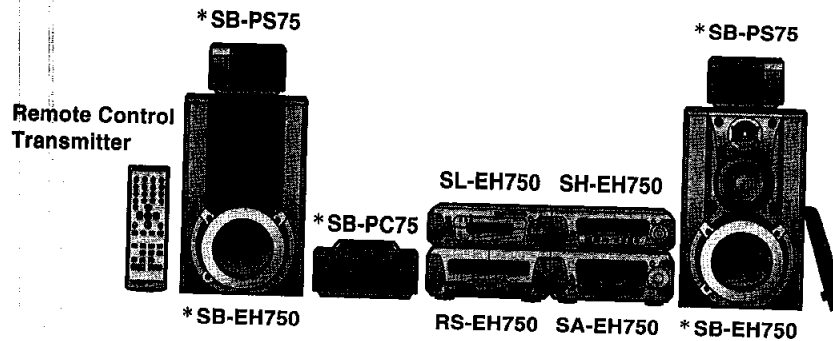


# Service Manual

## Tuner/Amplifier SA-EH750



Because of unique interconnecting cables, when a component requires service, send or bring in the entire system.

**Colour**  
(S) ..... Silver Type

**Areas**  
(E) ..... Europe.  
(EB) ..... Great Britain.  
(EG) ..... Germany,  
Italy, France,  
Netherlands  
and Denmark.  
(EP) ..... CIS.

| System             | SC-EH750        |
|--------------------|-----------------|
| Sound Processor    | SH-EH750        |
| Tuner/Amplifier    | <b>SA-EH750</b> |
| CD Changer         | SL-EH750        |
| Cassette Deck      | RS-EH750        |
| Front Speakers*    | SB-EH750        |
| Center Speaker*    | SB-PC75         |
| Surround Speakers* | SB-PS75         |

\* : Made in Singapore

## Specifications

### Amplifier Section

**Power output (at HIGH terminal):**

DIN 1 kHz, THD 1 %, both channels driven; 2 × 70 W (6 Ω)  
RMS 1 kHz, THD 10 %, both channels driven; 2 × 100 W (6 Ω)

**Prologic mode (at HIGH terminal):**

DIN 1 kHz, THD 1 %  
MAIN (both channels driven); 2 × 70 W (6 Ω)  
CENTER; 45 W (8 Ω)  
SURROUND; 2 × 25 W (8 Ω)

RMS 1 kHz, THD 10 %

MAIN (both channels driven); 2 × 100 W (6 Ω)  
CENTER; 60 W (8 Ω)  
SURROUND; 2 × 30 W (8 Ω)

PMPO 1 kHz: 3,000 W

(MAIN 6 Ω, CENT. 8 Ω, SURR. 8 Ω)

**Total harmonic distortion:**

Rated power at 1 kHz; 1 % (6 Ω)  
Half power at 1 kHz; 0.1 % (6 Ω)

**Load impedance:**

MAIN (HIGH/LOW); total impedance 6 Ω  
CENTER; 8 Ω  
SURROUND; 8 Ω

**S.WOOFER:**

Center frequency; 70 Hz  
LEVEL (VOL-20 dB); MID +8 dB  
MAX +12 dB

### FM tuner Section

**Frequency range:** 87.50 – 108.00 MHz (0.05 MHz steps)

**Sensitivity:** 1.8 μV (IHF usable)

**S/N:** 1.5 μV

**MONO:** 70 dB (75 dB, IHF)

**Antenna terminal(s):** 75 Ω (unbalanced)

### AM tuner Section

**Frequency range:**

522 – 1629 kHz (9 kHz steps)

520 – 1630 kHz (10 kHz steps)

500 μV/m

**Sensitivity (S/N 20 dB):**

### Timer Section

**Clock:**

Quartz - lock type

Play timer (1 time, daily)

Rec timer (1 time, daily)

Sleep (120 min, 30 min intervals)

1 minute – 23 hours 59 minutes

(1 min intervals)

**Function:**

**Setting (Play/Rec):**

### General

**Power supply:**

(E),(EG),(EP) areas;

AC 230 V, 50 Hz

(EB) area;

AC 230 – 240 V, 50 Hz

**Power consumption:**

205 W

**Standby;**

Normal;

ECO mode;

11 W

**Dimensions (W×H×D):**

0.6 W

**Weight:**

293×118.5×342.5 mm

5.2 kg

**Notes:** Specifications are subject to change without notice.

Weight and dimensions are approximate.

Total harmonic distortion is measured by the digital spectrum analyzer

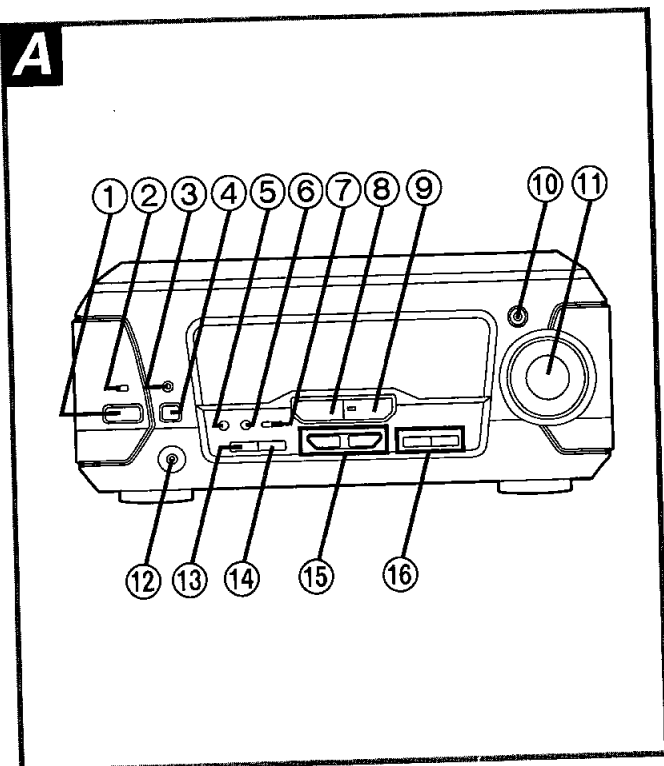
### ⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

# Technics®

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and distribution is a violation of law.

## Location of Controls

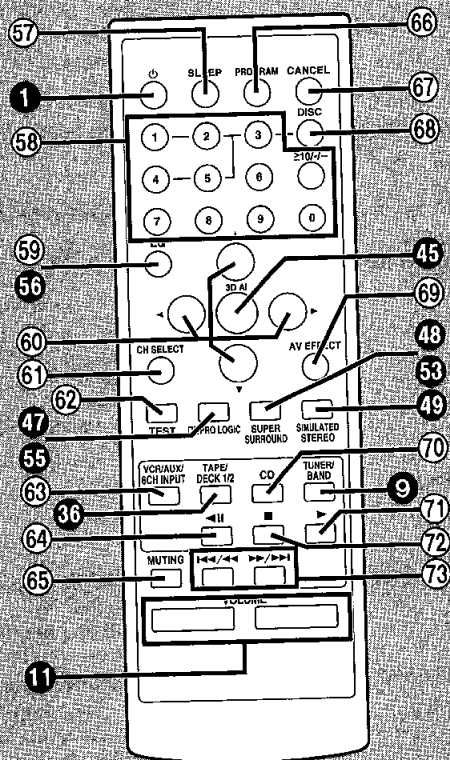


### Tuner amplifier

A

- ① **Standby/on switch (⏻/⏻)**  
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
- ② **Standby indicator (⏻)**  
When the unit is connected to the AC mains supply, this indicator lights up in standby mode and goes out when the unit is turned on.
- ③ **Play timer/record timer button and indicator (⌚ PLAY/⌚ REC)**
- ④ **ECO mode button (ECO)**
- ⑤ **Clock/timer, demo button (CLOCK/TIMER, -DEMO)**
- ⑥ **FM mode select button (FM AUTO/MONO)**
- ⑦ **6ch discrete input button (6CH DISCRETE INPUT)**
- ⑧ **Source input select button (INPUT SELECTOR)**
- ⑨ **Tuner/band select button and indicator (TUNER/BAND)**
- ⑩ **Super woofer button and indicator (S.WOOFER)**
- ⑪ **Volume control (VOLUME)**
- ⑫ **Headphones jack (PHONES)**
- ⑬ **Tuning mode select button (TUNING MODE)**
- ⑭ **Set button (SET)**
- ⑮ **Tuning buttons (▲, ▼ TUNING)**
- ⑯ **RDS display mode select buttons (RDS PS-DISP MODE-PTY)**

B



### Remote control

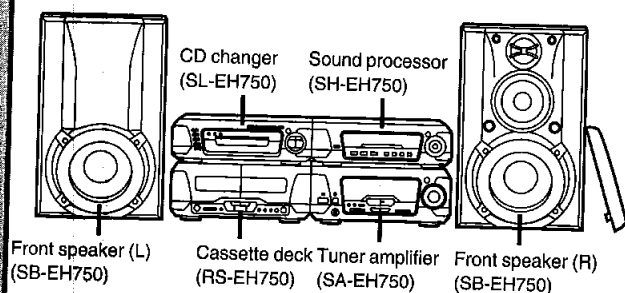
B

Buttons as ① function in exactly same way as the buttons on the main unit.

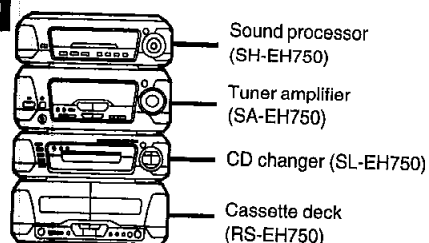
- ⑦ **Sleep timer button (SLEEP)**
- ⑧ **Numeric buttons (1-9, 0, ≥10/-/-)**
- ⑨ **EQ select button (EQ)**
- ⑩ **Cursor buttons (←, ↑, →, ↓)**
- ⑪ **Channel select button (CH SELECT)**
- ⑫ **Test button (TEST)**
- ⑬ **Input selection buttons (VCR/AUX/6CH INPUT)**
- ⑭ **Tape reverse playback/CD pause button (⏮/⏮)**
- ⑮ **Muting button (MUTING)**
- ⑯ **Program button (PROGRAM)**
- ⑰ **Cancel button (CANCEL)**
- ⑱ **Disc select button (DISC)**
- ⑲ **AV effect button (AV EFFECT)**
- ⑳ **CD button (CD)**
- ㉑ **CD play/tape forward playback button (▶)**
- ㉒ **CD/tape stop button (■)**
- ㉓ **CD skip/search, tape fast forward/rewind buttons (⏮/⏮, ⏭/⏭)**

# Installation

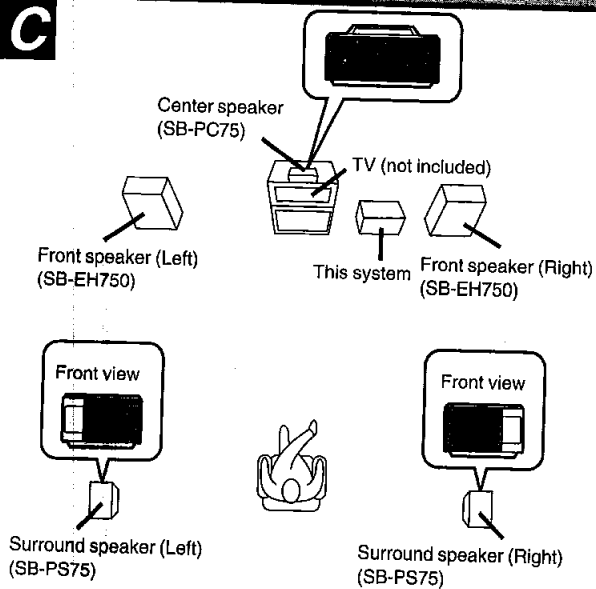
## A



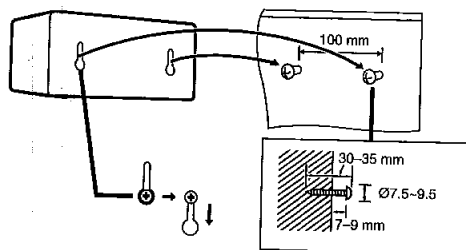
## B



## C



## D



## Locating the components

### Side-by-side set-up **A**

### Stacking **B**

#### Note

Left and right front speakers are exactly the same.

## Placement of center/surround speakers **C**

### Center speaker

Place the center speaker above a TV, as close to it as possible.

### Surround speakers

We recommend that surround speakers be placed on the side of or slightly behind the listener, and about one meter higher than ear level.

Place the speakers with the Technics logo facing toward the listening position.

However the position should be adjusted to your personal preference, because the effect varies to some degree depending upon the type of music and the music source.

### For your reference

Even if you are forced to put your surround speakers on top of your front speakers, this unit still allows you to enjoy surround effects

### Attaching to a wall **D**

Set speaker onto screws and slide through bracket to lock into position.

#### Note

The wall or pillar on which the speaker systems are to be attached should be capable of supporting a weight of 5 kg.

#### Caution

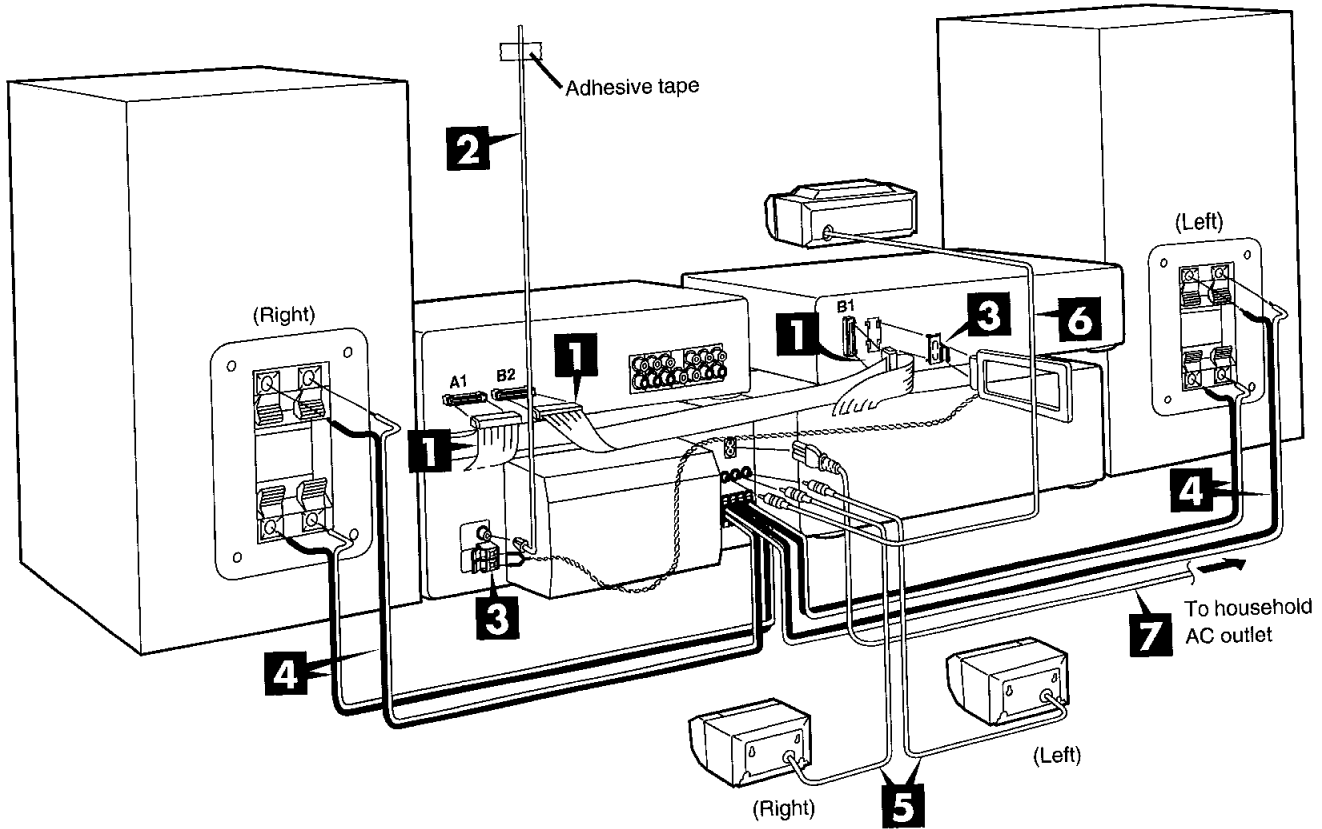
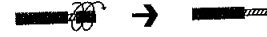
- Use the speakers only with the recommended system. Failure to do so may lead to damage to the amplifier and/or the speakers, and may result in the risk of fire.
- Do not attempt to attach these speakers to walls using methods other than those described in this manual.

#### Note

The front and center speakers are made so they can be used in close proximity to the TV, but irregular coloring may result due to how the system is placed. If such distortion occurs, turn off the TV for between 15 and 30 minutes. The demagnetizing function of the TV will eliminate the distortion. If the irregular coloring is still visible, then move the speaker further away from the TV.

# Connections

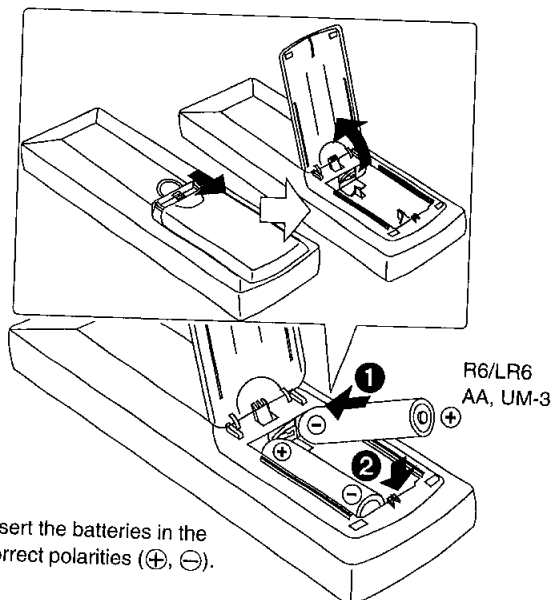
To prepare the AM loop antenna wire and speaker cords, twist the vinyl cover tip and pull off.



|   |                                 |  |
|---|---------------------------------|--|
| <p><b>1</b></p> <p><b>To connect cables</b></p> <p>Connector</p> <p>White line</p> <p><b>To unplug cables</b></p> <p>Hold the connector from both ends and pull it out.</p> | <p><b>3</b></p> <p><b>1</b></p> | <p><b>4</b></p> <p><b>Tuner amplifier side</b></p> <p>Red (+)</p> <p>Black (-)</p> <p>Blue (-)</p> <p>Gray (+)</p> |
| <p><b>2</b></p> <p>FM ANT 75Ω</p>   | <p><b>2</b></p>                 | <p><b>Speaker side</b></p> <p>Gray (+)</p> <p>Blue (-)</p> <p>Red (+)</p> <p>Black (-)</p>                         |

## ■ Preparing the Remote Control

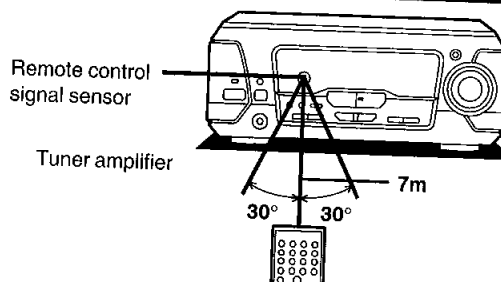
### Battery installation



Insert the batteries in the correct polarities (+, -).

- Do not mix old and new batteries, or batteries of different types (manganese and alkaline, etc.).
- Never subject batteries to excessive heat or flame; do not attempt to disassemble them; and be sure they are not short-circuited.
- If the remote control is not to be used for a long period of time, remove the batteries and store them in a cool, dark place.
- Do not attempt to recharge alkaline or manganese batteries.
- Do not use rechargeable type batteries.

### Correct method of use



- Aim the remote control's transmission window toward the unit's sensor. Avoid any obstacles.
- Be sure the transmission window and the unit's sensor are free from dust. Excessive dust might affect its performance.
- This unit may not operate correctly if direct sunlight or another strong light source strikes the receiving sensor of this unit. If there is a problem, place the unit away from the light source.
- Never place heavy items on top of the unit.
- Do not disassemble or reconstruct the unit.
- Do not spill water or other liquids into the unit.

### 1 Connect the flat cables.

1. Connect the shorter flat cable from the tuner amplifier to terminal A1 on the sound processor.
2. Connect the longer flat cable from the cassette deck to terminals B1 and B2.

#### After connection:

Keep cables as flat against the back of the unit as possible.

### 2 Connect the FM indoor antenna.

Tape the antenna to a wall or column, in a position where radio signals are received with the least amount of interference.

### 3 Connect the AM loop antenna.

1. Attach the antenna holder to the rear panel of the CD changer. Then clamp the antenna into the antenna holder.
2. Connect the antenna terminal to the rear panel of the tuner amplifier.

#### Note

To minimize noise pickup, bundle the loop antenna cord using tape or the like to keep the flat cables away from the AM loop antenna cord.

### 4 Connect the right (R) and left (L) front speaker cables.

Connect each end of the speaker cables to the terminal lever of the same color.

#### Use only the supplied front speakers.

The combination of the main unit and front speakers provide the best sound. Using other front speakers can damage the unit and sound quality will be negatively effected.

#### Note

- To prevent damage to circuitry, never short-circuit positive (+) and negative (-) speaker wires.
- Be sure to connect only positive (red or gray) wires to positive (+) terminals and negative (black or blue) wires to negative (-) terminals.

### 5 Connect the surround speaker cables.

### 6 Connect the center speaker cables.

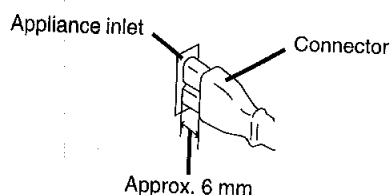
(United Kingdom only)  
BE SURE TO READ THE CAUTION FOR AC MAINS LEAD BEFORE PROCEEDING TO STEP 7.

### 7 Connect the AC mains lead.

#### Insertion of Connector

Even when the connector is perfectly inserted, depending on the type of inlet used, the front part of the connector may jut out as shown in the drawing.

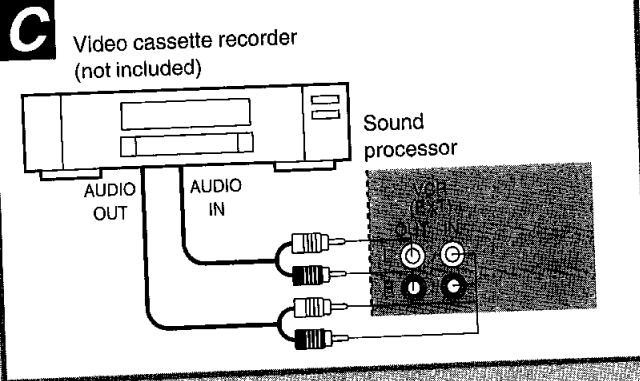
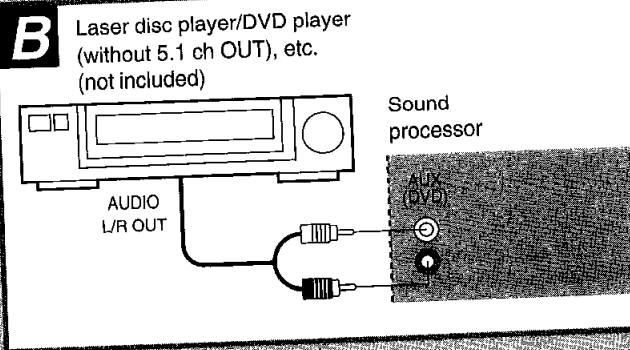
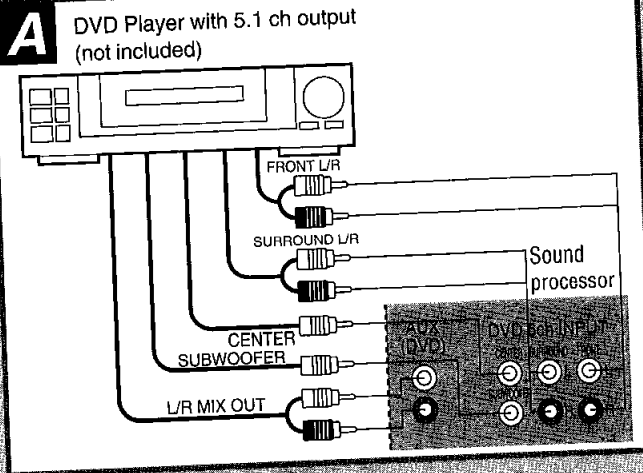
However there is no problem using the unit.



#### For your reference

Information you enter into the unit's memory, except for the time, remains intact for up to two weeks after the mains lead is disconnected.

## External Unit Connections

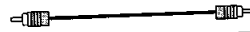


- Make sure that the power supply for all components has been turned off before making any connections.
- For details, refer to the operating instructions of the units which are to be connected.
- All peripheral components and cables sold separately.

**Stereo connection cable (not included)**



**Video connection cable (not included)**



**A DVD player with 5.1 ch output**

This unit has the input terminals for 5.1 channel surround systems but it does not have the decoders necessary to play them back. The DVD player should have these decoders and 5.1 channel output.

The front speakers have subwoofers, but it is possible to connect another subwoofer (not included) to the SUBWOOFER OUT terminal on the back of the sound processor to further enhance the surround experience available with 5.1 channel input.

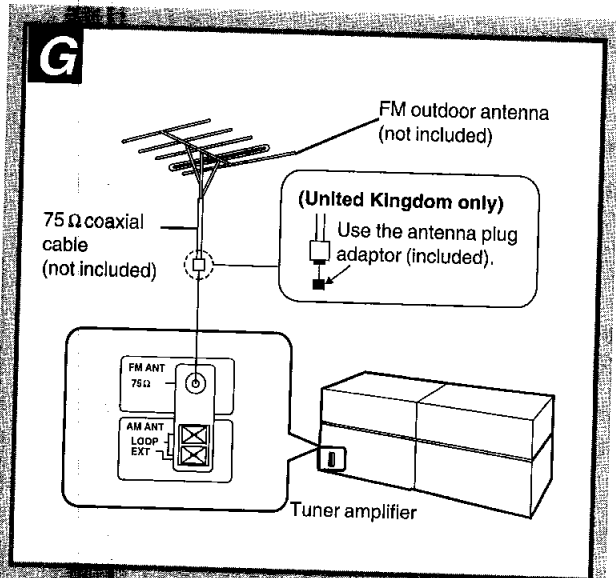
**B Laser disc player/DVD player (without 5.1 ch OUT), etc.**

This unit has Dolby Pro Logic circuitry. If the audio output of video equipment is connected to the AUX terminal of this unit, the sound will be reproduced with the same powerful stereophonic effects found in movie theaters.

**C Video cassette recorder**

You can enjoy only sound of the video cassette recorder.

## Optional Antenna Connections



You may need an outdoor antenna if you use this system in a mountainous region or inside a reinforced-concrete building, etc.

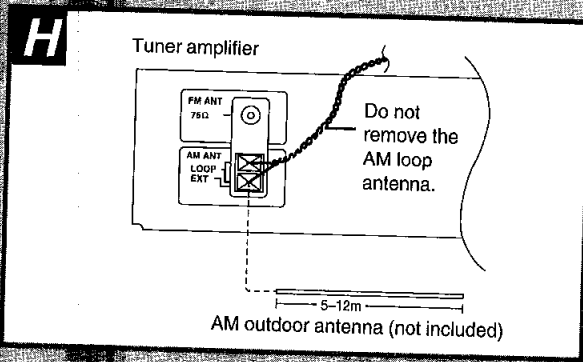
### FM outdoor antenna (not included) **G**

### AM outdoor antenna (not included) **H**

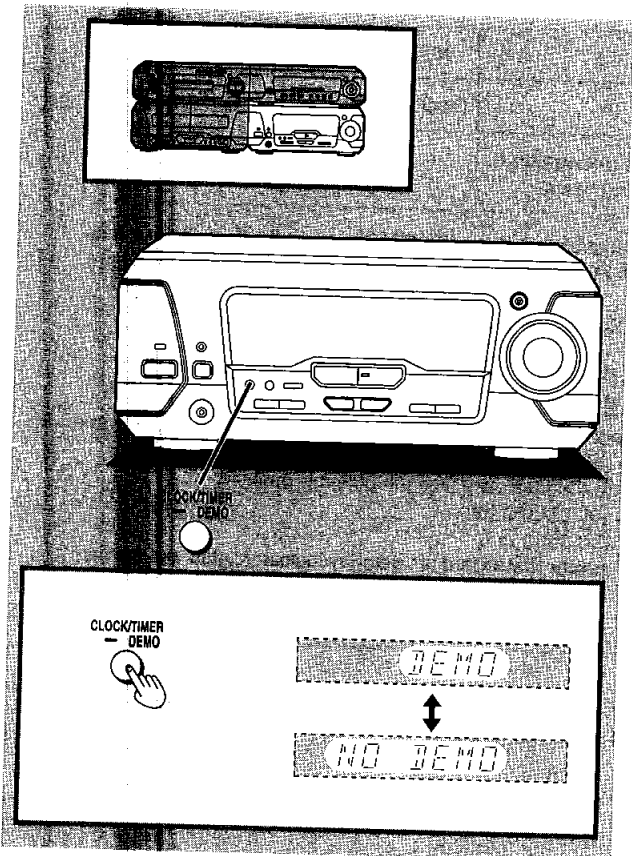
Connect the outdoor antenna without removing the AM loop antenna. Run 5 to 12 m of vinyl-covered wire horizontally along a window or other convenient location.

#### Note

When the unit is not in use, disconnect the outdoor antenna to prevent possible damage that may be caused by lightning. Never use an outdoor antenna during an electrical storm.



## Turning the Demo Function Off (DEMO)



If the clock has not been set, a demonstration of the display is shown when the unit is off.

This function is set to on at the time of purchase.

To get the most from the ECO mode, turn the demo function off.

Press and hold [CLOCK/TIMER, -DEMO] until "NO DEMO" is displayed.

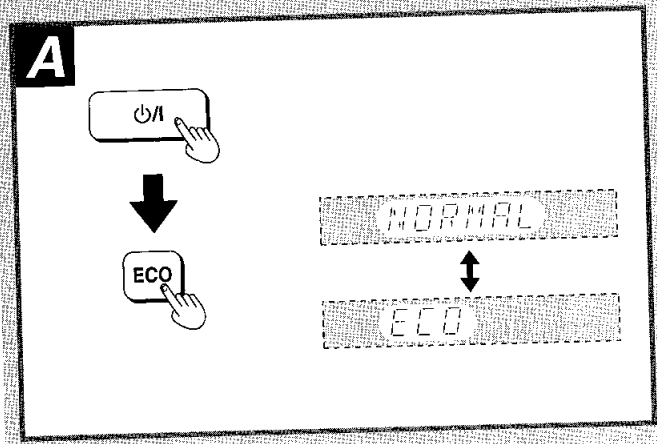
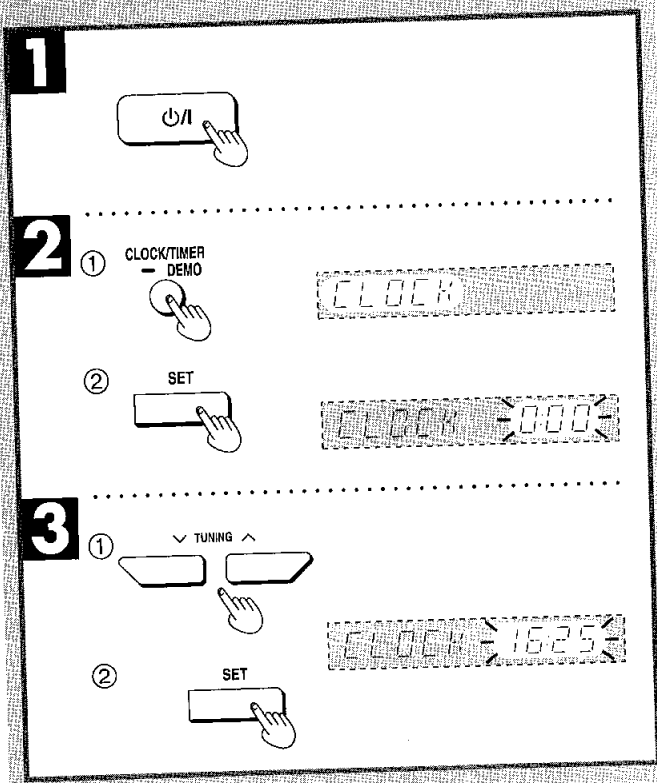
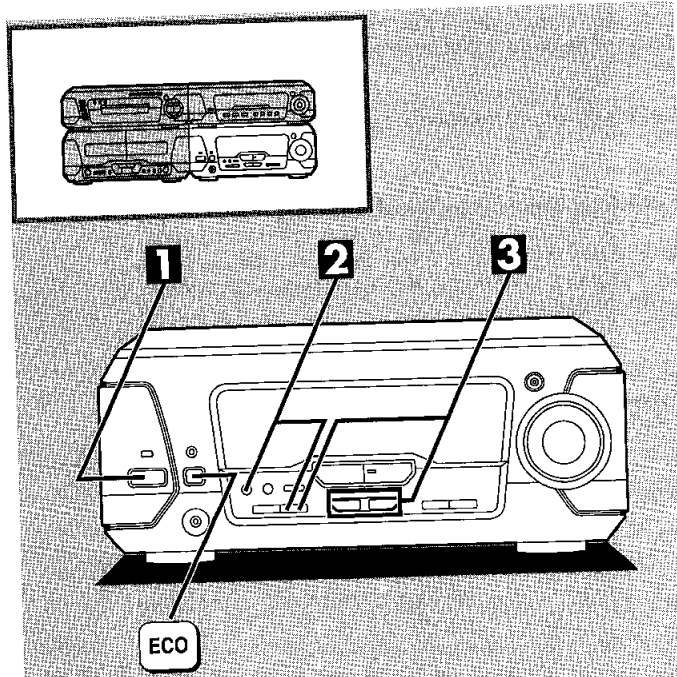
Every time you press and hold the button;

NO DEMO (off)  $\rightleftharpoons$  DEMO (on)

#### Note

Once the clock has been set the demo cannot be turned on when the unit is off.

## ■ Setting the Time



This is a 24-hour display clock.

The figure shows how to set the time for 16:25.

- 1** Press [⏻/⏻] to turn the unit on.
- 2** **1** Press [CLOCK/TIMER, -DEMO] to show "CLOCK".  
Every time you press the button;  
CLOCK → Ⓞ PLAY → Ⓞ REC → Original display
- Within 5 seconds:**
- 2** Press [SET].
- 3** **1** Press [TUNING (∨ or ∧)] to set the present time on the display.  
The time display can be changed in one minute units by tapping the buttons, and quickly by holding down the buttons.
- 2** Press [SET].  
The display will return to the previous display after about 3 seconds.

### To display the clock:

Press [CLOCK/TIMER, -DEMO].  
The time is shown for about five seconds.  
The time is shown constantly when the unit and ECO mode are off.

## ■ ECO mode **A**

When this mode is used the power consumed when the unit is switched to standby mode reduces from a maximum of 11 W to 0.6 W  
This mode is set to on at the time of purchase.

|                                   | NORMAL (off)        | ECO (on) |
|-----------------------------------|---------------------|----------|
| Display                           | Clock display, etc. | Blank    |
| Power consumption in standby mode | 11 W                | 0.6 W    |

The demonstration is shown if DEMO is on, regardless of the condition of the ECO mode. Turn DEMO off if ECO is used.

### Turning ECO on and off:

**Press [⏻/⏻] to turn the unit on.**  
**Press [ECO].**

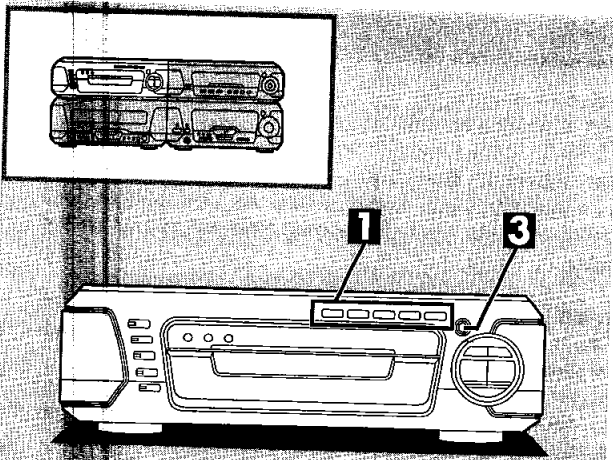
The current ECO mode is displayed. Press again to change the mode.  
The display changes each time the button is pressed:  
NORMAL (off) ↔ ECO (on)  
When ECO is on:  
When the power is switched off, standby indicator lights, but the display panel remains blank.

### Note

When the unit is off, the mode can be switched from NORMAL to ECO, but not the other way.



# Listening to Compact Disc



Always stop the changer before loading or changing CDs. You cannot change CDs while a disc is playing.

## How to load CDs

- 1** Press [DISC 1]–[DISC 5], whichever you want to open.
- 2** Set the CD in the tray.  
Repeat steps **1** and **2** to load the other trays.
- 3** Press [**▲** OPEN/CLOSE].  
The tray will close and the disc No., number of tracks and total playing time will be shown on the display.

## To prevent damage

Always observe the following points.

- Load only 1 CD per tray. **A**
- Load CDs as shown in figure **B**.  
An adapter is not needed with 8 cm CDs (singles).
- Set the system on a flat, level surface.  
Do not set it on top of magazines, inclined surfaces, etc.
- Do not move the system while trays are opening/closing, or when loaded.
- Always unload all trays before moving the system.
- Do not put anything except CDs in trays.
- Do not use cleaning CDs or CDs which are badly warped or cracked.
- Do not use CDs with poorly attached labels or stickers. Adhesive protruding from underneath stickers or left over from peeled off stickers can cause the system to malfunction.
- Do not use irregular shaped CDs. **C**

**1**

**2**

Label must face upward

**3**

OPEN/CLOSE

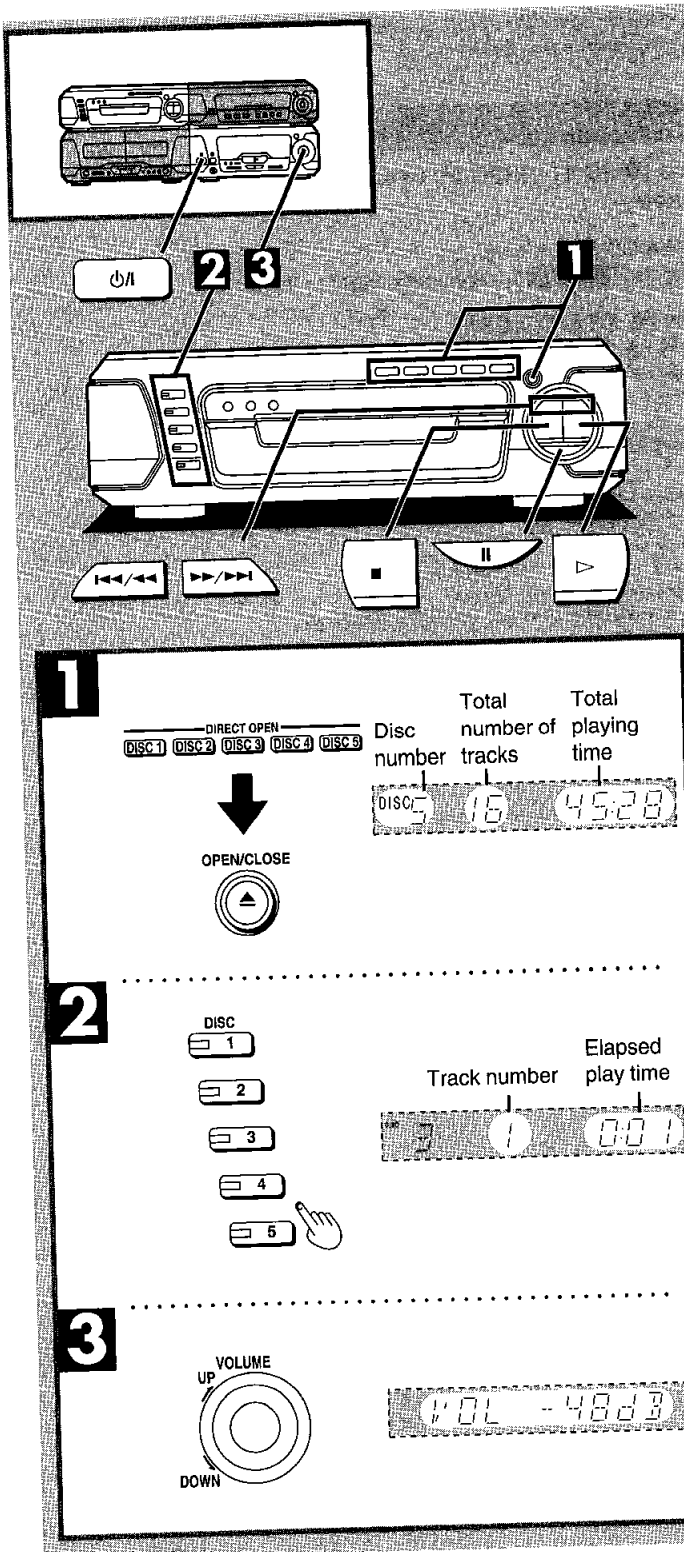
| Disc number | Number of tracks | Total playing time |
|-------------|------------------|--------------------|
| DISC 1      | 16               | 45:28              |

**A**

**B**

|         |  |  |
|---------|--|--|
| 8cm CD  |  |  |
| 12cm CD |  |  |

**C**



## Sequential play

### Preparation:

Press [⏻/⏻] to turn the unit on.

### 1 Insert CDs in the trays.

When the "CD" input source is selected, disc number, total number of tracks, and total playing time will appear on the display.

### 2 Press [1]–[5] to select the disc you want.

(If the desired CD is indicated on the display panel the same operation can be accomplished by pressing [▷].) Play will start from the first track on the disc shown on the display, and will continue until the last track of the final disc (see below).

### 3 Adjust the volume.

#### To stop the disc:

Press [■].

#### To temporarily stop the disc:

Press [⏸]. The play indicator flashes green.

To play again, press [▷].

#### Skipping tracks backward and forward:

Press [⏮/⏮] to skip backward. Press [⏭/⏭] to skip forward.

#### Searching through tracks during play:

Press and hold [⏮/⏮] to search backward. Press and hold [⏭/⏭] to search forward.

#### What is meant by "final disc"?:

For example, if play starts from disc 4, disc 3 will be the "final disc".

#### Order of progression:

Disc 4→5→1→2→3

#### When "NO DISC" display appears:

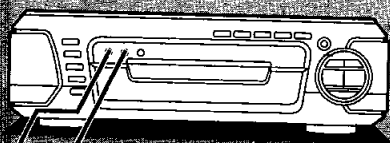
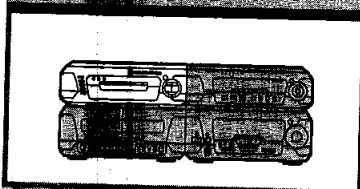
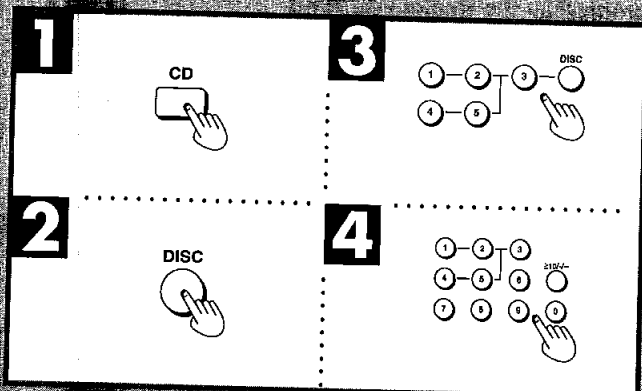
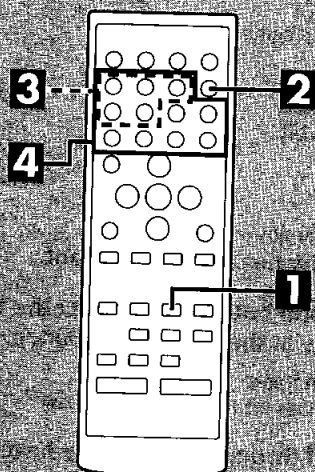
It indicates that a CD has not been installed.

#### For your reference:

If you press [▷] instead of [▲ OPEN/CLOSE] after inserting a CD, the tray will close and play will start directly from the track 1.

#### Note

- During random play, you cannot skip to tracks which have already been played.
- During program play or random play, you cannot search-forward/backward over tracks.
- During program play, skipping is in always in the programmed order, whether forward or backward.

**A****B**

REPEAT

**C**

RANDOM

**Direct access play****A**

Direct access allows you to start sequential play from a specific track to the last track of the final disc.

by remote control only

- 1** Press [CD].
- 2** Press [DISC].
- 3** (within 10 seconds or so)  
Press [1]–[5], whichever disc you want.
- 4** Press the numeric button(s) to select the desired track number.

**To select a two-digit track:**

Press [ $\geq 10$ /+/-] and then the two numbers you want within 10 seconds or so.

**Repeat play****B**

This function repeats the play of all tracks of all discs.

Press [REPEAT] before or during play.

**To cancel repeat play:**

Press [REPEAT] once again.

**To repeat only your favorite track(s)**

1. Program the track(s) you want.
2. Press [REPEAT] and make sure "↻" is displayed.
3. Press [▷]. Play will start.

**Random play****C**

This function automatically selects a sequence of tracks to be played in random order.

**Press [RANDOM].**

Random play will start.

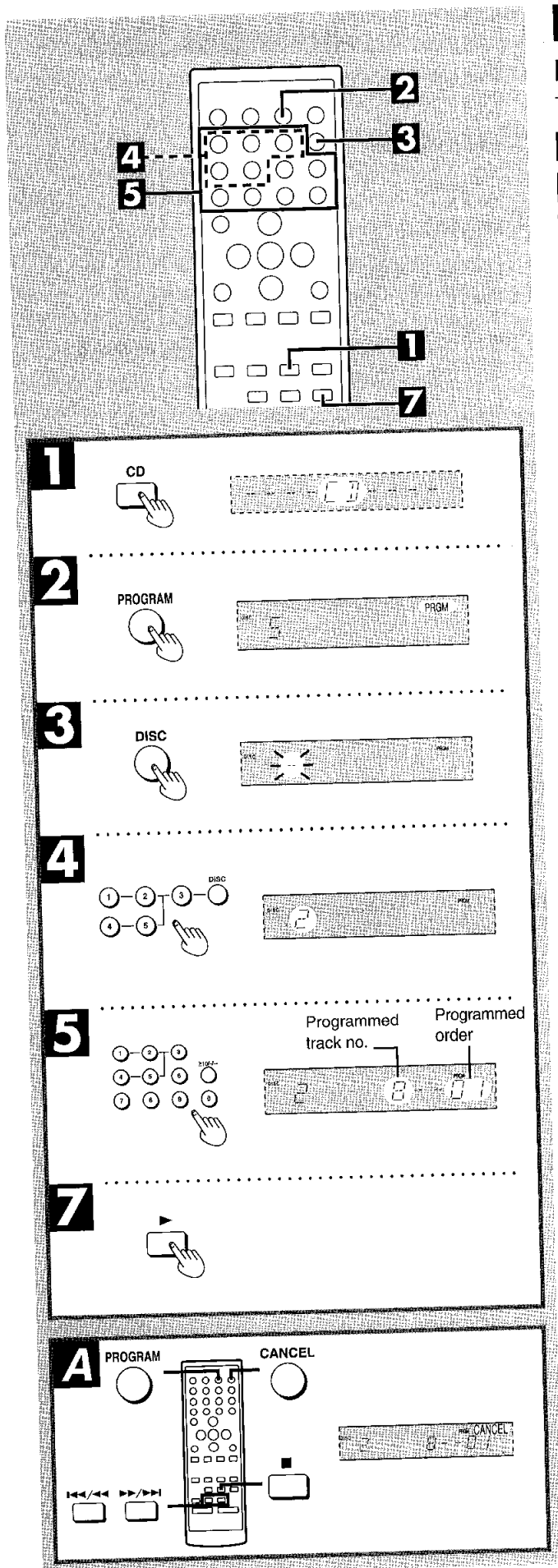
Play will stop automatically when all tracks on all of the discs finish playing randomly.

**To cancel random play:**

Press [RANDOM] once again.

**For your reference:**

In the program play mode, the programmed tracks will be played randomly.



## Program play

### by remote control only

This function allows you to program up to 24 tracks.

- 1** Press [CD].
- 2** Press [PROGRAM].
- 3** Press [DISC].
- 4** (within 10 seconds or so)  
Press [1]–[5] whichever disc you want.
- 5** Press the numeric button(s) to select the track you want to play in the desired sequence.  
  
To select a two-digit track:  
Press [≥10/-/-] and then the two numbers you want.
- 6** Repeat steps **3** through **5** until you have programmed all the tracks you want.
- 7** Press [▶].  
Play will start in the programmed sequence.  
Play will stop automatically when all the programmed tracks have been played.

### To cancel program play mode:

Press [PROGRAM].

"CLEAR" will appear on the display for approximately 1 second and all the programmed tracks will be cancelled.

### When "FULL" appears:

The number of programmed tracks is limited to 24. No further tracks can be programmed.

### When "--:--" appears:

The total playing time of the programmed tracks has exceeded 99 minutes 59 seconds, or you tried programming a track which is numbered 25 or more, or you tried programming a disc not in playing position. In any case, you can still program and play discs.

### You can do the following during program play. **A**

#### • Check program contents.

1. Press [CANCEL]. "CANCEL" will light.
2. Press [I◀◀/◀◀] or [▶▶/▶▶]. Every time you press one of the buttons, the track and program No. are shown on the display.
3. After the total playing time appears on the display, press [CANCEL]. "CANCEL" goes out.

#### • Add to the program.

Repeat steps **3** through **5**.

#### • Cancel entries.

A specific track only:

- ① Press [CANCEL]. "CANCEL" will light.
- ② Press the numeric button(s) of the track you want to cancel, or press [I◀◀/◀◀] or [▶▶/▶▶] to select the track you want to cancel and then press [CANCEL].
- ③ Press [CANCEL] once again. "CANCEL" goes out.

All tracks:

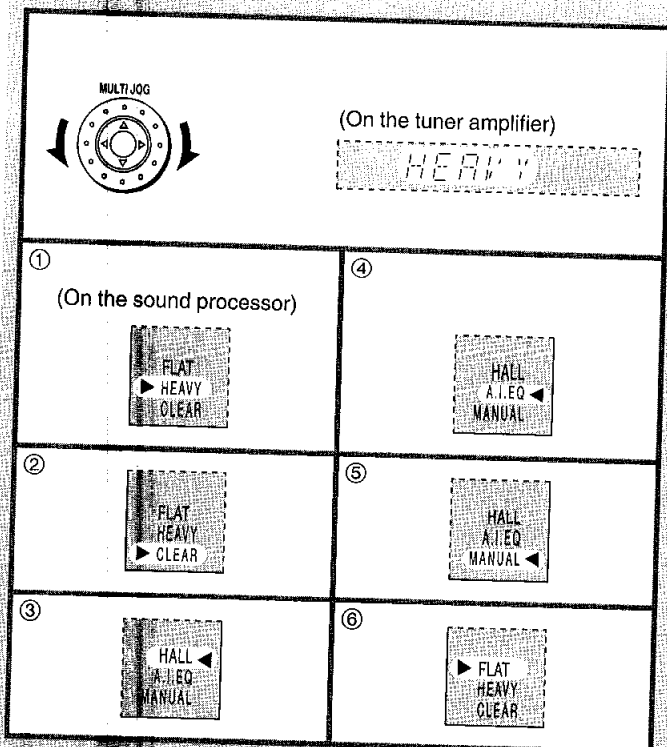
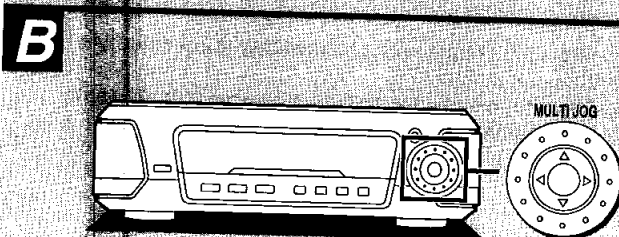
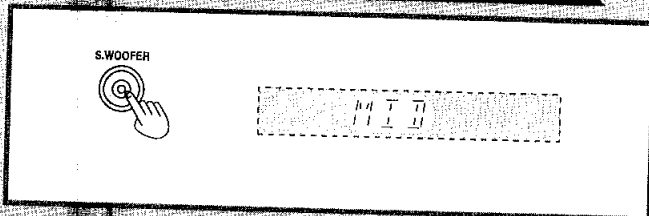
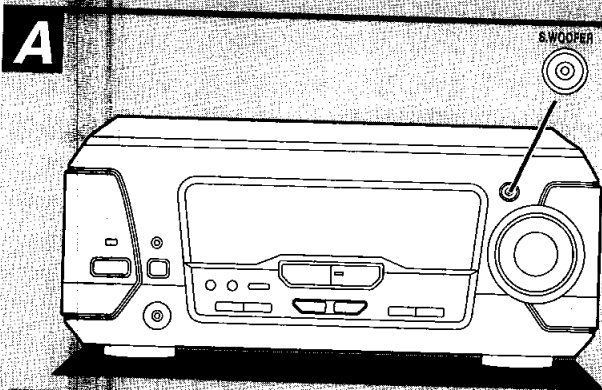
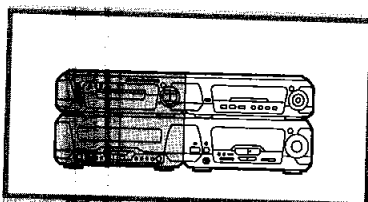
Press [PROGRAM], or press [■] while play is stopped.

### For your reference:

#### To program the track you are listening to:

If you press [PROGRAM] during playback, the program mode will engage and the current track will be automatically recorded as program No. 1.

## ■ Boosting the Super Woofer **A**



Press [**S. WOOFER**].  
[S. WOOFER] lamp lights.

- When listening to the sound through the speakers:  
MID (medium) → MAX (high) → Light off (OFF)
- When listening to the sound through the headphones:  
Light on (ON) ↔ Light off (OFF)

**To cancel**

Press [**S. WOOFER**] to select OFF.

## ■ Using the Built-in Sound Quality/ Sound Field Settings **B**

Turn [**MULTI JOG**] to select the sound quality or sound field.

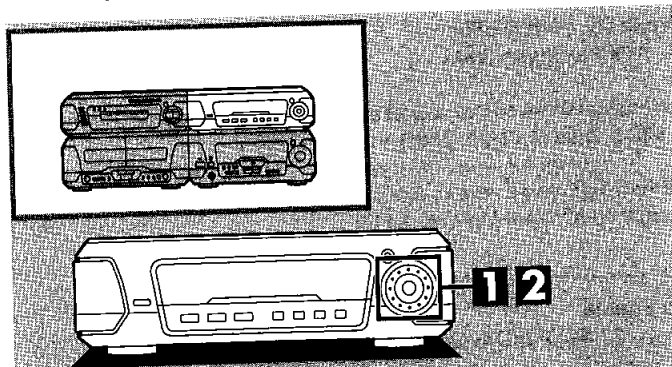
When [**MULTI JOG**] is turned clockwise the settings are selected in the following sequence.

- ① **HEAVY (sound quality)**  
Select this when playing rock or other kinds of music that sound better with an added punch.
- ② **CLEAR (sound quality)**  
Select this for jazz or other kinds of music for which clarity in the treble range is desired.
- ③ **HALL (sound field)**  
Select this to add an expansiveness to the sound to produce the atmosphere of a great concert hall.
- ④ **AI EQ**
- ⑤ **MANUAL**
- ⑥ **FLAT**  
The original display is restored on the display panel in about 5 seconds.

**To release the equalizer**

Turn [**MULTI JOG**] to select "FLAT".

## ■ Varying the Sound Quality with the Manual Equalizer (Manual EQ)



### 1 Turn [MULTI JOG] to select "MANUAL".

When [MULTI JOG] is turned clockwise, the settings are selected in the following sequence.

- ① HEAVY
- ② CLEAR
- ③ HALL
- ④ AI EQ
- ⑤ **MANUAL**
- ⑥ FLAT

### 2 Adjust the sound quality.

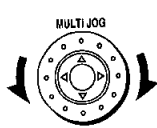
- ① ← → direction: For selecting the range of the sound to be adjusted

#### Characteristics of each sound range

- Under 100 Hz: Super woofer range
- Around 315 Hz: Bass to midrange
- Around 1 kHz: Midrange
- Around 3.15 kHz: Midrange to treble
- Above 10 kHz: Treble

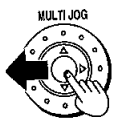
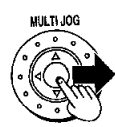
- ② ↓ ↑ direction: For adjusting the level  
Repeat steps ① and ② to set the desired sound quality.  
The original display is restored on the display panel in about 5 seconds.

# 1

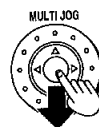
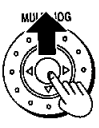


# 2

①



②



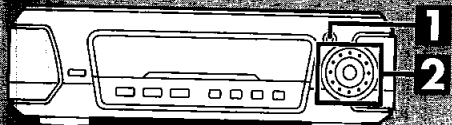
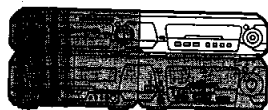
#### To release the equalizer

Turn [MULTI JOG] to select "FLAT".

#### Note

- The sound quality setting is stored automatically. It is recalled when "MANUAL" is next selected.
- All recordings are performed at the flat setting even if an alternative sound quality setting has been selected.

## ■ Varying the Sound Quality with the Acoustic Image (AI) Equalizer (3D AI EQ)



It is possible to use the acoustic image equalizer (AI EQ) together with the surround effect to create your own sound effect. The AI EQ equalizer uses the SOFT, SHARP, HEAVY and LIGHT sound quality coordinates to achieve subtle sound quality settings with ease.

### 1 Press [3D AI EQ] to adjust the surround level.

Everytime you press the button;  
AI EQ → 3D AI 1 → 3D AI 2

### 2 Adjust the sound quality.

① ← → direction: SOFT–SHARP setting

② ↓ ↑ direction: LIGHT–HEAVY setting

Repeat steps ① and ② to set the desired sound quality.

The original display is restored on the display panel in about 5 seconds.

### To release the equalizer

Turn [MULTI JOG] to select "FLAT".

#### Note

- The sound quality setting is stored automatically. It is recalled when "AI EQ" is next selected.
- All recordings are performed at the flat setting even if an alternative sound quality setting has been selected.
- 3D AI 1 and 3D AI 2 cannot be selected while the 6CH DISCRETE INPUT, DOLBY PRO LOGIC, SUPER SURROUND, SIMULATED STEREO and VIRTUAL DOLBY SURROUND modes are on.

# 1

3D AI EQ



(On the tuner amplifier)



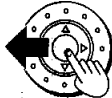
(On the sound processor)



# 2

①

MULTI JOG



MULTI JOG

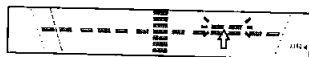


②

MULTI JOG





MULTI JOG



# Surround Systems

• Select the surround mode appropriate to the source you are using. Read the following explanations to aid your selection.

| Surround system   | Features  | Recognizing the sound sources and software that can be used   |                   |   |   |
|---|---|---|-------------------|---|---|
| 6CH DISCRETE INPUT  | <ul style="list-style-type: none"> <li>• Dolby Digital is a discrete 5.1 channel surround system developed for cinema use. The sound signals in Dolby Digital format are compressed to 1/10 their original size, allowing an entire movie to be recorded on a single DVD.</li> <li>• You will need a DVD player that has a built in decoder to enjoy DVDs with this unit.</li> <li>• Connect a subwoofer (not included) to SUBWOOFER OUT terminal on the rear panel of the sound processor to increase the effect.</li> </ul> | <p>Discs with the following mark are recorded in Dolby Digital:</p> <ul style="list-style-type: none"> <li>• DVD</li> <li>• Laser Disc</li> </ul>    |                   |   |   |
| DOLBY PRO LOGIC   | <ul style="list-style-type: none"> <li>• This system was developed to get a better sense of presence from sources encoded with Dolby Surround.</li> <li>• The feeling of position has been improved by the addition of a separate center speaker channel.</li> <li>• This unit has built-in Dolby Pro Logic circuitry so you can enjoy Dolby Surround by connecting the speakers.</li> </ul>  | <p>Software with the following mark is recorded in Dolby Pro Logic:</p> <ul style="list-style-type: none"> <li>• Laser Disc</li> <li>• DVD</li> <li>• Video tape (VCR)</li> <li>• CD</li> </ul>  <p>This mode cannot be used with the radio and 6CH DISCRETE INPUT mode.</p> |                   |   |   |
| <table border="1"> <tr> <td rowspan="2" style="vertical-align: middle;"><b>SUPER SURROUND</b></td> <td style="text-align: center;"><b>MOVIE mode</b></td> </tr> <tr> <td style="text-align: center;"><b>MUSIC mode</b></td> </tr> </table><br><b>SIMULATED STEREO</b> | <b>SUPER SURROUND</b>   | <b>MOVIE mode</b>   | <b>MUSIC mode</b> | <ul style="list-style-type: none"> <li>• This mode adds surround effects to movie software that isn't recorded with the above systems. In MOVIE mode you can adjust the volume of the surround speaker to get the best surround effect.</li> <li>• This mode adds surround effects to normal music sources.</li> <li>• This mode adds stereo-like effects to monaural sound sources.</li> </ul> | <p>Any general sound source can be used.</p> <ul style="list-style-type: none"> <li>• CD</li> <li>• Tape</li> <li>• Video tape</li> </ul> <p>This mode cannot be used with the radio and 6CH DISCRETE INPUT mode.</p><br><p>Any general sound source recorded in monaural can be used.</p> <ul style="list-style-type: none"> <li>• CD</li> <li>• Tape</li> <li>• Video tape</li> </ul> <p>This mode cannot be used with the radio and 6CH DISCRETE INPUT mode.</p> |
| <b>SUPER SURROUND</b>   |   | <b>MOVIE mode</b>   |                   |   |   |
|   | <b>MUSIC mode</b>   |   |                   |   |   |



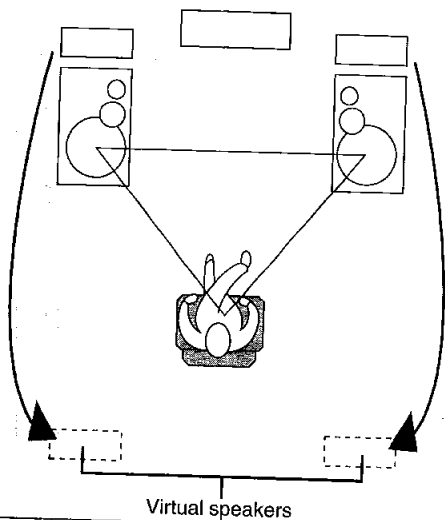
### Add these audio effects to improve the experience

#### • Check the set-up of your speakers.

Set your speakers up to suit the surround mode you have selected to get the best surround effect.  
These modes cannot be used with the radio.

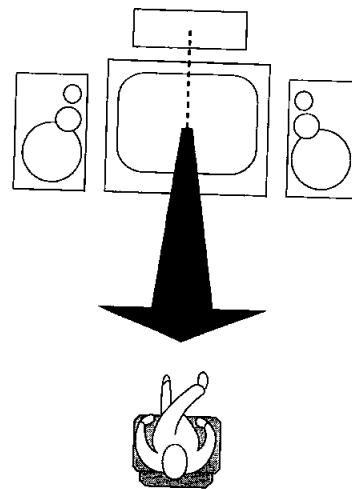
#### Virtual rear surround effect

- This mode is useful if you have to place your surround speakers on the front speakers because of the room's layout.
- This mode makes it seem like the sound from the surround speakers is coming from behind you.
- It is effective when using 6CH DISCRETE INPUT, DOLBY PRO LOGIC, or SUPER SURROUND MOVIE mode. (The [VIRTUAL REAR SURROUND] lamp turns orange.)



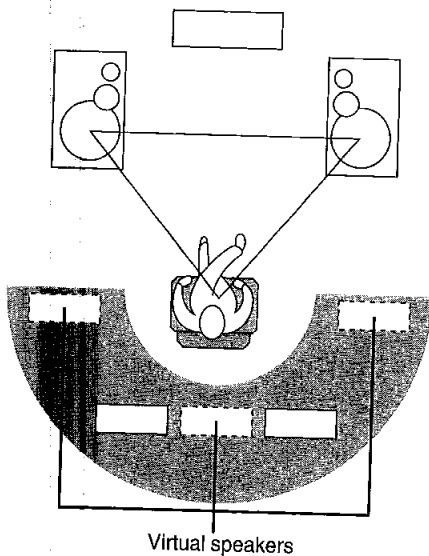
#### Center focus effect

- This mode makes it seem like the sound from the center speaker channel (dialogue, etc.) is coming from within the television.
- The center speaker must be placed on top of the television.
- It is effective when using 6CH DISCRETE INPUT or DOLBY PRO LOGIC. (The [CENTER FOCUS] lamp turns orange.)



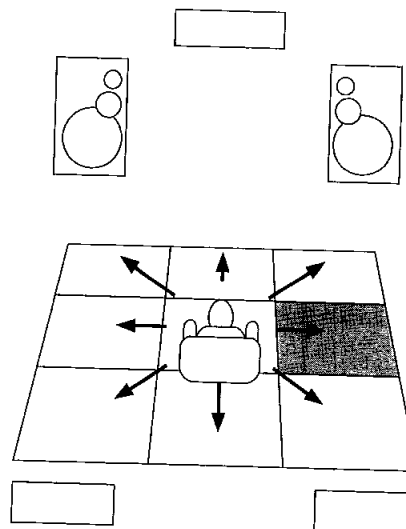
#### Multi rear surround effect

- Through processing of the surround sound signals, this mode makes it seem like there are multiple surround speakers in your room.
- This mode increases the cinema-like sense of presence.
- It is effective when using 6CH DISCRETE INPUT, DOLBY PRO LOGIC, or SUPER SURROUND MOVIE mode. (The [MULTI REAR SURROUND] lamp turns orange.)

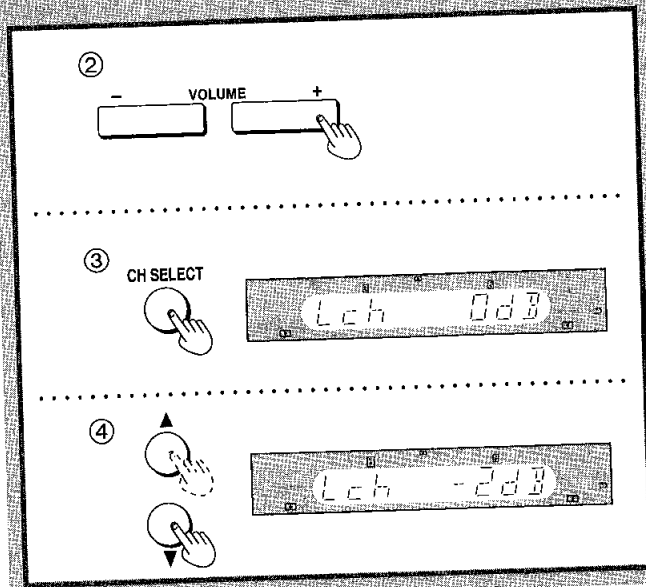
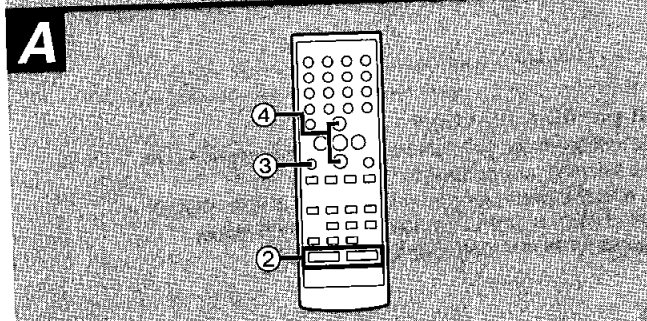
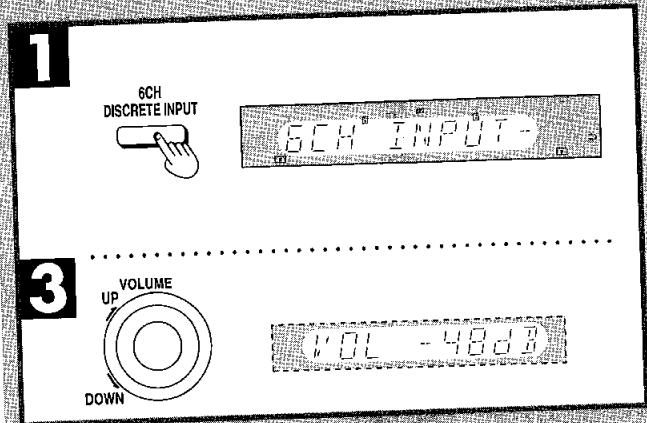
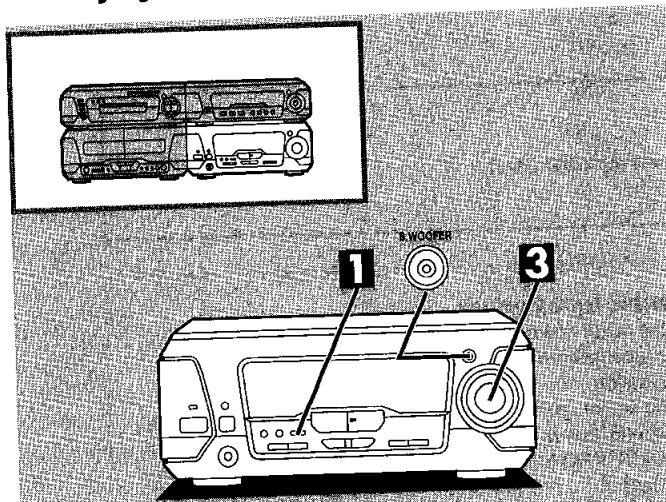


#### Seat position function

- This function helps maintain the sound signal position even if the listening position itself is changed.
- It is effective when using 6CH DISCRETE INPUT, DOLBY PRO LOGIC, or SUPER SURROUND MOVIE mode. (The [SEAT POSITION] lamp turns orange.)



## ■ Enjoying Sound with 6 CH DISCRETE INPUT



This mode allows you to enjoy the 5.1 channel Dolby Digital surround effects recorded on DVDs when they are played on a player which has 5.1 channel analog output.

### 1 Press [6CH DISCRETE INPUT].

#### For your reference

If you have connected a subwoofer (not included), press and hold [S. WOOFER] for about 2 seconds so "SUB W ON" is shown on the display. The SUBWOOFER can only be turned on and off if 6CH DISCRETE INPUT mode is selected.

### 2 Start playing the source (DVD).

#### Note

Do not switch input to AUX (DVD). This cancels 6CH DISCRETE INPUT mode.

### 3 Adjust the volume.

### To adjust the volume of each speaker **A**

Sit in the normal listening position and make the adjustments with the remote control.

#### Preparation:

Press [6CH DISCRETE INPUT] to select 6CH DISCRETE INPUT mode.

① **Output the test signal from the DVD player (not included).**  
Set the channel level to 0 dB on the DVD player, and adjust the channel level on this system.

② **Press [VOLUME (- or +)].**  
Set the volume to the normal listening level.

The following steps are for setting the output level of the front speakers and the other speakers to approximately the same level.

③ **Press [CH SELECT].**  
Select the speaker channel to be adjusted.

- L: Front speaker (Left)
- C: Center speaker
- R: Front speaker (Right)
- RS: Surround speaker (Right)
- LS: Surround speaker (Left)
- SW: Subwoofer

④ **Press [▲] or [▼].**  
Adjust the output level.  
▲: Increases the output level  
▼: Decreases the output level  
Repeat steps ③ and ④ to adjust the level accordingly.

#### Note

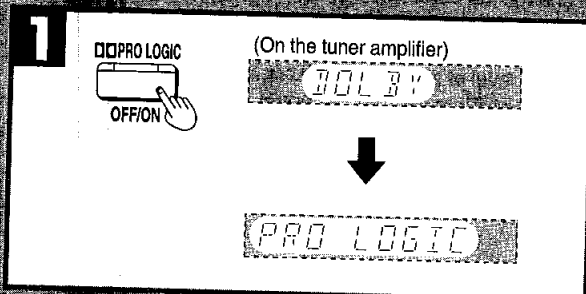
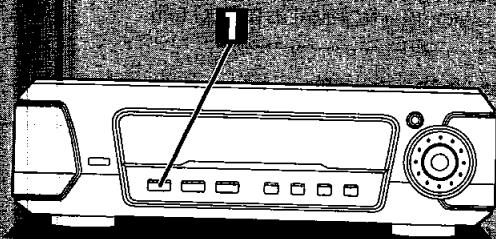
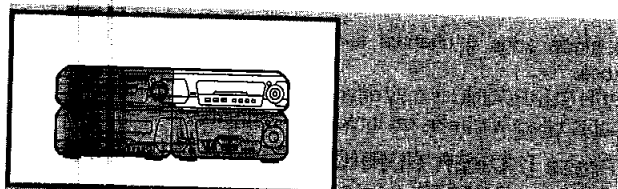
You cannot record sound or use MIC MIX when [6CH DISCRETE INPUT] is selected.

To record or use MIC MIX with DVDs, reconnect the DVD player from its MIXED OUT terminals to this unit's AUX (DVD) or VCR (EXT) IN terminals and select the external source with [INPUT SELECTOR].

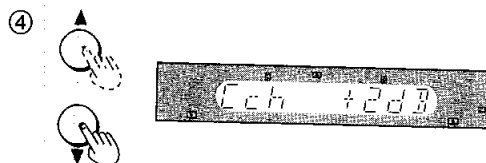
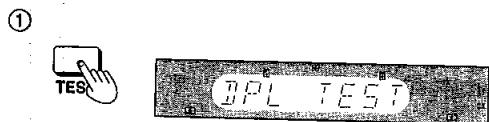
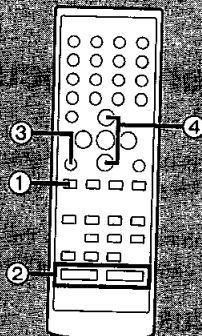
#### Reference:

- Add audio effects to improve the surround effect.
- The 6CH DISCRETE INPUT mode is canceled when another source is selected.

# ■ To Playback a Dolby Surround Source with Dolby Pro Logic



A



Use this mode when playing sources recorded with Dolby Pro Logic.

**1** Press [PRO LOGIC, OFF/ON].  
The [PRO LOGIC] lamp lights.

**2** Playback a Dolby Surround source.

## To turn off DOLBY PRO LOGIC

Press [PRO LOGIC OFF/ON].  
The [PRO LOGIC] lamp goes out.

## To adjust the volume of each speaker **A**

Sit in the normal listening position and make the adjustments with the remote control.

### Preparation:

Press [PRO LOGIC OFF/ON] to turn on DOLBY PRO LOGIC.

① Press [TEST].

A test signal is output.

The speaker outputting the test signal is displayed while the test is running.

L: Front speaker (Left)

C: Center speaker

R: Front speaker (Right)

S: Surround speakers

② Press [VOLUME (- or +)].

Set the volume to the normal listening level.

The following steps are for setting the output level of the front speakers and the other speakers to the same listening level.

③ Press [CH SELECT].

Select the speaker channel to be adjusted.

C ch: Center channel

S ch: Surround channel

④ Press [▲] or [▼].

Adjust the output level. The level can be adjusted between +6 and -10.

▲: Increases the output level

▼: Decreases the output level

Repeat steps ③ and ④ to adjust the level accordingly.

## To stop the test signal

Press [TEST] again.

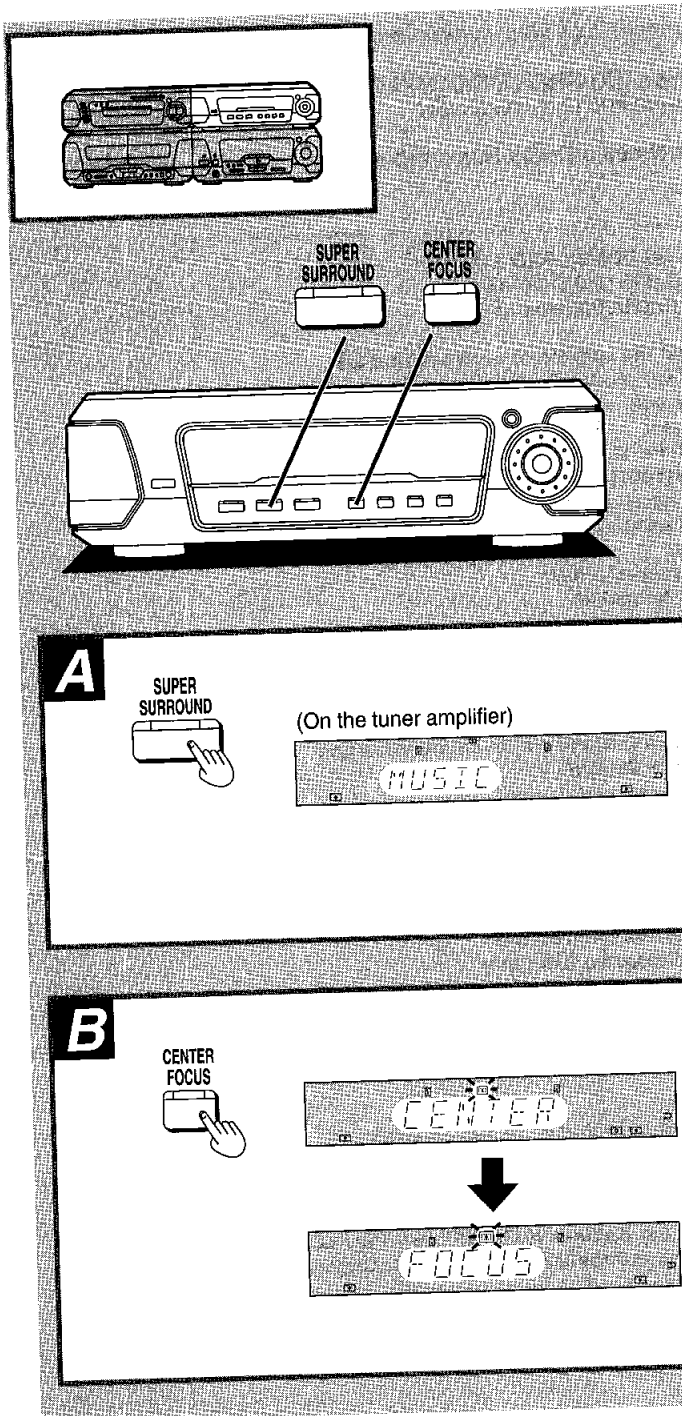
## Reference:

Add audio effects to improve the surround effect.

Manufactured under license from Dolby Laboratories Licensing Corporation.

DOLBY, the double-D symbol and "PRO LOGIC" are trademarks of Dolby Laboratories Licensing Corporation.

## ■ Enjoying Sound with Stereophonics (SUPER SURROUND) **A**



- This mode adds 5 channel surround effects to normal stereo sources.
- SUPER SURROUND is only effective if speakers are used. No discernable effect will be heard through headphones.

### **1** Press [SUPER SURROUND] and select **MOVIE mode or MUSIC mode.**

Each time the button is pressed;  
MUSIC → MOVIE → NORMAL STEREO (off)

### **2** Playback the source.

**To turn off the SUPER SURROUND mode**  
Press [SUPER SURROUND] to select "NORMAL STEREO".

**To adjust the volume of surround speakers**  
You can change the output level of surround speakers manually. While enjoying the desired source:

1. Press [CH SELECT] on the remote control.  
The output level of surround speakers is displayed.
2. Press [▲] or [▼] on the remote control.  
Adjust the output level. The level can be adjusted between +6 and -10.  
▲: Increase the output level  
▼: Decrease the output level

#### **Reference:**

Add audio effects to improve the surround effect.

## ■ Using the Center Focus Effect **B**

- When the center speaker is put on the TV set, this mode makes it seem like the sound from the center speaker is coming from within the television.
- This mode can only be turned on or off if the [CENTER FOCUS] lamp is orange. The mode cannot be used if the lamp is off.

### **Press [CENTER FOCUS].**

The [CENTER FOCUS] indicator turns green.

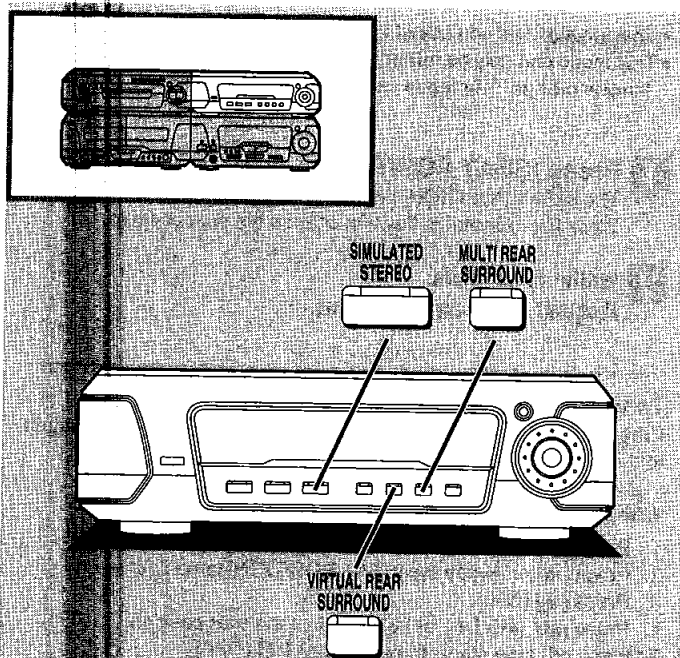
### **To turn off the CENTER FOCUS mode**

Press [CENTER FOCUS].

#### **With the remote control**

1. Press [AV EFFECT].
2. Press [◀] or [▶] so the [CENTER FOCUS] lamp flashes.
3. Press [▼] (OFF) or [▲] (ON).

## ■ Using the Virtual Rear Surround Effect **A**



- When the surround speakers are put on the front speakers, this mode makes it seem like the sound from the surround speakers is coming from behind you.
- This mode can only be turned on or off if the "VIRTUAL REAR SURROUND" lamp is orange. The mode cannot be used if the lamp is off.

### Press [VIRTUAL REAR SURROUND].

The [VIRTUAL REAR SURROUND] lamp turns green.

### To turn off the VIRTUAL REAR SURROUND mode

Press [VIRTUAL REAR SURROUND].

### With the remote control

1. Press [AV EFFECT].
2. Press [◀] or [▶] so the [VIRTUAL REAR SURROUND] lamp flashes.
3. Press [▼] (OFF) or [▲] (ON).

## ■ Using the Multi Rear Surround Effect **B**

- This mode makes it seem like there are multiple surround speakers in your room.
- This mode can only be turned on or off if the [MULTI REAR SURROUND] lamp is orange. The mode cannot be used if the lamp is off.

### Press [MULTI REAR SURROUND].

The [MULTI REAR SURROUND] indicator turns green.

### To turn off the MULTI REAR SURROUND mode

Press [MULTI REAR SURROUND].

### With the remote control

1. Press [AV EFFECT].
2. Press [◀] or [▶] so the [MULTI REAR SURROUND] lamp flashes.
3. Press [▼] (OFF) or [▲] (ON).

## ■ Enjoy the Sound with Simulated Stereo **C**

This mode adds stereo effect to monaural sources.

### 1 Press [SIMULATED STEREO].

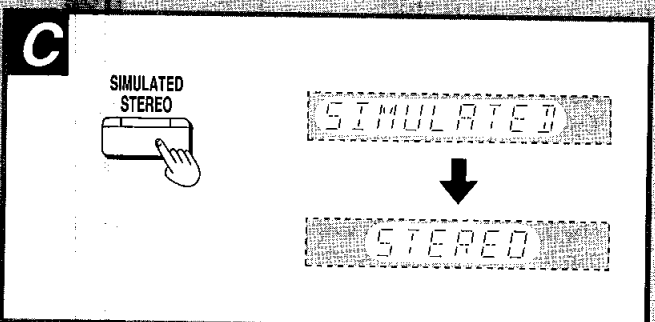
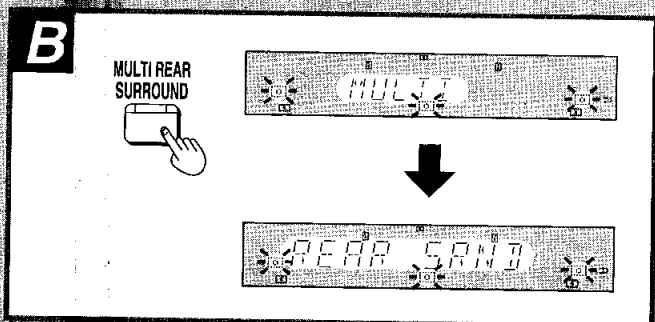
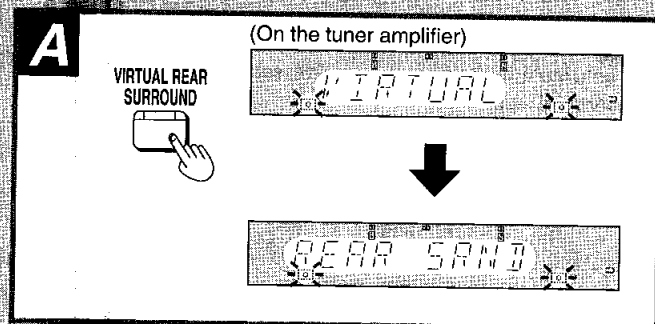
The [SIMULATED STEREO] lamp lights.

### 2 Playback the source.

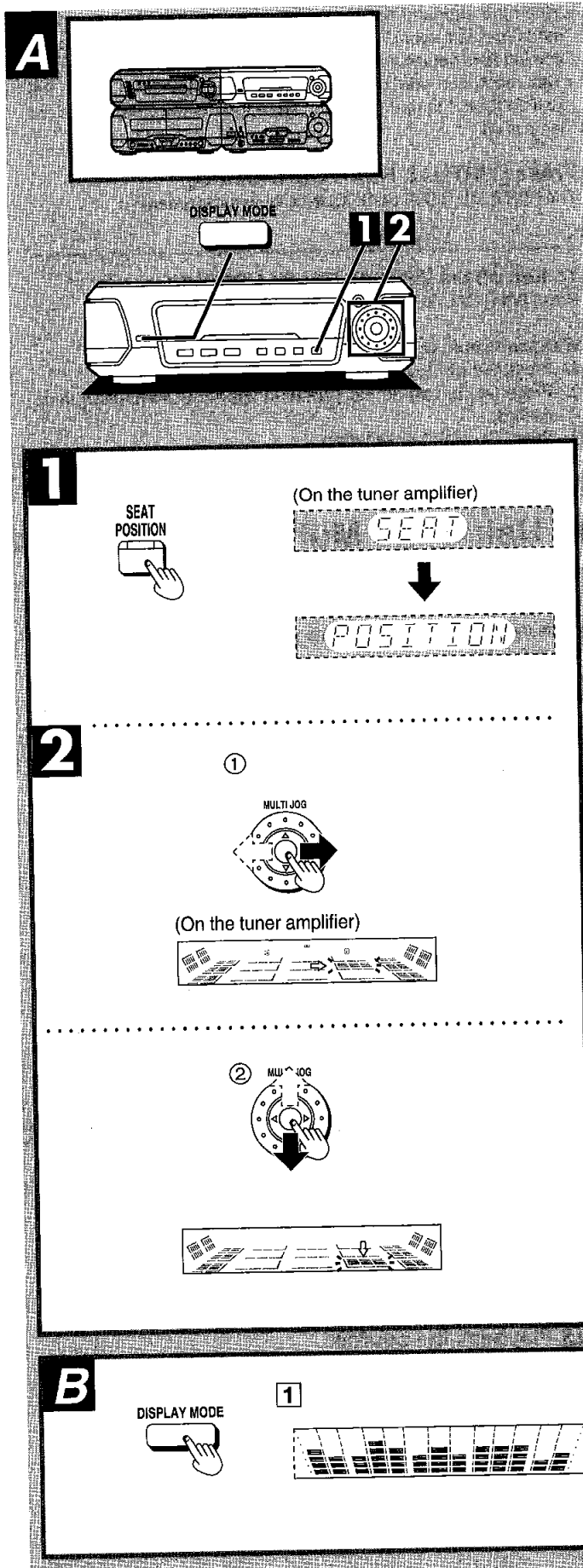
### To turn off the SIMULATED STEREO mode

Press [SIMULATED STEREO].

The [SIMULATED STEREO] lamp goes out.



## ■ Using the Seat Position Function **A**



- This function lets you adjust the listening position for better effect.
- This mode can only be turned on or off if the [SEAT POSITION] lamp is orange. The mode cannot be used if the lamp is off.

### **1** Press [SEAT POSITION].

The [SEAT POSITION] lamp flashes green. While the indicator is flashing change the seat position.

### **2** Within 10 seconds Adjust the seat position.

### To turn off the SEAT POSITION mode

Press [SEAT POSITION] once to select the function and once again to turn it off while the lamp flashes.

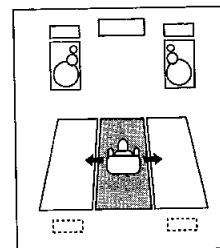
### With the remote control

1. Press [AV EFFECT].
2. Press [◀] or [▶] so the [SEAT POSITION] lamp flashes.
3. Press [▲] (ON).
4. Press [◀], [▶], [▼], or [▲] to adjust the seat position. To turn it off, after steps 1 and 2, press [▼] (OFF).

### Note

- When used with virtual rear surround, seat position is changed in 3 horizontal steps.

### With virtual rear surround



## ■ Concerning the Display **B**

The sound processor shows the level of each sound range with the three types of display described below. **B**

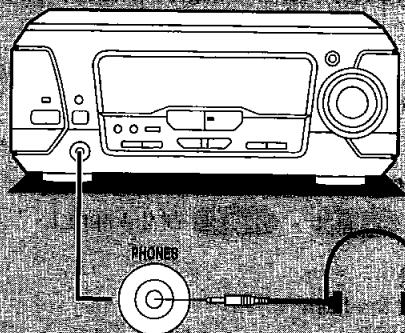
### Press [DISPLAY MODE].

The spectrum display will change as follows.

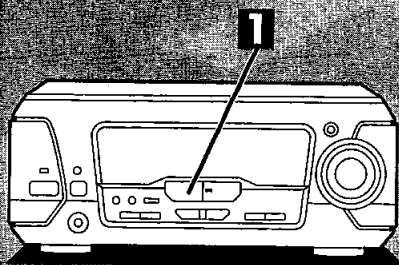
- 1 Normal display**  
This display indicates the strength of the sound in each tonal range.
- 2 Peak-hold display**  
The peak sound value of each sound range is held on the display for about one second after it occurs.
- 3 Aurora display**  
The peak sound value of each sound range is displayed in inverted form.

## Using the External Unit

A



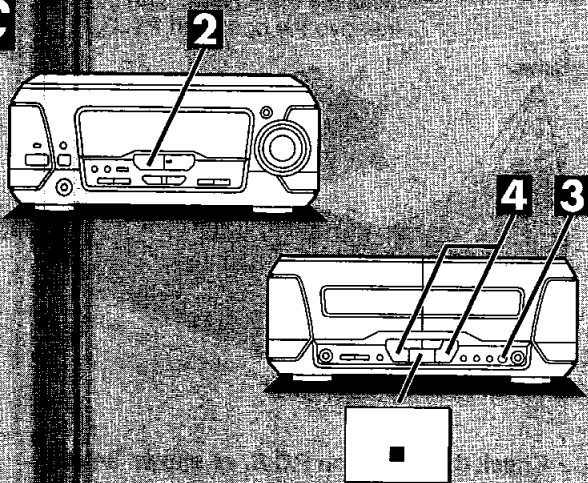
B



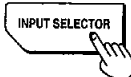
1



C



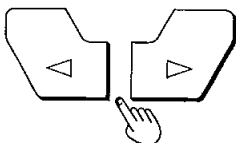
2



3



4



### To use headphones

A

- Before connecting, reduce the volume level.
- Avoid listening for prolonged periods of time to prevent hearing damage.
- Plug type: 3.5 mm stereo

### Listening to an external source

B

#### 1 Press [INPUT SELECTOR] to select the external source.

Each time you press this button, sound sources will be switched as follows.

TUNER → CD → TAPE → VCR (EXT) → AUX (DVD)

#### 2 Operate the external unit which you have connected to the system.

Refer to your equipment's operating instructions.

### Recording from an external source

C

#### 1 Press [▲ OPEN] on deck 2 and insert the tape.

#### 2 Press [INPUT SELECTOR] to select the external source.

#### 3 Press [● REC PAUSE] to put the cassette deck into the recording standby mode.

#### 4 Press [◀] or [▶] to start recording.

#### 5 Start playing the source to be recorded.

Refer to your equipment's operating instructions.

#### To stop recording:

Press [■] on the cassette deck.

#### To briefly interrupt recording:

Press [● REC PAUSE].

The cassette deck will go into the recording standby mode.

#### To resume recording:

Press [◀] or [▶] corresponding to the direction in which recording is taking place.

### Recording on an external unit

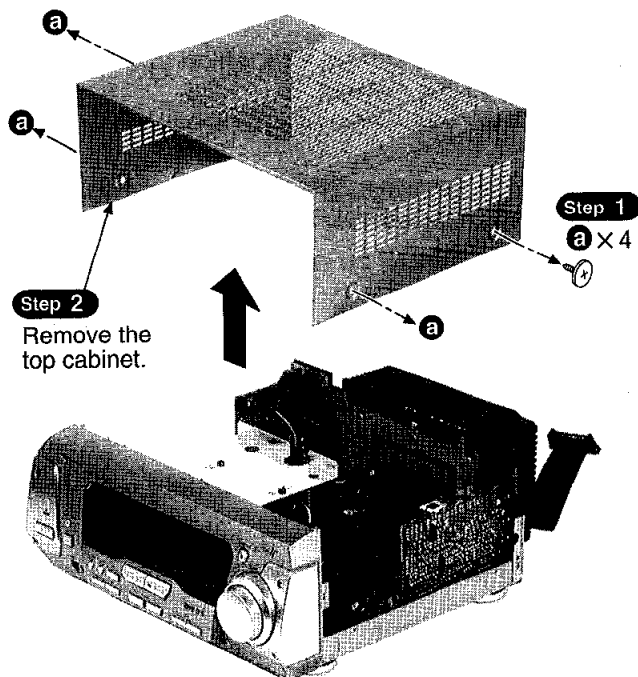
First, select the source with [INPUT SELECTOR].

Start recording on an external unit, and then start playing the source to be recorded.

## ■ Operation Checks and Component Replacement Procedures

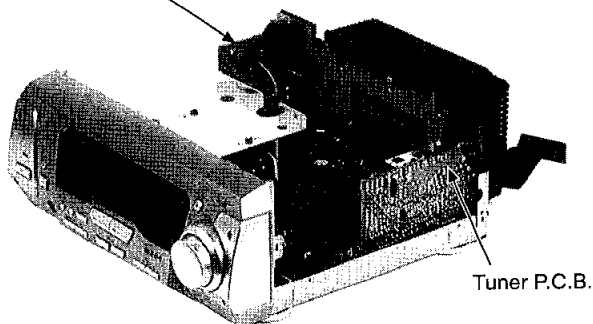
- NOTE**
1. This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.
  2. For reassembly after operation checks or replacement, reverse the respective procedures. Special reassembly procedures are described only when required.

### 1. Checking for the tuner P.C.B. and power supply P.C.B.



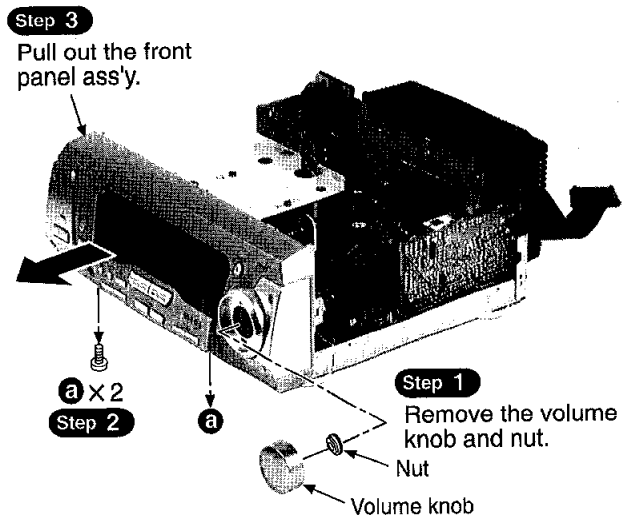
- Check the tuner P.C.B. and power supply P.C.B. as shown below.

Power supply P.C.B.



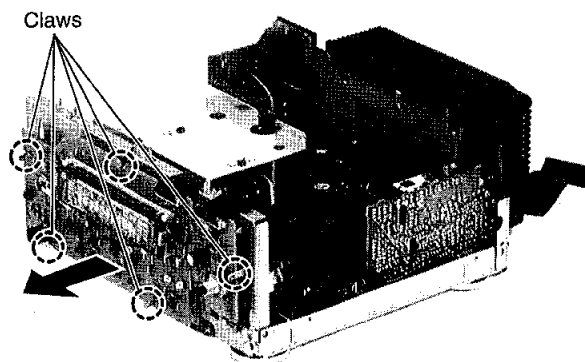
### 2. Checking for the operation P.C.B.

- Follow the Step 1 ~ Step 2 of the item 1.

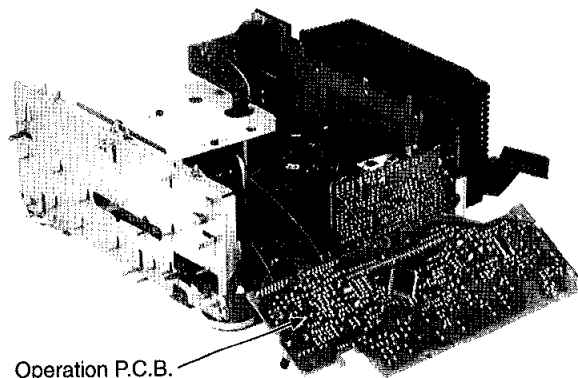


Step 4

- Release the 5 claws, and then remove the operation P.C.B..



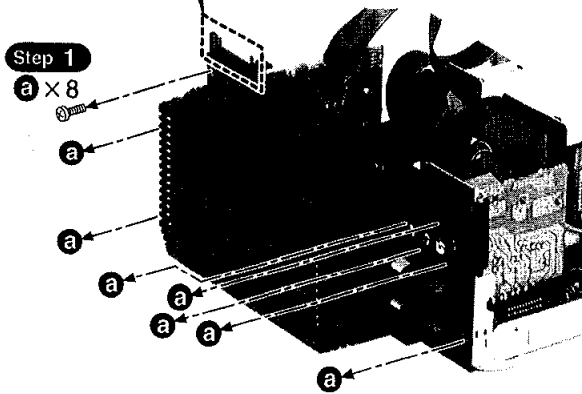
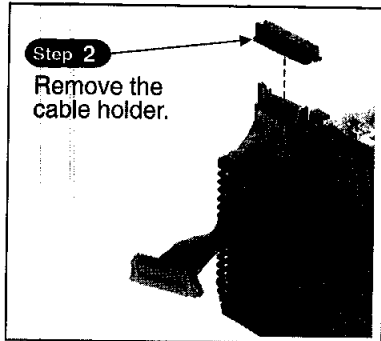
- Check the operation P.C.B. as shown below.



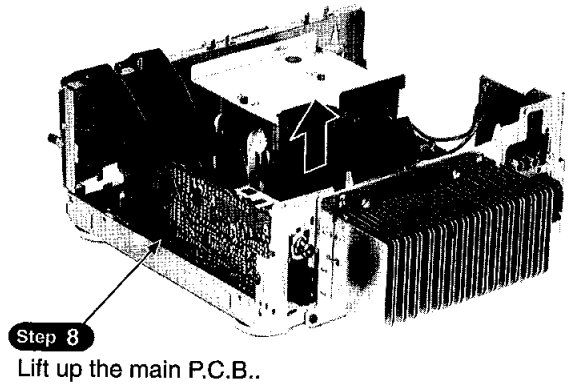
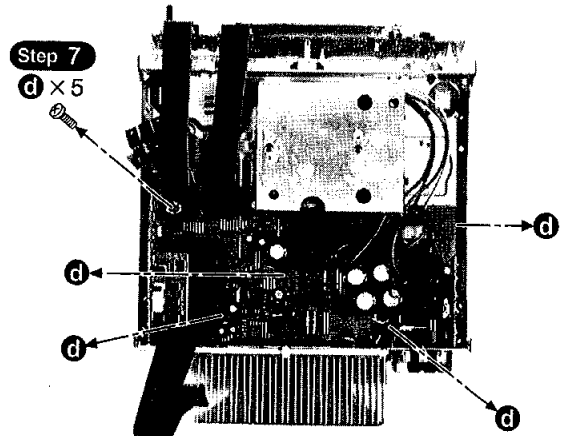
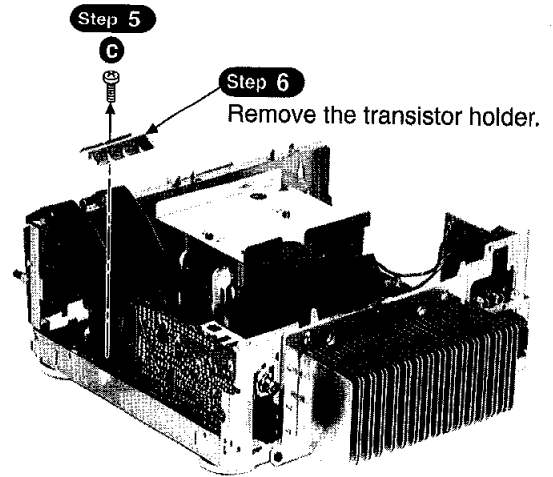
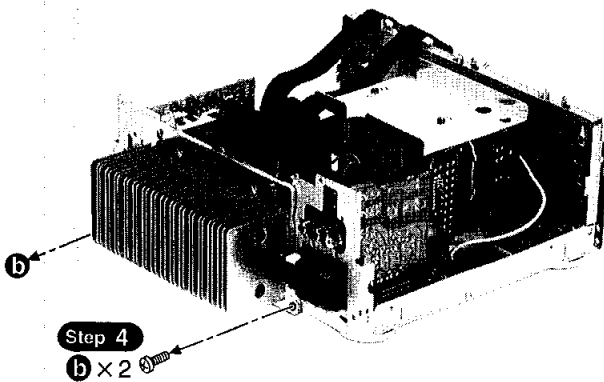
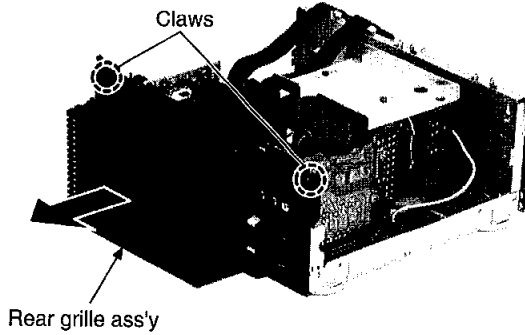


### 3. Checking for the main P.C.B.

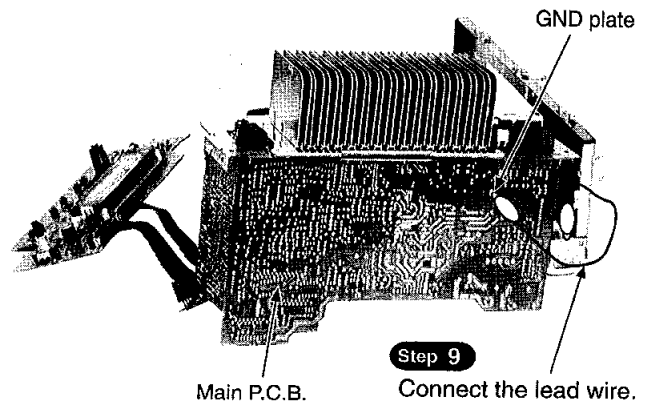
- Follow the Step 1 ~ Step 2 of the item 1.
- Follow the Step 1 ~ Step 4 of the item 2.



**Step 3**  
Release the 2 claws, and then remove the rear grille ass'y.

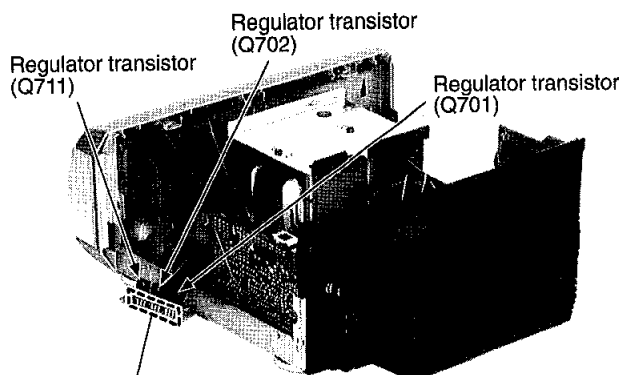
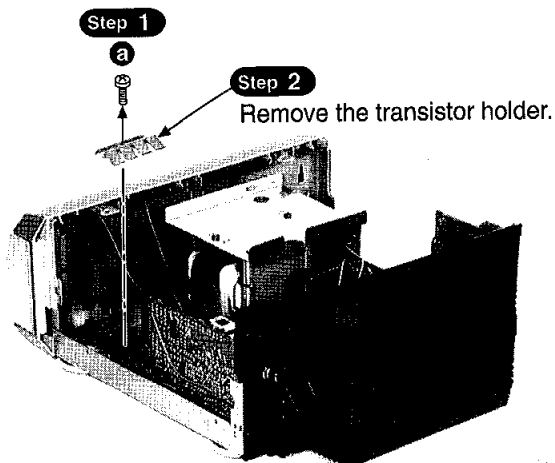


Check the main P.C.B. as shown below.



#### 4. Replacement for the regulator transistor

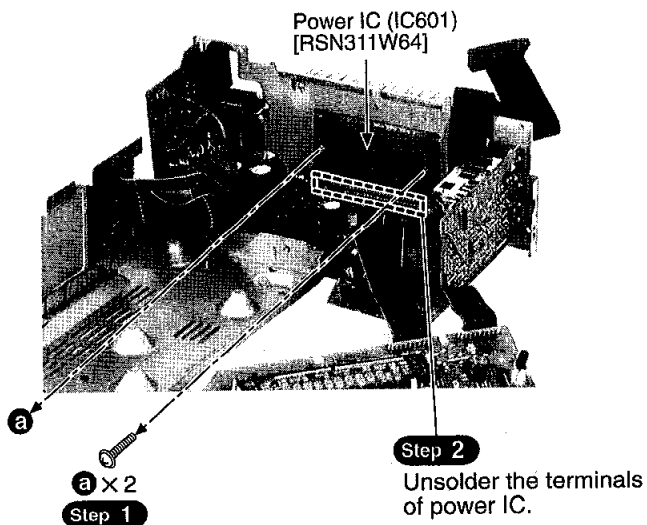
Follow the **Step 1** ~ **Step 2** of the item 1.



**Step 3**  
Unsolder the terminals of regulator transistors.

#### 5. Replacement for the power IC

- Follow the **Step 1** ~ **Step 2** of the item 1.
- Follow the **Step 1** ~ **Step 4** of the item 2.
- Follow the **Step 1** ~ **Step 8** of the item 3.

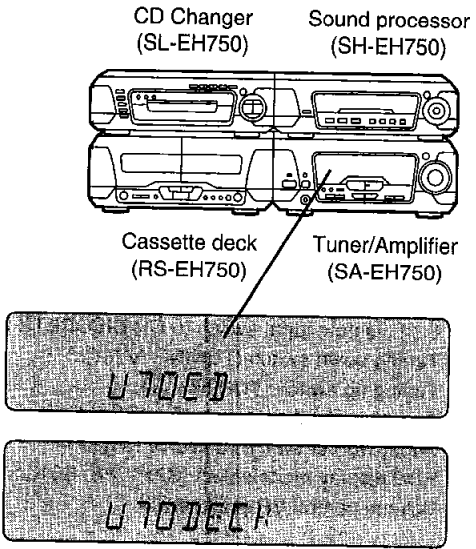


**NOTE**

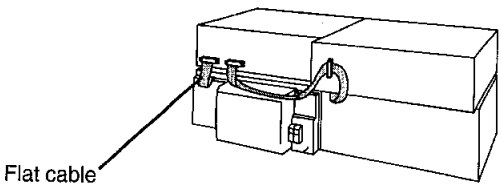
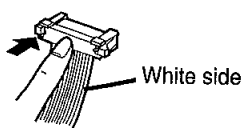
When mounting the power IC apply silicone compound (RFKX0002) to the rear side of power IC.

## Self-Diagnostic Mode

This unit is equipped with a self-diagnostic function which, in the event of a malfunction, automatically displays a code indicating the nature of the malfunction. Use this self-diagnostic function when servicing the unit.

| Display method   | Display location   |
|--|--|
| <p><b>To display the malfunction code</b></p> <p>U70 CD:<br/>U70 DECK: ..... Automatically displays on the tuner/amplifier when a malfunction occurs.</p> <p>F61 ..... Automatically displays on the tuner/amplifier when a malfunction occurs.</p> <p><b>To return to the normal display</b></p> <p><b>1. For U70 CD/U70 DECK:</b></p> <ul style="list-style-type: none"> <li>Press any operation button on the tuner/amplifier.</li> <li>To re-display the code, switch the power off (POWER STANDBY button), and then switch power back on again.</li> </ul> <p><b>2. For F61:</b></p> <ul style="list-style-type: none"> <li>If "F61" is displayed, the power will automatically be switched off and the standby indicator will light up.</li> <li>"F61" will be displayed for 3 seconds, and then the clock will be displayed.</li> <li>To re-display the code, switch the power on. "F61" will be re-displayed, and then after 3 seconds the clock will be displayed and the power will automatically switch off.</li> </ul> |  |

### Display contents

| Display code   | Problem or condition  | Correction procedure  |
|--|---|---|
| <p><b>U70 CD</b><br/><b>U70 DECK</b><br/>(displayed automatically)</p> | <p>A bus-line communications error has occurred as a result of the flat cables being inserted incorrectly, thus preventing the system from operating.</p> <p>1. If "U70" is displayed on the tuner/amplifier, the tape deck or CD Changer cannot be operated by remote control.</p> |  <p>1. To check for correct insertion of the flat cables.</p> <ol style="list-style-type: none"> <li>Insert each connector until you hear a click.</li> <li>Insert the flat cables at the back of the unit in the order indicated. Make sure the white side of the cable is on your right side.</li> </ol>  <p>2. Breakage of flat cable. (Check and replace as necessary.)</p> <p>3. If the problem is not corrected by items (1.) and (2.) above, this indicates a faulty IC.</p> <p><b>SA-EH750:</b><br/>IC901 (LC8A524A5K01)</p> <p><b>SL-EH750:</b><br/>IC451 (M38504M6200F)</p> <p><b>RS-EH750:</b><br/>IC701 (M38503M2400F)</p> <p>Check these IC's and replace as necessary.</p> |
| <p><b>F61</b></p>  | <p>When the power switch is switched on, it automatically switches back off, making it impossible to switch power on.</p>   | <ul style="list-style-type: none"> <li>Faulty Tuner/Amplifier (SA-EH750) output IC (IC601). (When a DC voltage is applied to the speaker terminals.)</li> </ul>   |

## ■ Schematic Diagram

|                                     | Page    |   | Page |
|-------------------------------------|---------|---|------|
| <b>A</b> TUNER CIRCUIT .....        | 31, 32  | <b>E</b> SPEAKER TERMINAL CIRCUIT .....     | 39   |
| <b>B</b> OPERATION CIRCUIT .....    | 33 – 35 | <b>F</b> POWER TRANSFORMER (A) CIRCUIT .... | 39   |
| <b>C</b> MAIN CIRCUIT .....         | 36 – 39 | <b>G</b> POWER TRANSFORMER (B) CIRCUIT .... | 39   |
| <b>D</b> POWER SUPPLY CIRCUIT ..... | 38      |   |      |

- This schematic diagram may be modified at any time with the development of new technology.

### Notes:

- **S901** : Power "Standby/on" switch (⏻ / I)
- **S902** : ECO mode switch (ECO)
- **S903** : Clock timer,demo switch (CLOCK/TIMER, ■ DEMO)
- **S904** : Play timer/Record timer switch (⊕PLAY/⊕REC)
- **S905** : FM mode select switch (FM AUTO/MONO)
- **S906** : Tuning mode select switch (TUNING MODE)
- **S907** : Set switch (SET)
- **S908** : Source input select switch (INPUT SELECTOR)
- **S909** : 6 ch discrete input switch (6 CH DISCRETE INPUT)
- **S910** : Tuning down switch (TUNING ∨)
- **S911** : Tuning up switch (TUNING ∧)
- **S912** : Tuner/band select switch (TUNER/BAND)
- **S913** : Super woofer switch (S.WOOFER)
- **S914,915** : RDS display mode select (S914: PS, S915 : PTY) switch (RDS DISP MODE)
- **VR901** : Volume control VR (VOLUME)

- Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.

No mark: FM ( ) : AM

### ● Important safety notice:

Components identified by  $\Delta$  mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

### ● Caution!

IC and LSI are sensitive to static electricity.

Secondary trouble can be prevented by taking care during repair.










Cover the parts boxes made of plastics with aluminum foil.

Ground the soldering iron.

Put a conductive mat on the work table.

Do not touch the legs of IC or LSI with the fingers directly.

### ● Voltage and signal line

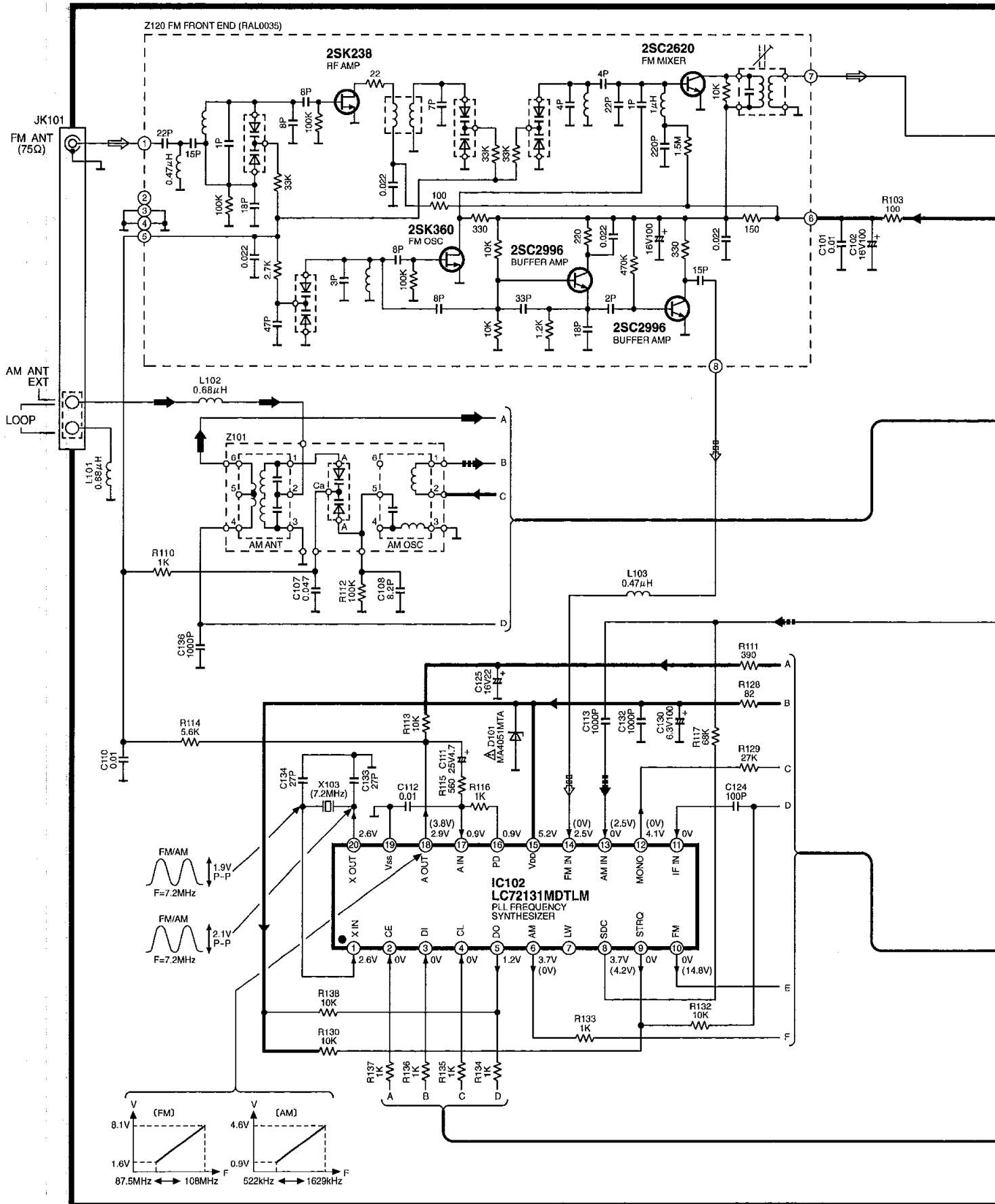
- |   |                               |   |                                 |
|---|-------------------------------|---|---------------------------------|
|  | : Positive voltage line       |  | : Negative voltage line         |
|  | : AM signal line              |  | : AM OSC signal line            |
|  | : FM signal line              |  | : FM OSC signal line            |
|  | : Center Sp.drive signal line |  | : Surround Sp.drive signal line |
|  | : Source signal line          |   |                                 |

**SCHEMATIC DIAGRAM-1**

Note: The number which noted at the connectors on the schematic diagram as "SCHEMATIC DIAGRAM-1" or "SCHEMATIC DIAGRAM-2" indicates the schematic diagram serial number located on the left corner in the schematic diagram.

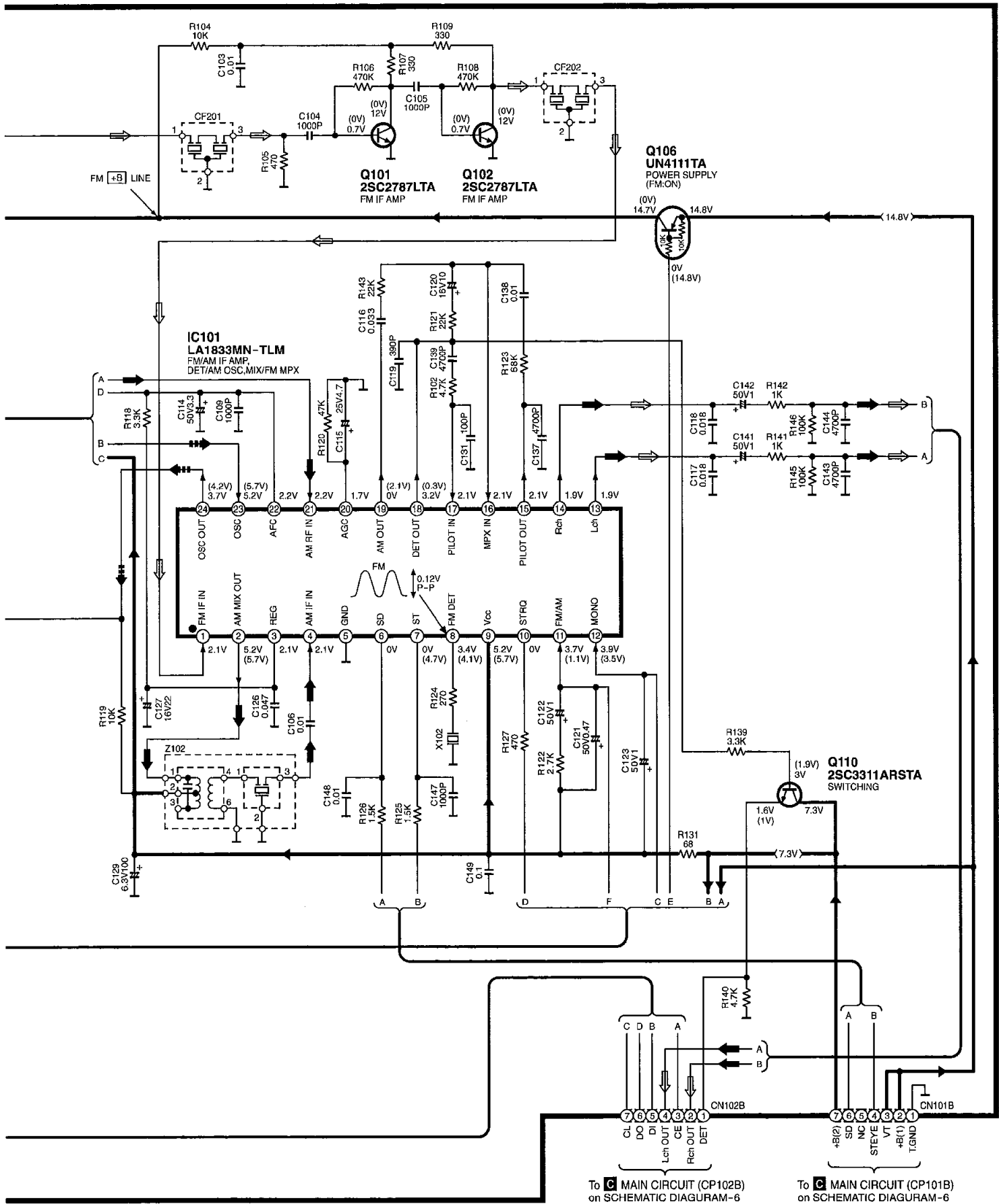
: FM SIGNAL LINE      : AM SIGNAL LINE  
 : POSITIVE VOLTAGE LINE      : FM OSC SIGNAL LINE      : AM OSC SIGNAL LINE

**A TUNER CIRCUIT**



SCHEMATIC DIAGRAM-2

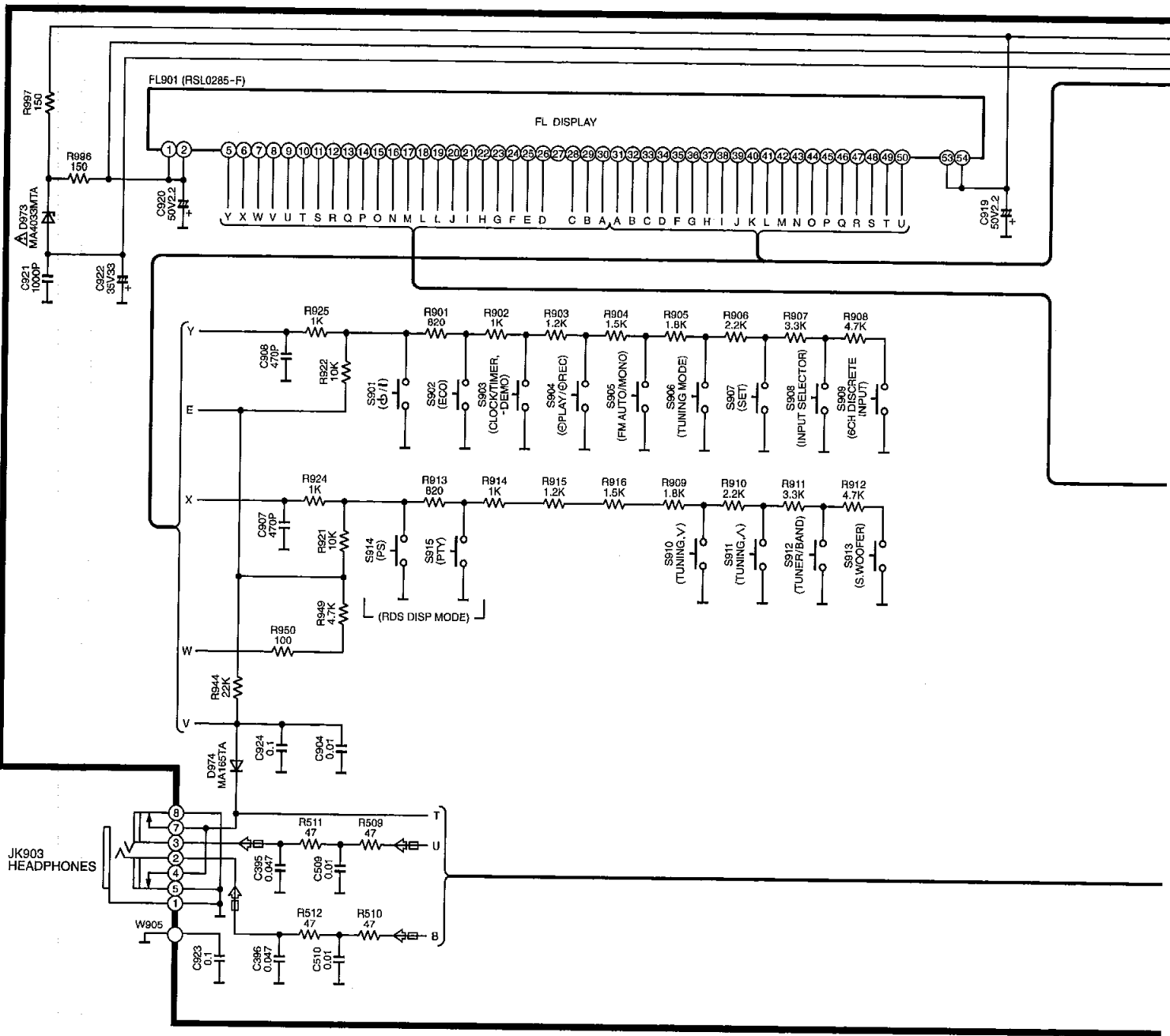
→ : POSITIVE VOLTAGE LINE    ⇨ : FM SIGNAL LINE    ➡ : AM SIGNAL LINE    ⇨⇨ : AM OSC SIGNAL LINE



SCHEMATIC DIAGRAM-3

**B** OPERATION CIRCUIT

□▷ : SOURCE SIGNAL LINE






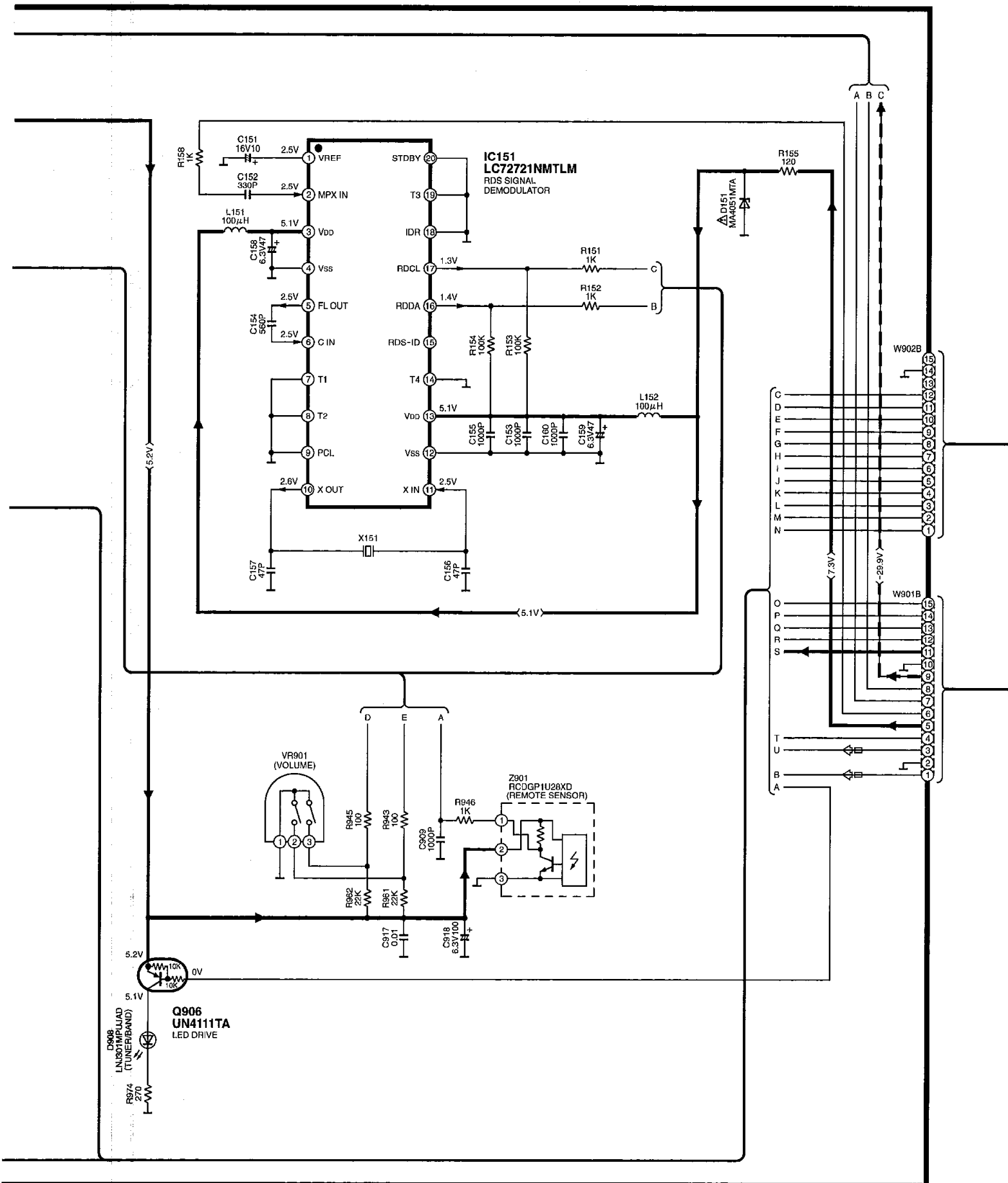




SCHEMATIC DIAGRAM-5

**B** OPERATION CIRCUIT

 : POSITIVE VOLTAGE LINE  
 : NEGATIVE VOLTAGE LINE     : SOURCE SIGNAL LINE



SCHEMATIC DIAGRAM-6

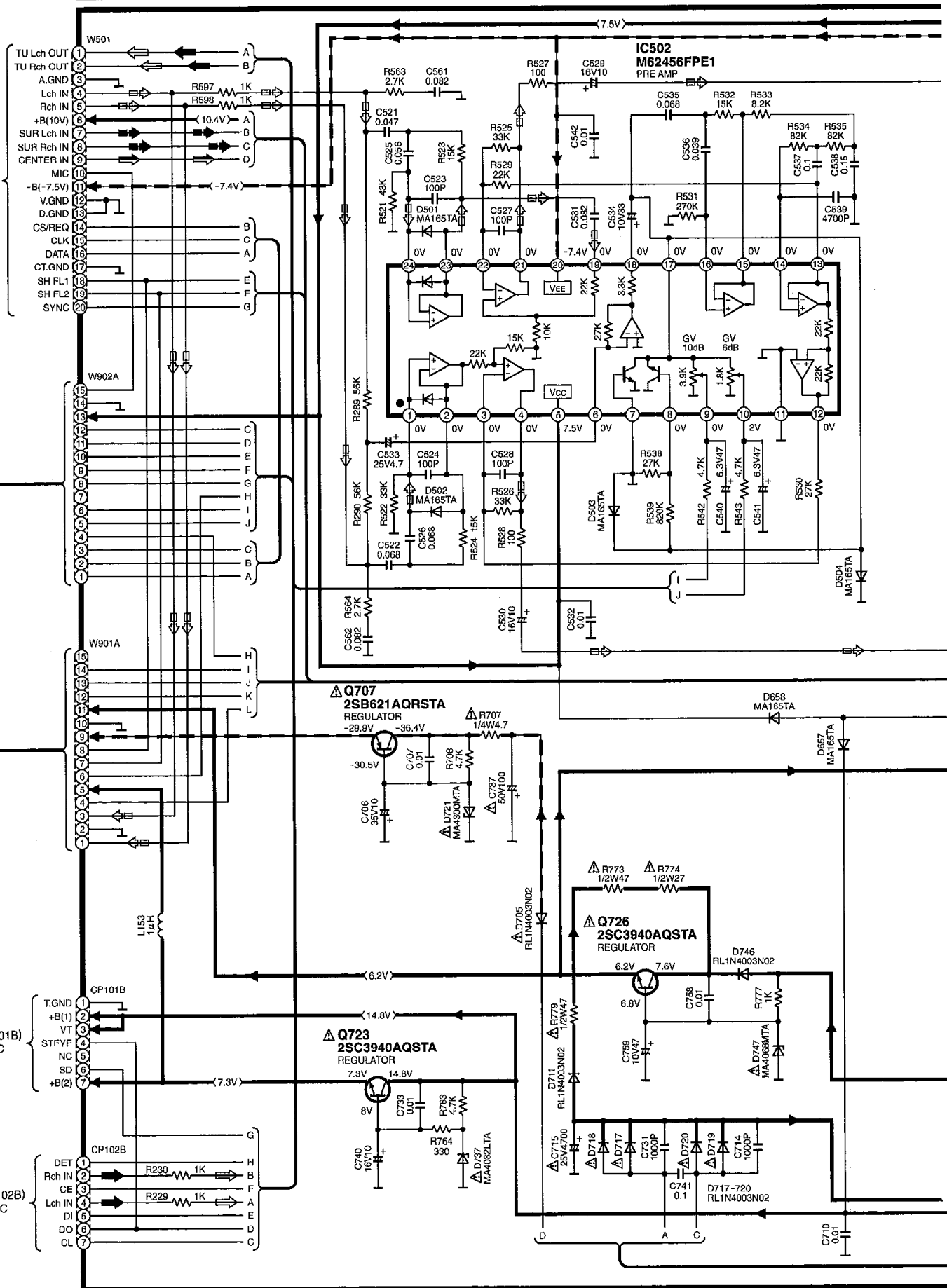
**C** MAIN CIRCUIT

: POSITIVE VOLTAGE LINE   
  : FM SIGNAL LINE   
  : SURROUND SP.DRIVE SIGNAL LINE  
 : NEGATIVE VOLTAGE LINE   
  : AM SIGNAL LINE   
  : CENTER SP.DRIVE SIGNAL LINE   
  : SOURCE SIGNAL LINE

To SOUND PROCESSOR MAIN CIRCUIT

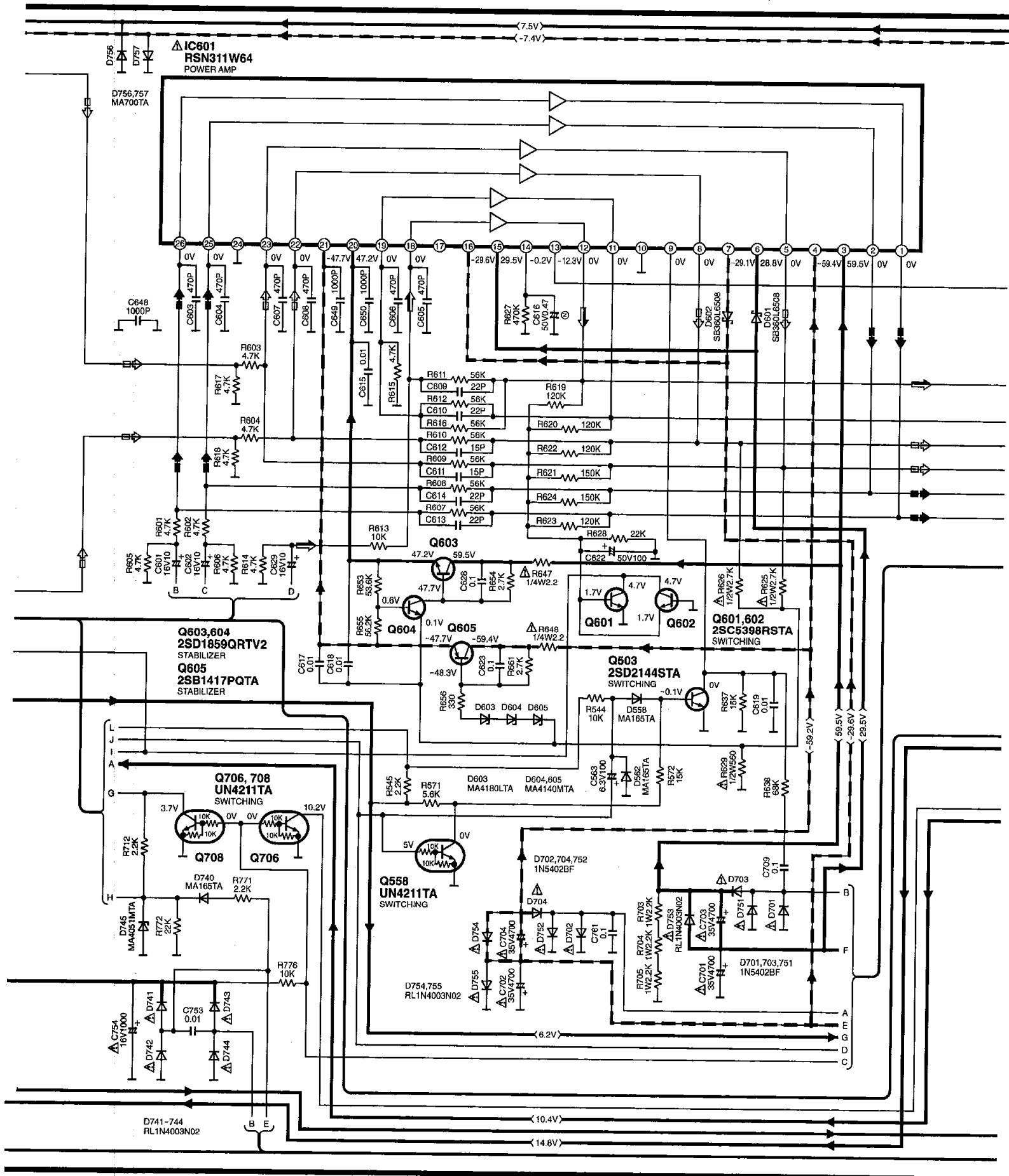
To **A** TUNER CIRCUIT (CN101B) on SCHEMATIC DIAGRAM-2

To **A** TUNER CIRCUIT (CN102B) on SCHEMATIC DIAGRAM-2



SCHEMATIC DIAGRAM-7

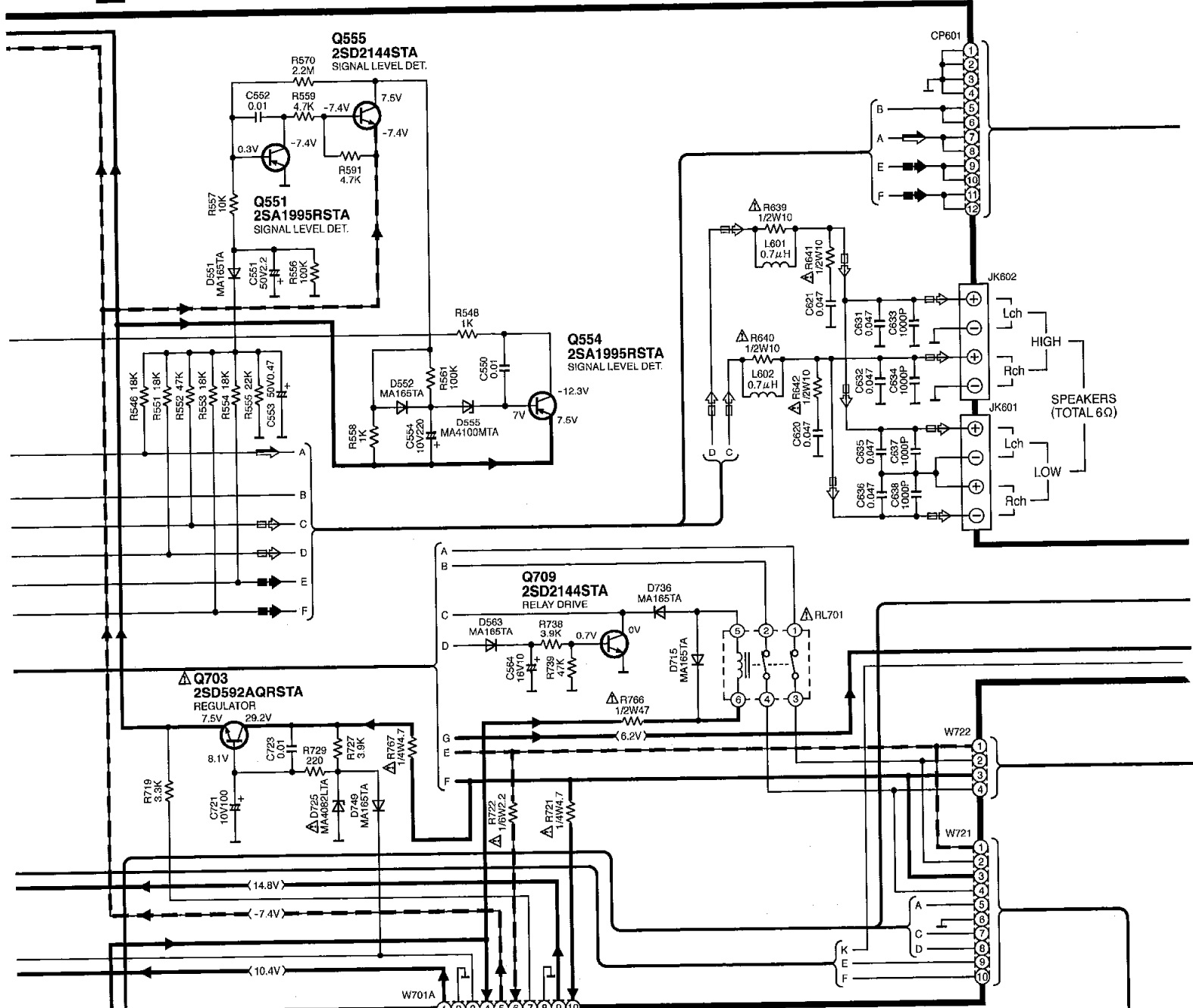
——— : POSITIVE VOLTAGE LINE    ■—— : SURROUND SP.DRIVE SIGNAL LINE  
 - - - : NEGATIVE VOLTAGE LINE    ▢—— : CENTER SP.DRIVE SIGNAL LINE    □◇ : SOURCE SIGNAL LINE



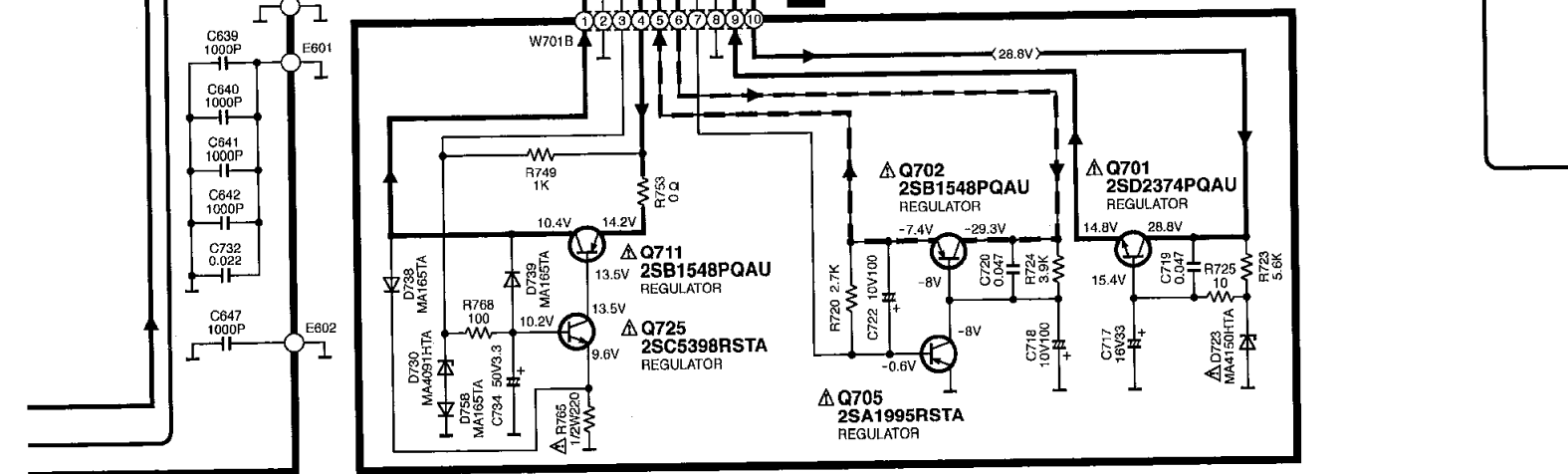
SCHEMATIC DIAGRAM-8

**C** MAIN CIRCUIT

: POSITIVE VOLTAGE LINE   
  : SURROUND SP.DRIVE SIGNAL LINE  
 : NEGATIVE VOLTAGE LINE   
  : CENTER SP.DRIVE SIGNAL LINE   
  : SOURCE SIGNAL LINE



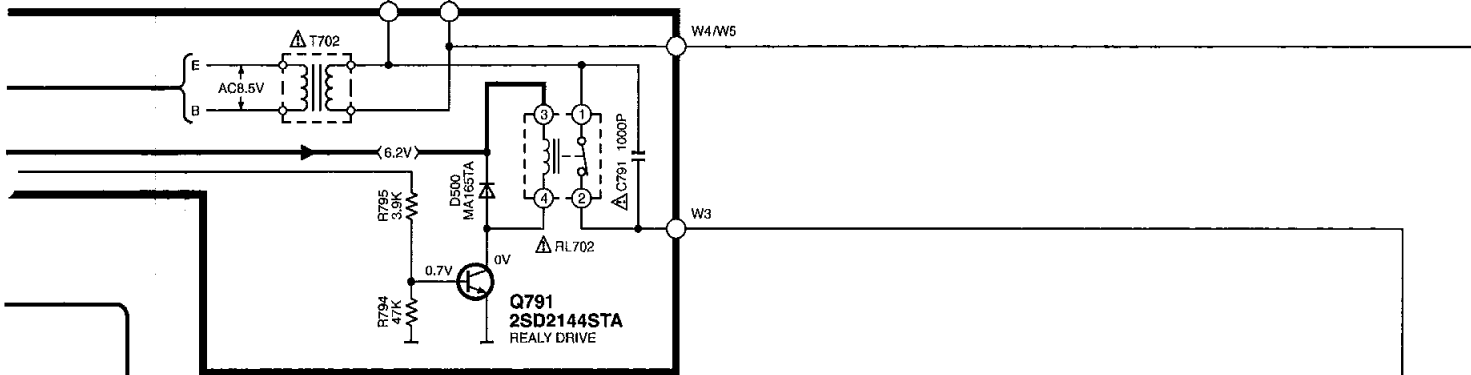
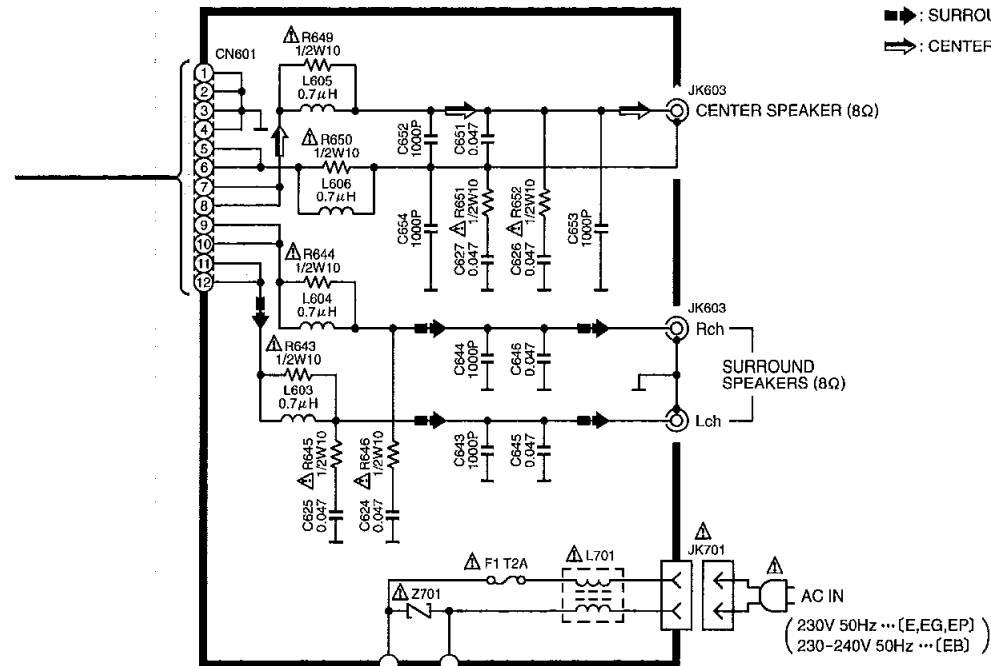
**D** POWER SUPPLY CIRCUIT



SCHEMATIC DIAGRAM-9

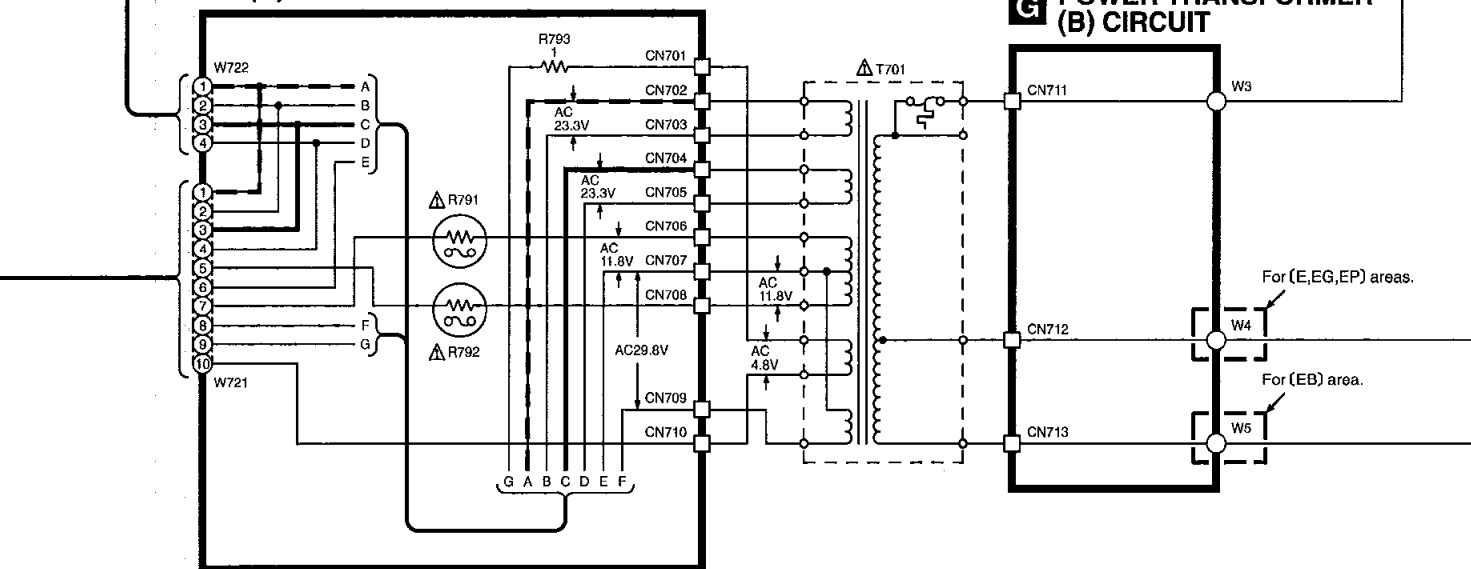
**E** SPEAKER TERMINAL CIRCUIT

- ▶— : POSITIVE VOLTAGE LINE
- -▶- : NEGATIVE VOLTAGE LINE
- ▶ : SURROUND SP.DRIVE SIGNAL LINE
- ⇨ : CENTER SP.DRIVE SIGNAL LINE



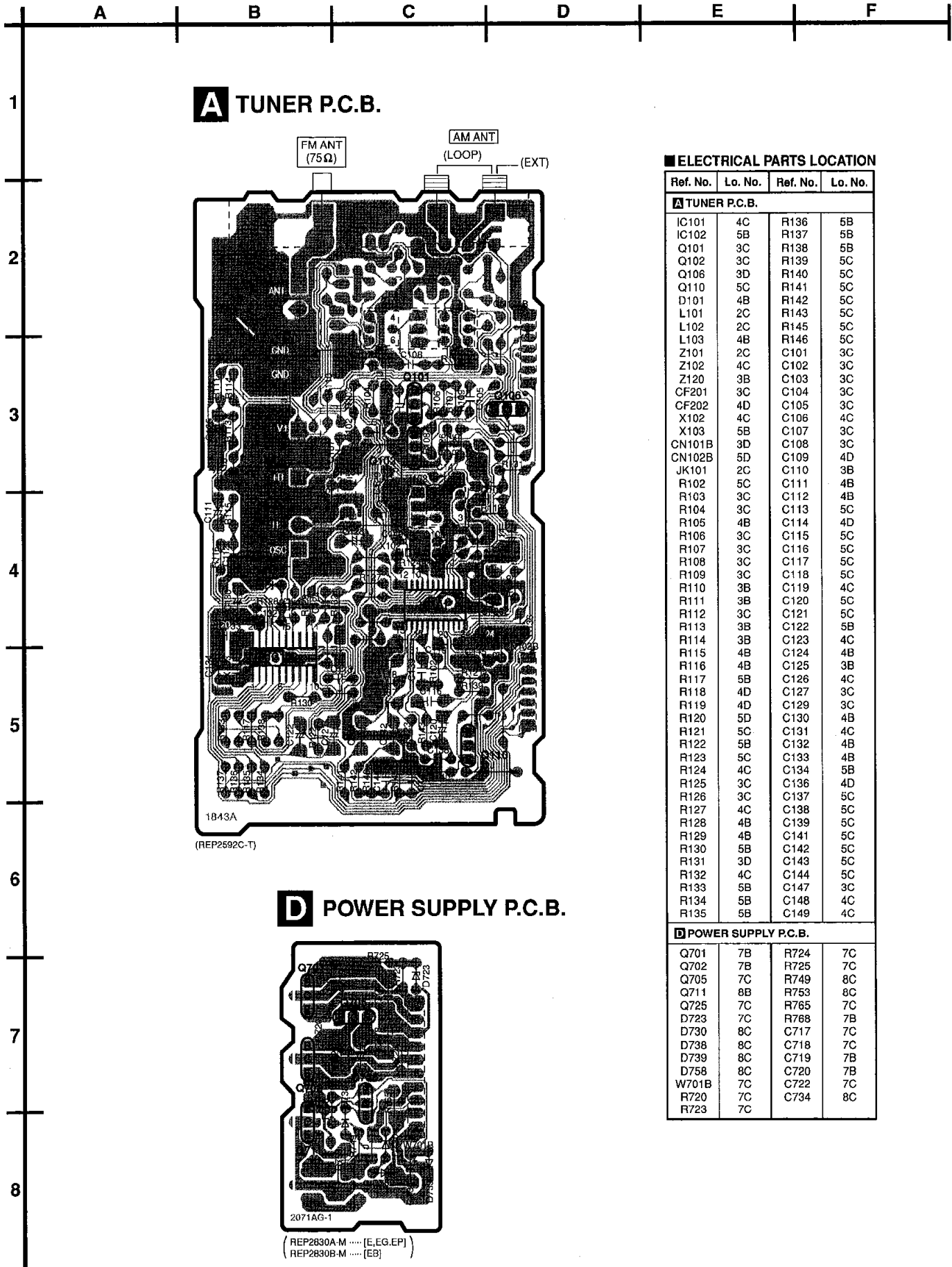
**F** POWER TRANSFORMER (A) CIRCUIT

**G** POWER TRANSFORMER (B) CIRCUIT

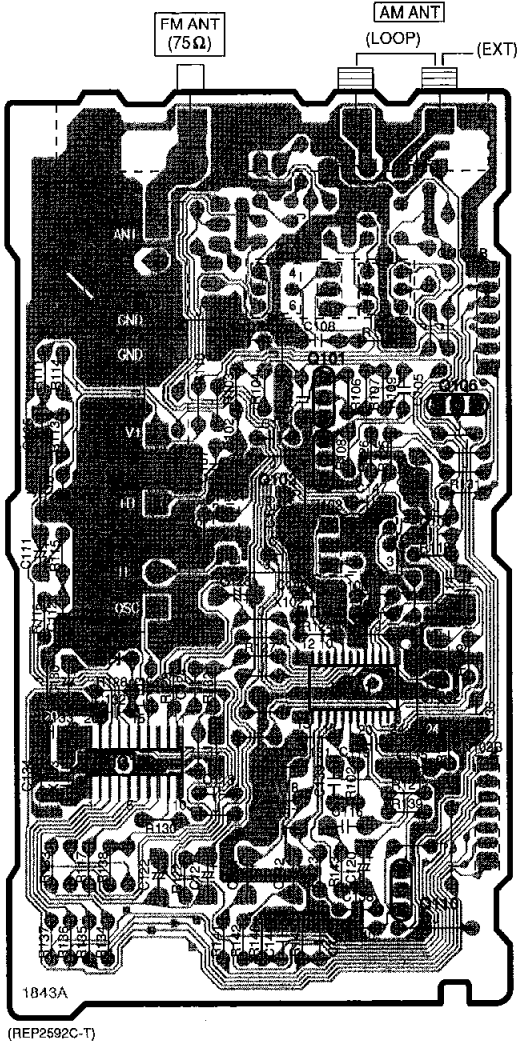


# Printed Circuit Board Diagram

• This circuit board diagram may be modified at any time with the development of new technology.



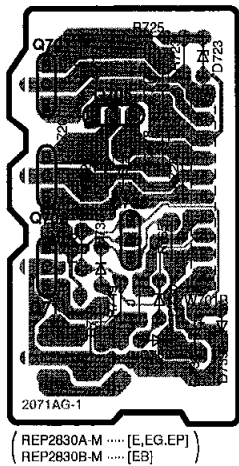
## A TUNER P.C.B.



### ELECTRICAL PARTS LOCATION

| Ref. No.                     | Lo. No. | Ref. No. | Lo. No. |
|------------------------------|---------|----------|---------|
| <b>A TUNER P.C.B.</b>        |         |          |         |
| IC101                        | 4C      | R136     | 5B      |
| IC102                        | 5B      | R137     | 5B      |
| Q101                         | 3C      | R138     | 5B      |
| Q102                         | 3C      | R139     | 5C      |
| Q106                         | 3D      | R140     | 5C      |
| Q110                         | 5C      | R141     | 5C      |
| D101                         | 4B      | R142     | 5C      |
| L101                         | 2C      | R143     | 5C      |
| L102                         | 2C      | R145     | 5C      |
| L103                         | 4B      | R146     | 5C      |
| Z101                         | 2C      | C101     | 3C      |
| Z102                         | 4C      | C102     | 3C      |
| Z120                         | 3B      | C103     | 3C      |
| CF201                        | 3C      | C104     | 3C      |
| CF202                        | 4D      | C105     | 3C      |
| X102                         | 4C      | C106     | 4C      |
| X103                         | 5B      | C107     | 3C      |
| CN101B                       | 3D      | C108     | 3C      |
| CN102B                       | 5D      | C109     | 4D      |
| JK101                        | 2C      | C110     | 3B      |
| R102                         | 5C      | C111     | 4B      |
| R103                         | 3C      | C112     | 4B      |
| R104                         | 3C      | C113     | 5C      |
| R105                         | 4B      | C114     | 4D      |
| R106                         | 3C      | C115     | 5C      |
| R107                         | 3C      | C116     | 5C      |
| R108                         | 3C      | C117     | 5C      |
| R109                         | 3C      | C118     | 5C      |
| R110                         | 3B      | C119     | 4C      |
| R111                         | 3B      | C120     | 5C      |
| R112                         | 3C      | C121     | 5C      |
| R113                         | 3B      | C122     | 5B      |
| R114                         | 3B      | C123     | 4C      |
| R115                         | 4B      | C124     | 4B      |
| R116                         | 4B      | C125     | 3B      |
| R117                         | 5B      | C126     | 4C      |
| R118                         | 4D      | C127     | 3C      |
| R119                         | 4D      | C129     | 3C      |
| R120                         | 5D      | C130     | 4B      |
| R121                         | 5C      | C131     | 4C      |
| R122                         | 5B      | C132     | 4B      |
| R123                         | 5C      | C133     | 4B      |
| R124                         | 4C      | C134     | 5B      |
| R125                         | 3C      | C136     | 4D      |
| R126                         | 3C      | C137     | 5C      |
| R127                         | 4C      | C138     | 5C      |
| R128                         | 4B      | C139     | 5C      |
| R129                         | 4B      | C141     | 5C      |
| R130                         | 5B      | C142     | 5C      |
| R131                         | 3D      | C143     | 5C      |
| R132                         | 4C      | C144     | 5C      |
| R133                         | 5B      | C147     | 3C      |
| R134                         | 5B      | C148     | 4C      |
| R135                         | 5B      | C149     | 4C      |
| <b>D POWER SUPPLY P.C.B.</b> |         |          |         |
| Q701                         | 7B      | R724     | 7C      |
| Q702                         | 7B      | R725     | 7C      |
| Q705                         | 7C      | R749     | 8C      |
| Q711                         | 8B      | R753     | 8C      |
| Q725                         | 7C      | R765     | 7C      |
| D723                         | 7C      | R768     | 7B      |
| D730                         | 8C      | C717     | 7C      |
| D738                         | 8C      | C718     | 7C      |
| D739                         | 8C      | C719     | 7B      |
| D758                         | 8C      | C720     | 7B      |
| W701B                        | 7C      | C722     | 7C      |
| R720                         | 7C      | C734     | 8C      |
| R723                         | 7C      |          |         |

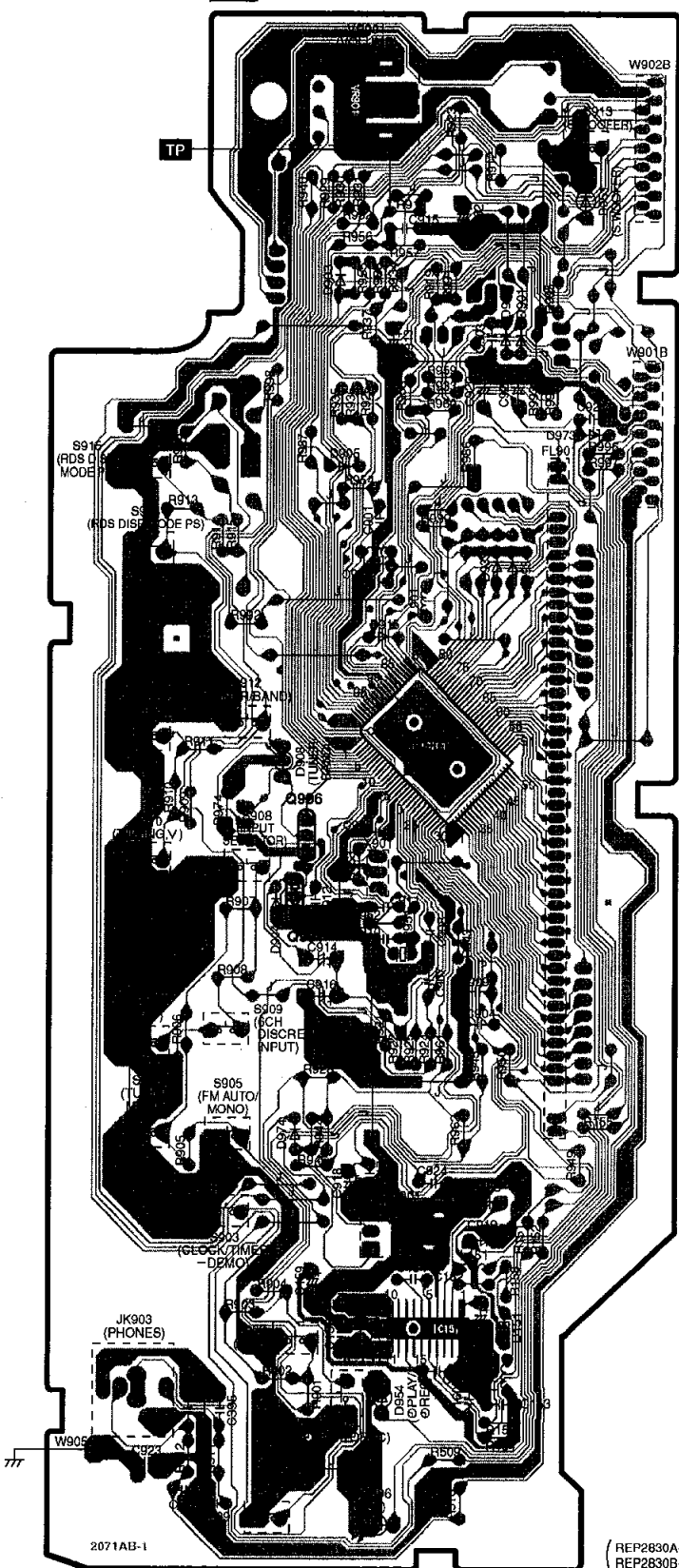
## D POWER SUPPLY P.C.B.



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**B OPERATION P.C.B.**



**ELECTRICAL PARTS LOCATION**

| Ref. No.                | Lo. No. | Ref. No. | Lo. No. | Ref. No. | Lo. No. |
|-------------------------|---------|----------|---------|----------|---------|
| <b>OPERATION P.C.B.</b> |         |          |         |          |         |
| IC151                   | 7C      | R509     | 8C      | R959     | 3C      |
| IC901                   | 5C      | R510     | 8C      | R960     | 3C      |
| Q901                    | 5B      | R511     | 8B      | R961     | 6C      |
| Q906                    | 5B      | R512     | 8B      | R962     | 6C      |
| D151                    | 7C      | R901     | 8B      | R974     | 5B      |
| D306                    | 8C      | R902     | 8B      | R986     | 3C      |
| D901                    | 3C      | R903     | 7B      | R987     | 3B      |
| D902                    | 3C      | R904     | 7B      | R988     | 2C      |
| D903                    | 2B      | R905     | 6B      | R990     | 3C      |
| D904                    | 5B      | R906     | 6B      | R991     | 2C      |
| D905                    | 3B      | R907     | 5B      | R992     | 4B      |
| D908                    | 5B      | R908     | 6B      | R993     | 3C      |
| D915                    | 4C      | R909     | 5B      | R995     | 2C      |
| D933                    | 4C      | R910     | 5B      | R996     | 3D      |
| D934                    | 4C      | R911     | 5B      | R997     | 3D      |
| D951                    | 2D      | R912     | 2C      | R998     | 3B      |
| D954                    | 8C      | R913     | 3B      | C151     | 7C      |
| D973                    | 3D      | R914     | 4B      | C152     | 7C      |
| D974                    | 6B      | R915     | 4B      | C153     | 8C      |
| VR901                   | 2C      | R916     | 3B      | C154     | 7C      |
| L151                    | 7C      | R918     | 2C      | C156     | 8C      |
| L152                    | 8C      | R919     | 2C      | C156     | 7B      |
| L901                    | 4C      | R921     | 6C      | C157     | 7B      |
| L902                    | 4C      | R922     | 6C      | C158     | 7C      |
| Z901                    | 7C      | R923     | 2C      | C159     | 7B      |
| X151                    | 7C      | R924     | 6C      | C160     | 8C      |
| X901                    | 5C      | R925     | 6C      | C395     | 8B      |
| X902                    | 6C      | R926     | 3C      | C396     | 8B      |
| FL901                   | 3C      | R928     | 6B      | C509     | 8B      |
| S901                    | 8B      | R929     | 2B      | C510     | 8B      |
| S902                    | 7B      | R930     | 2B      | C901     | 4C      |
| S903                    | 7B      | R931     | 2C      | C902     | 2C      |
| S904                    | 8B      | R932     | 2B      | C903     | 3C      |
| S905                    | 6B      | R933     | 3C      | C904     | 6C      |
| S906                    | 6B      | R934     | 2C      | C907     | 6C      |
| S907                    | 6B      | R935     | 3B      | C908     | 5C      |
| S908                    | 5B      | R936     | 3B      | C909     | 6C      |
| S909                    | 6B      | R937     | 3C      | C910     | 5C      |
| S910                    | 5B      | R939     | 4C      | C911     | 5C      |
| S911                    | 5B      | R940     | 2B      | C912     | 5B      |
| S912                    | 4B      | R943     | 5C      | C913     | 3C      |
| S913                    | 2D      | R944     | 6B      | C914     | 6B      |
| S914                    | 4B      | R945     | 6C      | C915     | 2C      |
| S915                    | 3A      | R946     | 7B      | C916     | 6B      |
| W901B                   | 3D      | R949     | 7D      | C917     | 7C      |
| W902B                   | 2D      | R950     | 6C      | C918     | 7B      |
| W905                    | 8A      | R951     | 5C      | C919     | 7C      |
| JK903                   | 8A      | R952     | 5C      | C920     | 3C      |
| R151                    | 7C      | R953     | 5C      | C921     | 3D      |
| R152                    | 7C      | R954     | 3B      | C922     | 3C      |
| R153                    | 8C      | R955     | 2B      | C923     | 8B      |
| R154                    | 8C      | R956     | 2B      | C924     | 7C      |
| R155                    | 6D      | R957     | 2C      | C925     | 5C      |
| R158                    | 7C      | R958     | 3C      | C926     | 4C      |

2071AB-1

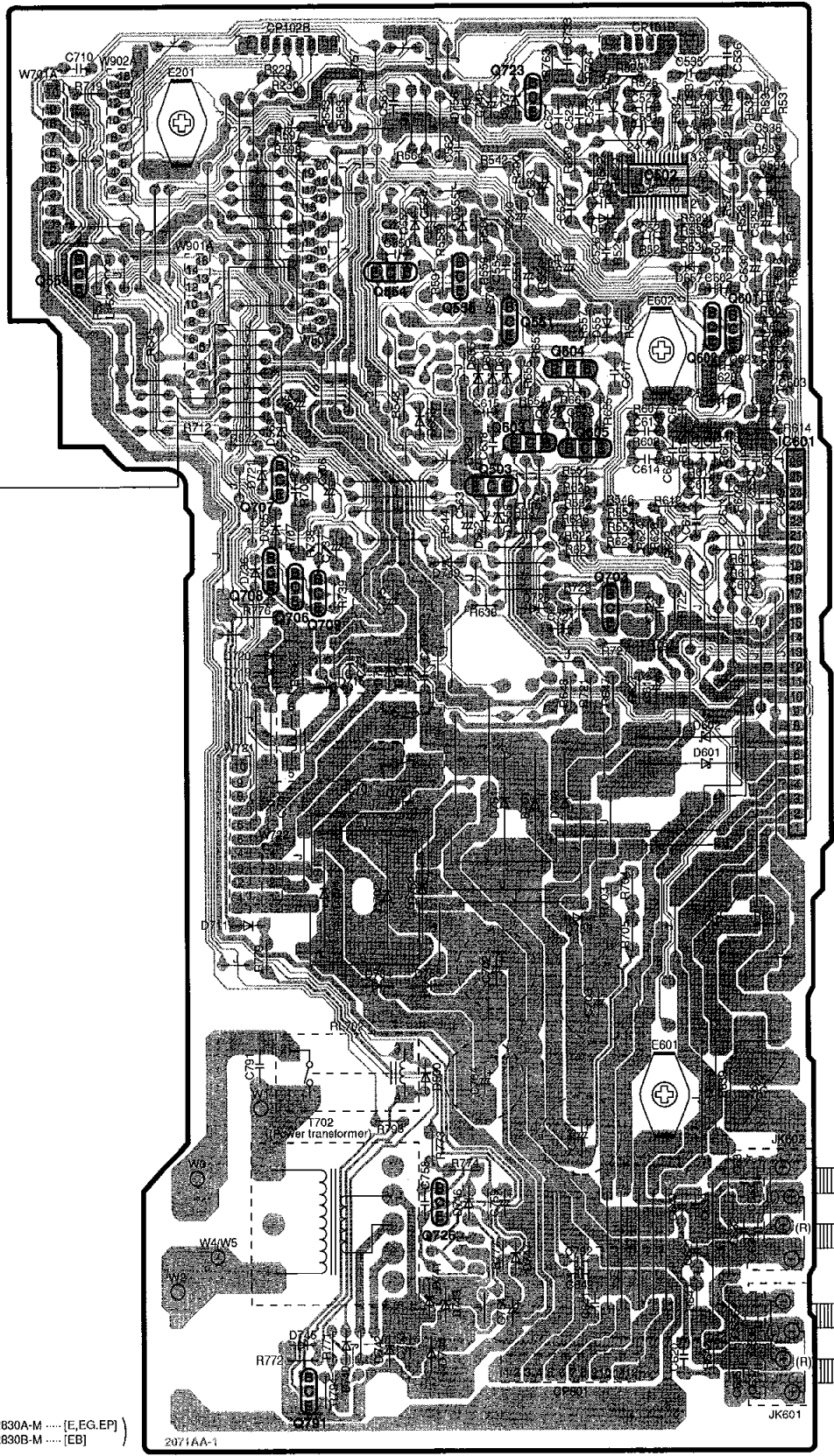
(REP2830A-M .....[E,EG,EP])  
(REP2830B-M .....[EB])

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**C** MAIN P.C.B.

To SOUND PROCESSOR



( REP2830A-M ..... [E,EG,EP] )  
 ( REP2830B-M ..... [EB] )

2071AA-1

JK601

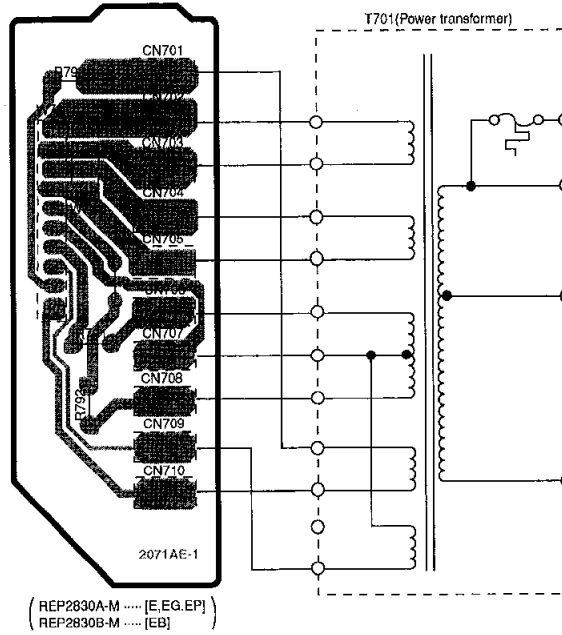



**■ ELECTRICAL PARTS LOCATION**

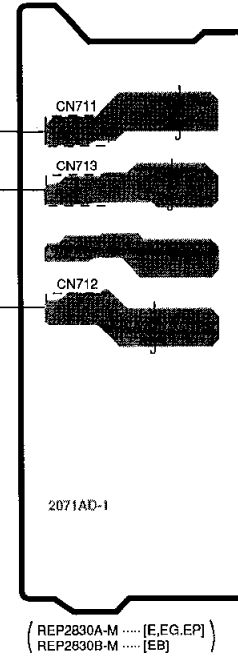
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|----------------------|---------|----------|---------|----------|---------|----------|---------|----------|---------|----------|---------|
| <b>■ MAIN P.C.B.</b> |         |          |         |          |         |          |         |          |         |          |         |
| IC502                | 2E      | D736     | 4C      | R526     | 2E      | R616     | 4F      | R794     | 8C      | C619     | 4D      |
| IC601                | 4F      | D737     | 2D      | R527     | 2F      | R617     | 2F      | R795     | 7D      | C620     | 8E      |
| Q503                 | 3D      | D740     | 8D      | R528     | 2F      | R618     | 2F      | C521     | 2E      | C621     | 7E      |
| Q551                 | 3D      | D741     | 8D      | R529     | 2E      | R619     | 4E      | C522     | 2E      | C622     | 3E      |
| Q554                 | 2D      | D742     | 8D      | R530     | 2E      | R620     | 4E      | C523     | 2E      | C623     | 3E      |
| Q555                 | 2D      | D743     | 8D      | R531     | 2F      | R621     | 4E      | C524     | 2E      | C628     | 3E      |
| Q558                 | 2B      | D744     | 8D      | R532     | 2F      | R622     | 4E      | C525     | 2E      | C629     | 3F      |
| Q601                 | 3F      | D745     | 8C      | R533     | 2F      | R623     | 4E      | C526     | 2E      | C631     | 7F      |
| Q602                 | 3E      | D746     | 7D      | R534     | 2E      | R624     | 4E      | C527     | 2E      | C632     | 7F      |
| Q603                 | 3E      | D747     | 7D      | R535     | 2F      | R625     | 4E      | C528     | 2E      | C633     | 7F      |
| Q604                 | 3E      | D749     | 4D      | R538     | 2E      | R626     | 4E      | C529     | 2F      | C634     | 7F      |
| Q605                 | 3E      | D751     | 5D      | R539     | 2E      | R627     | 5E      | C530     | 2F      | C635     | 8F      |
| Q703                 | 4E      | D752     | 6D      | R542     | 2D      | R628     | 3E      | C531     | 2E      | C636     | 8F      |
| Q706                 | 4C      | D753     | 6E      | R543     | 2C      | R629     | 3D      | C532     | 2E      | C637     | 8F      |
| Q707                 | 3C      | D754     | 6D      | R544     | 4D      | R637     | 4D      | C533     | 2E      | C638     | 8F      |
| Q708                 | 4C      | D755     | 6D      | R545     | 3C      | R638     | 4D      | C534     | 2F      | C639     | 7E      |
| Q709                 | 4C      | D756     | 2D      | R546     | 4E      | R639     | 7F      | C535     | 1E      | C640     | 7E      |
| Q723                 | 2E      | D757     | 1D      | R548     | 3D      | R640     | 6F      | C536     | 1F      | C641     | 8E      |
| Q726                 | 7D      | L153     | 2B      | R551     | 3E      | R641     | 8E      | C537     | 2E      | C642     | 8E      |
| Q791                 | 8C      | L601     | 7F      | R552     | 4E      | R642     | 8E      | C538     | 2F      | C647     | 3E      |
| D500                 | 7D      | L602     | 6E      | R553     | 4E      | R647     | 5E      | C539     | 2E      | C648     | 3E      |
| D501                 | 2E      | T702     | 7C      | R554     | 4E      | R648     | 5E      | C540     | 2D      | C649     | 4F      |
| D502                 | 2E      | RL701    | 5D      | R555     | 3E      | R653     | 3E      | C541     | 2E      | C650     | 4F      |
| D503                 | 2F      | RL702    | 6D      | R556     | 2E      | R654     | 3E      | C542     | 2F      | C701     | 7E      |
| D504                 | 2F      | W3       | 7C      | R557     | 3E      | R655     | 3E      | C550     | 2D      | C702     | 6D      |
| D551                 | 3E      | CP101B   | 1E      | R558     | 2D      | R656     | 3D      | C551     | 2D      | C703     | 6E      |
| D552                 | 2D      | CP102B   | 1C      | R559     | 2D      | R661     | 3E      | C552     | 2D      | C704     | 7D      |
| D555                 | 2D      | CP601    | 8E      | R561     | 2D      | R703     | 6E      | C553     | 3E      | C706     | 4C      |
| D558                 | 4D      | W1       | 7C      | R563     | 2D      | R704     | 6E      | C554     | 2D      | C707     | 4C      |
| D562                 | 4D      | W2       | 8C      | R564     | 2D      | R705     | 6E      | C561     | 2D      | C709     | 4D      |
| D563                 | 3C      | W4/W5    | 7C      | R570     | 2D      | R707     | 4C      | C562     | 2D      | C710     | 1B      |
| D601                 | 5E      | W501     | 2C      | R671     | 2B      | R708     | 4C      | C563     | 4D      | C714     | 5C      |
| D602                 | 5E      | W701A    | 2B      | R572     | 3C      | R712     | 3C      | C564     | 3C      | C715     | 4D      |
| D603                 | 3D      | W721     | 5C      | R591     | 2D      | R719     | 1B      | C601     | 2F      | C721     | 4E      |
| D604                 | 3D      | W722     | 5C      | R597     | 2C      | R721     | 5E      | C602     | 2E      | C723     | 4E      |
| D605                 | 3D      | W901A    | 3C      | R598     | 2C      | R722     | 4E      | C603     | 3F      | C731     | 4D      |
| D657                 | 2E      | W902A    | 2B      | R601     | 3F      | R727     | 4E      | C604     | 3F      | C732     | 7E      |
| D658                 | 3D      | JK601    | 8F      | R602     | 3F      | R729     | 4E      | C605     | 3E      | C733     | 1E      |
| D701                 | 5E      | JK602    | 7F      | R603     | 2F      | R738     | 4C      | C606     | 3E      | C737     | 4D      |
| D702                 | 6D      | E201     | 2C      | R604     | 3F      | R739     | 4C      | C607     | 3F      | C740     | 2D      |
| D703                 | 5E      | E601     | 7E      | R605     | 3F      | R763     | 1E      | C608     | 3F      | C741     | 5C      |
| D704                 | 6C      | E602     | 3E      | R606     | 3F      | R764     | 1E      | C609     | 4F      | C753     | 8D      |
| D705                 | 4C      | R229     | 1C      | R607     | 3E      | R766     | 4C      | C610     | 4E      | C754     | 8D      |
| D711                 | 6C      | R230     | 1C      | R608     | 3E      | R767     | 4E      | C611     | 4F      | C758     | 7D      |
| D715                 | 5C      | R289     | 2E      | R609     | 4F      | R771     | 8C      | C612     | 4E      | C759     | 7D      |
| D717                 | 4D      | R290     | 2D      | R610     | 3E      | R772     | 8C      | C613     | 3E      | C761     | 5D      |
| D718                 | 4D      | R521     | 2E      | R611     | 4F      | R773     | 7D      | C614     | 3E      | C791     | 6C      |
| D719                 | 4C      | R522     | 2E      | R612     | 4E      | R774     | 7D      | C615     | 3D      |          |         |
| D720                 | 4C      | R523     | 1E      | R613     | 3F      | R776     | 4C      | C616     | 5E      |          |         |
| D721                 | 3C      | R524     | 2E      | R614     | 3F      | R777     | 7D      | C617     | 3E      |          |         |
| D725                 | 4E      | R525     | 1E      | R615     | 3E      | R779     | 6C      | C618     | 3D      |          |         |



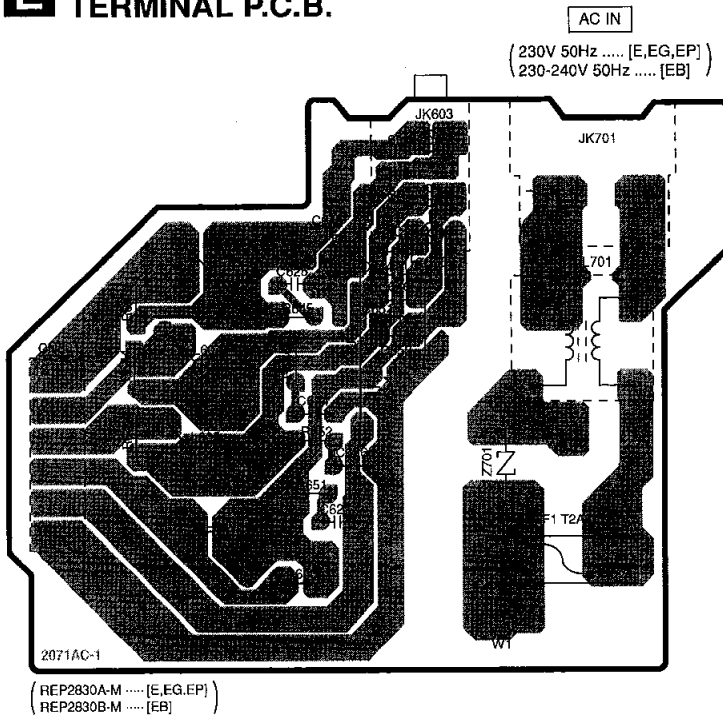
**F POWER TRANSFORMER (A) P.C.B.**



**G POWER TRANSFORMER (B) P.C.B.**



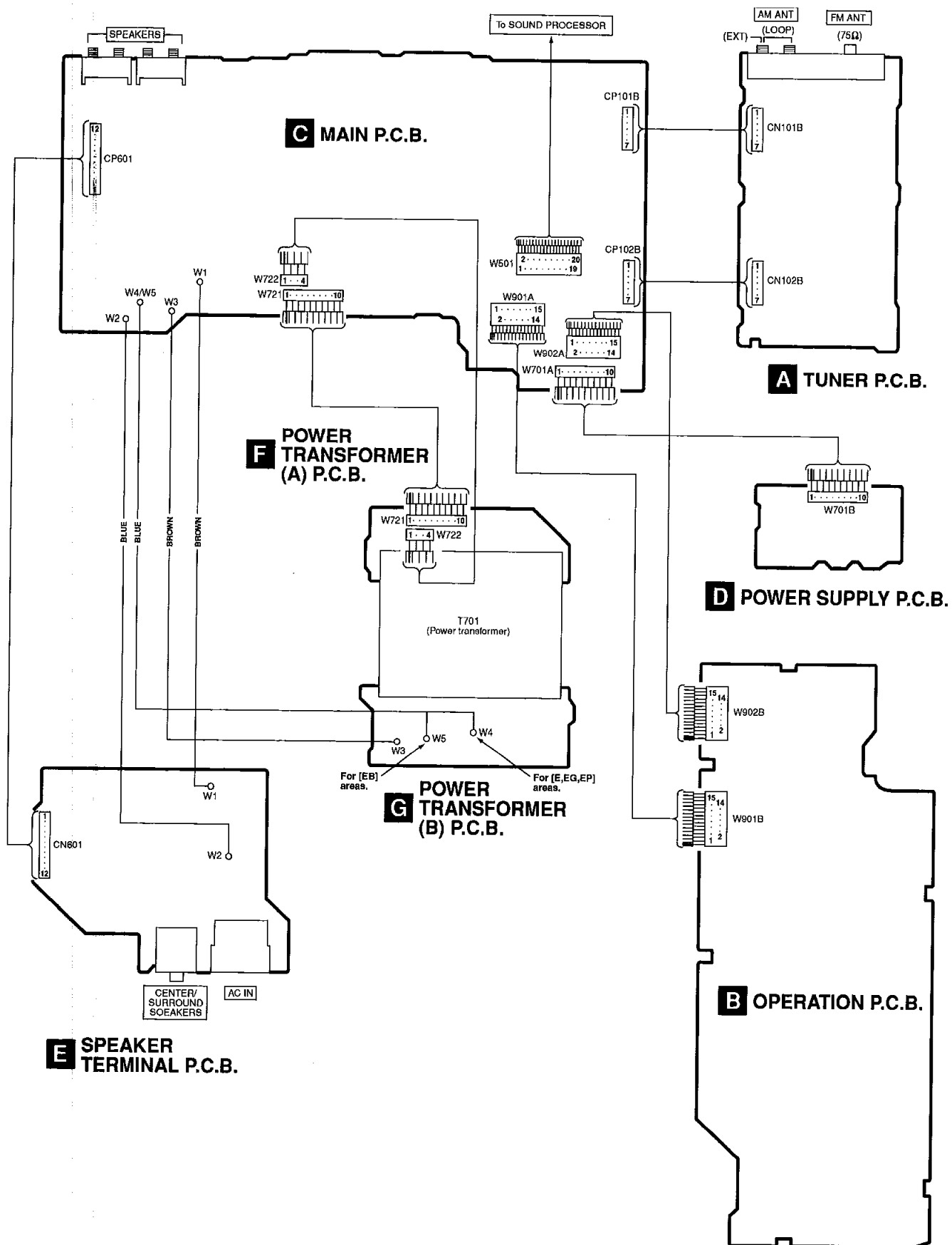
**E SPEAKER TERMINAL P.C.B.**



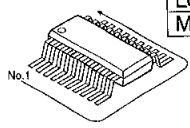
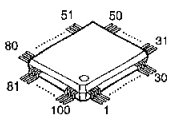
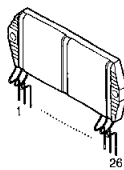

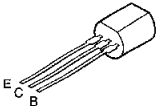
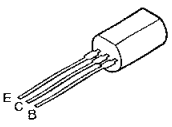
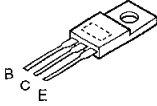
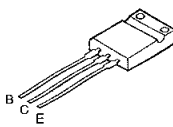
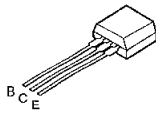
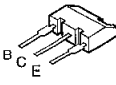
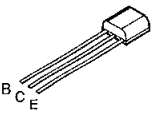
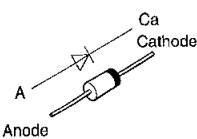
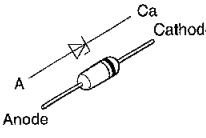
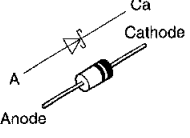
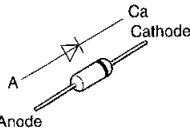
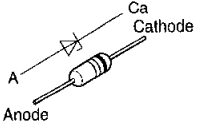
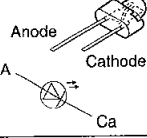
**ELECTRICAL PARTS LOCATION**

| Ref. No.                           | Lo. No. | Ref. No. | Lo. No. |
|------------------------------------|---------|----------|---------|
| <b>SPEAKER TERMINAL P.C.B.</b>     |         |          |         |
| L603                               | 6B      | R646     | 7B      |
| L604                               | 7B      | R649     | 7A      |
| L605                               | 7B      | R650     | 6B      |
| L606                               | 7B      | R651     | 7B      |
| L701                               | 6C      | R652     | 7B      |
| Z701                               | 7C      | C624     | 7B      |
| CN601                              | 7A      | C625     | 6B      |
| W1                                 | 8C      | C626     | 7B      |
| W2                                 | 7C      | C627     | 7B      |
| JK603                              | 6C      | C643     | 6B      |
| F1                                 | 7C      | C644     | 6C      |
| JK701                              | 6D      | C645     | 6B      |
| FC1                                | 7D      | C646     | 6C      |
| FC2                                | 7C      | C651     | 6C      |
| R643                               | 6A      | C652     | 6C      |
| R644                               | 7A      | C653     | 6C      |
| R645                               | 6B      | C654     | 7C      |
| <b>POWER TRANSFORMER(A) P.C.B.</b> |         |          |         |
| CN701                              | 2B      | CN709    | 3B      |
| CN702                              | 2B      | CN710    | 4B      |
| CN703                              | 2B      | W721     | 2B      |
| CN704                              | 2B      | W722     | 2B      |
| CN705                              | 3B      | R791     | 3B      |
| CN706                              | 3B      | R792     | 3B      |
| CN707                              | 3B      | R793     | 2B      |
| CN708                              | 3B      |          |         |
| <b>POWER TRANSFORMER(B) P.C.B.</b> |         |          |         |
| CN711                              | 2E      | W3       | 2E      |
| CN712                              | 3E      | W4       | 3E      |
| CN713                              | 2E      | W5       | 2E      |

# Wiring Connection Diagram



# ■ Type Illustration of IC's, Transistors and Diodes

|   |   |  |  |   |   |       |            |       |   |  |   |  |  |
|---|---|--|--|---|---|-------|------------|-------|---|--|---|--|--|
|  <table border="1" data-bbox="297 199 545 304"> <tr><td>LA1833MN-TLM</td><td>24PIN</td></tr> <tr><td>LC72131MDTLM</td><td>20PIN</td></tr> <tr><td>LC72721NMTLM</td><td>20PIN</td></tr> <tr><td>M62456FPE1</td><td>24PIN</td></tr> </table> | LA1833MN-TLM  | 24PIN  | LC72131MDTLM   | 20PIN   | LC72721NMTLM  | 20PIN | M62456FPE1 | 24PIN | <p>LC8A524A5K01</p>  | <p>RSN311W64</p>  |  <p>2SC2787LTA<br/>2SC3311ARSTA<br/>UN4111TA<br/>UN4211TA<br/>UN4212TA</p> |  |  |
| LA1833MN-TLM  | 24PIN   |  |  |   |   |       |            |       |   |  |   |  |  |
| LC72131MDTLM  | 20PIN   |  |  |   |   |       |            |       |   |  |   |  |  |
| LC72721NMTLM  | 20PIN   |  |  |   |   |       |            |       |   |  |   |  |  |
| M62456FPE1  | 24PIN   |  |  |   |   |       |            |       |   |  |   |  |  |
| <p>2SB621AQRSTA<br/>2SD592AQRSTA</p>   | <p>2SC3940AQSTA</p>              | <p>2SB1548PQAU<br/>2SD2374PQAU</p>    | <p>2SB1417PQTA</p>  | <p>2SD2144STA</p>  | <p>2SD1859QRTV2</p>                      |       |            |       |   |  |   |  |  |
| <p>2SA1995RSTA<br/>2SC5398RSTA</p>   | <p>1N5402BF<br/>RL1N4003N02</p>  | <p>MA4091HTA<br/>MA4100MTA<br/>MA4140MTA<br/>MA4150HTA<br/>MA4180LTA<br/>MA4300MTA</p>  |  | <p>SB360L6508</p>  | <p>MA165TA<br/>MA700TA<br/>1SS291TA</p>  |       |            |       |   |  |   |  |  |
|  <p>MA4033MTA<br/>MA4051MTA<br/>MA4068MTA<br/>MA4082LTA</p>   |   | <p>LNJ301MPUJAD<br/>LNJ801TPSJAD<br/>LNJ401NPYJA</p>                                   |  |   |   |       |            |       |   |  |   |  |  |

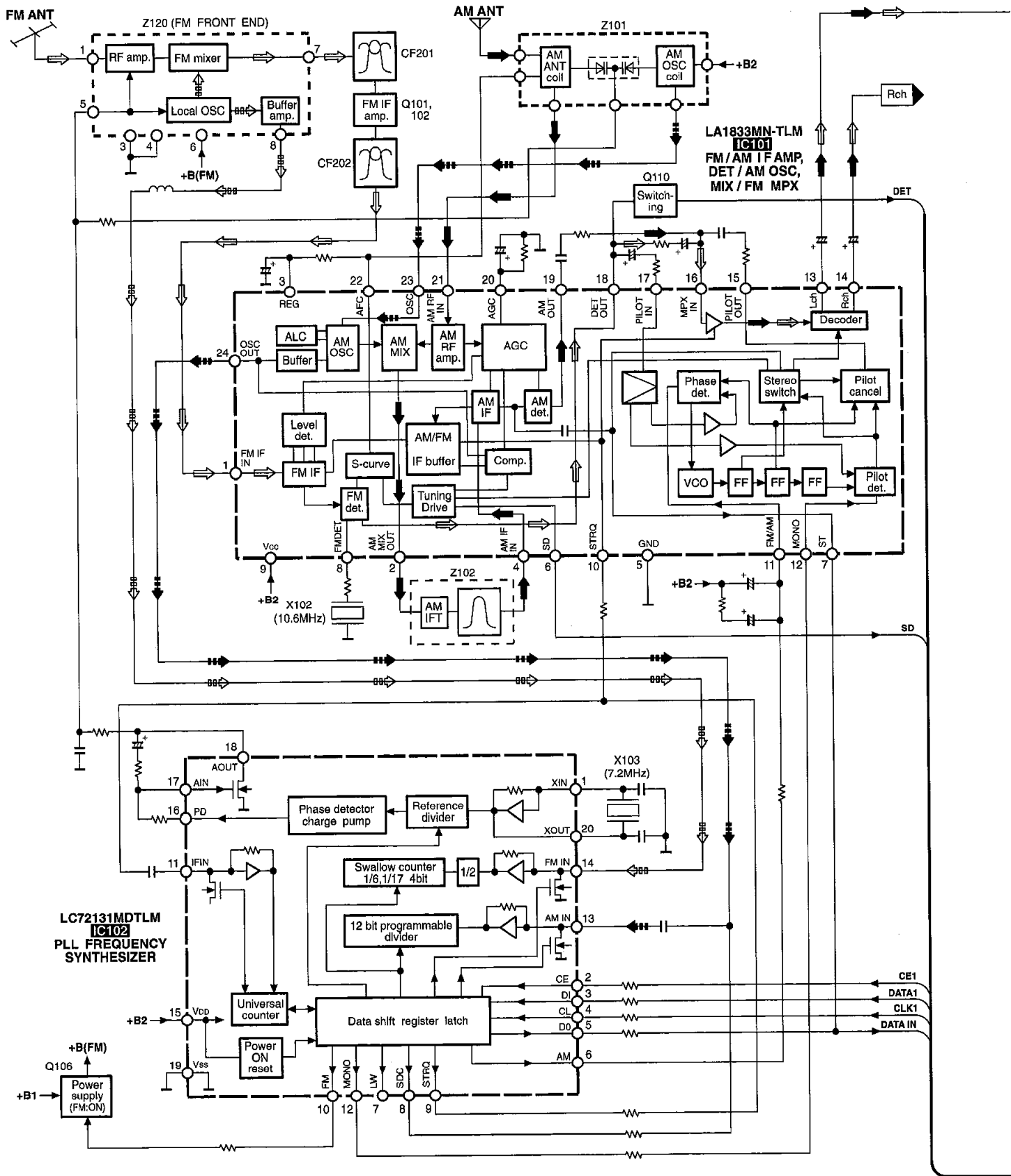
## Terminal Function of IC's

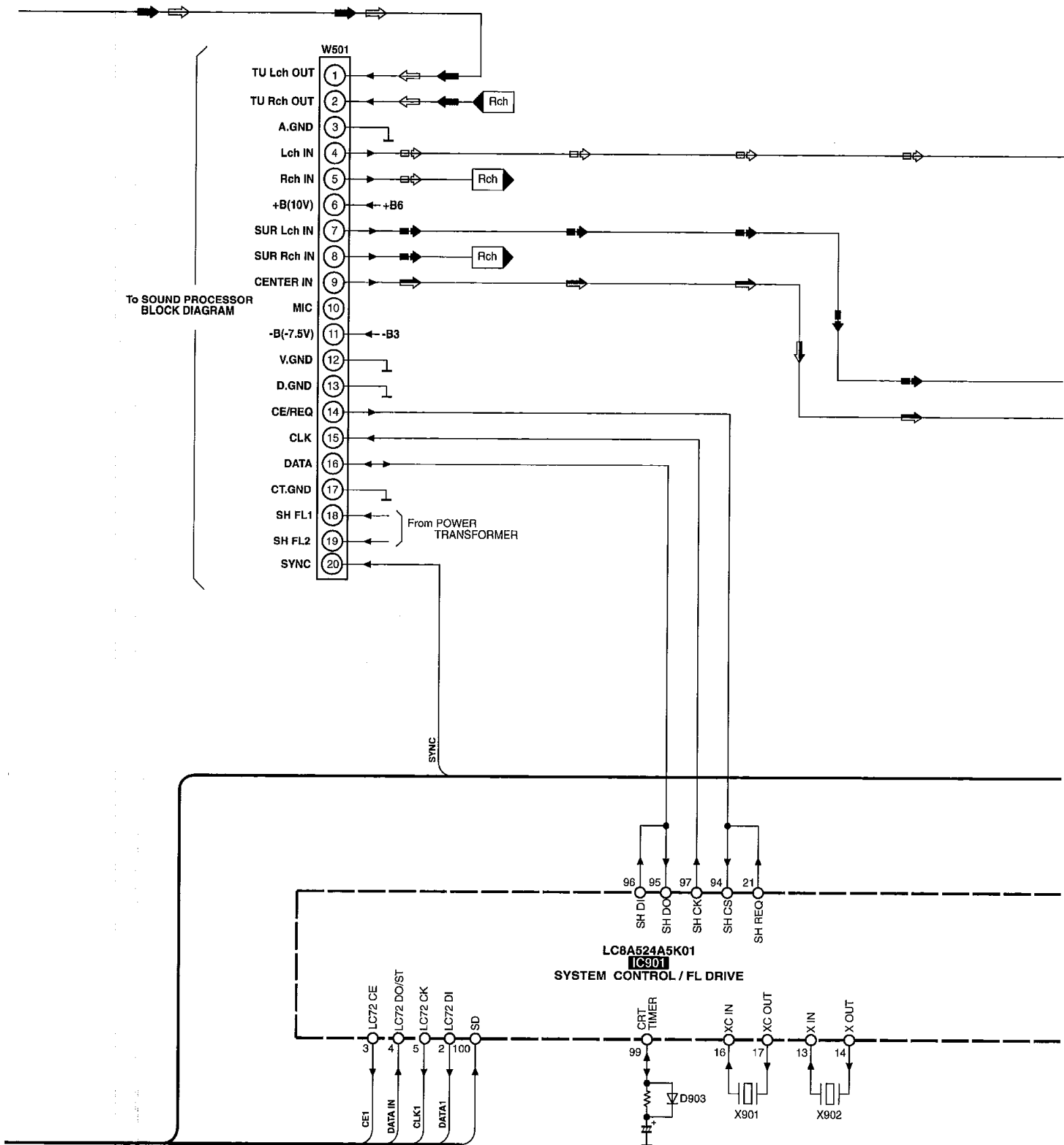
### ● IC901 (LC8A524A5K01) : System Control/ FL Drive

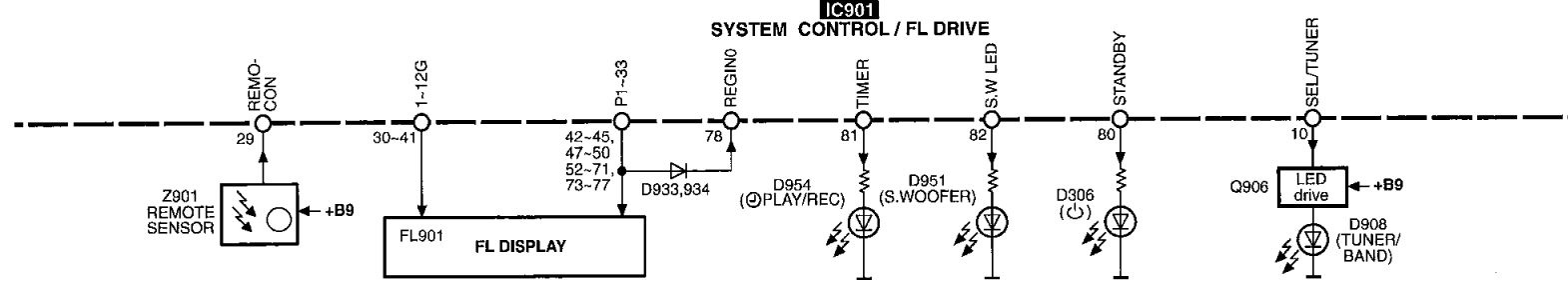
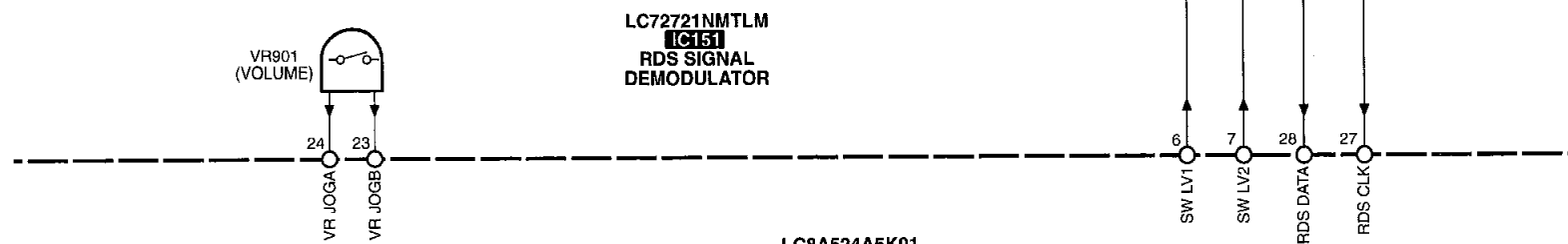
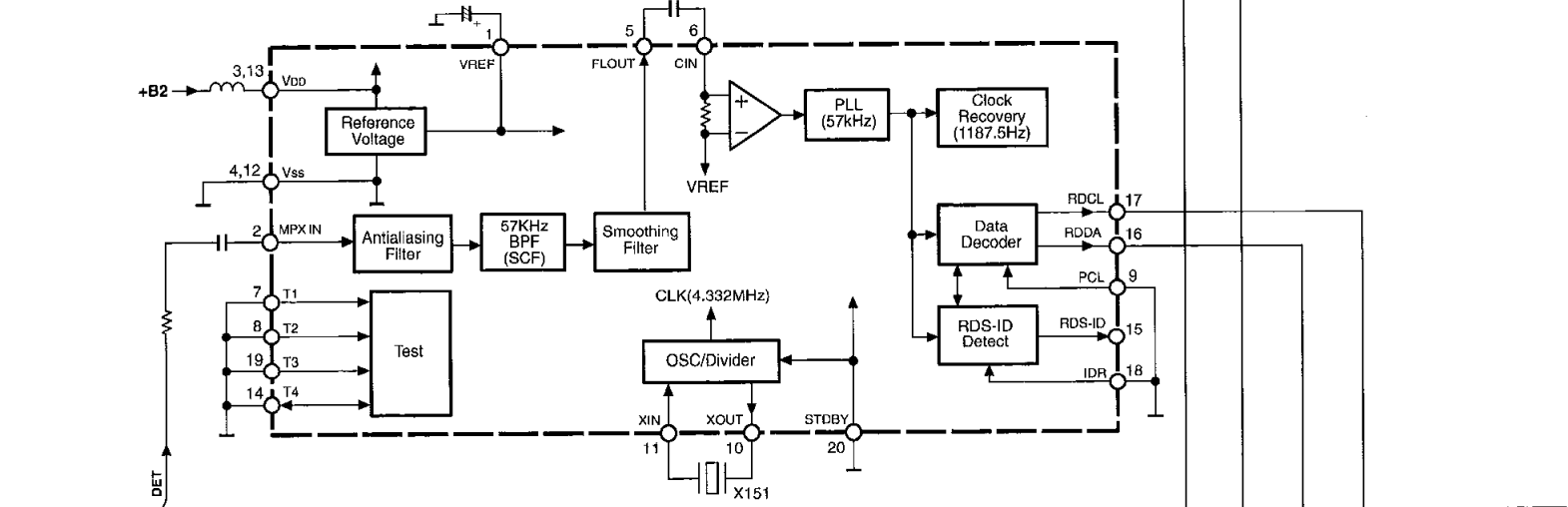
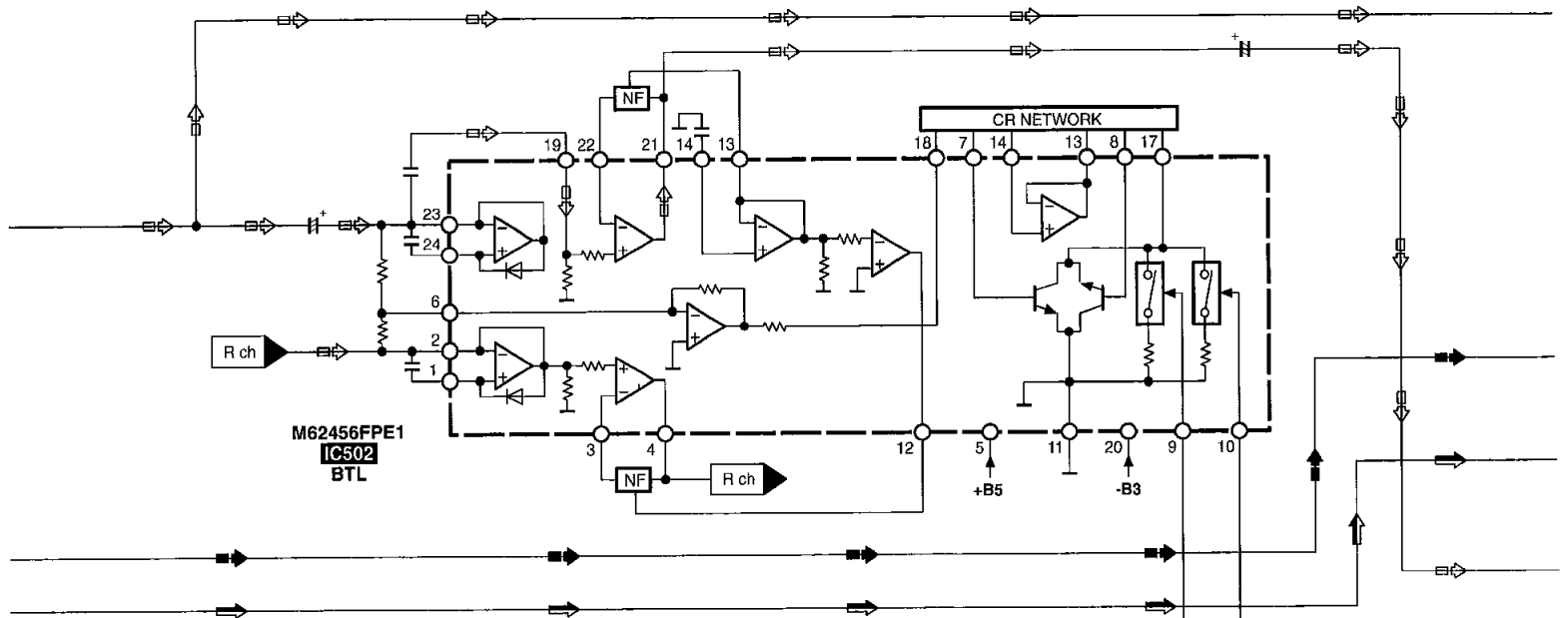
| Pin No. | Terminal Name    | I/O | Function   |
|---------|------------------|-----|--|
| 1       | CHECK            | O   | Clock check signal output                              |
| 2       | LC72 DI          | O   | PLL data signal output for IC102                       |
| 3       | LC72 CE          | O   | Chip enable signal output for IC102                    |
| 4       | LC72 DO/<br>ST   | I   | IF count data/stereo detect signal input for IC102     |
| 5       | LC72 CK          | O   | Clock signal output for IC102                          |
| 6       | SW LV1           | O   | LEVEL 1 signal output for IC502                        |
| 7       | SW LV2           | O   | LEVEL 2 signal output for IC502                        |
| 8       | SW MUT           | O   | Muting signal output for IC502                         |
| 9       | SEL TUNER        | -   | Tuner select signal output (Not used, open)            |
| 10      | SEL/ TUNER       | O   | Tuner select signal output ("L" = Tuner)               |
| 11      | AC IN            | I   | Power failure detect signal input                      |
| 12      | RESET            | I   | Reset signal input                                     |
| 13      | X IN             | I   | Oscillator connected terminal (32.7 kHz)               |
| 14      | X OUT            | O   |  |
| 15      | V <sub>SS</sub>  | -   | GND terminal   |
| 16      | XC IN            | I   | Oscillator connected terminal (6 MHz)                  |
| 17      | XC OUT           | O   |  |
| 18      | V <sub>DD1</sub> | I   | Power supply terminal                                  |
| 19      | KEY TU           | I   | Operation key signal input (TUNER, TIMER, AMP.section) |
| 20      | KEY KARAOKE      | I   | Operation key signal input (KARAOKE section)           |
| 21      | SH REQ           | I   | Request signal input for sound processor               |
| 22      | NC(GND)          | -   | Not used, connected to GND                             |
| 23      | VR JOGB          | I   | Volume control signal input                            |
| 24      | VR JOGA          |     |  |
| 25      | MIC DET          | I   | Microphone connecting detect signal input              |
| 26      | HP SW            | I   | Headphones connecting detect signal input              |
| 27      | RDS CLK          | I   | RDS clock signal input                                 |
| 28      | RDS DATA         | I   | RDS data signal input                                  |
| 29      | REMOCON          | I   | Remote control signal input                            |

| Pin No. | Terminal Name    | I/O | Function  |
|---------|------------------|-----|---|
| 30~41   | 12G~1G           | O   | Grid signal output  |
| 42~45   | P33~P30          | O   | Segment signal output   |
| 46      | V <sub>DD3</sub> | I   | Power supply terminal   |
| 47~50   | P29~P26          | O   | Segment signal output   |
| 51      | -VP              | I   | Power supply terminal (negative)                                    |
| 52~71   | P25~P6           | O   | Segment signal output   |
| 72      | V <sub>DD4</sub> | I   | Power supply terminal   |
| 73~77   | P5~P1            | O   | Segment signal output   |
| 78      | REGIN0           | I   | Area select signal input  |
| 79      | REGIN1           | I   | Area select signal input  |
| 80      | STANDBY          | O   | LED (STAND BY) drive signal output                                  |
| 81      | TIMER            | O   | LED (TIMER) drive signal output                                     |
| 82      | S.W LED          | O   | LED (S.WOOFER) drive signal output                                  |
| 83      | LOUNGE           | O   | LED (LOUNGE) drive signal output                                    |
| 84      | CHORUS           | O   | LED (CHORUS) drive signal output                                    |
| 85      | MUTE             | O   | Muting signal output  |
| 86      | POWER            | O   | Power control signal output   |
| 87      | /ECO             | O   | ECO signal output   |
| 88      | NC               | -   | Not used, open  |
| 89      | V <sub>SS2</sub> | -   | GND terminal  |
| 90      | V <sub>DD2</sub> | I   | Power supply terminal   |
| 91~93   | NC               | -   | Not used, open  |
| 94      | SH CS            | O   | Chip select signal output to Sound processor                        |
| 95      | SH DO            | O   | Serial communication signal to Sound processor (Data signal output) |
| 96      | SH DI            | I   | Serial communication signal to Sound processor (Data signal input)  |
| 97      | SH CK            | I   | Serial communication signal to Sound processor (Clock signal Input) |
| 98      | E DET            | I   | Unusual condition detect terminal ("L": Unusual)                    |
| 99      | CR TIMER         | I/O | TIME CONSTANT terminal  |
| 100     | SD               | I   | Station detector signal input for tuner circuit                     |

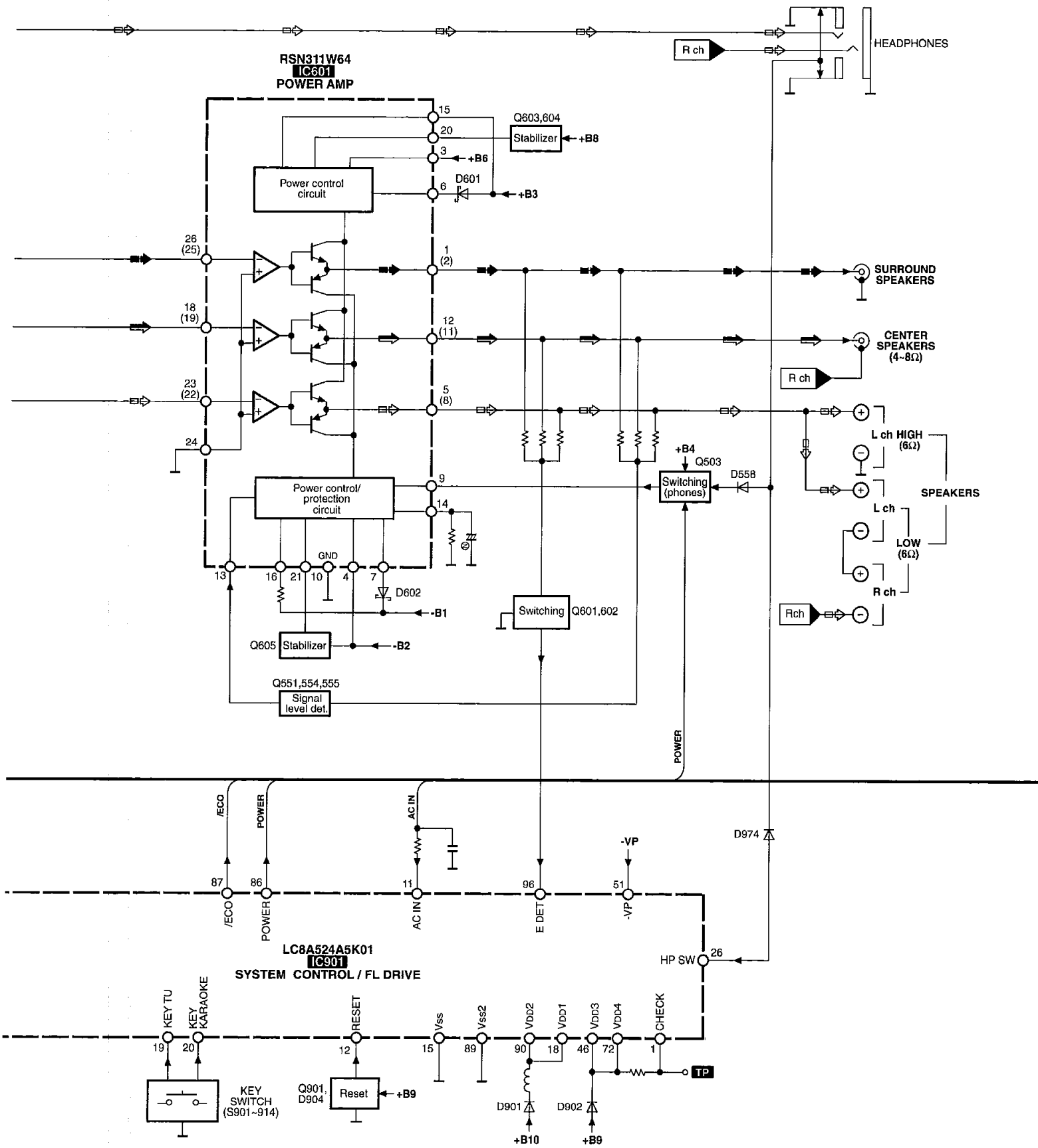
# Block Diagram













## ■ Replacement Parts List

### Notes: \* Important safety notice:

Components identified by  $\Delta$  mark have special characteristics important for safety. Furthermore, special parts which have purposes of fire-(resistors), etc. are used. When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

\* The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)

\* ALL parts are supplied by MESA.

\* The "<IA> <IB> <IC> <ID> <IE>" marks in Remarks indicate language of operating instructions.

<IA>: Spanish, Swedish

<IB>: German, Italian, French

<IC>: Dutch, Danish

<ID>: English

<IE>: Russian, Czech, Polish

| Ref.No.     | Part No.     | Part Name & Description | Pcs | Remarks     |
|-------------|--------------|-------------------------|-----|-------------|
| 1           | RKM0395-S    | CABINET                 | 1   |             |
| 2           | RHD30007-K1  | SCREW                   | 4   |             |
| 3           | XTBS3+10JFZ1 | SCREW                   | 1   |             |
| 4           | REX0967      | WIRE ASS'Y              | 1   |             |
| 5           | RMZ0339      | ZNR COVER               | 1   |             |
| 6           | RGW0317-S1   | KNOB,VOLUME             | 1   |             |
| 7           | RHN90001     | NUT                     | 1   |             |
| 8           | RKA0106-N    | FOOT RING               | 4   |             |
| 9           | RKF0589-K    | BACK GRILL              | 1   |             |
| 10          | RKW0581-V    | FL WINDOW               | 1   |             |
| 11          | RMN0427      | CABLE HOLDER            | 1   |             |
| 12          | RLBT4001-N   | FERRITE CORE            | 1   |             |
| 13          | RYP0915-S    | FRONT PANEL             | 1   |             |
| 13-1        | RGB0025-A    | TECHNICS BADGE          | 1   |             |
| 14          | SHG1854      | RUBBER                  | 4   |             |
| 15          | XTB3+10JFZ   | SCREW                   | 10  |             |
| 16          | XTB3+8JFZ    | SCREW                   | 13  |             |
| 17          | XTW3+15T     | SCREW                   | 2   |             |
| 18          | XTBS3+8JFZ1  | SCREW                   | 2   |             |
| A1          | RAK-EHA16WH  | REMOTE CONT.TRANSITTER  | 1   |             |
| A1-1        | RKK0123-H    | BATTERY COVER           | 1   |             |
| A2          | REE0393      | SPEAKER CORD            | 2   |             |
| A3          | REE0853      | SPEAKER CORD            | 2   |             |
| A4          | RJA0019-X    | AC POWER SUPPLY CORD    | 1   | (E,EG,EP)   |
| $\Delta$ A4 | RJA0053-2X   | AC POWER SUPPLY CORD    | 1   | (EB)        |
| A5          | RQA0117      | WARRANTY CARD           | 1   | (E,EG,EB)   |
| A6          | RQCA0669     | QUICK REFERENCE GUIDE   | 1   | (EB)        |
| A7          | RQCB0169     | SERVICE CENTER LIST     | 1   | (E,EG,EB)   |
| A8          | RQT4969-E    | OPERATING INSTRUCTIONS  | 1   | (E)<IA>     |
| A8          | RQT4967-1D   | OPERATING INSTRUCTIONS  | 1   | (EG)<IB>    |
| A8          | RQT4966-1H   | OPERATING INSTRUCTIONS  | 1   | (EG)<IC>    |
| A8          | RQT4970-B    | OPERATING INSTRUCTIONS  | 1   | (EB,EP)<ID> |
| A8          | RQT4971-R    | OPERATING INSTRUCTIONS  | 1   | (EP)<IE>    |
| A9          | RSA0007      | FM INDOOR ANTENNA       | 1   |             |
| A10         | RSA0022-J    | AM LOOP ANTENNA         | 1   |             |
| A11         | SJP9009      | ANT ADAPTOR             | 1   | (EB)        |
| C101        | ECBT1C103NS5 | 16V 0.01U               | 1   |             |
| C102        | ECEA1CKS101  | 16V 100U                | 1   |             |
| C103        | ECBT1C103NS5 | 16V 0.01U               | 1   |             |
| C104,05     | ECBT1H102KB5 | 50V 1000P               | 2   |             |
| C106        | ECBT1C103NS5 | 16V 0.01U               | 1   |             |
| C107        | ECBT1H473ZF5 | 50V 0.047U              | 1   |             |
| C108        | ECBT1H8R2KC5 | 50V 8.2P                | 1   |             |
| C109        | ECBT1H102KB5 | 50V 1000P               | 1   |             |
| C110        | ECBT1C103NS5 | 16V 0.01U               | 1   |             |
| C111        | ECEA1EKS4R7  | 25V 4.7U                | 1   |             |
| C112        | ECBT1C103NS5 | 16V 0.01U               | 1   |             |
| C113        | ECBT1H102KB5 | 50V 1000P               | 1   |             |
| C114        | RCE1HKA3R3BG | 50V 3.3U                | 1   |             |
| C115        | ECEA1EKS4R7  | 25V 4.7U                | 1   |             |
| C116        | ECFR1C333KR  | 16V 0.033U              | 1   |             |
| C117,18     | ECFR1C183KR  | 16V 0.0018U             | 2   |             |
| C119        | ECQP1391JZ   | 100V 390P               | 1   |             |
| C120        | RCE1CKA100BG | 16V 10U                 | 1   |             |
| C121        | RCE1HKAR47BG | 50V 0.47U               | 1   |             |

| Ref.No.          | Part No.     | Part Name & Description | Pcs | Remarks |
|------------------|--------------|-------------------------|-----|---------|
| C122,23          | ECEA1HKS010  | 50V 1U                  | 2   |         |
| C124             | ECBT1H101KB5 | 50V 100P                | 1   |         |
| C125             | ECEA1CKS220  | 16V 22U                 | 1   |         |
| C126             | ECBT1H473ZF5 | 50V 0.047U              | 1   |         |
| C127             | ECEA1CKS220  | 16V 22U                 | 1   |         |
| C129,30          | ECEA0JKS101  | 6.3V 100U               | 2   |         |
| C131             | ECBT1H101KB5 | 50V 100P                | 1   |         |
| C132             | ECBT1H102KB5 | 50V 1000P               | 1   |         |
| C133,34          | ECBT1H270JU5 | 50V 27P                 | 2   |         |
| C136             | ECBT1H102KB5 | 50V 1000P               | 1   |         |
| C137             | ECFR1E472KR  | 25V 4700P               | 1   |         |
| C138             | ECBT1C103KS5 | 16V 0.01U               | 1   |         |
| C139             | ECFR1E472KR  | 25V 4700P               | 1   |         |
| C141,42          | ECEA1HKS010  | 50V 1U                  | 2   |         |
| C143,44          | ECBT1C472KR5 | 16V 4700P               | 2   |         |
| C147             | ECBT1H102KB5 | 50V 1000P               | 1   |         |
| C148             | ECBT1C103NS5 | 16V 0.01U               | 1   |         |
| C149             | ECBT1H104ZF5 | 50V 0.1U                | 1   |         |
| C151             | RCE1CKA100BG | 16V 10U                 | 1   |         |
| C152             | ECBT1H331KB5 | 50V 330P                | 1   |         |
| C153             | ECBT1H102KB5 | 50V 1000P               | 1   |         |
| C154             | ECBT1H561KB5 | 50V 560P                | 1   |         |
| C155             | ECBT1H102KB5 | 50V 1000P               | 1   |         |
| C156,57          | ECBT1H470J5  | 50V 47P                 | 2   |         |
| C158,59          | ECEA0JKS470  | 6.3V 47UF               | 2   |         |
| C160             | ECBT1H102KB5 | 50V 1000P               | 1   |         |
| C395,96          | ECBT1H473ZF5 | 50V 0.047U              | 2   |         |
| C509,10          | ECBT1E103ZF  | 25V 0.01U               | 2   |         |
| C521             | ECQV1H473JM3 | 50V 0.047U              | 1   |         |
| C522             | ECQV1H683JM3 | 50V 0.068U              | 1   |         |
| C523,24          | ECBT1H101KB5 | 50V 100P                | 2   |         |
| C525             | ECQV1H563JM3 | 50V 0.056U              | 1   |         |
| C526             | ECQV1H683JM3 | 50V 0.068U              | 1   |         |
| C527,28          | ECBT1H101KB5 | 50V 100P                | 2   |         |
| C529,30          | RCE1CKA100BG | 16V 10U                 | 2   |         |
| C531             | ECQV1H823JZ  | 50V 0.082U              | 1   |         |
| C532             | ECBT1E103ZF  | 25V 0.01U               | 1   |         |
| C533             | ECEA1EKS4R7  | 25V 4.7U                | 1   |         |
| C534             | RCE1AKA330BG | 10V 33U                 | 1   |         |
| C535             | ECQV1H683JM3 | 50V 0.068U              | 1   |         |
| C536             | ECQV1H393JM3 | 50V 0.039U              | 1   |         |
| C537             | ECBT1H104KB5 | 50V 0.1U                | 1   |         |
| C538             | ECQV1H154JM3 | 50V 0.15U               | 1   |         |
| C539             | ECBT1C472KR5 | 16V 4700P               | 1   |         |
| C540,41          | ECEA0JKS470  | 6.3V 47U                | 2   |         |
| C542             | ECBT1E103ZF  | 25V 0.01U               | 1   |         |
| C550             | ECBT1C103NS5 | 16V 0.01U               | 1   |         |
| C551             | ECEA1HKS2R2  | 50V 2.2U                | 1   |         |
| C552             | ECBT1E103ZF  | 25V 0.01U               | 1   |         |
| C553             | RCE1HKAR47BG | 50V 0.47U               | 1   |         |
| C554             | ECEA1AKS221  | 10V 220U                | 1   |         |
| C561,62          | ECQV1H823JZ  | 50V 0.082U              | 2   |         |
| C563             | ECEA0JKS101  | 6.3V 100U               | 1   |         |
| C564             | RCE1CKA100BG | 16V 10U                 | 1   |         |
| C601,02          | RCE1CKA100BG | 16V 10U                 | 2   |         |
| C603-08          | ECBT1H471KB5 | 50V 470P                | 6   |         |
| C609,10          | ECBT1H220JC5 | 50V 22P                 | 2   |         |
| C611,12          | ECBT1H150JC5 | 50V 15P                 | 2   |         |
| C613,14          | ECBT1H220JC5 | 50V 22P                 | 2   |         |
| C615             | ECKR1H103ZF5 | 50V 0.01U               | 1   |         |
| C616             | ECEA1HKNR47B | 50V 0.47U               | 1   |         |
| C617,18          | ECKR2H103ZU  | 500V 0.01U              | 2   |         |
| C619             | ECBT1E103ZF  | 25V 0.01U               | 1   |         |
| C620,21          | ECQV1H473JM3 | 50V 0.047U              | 2   |         |
| C622             | ECA1HM101    | 50V 100U                | 1   |         |
| C623             | ECBT1H104ZF5 | 50V 0.1U                | 1   |         |
| C624-27          | ECQV1H473JM3 | 50V 0.047U              | 4   |         |
| C628             | ECBT1H104ZF5 | 50V 0.1U                | 1   |         |
| C629             | RCE1CKA100BG | 16V 10U                 | 1   |         |
| C631,32          | ECBT1H473ZF5 | 50V 0.047U              | 2   |         |
| C633,34          | ECBT1H102KB5 | 50V 1000P               | 2   |         |
| C635,36          | ECBT1H473ZF5 | 50V 0.047U              | 2   |         |
| C637-44          | ECBT1H102KB5 | 50V 1000P               | 8   |         |
| C645,46          | ECBT1H473ZF5 | 50V 0.047U              | 2   |         |
| C647-50          | ECBT1H102KB5 | 50V 1000P               | 4   |         |
| C651             | ECBT1H473ZF5 | 50V 0.047U              | 1   |         |
| C652-54          | ECBT1H102KB5 | 50V 1000P               | 3   |         |
| $\Delta$ C701-04 | ECA1VM472E   | 35V 4700U               | 4   |         |

| Ref.No.   | Part No.      | Part Name & Description | Pcs | Remarks |
|-----------|---------------|-------------------------|-----|---------|
| C706      | RCE1VKA100BG  | 35V 10U                 | 1   |         |
| C707      | ECBT1E103ZF   | 25V 0.01U               | 1   |         |
| C709      | ECBT1H104ZF5  | 50V 0.1U                | 1   |         |
| C710      | ECBT1E103ZF   | 25V 0.01U               | 1   |         |
| C714      | ECBT1H102KB5  | 50V 1000P               | 1   |         |
| △ C715    | ECA1EM472     | 25V 4700U               | 1   |         |
| C717      | ECEA1CK330    | 16V 33U                 | 1   |         |
| C718      | RCE1AKA101BG  | 10V 100U                | 1   |         |
| C719,20   | ECBT1H473KB5  | 50V 0.047U              | 2   |         |
| C721,22   | RCE1AKA101BG  | 10V 100U                | 2   |         |
| C723      | ECBT1E103ZF   | 25V 0.01U               | 1   |         |
| C731      | ECBT1H102KB5  | 50V 1000P               | 1   |         |
| C732      | ECBT1E223ZF   | 25V 0.022U              | 1   |         |
| C733      | ECBT1E103ZF   | 25V 0.01U               | 1   |         |
| C734      | RCE1HKA3R3BG  | 50V 3.3U                | 1   |         |
| △ C737    | ECA1HM101     | 50V 100U                | 1   |         |
| C740      | RCE1CKA100BG  | 16V 10U                 | 1   |         |
| C741      | ECQE1104KF3   | 100V 0.1U               | 1   |         |
| C753      | ECKR1H103ZF5  | 50V 0.01U               | 1   |         |
| △ C754    | RCE1CM102BV   | 16V 1000U               | 1   |         |
| C758      | ECBT1E103ZF   | 25V 0.01U               | 1   |         |
| C759      | RCE1AKA470BG  | 10V 47U                 | 1   |         |
| C761      | ECQE1104KF3   | 100V 0.1U               | 1   |         |
| C791      | ECKWRS102MBC  | 125V 1000P              | 1   |         |
| C901      | ECBT1H102KB5  | 50V 1000P               | 1   |         |
| C902      | RCE1AM102BV   | 10V 1000U               | 1   |         |
| C903,04   | ECBT1E103ZF   | 25V 0.01U               | 2   |         |
| C907,08   | ECBT1H471KB5  | 50V 470P                | 2   |         |
| C909      | ECBT1H102KB5  | 50V 1000P               | 1   |         |
| C910      | ECBT1H220JC5  | 50V 22P                 | 1   |         |
| C911      | ECBT1H180J5   | 50V 18P                 | 1   |         |
| C912      | ECBT1H104ZF5  | 50V 0.1U                | 1   |         |
| C913      | RCE1CKA100BG  | 16V 10U                 | 1   |         |
| C914      | ECEA1HKS2R2   | 50V 2.2U                | 1   |         |
| C915      | ECBT1E103ZF   | 25V 0.01U               | 1   |         |
| C916      | EFAFC0J101B   | 6.3V 100U               | 1   |         |
| C917      | ECBT1E103ZF   | 25V 0.01U               | 1   |         |
| C918      | ECEA0JKS101   | 6.3V 100U               | 1   |         |
| C919,20   | ECEA1HKS2R2   | 50V 2.2U                | 2   |         |
| C921      | ECBT1H102KB5  | 50V 1000P               | 1   |         |
| C922      | ECEA1VKA330B  | 35V 33U                 | 1   |         |
| C923,24   | ECBT1H104ZF5  | 50V 0.1U                | 2   |         |
| C925,26   | ECBT1H102KB5  | 50V 1000P               | 2   |         |
| CF201     | RLFFETNGD01L  | CERAMIC FILTER          | 1   |         |
| CF202     | RLFFETMGD01L  | CERAMIC FILTER          | 1   |         |
| CN101B,2B | RJU100W07     | CONNECTOR(7P)           | 2   |         |
| CN601     | RJU057W012    | CONNECTOR(12P)          | 1   |         |
| CN701-13  | RJS1A1101T1   | CONNECTOR(1P)           | 13  |         |
| CP101B,2B | RJT100W07     | CONNECTOR(7P)           | 2   |         |
| CP601     | RJT057W012-1  | CONNECTOR(12P)          | 1   |         |
| △ D101    | MA4051M       | DIODE                   | 1   |         |
| △ D151    | MA4051M       | DIODE                   | 1   |         |
| D306      | LNJ801TPS,JAD | LED                     | 1   |         |
| D500-04   | MA165         | DIODE                   | 5   |         |
| D561,52   | MA165         | DIODE                   | 2   |         |
| D555      | MA4100M       | DIODE                   | 1   |         |
| D558      | MA165         | DIODE                   | 1   |         |
| D562,63   | MA165         | DIODE                   | 2   |         |
| D601,02   | SB360L6508    | DIODE                   | 2   |         |
| D603      | MA4180L       | DIODE                   | 1   |         |
| D604,05   | MA4140M       | DIODE                   | 2   |         |
| D657,58   | MA165         | DIODE                   | 2   |         |
| △ D701-04 | 1N5402BF      | DIODE                   | 4   |         |
| △ D705    | RL1N4003N02   | DIODE                   | 1   |         |
| D711      | RL1N4003N02   | DIODE                   | 1   |         |
| D715      | MA165         | DIODE                   | 1   |         |
| △ D717-20 | RL1N4003N02   | DIODE                   | 4   |         |
| △ D721    | MA4300M       | DIODE                   | 1   |         |
| △ D723    | MA4150M       | DIODE                   | 1   |         |
| △ D725    | MA4082LTA     | DIODE                   | 1   |         |
| D730      | MA4091H       | DIODE                   | 1   |         |
| D736      | MA165         | DIODE                   | 1   |         |
| △ D737    | MA4082LTA     | DIODE                   | 1   |         |
| D738-40   | MA165         | DIODE                   | 3   |         |

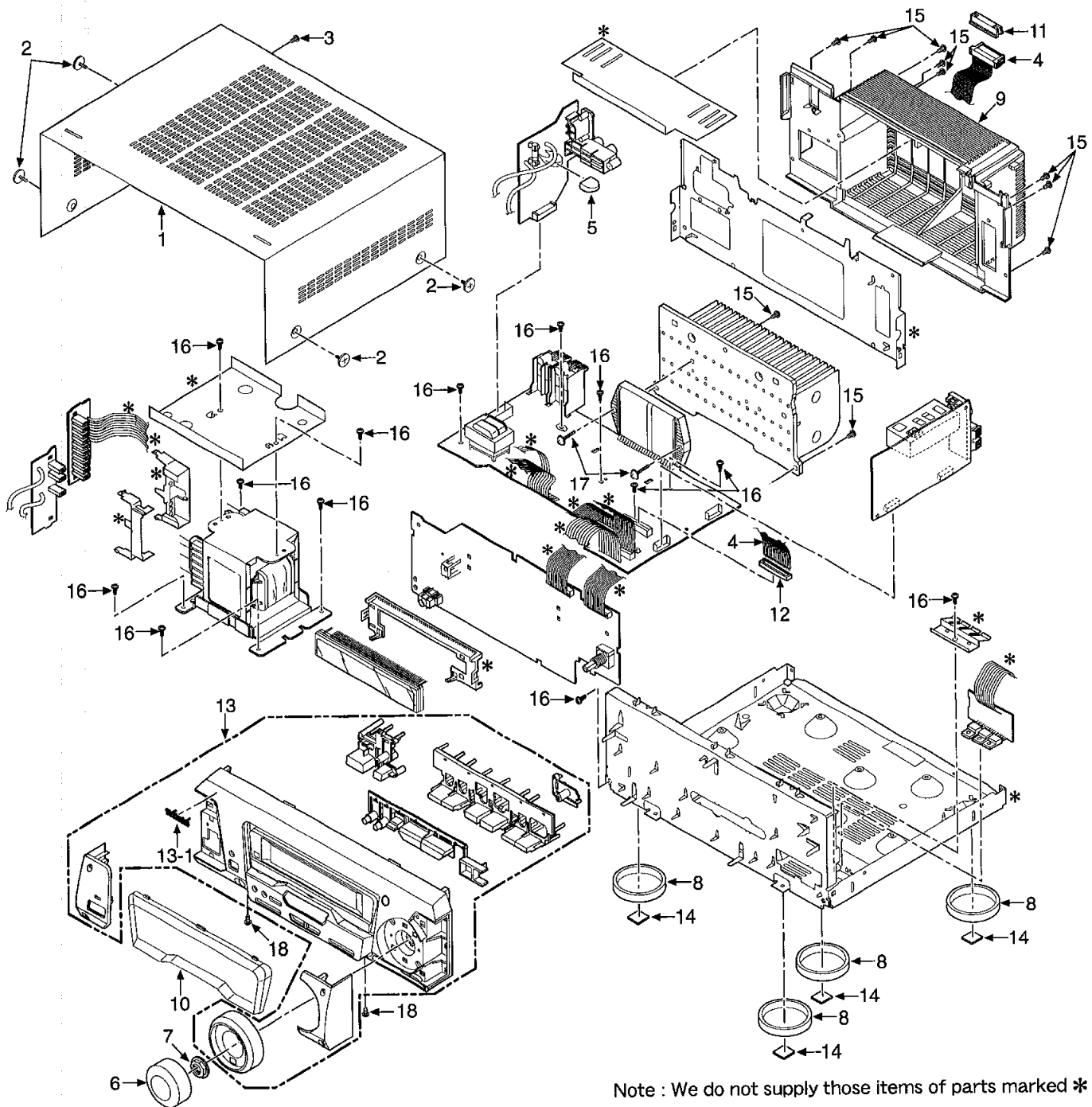
| Ref.No.   | Part No.     | Part Name & Description | Pcs | Remarks |
|-----------|--------------|-------------------------|-----|---------|
| △ D741-44 | RL1N4003N02  | DIODE                   | 4   |         |
| D745      | MA4051M      | DIODE                   | 1   |         |
| D746      | RL1N4003N02  | DIODE                   | 1   |         |
| △ D747    | MA4068M      | DIODE                   | 1   |         |
| D749      | MA165        | DIODE                   | 1   |         |
| △ D751,52 | 1N5402BF     | DIODE                   | 2   |         |
| △ D753-55 | RL1N4003N02  | DIODE                   | 3   |         |
| D756,57   | MA700TA      | DIODE                   | 2   |         |
| D758      | MA165        | DIODE                   | 1   |         |
| D901,02   | 1SS291TA     | DIODE                   | 2   |         |
| D903,04   | MA165        | DIODE                   | 2   |         |
| D905      | 1SS291TA     | DIODE                   | 1   |         |
| D908      | LNJ301MPUJAD | LED                     | 1   |         |
| D915      | 1SS291TA     | DIODE                   | 1   |         |
| D933,34   | MA165        | DIODE                   | 2   |         |
| D951      | LNJ301MPUJAD | LED                     | 1   |         |
| D954      | LNJ401NPFJA  | DIODE                   | 1   |         |
| △ D973    | MA4033M      | DIODE                   | 1   |         |
| D974      | MA165        | DIODE                   | 1   |         |
| △ F1      | XBA2C20TB0   | FUSE,T2A                | 1   |         |
| FL901     | RSL0285-F    | FL                      | 1   |         |
| IC101     | LA1833MN-TLM | IC                      | 1   |         |
| IC102     | LC72131MDTLM | IC                      | 1   |         |
| IC151     | LC72721NMTLM | IC                      | 1   |         |
| IC502     | M62456FPE1   | IC                      | 1   |         |
| △ IC601   | RSN311W64    | IC                      | 1   |         |
| IC901     | LC8A524A5K01 | IC                      | 1   |         |
| JK101     | RJH5210M     | JACK,ANTENNA            | 1   |         |
| JK601     | RJR0054B     | JACK,SPEAKER            | 1   |         |
| JK602     | RJR0054C     | JACK,SPEAKER            | 1   |         |
| JK603     | RJH2308      | JACK,SPEAKER            | 1   |         |
| △ JK701   | SJS9236      | JACK,AC INLET           | 1   |         |
| JK903     | RJJ37TN02-C  | JACK,HEADPHONE          | 1   |         |
| L101,02   | ELESNR68MA   | COIL                    | 2   |         |
| L103      | ELEXR47MA9   | COIL                    | 1   |         |
| L151,52   | ELEXT101KA9  | COIL                    | 2   |         |
| L153      | RLQZP1R0KT-Y | COIL                    | 1   |         |
| L601-06   | RLQYR73MW1-0 | COIL                    | 6   |         |
| △ L701    | RLQZ371      | COIL                    | 1   |         |
| L901      | RLQA100JT-Y  | COIL                    | 1   |         |
| L902      | RLQZP1R0KT-Y | COIL                    | 1   |         |
| P1        | RPF0139      | PROTECTION COVER        | 1   |         |
| P2        | RPG4397      | PACKING CASE(RS)        | 1   |         |
| P2        | RPG4396      | PACKING CASE(SA)        | 1   |         |
| P2        | RPG4398      | PACKING CASE(SH)        | 1   |         |
| P2        | RPG4399      | PACKING CASE(SL)        | 1   |         |
| P3        | RPN1195      | PAD(RS)                 | 1   |         |
| P3        | RPN1194      | PAD(SA)                 | 1   |         |
| P3        | RPN1196      | PAD(SH)                 | 1   |         |
| P3        | RPN1197      | PAD(SL)                 | 1   |         |
| P4        | RPG4400      | PACKING CASE(SYSTEM)    | 1   | (E)     |
| P4        | RPG4401      | PACKING CASE(SYSTEM)    | 1   | (EG)    |
| P4        | RPG4402      | PACKING CASE(SYSTEM)    | 1   | (EB)    |
| P4        | RPG4403      | PACKING CASE(SYSTEM)    | 1   | (EP)    |
| P5        | RPQ0951      | PAD(SYSTEM)             | 1   |         |
| P6        | SPP740-1     | SHEET                   | 1   |         |
| Q101,02   | 2SC2787FK    | TRANSISTOR              | 2   |         |
| Q106      | UN4111       | TRANSISTOR              | 1   |         |
| Q110      | 2SC3311AR    | TRANSISTOR              | 1   |         |
| Q503      | 2SC3327A     | TRANSISTOR              | 1   |         |
| Q551      | 2SA1995RSTA  | TRANSISTOR              | 1   |         |
| Q554      | 2SA1995RSTA  | TRANSISTOR              | 1   |         |
| Q555      | 2SC3327A     | TRANSISTOR              | 1   |         |
| Q558      | UN4211       | TRANSISTOR              | 1   |         |
| Q601,02   | 2SC5998RSTA  | TRANSISTOR              | 2   |         |
| Q603,04   | 2SD1859QRTV2 | TRANSISTOR              | 2   |         |
| Q605      | 2SB1417PQTA  | TRANSISTOR              | 1   |         |
| △ Q701    | 2SD2374PQAU  | TRANSISTOR              | 1   |         |
| △ Q702    | 2SB1548PQAU  | TRANSISTOR              | 1   |         |
| △ Q703    | 2SD592AR     | TRANSISTOR              | 1   |         |
| △ Q705    | 2SA1995RSTA  | TRANSISTOR              | 1   |         |

| Ref.No. | Part No.     | Part Name & Description | Pcs | Remarks |
|---------|--------------|-------------------------|-----|---------|
| Q706    | UN4211       | TRANSISTOR              | 1   |         |
| △ Q707  | 2SB621A-R    | TRANSISTOR              | 1   |         |
| Q708    | UN4211       | TRANSISTOR              | 1   |         |
| Q709    | 2SC3327A     | TRANSISTOR              | 1   |         |
| △ Q711  | 2SB1548PQAU  | TRANSISTOR              | 1   |         |
| △ Q723  | 2SC3940AQSTA | TRANSISTOR              | 1   |         |
| △ Q725  | 2SC5398RSTA  | TRANSISTOR              | 1   |         |
| △ Q726  | 2SC3940AQSTA | TRANSISTOR              | 1   |         |
| Q791    | 2SC3327A     | TRANSISTOR              | 1   |         |
| Q901    | UN4212TA     | TRANSISTOR              | 1   |         |
| Q906    | UN4111       | TRANSISTOR              | 1   |         |
|         |              |                         |     |         |
| R102    | ERDS2FJ472   | 1/4W 4.7K               | 1   |         |
| R103    | ERDS2FJ101   | 1/4W 100                | 1   |         |
| R104    | ERDS2FJ103   | 1/4W 10K                | 1   |         |
| R105    | ERDS2FJ471   | 1/4W 470                | 1   |         |
| R106    | ERDS2FJ474   | 1/4W 470K               | 1   |         |
| R107    | ERDS2FJ331   | 1/4W 330                | 1   |         |
| R108    | ERDS2FJ474   | 1/4W 470K               | 1   |         |
| R109    | ERDS2FJ331   | 1/4W 330                | 1   |         |
| R110    | ERDS2FJ102   | 1/4W 1K                 | 1   |         |
| R111    | ERDS2FJ391   | 1/4W 390                | 1   |         |
| R112    | ERDS2FJ104   | 1/4W 100K               | 1   |         |
| R113    | ERDS2FJ103   | 1/4W 10K                | 1   |         |
| R114    | ERDS2FJ562   | 1/4W 5.6K               | 1   |         |
| R115    | ERDS2FJ561   | 1/4W 560                | 1   |         |
| R116    | ERDS2FJ102   | 1/4W 1K                 | 1   |         |
| R117    | ERDS2FJ683   | 1/4W 68K                | 1   |         |
| R118    | ERDS2FJ332   | 1/4W 3.3K               | 1   |         |
| R119    | ERDS2FJ103   | 1/4W 10K                | 1   |         |
| R120    | ERDS2FJ473   | 1/4W 47K                | 1   |         |
| R121    | ERDS2FJ223   | 1/4W 22K                | 1   |         |
| R122    | ERDS2FJ272   | 1/4W 2.7K               | 1   |         |
| R123    | ERDS2FJ683   | 1/4W 68K                | 1   |         |
| R124    | ERDS2FJ271   | 1/4W 270                | 1   |         |
| R125,26 | ERDS2FJ152   | 1/4W 1.5K               | 2   |         |
| R127    | ERDS2FJ471   | 1/4W 470                | 1   |         |
| R128    | ERDS2FJ820   | 1/4W 82                 | 1   |         |
| R129    | ERDS2FJ273   | 1/4W 27K                | 1   |         |
| R130    | ERDS2FJ103   | 1/4W 10K                | 1   |         |
| R131    | ERDS2FJ680   | 1/4W 68                 | 1   |         |
| R132    | ERDS2FJ103   | 1/4W 10K                | 1   |         |
| R133-37 | ERDS2FJ102   | 1/4W 1K                 | 5   |         |
| R138    | ERDS2FJ103   | 1/4W 10K                | 1   |         |
| R139    | ERDS2FJ332   | 1/4W 3.3K               | 1   |         |
| R140    | ERDS2FJ472   | 1/4W 4.7K               | 1   |         |
| R141,42 | ERDS2FJ102   | 1/4W 1K                 | 2   |         |
| R143    | ERDS2FJ223   | 1/4W 22K                | 1   |         |
| R145,46 | ERDS2FJ104   | 1/4W 100K               | 2   |         |
| R151,52 | ERDS2FJ102   | 1/4W 1K                 | 2   |         |
| R153,54 | ERDS2FJ104   | 1/4W 100K               | 2   |         |
| R155    | ERDS2FJ121   | 1/4W 120                | 1   |         |
| R158    | ERDS2FJ102   | 1/4W 1K                 | 1   |         |
| R229,30 | ERDS2FJ102   | 1/4W 1K                 | 2   |         |
| R289,90 | ERDS2FJ473   | 1/4W 47K                | 2   |         |
| R509-12 | ERDS2FJ470   | 1/4W 47                 | 4   |         |
| R521    | ERDS2FJ433   | 1/4W 43K                | 1   |         |
| R522    | ERDS2FJ333   | 1/4W 33K                | 1   |         |
| R523,24 | ERDS2FJ153   | 1/4W 15K                | 2   |         |
| R525,26 | ERDS2FJ333   | 1/4W 33K                | 2   |         |
| R527,28 | ERDS2FJ101   | 1/4W 100                | 2   |         |
| R529    | ERDS2FJ223   | 1/4W 22K                | 1   |         |
| R530    | ERDS2FJ273   | 1/4W 27K                | 1   |         |
| R531    | ERDS2FJ274   | 1/4W 270K               | 1   |         |
| R532    | ERDS2FJ153   | 1/4W 15K                | 1   |         |
| R533    | ERDS2FJ822   | 1/4W 8.2K               | 1   |         |
| R534,35 | ERDS2FJ823   | 1/4W 82K                | 2   |         |
| R538    | ERDS2FJ273   | 1/4W 27K                | 1   |         |
| R539    | ERDS2FJ824   | 1/4W 820K               | 1   |         |
| R542,43 | ERDS2FJ472   | 1/4W 4.7K               | 2   |         |
| R544    | ERDS2FJ103   | 1/4W 10K                | 1   |         |
| R545    | ERDS2FJ222   | 1/4W 2.2K               | 1   |         |
| R546    | ERDS2FJ183   | 1/4W 18K                | 1   |         |
| R548    | ERDS2FJ102   | 1/4W 1K                 | 1   |         |
| R551    | ERDS2FJ183   | 1/4W 18K                | 1   |         |
| R552    | ERDS2FJ473   | 1/4W 47K                | 1   |         |
| R553,54 | ERDS2FJ183   | 1/4W 18K                | 2   |         |
| R555    | ERDS2FJ223   | 1/4W 22K                | 1   |         |

| Ref.No.   | Part No.     | Part Name & Description | Pcs | Remarks |
|-----------|--------------|-------------------------|-----|---------|
| R556      | ERDS2FJ104   | 1/4W 100K               | 1   |         |
| R557      | ERDS2FJ103   | 1/4W 10K                | 1   |         |
| R558      | ERDS2FJ102   | 1/4W 1K                 | 1   |         |
| R559      | ERDS2FJ472   | 1/4W 4.7K               | 1   |         |
| R561      | ERDS2FJ104   | 1/4W 100K               | 1   |         |
| R563,64   | ERDS2FJ272   | 1/4W 2.7K               | 2   |         |
| R570      | ERDS2TJ225   | 1/4W 2.2M               | 1   |         |
| R571      | ERDS2FJ562   | 1/4W 5.6K               | 1   |         |
| R572      | ERDS2FJ153   | 1/4W 15K                | 1   |         |
| R591      | ERDS2FJ472   | 1/4W 4.7K               | 1   |         |
| R597,98   | ERDS2FJ102   | 1/4W 4.7K               | 2   |         |
| R601-06   | ERDS2FJ472   | 1/4W 4.7K               | 6   |         |
| R607-12   | ERDS2FJ563   | 1/4W 56K                | 6   |         |
| R613      | ERDS2FJ103   | 1/4W 10K                | 1   |         |
| R614,15   | ERDS2FJ472   | 1/4W 4.7K               | 2   |         |
| R616      | ERDS2FJ563   | 1/4W 56K                | 1   |         |
| R617,18   | ERDS2FJ472   | 1/4W 4.7K               | 2   |         |
| R619,20   | ERDS2FJ124   | 1/4W 120K               | 2   |         |
| R621      | ERDS2FJ154   | 1/4W 150K               | 1   |         |
| R622,23   | ERDS2FJ124   | 1/4W 120K               | 2   |         |
| R624      | ERDS2FJ154   | 1/4W 150K               | 1   |         |
| △ R625,26 | ERDS1FJ272   | 1/2W 2.7K               | 2   |         |
| R627      | ERDS2FJ474   | 1/4W 470K               | 1   |         |
| R628      | ERDS2FJ223   | 1/4W 22K                | 1   |         |
| △ R629    | ERDS1FJ561   | 1/2W 560                | 1   |         |
| R637      | ERDS2FJ153   | 1/4W 15K                | 1   |         |
| R638      | ERDS2FJ683   | 1/4W 68K                | 1   |         |
| △ R639-46 | ERDS1FJ100   | 1/2W 10                 | 8   |         |
| △ R647,48 | ERDS2FJ2H2   | 1/4W 2.2                | 2   |         |
| △ R649-52 | ERDS1FJ100   | 1/2W 10                 | 4   |         |
| R653      | EROS2TKF5362 | 1/4W 53.6K              | 1   |         |
| R654      | ERDS2FJ272   | 1/4W 2.7K               | 1   |         |
| R655      | EROS2TKG5622 | 1/4W 56.2K              | 1   |         |
| R656      | ERDS2FJ331   | 1/4W 330                | 1   |         |
| R661      | ERDS2FJ272   | 1/4W 2.7K               | 1   |         |
| R703-05   | ERG1SJ222    | 1W 2.2K                 | 3   |         |
| △ R707    | ERDS2FJ4R7   | 1/4W 4.7                | 1   |         |
| R708      | ERDS2FJ472   | 1/4W 4.7K               | 1   |         |
| R712      | ERDS2FJ222   | 1/4W 2.2K               | 1   |         |
| R719      | ERDS2FJ332   | 1/4W 3.3K               | 1   |         |
| R720      | ERDS2FJ272   | 1/4W 2.7K               | 1   |         |
| △ R721    | ERD2FCJ4R7   | 1/4W 4.7                | 1   |         |
| △ R722    | ERQ16NKW2R2E | 1/6W 2.2                | 1   |         |
| R723      | ERDS2FJ562   | 1/4W 5.6K               | 1   |         |
| R724      | ERDS2FJ392   | 1/4W 3.9K               | 1   |         |
| R725      | ERDS2FJ100   | 1/4W 10                 | 1   |         |
| R727      | ERDS2FJ392   | 1/4W 3.9K               | 1   |         |
| R729      | ERDS2FJ221   | 1/4W 220                | 1   |         |
| R738      | ERDS2FJ392   | 1/4W 3.9K               | 1   |         |
| R739      | ERDS2FJ473   | 1/4W 47K                | 1   |         |
| R749      | ERDS2FJ102   | 1/4W 1K                 | 1   |         |
| R753      | ERD16TJ000T  | 1/6W 0                  | 1   |         |
| R763      | ERDS2FJ472   | 1/4W 4.7K               | 1   |         |
| R764      | ERDS2FJ331   | 1/4W 330                | 1   |         |
| R765      | ERDS1FJ221   | 1/2W 220                | 1   |         |
| △ R766    | ERDS1FJ470   | 1/2W 47                 | 1   |         |
| △ R767    | ERDS2FJ4R7   | 1/4W 4.7                | 1   |         |
| R768      | ERDS2FJ101   | 1/4W 100                | 1   |         |
| R771      | ERDS2FJ222   | 1/4W 2.2K               | 1   |         |
| R772      | ERDS2FJ223   | 1/4W 22K                | 1   |         |
| △ R773    | ERDS1FJ470   | 1/2W 47                 | 1   |         |
| △ R774    | ERDS1FJ270   | 1/2W 27                 | 1   |         |
| R776      | ERDS2FJ103   | 1/4W 10K                | 1   |         |
| R777      | ERDS2FJ102   | 1/4W 1K                 | 1   |         |
| △ R779    | ERDS1FJ470   | 1/2W 47                 | 1   |         |
| △ R791,92 | RSFMB30KT-L  | FUSE PROTECTOR          | 2   |         |
| R793      | ERDS2FJ1R0   | 1/4W 1                  | 1   |         |
| R794      | ERDS2FJ473   | 1/4W 47K                | 1   |         |
| R795      | ERDS2FJ392   | 1/4W 3.9K               | 1   |         |
| R901      | ERDS2FJ821   | 1/4W 820                | 1   |         |
| R902      | ERDS2FJ102   | 1/4W 1K                 | 1   |         |
| R903      | ERDS2FJ122   | 1/4W 1.2K               | 1   |         |
| R904      | ERDS2FJ152   | 1/4W 1.5K               | 1   |         |
| R905      | ERDS2FJ182   | 1/4W 1.8K               | 1   |         |
| R906      | ERDS2FJ222   | 1/4W 2.2K               | 1   |         |
| R907      | ERDS2FJ332   | 1/4W 3.3K               | 1   |         |
| R908      | ERDS2FJ472   | 1/4W 4.7K               | 1   |         |
| R909      | ERDS2FJ182   | 1/4W 1.8K               | 1   |         |



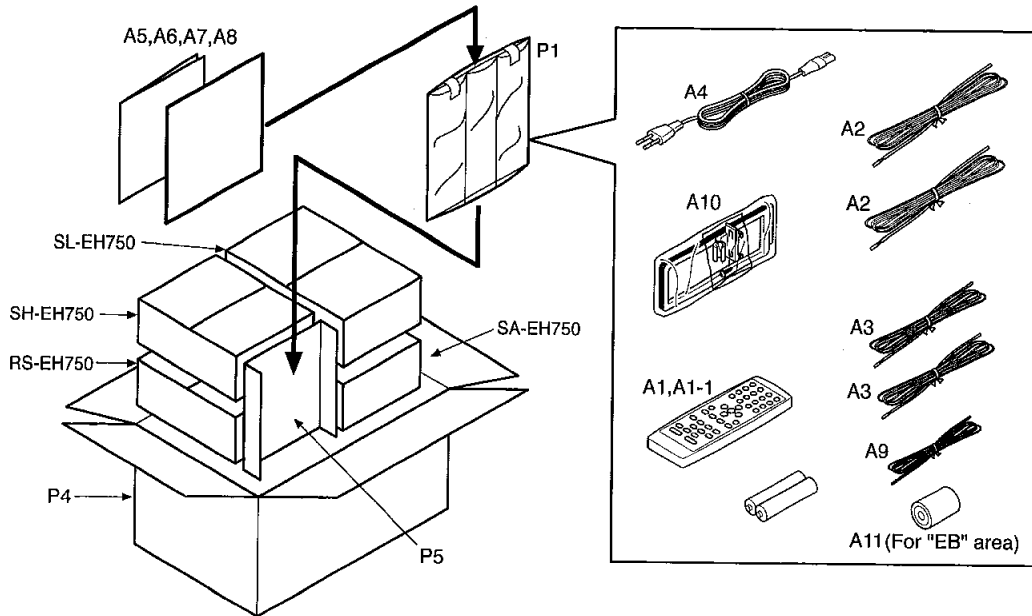
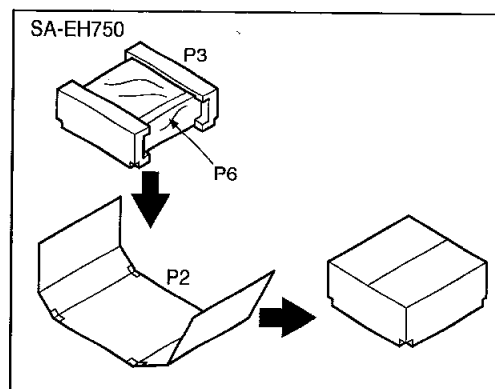
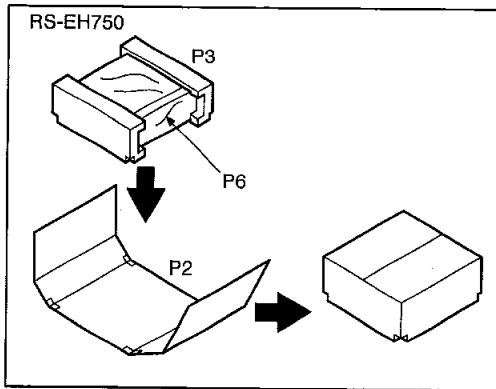
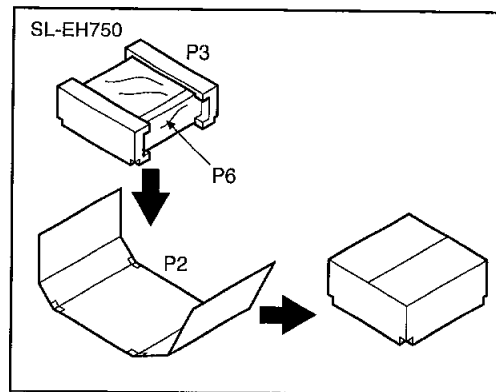
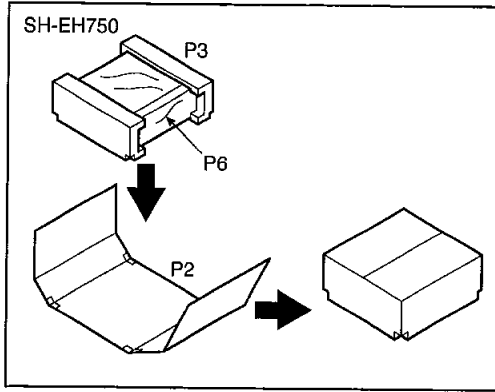
## ■ Cabinet Parts Location



| Ref.No. | Part No.     | Part Name & Description | Pcs | Remarks |
|---------|--------------|-------------------------|-----|---------|
| 1       | RKM0395-S    | CABINET                 | 1   |         |
| 2       | RHD30007-K1  | SCREW                   | 4   |         |
| 3       | XTBS3+10JFZ1 | SCREW                   | 1   |         |
| 4       | REX0967      | WIRE ASS'Y              | 1   |         |
| 5       | RMZ0339      | ZNR COVER               | 1   |         |
| 6       | RGW0317-S1   | KNOB,VOLUME             | 1   |         |
| 7       | RHN90001     | NUT                     | 1   |         |
| 8       | RKA0106-N    | FOOT RING               | 4   |         |
| 9       | RKF0589-K    | BACK GRILL              | 1   |         |
| 10      | RKW0581-V    | FL WINDOW               | 1   |         |

| Ref.No. | Part No.    | Part Name & Description | Pcs | Remarks |
|---------|-------------|-------------------------|-----|---------|
| 11      | RMN0427     | CABLE HOLDER            | 1   |         |
| 12      | RLBT4001-N  | FERRITE CORE            | 1   |         |
| 13      | RYP0915-S   | FRONT PANEL             | 1   |         |
| 13-1    | RGB0025-A   | TECHNICS BADGE          | 1   |         |
| 14      | SHG1654     | RUBBER                  | 4   |         |
| 15      | XTB3+10JFZ  | SCREW                   | 10  |         |
| 16      | XTB3+8JFZ   | SCREW                   | 13  |         |
| 17      | XTW3+15T    | SCREW                   | 2   |         |
| 18      | XTBS3+8JFZ1 | SCREW                   | 2   |         |

# ■ Packaging



| Ref.No. | Part No.    | Part Name & Description | Pcs | Remarks    |
|---------|-------------|-------------------------|-----|------------|
| A1      | RAK-EHA16WH | REMOTE CONT.TRANSMITTER | 1   |            |
| A1-1    | RKK0123-H   | BATTERY COVER           | 1   |            |
| A2      | REE0393     | SPEAKER CORD            | 2   |            |
| A3      | REE0853     | SPEAKER CORD            | 2   |            |
| △ A4    | RJA0019-X   | AC POWER SUPPLY CORD    | 1   | (E,EG,EP)  |
| △ A4    | RJA0053-2X  | AC POWER SUPPLY CORD    | 1   | (EB)       |
| A5      | RQA0117     | WARRANTY CARD           | 1   | (E,EG,EB)  |
| A6      | RQCA0669    | QUICK REFERENCE GUIDE   | 1   | (EB)       |
| A7      | RQCB0169    | SERVICE CENTER LIST     | 1   | (E,EG,EB)  |
| A8      | RQT4969-E   | OPERATING INSTRUCTIONS  | 1   | (E)<A>     |
| A8      | RQT4967-1D  | OPERATING INSTRUCTIONS  | 1   | (EG)<B>    |
| A8      | RQT4968-1H  | OPERATING INSTRUCTIONS  | 1   | (EG)<C>    |
| A8      | RQT4970-B   | OPERATING INSTRUCTIONS  | 1   | (EB,EP)<D> |
| A8      | RQT4971-R   | OPERATING INSTRUCTIONS  | 1   | (EP)<E>    |
| A9      | RSA0007     | FM INDOOR ANTENNA       | 1   |            |
| A10     | RSA0022-J   | AM LOOP ANTENNA         | 1   |            |
| A11     | SJP9009     | ANT ADAPTOR             | 1   | (EB)       |

| Ref.No. | Part No. | Part Name & Description | Pcs | Remarks |
|---------|----------|-------------------------|-----|---------|
| P1      | RPF0139  | PROTECTION COVER        | 1   |         |
| P2      | RPG4397  | PACKING CASE(RS)        | 1   |         |
| P2      | RPG4396  | PACKING CASE(SA)        | 1   |         |
| P2      | RPG4398  | PACKING CASE(SH)        | 1   |         |
| P2      | RPG4399  | PACKING CASE(SL)        | 1   |         |
| P3      | RPN1195  | PAD(RS)                 | 1   |         |
| P3      | RPN1194  | PAD(SA)                 | 1   |         |
| P3      | RPN1196  | PAD(SH)                 | 1   |         |
| P3      | RPN1197  | PAD(SL)                 | 1   |         |
| P4      | RPG4400  | PACKING CASE(SYSTEM)    | 1   | (E)     |
| P4      | RPG4401  | PACKING CASE(SYSTEM)    | 1   | (EG)    |
| P4      | RPG4402  | PACKING CASE(SYSTEM)    | 1   | (EB)    |
| P4      | RPG4403  | PACKING CASE(SYSTEM)    | 1   | (EP)    |
| P5      | RPC0951  | PAD(SYSTEM)             | 1   |         |
| P6      | SPP740-1 | SHEET                   | 1   |         |