249-425-11	CARBON	4.7K 5% 1/4W (E, MY, SP)
R522	1-249-418-11	CARBON	1.2K 5% 1/4W (EA)
R523	1-249-414-11	CARBON	560 5% 1/4W
R524	1-249-417-11	CARBON	1K 5% 1/4W
R525	1-249-410-11	CARBON	270 5% 1/4W
R526	1-249-421-11	CARBON	2.2K 5% 1/4W
R527	1-249-425-11	CARBON	4.7K 5% 1/4W
R528	1-249-425-11	CARBON	4.7K 5% 1/4W
R529	1-249-405-11	CARBON	100 5% 1/4W
R530	1-249-405-11	CARBON	100 5% 1/4W
R1001	1-249-417-11	CARBON	1K 5% 1/4W
R1002	1-249-437-11	CARBON	47K 5% 1/4W
R1003	1-249-416-11	CARBON	820 5% 1/4W
R1004	1-247-897-11	CARBON	560K 5% 1/4W
R1005	1-249-437-11	CARBON	47K 5% 1/4W
R1006	1-249-409-11	CARBON	220 5% 1/4W
R1007	1-249-441-11	CARBON	100K 5% 1/4W
R1010	1-249-431-11	CARBON	15K 5% 1/4W
R1016	1-249-437-11	CARBON	47K 5% 1/4W

Ref. No.	Part No.	Description	Remark
R1017	1-249-437-11	CARBON	47K 5% 1/4W
R1021	1-249-434-11	CARBON	27K 5% 1/4W
R1022	1-249-432-11	CARBON	18K 5% 1/4W
R1023	1-249-434-11	CARBON	27K 5% 1/4W
R1029	1-249-433-11	CARBON	22K 5% 1/4W
R1030	1-249-433-11	CARBON	22K 5% 1/4W
R1031	1-249-433-11	CARBON	22K 5% 1/4W
R1034	1-249-425-11	CARBON	4.7K 5% 1/4W
R1035	1-249-437-11	CARBON	47K 5% 1/4W
R1036	1-249-425-11	CARBON	4.7K 5% 1/4W
R1051	1-249-417-11	CARBON	1K 5% 1/4W
R1052	1-249-437-11	CARBON	47K 5% 1/4W
R1053	1-249-416-11	CARBON	820 5% 1/4W
R1054	1-247-897-11	CARBON	560K 5% 1/4W
R1055	1-249-437-11	CARBON	47K 5% 1/4W
R1056	1-249-409-11	CARBON	220 5% 1/4W
R1057	1-249-441-11	CARBON	100K 5% 1/4W
R1060	1-249-431-11	CARBON	15K 5% 1/4W
R1071	1-249-434-11	CARBON	27K 5% 1/4W
R1072	1-249-432-11	CARBON	18K 5% 1/4W
R1073	1-249-434-11	CARBON	27K 5% 1/4W
R1095	1-249-433-11	CARBON	22K 5% 1/4W
R1222	1-249-415-11	CARBON	680 5% 1/4W
R1223	1-249-415-11	CARBON	680 5% 1/4W
△R1226	1-216-454-11	METAL OXIDE	390 5% 2W F
R1233	1-249-425-11	CARBON	4.7K 5% 1/4W
R1234	1-249-425-11	CARBON	4.7K 5% 1/4W
R1235	1-249-435-11	CARBON	33K 5% 1/4W
R1236	1-249-441-11	CARBON	100K 5% 1/4W
R1237	1-249-429-11	CARBON	10K 5% 1/4W
R1240	1-249-438-11	CARBON	56K 5% 1/4W
R1272	1-249-415-11	CARBON	680 5% 1/4W
R1273	1-249-415-11	CARBON	680 5% 1/4W
R1290	1-249-437-11	CARBON	47K 5% 1/4W
R1301	1-249-429-11	CARBON	10K 5% 1/4W
R1302	1-249-429-11	CARBON	10K 5% 1/4W
R1303	1-249-421-11	CARBON	2.2K 5% 1/4W
R1304	1-249-425-11	CARBON	4.7K 5% 1/4W
R1321	1-249-417-11	CARBON	1K 5% 1/4W
R1322	1-249-429-11	CARBON	10K 5% 1/4W
R1345	1-249-421-11	CARBON	2.2K 5% 1/4W
< VARIABLE RESISTOR >			
RV301	1-238-601-11	RES, ADJ, CARBON 22K (AM TUNED)	
RV302	1-238-601-11	RES, ADJ, CARBON 22K (FM TUNED)	
< RELAY >			
RY1201	1-515-533-11	RELAY	

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

Ref. No.	Part No.	Description	Remark			
< TRANSFORMER >						
T301	1-404-807-11	TRANSFORMER, DISCRIMINATOR (NULL)				
< TERMINAL >						
* TM301	1-537-264-11	TERMINAL BOARD (ANTENNA)				
< TEST PIN >						
* TP1	1-560-060-00	PIN, CONNECTOR 2P (NULL)				
< VIBRATOR >						
X401	1-567-908-11	VIBRATOR, CRYSTAL (16.9MHz)				
XT501	1-579-383-11	VIBRATOR, CRYSTAL (7.2MHz)				

*	1-645-903-12	H. P BOARD				

< CAPACITOR >						
C1237	1-162-282-31	CERAMIC	100PF	10%	50V	
C1238	1-162-282-31	CERAMIC	100PF	10%	50V	
< JACK >						
CNJ12011-569-113-11 JACK, LARGE TYPE (HEADPHONES)						

*	A-4356-531-A	PANEL BOARD, COMPLETE	(E, MY, SP)			
*	A-4360-776-A	PANEL BOARD, COMPLETE	(E)			

VOL BOARD						

*	4-942-301-01	HOLDER, FL TUBE				
< CAPACITOR >						
C603	1-136-169-00	FILM	0.22uF	5%	50V	
C604	1-164-159-11	CERAMIC	0.1uF		50V	
C605	1-104-905-11	CAP, DOUBLE LAYERS	0.22F		6.3V	
C606	1-164-159-11	CERAMIC	0.1uF		50V	
C607	1-124-261-00	ELECT	10uF	20%	50V	
C608	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C609	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C611	1-126-163-11	ELECT	4.7uF	20%	50V	
C650	1-126-301-11	ELECT	1uF	20%	50V	
C651	1-126-301-11	ELECT	1uF	20%	50V	
C1102	1-124-589-11	ELECT	47uF	20%	16V	
C1103	1-162-282-31	CERAMIC	100PF	10%	50V	
C1104	1-124-257-00	ELECT	2.2uF	20%	50V	
C1105	1-124-464-11	ELECT	0.22uF	20%	50V	

Ref. No.	Part No.	Description	Remark			
C1106	1-136-161-00	FILM	0.047uF	5%	50V	
C1107	1-136-155-00	FILM	0.015uF	5%	50V	
C1108	1-136-155-00	FILM	0.015uF	5%	50V	
C1109	1-137-437-11	FILM	0.0056uF	5%	50V	
C1110	1-161-327-00	CERAMIC	0.0033uF	20%	16V	
C1111	1-136-155-00	FILM	0.015uF	5%	50V	
C1112	1-136-157-00	FILM	0.022uF	5%	50V	
C1113	1-136-153-00	FILM	0.01uF	5%	50V	
C1114	1-161-377-00	CERAMIC	0.0047uF	20%	16V	
C1115	1-124-257-00	ELECT	2.2uF	20%	50V	
C1116	1-124-257-00	ELECT	2.2uF	20%	50V	
C1120	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C1121	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C1123	1-162-286-31	CERAMIC	220PF	10%	50V	
C1131	1-162-215-31	CERAMIC	47PF	5%	50V	
C1132	1-162-215-31	CERAMIC	47PF	5%	50V	
C1152	1-124-589-11	ELECT	47uF	20%	16V	
C1153	1-162-282-31	CERAMIC	100PF	10%	50V	
C1154	1-124-257-00	ELECT	2.2uF	20%	50V	
C1155	1-124-464-11	ELECT	0.22uF	20%	50V	
C1156	1-136-161-00	FILM	0.047uF	5%	50V	
C1157	1-136-155-00	FILM	0.015uF	5%	50V	
C1158	1-136-155-00	FILM	0.015uF	5%	50V	
C1159	1-137-437-11	FILM	0.0056uF	5%	50V	
C1160	1-161-327-00	CERAMIC	0.0033uF	20%	16V	
C1161	1-136-155-00	FILM	0.015uF	5%	50V	
C1162	1-136-157-00	FILM	0.022uF	5%	50V	
C1163	1-136-153-00	FILM	0.01uF	5%	50V	
C1164	1-161-377-00	CERAMIC	0.0047uF	20%	16V	
C1165	1-124-257-00	ELECT	2.2uF	20%	50V	
C1166	1-124-257-00	ELECT	2.2uF	20%	50V	
C1173	1-162-286-31	CERAMIC	220PF	10%	50V	
C1181	1-162-215-31	CERAMIC	47PF	5%	50V	
C1182	1-162-215-31	CERAMIC	47PF	5%	50V	
C1197	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C1198	1-161-494-00	CERAMIC	0.022uF		25V	

< CONNECTOR >

- * CN601 1-568-830-11 SOCKET, CONNECTOR 11P
- * CN1101 1-568-836-11 SOCKET, CONNECTOR 17P

< DIODE >

D601	8-719-987-63	DIODE	1N4148M	
D602	8-719-010-26	DIODE	UZ-3.9BSB	
D603	8-719-987-63	DIODE	1N4148M	
D604	8-719-987-63	DIODE	1N4148M	
D611	8-719-987-63	DIODE	1N4148M	
D612	8-719-987-63	DIODE	1N4148M	

PANEL

VOL

Ref. No.	Part No.	Description	Remark
D613	8-719-987-63	DIODE 1N4148M	
D614	8-719-987-63	DIODE 1N4148M	
D615	8-719-987-63	DIODE 1N4148M	
D616	8-719-987-63	DIODE 1N4148M	
D621	8-719-987-63	DIODE 1N4148M	(EA)
D623	8-719-987-63	DIODE 1N4148M	
D625	8-719-987-63	DIODE 1N4148M	
D627	8-719-987-63	DIODE 1N4148M	
D632	8-719-987-63	DIODE 1N4148M	
D635	8-719-987-63	DIODE 1N4148M	
D641	8-719-200-82	DIODE 11ES2	
D1101	8-719-987-63	DIODE 1N4148M	
D1131	8-719-301-37	LED SEL2210S-CD (CD)	
D1132	8-719-301-37	LED SEL2210S-CD (PHONO)	
D1133	8-719-301-37	LED SEL2210S-CD (TUNER)	
D1134	8-719-301-37	LED SEL2210S-CD (TAPE)	
D1145	8-719-301-37	LED SEL2210S-CD (VOLUME)	
D1146	8-719-038-63	LED SEL5220S-TH8C (MULTIPLEX)	
D1151	8-719-987-63	DIODE 1N4148M	
D1152	8-719-987-63	DIODE 1N4148M	
< FLUORESCENT INDICATOR >			
FL601	1-519-711-21	INDICATOR TUBE, FLUORESCENT	
< IC >			
IC601	8-759-096-99	IC μ PD75212ACW-A47	
IC602	8-749-923-64	IC NJH32H400	
IC1101	8-759-634-51	IC M5218AP	
IC1102	8-759-634-51	IC M5218AP	
IC1103	8-759-820-62	IC LB1639	
IC1104	8-759-916-12	IC SN74HC00AN	
< COIL >			
L601	1-410-521-11	INDUCTOR 100 μ H	
< TRANSISTOR >			
Q601	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q602	8-729-900-80	TRANSISTOR DTC114ES	
Q1101	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1102	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q1136	8-729-900-36	TRANSISTOR DTC124ES	
Q1138	8-729-900-36	TRANSISTOR DTC124ES	
Q1139	8-729-900-36	TRANSISTOR DTC124ES	
Q1141	8-729-900-63	TRANSISTOR DTA124ES	
Q1143	8-729-900-80	TRANSISTOR DTC114ES	
Q1144	8-729-900-80	TRANSISTOR DTC114ES	
Q1145	8-729-900-61	TRANSISTOR DTA114ES	

Ref. No.	Part No.	Description	Remark
Q1146	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1147	8-729-900-36	TRANSISTOR DTC124ES	
Q1151	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1152	8-729-141-26	TRANSISTOR 2SC3622A-LK	
< RESISTOR >			
R601	1-249-429-11	CARBON 10K 5% 1/4W	
R602	1-249-429-11	CARBON 10K 5% 1/4W	
R603	1-249-423-11	CARBON 3.3K 5% 1/4W	
R605	1-249-433-11	CARBON 22K 5% 1/4W	
R606	1-249-433-11	CARBON 22K 5% 1/4W	
R607	1-249-439-11	CARBON 68K 5% 1/4W	
R608	1-249-417-11	CARBON 1K 5% 1/4W	
R609	1-249-405-11	CARBON 100 5% 1/4W	
R610	1-249-429-11	CARBON 10K 5% 1/4W	
R611	1-249-437-11	CARBON 47K 5% 1/4W	
R612	1-249-417-11	CARBON 1K 5% 1/4W	
R613	1-249-441-11	CARBON 100K 5% 1/4W	
R621	1-249-433-11	CARBON 22K 5% 1/4W	
R622	1-249-433-11	CARBON 22K 5% 1/4W	
R623	1-249-433-11	CARBON 22K 5% 1/4W	
R624	1-249-433-11	CARBON 22K 5% 1/4W	
R641	1-249-417-11	CARBON 1K 5% 1/4W	
R1102	1-249-426-11	CARBON 5.6K 5% 1/4W	
R1103	1-249-431-11	CARBON 15K 5% 1/4W	
R1104	1-249-429-11	CARBON 10K 5% 1/4W	
R1105	1-249-433-11	CARBON 22K 5% 1/4W	
R1106	1-249-424-11	CARBON 3.9K 5% 1/4W	
R1107	1-249-441-11	CARBON 100K 5% 1/4W	
R1108	1-249-427-11	CARBON 6.8K 5% 1/4W	
R1109	1-249-412-11	CARBON 390 5% 1/4W	
R1110	1-249-431-11	CARBON 15K 5% 1/4W	
R1111	1-249-439-11	CARBON 68K 5% 1/4W	
R1112	1-249-433-11	CARBON 22K 5% 1/4W	
R1113	1-249-431-11	CARBON 15K 5% 1/4W	
R1114	1-249-429-11	CARBON 10K 5% 1/4W	
R1115	1-249-429-11	CARBON 10K 5% 1/4W	
R1116	1-247-852-11	CARBON 7.5K 5% 1/4W	
R1117	1-247-852-11	CARBON 7.5K 5% 1/4W	
R1118	1-249-425-11	CARBON 4.7K 5% 1/4W	
R1119	1-249-425-11	CARBON 4.7K 5% 1/4W	
R1120	1-249-423-11	CARBON 3.3K 5% 1/4W	
R1121	1-249-423-11	CARBON 3.3K 5% 1/4W	
R1122	1-247-887-00	CARBON 220K 5% 1/4W	
R1123	1-249-421-11	CARBON 2.2K 5% 1/4W	
R1124	1-249-425-11	CARBON 4.7K 5% 1/4W	
R1125	1-249-433-11	CARBON 22K 5% 1/4W	
R1132	1-249-412-11	CARBON 390 5% 1/4W	
R1133	1-249-412-11	CARBON 390 5% 1/4W	

PANEL

VOL

POWER

POWER AMP

Ref. No.	Part No.	Description	Remark
R1135	1-249-433-11	CARBON	22K 5% 1/4W
R1145	1-249-412-11	CARBON	390 5% 1/4W
R1146	1-249-414-11	CARBON	560 5% 1/4W
R1147	1-249-429-11	CARBON	10K 5% 1/4W
R1148	1-249-429-11	CARBON	10K 5% 1/4W
R1152	1-249-426-11	CARBON	5.6K 5% 1/4W
R1154	1-249-429-11	CARBON	10K 5% 1/4W
R1155	1-249-433-11	CARBON	22K 5% 1/4W
R1156	1-249-424-11	CARBON	3.9K 5% 1/4W
R1157	1-249-441-11	CARBON	100K 5% 1/4W
R1158	1-249-427-11	CARBON	6.8K 5% 1/4W
R1159	1-249-412-11	CARBON	390 5% 1/4W
R1160	1-249-431-11	CARBON	15K 5% 1/4W
R1161	1-249-439-11	CARBON	68K 5% 1/4W
R1162	1-249-433-11	CARBON	22K 5% 1/4W
R1163	1-249-431-11	CARBON	15K 5% 1/4W
R1164	1-249-429-11	CARBON	10K 5% 1/4W
R1165	1-249-429-11	CARBON	10K 5% 1/4W
R1166	1-247-852-11	CARBON	7.5K 5% 1/4W
R1167	1-247-852-11	CARBON	7.5K 5% 1/4W
R1168	1-249-425-11	CARBON	4.7K 5% 1/4W
R1169	1-249-425-11	CARBON	4.7K 5% 1/4W
R1170	1-249-423-11	CARBON	3.3K 5% 1/4W
R1171	1-249-423-11	CARBON	3.3K 5% 1/4W
R1172	1-247-887-00	CARBON	220K 5% 1/4W
R1173	1-249-421-11	CARBON	2.2K 5% 1/4W
R1174	1-249-425-11	CARBON	4.7K 5% 1/4W

< VARIABLE RESISTOR >

RV1101	1-223-251-11	RES, VAR, CARBON 100K/100K (SURROUND)
RV1102	1-223-251-11	RES, VAR, CARBON 100K/100K (DBFB)
RV1103	1-241-351-11	RES, VAR, SLIDE 100K/100K (100Hz)
RV1104	1-241-351-11	RES, VAR, SLIDE 100K/100K (330Hz)
RV1105	1-241-351-11	RES, VAR, SLIDE 100K/100K (1kHz)
RV1106	1-241-351-11	RES, VAR, SLIDE 100K/100K (3.3kHz)
RV1107	1-241-351-11	RES, VAR, SLIDE 100K/100K (10kHz)
RV1109	1-223-252-11	RES, VAR, CARBON 100K/100K (VOLUME)

< SWITCH >

S601	1-554-303-21	SWITCH, TACTILE (1)
S602	1-554-303-21	SWITCH, TACTILE (2)
S603	1-554-303-21	SWITCH, TACTILE (3)
S604	1-554-303-21	SWITCH, TACTILE (4)
S605	1-554-303-21	SWITCH, TACTILE (5)
S606	1-554-303-21	SWITCH, TACTILE (6)
S607	1-554-303-21	SWITCH, TACTILE (7)
S608	1-554-303-21	SWITCH, TACTILE (8)
S609	1-554-303-21	SWITCH, TACTILE (9)
S610	1-554-303-21	SWITCH, TACTILE (0)

Ref. No.	Part No.	Description	Remark
S611	1-554-303-21	SWITCH, TACTILE (DUAL MODE TUNING +)	
S612	1-554-303-21	SWITCH, TACTILE (DUAL MODE TUNING -)	
S613	1-554-303-21	SWITCH, TACTILE (SHIFT)	
S614	1-554-303-21	SWITCH, TACTILE (BAND SELECT)	
S615	1-554-303-21	SWITCH, TACTILE (ST/MUTE)	
S616	1-554-303-21	SWITCH, TACTILE (MEMORY)	
S618	1-554-303-21	SWITCH, TACTILE (MULTIPLEX)	
S621	1-554-303-21	SWITCH, TACTILE (TAPE)	
S622	1-554-303-21	SWITCH, TACTILE (CD)	
S623	1-554-303-21	SWITCH, TACTILE (TUNER)	
S624	1-554-303-21	SWITCH, TACTILE (PHONO)	

< VIBRATOR >

X601	1-567-775-11	VIBRATOR, CERAMIC (4.2MHz)
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*	1-645-905-13	POWER BOARD
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*	1-533-217-31	HOLDER, FUSE
*	1-560-595-00	TERMINAL (WITH BASE)

< CAPACITOR >

△C1301	1-161-744-00	CERAMIC	0.01uF	400V
C1348	1-164-159-11	CERAMIC	0.1uF	50V

< CONNECTOR >

*	CN1350	1-580-230-11	PIN, CONNECTOR (PC BOARD) 3P
*	CN1351	1-564-321-00	PIN, CONNECTOR 2P

< FUSE >

△F1301	1-532-237-00	FUSE, TIME LAG (T3.15A/250V)
△F1302	1-532-237-00	FUSE, TIME LAG (T3.15A/250V)
△F1303	1-532-350-00	FUSE, TIME LAG (T4A/250V)
△F1304	1-532-350-00	FUSE, TIME LAG (T4A/250V)

*	A-4356-550-A	POWER AMP BOARD, COMPLETE
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< CAPACITOR >

C1201	1-124-925-11	ELECT	2.2uF	20%	100V
C1202	1-162-286-31	CERAMIC	220PF	10%	50V
C1203	1-162-286-31	CERAMIC	220PF	10%	50V
C1204	1-124-910-11	ELECT	47uF	20%	50V
C1205	1-124-910-11	ELECT	47uF	20%	50V
C1206	1-124-122-11	ELECT	100uF	20%	50V
C1207	1-136-165-00	FILM	0.1uF	5%	50V
C1208	1-124-916-11	ELECT	22uF	20%	63V
C1209	1-136-165-00	FILM	0.1uF	5%	50V

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

POWER AMP

Ref. No.	Part No.	Description	Remark		
C1210	1-136-163-00	FILM	0.068uF	5%	50V
C1211	1-136-163-00	FILM	0.068uF	5%	50V
C1220	1-124-917-11	ELECT	33uF	20%	63V
C1251	1-124-925-11	ELECT	2.2uF	20%	100V
C1252	1-162-286-31	CERAMIC	220PF	10%	50V
C1253	1-162-286-31	CERAMIC	220PF	10%	50V
C1254	1-124-910-11	ELECT	47uF	20%	50V
C1255	1-124-910-11	ELECT	47uF	20%	50V
C1256	1-124-122-11	ELECT	100uF	20%	50V
C1257	1-136-165-00	FILM	0.1uF	5%	50V
C1260	1-136-163-00	FILM	0.068uF	5%	50V
C1261	1-136-163-00	FILM	0.068uF	5%	50V

< CONNECTOR >

* CN1203 1-564-518-11 PLUG, CONNECTOR 3P

< DIODE >

D1201	8-719-987-63	DIODE	1N4148M
D1251	8-719-987-63	DIODE	1N4148M

< IC >

IC1201	8-749-900-96	IC	STK4142MK2
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< COIL >

L1201	1-420-872-00	COIL, AIR CORE
L1251	1-420-872-00	COIL, AIR CORE

< TRANSISTOR >

Q1201	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA
Q1202	8-729-900-80	TRANSISTOR	DTC114ES
Q1203	8-729-119-78	TRANSISTOR	2SC2785-HFE
Q1251	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA

< RESISTOR >

R1201	1-249-417-11	CARBON	1K	5%	1/4W
R1202	1-249-438-11	CARBON	56K	5%	1/4W
R1203	1-249-414-11	CARBON	560	5%	1/4W
R1204	1-249-438-11	CARBON	56K	5%	1/4W
R1205	1-249-425-11	CARBON	4.7K	5%	1/4W
R1206	1-249-425-11	CARBON	4.7K	5%	1/4W
R1207	1-249-425-11	CARBON	4.7K	5%	1/4W
R1208	1-249-425-11	CARBON	4.7K	5%	1/4W
△R1209	1-212-881-11	FUSIBLE	100	5%	1/4W F
△R1210	1-217-151-00	RES, METAL PLATE	0.22	10%	2W F
R1211	1-249-417-11	CARBON	1K	5%	1/4W
R1212	1-249-431-11	CARBON	15K	5%	1/4W
R1213	1-249-441-11	CARBON	100K	5%	1/4W
R1214	1-249-421-11	CARBON	2.2K	5%	1/4W

Ref. No.	Part No.	Description	Remark		
R1215	1-249-421-11	CARBON	2.2K	5%	1/4W
R1216	1-249-421-11	CARBON	2.2K	5%	1/4W
R1217	1-249-421-11	CARBON	2.2K	5%	1/4W
R1218	1-249-397-11	CARBON	22	5%	1/4W
R1219	1-249-397-11	CARBON	22	5%	1/4W
R1220	1-249-397-11	CARBON	22	5%	1/4W
R1221	1-249-397-11	CARBON	22	5%	1/4W
R1227	1-249-429-11	CARBON	10K	5%	1/4W
R1228	1-247-881-00	CARBON	120K	5%	1/4W
R1229	1-249-437-11	CARBON	47K	5%	1/4W
R1230	1-249-439-11	CARBON	68K	5%	1/4W
R1231	1-249-417-11	CARBON	1K	5%	1/4W
R1232	1-249-434-11	CARBON	27K	5%	1/4W
R1238	1-249-433-11	CARBON	22K	5%	1/4W
R1239	1-249-426-11	CARBON	5.6K	5%	1/4W
△R1241	1-249-389-11	CARBON	4.7	5%	1/4W F
R1251	1-249-417-11	CARBON	1K	5%	1/4W
R1252	1-249-438-11	CARBON	56K	5%	1/4W
R1253	1-249-414-11	CARBON	560	5%	1/4W
R1254	1-249-438-11	CARBON	56K	5%	1/4W
R1255	1-249-425-11	CARBON	4.7K	5%	1/4W
R1256	1-249-425-11	CARBON	4.7K	5%	1/4W
R1257	1-249-425-11	CARBON	4.7K	5%	1/4W
R1258	1-249-425-11	CARBON	4.7K	5%	1/4W
△R1259	1-212-881-11	FUSIBLE	100	5%	1/4W F
△R1260	1-217-151-00	RES, METAL PLATE	0.22	10%	2W F
R1261	1-249-417-11	CARBON	1K	5%	1/4W
R1262	1-249-431-11	CARBON	15K	5%	1/4W
R1263	1-249-441-11	CARBON	100K	5%	1/4W
R1268	1-249-397-11	CARBON	22	5%	1/4W
R1269	1-249-397-11	CARBON	22	5%	1/4W
R1270	1-249-397-11	CARBON	22	5%	1/4W
R1271	1-249-397-11	CARBON	22	5%	1/4W

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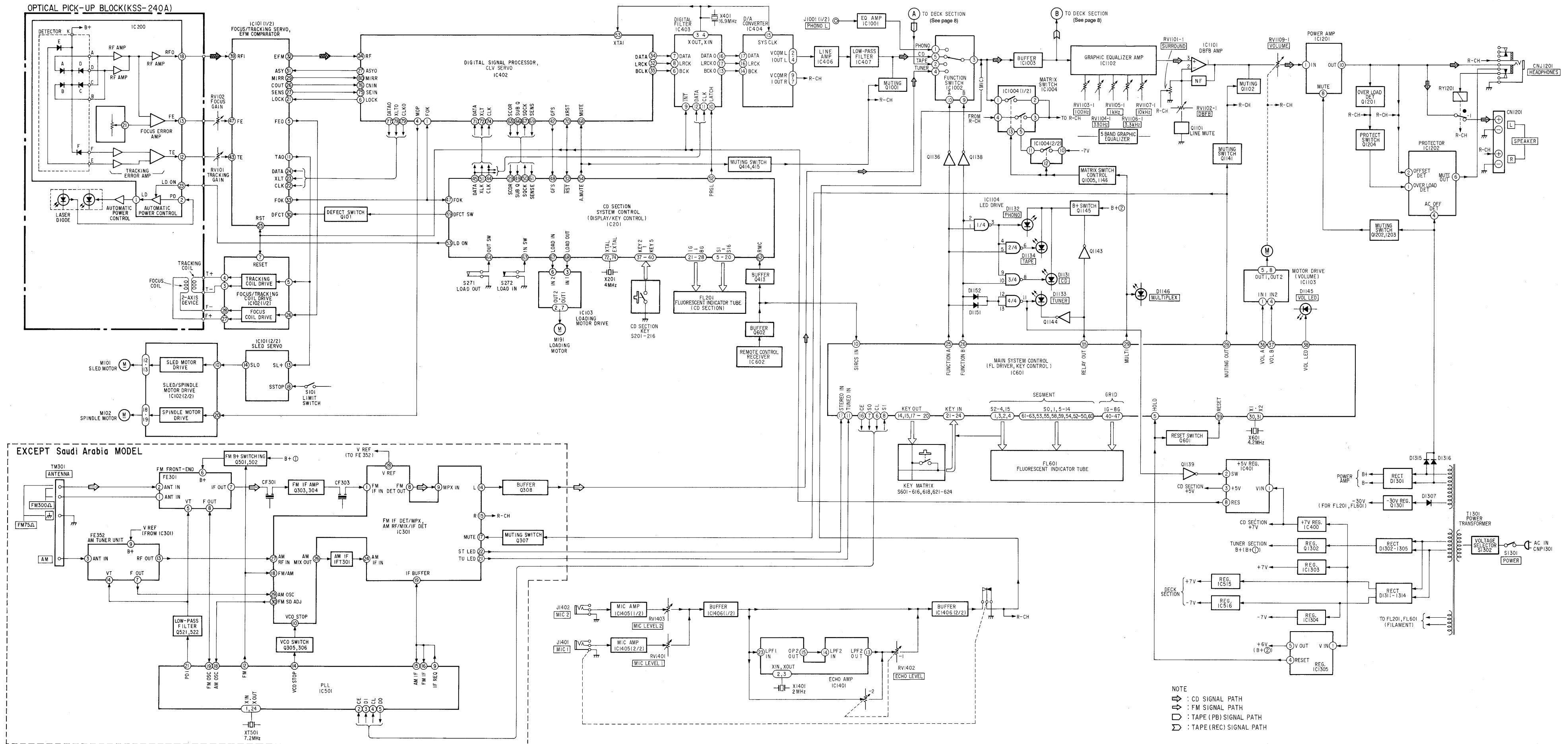
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SUPPLEMENT-1

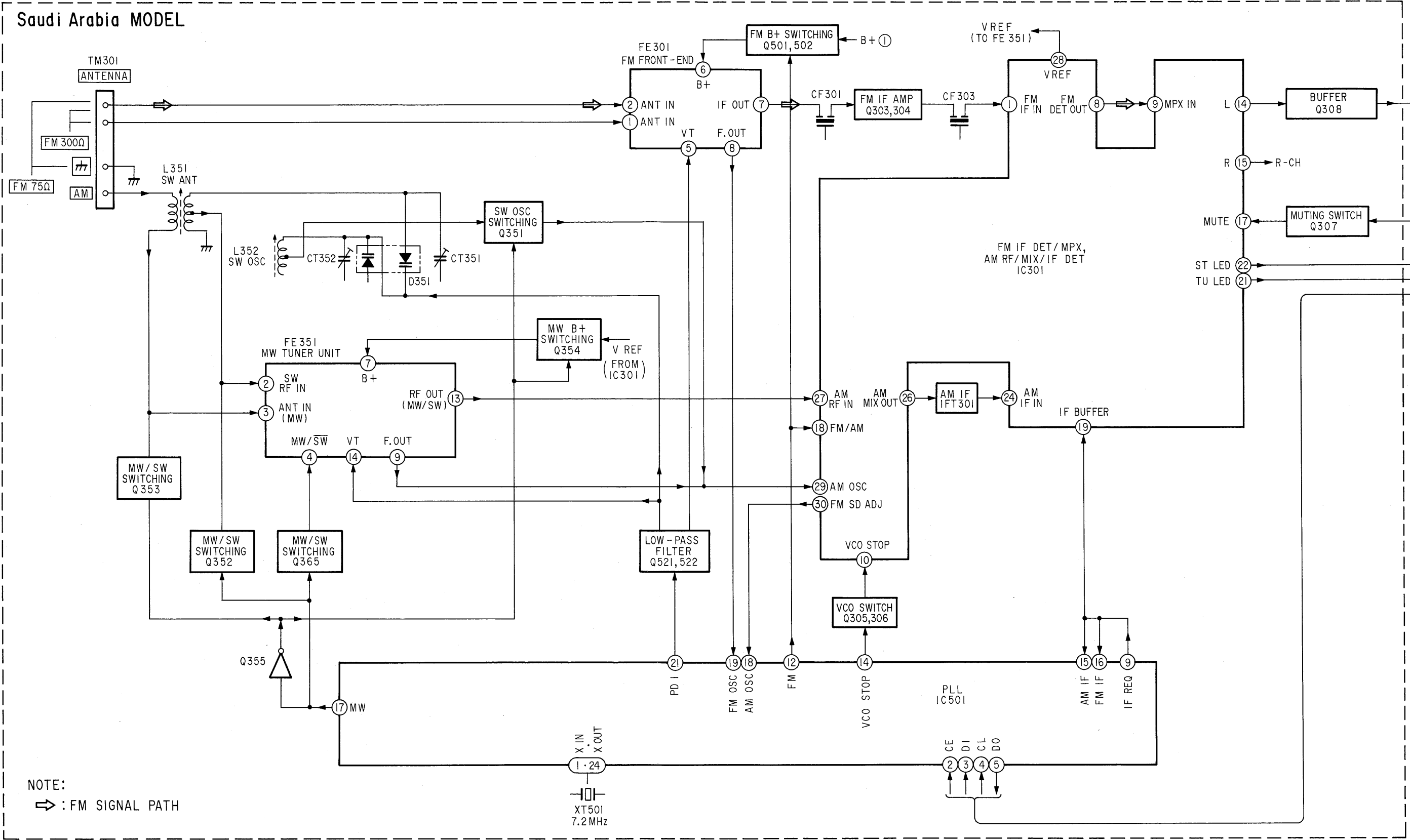
File this supplement with the service manual.

BLOCK DIAGRAMS

BLOCK DIAGRAM — MAIN Section —



BLOCK DIAGRAM — TUNER Section (Saudi Arabia model only) —



BLOCK DIAGRAM — DECK Section —

