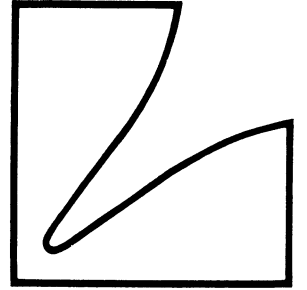
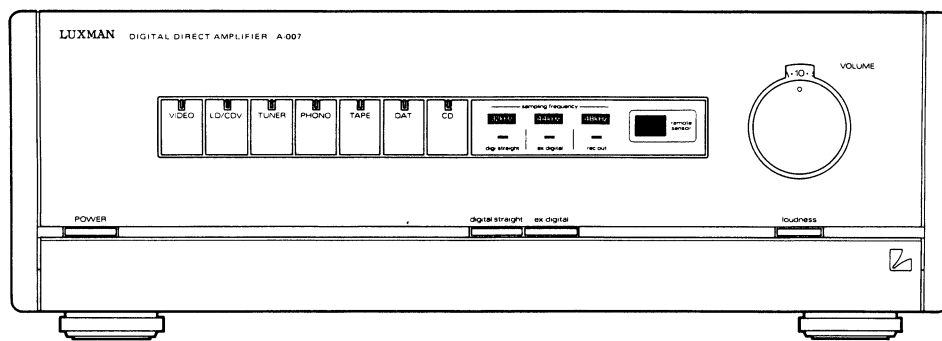


# SERVICE MANUAL



Digital Direct Amplifier

# A-007



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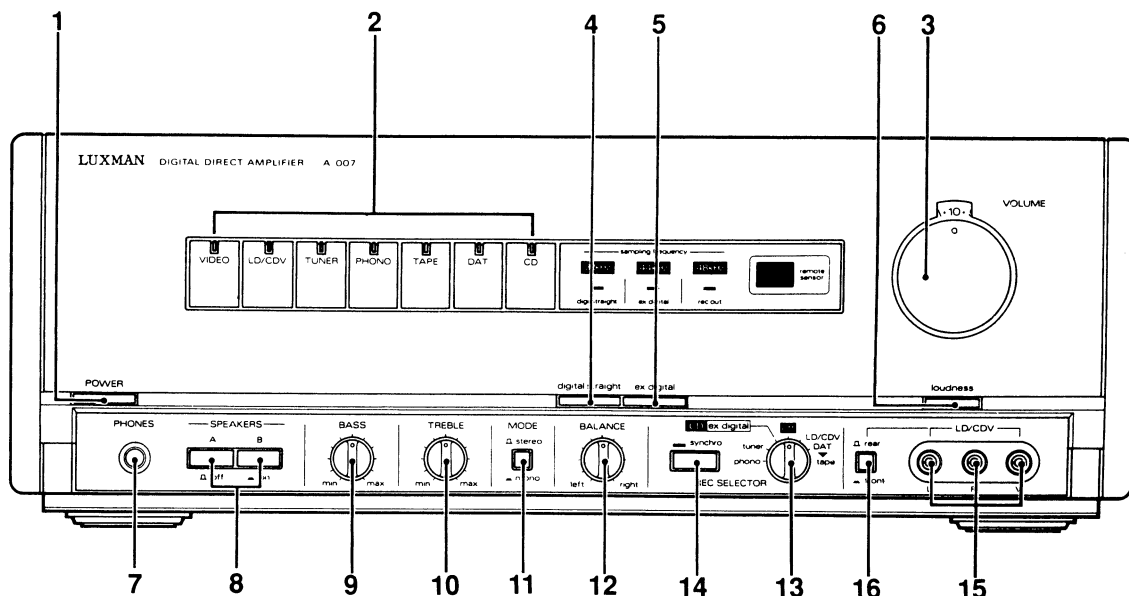
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## Specifications

Power Output .....	35W (20Hz~20kHz)
Headphones Output .....	(35W/8ohms, 1kHz) 500±100mV
Input Sensitivity (1kHz) .....	Line: 150mV±15mV Phone: 2.5mV±2.5mV
Input Impedance (1kHz) .....	Line: 40kohm±5% Phone: 47kohm±5%
Frequency Response .....	Line: (10Hz~70kHz) $\begin{matrix} +1.5 \\ -4.5 \end{matrix}$ dB Phono: (100Hz) 13.09±1dB Phono: (10kHz) -13.73±1dB
Distortion (1kHz) .....	.03%
Loudness Control (VR-30dB) .....	(100Hz) 7±3dB (10kHz) 4.5±3dB
Tone Controls .....	Bass: (100Hz) ±8±2dB Treble: (10kHz) ±8±2dB
S/N Ratio (Input Terminal Shorted) .....	(1kHz) 90dB
Cross Talk (10KHz) .....	50dB
Residual Noise .....	1.5mV
Power Supply .....	220/240V, 50Hz (AD/AG Model Only) 120V, 60Hz (UZ Model Only) 100V, 50/60Hz (JA Model Only)
Dimensions .....	360(W)×125(H)×362(D)mm
Weight .....	8.6kg
Semiconductors .....	29 IC's, 105 Transistors, 2 FET's, 56 Diodes, 5 Zener Diodes (JA Model Only) 30 IC's, 110 Transistors, 2 FET's, 56 Diodes, 5 Zener Diodes (AD/AG/UZ Model Only)

NOTE: Due to conditions product improvement, specifications and designs are subject to change without notice.

## Controls & Switches—Amplifier



### 1. POWER Button

For turning the power on and off for the whole system.

### 2. Input Select Buttons

For selecting the desired source (tuner, CD, etc.).

### 3. VOLUME Control

For adjusting the volume.

### 4. digital straight Button

For playing CD and DAT with high sound quality.

### 5. ex. digital Button

For selecting the digital input.

### 6. loudness Button

For compensating bass and treble at a low volume.

### 7. PHONES Jack

### 8. SPEAKERS Selector

For selecting the connected speaker terminals A or B.  
Set A and B to off position when using the headphones.

### 9. BASS Control

For adjusting the bass.

### 10. TREBLE Control

For adjusting the treble.

### 11. MODE Selector

For selecting play mode, stereo or monaural.

### 12. BALANCE Control

For balancing the volume output of the right and left speakers.

### 13. REC SELECTOR

For selecting a recording source. When not in use, set it to OFF.

### 14. synchro Button

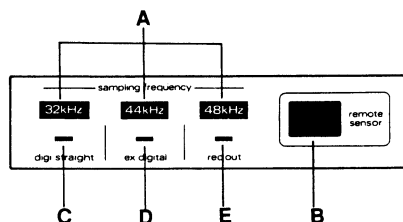
A single operation of this button allows recording from the CD player to the tape. Remember to set the REC SELECTOR to "CD/ex digital".

### 15. LD/CDV Front Input Jacks

For connecting the audio and video outputs of the video disc player or CDV player.

### 16. LD/CDV Input Selector

For selecting the LD/CDV input jacks on the front or those on the rear.



### A: Sampling Frequency Display

The sampling frequency of the digital signal (input signal of CD, DAT, etc.) is detected and indicated.

32 kHz : DAT 32 kHz mode

44 kHz : CD play, DAT soft tape playback

48 kHz : DAT 48 kHz mode

### B: remote sensor

The signal from the remote control unit is received here.

### NOTE:

It takes 0.5 second for the input select buttons to function due to the direct function (the tuner, cassette deck and CD players are activated by this single operation).

### C: digital straight Indicator

This is turned on when listening to a digital source (CD, DAT, etc.) directly, without mode or balance adjustment.

### D: ex digital Indicator

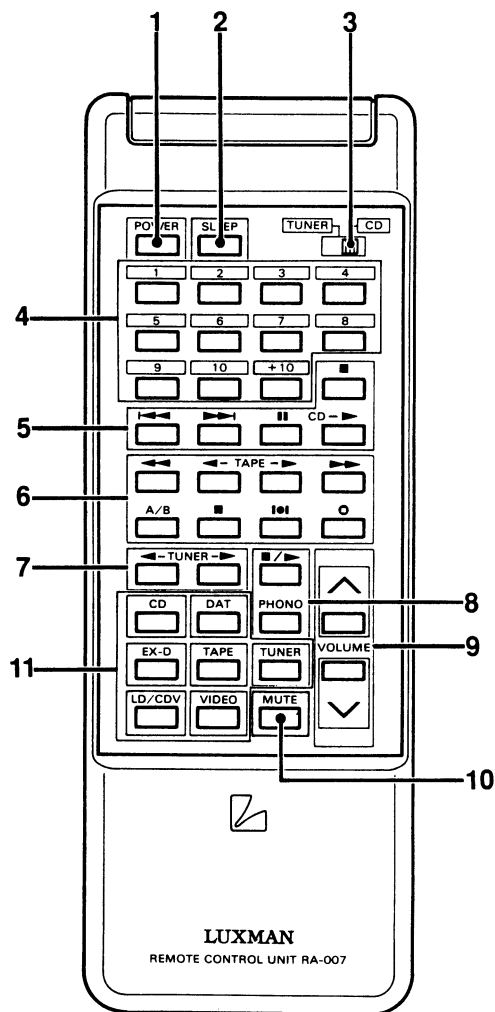
This is turned on when "ex.digital" is selected.

### E: rec out Indicator

This is turned on in recording mode.

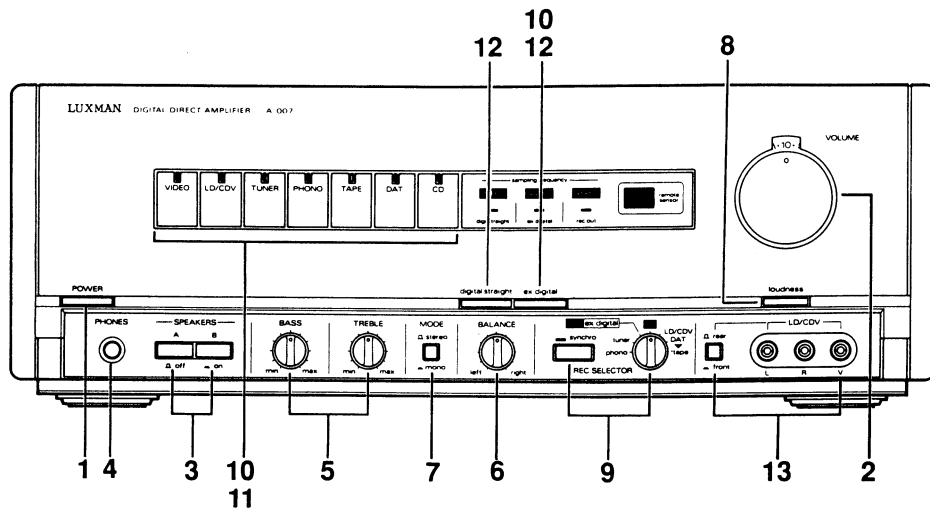
# Controls & Switches—Remote Control Unit

A-007 amplifier, T-007 tuner, D-007 CD player, K-007 cassette deck and P-007 turntable are operable with this RA-007 remote control unit.



- 1. POWER Button**  
The whole system is turned on and off with this button.
- 2. SLEEP Button**  
For setting the sleep timer which turns off the power automatically at the preset time.
- 3. TUNER/CD Selector**  
For selecting the FM/AM random station buttons of the tuner or the direct access buttons of the CD player.
- 4. 1 to 10 and +10 buttons**  
For selecting the desired tracks for operating the CD player, or for calling preset stations for the tuner.
- 5. CD Player Control Buttons**
  - ▶ For starting play.
  - For stopping play.
  - ⏸ For pausing play.
  - ◀ Pressing of this button during play repeats the current track from the beginning. Press it as many times as the number of previous tracks to be skipped.
  - ▶ Press it as many times as the number of following tracks to be skipped.
- 6. Cassette Deck Control Buttons**
  - ▶ For starting playback of the front side.
  - ◀ For starting playback of the reverse side.
  - ▶▶ For fast forwarding or rewinding toward the right. To locate the desired track, press this button during playback. The same number of tracks are located as that of pressing (up to 8 tracks).
  - ◀◀ For fast forwarding or rewinding toward the left. To locate the desired track, press this button during playback. The same number of tracks are located as that of pressing (up to 8 tracks).
  - ▲/▼ For selecting deck A or deck B.
  - For stopping playback or recording. (for recording, deck B only)
  - ■ For inserting 4 second blanks between recorded tracks and setting the unit in recording pause mode.
- 7. Tuner Control Buttons**
  - For calling a preset station of a lower frequency.
  - For calling a preset station of a higher frequency.
- 8. Turntable Control Button**
  - PHONO For activating the turntable.
  - /▶ For starting and stopping play.
- 9. VOLUME Control Buttons**
  - ∧ For turning up the volume.
  - ∨ For turning down the volume.
- 10. MUTE Button**  
For temporary muting. Press it again to resume the original volume.
- 11. Input Select Buttons**  
For selecting the desired source.

# Basic Operation



## 1 Turn the power on/off.

- Press POWER to turn the power on. By pressing POWER, the whole system is turned on.
- Press POWER again to turn the power off. By pressing POWER, the whole system is turned off.

## 2 Turn the volume up/down.

- Turn VOLUME clockwise to turn up the volume.
- Turn VOLUME counterclockwise to turn down the volume.

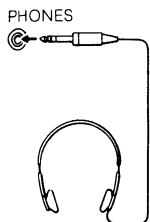
### NOTE:

- Avoid turning up the volume excessively.
- After completion of the program, turn down the volume and turn the power off.

## 3 Selecting speakers

- When the speaker is connected to A, press A of the SPEAKERS selector.
- When the speaker is connected to B, press B of the SPEAKERS selector.
- When driving both speakers connected to A and B, press A and B of the SPEAKERS selector.

## 4 Using the headphones



- When using the headphones, do not press A nor B of the SPEAKERS selectors.
- If the sound is heard from either speaker, again press the corresponding SPEAKERS selector, A or B.

### NOTES:

Before using the headphones, turn down the volume appropriately.

## 5 Tone control

- To increase bass, turn BASS clockwise.
- To decrease bass, turn BASS counterclockwise.
- To increase treble, turn TREBLE clockwise.
- To decrease treble, turn TREBLE counterclockwise.

## 6 Balancing the left and right speakers

- To turn down the volume of the right speaker, turn BALANCE counterclockwise.
- To turn down the volume of the left speaker, turn BALANCE clockwise.

## 7 Selecting monaural or stereo mode

- For stereo mode, set MODE to  $\square$ . Normally set it to this position.
- For monaural mode, set MODE to  $\triangle$ . This position is used for sound checking.

## 8 Loudness control

Press "loudness" to receive a vivid sound at low volume. This compensates bass and treble at low volume.

## 9 Selecting the recording source

Use the REC SELECTOR to select a program source to be recorded.

- Set the REC SELECTOR to the position of the program source to be recorded.
- When performing CD synchronized recording, set the REC SELECTOR to "CD/ex digital" and press "synchro".

### NOTES:

If "ex digital" has been pressed, CD synchronized recording cannot be performed. (No synchro indication is turned on.)

## 10 Selecting a program source

Select a desired program with the input select buttons and "ex digital" button.

## 11 Direct function selection

- Each program play can be started automatically by pressing each input select button.
- The input source is automatically selected by pressing the rotary tuning button or FM/AM random station memory button of the tuner, or the play button or 10-key of the CD player, or the play button of the cassette deck. Each program starts play automatically.

## 12 Digital straight play

Press "digital straight" to give priority to the digital input ("digital straight" is indicated). Then, only CD of the input select button and "ex digital" are operated.

This function allows digital signal input only and provides excellent sound quality.

### NOTES:

- When the digital straight function is activated, the stereo/monaural mode and balance cannot be controlled.
- When the digital straight button is pressed, direct function selection [11] cannot be used.

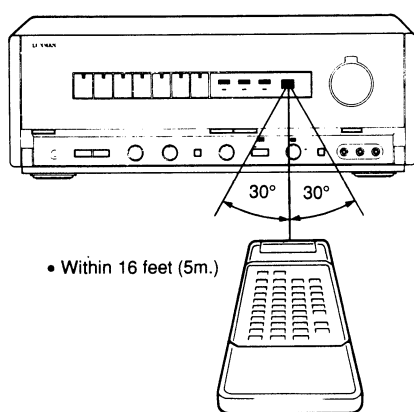
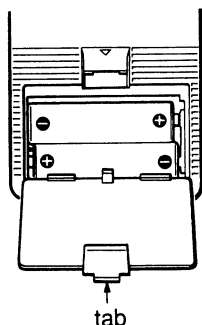
## 13 Using the input terminals on the front panel

Connect a video disc player or compact disc player to the LD/CDV input terminals on the front panel. Press the LD/CDV input selector to the "front" position ( $\triangle$ ). Then press LD/CDV of the input select buttons.

### NOTES:

When the input terminals on the front panel are not to be used, press the LD/CDV input selector to the "rear" position ( $\square$ ).

## Preparations of Remote Control Unit



1. Open the battery compartment cover on the rear of the remote control unit. The cover should open easily if you press on the tab with your thumbnail and lift up.
2. Place two "AA" size dry batteries in the battery compartment in accordance with the diagram in the compartment, then replace the cover.

Incorrect use of batteries may lead to leakage or rupture. Always be sure to follow these guidelines:

- A. Always insert batteries into the battery compartment correctly matching the positive (+) and negative (-) polarities as shown in the diagram inside the compartment.
- B. Never mix new and used batteries together.
- C. Both rechargeable and non-rechargeable batteries are available. Be sure to use your batteries in accordance with the instructions provided on the cells.

For reliable operation, use the hand-held remote within the above basic dimensional area.

# Disassembly Instructions

## 1. Removal of Front Panel

- (1) After removal of the Top Cover, remove four screws marked "●" as shown in Figure 1 and 2.
- (2) Remove two Hooks (A) as shown in Figure 1.

### 1. フロント・パネルの外し方

- (1) 上蓋を外した後、4本のネジ(●印)を外します。(1図、2図参照)
- (2) 2箇所のツメ(A)を外しますと、フロント・パネルが外れます。(1図参照)

## 2. Removal of Main P.C.Board

- (1) Remove four screws marked "\*" as shown in Figure 1.
- (2) Disconnect all connectors from the Power Amp P.C.Board.
- (3) Remove fifteen screws marked "▲" as shown in Figure 3 and 4.
- (4) Remove two P.C.Board supports from Main P.C.Board as shown in Figure 3, by pushing the point "A" as shown in Figure 3.
- (5) Disconnect all connectors from the Main P.C.Board and removing Main P.C.Board with Heat Sink.

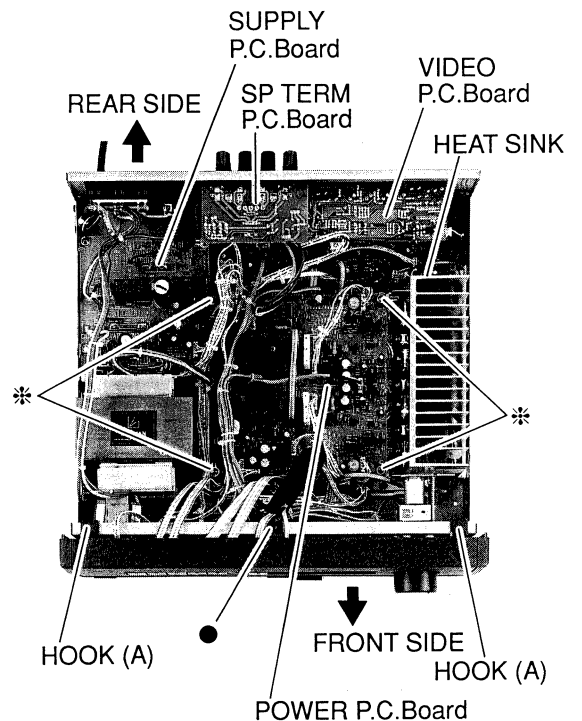


Figure 1

< 1 図 >

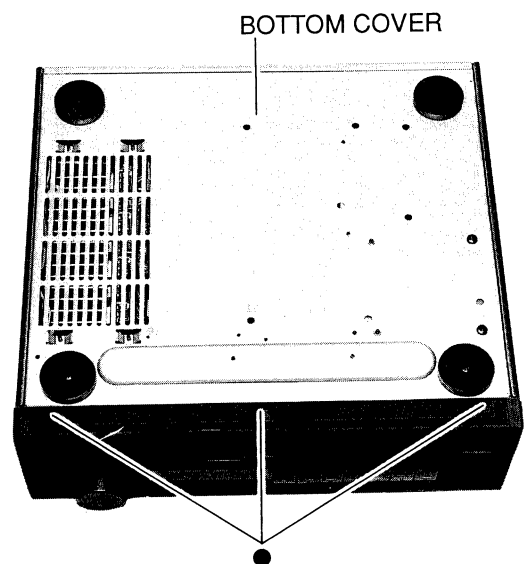


Figure 2

< 2 図 >



## 2. メイン基板の外し方

- (1) 4本のネジ (※印) を外します。(1図参照)
- (2) パワーアンプ基板から出ている全てのコネクタを外し、パワーアンプ基板を外します。
- (3) 14本のネジ (▲印) を外します。(3図、4図参照)
- (4) 3図のようにA部を押してメイン基板から2本の基板サポートを外します。(3図参照)
- (5) メイン基板から出ている全てのコネクタを外しますと、メイン基板はヒートシンクと一緒に外れます。

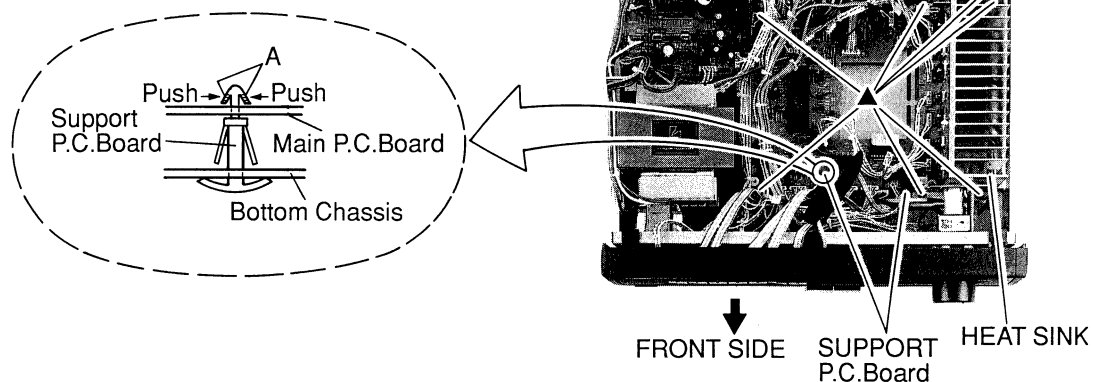


Figure 3  
< 3 図 >

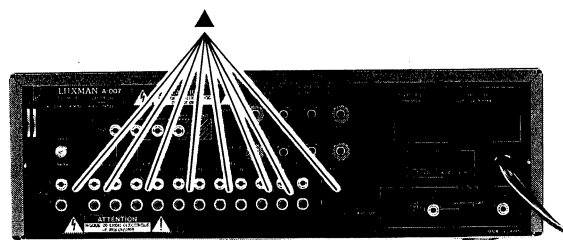


Figure 4  
< 4 図 >

# Adjustment Procedures

## 1. Connections

### 1. 接続図

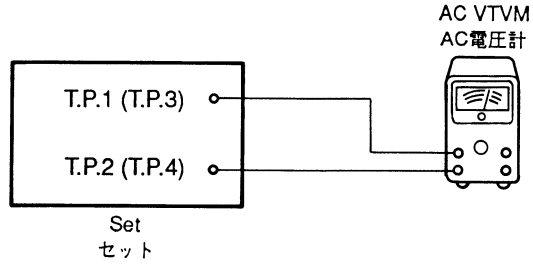


Figure 5

< 5 図 >

## 2. Controls Setting

Power Switch .....ON  
Others .....OFF

### 2. スイッチ類のセット位置

電源スイッチ ..... ON  
その他 ..... OFF

## 3. Adjustment Procedures

### ● Idling Adjustment

- (1) VR701 (VR702) set at minimum position.
- (2) Adjust VR701 (VR702) so that voltage between T.P.1 (T.P.3) and T.P.2 (T.P.4) reaches  $10 \pm 2\text{mV}$ .

**NOTE:** Proceed the adjustment shown above about one minute after power is turned on.

### 3. 調整方法

#### ● アイドリング調整

- (1) VR701 (VR702) を最小にセットします。
- (2) T.P.1 (T.P.3)、T.P.2 (T.P.4) 間の電圧が  $10 \pm 2\text{mV}$  になる様に VR701 (VR702) で調整します。

注意：電源ON後、約1分ぐらいたってから上記の調整を行って下さい。

# Adjustment Locations

Power Amp P.C.Board

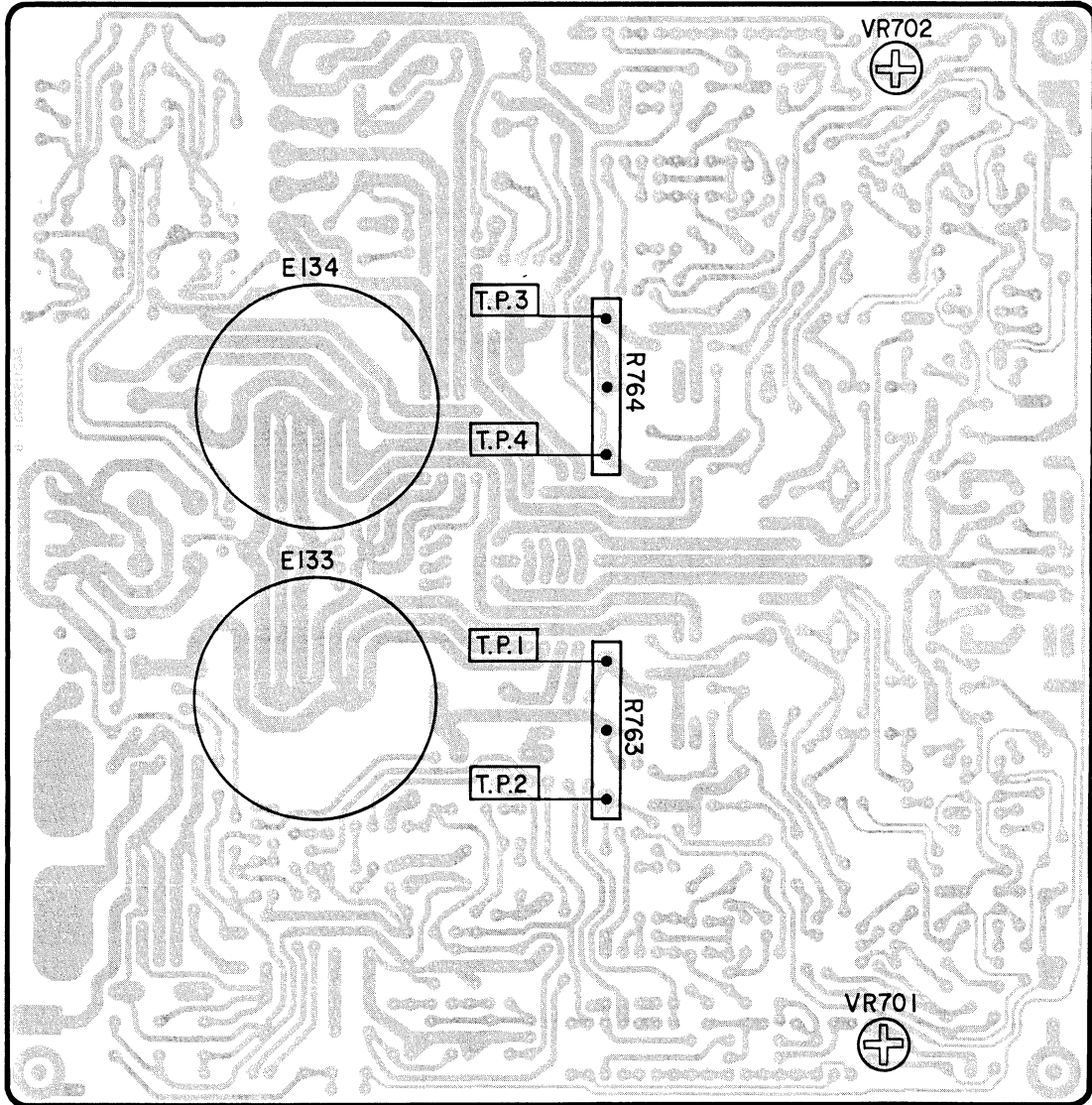
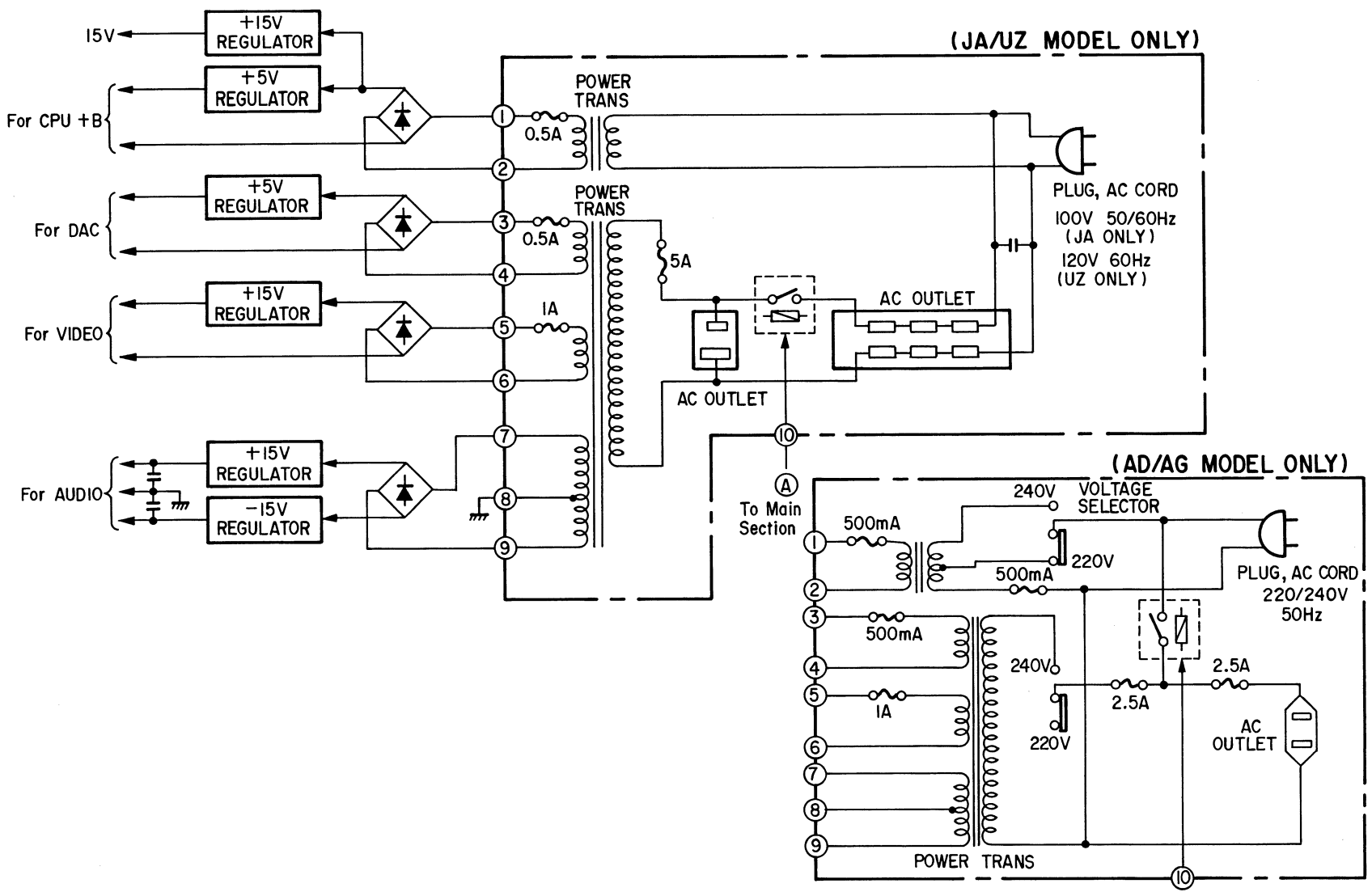


Figure 6  
< 6 図 >

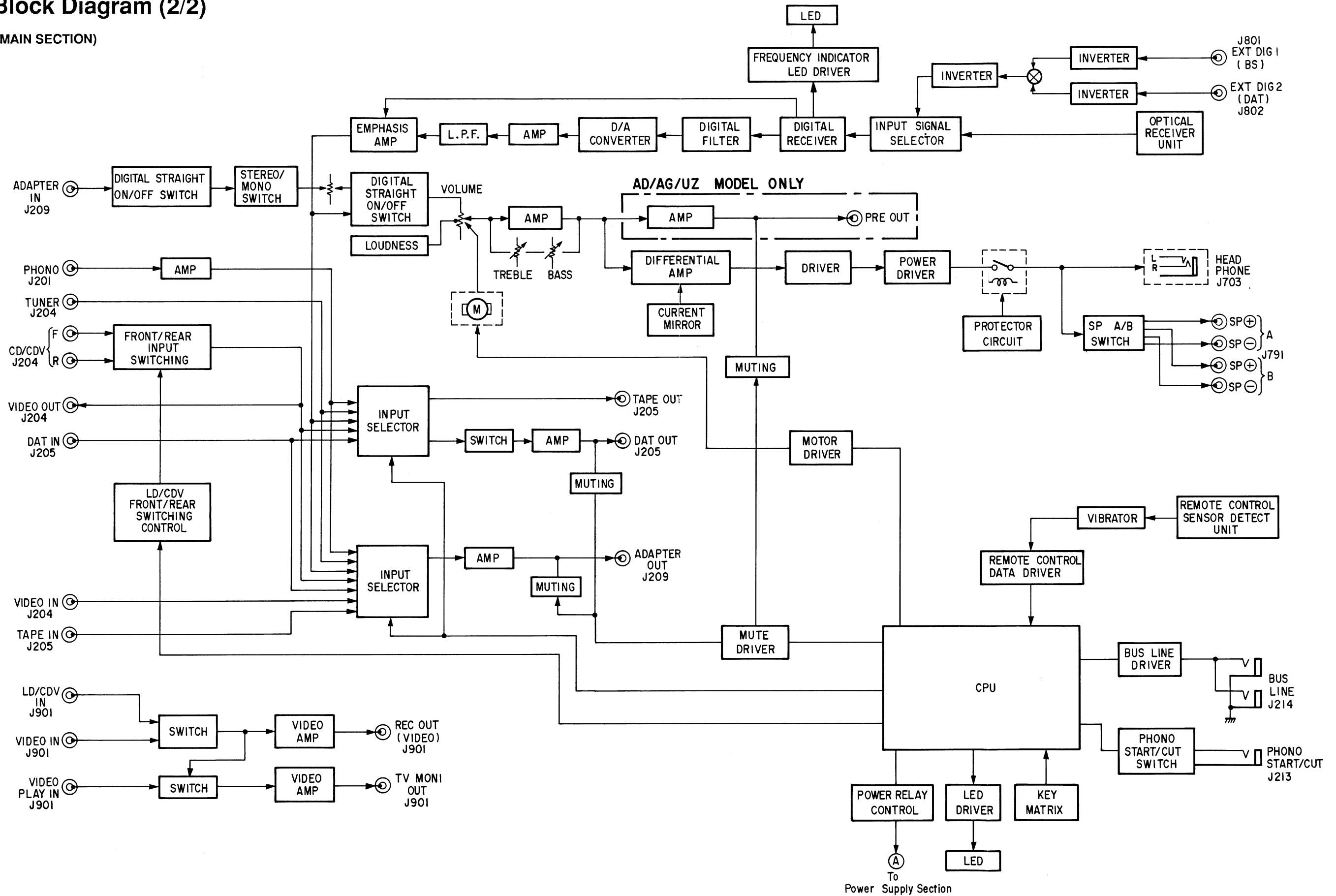
# Block Diagram (1/2)

(POWER SUPPLY SECTION)



# Block Diagram (2/2)

(MAIN SECTION)



# Parts Layout on P.C. Boards and Wiring Diagram (1/3)

(DIGITAL SECTION)

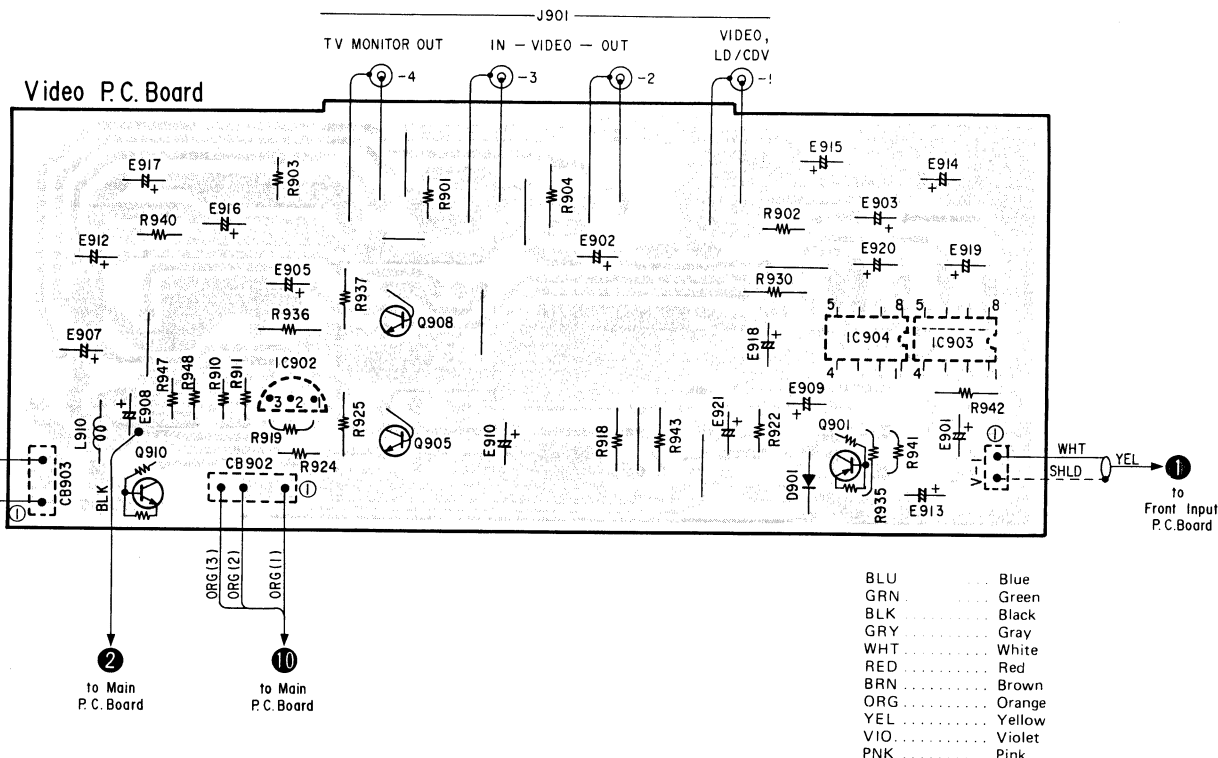
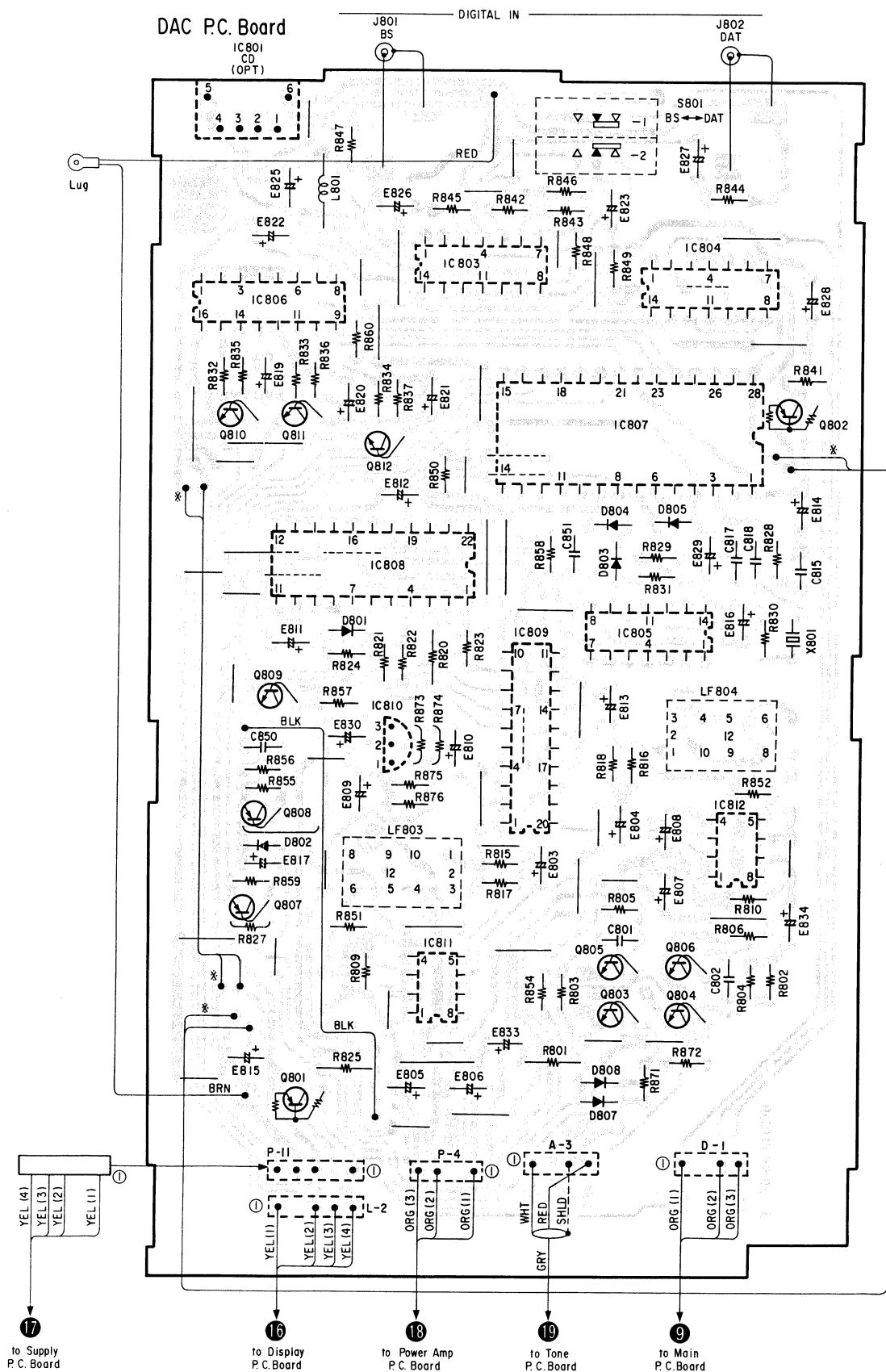
1

2

3

4

5



- BLU ..... Blue
- GRN ..... Green
- BLK ..... Black
- GRY ..... Gray
- WHT ..... White
- RED ..... Red
- BRN ..... Brown
- ORG ..... Orange
- YEL ..... Yellow
- VIO ..... Violet
- PNK ..... Pink

NOTE:  
 ● : For Japanese Model Only (JA)  
 ■ : West Germany Model Only (AD)  
 ▲ : For American Model Only (UZ)  
 ★ : For England Model Only (AG)  
 Others Common

# Schematic Diagram (1/3)

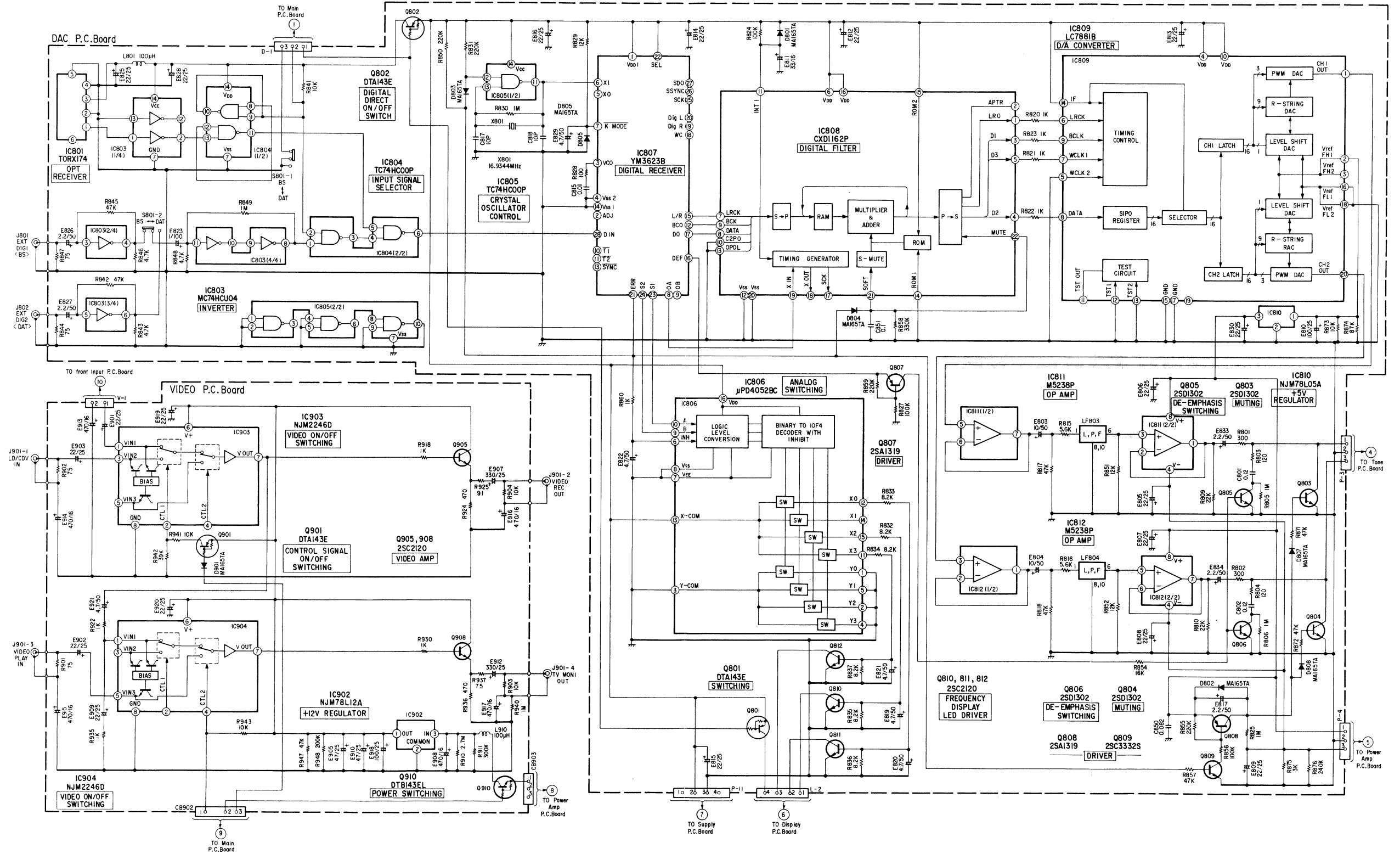
## (DIGITAL SECTION)

**NOTE:**  
 1. All resistance values are in ohms. K= 1,000 M= 1,000,000  
 2. All capacitance values are in microfarads. P= 1/1,000,000

● : For Japanese Model Only (JA)  
 ■ : West Germany Model Only (AD)  
 ▲ : For American Model Only (UZ)  
 ★ : For England Model Only (AG)  
 Others Common

**CAUTION:**  
 The  $\Delta$  mark, the symbol No. in a box in the schematic diagram and the shaded are in the parts list designate components which have only with types identical to those in the original circuit or specified in the parts list.

IC	IC801	IC803	IC903	IC904	IC804	IC805	IC902	IC805	IC807	IC806	IC808	IC811	IC812	IC809	IC810			
Transistor (Q)			Q901				Q802	Q905						Q808	Q805	Q803		
							Q908	Q910			Q801	Q810	Q811	Q812	Q807	Q809	Q806	Q804



## IC's and Transistors Voltage Values (DIGITAL SECTION)

IC Pin No.	IC801	IC803	IC804	IC805	IC806
1	0V	0V	0V	0V	5V
2	0V	4.8V	0V	0V	0V
3	4.7V	2.1V	4.8V	5V	0V
4	0V	2.1V	4.8V	0V	0V
5	0V	2.1V	0V	0V	0V
6	—	2.1V	4.8V	5V	5V
7	—	0V	0V	0V	0V
8	—	0V	4.8V	5V	0V
9	—	4.8V	0V	0V	0V
10	—	4.8V	0V	0V	0V
11	—	0V	0V	2.8V	0V
12	—	4.8V	4.8V	4.6V	0V
13	—	0V	4.8V	2.2V	2.5V
14	—	4.8V	4.8V	5V	0.2V
15	—	—	—	—	0V
16	—	—	—	—	2.4V

IC Pin No.	IC810	IC811	IC812
1	3.9V	0V	3.2V
2	5.4V	0V	3.2V
3	0V	0V	3.1V
4	—	-14.5V	-14.5V
5	—	3.1V	0V
6	—	3.1V	0V
7	—	3.2V	0V
8	—	5.4V	5.4V

IC Pin No.	IC807	IC808	IC809
1	5.1V	1.2V	3.1V
2	0V	0.5V	3.9V
3	5V	1.2V	3.9V
4	0V	0V	2.4V
5	1.5V	1.2V	0V
6	2.9V	2.4V	1.2V
7	4.9V	0.2V	1.2V
8	1.1V	0V	0V
9	1.9V	1V	1.3V
10	3.9V	0V	2.5V
11	4.1V	2.4V	0.2V
12	2.3V	0V	0V
13	4.9V	0V	0V
14	0V	0V	2.5V
15	2.5V	2.4V	0V
16	0V	2.4V	0V
17	0V	1.5V	0V
18	2.5V	1.4V	0V
19	1.3V	0.5V	0V
20	1.3V	0V	3.1V
21	5V	2.1V	—
22	5V	2.1V	—
23	0V	—	—
24	0V	—	—
25	0V	—	—
26	5V	—	—
27	0V	—	—
28	4.8V	—	—

Pin No. Transistor	E	C	B
Q801	2.5V	2.5V	0V
Q802	5.1V	-1.1V	0V
Q803	0V	0V	0.6V
Q804	0V	0V	0.6V
Q805	0V	0.7V	0.4V
Q806	0V	0.5V	0.3V
Q807	0V	-1.3V	0V
Q808	5.4V	5.4V	4.9V
Q809	0V	0V	0.5V
Q810	0V	1.1V	0V
Q811	0V	1.7V	0V
Q812	0V	2.9V	0V
Q901	14.4V	14.4V	0.7V
Q902	14.4V	14.4V	0V
Q903	3.1V	14.4V	3.7V
Q904	2.7V	7.8V	3.3V
Q905	7.1V	14.4V	7.7V
Q906	3.1V	14.4V	3.7V
Q907	2.8V	6.9V	3.3V
Q908	6.3V	14.4V	6.9V
Q910	15.1V	14.9V	0.7V

## (POWER AMP/POWER SUPPLY SECTION)

Pin No. Transistor	E	C	B	Pin No. Transistor	E	C	B
Q101	12.7V	12.6V	12V	Q724	0V	1V	0V
Q131	14.8V	23.1V	15.4V	Q725	0V	-5.1V	0V
Q132	-14.7V	-23.3V	-15.2V	Q726	0V	-1V	0V
Q701	-0.1V -0.1V	37.9V 37.8V	0V 0.1V	Q727	0V	33.3V	0V
Q702	0.3V -0.7V	38.1V 38V	0.3V -0.1V	Q728	0V	33.6V	0V
Q705	38.8V	-20.3V	38V	Q729	35.2V	0V	33.6V
Q706	38.8V	-20V	38.2V	Q730	34.4V	0V	34.1V
Q707	38.7V	1.1V	38V	Q731	5.3V	0V	5.3V
Q708	38.7V	1.1V	38.1V	Q732	0V	5.3V	0V
Q709	-41.4V	-40.8V	-40.8V	Q733	0V	5.3V	0V
Q710	-41V	-40.7V	-40.6V	Q734	-0.1V	5.3V	-0.1V
Q711	-41.4V	-1.2V	-40.8V	Q735	3.5V	3.5V	4.1V
Q712	-41.2V	-1.2V	-40.6V	Q736	2.8V	2.8V	3.5V
Q713	-1.2V	1.2V	-0.6V	Q737	15.1V	15.1V	14.5V
Q714	-1.1V	1.2V	-0.6V	Q738	0V	5.3V	0V
Q715	0.5V	41.3V	1.1V	Q739	0V	0V	-0.3V
Q716	0.6V	41.5V	1.1V	Q740	0V	0V	-0.1V
Q717	-0.6V	-41.6V	-1.2V	Q741	0V	0V	-0.1V
Q718	-0.6V	-41.8V	-1.2V	Q742	0V	0V	-0.4V
Q719	0V	42V	0.6V	Q743	0V	5.3V	0.5V
Q720	0V	42V	0.6V	Q791	5V	5V	0V
Q721	-14.3V	-41.6V	-0.6V	Q792	0V	5V	0V
Q722	-1.1V	1.2V	-0.6V	Q793	5V	2.4V	5V
Q723	0V	1V	0V	Q794	2.4V	0V	0.1V

Pin No. FET	G	D	S
Q703	-40V	-41V	-39.9V
Q704	-41V	-42V	-39.6V

IC Pin No.	IC101	IC102	IC111	IC121	IC601
1	15.2V	5V	15.1V	15.2V	0V
2	0V	0V	0V	0V	0V
3	22.5V	15.4V	10.8V	22.9V	0V
4	—	—	—	—	-14.7V
5	—	—	—	—	0V
6	—	—	—	—	0V
7	—	—	—	—	0V
8	—	—	—	—	14.7V

- Measuring Condition
- 1. Power Supply Voltage : AC100V, 50/60Hz (JA Model Only)  
: AC220/240V, 50Hz (AD/AG Model Only)  
: AC120V, 60Hz (UZ Model Only)
- 2. Measuring Meter : Digital Multi Voltmeter.
- 3. Measuring Point Reference : Between Ground.
- 4. Measuring Conditions : No Signal Input  
Power Switch ON



# Parts Layout on P.C. Boards and Wiring Diagram (2/3)

(POWER AMP/POWER SUPPLY SECTION)

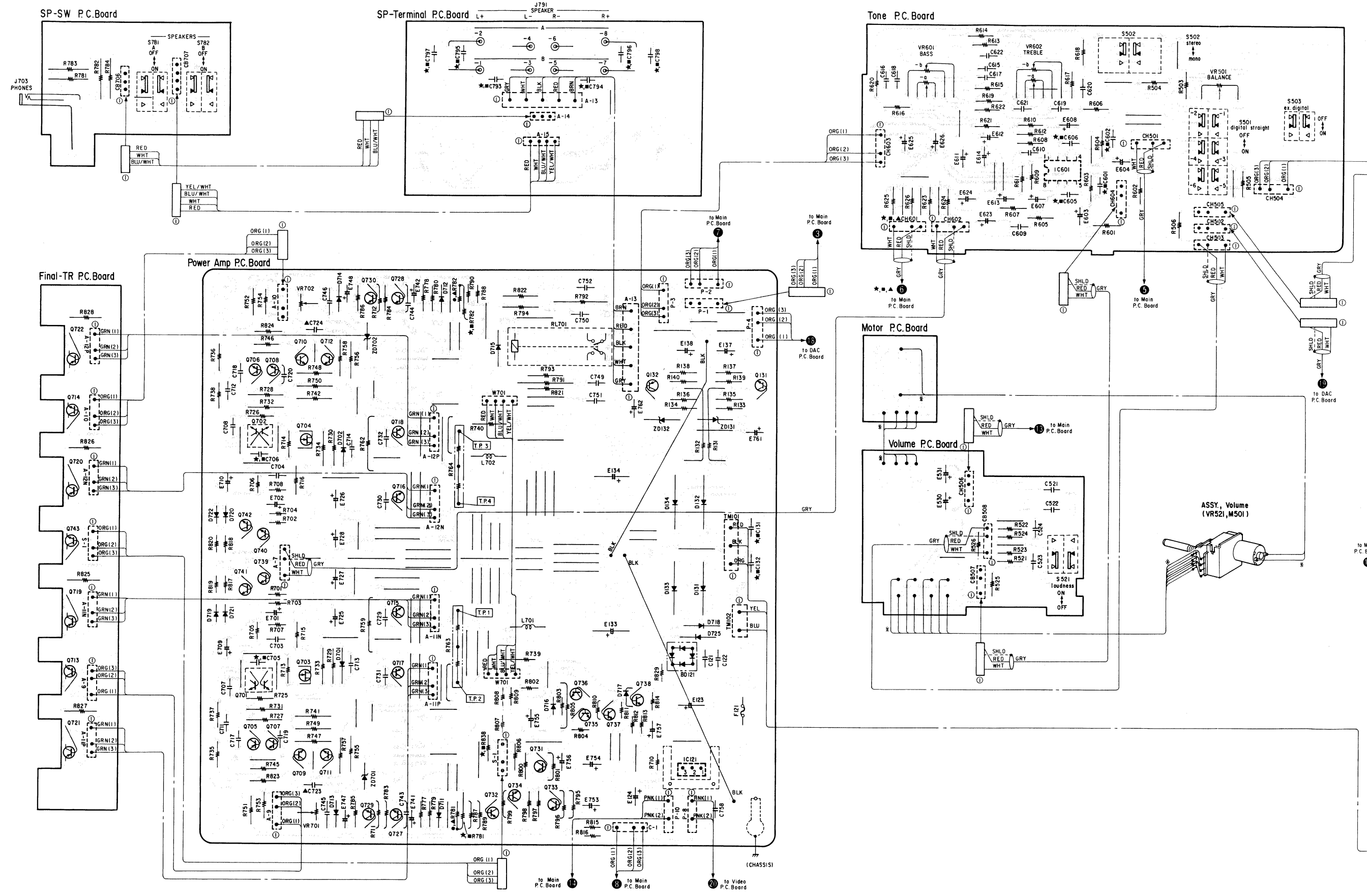
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A

B-21-

C

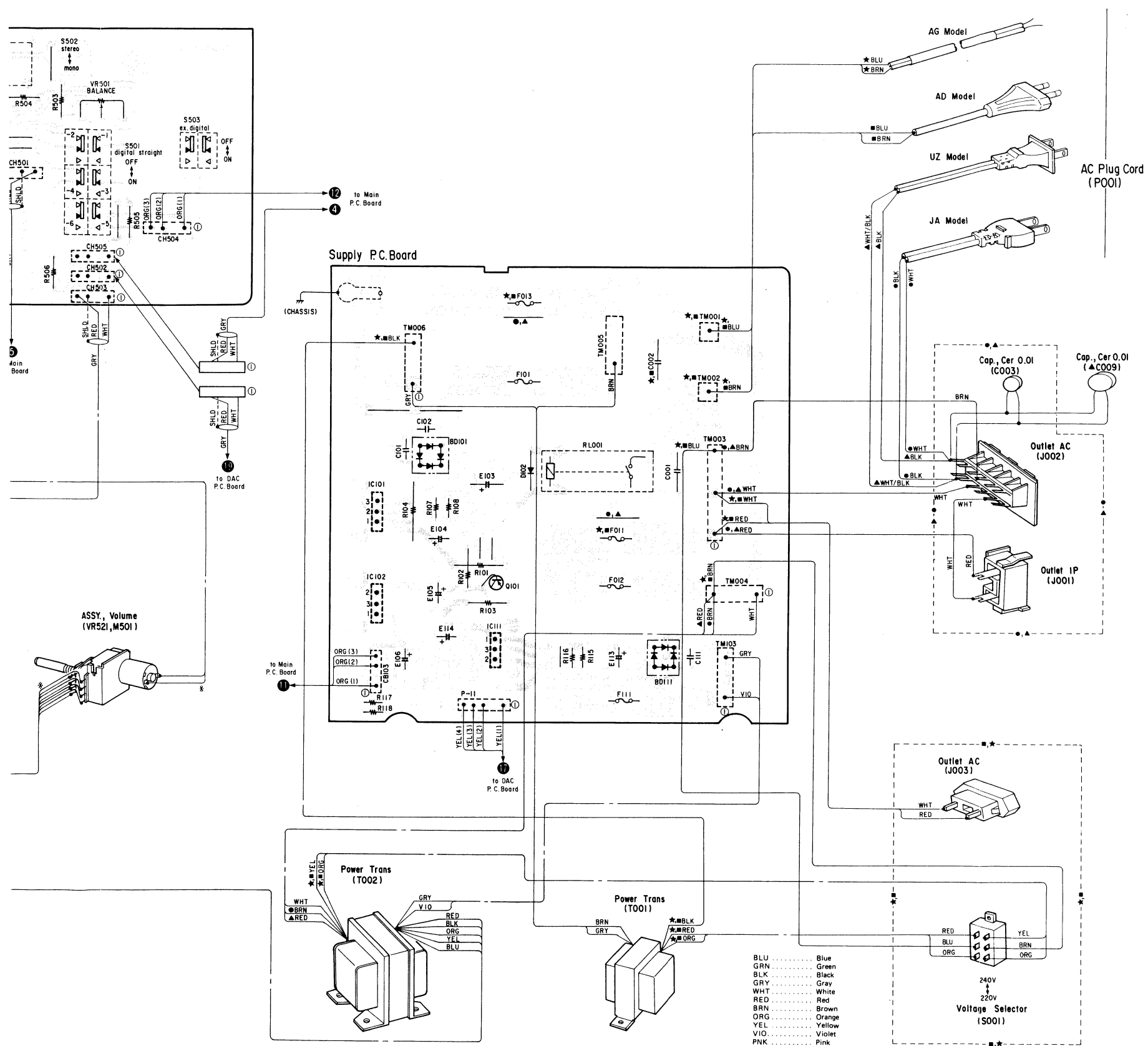
D

E

-22- F

G

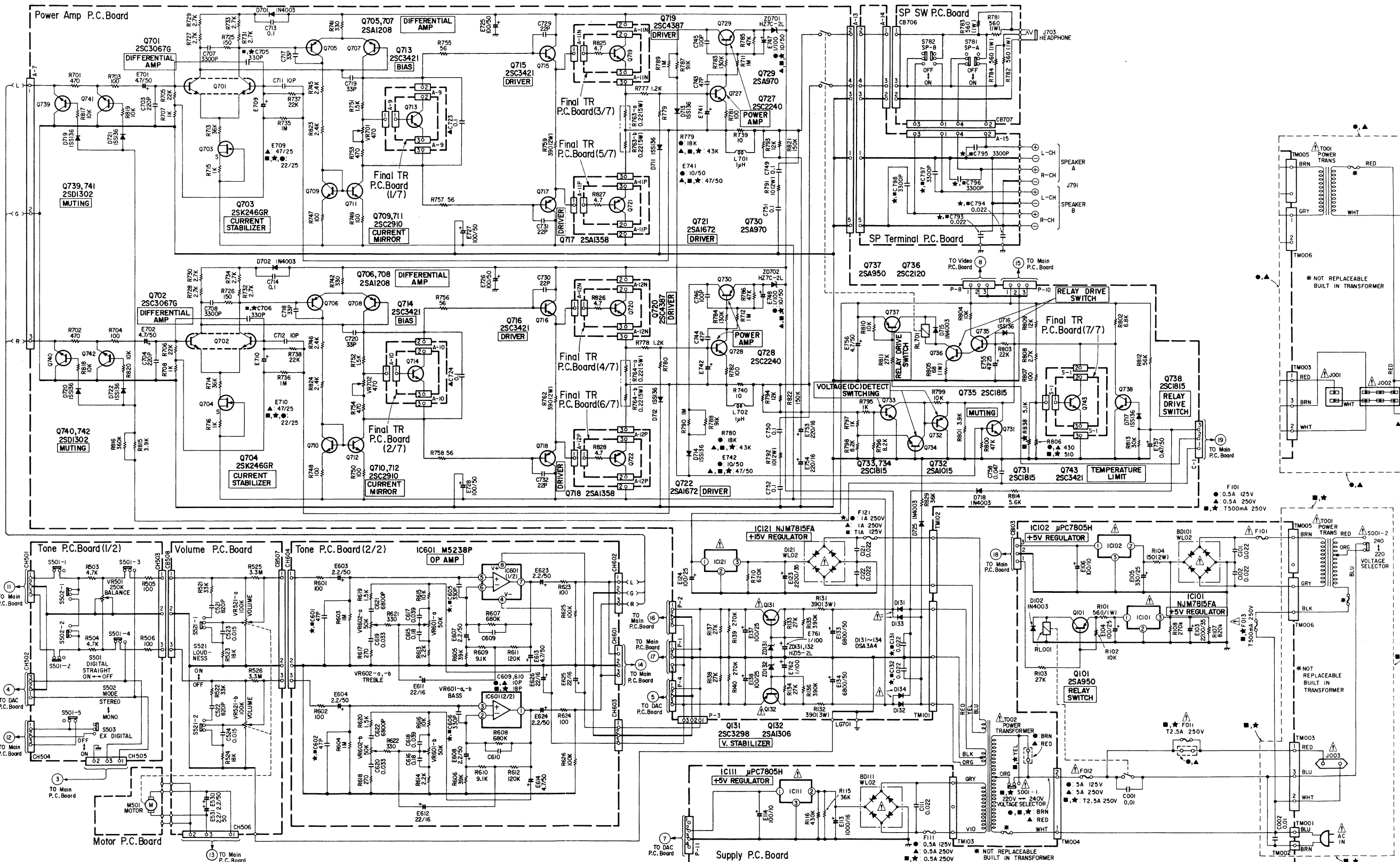
H



# Schematic Diagram (2/3) (Refer to page 20 for IC's and Transistors voltage values)

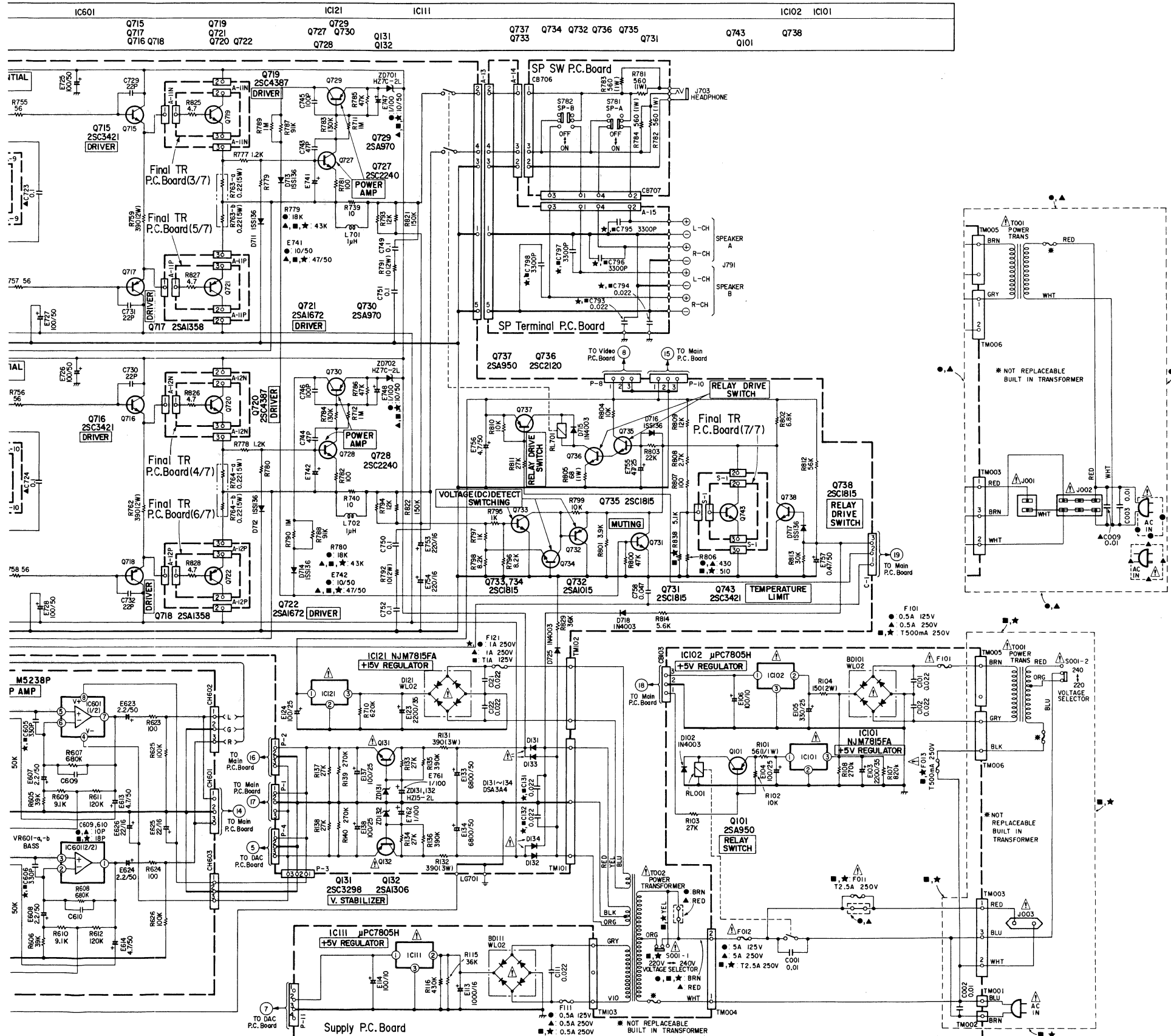
## (POWER AMP/POWER SUPPLY SECTION)

IC	Q739 Q740 Q741 Q742		Q701 Q703 Q702 Q704				Q705 Q706 Q709 Q710 Q711 Q712				Q713 Q714		IC601 Q715 Q717 Q718				Q719 Q721 Q720 Q722				IC121 Q729 Q727 Q730		IC111 Q131 Q132		Q737 Q733 Q734 Q732 Q736 Q735 Q731					IC102 IC101 Q743 Q101 Q738								
Transistor (Q)	Q739	Q740	Q741	Q742	Q701	Q703	Q702	Q704	Q705	Q706	Q709	Q710	Q711	Q712	Q713	Q714	Q715	Q717	Q718	Q719	Q721	Q720	Q722	Q729	Q727	Q730	Q131	Q132	Q737	Q733	Q734	Q732	Q736	Q735	Q731	Q743	Q101	Q738



1  
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A | B | C | D | E | F | G | H

transistors voltage values)



**NOTE:**  
 1. All resistance values are in ohms. K= 1,000 M= 1,000,000  
 2. All capacitance values are in microfarads. P= 1/1,000,000

● : For Japanese Model Only (JA)  
 ■ : West Germany Model Only (AD)  
 ▲ : For American Model Only (UZ)  
 ★ : For England Model Only (AG)  
 Others Common

**CAUTION:**  
 The  $\Delta$  mark, the symbol No. in a box in the schematic diagram and the shaded are in the parts list designare components which have only with types identical to those in the original circuit or specified in the parts list.

# Parts Layout on P.C. Boards and Wiring Diagram (3/3)

(MAIN SECTION)

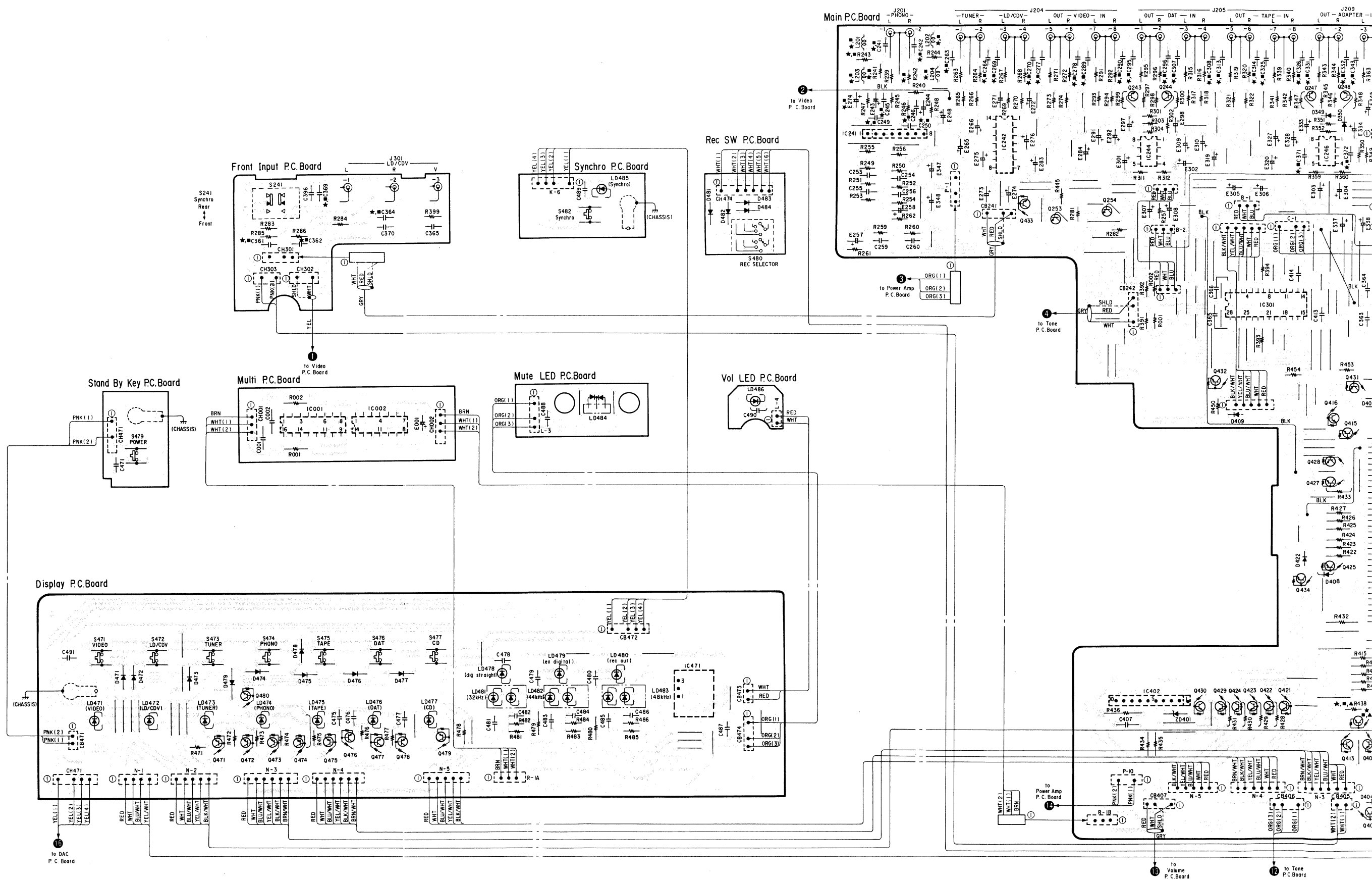
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A

- 28 - B

C

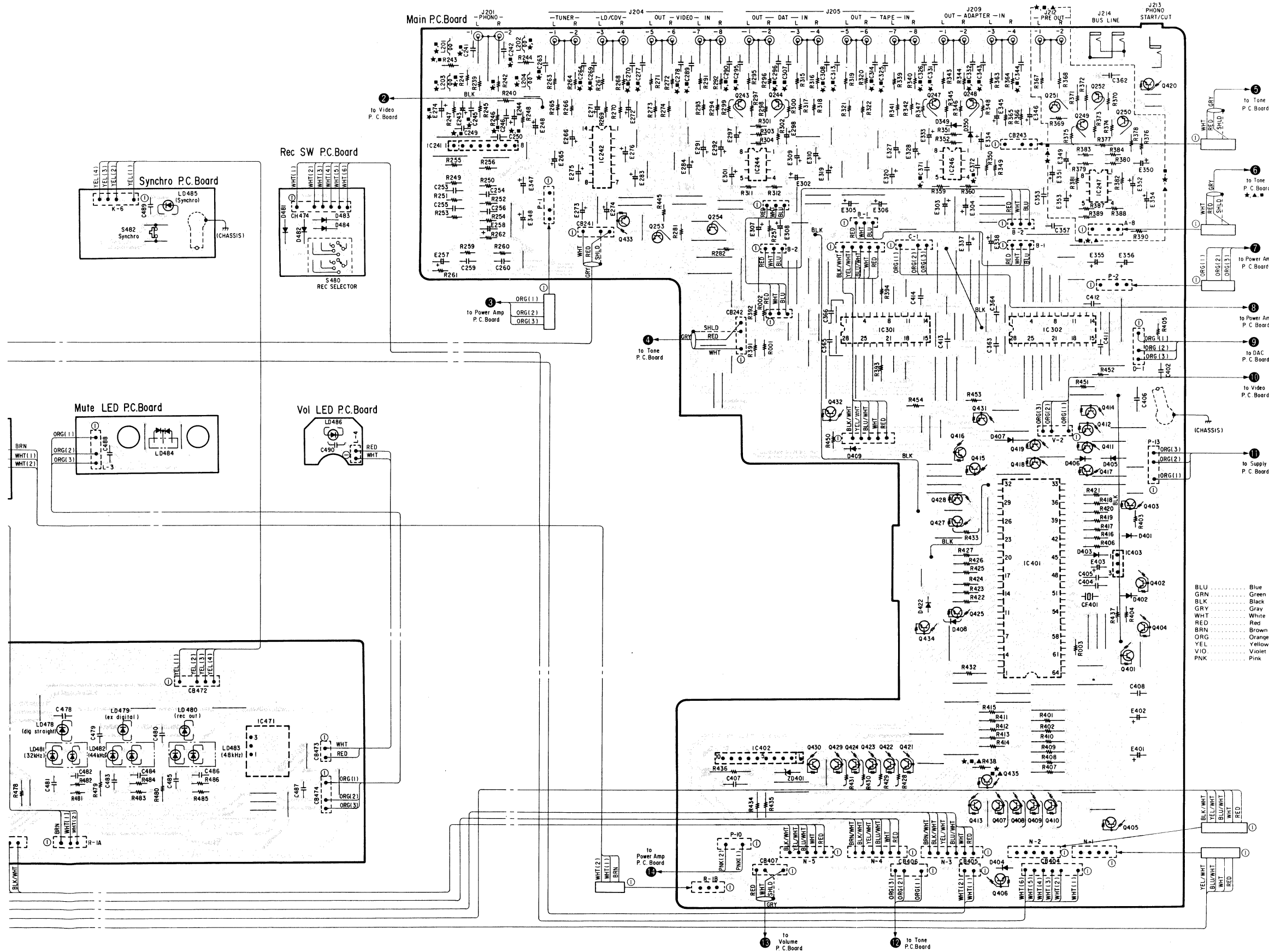
D

E

- 29 - F

G

H



NOTE:  
 ● : For Japaneas Model Only (JA)  
 ● : West Germany Model Only (AD)  
 ▲ : For American Model Only (UZ)  
 ★ : For England Model Only (AG)  
 Others Common

D

E

F

G

H

I

J

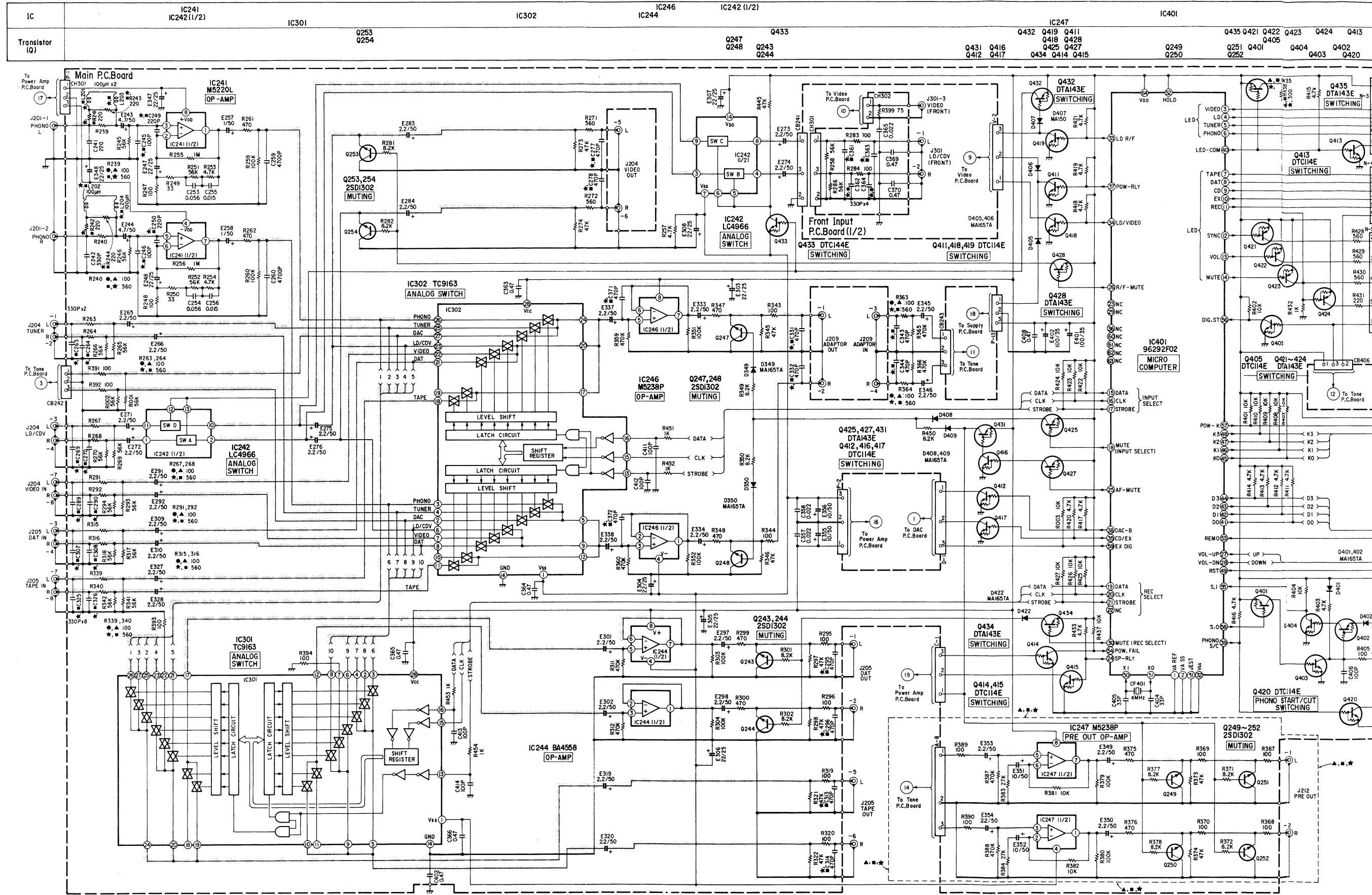
K



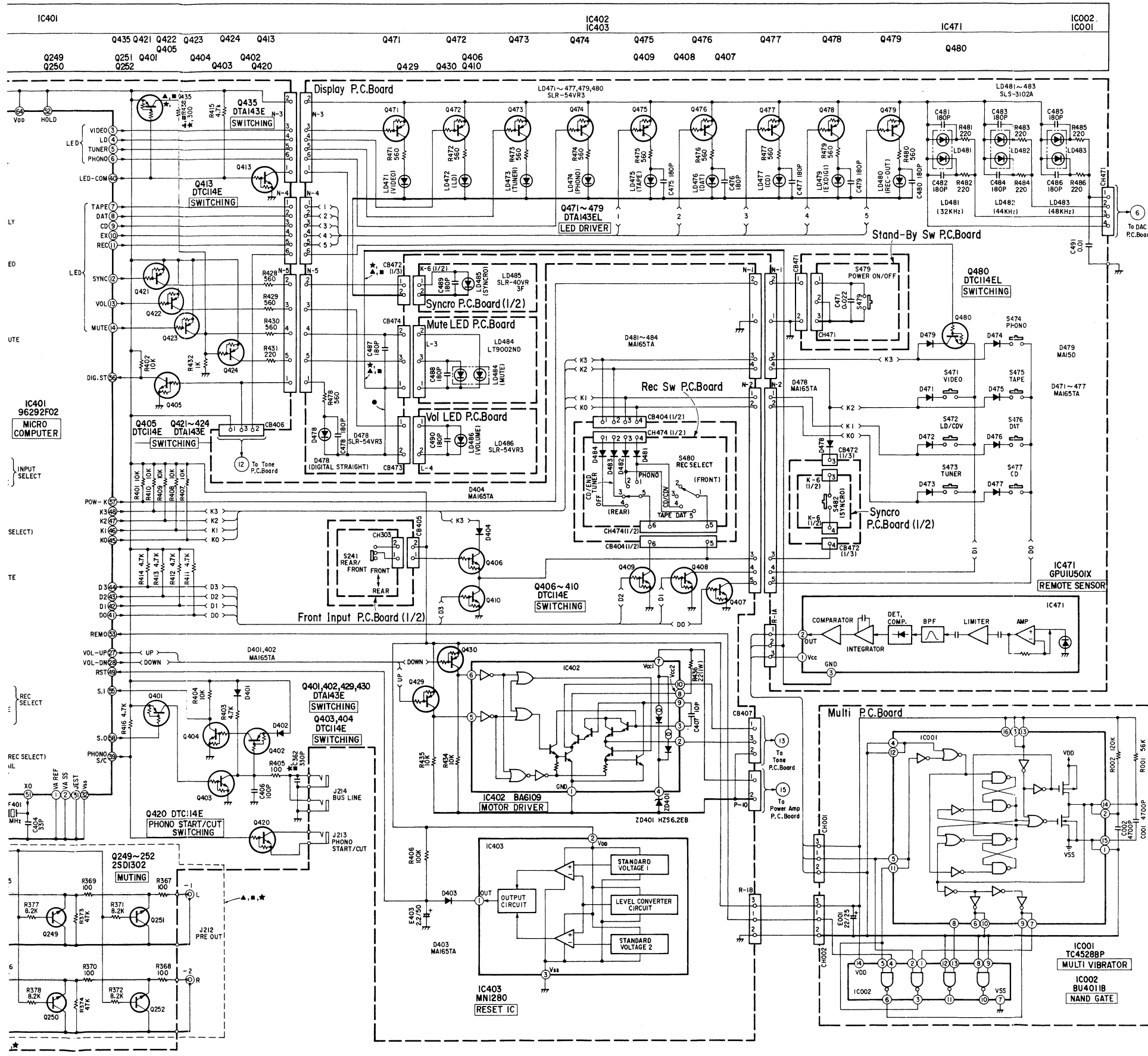
# Schematic Diagram (3/3) (Refer to Reverse side for IC's and Transistors voltage values)

## (MAIN SECTION)

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


A | B-31- | C | D | E | F-32- | G | H



**NOTE:**  
 1. All resistance values are in ohms. K= 1,000 M= 1,000,000  
 2. All capacitance values are in microfarads. P= 1/1,000,000

● : For Japanese Model Only (JA)  
 ■ : West Germany Model Only (AD)  
 ▲ : For American Model Only (UZ)  
 ★ : For England Model Only (AG)  
 Others Common

**CAUTION:**  
 The  mark, the symbol No. in a box in the schematic diagram and the shaded are in the parts list designate components which have only with types identical to those in the original circuit or specified in the parts list.



## IC's and Transistors Voltage Values (MAIN SECTION)

IC Pin No.	IC1	IC2	IC3
1	11.8V	7.2V	7.2V
2	0V	8.7V	0V
3	14.5V	7.2V	7.2V
4	—	0.1V	0V
5	—	7.2V	7.2V
6	—	11.9V	11.9V
7	—	6.4V	6.5V
8	—	0V	0V

IC Pin No.	IC246	IC402	IC403	IC471
1	0V	0V	0V	0V
2	0V	0.2V	5V	4.8V
3	0V	0V	5V	5V
4	-14.7V	0.2V	—	—
5	1.2V	0V	—	—
6	0V	0V	—	—
7	0V	15.2V	—	—
8	14.8V	15.2V	—	—
9	—	0.1V	—	—
10	—	0.5V	—	—

IC Pin No.	IC301	IC302
1	-14.6V	-14.7V
2	0V	0V
3	-0.4V	-0.4V
4	2.3V	-2.3V
5	0V	-2.9V
6	-0.6V	-2.6V
7	0V	-1.9V
8	2.6V	-2.2V
9	0V	-3.7V
10	0V	-4.3V
11	—	—
12	0V	-3.3V
13	0V	0V
14	0V	0V
15	0V	0V
16	0V	0V
17	0V	0.6V
18	—	0.1V
19	0V	-2.2V
20	0V	0V
21	3.6V	-3V
22	0V	-2.8V
23	4.1V	-4V
24	0V	-1.4V
25	3.8V	-4.3V
26	0.8V	-0.7V
27	0V	0V
28	14.8V	14.8V

IC Pin No.	IC241	IC242	IC243	IC244	IC245
1	-0.8V	2.7V	14.3V	0V	0V
2	0.1V	2.3V	14.3V	0V	0V
3	0.1V	2.2V	13.3V	0V	0V
4	-14.7V	5.8V	-14.7V	-14.7V	-14.7V
5	0.1V	-14.7V	11.3V	0V	0V
6	0V	-14.7V	14.2V	0V	0V
7	-0.8V	-14.7V	14.2V	0V	0V
8	14.8V	-3.5V	14.8V	14.8V	14.8V
9	—	-2.5V	—	—	—
10	—	-2.2V	—	—	—
11	—	-5V	—	—	—
12	—	14.8V	—	—	—
13	—	14.8V	—	—	—
14	—	14.8V	—	—	—

IC401

Pin No.		Pin No.	
1	0V	33	3.6V
2	0V	34	3.6V
3	5V	35	3.7V
4	5V	36	—
5	5V	37	4.3V
6	5V	38	4.3V
7	5V	39	0.1V
8	5V	40	4.2V
9	0.1V	41	0.1V
10	5V	42	0.1V
11	5V	43	0.1V
12	5V	44	0.1V
13	0.1V	45	5V
14	0.1V	46	5V
15	5V	47	5V
16	5V	48	4.9V
17	0.1V	49	4.2V
18	0.1V	50	0V
19	5V	51	2.4V
20	0.1V	52	5V
21	0.1V	53	4.8V
22	5V	54	5V
23	—	55	0V
24	4.4V	56	5V
25	5V	57	5V
26	5V	58	0.1V
27	4.8V	59	5V
28	4.8V	60	—
29	—	61	—
30	1.5V	62	—
31	0V	63	—
32	0V	64	5V

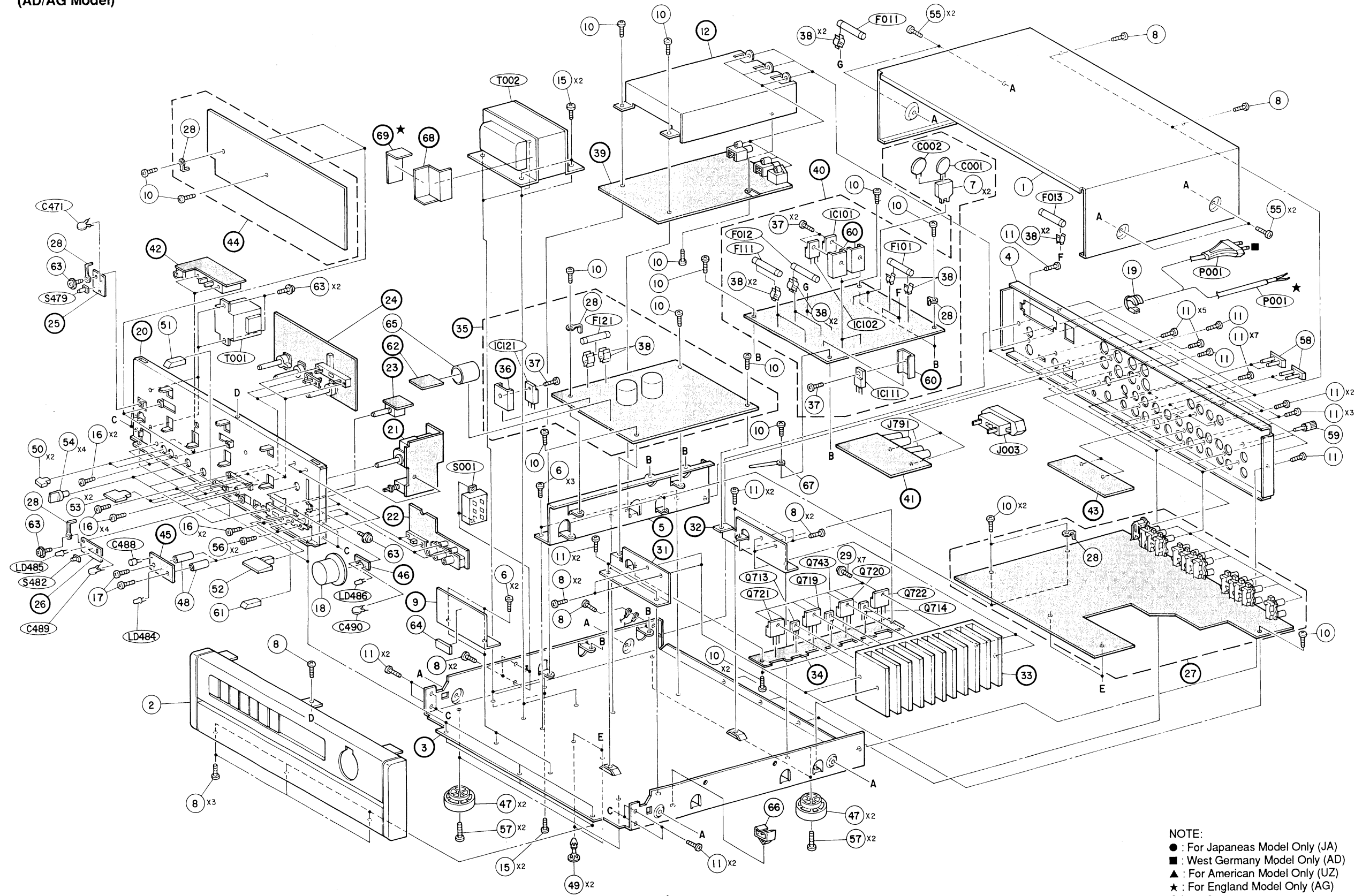
Pin No. Transistor	E	C	B	Pin No. Transistor	E	C	B
Q241	13.8V	14.3V	0.7V	Q418	0V	0V	3.6V
Q242	14.2V	14.3V	0.6V	Q419	0V	0.1V	3.6V
Q243	0.1V	0V	-0.1V	Q420	0.1V	0.1V	0.1V
Q244	0V	0V	-0.1V	Q421	5V	0.1V	5V
Q245	0V	0V	-0.1V	Q422	5V	4.9V	0.1V
Q246	0V	0V	-0.1V	Q423	5V	0.8V	5V
Q247	0V	0V	-0.1V	Q424	5V	4.9V	0.8V
Q248	0V	0V	-0.1V	Q425	5V	0V	5V
Q253	7.4V	14.3V	0.5V	Q426	5V	0.1V	5V
Q254	-1.4V	14.3V	0.6V	Q427	5V	0V	5V
Q401	5V	0V	5V	Q428	5V	0.1V	5V
Q402	15.8V	0V	5.6V	Q429	5V	0V	4.8V
Q403	0V	7.2V	0V	Q430	5V	0V	4.8V
Q404	0V	5V	0V	Q431	14.6V	-2.4V	14.5V
Q405	0V	5V	0V	Q432	14.7V	14.7V	0.7V
Q406	3.3V	8.7V	3.7V	Q433	-14.7V	-14.7V	14.8V
Q407	0V	10.1V	0.1V	Q471	5V	0V	5V
Q408	0V	8.1V	0.1V	Q472	5V	0V	5V
Q409	0V	13.7V	0.1V	Q473	5V	0V	5V
Q410	0V	8.3V	0.1V	Q474	5V	0V	5V
Q411	0V	0V	4.3V	Q475	5V	0V	5V
Q412	0V	0V	4.3V	Q476	5V	0V	5V
Q413	0V	0.1V	4.2V	Q477	5V	5V	0.1V
Q414	0V	5V	-9.5V	Q478	5V	0V	5V
Q415	0V	0V	4.4V	Q479	5V	0V	5V
Q416	0V	14.7V	0V	Q480	0V	5V	0V
Q417	0V	0V	3.8V				

- Measuring Condition
- 1. Power Supply Voltage : AC100V, 50/60Hz (JA Model Only)  
: AC220/240V, 50Hz (AD/AG Model Only)  
: AC120V, 60Hz (UZ Model Only)
- 2. Measuring Meter : Digital Multi Voltmeter.
- 3. Measuring Point Reference : Between Ground.
- 4. Measuring Conditions : No Signal Input  
Power Switch ON

# Exploded View (Cabinet)

(AD/AG Model)

1  
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NOTE:  
 ● : For Japanese Model Only (JA)  
 ■ : West Germany Model Only (AD)  
 ▲ : For American Model Only (UZ)  
 ★ : For England Model Only (AG)  
 Others Common

# Cabinet Assembly Parts List

(AD/AG Model)

Symbol No.	Index	Part No.	Description		
1	2-F	15C11357W01	Cover, Top		
2	4-B	64C11379W02	Assy., Panel Front		
4	2-F	15C11356W07	Cover, Rear		
6	4-C	03S44205G40	Screw, Bind (M3 × 4)		
7	2-F	43T53136F04	Bush, Cap		
8	4-B	03S71031F04	Screw, Bind (M3 × 8)		
10	2-B	03S40018G02	Screw, Tapping (M3 × 8)		
11	4-C	03S82672F20	Screw, Bind (M3 × 8)		
15	5-C	03S44205G69	Screw, Bind (M4 × 6)		
16	3-A	03S40011G41	Screw, Countersink (M3 × 6)		
17	4-A	03S44205G56	Screw, Bind (M3 × 25)		
18	4-C	36B11380W01	Assy., Main Volume Knob		
19	2-G	43B41625J02	Stopper, Cord		
28	2-A	29A11624W01	Lug, P.C. Board		
29	4-E	03C40121T01	Screw, W/Double Washer (M3 × 10)		
37	3-D	03S52360F35	Screw, Bind (M3 × 6)		
38	3-D	09T51410F01	Holder Fuse		
47	5-C	75T11325W01	Assy., Trann Leg		
48	4-B	07T96470F02	Support, P.C.Board		
49	5-D	15T84846F03	LSR-10R		
50	3-A	36A11347W01	Knob, Push		
51	3-B	36A11346W01	Knob, Push		
52	4-A	36A11348W01	Knob, Push		
53	3-A	36A11349W01	Knob, Push		
54	3-A	36A11350W01	Knob, Volume		
55	1-F	03S40036U05	Screw, Bind (M3 × 8)		
56	4-B	03A82468F01	Screw, Tapping (M3 × 10)		
57	5-C	03S44205G82	Screw, Bind (M4 × 10)		
58	3-H	09T95168F01	Plug, Jumper		
59	3-H	29T66964F01	Terminal, GND		
61	4-B	36A11345W01	Knob, Push		
63	2-A	03C42723U01	Screw, Cup (M3 × 6)		
64	4-C	75S92615F11	Cushion, Rubber		
65	3-C	37T43734F01	Sumi, Tube		
66	5-E	42T93247F07	Clump, UAMS-07-0		
67	3-E	29C41045P05	Lug, Wrap		

NOTE: The parts without part numbers are not supplied.

## Cabinet Assembly Parts List

(UZ/JA Model)

Symbol No.	Index	Part No.	Description		
1	2-F	15C11357W01	Cover, Top		
● 2	4-B	64C11379W01	Assy., Panel Front		
▲ 2	4-B	64C11379W02	Assy., Panel Front		
● 4	2-F	15C11356W01	Cover, Rear		
▲ 4	2-F	15C11356W09	Cover, Rear		
6	4-C	03S44205G40	Screw, Bind (M3 × 4)		
● 7	2-F	43T53136F01	Bush, Cap		
▲ 7	2-F	43T53136F04	Bush, Cap		
8	4-B	03S71031F04	Screw, Bind (M3 × 8)		
10	2-A	03S40018G02	Screw, Tapping (M3 × 8)		
11	4-C	03S82672F20	Screw, Bind (M3 × 8)		
15	5-C	03S44205G69	Screw, Bind (M4 × 6)		
16	3-A	03S40011G41	Screw, Countersink (M3 × 6)		
17	4-A	03S44205G56	Screw, Bind (M3 × 25)		
18	4-C	36B11380W01	Assy., Main Volume Knob		
19	2-G	43B41625J05	Stopper, Cord		
28	2-A	29A11624W01	Lug, P.C. Board		
29	4-E	03C40121T01	Screw, W/Double Washer (M3 × 10)		
37	3-D	03S52360F35	Screw, Bind (M3 × 6)		
● 38	3-D	09T51960F01	Holder Fuse		
▲ 38	3-D	09T51410F01	Holder Fuse		
47	5-C	75T11325W01	Assy., Trann Leg		
48	4-B	07T96470F02	Support, P.C. Board		
49	5-D	15T84846F03	LSR-10R		
50	3-A	36A11347W01	Knob, Push		
51	3-B	36A11346W01	Knob, Push		
52	4-B	36A11348W01	Knob, Push		
53	3-A	36A11349W01	Knob, Push		
54	3-A	36A11350W01	Knob, Volume		
55	1-F	03S40036U05	Screw, Bind (M3 × 8)		
56	4-B	03A82468F01	Screw, Tapping (M3 × 10)		
57	5-C	03S44205G82	Screw, Bind (M4 × 10)		
58	3-H	09T95168F01	Plug, Jumper		
59	3-H	29T66964F01	Terminal, GND		
61	4-B	36A11345W01	Knob, Push		
63	2-C	03C42723U01	Screw, Cup (M3 × 6)		
64	4-C	75S92615F11	Cushion, Rubber		
65	3-C	37T43734F01	Sumi, Tube		
▲ 67	5-E	42T93247F07	Clump, UAMS-07-0		
▲ 68	2-E	09T51960F01	Holder, Fuse		
▲ 69	2-F	43T53136F04	Bush, Cap		

## NOTE:

- : For Japanese Model Only (JA)
- : West Germany Model Only (AD)
- ▲ : For American Model Only (UZ)
- ★ : For England Model Only (AG)
- Others Common

NOTE: The parts without part numbers are not supplied.

# Exploded View (Cabinet)

(UZ/JA Model)

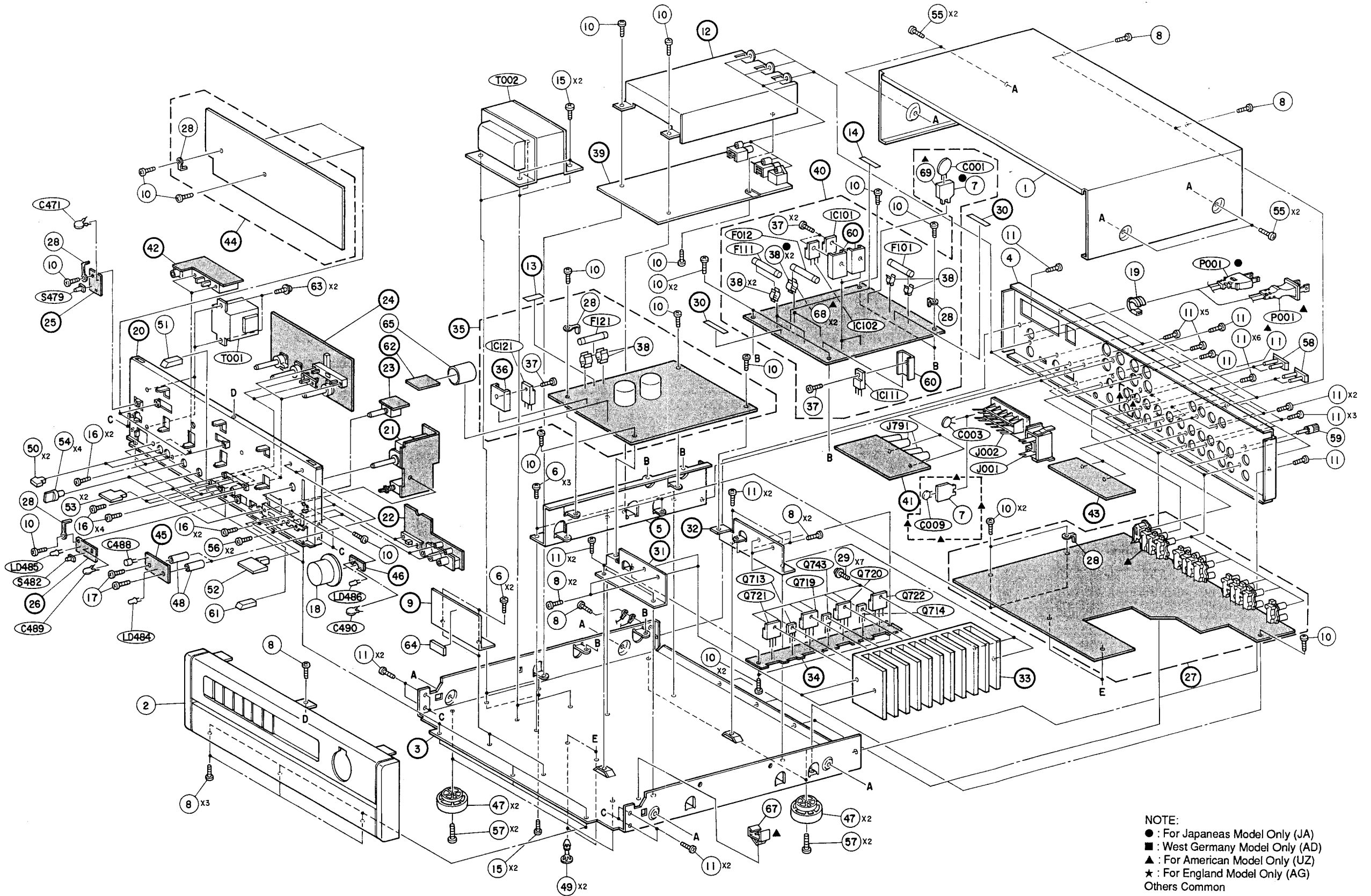
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NOTE:  
 ● : For Japanese Model Only (JA)  
 ■ : West Germany Model Only (AD)  
 ▲ : For American Model Only (UZ)  
 ★ : For England Model Only (AG)  
 Others Common

## Electrical Parts List

Resistors: Carbon resistors under 1/4 watts are not mentioned in the parts list, please confirm them by schematic diagram.  
 $\mu\text{F}$  = microfarads, pF = picofarads

Symbol No.	Part No.	Description
<b>Abbreviations</b>		
RES. = Resistor	CAP. = Capacitor	
C.F. = Carbon Film	ELY. = Electrolytic	
M.F. = Metal Film	CER. = Ceramic	
M.O. = Metal Oxide Film	MYL. = Mylar	
M.P. = Metal Plate	TAN. = Tantalum	
TR. = Transistor	POLY. = Polystrol	
TRANS. = Transformer	PP. = Polypropylene	
CP. = Chip	PLT. = Polyethylene	
<b>Main P.C.Board</b>		
<b>IC's</b>		
IC241	51T72167F01	M5220L
IC242	51T15486W01	LC4966
IC244	51T65380F01	BA4558
IC246	51T80136F01	M5238P
▲ IC247	51T80136F01	M5238P
■ IC247	51T80136F01	M5238P
★ IC247	51T80136F01	M5238P
IC301	51T10818W01	TC9163
IC302	51T10818W01	TC9163
IC401	51T96292F02	96292F02
IC402	51T63849F01	BA6109
IC403	51T72309F01	MN1280
<b>Transistors</b>		
Q243	48T57305F01	2SD1302
Q244	48T57305F01	2SD1302
Q247	48T57305F01	2SD1302
Q248	48T57305F01	2SD1302
▲ Q249	48T57305F01	2SD1302
■ Q249	48T57305F01	2SD1302
★ Q249	48T57305F01	2SD1302
▲ Q250	48T57305F01	2SD1302
■ Q250	48T57305F01	2SD1302
★ Q250	48T57305F01	2SD1302
▲ Q251	48T57305F01	2SD1302
■ Q251	48T57305F01	2SD1302
★ Q251	48T57305F01	2SD1302
▲ Q252	48T57305F01	2SD1302
■ Q252	48T57305F01	2SD1302
★ Q252	48T57305F01	2SD1302
Q253	48T57305F01	2SD1302
Q254	48T57305F01	2SD1302
Q401	48T81715F07	DTA143E
Q402	48T81715F07	DTA143E
Q403	48T81715F16	DTC114E
Q404	48T81715F16	DTC114E
Q405	48T81715F16	DTC114E
Q406	48T81715F16	DTC114E

Symbol No.	Part No.	Description
Q407	48T81715F16	DTC114E
Q408	48T81715F16	DTC114E
Q409	48T81715F16	DTC114E
Q410	48T81715F16	DTC114E
Q411	48T81715F16	DTC114E
Q412	48T81715F16	DTC114E
Q413	48T81715F16	DTC114E
Q414	48T81715F16	DTC114E
Q415	48T81715F16	DTC114E
Q416	48T81715F16	DTC114E
Q417	48T81715F16	DTC114E
Q418	48T81715F16	DTC114E
Q419	48T81715F16	DTC114E
Q420	48T81715F16	DTC114E
Q421	48T81715F07	DTA143E
Q422	48T81715F07	DTA143E
Q423	48T81715F07	DTA143E
Q424	48T81715F07	DTA143E
Q425	48T81715F07	DTA143E
Q427	48T81715F07	DTA143E
Q428	48T81715F07	DTA143E
Q429	48T81715F07	DTA143E
Q430	48T81715F07	DTA143E
Q431	48T81715F07	DTA143E
Q432	48T81715F07	DTA143E
Q433	48T81715F11	DTC144E
Q434	48T81715F07	DTA143E
▲ Q435	48T81715F07	DTA143E
■ Q435	48T81715F07	DTA143E
★ Q435	48T81715F07	DTA143E
<b>Diodes</b>		
D349	48T44813F01	MA165TA
D350	48T44813F01	MA165TA
D401	48T44813F01	MA165TA
D402	48T44813F01	MA165TA
D403	48T44813F01	MA165TA
D404	48T44813F01	MA165TA
D405	48T44813F01	MA165TA
D406	48T44813F01	MA165TA
D407	48T51582F01	MA150
D408	48T44813F01	MA165TA
D409	48T44813F01	MA165TA
D422	48T44813F01	MA165TA
ZD401	48T68697F23	Zener, HZS6.2EB1
<b>Capacitors</b>		
C241	08S65480F43	CER., 330pF
C242	08S65480F43	CER., 330pF
E243	23T00180L24	ELY., 4.7 $\mu\text{F}/50\text{V}$
E244	23T00180L24	ELY., 4.7 $\mu\text{F}/50\text{V}$
■ C245	08S65480F37	CER., 100pF

Symbol No.	Part No.	Description
★ C245	08S65480F37	CER., 100pF
■ C246	08S65480F37	CER., 100pF
★ C246	08S65480F37	CER., 100pF
E247	23T00180L12	ELY., 22 $\mu\text{F}/25\text{V}$
E248	23T00180L12	ELY., 22 $\mu\text{F}/25\text{V}$
■ C249	08S65480F41	CER., 220pF
★ C249	08S65480F41	CER., 220pF
■ C250	08S65480F41	CER., 220pF
★ C250	08S65480F41	CER., 220pF
C253	08T57705F76	MYL., 0.056 $\mu\text{F}$
C254	08T57705F76	MYL., 0.056 $\mu\text{F}$
C255	08T57705F69	MYL., 0.015 $\mu\text{F}$
C256	08T57705F69	MYL., 0.015 $\mu\text{F}$
E257	23T00180L21	ELY., 1 $\mu\text{F}/50\text{V}$
E258	23T00180L21	ELY., 1 $\mu\text{F}/50\text{V}$
C259	08T57705F13	MYL., 4700pF
C260	08T57705F13	MYL., 4700pF
■ C263	08S65480F43	CER., 330pF
★ C263	08S65480F43	CER., 330pF
■ C264	08S65480F43	CER., 330pF
★ C264	08S65480F43	CER., 330pF
E265	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
E266	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
■ C269	08S65480F43	CER., 330pF
★ C269	08S65480F43	CER., 330pF
■ C270	08S65480F43	CER., 330pF
★ C270	08S65480F43	CER., 330pF
E271	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
E272	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
E273	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
E274	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
E275	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
E276	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
■ C277	08S65480F45	CER., 470pF
★ C277	08S65480F45	CER., 470pF
■ C278	08S65480F45	CER., 470pF
★ C278	08S65480F45	CER., 470pF
E283	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
E284	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
■ C289	08S65480F43	CER., 330pF
★ C289	08S65480F43	CER., 330pF
■ C290	08S65480F43	CER., 330pF
★ C290	08S65480F43	CER., 330pF
E291	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
E292	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
■ C295	08S65480F45	CER., 470pF
★ C295	08S65480F45	CER., 470pF
■ C296	08S65480F45	CER., 470pF
★ C296	08S65480F45	CER., 470pF
E297	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
E298	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
E301	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
E302	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
E303	23T00180L12	ELY., 22 $\mu\text{F}/25\text{V}$

Symbol No.	Part No.	Description
E304	23T00180L12	ELY., 22 $\mu\text{F}/25\text{V}$
E305	23T00180L12	ELY., 22 $\mu\text{F}/25\text{V}$
E306	23T00180L12	ELY., 22 $\mu\text{F}/25\text{V}$
■ C307	08S65480F43	CER., 330pF
★ C307	08S65480F43	CER., 330pF
E307	23T00180L12	ELY., 22 $\mu\text{F}/25\text{V}$
■ C308	08S65480F43	CER., 330pF
★ C308	08S65480F43	CER., 330pF
E308	23T00180L12	ELY., 22 $\mu\text{F}/25\text{V}$
E309	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
E310	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
■ C313	08S65480F45	CER., 470pF
★ C313	08S65480F45	CER., 470pF
■ C314	08S65480F45	CER., 470pF
★ C314	08S65480F45	CER., 470pF
E319	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
E320	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
■ C325	08S65480F43	CER., 330pF
★ C325	08S65480F43	CER., 330pF
■ C326	08S65480F43	CER., 330pF
★ C326	08S65480F43	CER., 330pF
E327	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
E328	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
■ C331	08S65480F45	CER., 470pF
★ C331	08S65480F45	CER., 470pF
■ C332	08S65480F45	CER., 470pF
★ C332	08S65480F45	CER., 470pF
E333	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
E334	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
E337	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
E338	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
■ C343	08S65480F45	CER., 470pF
★ C343	08S65480F45	CER., 470pF
■ C344	08S65480F45	CER., 470pF
★ C344	08S65480F45	CER., 470pF
E345	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
E346	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
E347	23T00180L12	ELY., 22 $\mu\text{F}/25\text{V}$
E348	23T00180L12	ELY., 22 $\mu\text{F}/25\text{V}$
▲ E349	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
■ E349	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
★ E349	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
▲ E350	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
■ E350	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
★ E350	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
▲ E351	23T00180L25	ELY., 10 $\mu\text{F}/50\text{V}$
■ E351	23T00180L25	ELY., 10 $\mu\text{F}/50\text{V}$
★ E351	23T00180L25	ELY., 10 $\mu\text{F}/50\text{V}$
▲ E352	23T00180L25	ELY., 10 $\mu\text{F}/50\text{V}$
■ E352	23T00180L25	ELY., 10 $\mu\text{F}/50\text{V}$
★ E352	23T00180L25	ELY., 10 $\mu\text{F}/50\text{V}$
▲ E353	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
■ E353	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$
★ E353	23T00180L22	ELY., 2.2 $\mu\text{F}/50\text{V}$

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Symbol No.	Part No.	Description		
▲ E354	23T00180L22	ELY., 2.2μF/50V		
■ E354	23T00180L22	ELY., 2.2μF/50V		
★ E354	23T00180L22	ELY., 2.2μF/50V		
E355	23T00180L25	ELY., 10μF/50V		
E356	23T00180L25	ELY., 10μF/50V		
C357	08S40805F21	CER., 0.022μF		
C358	08S40805F21	CER., 0.022μF		
■ C362	08S65480F43	CER., 330pF		
★ C362	08S65480F43	CER., 330pF		
C363	08T94422F01	CER., 0.47μF		
C364	08T94422F01	CER., 0.47μF		
C365	08T94422F01	CER., 0.47μF		
C366	08T94422F01	CER., 0.47μF		
■ C371	08S65480F45	CER., 470pF		
★ C371	08S65480F45	CER., 470pF		
■ C372	08S65480F45	CER., 470pF		
★ C372	08S65480F45	CER., 470pF		
E401	23T00181L34	ELY., 100μF/35V		
C402	08T94422F01	CER., 0.47μF		
E402	23T00181L34	ELY., 100μF/35V		
E403	23T00180L22	ELY., 2.2μF/50V		
C404	08S65480F25	CER., 33pF		
C405	08S65480F25	CER., 33pF		
C406	08S65480F37	CER., 100pF		
C407	08S65480F13	CER., 10pF		
C408	08T94422F01	CER., 0.47μF		
C411	08S65480F37	CER., 100pF		
C412	08S65480F37	CER., 100pF		
C413	08T74293F37	CER., 100pF		
C414	08S65480F37	CER., 100pF		
<b>Coils</b>				
■ L201	24T63929F26	Inductor, 100μH		
★ L201	24T63929F26	Inductor, 100μH		
■ L202	24T63929F26	Inductor, 100μH		
★ L202	24T63929F26	Inductor, 100μH		
■ L203	24T63929F26	Inductor, 100μH		
★ L203	24T63929F26	Inductor, 100μH		
■ L204	24T63929F26	Inductor, 100μH		
★ L204	24T63929F26	Inductor, 100μH		
<b>Jacks</b>				
J201	09T15457W01	Jack, Pin 2P T6105 (PHONO)		
J204	09T15458W01	Jack, Pin 8P T5831 (TUNER, LD/CDV, VIDEO)		
J205	09T15458W01	Jack, Pin 8P T5831 (DAT, TAPE)		
Symbol No.	Part No.	Description		
● J209	09T15454W02	Jack, Pin 4P T5812 (ADAPTER)		
▲ J209	09T67404F01	Plate, T5813 (ADAPTER)		
■ J209	09T67404F01	Plate, T5813 (ADAPTER)		
★ J209	09T67404F01	Plate, T5813 (ADAPTER)		
▲ J212	09T67404F01	Plate, T5813 (PRE OUT)		
■ J212	09T15454W02	Jack, Pin 4P T5812 (PRE OUT)		
★ J212	09T15454W02	Jack, Pin 4P T5812 (PRE OUT)		
J213	09T15462W01	Jack, 2.5-1Pin (PHONO, START/CUT)		
J214	09T15461W01	Jack, Min 3.5-2Pin (BUS LINE)		
<b>Resistor / Filter</b>				
CF401	91T70534F01	FIL., CER. 4MHz		
R436	06T92263F09	RES., M.F. 22 ohm 1W		
<b>DAC P.C.Board</b>				
<b>IC's</b>				
IC801	51T95250F01	TORX174		
IC803	51T94890F01	MC74HCU04		
IC804	51T83506F01	TC74HC00P		
IC805	51T83506F01	TC74HC00P		
IC806	51T72306F01	μPD4052BC		
IC807	51T91084F02	YM3623B		
IC808	51T95091F01	CXD1162P		
IC809	51T95181F01	LC7881B		
IC810	51T61180F02	NJM78L05A		
IC811	51T80136F01	M5238P		
IC812	51T80136F01	M5238P		
<b>Transistors</b>				
Q801	48T81715F07	DTA143E		
Q802	48T81715F07	DTA143E		
Q803	48T57305F04	2SD1302		
Q804	48T57305F04	2SD1302		
Q805	48T57305F04	2SD1302		
Q806	48T57305F04	2SD1302		
Q807	48T82194F01	2SA1319		
Q808	48T82194F01	2SA1319		
Q809	48T82195F01	2SC3332S		
Q810	48T43015U01	2SC2120		

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Symbol No.	Part No.	Description		
Q811 Q812	48T43015U01 48T43015U01	2SC2120 2SC2120		
Diodes				
D801 D802 D803 D804 D805	48T44813F01 48T44813F01 48T44813F01 48T44813F01 48T44813F01	MA165TA MA165TA MA165TA MA165TA MA165TA		
D807 D808	48T44813F01 48T44813F01	MA165TA MA165TA		
Capacitors				
C801 C802 E803 E804 E805	08T90316F30 08T90316F30 23T00180L25 23T00180L25 23T00181L25	TF., TF., ELY., ELY., ELY.,	0.12μF 0.12μF 10μF/50V 10μF/50V 22μF/25V	
E806 E807 E808 E809 E810	23T00180L12 23T00180L12 23T00180L12 23T00180L12 23T00180L14	ELY., ELY., ELY., ELY., ELY.,	22μF/25V 22μF/25V 22μF/25V 22μF/25V 100μF/25V	
E811 E812 E813 E814 C815	23T00180L08 23T00180L12 23T00180L12 23T00180L12 08T57705F67	ELY., ELY., ELY., ELY., MYL.,	33μF/16V 22μF/25V 22μF/25V 22μF/25V 0.01μF	
E815 E816 C817 E817 C818	23T00180L12 23T00180L12 08S65480F13 23T00180L22 08S65480F13	ELY., ELY., CER., ELY., CER.,	22μF/25V 22μF/25V 10pF 2.2μF/50V 10pF	
E819 E820 E821 E822 E823	23T00180L24 23T00180L24 23T00180L24 23T00180L24 23T00180L40	ELY., ELY., ELY., ELY., ELY.,	4.7μF/50V 4.7μF/50V 4.7μF/50V 4.7μF/50V 1μF/100V	
E825 E826 E827 E828 E829	23T00180L12 23T00180L22 23T00180L22 23T00180L12 23T00180L24	ELY., ELY., ELY., ELY., ELY.,	22μF/25V 2.2μF/50V 2.2μF/50V 22μF/25V 4.7μF/50V	
E830 E833 E834 C850 C851	23T00180L12 23T00180L22 23T00180L22 08T57705F78 08T90316F29	ELY., ELY., ELY., MYL., TF.,	22μF/25V 2.2μF/50V 2.2μF/50V 0.082μF 0.1μF	

Symbol No.	Part No.	Description		
Coil / Switch				
L801 S801	24T50508F34 40T15482W01	Coil, IND. 100μH Switch, Slide SSSP12 (DAT/BS)		
Jacks				
J801 J802	09T84775F02 09T84775F02	Plate, PHRA-B (EXT DIGITAL-BS) Plate, PHRA-B (EXT DIGITAL-DAT)		
X'tal / L.P.F.				
LF803 LF804 X801	24T95189F01 24T95189F01 48T84727F01	L.P.F., 70910910-22K L.P.F., 70910910-22K X'tal, AT-51 16.9MHz		
Video P.C.Board				
IC's				
IC902 IC903 IC904	51T61180F06 51T10824W02 51T10824W02	NJM78L12A NJM2246D NJM2246D		
Transistors				
Q901 Q905 Q908 Q910	48T81715F07 48T43015U01 48T43015U01 48T82762F21	DTA143E 2SC2120 2SC2120 DTB143EL		
Diode				
D901	48T44813F01	MA165TA		
Capacitors				
E901 E902 E903 E905 E907	23T00180L12 23T00180L12 23T00180L12 23T00180L13 23T00181L29	ELY., ELY., ELY., ELY., ELY.,	22μF/25V 22μF/25V 22μF/25V 47μF/25V 330μF/25V	
E908 E909 E910 E912 E913	23T00181L20 23T00180L12 23T00180L13 23T00181L29 23T00181L20	ELY., ELY., ELY., ELY., ELY.,	470μF/16V 22μF/25V 47μF/25V 330μF/25V 470μF/16V	
E914 E915	23T00181L20 23T00181L20	ELY., ELY.,	470μF/16V 470μF/16V	



Symbol No.	Part No.	Description			Symbol No.	Part No.	Description		
E916	23T00181L20	ELY., 470 $\mu$ F/16V			Q741	48T57305F04	2SD1302		
E917	23T00181L20	ELY., 470 $\mu$ F/16V			Q742	48T57305F04	2SD1302		
E918	23T00180L14	ELY., 100 $\mu$ F/25V			Diodes				
E919	23T00180L12	ELY., 22 $\mu$ F/25V			BD121	48T50629F01	Bridge, WL-02		
E920	23T00180L12	ELY., 22 $\mu$ F/25V			D131	48T68580F03	DSA3A4		
E921	23T00180L24	ELY., 4.7 $\mu$ F/50V			D132	48T68580F03	DSA3A4		
Coil / Jack					D133	48T68580F03	DSA3A4		
J901	09T15459W01	Jack, Pin 4P T6126 (LD/CDV IN, TV MONI. OUT, VIDEO, REC-OUT /PLAY-IN)			D134	48T68580F03	DSA3A4		
L910	24T50508F34	Coil, IND. 100 $\mu$ H			D701	48T55186F01	1N4003		
Power Amp P.C.Board					D702	48T55186F01	1N4003		
Transistors					D711	48T70933F01	1SS136		
Q131	48T60555F01	2SC3298			D712	48T70933F01	1SS136		
Q132	48T60556F01	2SA1306			D713	48T70933F01	1SS136		
Q701	48T83839F01	2SC3067G			D714	48T70933F01	1SS136		
Q702	48T83839F01	2SC3067G			D715	48T55186F01	1N4003		
Q703	48T66948F03	FET, 2SK246GR			D716	48T70933F01	1SS136		
Q704	48T66948F03	FET, 2SK246GR			D717	48T70933F01	1SS136		
Q705	48T72888F01	2SA1208			D718	48S40477U01	1N4003		
Q706	48T72888F01	2SA1208			D719	48T70933F01	1SS136		
Q707	48T72888F01	2SA1208			D720	48T70933F01	1SS136		
Q708	48T72888F01	2SA1208			D721	48T70933F01	1SS136		
Q709	48T72889F01	2SC2910			D722	48T70933F01	1SS136		
Q710	48T72889F01	2SC2910			D725	48T55186F01	1N4003		
Q711	48T72889F01	2SC2910			ZD131	48T52741F47	Zener, HZ15-2L		
Q712	48T72889F01	2SC2910			ZD132	48T52741F47	Zener, HZ15-2L		
Q715	48T69176F02	2SC3421			ZD701	48T52741F17	Zener, HZ7C-2L		
Q716	48T69176F02	2SC3421			ZD702	48T52741F17	Zener, HZ7C-2L		
Q717	48T69177F02	2SA1358			Capacitors				
Q718	48T69177F02	2SA1358			C121	08S40805F21	CER., 0.022 $\mu$ F		
Q727	48T53301F01	2SC2240			C122	08S40805F21	CER., 0.022 $\mu$ F		
Q728	48T53301F01	2SC2240			E123	23T00181L38	ELY., 2200 $\mu$ F/35V		
Q729	48T52545F01	2SA970			E124	23T00180L14	ELY., 100 $\mu$ F/25V		
Q730	48T52545F01	2SA970			■ C131	08S40805F21	CER., 0.022 $\mu$ F		
Q731	48S43525F03	2SC1815			★ C131	08S40805F21	CER., 0.022 $\mu$ F		
Q732	48T51118F02	2SA1015			■ C132	08S40805F21	CER., 0.022 $\mu$ F		
Q733	48S43525F03	2SC1815			★ C132	08S40805F21	CER., 0.022 $\mu$ F		
Q734	48S43525F03	2SC1815			E133	23T15479W01	ELY., 6800 $\mu$ F/50V		
Q735	48S43525F03	2SC1815			E134	23T15479W01	ELY., 6800 $\mu$ F/50V		
Q736	48T43015U01	2SC2120			E137	23T00180L14	ELY., 100 $\mu$ F/25V		
Q737	48T43526F02	2SA950			E138	23T00180L14	ELY., 100 $\mu$ F/25V		
Q738	48S43525F03	2SC1815			E701	23T00180L24	ELY., 4.7 $\mu$ F/50V		
Q739	48T57305F04	2SD1302			E702	23T00180L24	ELY., 4.7 $\mu$ F/50V		
Q740	48T57305F04	2SD1302			C703	08S65480F41	CER., 220pF		
					C704	08S65480F41	CER., 220pF		
					■ C705	08S65480F43	CER., 330pF		
					★ C705	08S65480F43	CER., 330pF		
					■ C706	08S65480F43	CER., 330pF		
					★ C706	08S65480F43	CER., 330pF		

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★ : For England Model Only (AG), Others Common

Symbol No.	Part No.	Description			Symbol No.	Part No.	Description		
C707	08T52448F25	PP., 3300pF			E755	23T00180L13	ELY., 47μF/25V		
C708	08T52448F25	PP., 3300pF			E756	23T00180L24	ELY., 4.7μF/50V		
● E709	23T00180L12	ELY., 22μF/25V			E757	23T00180L20	ELY., 0.47μF/50V		
▲ E709	23T00180L13	ELY., 47μF/25V			C758	08T57705F75	MYL., 0.047μF		
■ E709	23T00180L12	ELY., 22μF/25V			E761	23T00180L40	ELY., 1μF/100V		
★ E709	23T00180L12	ELY., 22μF/25V			E762	23T00180L40	ELY., 1μF/100V		
● E710	23T00180L12	ELY., 22μF/25V			Coils / Relay				
▲ E710	23T00180L13	ELY., 47μF/25V			L701	24T74372F01	Coil, DR08-10-12 1μH		
■ E710	23T00180L12	ELY., 22μF/25V			L702	24T74372F01	Coil, DR08-10-12 1μH		
★ E710	23T00180L12	ELY., 22μF/25V			RL701	80T95099F01	Relay, DH12D2		
C711	08T81196F06	MIC., 10pF			Resistors				
C712	08T81196F06	MIC., 10pF			R131	06T92265F39	M.F., 390 ohm 3W		
C713	08T57705F79	MYL., 0.1μF			R132	06T92265F39	M.F., 390 ohm 3W		
C714	08T57705F79	MYL., 0.1μF			R759	06T92264F39	M.F., 390 ohm 2W		
C717	08T81196F19	MIC., 33pF			R762	06T92264F39	M.F., 390 ohm 2W		
C718	08T81196F19	MIC., 33pF			R763	06T67397F01	MPC, 0.22 ohm 5W		
C719	08T81196F19	MIC., 33pF			R764	06T67397F01	MPC, 0.22 ohm 5W		
C720	08T81196F19	MIC., 33pF			R791	06T92264F01	M.F., 10 ohm 2W		
▲ C723	08T57705F79	MYL., 0.1μF			R792	06T92264F01	M.F., 10 ohm 2W		
▲ C724	08T57705F79	MYL., 0.1μF			R805	06T92263F21	M.F., 68 ohm 1W		
E725	23T00181L48	ELY., 100μF/50V			Volumes				
E726	23T00181L48	ELY., 100μF/50V			VR701	18C41732G10	RES., Sol 470 ohm		
E727	23T00181L48	ELY., 100μF/50V			VR702	18C41732G10	RES., Sol 470 ohm		
E728	23T00181L48	ELY., 100μF/50V			Tone P.C.Board				
C729	08T81196F14	MIC., 22pF			IC				
C730	08T81196F14	MIC., 22pF			IC601	51T80136F01	M5238P		
C731	08T81196F14	MIC., 22pF			Capacitors				
C732	08T81196F14	MIC., 22pF			■ C601	08S65480F29	CER., 47pF		
● E741	23T00180L25	ELY., 10μF/50V			★ C601	08S65480F29	CER., 47pF		
▲ E741	23T00180L28	ELY., 47μF/50V			■ C602	08S65480F29	CER., 47pF		
■ E741	23T00180L28	ELY., 47μF/50V			★ C602	08S65480F29	CER., 47pF		
★ E741	23T00180L28	ELY., 47μF/50V			E603	23T16145W06	ELY., 2.2μF/50V		
● E742	23T00181L44	ELY., 10μF/50V			E604	23T16145W06	ELY., 2.2μF/50V		
▲ E742	23T00181L47	ELY., 47μF/50V			■ C605	08S65480F43	CER., 330pF		
■ E742	23T00181L47	ELY., 47μF/50V			★ C605	08S65480F43	CER., 330pF		
★ E742	23T00181L47	ELY., 47μF/50V			■ C606	08S65480F43	CER., 330pF		
C743	08T55260F29	CER., 47pF			★ C606	08S65480F43	CER., 330pF		
C744	08T55260F29	CER., 47pF			E607	23T16145W06	ELY., 2.2μF/50V		
C745	08T55260F37	CER., 100pF			E608	23T16145W06	ELY., 2.2μF/50V		
C746	08T55260F37	CER., 100pF			Capacitors				
● E747	23T00180L40	ELY., 1μF/100V			■ C601	08S65480F29	CER., 47pF		
▲ E747	23T00180L40	ELY., 1μF/100V			★ C601	08S65480F29	CER., 47pF		
■ E747	23T00180L25	ELY., 10μF/50V			■ C602	08S65480F29	CER., 47pF		
★ E747	23T00180L25	ELY., 10μF/50V			★ C602	08S65480F29	CER., 47pF		
● E748	23T00180L40	ELY., 1μF/100V			E603	23T16145W06	ELY., 2.2μF/50V		
▲ E748	23T00180L40	ELY., 1μF/100V			E604	23T16145W06	ELY., 2.2μF/50V		
■ E748	23T00180L25	ELY., 10μF/50V			■ C605	08S65480F43	CER., 330pF		
★ E748	23T00180L25	ELY., 10μF/50V			★ C605	08S65480F43	CER., 330pF		
C749	08T57705F79	MYL., 0.1μF			■ C606	08S65480F43	CER., 330pF		
C750	08T57705F79	MYL., 0.1μF			★ C606	08S65480F43	CER., 330pF		
C751	08T57705F79	MYL., 0.1μF			E607	23T16145W06	ELY., 2.2μF/50V		
C752	08T57705F79	MYL., 0.1μF			E608	23T16145W06	ELY., 2.2μF/50V		
E753	23T00181L18	ELY., 220μF/16V			Capacitors				
E754	23T00181L18	ELY., 220μF/16V			■ C601	08S65480F29	CER., 47pF		

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Symbol No.	Part No.	Description		
● C609	08S65480F13	CER., 10pF		
▲ C609	08S65480F13	CER., 10pF		
■ C609	08S65480F19	CER., 18pF		
★ C609	08S65480F19	CER., 18pF		
● C610	08S65480F13	CER., 10pF		
▲ C610	08S65480F13	CER., 10pF		
■ C610	08S65480F19	CER., 18pF		
★ C610	08S65480F19	CER., 18pF		
E611	23T16145W16	ELY., 22μF/16V		
E612	23T16145W16	ELY., 22μF/16V		
E613	23T16145W09	ELY., 4.7μF/50V		
E614	23T16145W09	ELY., 4.7μF/50V		
C615	08T90316F32	TF., 0.18μF		
C616	08T90316F32	TF., 0.18μF		
C617	08T90316F24	TF., 0.039μF		
C618	08T90316F24	TF., 0.039μF		
C619	08T90316F23	TF., 0.033μF		
C620	08T90316F23	TF., 0.033μF		
C621	08T90316F15	TF., 6800pF		
C622	08T90316F15	TF., 6800pF		
E623	23T16145W06	ELY., 2.2μF/50V		
E624	23T16145W06	ELY., 2.2μF/50V		
E625	23T16145W16	ELY., 22μF/16V		
E626	23T16145W16	ELY., 22μF/16V		
<b>Switches</b>				
S501	40T74065F02	Push, SPEC21 (DIGITAL/STRAIGHT)		
S502	40T74066F02	Push, SPEC12 (MONO/STEREO)		
S503	40T74065F02	Push, SPEC21 (EX/DIGITAL)		
<b>Volumes</b>				
VR501	18T74067F02	RK16K1140 250K ohm-W (BALANCE)		
VR601	18T74068F02	RK16K1240 50K ohm-C (BASS)		
VR602	18T74068F02	RK16K1240 50K ohm-C (TREBLE)		
<b>Volume P.C.Board</b>				
<b>Capacitors</b>				
C521	08T52448F11	PP., 820pF		
C522	08T52448F11	PP., 820pF		
C523	08T57705F69	MYL., 0.015μF		
C524	08T57705F69	MYL., 0.015μF		
E530	23T00180L22	ELY., 2.2μF/50V		

Symbol No.	Part No.	Description		
E531	23T00180L22	ELY., 2.2μF/50V		
<b>Volume / Switch</b>				
S521	40T15483W01	Switch, Push SPUN19 (LOUDNESS)		
VR521	18T15480W01	Volume, RK16312MA 100K ohm-B (VOLUME)		
<b>Display P.C.Board</b>				
<b>IC</b>				
IC471	51T10816W01	GP1U501X		
<b>Transistors</b>				
Q471	48T82762F01	DTA143EL		
Q472	48T82762F01	DTA143EL		
Q473	48T82762F01	DTA143EL		
Q474	48T82762F01	DTA143EL		
Q475	48T82762F01	DTA143EL		
Q476	48T82762F01	DTA143EL		
Q477	48T82762F01	DTA143EL		
Q478	48T82762F01	DTA143EL		
Q479	48T82762F01	DTA143EL		
Q480	48T82763F02	DTC114EL		
<b>Diodes</b>				
D471	48T44813F01	MA165TA		
D472	48T44813F01	MA165TA		
D473	48T44813F01	MA165TA		
D474	48T44813F01	MA165TA		
D475	48T44813F01	MA165TA		
D476	48T44813F01	MA165TA		
D477	48T44813F01	MA165TA		
D478	48T44813F01	MA165TA		
D479	48T51582F01	MA150		
<b>LED's</b>				
LD471	48T66616F02	SLR-54VR3 (RED)		
LD472	48T66616F02	SLR-54VR3 (RED)		
LD473	48T66616F02	SLR-54VR3 (RED)		
LD474	48T66616F02	SLR-54VR3 (RED)		
LD475	48T66616F02	SLR-54VR3 (RED)		
LD476	48T66616F02	SLR-54VR3 (RED)		
LD477	48T66616F02	SLR-54VR3 (RED)		
LD478	48T66616F02	SLR-54VR3 (RED)		
LD479	48T66616F02	SLR-54VR3 (RED)		

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Symbol No.	Part No.	Description		
LD480	48T66616F02	SLR-54VR3 (RED)		
LD481	48T15488W01	SLS-3102A (GRN)		
LD482	48T15488W01	SLS-3102A (GRN)		
LD483	48T15488W01	SLS-3102A (GRN)		
<b>Capacitors</b>				
C475	08S65480F40	CER., 180pF		
C476	08S65480F40	CER., 180pF		
C477	08T00152L18	PP., 180pF		
C478	08T00152L18	PP., 180pF		
C479	08S65480F40	CER., 180pF		
C480	08S65480F40	CER., 180pF		
C481	08S65480F40	CER., 180pF		
C482	08S65480F40	CER., 180pF		
C483	08T00152L18	PP., 180pF		
C484	08T00152L18	PP., 180pF		
C485	08S65480F40	CER., 180pF		
C486	08S65480F40	CER., 180pF		
C487	08S65480F40	CER., 180pF		
C491	08T90316F17	TF., 0.01μF		
<b>Switches</b>				
S471	40T83324F15	Tact, SKHHPM (VIDEO)		
S472	40T83324F15	Tact, SKHHPM (LD/CDV)		
S473	40T83324F15	Tact, SKHHPM (TUNER)		
S474	40T83324F15	Tact, SKHHPM (PHONO)		
S475	40T83324F15	Tact, SKHHPM (TAPE)		
S476	40T83324F15	Tact, SKHHPM (DAT)		
S477	40T83324F15	Tact, SKHHPM (CD)		
<b>Supply P.C.Board</b>				
<b>Diodes / Transistor</b>				
BD101	48T50629F01	DIO., Bridge WL-02		
BD111	48T50629F01	DIO., Bridge WL-02		
D102	48T55186F01	DIO., 1N4003		
Q101	48T43526F02	TR., 2SA950		
<b>Capacitors</b>				
C101	08S40805F21	CER., 0.022μF		
C102	08S40805F21	CER., 0.022μF		
E103	23T00181L38	ELY., 2200μF/35V		
E104	23T00180L14	ELY., 100μF/25V		
E105	23T00181L29	ELY., 330μF/25V		

Symbol No.	Part No.	Description		
E106	23T00180L04	ELY., 100μF/10V		
C111	08S40805F21	CER., 0.022μF		
E113	23T00181L21	ELY., 1000μF/16V		
E114	23T00180L04	ELY., 100μF/10V		
<b>Resistors</b>				
R101	06T92263F19	M.F., 56 ohm 1W		
R104	06T92264F29	M.F., 150 ohm 2W		
<b>Relay</b>				
RL001	80T15478W01	DH12D1		
<b>Speaker Terminal P.C.Board</b>				
<b>Capacitors</b>				
■ C793	08S40805F21	CER., 0.022μF		
★ C793	08S40805F21	CER., 0.022μF		
■ C794	08S40805F21	CER., 0.022μF		
★ C794	08S40805F21	CER., 0.022μF		
■ C795	08S40805F13	CER., 3300pF		
★ C795	08S40805F13	CER., 3300pF		
■ C796	08S40805F13	CER., 3300pF		
★ C796	08S40805F13	CER., 3300pF		
■ C797	08S40805F13	CER., 3300pF		
★ C797	08S40805F13	CER., 3300pF		
■ C798	08S40805F13	CER., 3300pF		
★ C798	08S40805F13	CER., 3300pF		
<b>Speaker Switch P.C.Board</b>				
<b>Switches</b>				
S781	40T74063F02	Push, SPUN22 (SPEAKER-A)		
S782	40T74063F02	Push, SPUN22 (SPEAKER-B)		
<b>Jack</b>				
J703	09T74077F01	Jack, Phones		
<b>Resistors</b>				
R781	06T92263F43	M.F., 560 ohm 1W		
R782	06T92263F43	M.F., 560 ohm 1W		
R783	06T92263F43	M.F., 560 ohm 1W		
R784	06T92263F43	M.F., 560 ohm 1W		

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Symbol No.	Part No.	Description			Symbol No.	Part No.	Description		
<b>Front P.C.Board</b>					<b>Miscellaneous</b>				
<b>Capacitors</b>									
■ C361	08S65480F43	CER.,	330pF		● C001	08T57437F11	CAP., CER.,	0.01μF	
★ C361	08S65480F43	CER.,	330pF		■ C002	08T57437F11	CAP., CER.,	0.01μF	
■ C362	08S65480F43	CER.,	330pF		★ C002	08T57437F11	CAP., CER.,	0.01μF	
★ C362	08S65480F43	CER.,	330pF		● C003	08T57437F11	CAP., CER.,	0.01μF	
■ C363	08S65480F43	CER.,	330pF		▲ C003	08T57437F11	CAP., CER.,	0.01μF	
★ C363	08S65480F43	CER.,	330pF		▲ C009	08T57437F11	CAP., CER.,	0.01μF	
■ C364	08S65480F43	CER.,	330pF		C471	08S40805F21	CAP., CER.	0.022μF	
★ C364	08S65480F43	CER.,	330pF		C488	08T00152L18	CAP., P.P.	180pF	
C365	08S65480F62	CER.,	0.022μF		C489	08S65480F40	CAP., CER.	180pF	
C369	08T94422F01	CER.,	0.47μF		C490	08T00152L18	CAP., P.P.	180pF	
C370	08T94422F01	CER.,	0.47μF		■ F011	65T42077U20	Fuse, SEMKO (2.5A)		
<b>Jack / Switch</b>					★ F011	65T42077U20	Fuse, SEMKO (2.5A)		
J301	09T15460W01	Jack, Pin 3P T6186			● F012	65T55050F16	Fuse, F611 (5A/125V)		
S241	40T74066F03	Switch, Push SPEC (REAR/FRONT)			▲ F012	65T52486F40	Fuse, ASG3 (5A/250V)		
<b>REC-SW P.C.Board</b>					■ F012	65T42077U20	Fuse, SEMKO (2.5A)		
<b>Diodes</b>					★ F013	65T42077U13	Fuse, SEMKO (500mA)		
D481	48T44813F01	MA165TA			■ F013	65T42077U13	Fuse, SEMKO (500mA)		
D482	48T44813F01	MA165TA			★ F013	65T42077U13	Fuse, SEMKO (500mA)		
D483	48T44813F01	MA165TA			● F101	65T55050F05	Fuse, F611 (0.5A/125V)		
D484	48T44813F01	MA165TA			▲ F101	65T66926F04	Fuse, 51NM (500mA/250V)		
<b>Switch</b>					■ F101	65T42077U13	Fuse, SEMKO (500mA)		
S480	40T15481W01	Rotary, SRBM16 (REC SELECTOR)			★ F101	65T42077U13	Fuse, SEMKO (500mA)		
<b>Multi P.C.Board</b>					● F111	65T55050F05	Fuse, F611 (0.5A/125V)		
<b>IC's</b>					▲ F111	65T66926F04	Fuse, 51NM (500mA/250V)		
IC001	51T67785F01	TC4528BP			■ F111	65T42077U13	Fuse, SEMKO (500mA)		
IC002	51T69001F01	BU4011B			★ F111	65T42077U13	Fuse, SEMKO (500mA)		
<b>Capacitors</b>					● F121	65T55050F08	Fuse, F611 (1A/125V)		
C001	08S65480F57	PP.,	4700pF		▲ F121	65T66926F13	Fuse, 51NM (1A/250V)		
E001	23T00180L12	ELY.,	22μF/25V		■ F121	65T42077U16	Fuse, SEMKO (1A)		
C002	08S65480F57	PP.,	4700pF		★ F121	65T42077U16	Fuse, SEMKO (1A)		
					IC101	51T82394F01	IC, NJM7815FA		
					IC102	51T50834F02	IC, μPC7805H		
					IC111	51T50834F02	IC, μPC7805H		
					IC121	51T82394F01	IC, NJM7815FA		
					● J001	09T15464W01	Outlet, 1P S2-737T100		
					▲ J001	09T15464W01	Outlet, 1P S2-737T100		
					● J002	09T67405F02	Outlet, AC-CSA		
					▲ J002	09T67405F02	Outlet, AC-CSA		
					■ J003	09T81260F01	Outlet, AC SEMKO		
					★ J003	09T81260F01	Outlet, AC SEMKO		
					● J791	09T15463W01	Terminal, Speaker 8P		
					▲ J791	09T15463W01	Terminal, Speaker 8P		
					■ J791	09T15463W02	Terminal, Speaker 8P		
					★ J791	09T15463W02	Terminal, Speaker 8P		
					LD484	48T15487W01	LED, LT9002ND (GRN)		
					LD485	48T72160F01	LED, SLR-40VR3F (RED)		

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## Packing Assembly Parts List

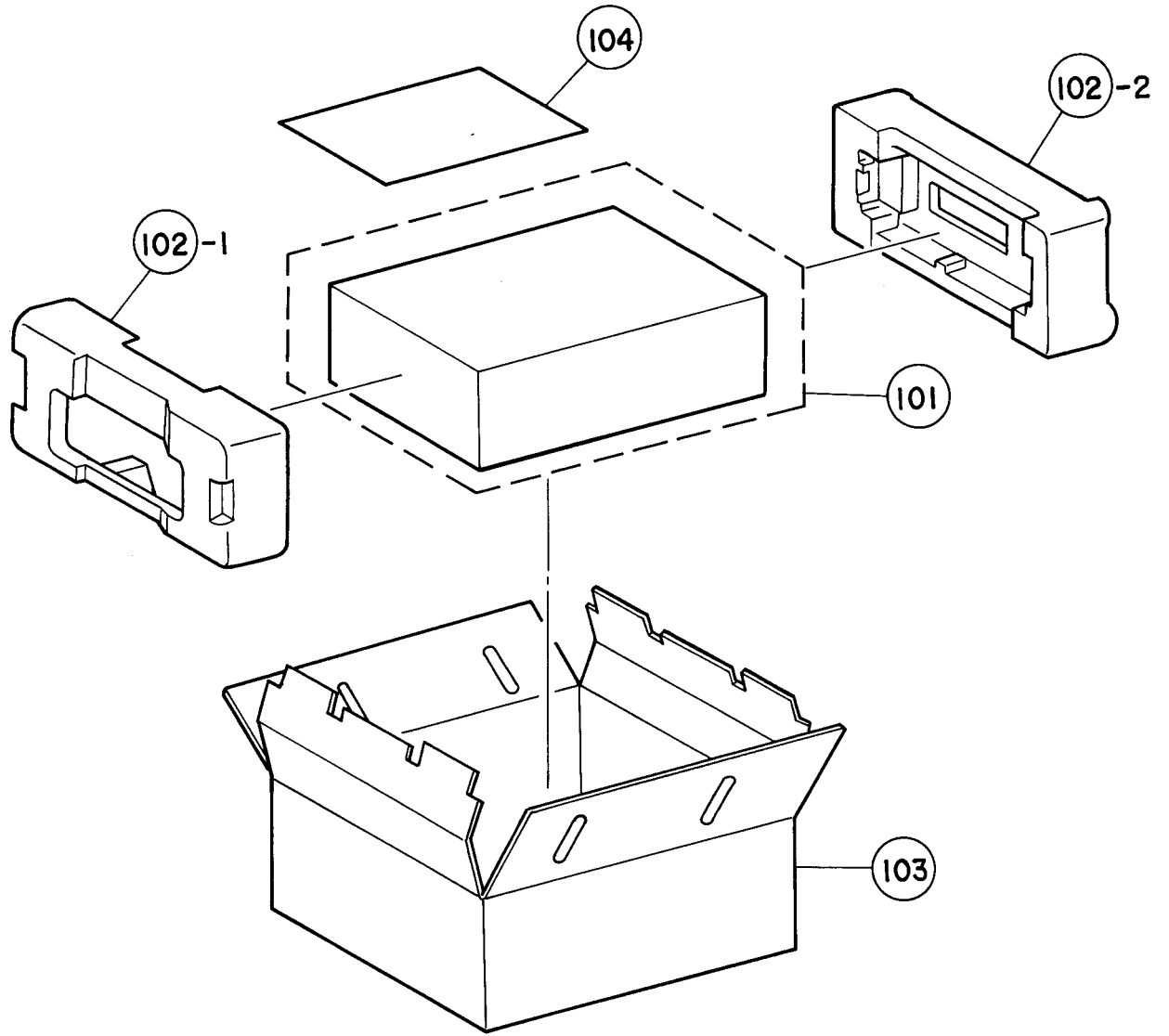
Symbol No.	Part No.	Description		
LD486	48T66616F02	LED, SLR-54VR3 (RED)		
● P001	28T81592F01	Plug, AC Cord		
▲ P001	28T66838F01	Plug, AC Cord		
■ P001	28T65151F03	Plug, AC Cord		
★ P001	28T44061F05	Plug, AC Cord		
Q713	48T69176F01	TR., 2SC3421		
Q714	48T69176F01	TR., 2SC3421		
Q719	48T96316F01	TR., 2SC4387		
Q720	48T96316F01	TR., 2SC4387		
Q721	48T96317F01	TR., 2SA1672		
Q722	48T96317F01	TR., 2SA1672		
Q743	48T69176F01	TR., 2SC3421		
■ S001	40T16339W01	SW., SDKG-AD (VOLTAGE SELECTOR)		
★ S001	40T16339W01	SW., SDKG-AD (VOLTAGE SELECTOR)		
S479	40T83324F13	SW., Tact SKHPP (POWER ON/OFF)		
S482	40T83324F13	SW., Tact SKHPP (SYNCHRO)		
● T001	25T16441W03	TRANS., Power		
▲ T001	25T16441W02	TRANS., Power		
■ T001	25T16441W01	TRANS., Power		
★ T001	25T16441W01	TRANS., Power		
● T002	25T16205W03	TRANS., Power		
▲ T002	25T16205W02	TRANS., Power		
■ T002	25T16205W01	TRANS., Power		
★ T002	25T16205W01	TRANS., Power		

Symbol No.	Part No.	Description		
101	56B13156W02	Packing, Sheet		
102	56D11360W01	Tray, Packing		
● 103	56S10005W24	Carton, Packing		
▲ 103	56S10005W45	Carton, Packing		
■ 103	56S10005W45	Carton, Packing		
★ 103	56S10005W45	Carton, Packing		
● 104-1	68P96552F08	Owners, Manual A-007 JA		
▲ 104-1	68P96552F50	Owners, Manual A-007 UZ		
■ 104-1	68P96552F51	Owners, Manual A-007 EK		
★ 104-1	68P96552F51	Owners, Manual A-007 EK		
104-2	60T58064F01	Battery, SUM-3 "FUJI"		
● 104-3	01T15521W01	Unit, Remocon RA007AL		
▲ 104-3	01T15521W02	Unit, Remocon RA007LX		
■ 104-3	01T15521W02	Unit, Remocon RA007LX		
★ 104-3	01T15521W02	Unit, Remocon RA007LX		

## NOTE:

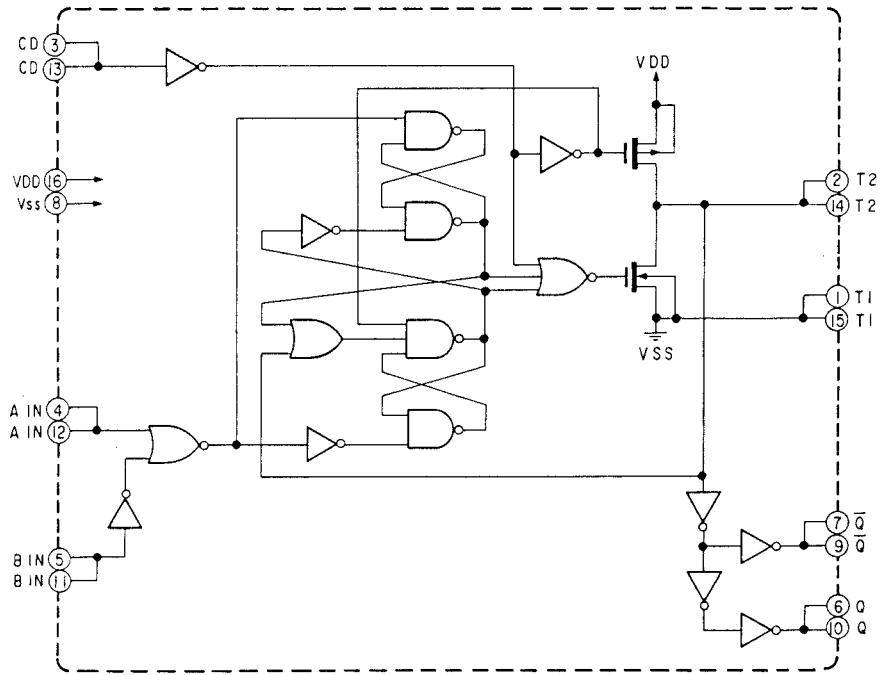
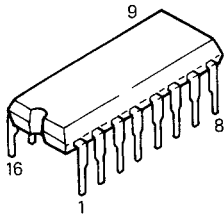
- : Japanese Model Only (JA)
- : For West Germany Model Only (AD)
- ▲ : For American Model Only (UZ)
- ★ : For England Model Only (AG)
- Others Common

# Packing Method View

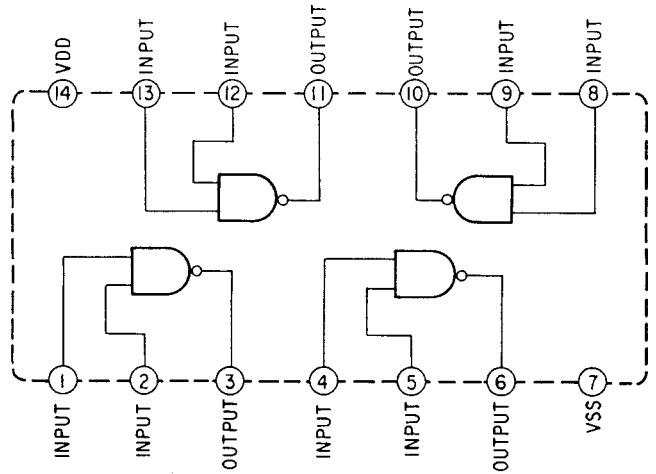
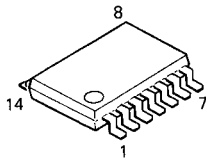


# Semi-Conductor Lead Identifications

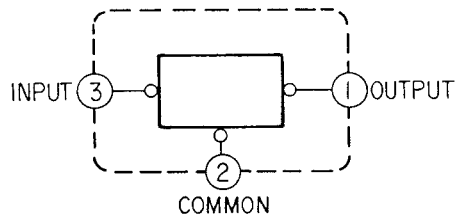
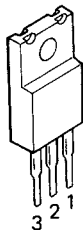
**TC4528BP: IC001**



**BU4011B: IC002**

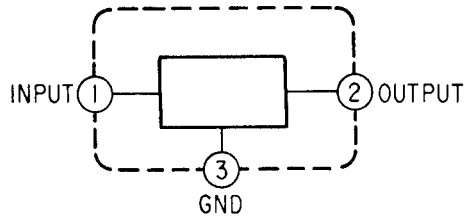
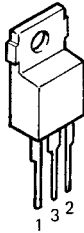


**NJM7815FA: IC101, 121**

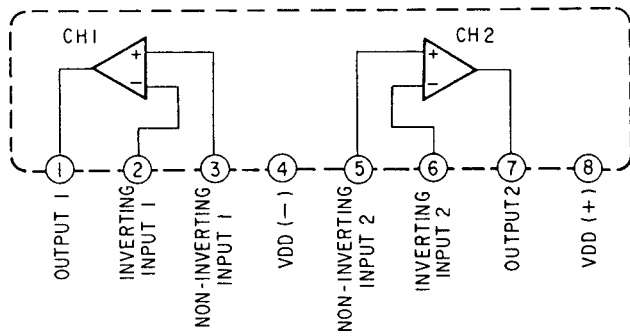
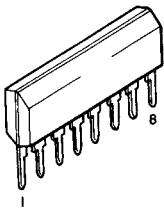




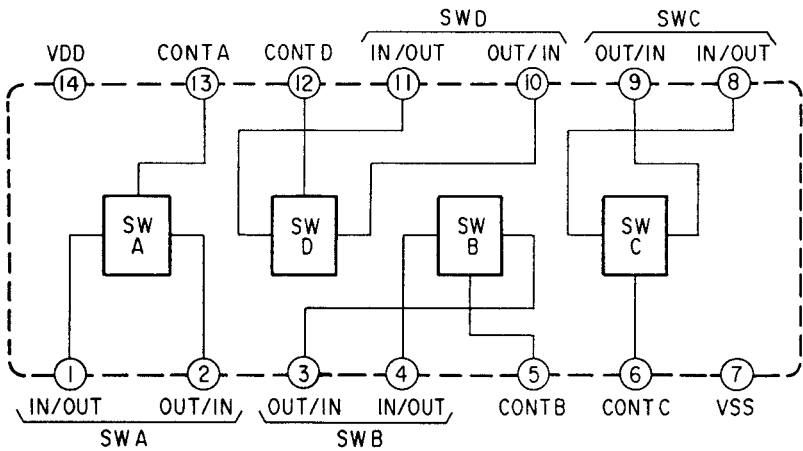
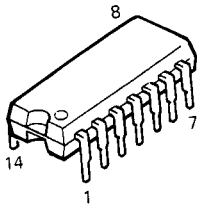
**μPC7805H: IC102, 111**



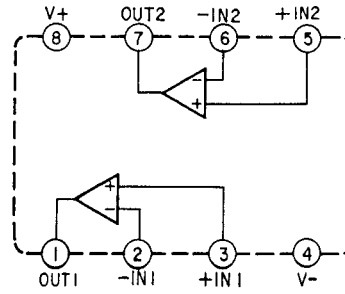
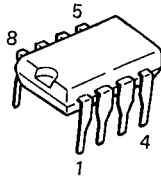
**M5220L: IC241**



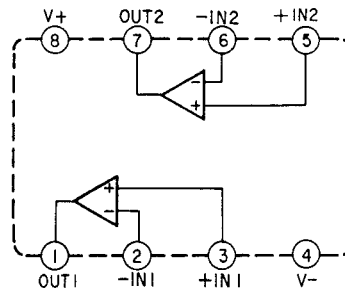
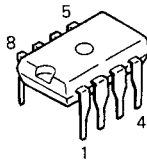
**LC4966: IC242**



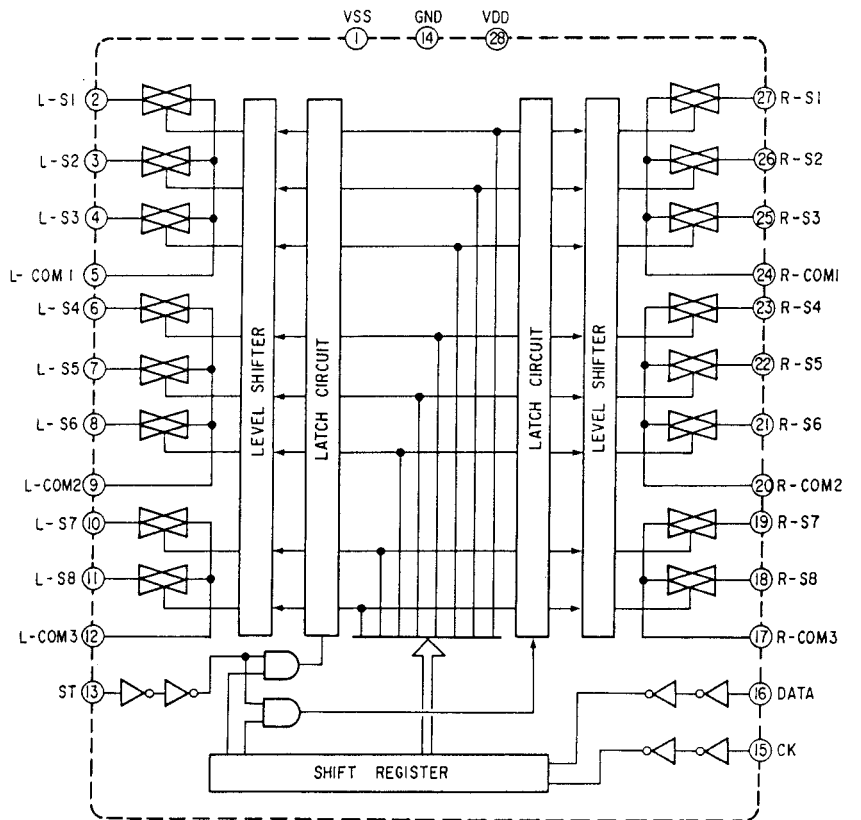
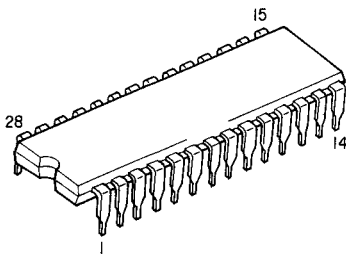
**BA4558: IC244**



**M5238P: IC246,**  
 ■★▲ IC247,  
 IC246, 601, 811, 812

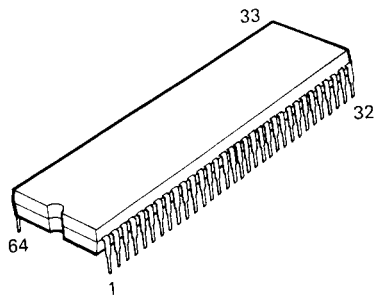


**TC9163: IC301, 302**



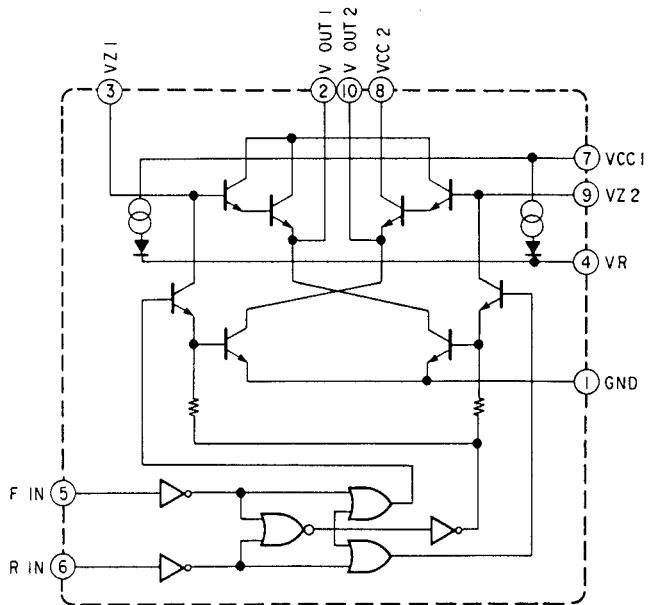
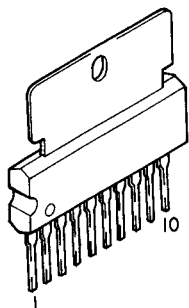
**NOTE:** ■ : For West Germany Model Only (AD), ▲ : For American Model Only (UZ), ★ : For England Model Only (AG),  
 ● : For Japanese Model Only (JA), Others Common

96292F02: IC401

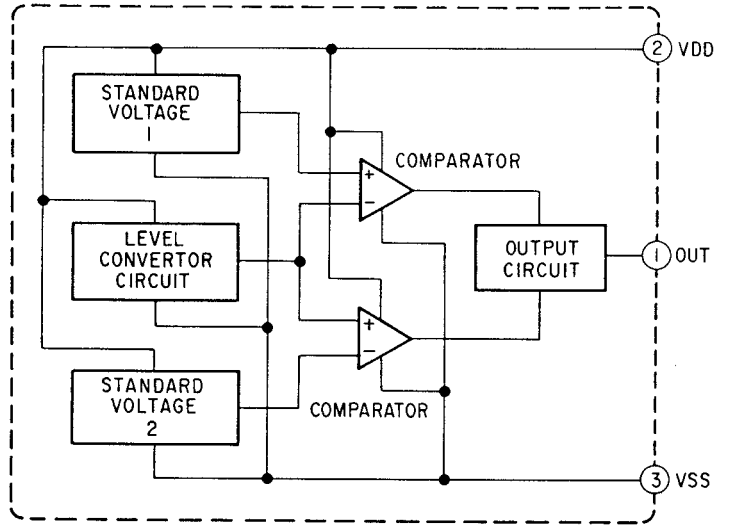
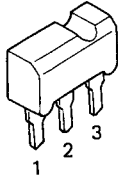


Pin No.	Cord Address	Pin No.	Cord Address	Pin No.	Cord Address
1	VAREF	23	P00	45	K00
2	VASS	24	P01	46	K01
3	R40 (A1N0)	25	P02	47	K02
4	R41 (A1N1)	26	P03	48	K03
5	R42 (A1N2)	27	P10	49	RESET
6	R43 (A1N3)	28	P11	50	X IN
7	R50 (A1N4)	29	P12	51	X OUT
8	R51 (A1N5)	30	P13	52	HOLD (XEO)
9	R52 (A1N6)	31	TEST	53	R80 (T1)
10	R53 (A1N7)	32	Vss	54	R81 (INT1)
11	R60	33	P20	55	R82 (T2)
12	R61	34	P21	56	R83 (INT2)
13	R62	35	P22	57	R90 (SI)
14	R63	36	P23	58	R91 (S0)
15	R70	37	P30	59	R92 (SCK)
16	R71 (WIO)	38	P31	60	RC0
17	R72 (XT IN)	39	P32	61	RC1
18	R73 (XT OUT)	40	P33	62	RC2
19	RA0	41	RB0	63	RC3
20	RA1	42	RB1	64	VDD
21	RA2	43	RB2		
22	RA3	44	RB3		

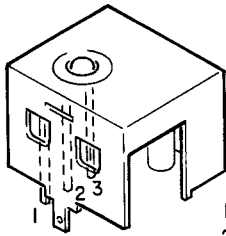
BA6109: IC402



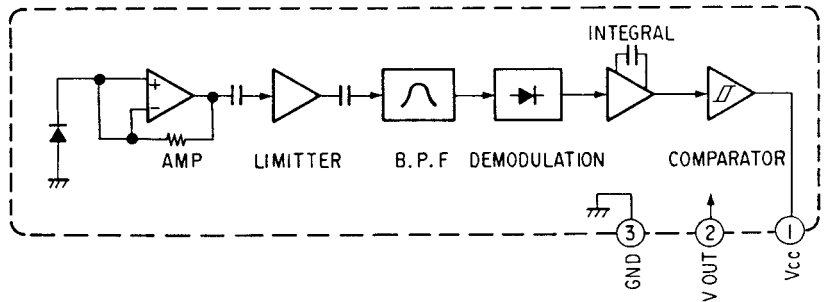
**MN1280: IC403**



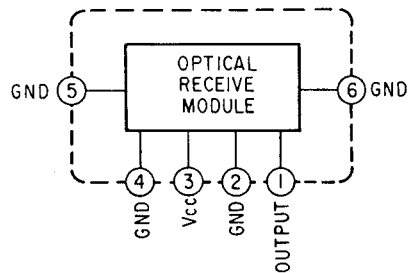
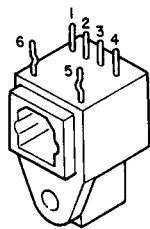
**GP1U501X:IC471**



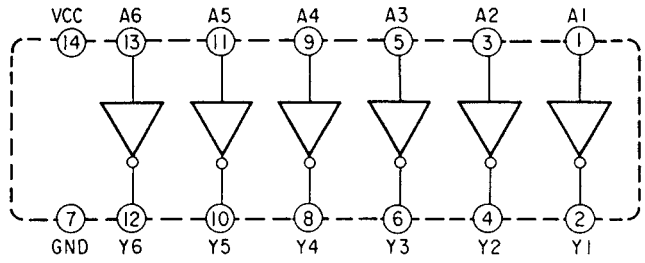
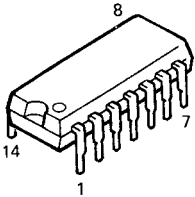
- 1. Vcc
- 2. Vout
- 3. GND



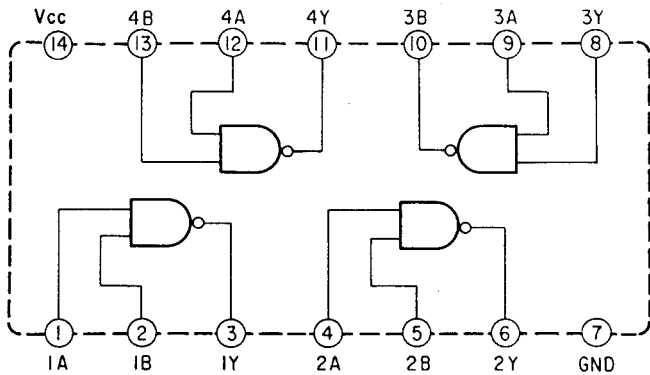
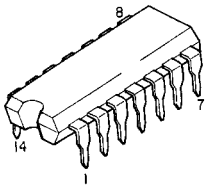
**TORX174: IC801**



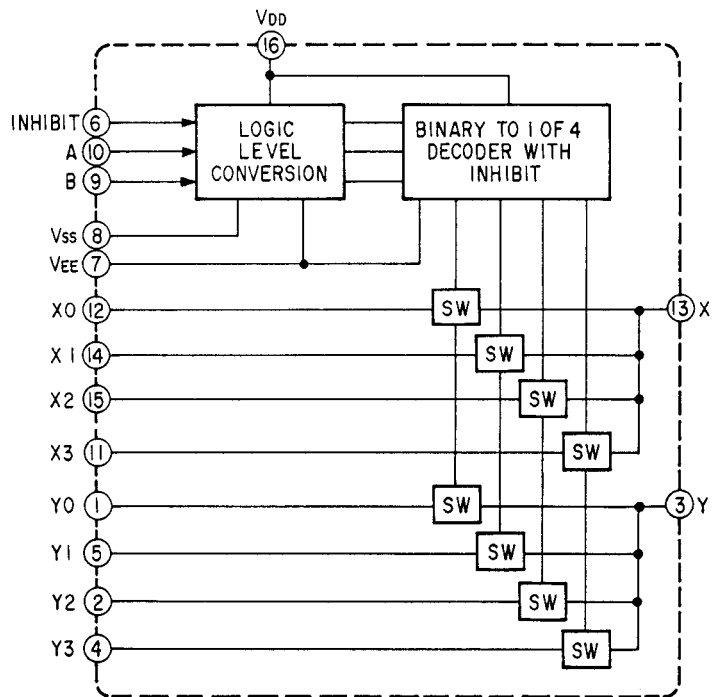
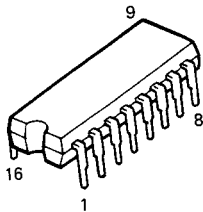
**MC74HCU04: IC803**



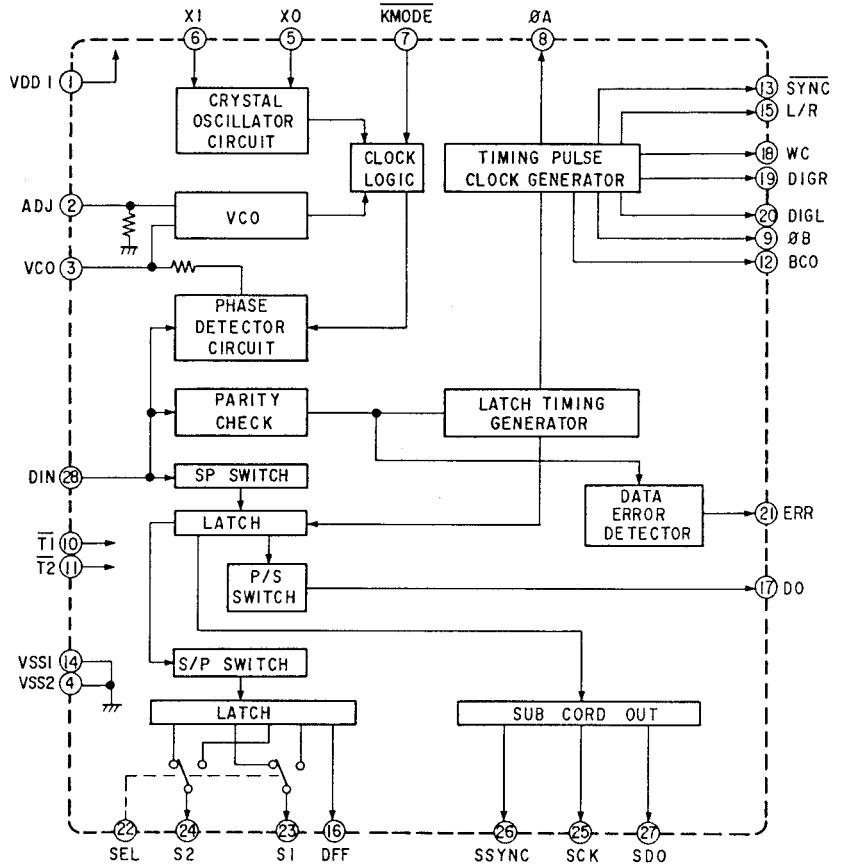
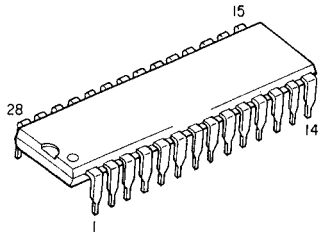
**TC74HC00P: IC804, 805**



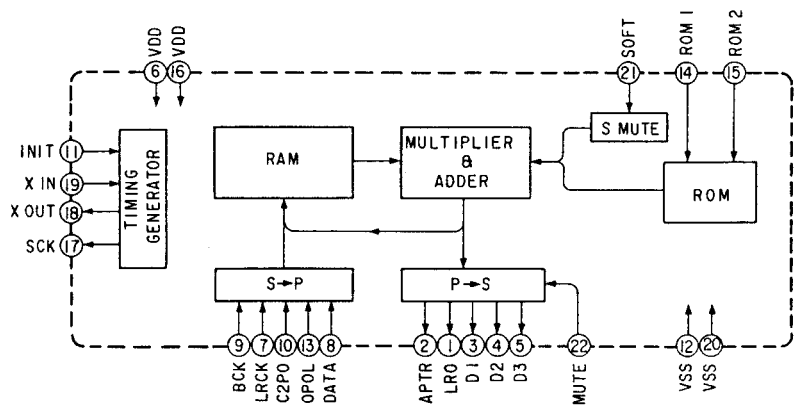
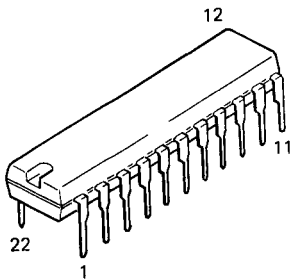
**μPD4052BC: IC806**



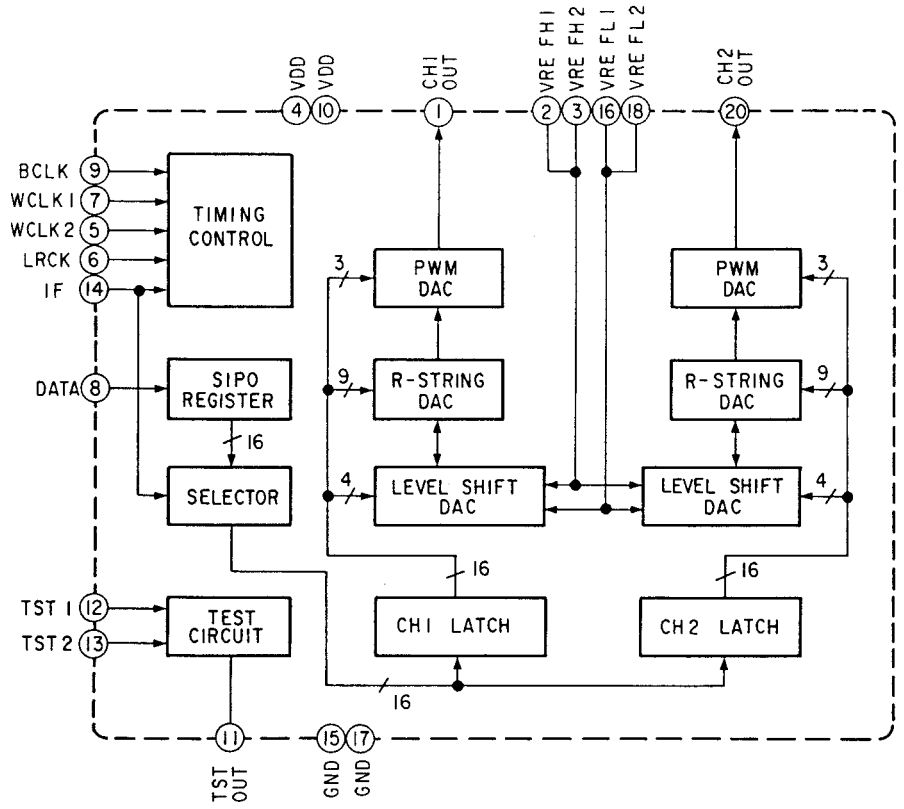
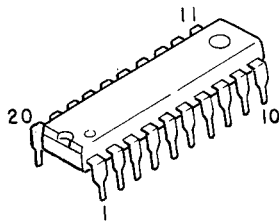
YM3623B: IC807



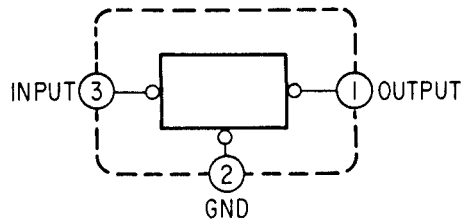
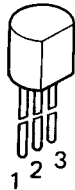
CXD1162P: IC808



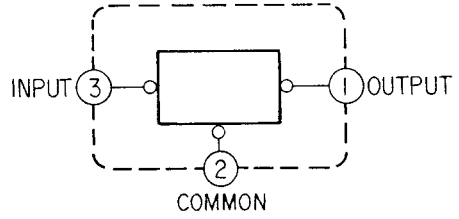
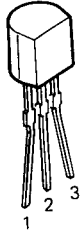
LC7881B: IC809



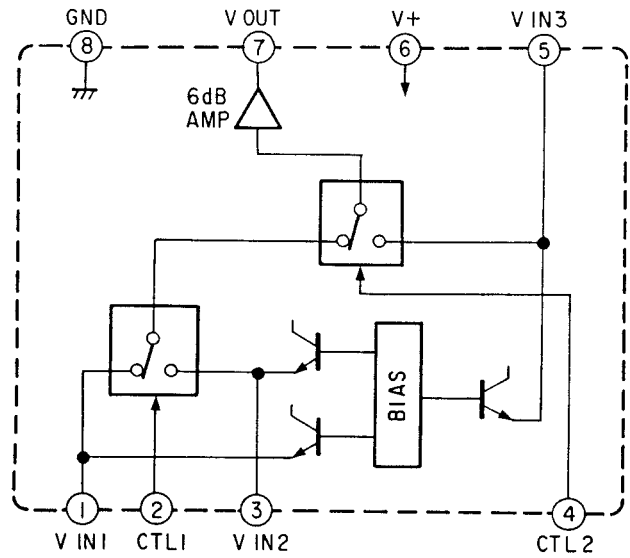
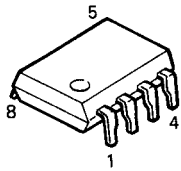
NJM78L05A: IC810



**NJM78L12A: IC902**



**NJM2246D: IC903, 904**

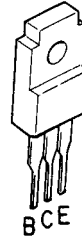




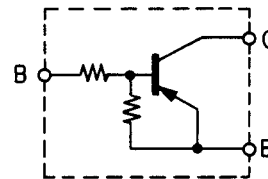
**2SA950:** Q101, 737  
**2SD1302:** Q243, 244, 247, 248,  
 Q253, 254, 739~742  
 Q803~806  
 ■★▲ Q249~252,  
**2SC2240:** Q727, 728  
**2SA970:** Q729, 730  
**2SC1815:** Q731, 733~735, 738  
**2AS1015:** Q732  
**2SC2120:** Q736, 810~812, 905, 908  
**2SA1319:** Q807, 808  
**2SC3332:** Q809



**2SC3298:** Q131  
**2SA1306:** Q132

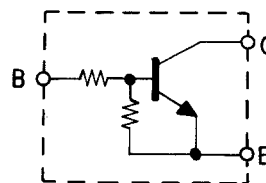


**DTA143E:** Q401, 402, 421~425,  
 Q427~432, 434,  
 Q801, 802, 901  
 ■★▲ Q435,

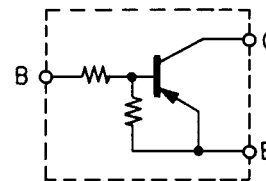
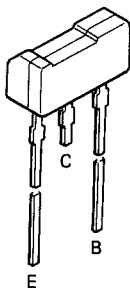


**NOTE:** ■ : For West Germany Model Only (AD), ▲ : For American Model Only (UZ), ★ : For England Model Only (AG),  
 ● : For Japanese Model Only (JA), Others Common

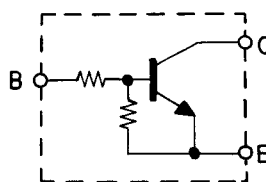
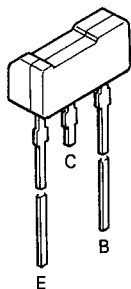
**DTC114E:** Q403~420  
**DTC144E:** Q433



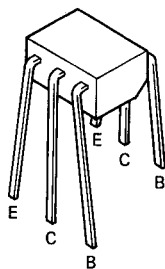
**DTA143EL:** Q471~479



**DTC114EL:** Q480  
**DTD143EL:** Q910



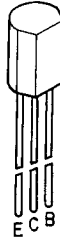
**2SC3067G:** Q701, 702



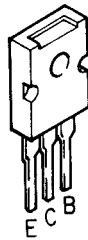
**2SK246:** Q703, 704



**2SA1208:** Q705~708  
**2SC2910:** Q709~712



**2SC3421:** Q713~716, 743  
**2SA1358:** Q717, 718



**2SC4387:** Q719, 720  
**2SA1672:** Q721, 722

