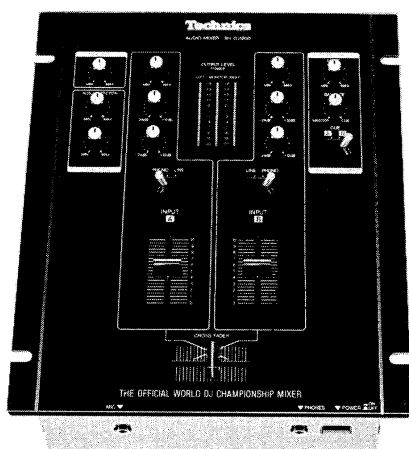


# Service Manual

Audio Mixer

Mixer

## SH-DJ1200



Colour

(K) . . . Black Type

Area

| Suffix for Model No. | Area                                              | Colour |
|----------------------|---------------------------------------------------|--------|
| (PP)                 | U.S.A. and Canada.                                | (K)    |
| (E)                  | Europe.                                           |        |
| (EB)                 | Great Britain.                                    |        |
| (GU)                 | Asia, Latin America, Middle Near East and Africa. |        |
| (GN)                 | Oceania.                                          |        |

## Specifications

### Input sensitivity/input impedance

|              |                                      |
|--------------|--------------------------------------|
| PHONO        | 1.5 to 15 mV/47k $\Omega$            |
| LINE         | 100 to 1000mV/more than 10k $\Omega$ |
| AUX/EFFECTOR | 150 mV/47k $\Omega$                  |
| MIC          | 0.7 mV/1k $\Omega$                   |

### Rated output voltage

|         |                                        |
|---------|----------------------------------------|
| LINE    | 1V/600 $\Omega$                        |
| MONITOR | 2V/2.2k $\Omega$                       |
| PHONES  | 1.5V/100 $\Omega$ (Load 100 $\Omega$ ) |
| REC     | 1V/2.2k $\Omega$                       |

### Maximum output voltage (10k $\Omega$ load excluding headphones)

|         |                           |
|---------|---------------------------|
| LINE    | 8V                        |
| MONITOR | 8V (headphones open)      |
| PHONES  | 1.5V (Load 100 $\Omega$ ) |
| REC     | 8V                        |

### Applicable load impedance

|         |                        |
|---------|------------------------|
| LINE    | More than 600 $\Omega$ |
| MONITOR | More than 10k $\Omega$ |
| PHONES  | More than 47 $\Omega$  |
| REC     | More than 10k $\Omega$ |

### Residual hum and noise

Less than 0.2 mV

### Frequency response

|              |                                   |
|--------------|-----------------------------------|
| PHONO        | 30 Hz to 15 kHz (RIAA $\pm$ 1 dB) |
| LINE         | 10 Hz to 70 kHz ( - 3dB)          |
| AUX/EFFECTOR | 10 Hz to 100 kHz ( - 3dB)         |
| MIC          | 100 Hz to 15 kHz ( - 3dB)         |

### Tone control characteristics

|      |                                   |
|------|-----------------------------------|
| LOW  | 12 dB/oct<br>+12dB, - 24dB (63Hz) |
| HIGH | +12dB, - 24dB (10kHz)             |

### General

|                                         |                                                                                                                                                                |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power supply:                           |                                                                                                                                                                |
| For (PP) area;                          | AC 60 Hz, 120V                                                                                                                                                 |
| For (E, EB, GU, GN) areas;              | AC 50/60 Hz, 230 - 240V                                                                                                                                        |
| Power consumption                       | 15W                                                                                                                                                            |
| Dimensions<br>(W $\times$ H $\times$ D) | 260 $\times$ 102 $\times$ 305 mm<br>(10 <sup>15</sup> / <sub>64</sub> " $\times$ 4 <sup>1</sup> / <sub>64</sub> " $\times$ 12 <sup>1</sup> / <sub>64</sub> " ) |
| Weight                                  | 3.4 kg<br>(7.5 lb.)                                                                                                                                            |

### Note:

Design and specifications are subject to change without notice.  
Weight and dimensions are approximate.

### 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.

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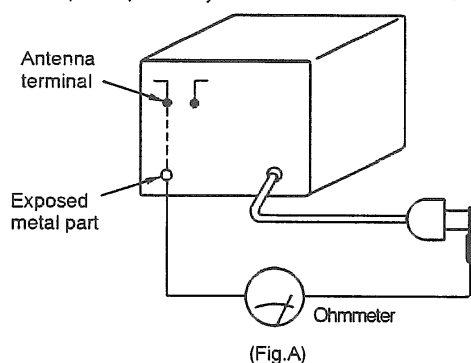
## Safety Precaution (This "Safety Precaution" is applied only in U.S.A.)

1. Before servicing, unplug the power cord to prevent an electric shock.
2. When replacing parts, use only manufacturer's recommended components for safety.
3. Check the condition of the power cord. Replace if wear or damage is evident.
4. After servicing, be sure to restore the lead dress, insulation barriers, insulation papers, shields, etc.
5. Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test to prevent the customer from being exposed to a shock hazard.

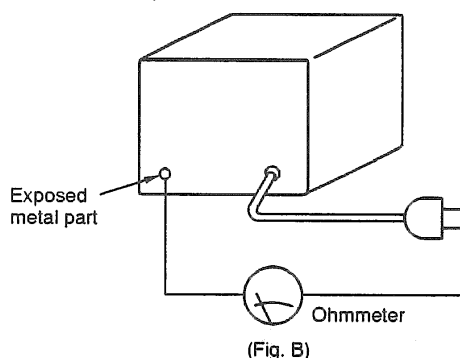
### • INSULATION RESISTANCE TEST

1. Unplug the power cord and short the two prongs of the plug with a jumper wire.
2. Turn on the power switch.
3. Measure the resistance value with ohmmeter between the jumpered AC plug and each exposed metal cabinet part, such as screwheads antenna, control shafts, handle brackets, etc. Equipment with antenna terminals should read between 3 MΩ and 5.2 MΩ to all exposed parts. (Fig. A)  
Equipment without antenna terminals should read approximately infinity to all exposed parts. (Fig. B)

**Note:** Some exposed parts may be isolated from the chassis by design. These will read infinity.



Resistance = 3 MΩ — 5.2 MΩ



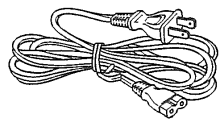
Resistance = Approx. ∞

4. If the measurement is outside the specified limits, there is a possibility of a shock hazard. The equipment should be repaired and rechecked before it is returned to the customer.

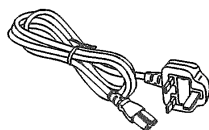
## Accessories

### • AC power cord

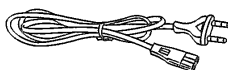
(PP) area: (SJA172) .....1pc.



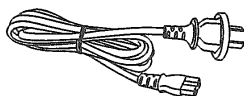
(EB) area: (VJA0733) .....1pc.



(E, GU) areas: (RJA0019-2K) .....1pc.



(GN) area: (RJA0035-K) .....1pc.



### • Power plug adaptor

(GU) area: (SJP5213-2) .....1pc.



### • Sticker

(RFE0032) : .....1pc.

**Technics**

## ■ Caution for AC Mains Lead

(“EB” area code model only)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.

A 5-ampere fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local dealer.

### CAUTION!

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.

THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as shown below.

If in any doubt please consult a qualified electrician.

### IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral, Brown: Live.

As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Black or Blue.

The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Brown or Red.

**WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E, BY THE EARTH SYMBOL  $\perp$  OR COLOURED GREEN OR GREEN/YELLOW.**

**THIS PLUG IS NOT WATERPROOF—KEEP DRY.**

### Before use

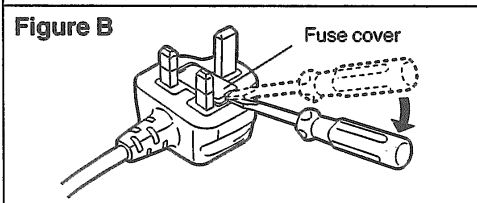
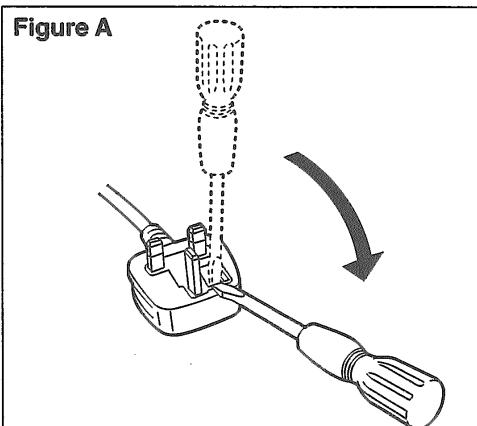
Remove the connector cover.

### How to replace the fuse

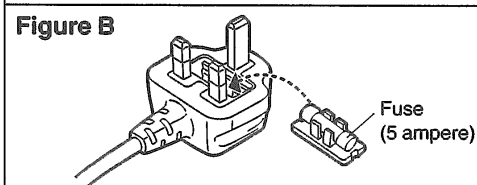
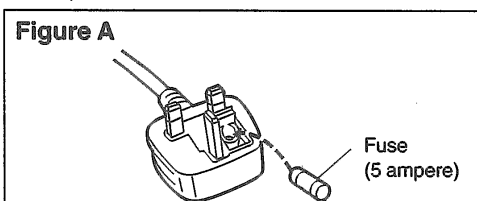
The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below.

Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.



2. Replace the fuse and close or attach the fuse cover.



## ■ Features

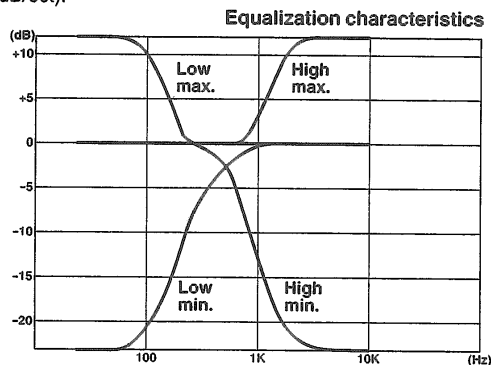
This model is the official audio mixer for the DMC-sponsored World DJ Championship to be held each year in 1997 and beyond. The event will bring together professional disc jockeys from all over the world to compete for top honors. It is a top-of-the-line audio mixer with the kind of outstanding design, functions and sound quality that suits the requirements of disc jockeys accustomed to giving scratch-mixing performances in a variety of different ways.

### *Operating ease*

- This audio mixer is designed with the same height as that of the SL-1200MK2 for operating ease.
- By providing adequate space in the panel layout around the channel faders and cross fader and by eliminating the protruding parts, full rein can be given to individual technique which exactly reflects the mood of the moment even when it comes to high-powered scratch-mixing.

### *Functions*

- The model comes with both high and low equalizers so that all manner of sound sources can be accommodated to generate a highly creative style of sound. A wide margin of creativity in producing sound is provided since the attenuation is set to a high -24 dB (12 dB/oct).



- The model is equipped with TRIM controls ( $\pm 10$  dB) which compensate for differences in the source level.
- By adding a pre-fader monitor, the channels selected by the CUE controls can be monitored regardless of the positions of the faders. It is also possible to mix and monitor the line-out sources.
- The model comes with line-out connectors for monitoring so that sound can be monitored not only with headphones but through the speakers inside the booth.
- The line-out source L and R levels as well as the monitor source levels can be checked out on the 12-point, 3-column level meter.
- An AUX IN connector is provided to enable a sampler, keyboard, etc. to become part of the disc jockey scene.

### *Construction and materials*

- New 45 mm stroke faders with an excellent durability and smooth operating touch have been developed for this model. The service life of the channel faders and cross fader has been improved by a quantum leap (an approximately 10-fold increase over existing models; nominal service life: 100,000 operations).
- A spare channel fader and a spare cross fader have been provided on the back panel just in case, and the faders themselves are designed to enable easy replacement.
- Lever switches are employed for the input selector controls (LINE, PHONO) and, by providing adequate space around them, they can also be used for operations involving the transformer scratch function.
- The panels are made of aluminum, and the surfaces have a glossy finish with a tough black coating which makes it hard for the markings to be worn away.

#### **What is DMC?**

DMC is the world's largest disc jockey organization whose members include the world's top disc jockeys, musicians and producers. Its objective is to contribute to improvements in the creation of music by its members. With main offices in England (London) and the United States (New York), it has branches in 32 countries throughout the world. Through its many activities which include the publication of "MIX MAG", the world's best-selling dance music trade magazine, DMC has sponsored the World DJ Championship for the last ten years with the support of Technics. At this venue which is held in London's Albert Hall or Wembley Stadium, the disc jockeys from 32 nations around the globe who have won top honors in the championships held in their respective countries put on their most impressive shows and compete to determine who will be crowned as world champion.

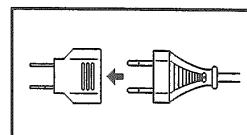
## ■ Connections

### *Rear panel connections*

This model is connected with the other equipment using stereo connection cables (not included). Before proceeding with the connections, make absolutely sure that the power is turned off to the units concerned. Connect the power cord after all the other connections have been completed.

**Note** [For (GU) area]

When using AC power cord, please use a power plug adaptor if the plug is not compatible with your household mains outlet.





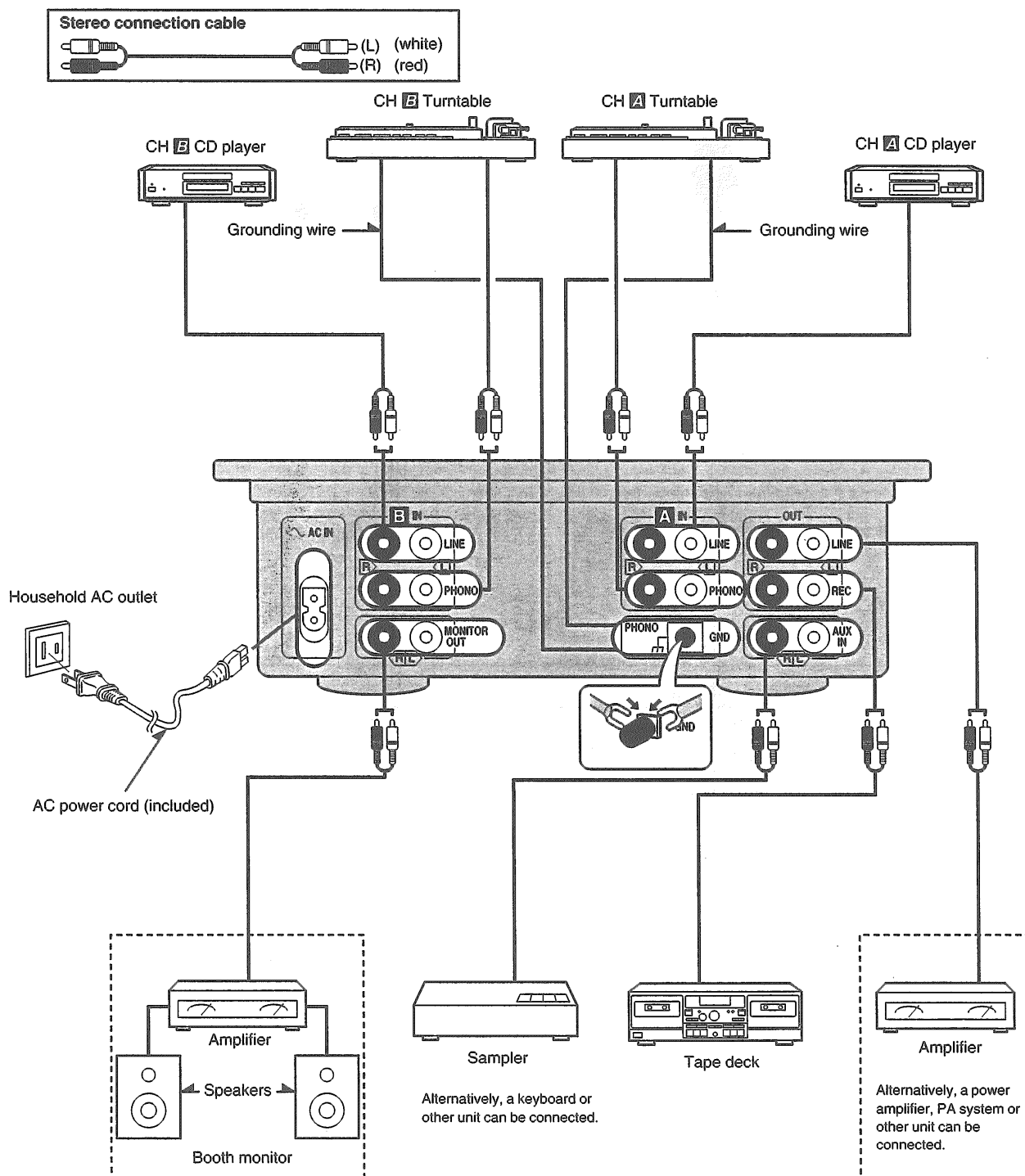
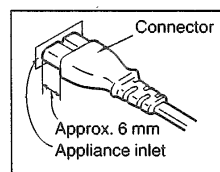
**For your reference:**

The grounding wire need not be connected if the turntable does not have a GND terminal.

**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.



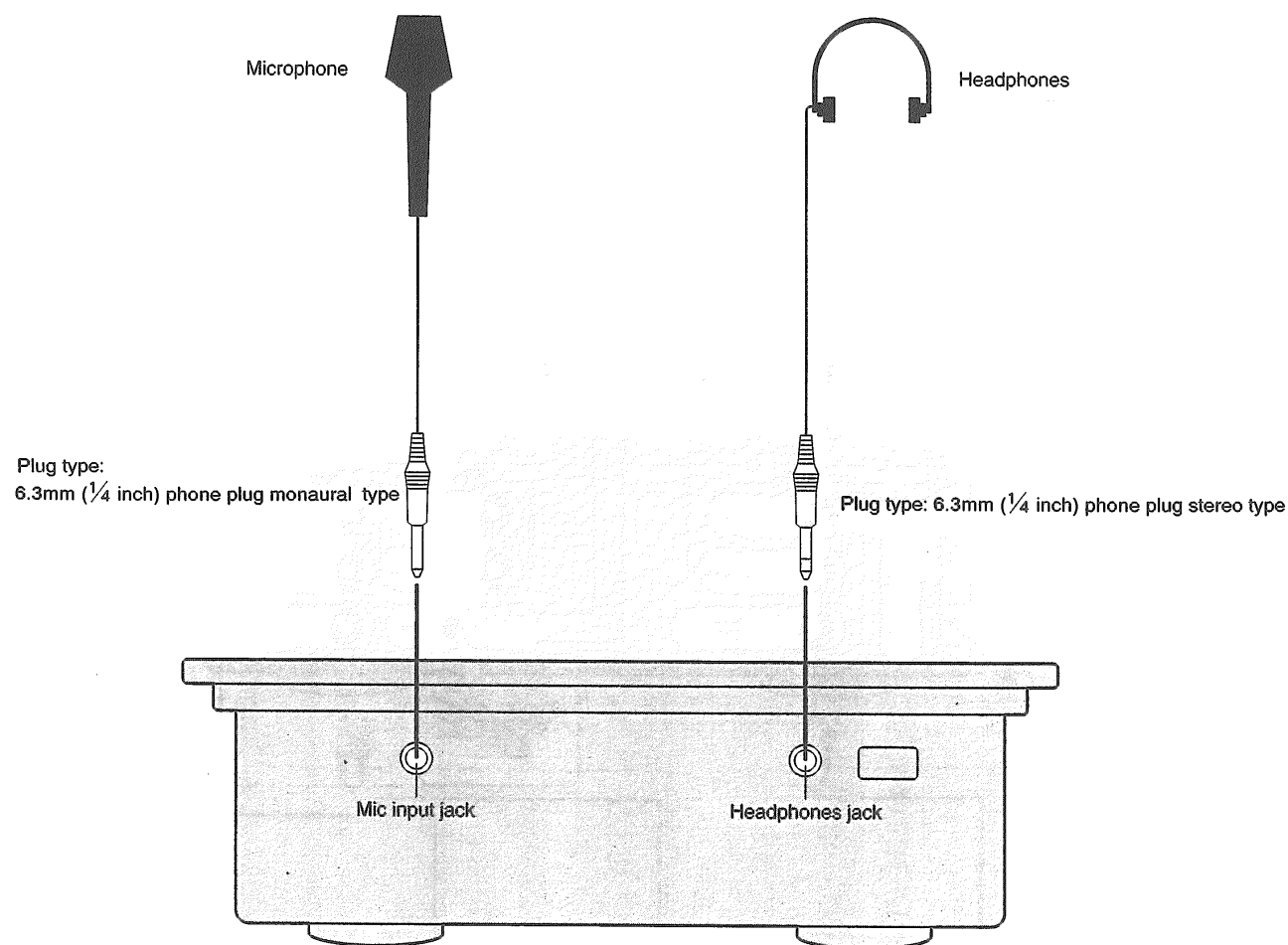
---

## Front panel connections

---

### To listen with the headphones:

- Before connecting the headphones, be absolutely sure to turn down the volume setting using the monitor volume level control, etc.
- Avoid listening for prolonged periods of time to prevent hearing damage.

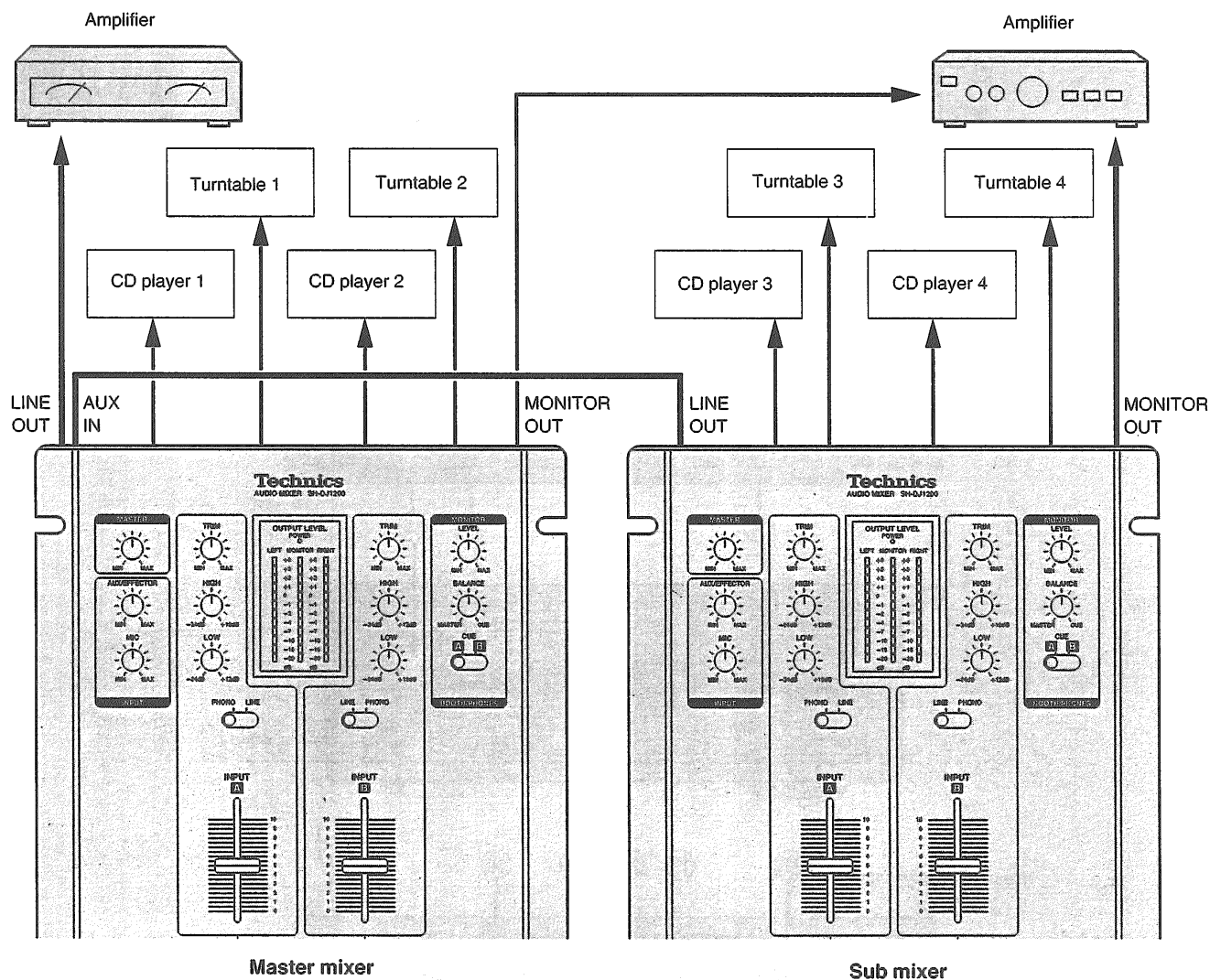


## Connecting two audio mixers side by side

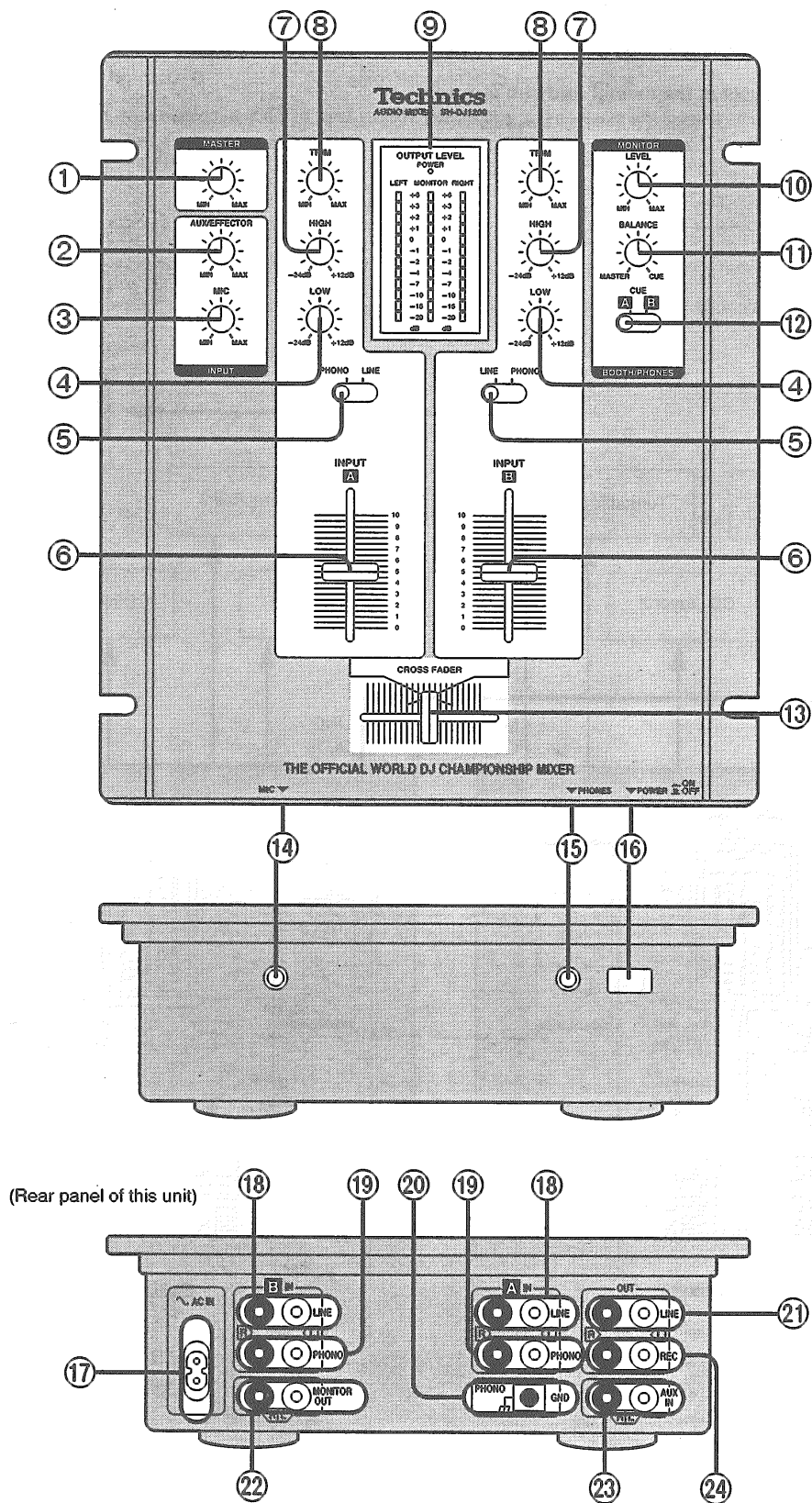
Connect the LINE OUT connector of the sub mixer to the AUX IN connector on the master mixer.

### How to align the volume levels of the master and sub mixers:

Adjust the AUX/EFFECTOR volume level of the master mixer and master volume level of the sub mixer in such a way that the levels of the two models are identical.



## Names of the Parts



| No. | Name                                                                                                                                            |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------|
| ①   | <b>Master volume level control (MASTER)</b>                                                                                                     |
| ②   | <b>AUX/EFFECTOR volume level control (AUX/EFFECTOR)</b>                                                                                         |
| ③   | <b>Mic volume level control (MIC)</b>                                                                                                           |
| ④   | <b>CH <b>A</b> (<b>B</b>) low-range level control (LOW)</b>                                                                                     |
| ⑤   | <b>CH <b>A</b> (<b>B</b>) input selector (LINE, PHONO)</b>                                                                                      |
| ⑥   | <b>INPUT <b>A</b> (<b>B</b>) control</b>                                                                                                        |
| ⑦   | <b>CH <b>A</b> (<b>B</b>) high-range level control (HIGH)</b>                                                                                   |
| ⑧   | <b>CH <b>A</b> (<b>B</b>) input sensitivity control (TRIM)</b>                                                                                  |
| ⑨   | <b>OUTPUT LEVEL meter</b><br>This indicates the LINE OUT (L and R channels) and MONITOR OUT output levels.                                      |
| ⑩   | <b>Monitor volume level control (MONITOR LEVEL)</b>                                                                                             |
| ⑪   | <b>Monitor balance control (MONITOR BALANCE)</b><br>This adjusts the balance between the LINE OUT source and source selected by the CUE switch. |
| ⑫   | <b>Headphones monitor selector (CUE)</b><br>This selects the source to be monitored regardless of the positions of the faders.                  |

| No. | Name                                                                                                                                       |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------|
| ⑬   | <b>CROSS FADER control</b><br>This enables the balance between the CH <b>A</b> and CH <b>B</b> input levels to be adjusted.                |
| ⑭   | <b>Mic input jack (MIC)</b>                                                                                                                |
| ⑮   | <b>Headphones jack (PHONES)</b>                                                                                                            |
| ⑯   | <b>Power button (POWER ON/OFF)</b>                                                                                                         |
| ⑰   | <b>Power input socket (~AC IN)</b>                                                                                                         |
| ⑱   | <b>CH <b>A</b> (<b>B</b>) LINE IN connector</b>                                                                                            |
| ⑲   | <b>CH <b>A</b> (<b>B</b>) PHONO IN connector</b>                                                                                           |
| ⑳   | <b>PHONO GND terminal</b><br>The grounding wire of the turntable must be secured to the ground terminal in order to prevent hum and noise. |
| ㉑   | <b>LINE OUT connector</b>                                                                                                                  |
| ㉒   | <b>MONITOR OUT connector</b>                                                                                                               |
| ㉓   | <b>AUX IN connector</b>                                                                                                                    |
| ㉔   | <b>REC OUT connector</b>                                                                                                                   |

## ■ Proper Use of the SH-DJ1200

New functions not available on past DJ mixers, the MONITOR BALANCE control ⑪ and the MONITOR OUT connector ㉒, have been added to this unit. Read the following explanations carefully before operating the SH-DJ1200.

### ■ MONITOR BALANCE control ⑪

#### Select CUE (completely to the right)

- Works as past general DJ mixer monitors.
- Allows the CH (A/B) input selected with the CUE control ⑫ to be monitored regardless of the position of the input and cross faders.

#### Select MASTER (completely to the left)

- Disregards the source selected with the CUE control.
- Allows monitoring of the output from the LINE OUT connector ㉑.

#### Select the center

- Allows the CH (A/B) input selected with the CUE control ⑫ and the output from the LINE OUT connector ㉑ to be mixed and monitored.

### ■ MONITOR OUT connector ㉒

Outputs the same signal as the headphones. Connect the monitor amplifier when monitoring from the speakers without headphones as in independent DJ booths.

Connect the general output amplifier to the LINE OUT connector ㉑.

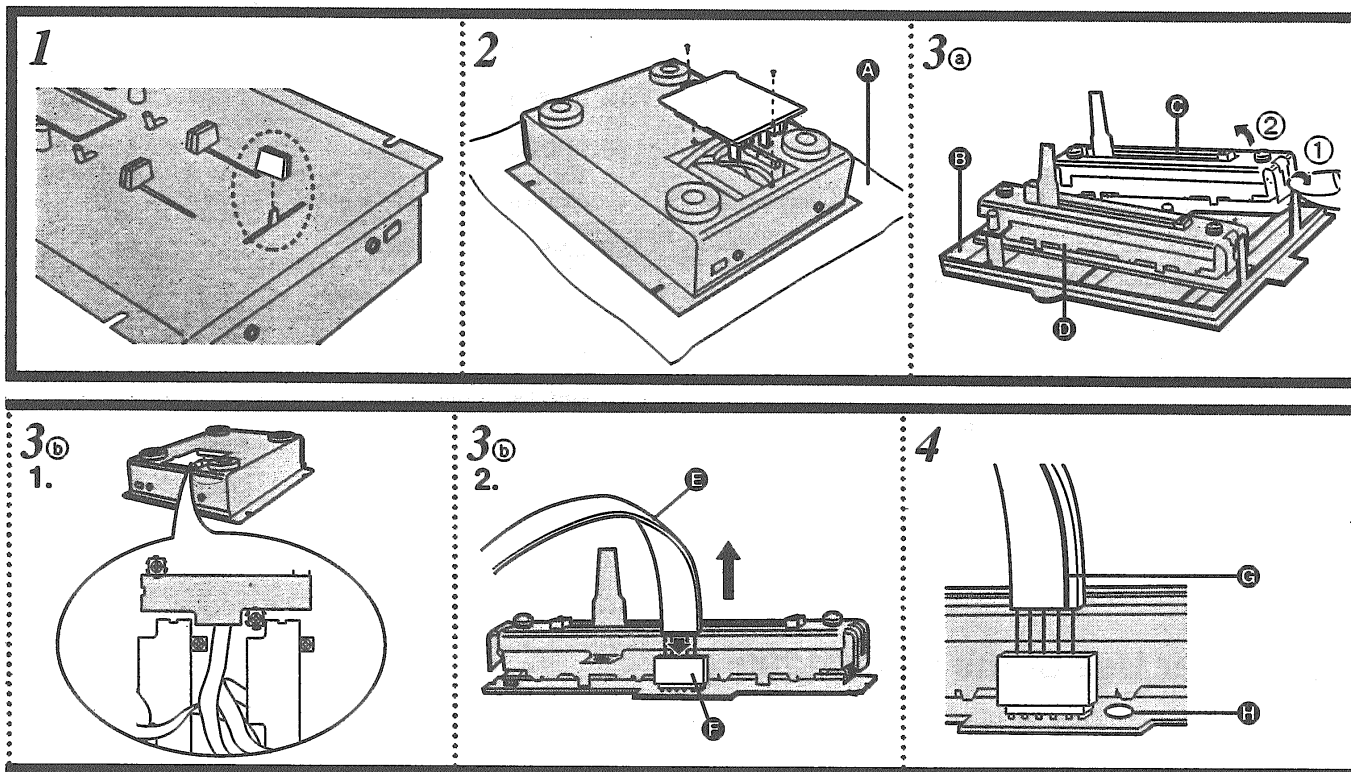
## ■ Audio Mixer Slide Volume Control Replacement Instructions

### ※●CROSS FADER KIT (RFKVH DJ1200A)

- CROSS FADER VR ..... (1)
- P.C.B. .... (1)
- CONNECTOR ..... (1)
- BRACKET ..... (1)
- HIMELON ..... (2)
- SCREW ..... (2)
- KNOB ..... (1)

### ●CHANNEL FADER KIT (RFKVH DJ1200B)

- CHANNEL FADER VR ..... (1)
- P.C.B. .... (1)
- CONNECTOR ..... (1)
- BRACKET ..... (1)
- HIMELON ..... (2)
- SCREW ..... (2)
- KNOB ..... (1)



This unit comes with two spare slide volume controls (one for the cross fader and one for the channel fader) mounted on its bottom panel. If the movement of one of the faders should become impaired, follow the steps outlined below to replace the fader. These steps describe the replacement of the cross fader as an example of the procedure to be followed which is the same for replacing the channel fader.

- 1 Remove the knob of the slide volume control to be replaced.**
- 2 Turn the bottom panel so that it is facing up and remove the bottom cover.**  
(Remove the two screws.)  
 (A) Soft cloth, etc.
- 3 Remove the slide volume control to be replaced.**
  - (a) How to remove the new slide volume control on bottom panel
    - (B) Bottom cover
    - (C) For cross fader
    - (D) For channel fader
  - (b) How to remove the old slide volume control
    1. Remove the two screws and remove the slide volume control.
    2. Disconnect the cable leading from the slide volume control to be replaced by pressing down on the head section of the connector.
    - (E) Cable
    - (F) Connector
- 4 Install the new slide volume control.**  
(Align the line on the cable with the "1" marking below the connector and use the screws for mounting.)
  - (G) Line
  - (H) "1" marking
- 5 Attach the bottom cover.**
- 6 Attach the knob to the control.**

## ■ Troubleshooting Guide

Before requesting service for this unit, check the chart below for a possible cause of the problem you are experiencing. Some simple checks or a minor adjustment on your part may eliminate the problem and restore proper operation.

If you are in doubt about some of the check points, or if the remedies indicated in the chart do not solve the problem, refer to the directory of Authorized Service Centers (enclosed with this unit) to locate a convenient service center, or consult your dealer for instructions.

| Symptom                                              | Checkpoint                                                                                                     | Remedial action                                                                                                  |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| No power.                                            | Has the power plug been disconnected?                                                                          | Connect the power plug securely.                                                                                 |
| No sound even when power is supplied.                | Has the input selector control been set to another source?                                                     | Check the source and set the control to the proper position.                                                     |
|                                                      | Have any of the units been wrongly connected?                                                                  | Connect the units properly.                                                                                      |
|                                                      | Is the master level control or another volume level control at the MIN position?                               | Adjust the volume level controls correctly.                                                                      |
| Left and right sound is reversed.                    | Have any of the units been connected with the left and right channels reversed?                                | Connect the channels correctly.                                                                                  |
| Low hum or buzz is heard during play.                | Is there a fluorescent light or other electrical appliance or its power cord near any of the connecting cords? | Place the fluorescent light, other appliances or their power cords as far away from the audio mixer as possible. |
|                                                      | Has the turntable's grounding wire been disconnected?                                                          | Connect the grounding wire securely.                                                                             |
| Fader (slide volume control) fails to move smoothly. | Is one of the faders worn?                                                                                     | Replace with a new fader. (Refer to the Slide Volume Replacement Instructions provided separately.)              |

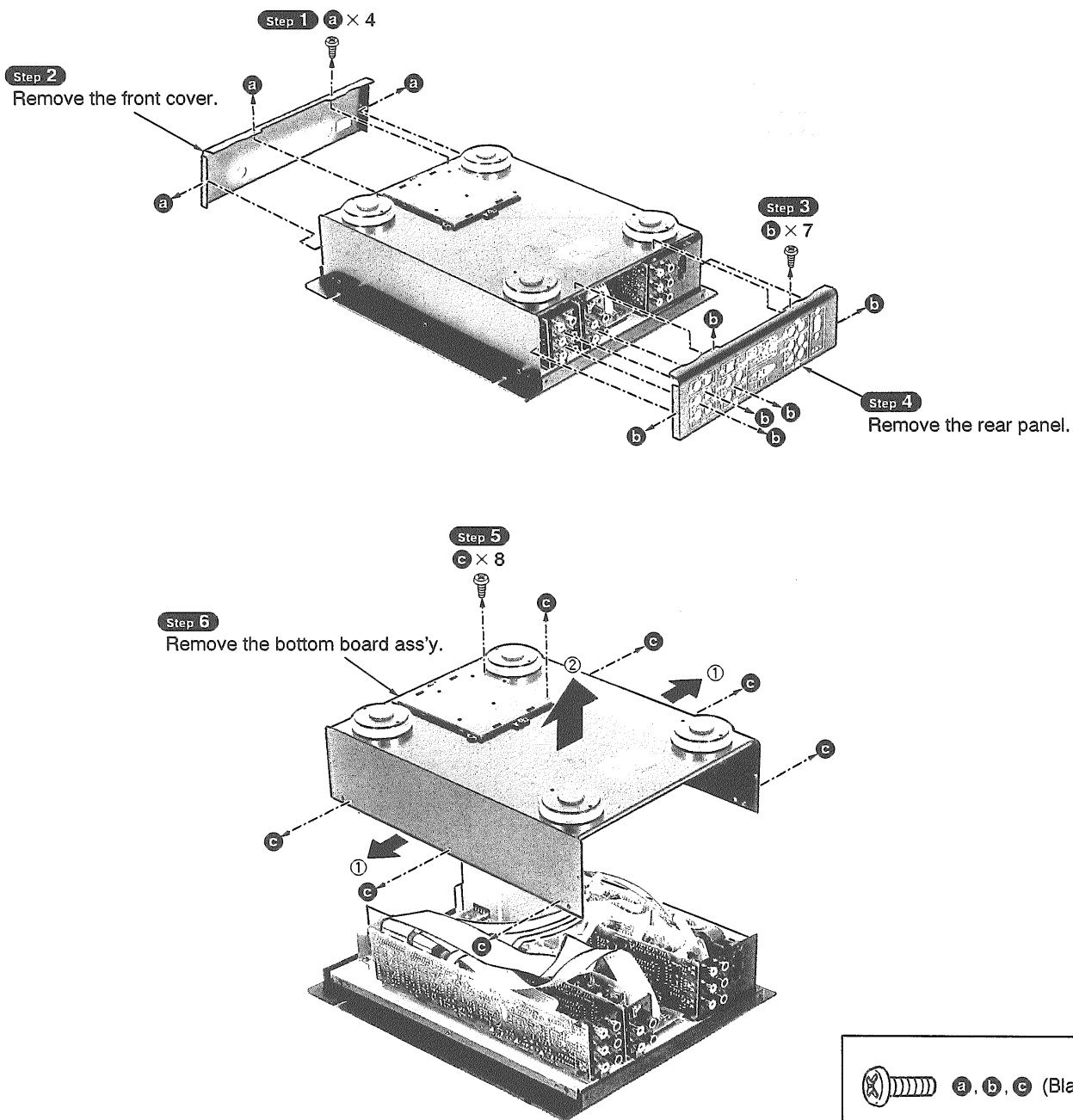
## Operation Checks and Main Component Replacement Procedures

### 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.
3. Illustrated screws are equivalent to actual size.
4. [ ] indicates parts No.

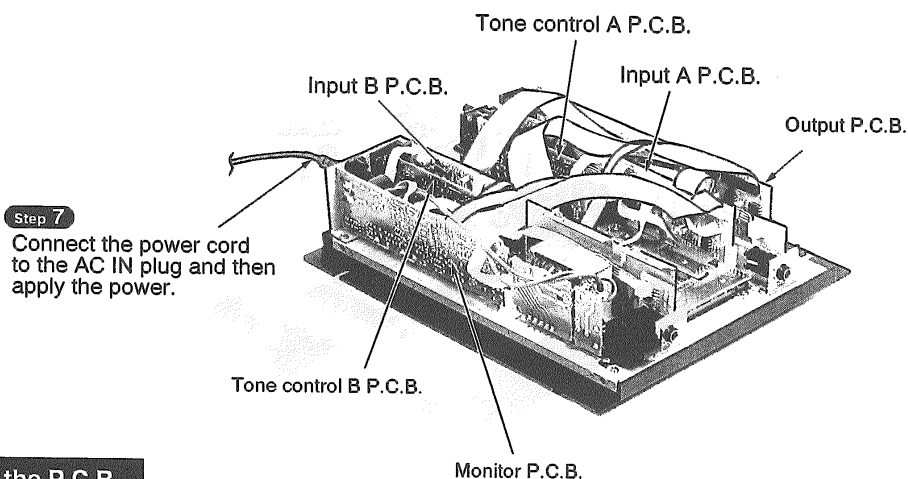
### Checking for the P.C.B.

(Output P.C.B. / Input A P.C.B. / Input B P.C.B. / Tone control A P.C.B. / Tone control B P.C.B. / Monitor P.C.B.)



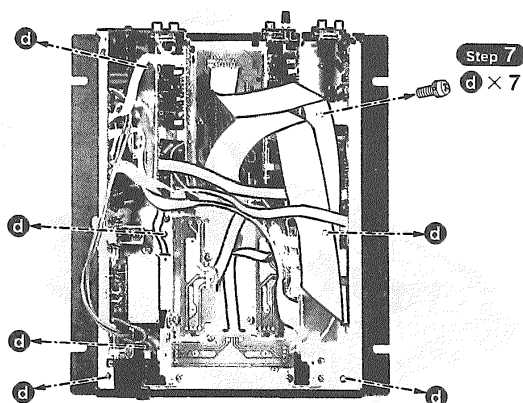


- Check the P.C.B. as shown below.



### Removal for the P.C.B.

- Follow the item **Step 1** ~ **Step 6** in checking procedures on page.



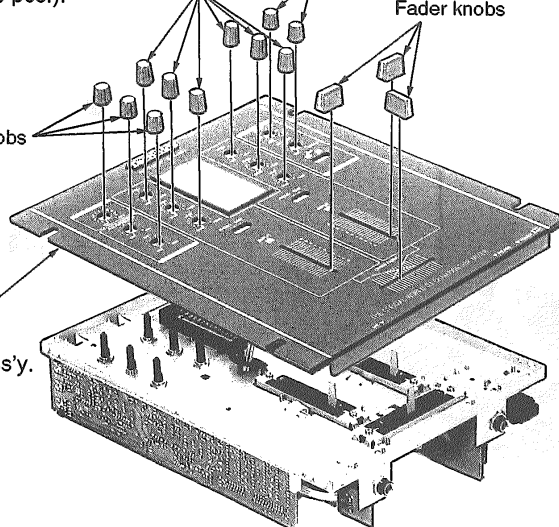
(Upset the unit)

### Step 8

Pull out the master knobs (5 pcs.), trim knobs (6 pcs.) and fader knobs (3 pcs.).

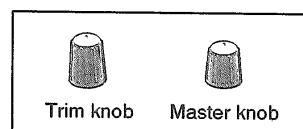
Trim knobs Master knobs Fader knobs

Master knobs



### Step 9

Remove the panel ass'y.

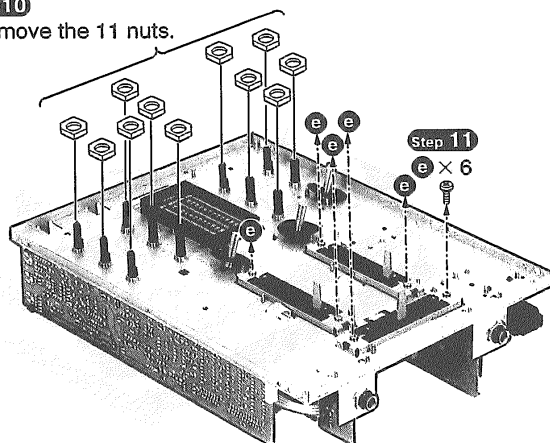


### NOTE

Handle with care the knobs because the trim knobs and master knobs are different size.

**Step 10**

Remove the 11 nuts.

**Step 11**

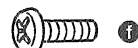
e × 6



(Upset the unit)



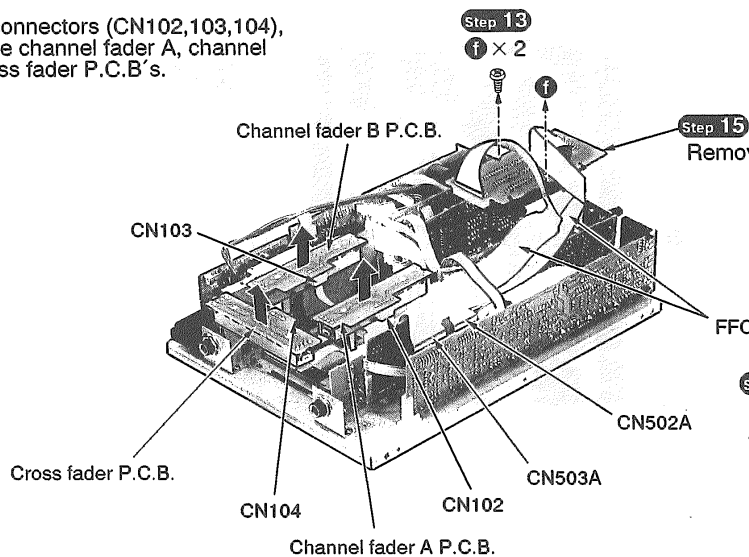
[XYN3+C5S]



[XTB3+8J]

**Step 12**

Remove the 3 connectors (CN102,103,104), and then remove channel fader A, channel fader B and cross fader P.C.B's.

**Step 13**

f × 2

**Step 15**

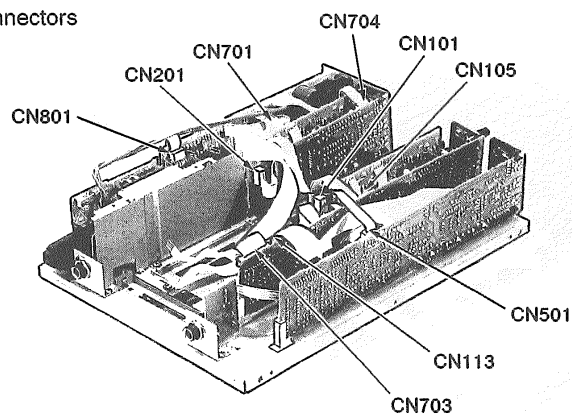
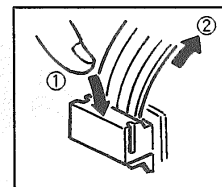
Remove the LED P.C.B..

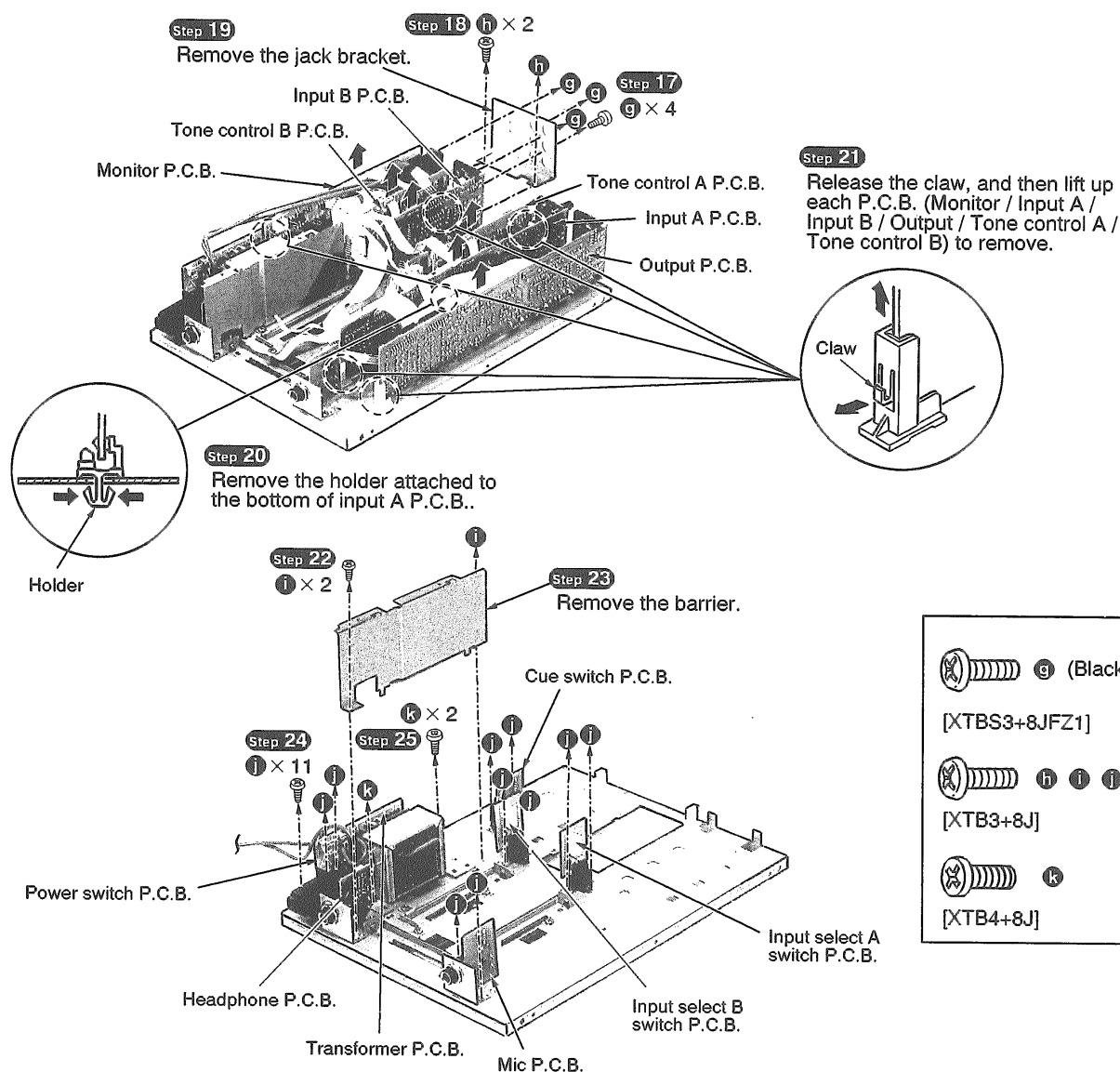
**Step 14**

Remove the FFC from the 2 connectors (CN502A,503A).

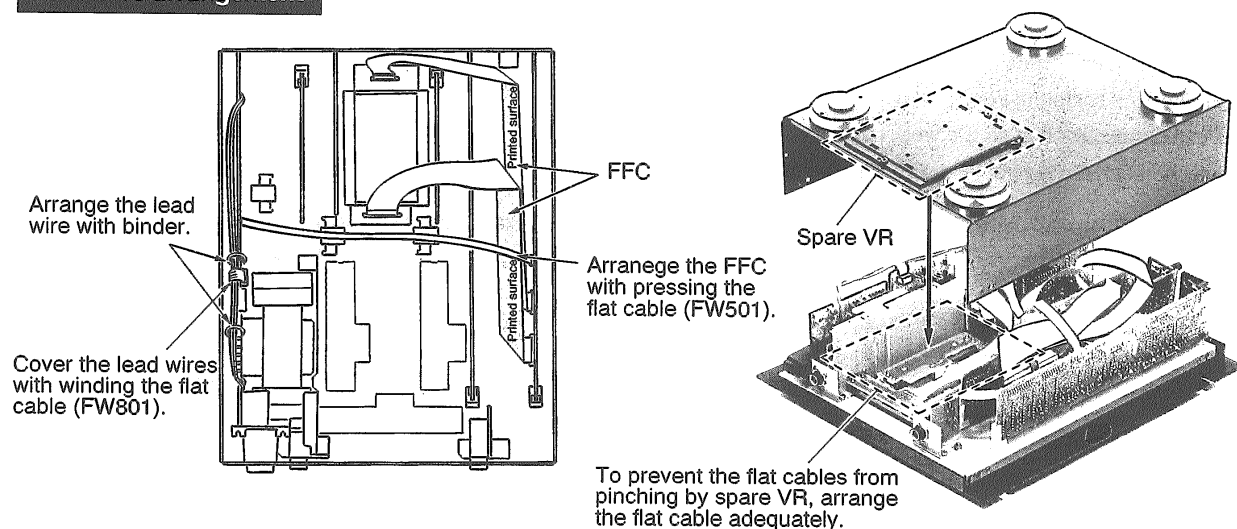
**Step 16**

Remove the 9 connectors as shown below.

**Removal for the connector.**



### Lead wire arrangement



## Schematic Diagram

### Notes:

- S101 : CH. [A] input selector switch in "PHONO" position.
- S201 : CH. [B] input selector switch in "PHONO" position.
- S701 : Headphones monitor selector switch in "[A]" position.
- S801 : Power ON/OFF switch in "ON" position.
- VR101-1, 101-2 : CH. [A] input sensitivity control.
- VR102-1, 102-2 : CHANNEL FADER control (INPUT [A]).
- VR103-1, 103-2 : CHANNEL FADER control (INPUT [B]).
- VR104-1, 104-2 : CROSS FADER control.
- VR201-1, 201-2 : CH. [B] input sensitivity control.
- VR301-1, 301-2 : CH. [A] high-range level control.
- VR302-1, 302-2 : CH. [A] low-range level control.
- VR401-1, 401-2 : CH. [B] high-range level control.
- VR402-1, 402-2 : CH. [B] low-range level control.
- VR501-1, 501-2 : Master volume level control.
- VR601 : Mic volume level control.
- VR602-1, 602-2 : AUX/EFFECTOR volume level control.
- VR701-1, 701-2 : Monitor balance control.
- VR702-1, 702-2 : Monitor volume level control.
- VR102S-1, 102S-2 : CHANNEL FADER control (spare).
- VR104S-1, 104S-2 : CROSS FADER control (spare).

● The voltage value and waveforms are the reference voltage of this unit measured by DC electronic voltmeter (high-impedance) and oscilloscope on the basis of chassis.

Accordingly, there may arise some error in voltage values and waveforms depending upon the internal impedance of the tester or the measuring unit.

### ● Important safety notice:

Components identified by  $\Delta$  mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

-  : +B Line
-  : PHONO ([A], Lch) Signal Line
-  : - B Line
-  : MIC Signal Line

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

### ● 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.

### 【For U.S.A. model only】

**CAUTION : FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE F1 315mA 125V FUSE.**



RISK OF FIRE-REPLACE FUSE AS MARKED.

### 【For CANADA model only】

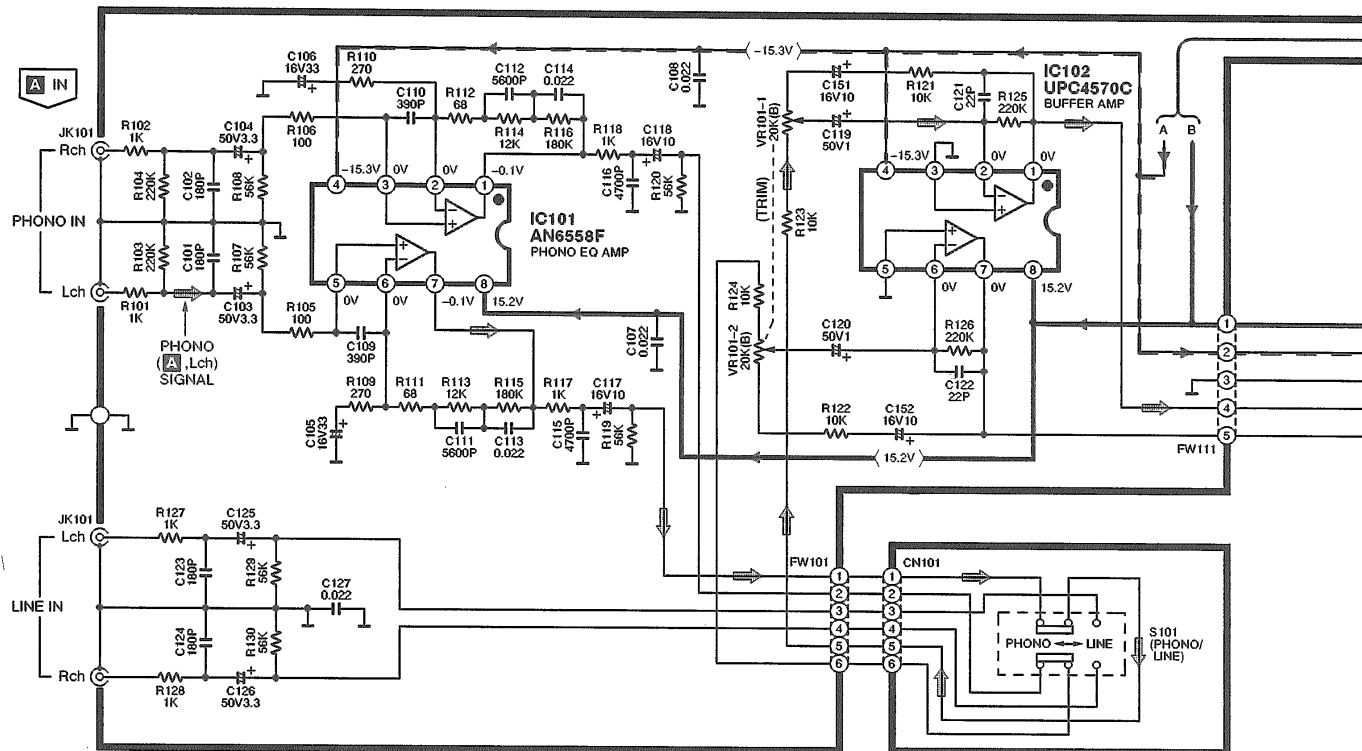
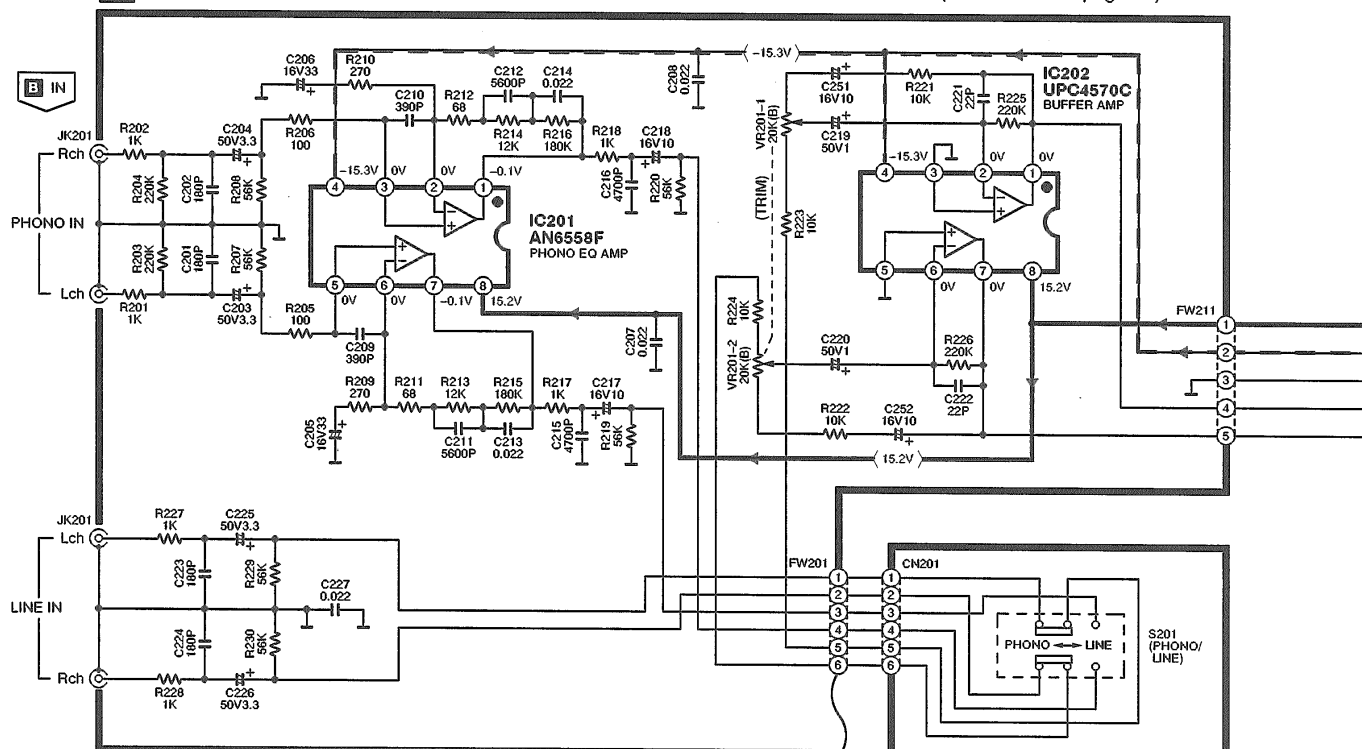
#### FUSE CAUTION



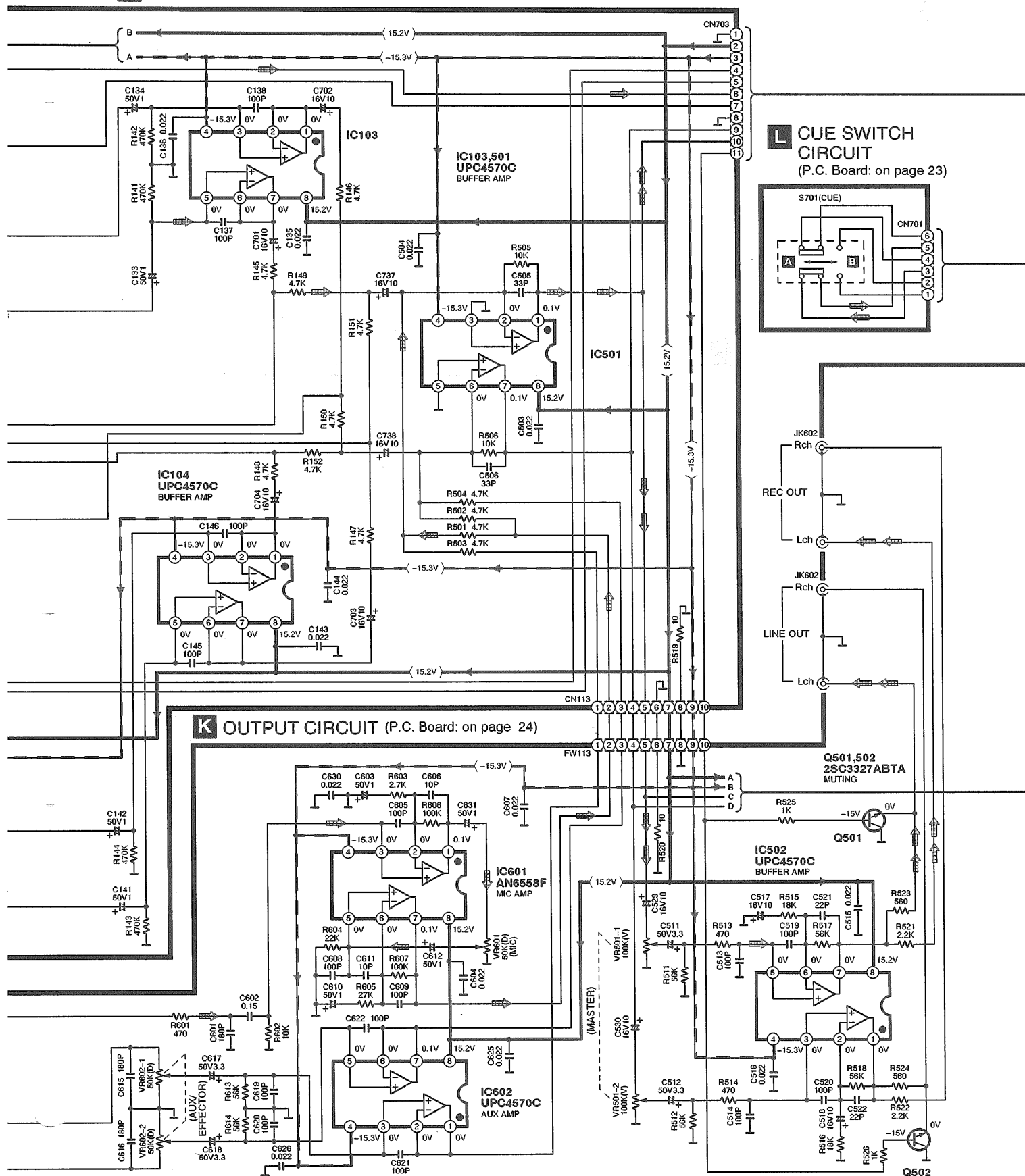
These symbols located near the fuse indicates that the fuse used is a fast operating type. For continued protection against fire hazard, replace with the same type fuse. For fuse rating, refer to the marking adjacent to the symbol.

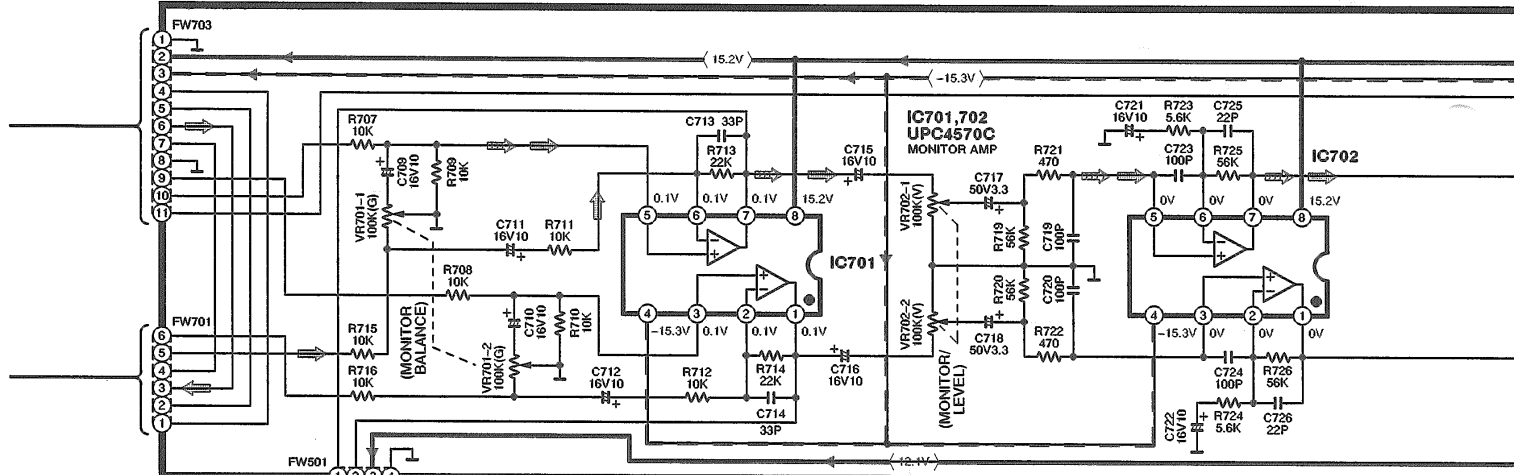
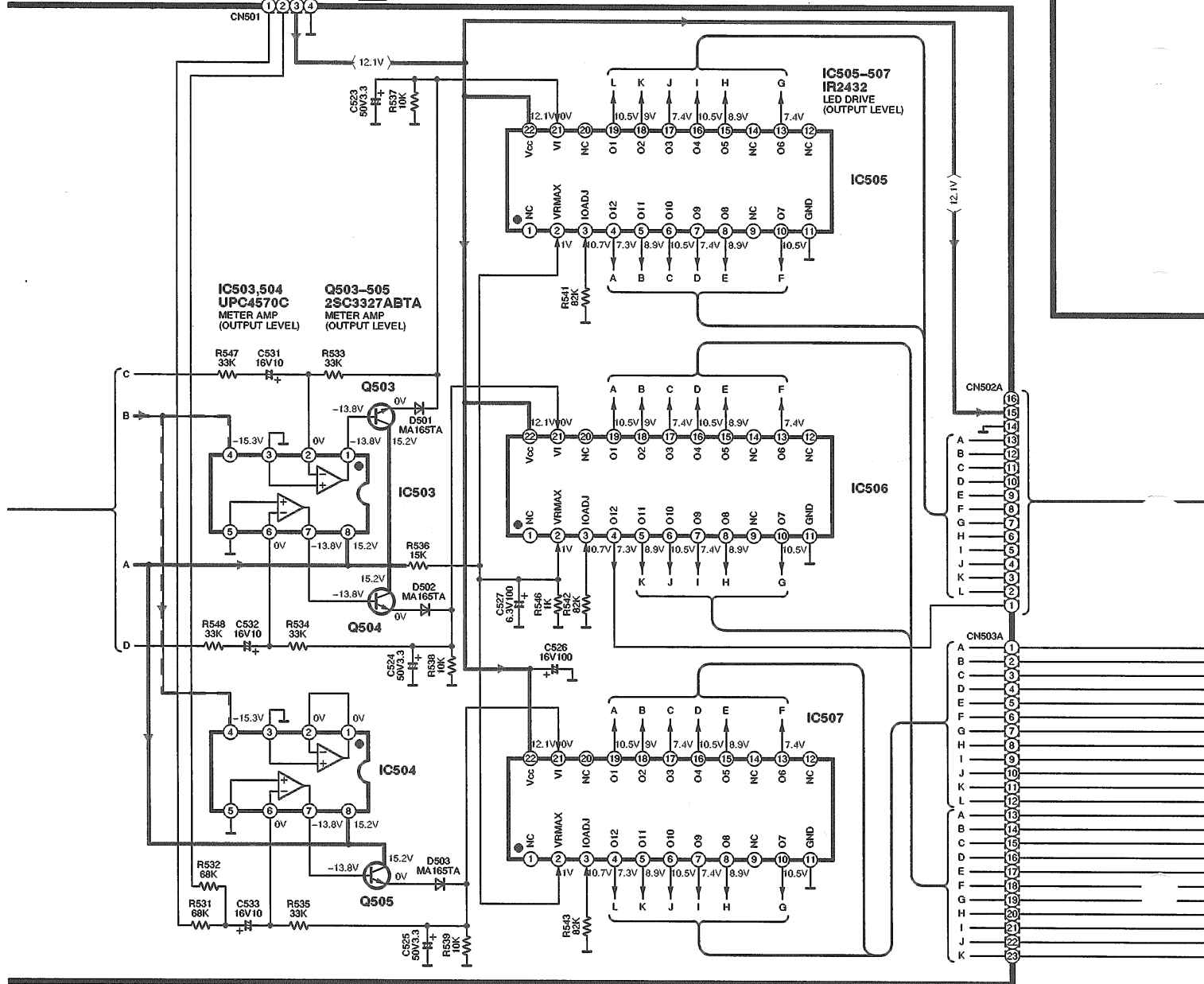


Ce symbole indique que le fusible utilisé est à rapide. Pour une protection permanente, n' utiliser que des fusibles de même type. Ce dernier est indiqué là où le présent symbole est apposé.

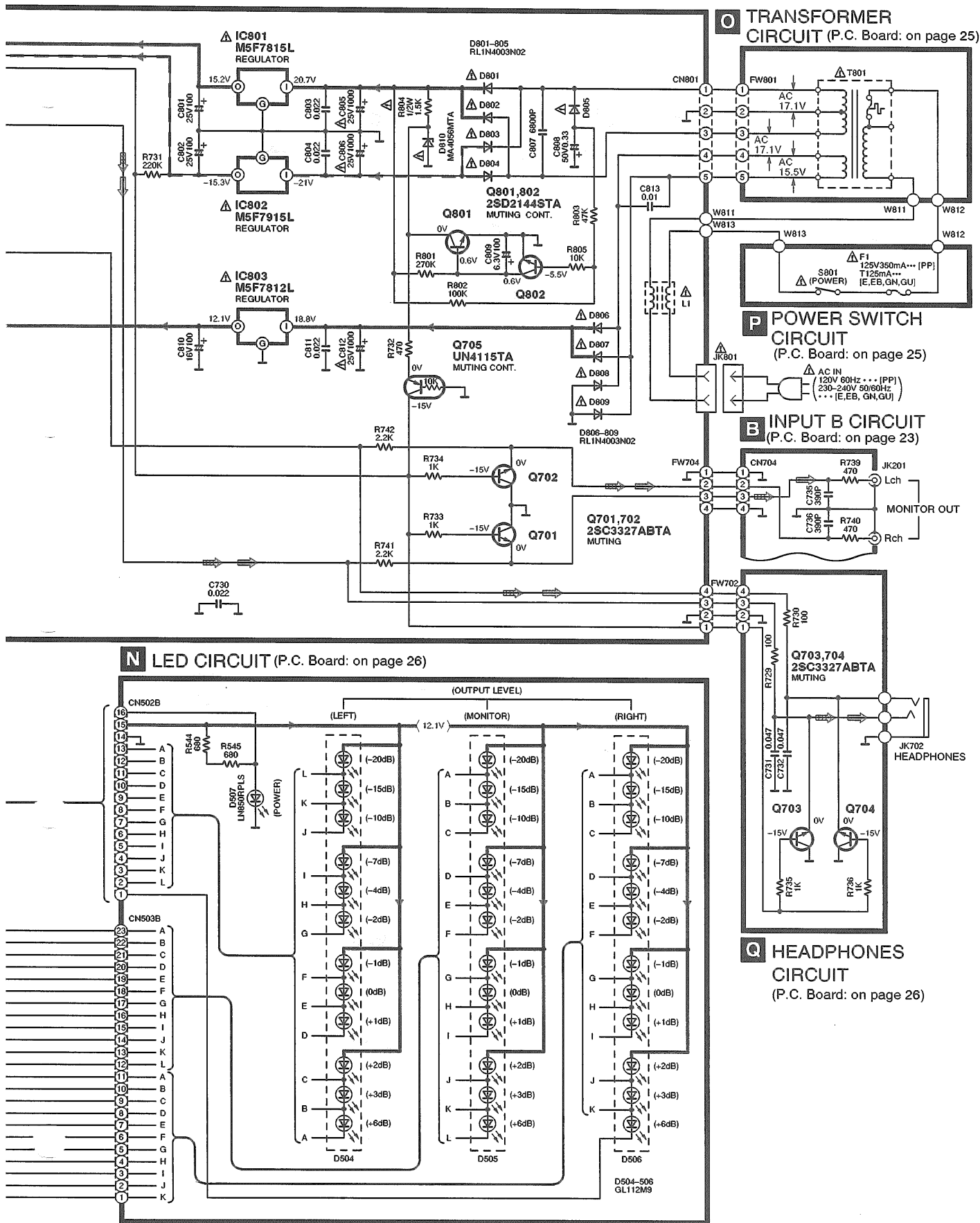
**A** INPUT A CIRCUIT (P.C. Board: on page 24)**C** INPUT SELECT A SWITCH CIRCUIT (P.C. Board: on page 23)**B** INPUT B CIRCUIT (P.C. Board: on page 23)



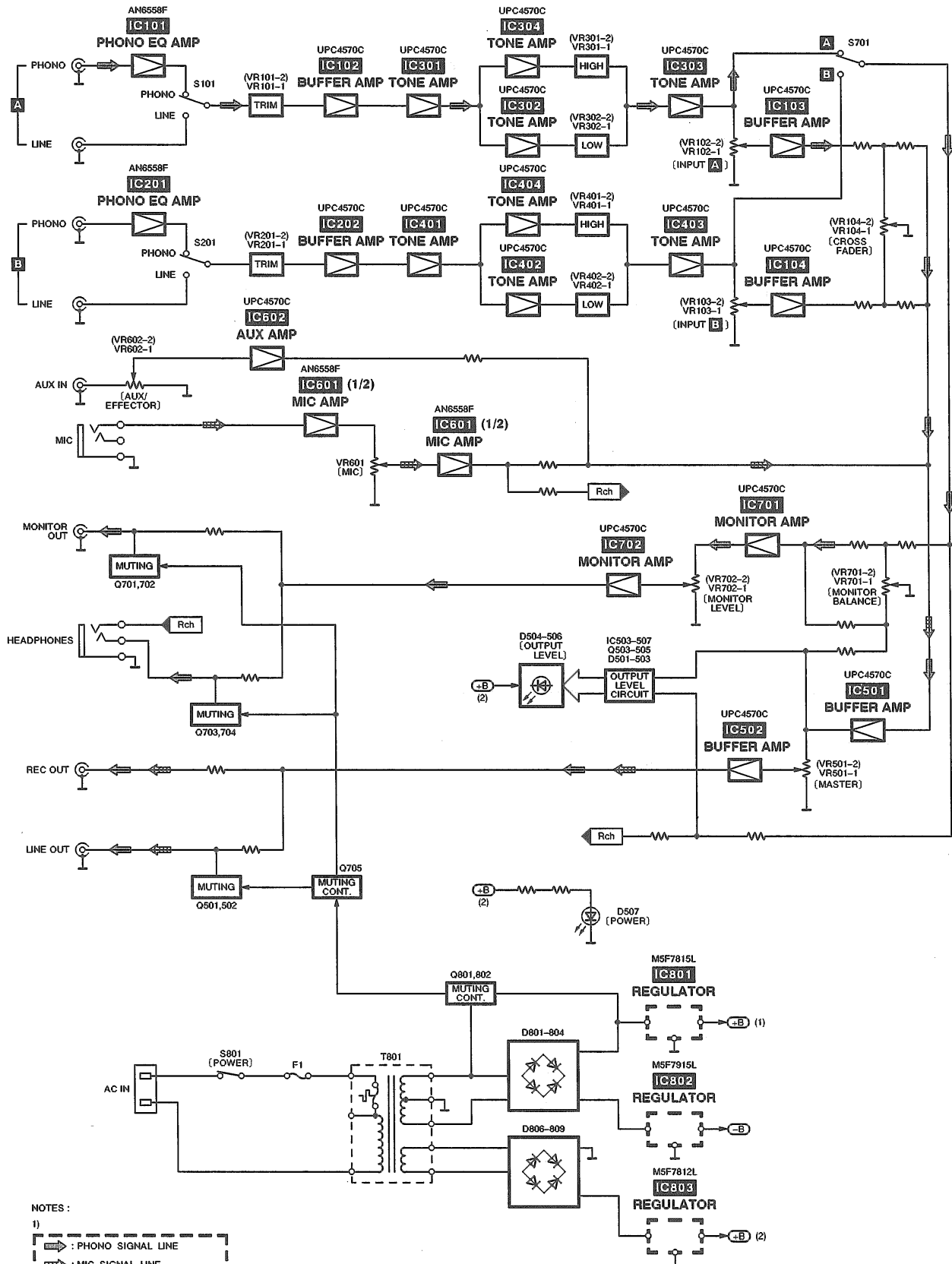
**A INPUT A CIRCUIT** (P.C. Board: on page 24)

**M** MONITOR CIRCUIT (P.C. Board: on page 23)**K** OUTPUT CIRCUIT (P.C. Board: on page 24)





# Block Diagram



## NOTES:

1)

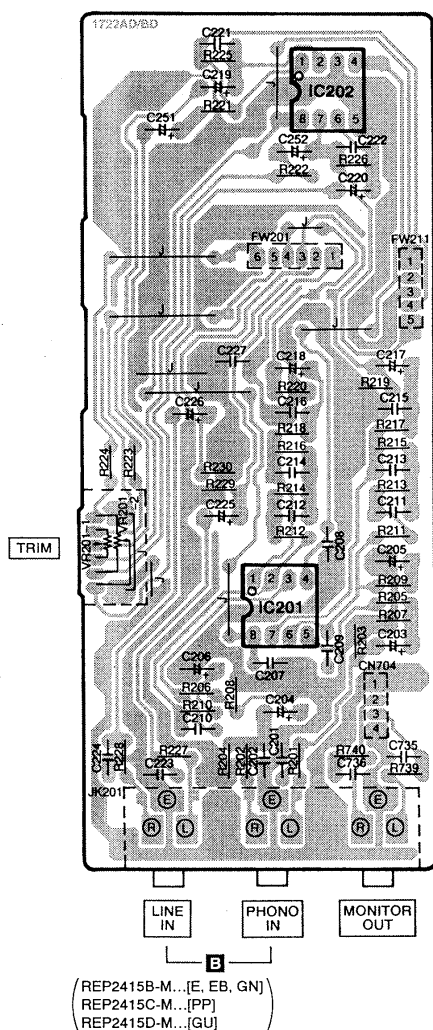
: PHONO SIGNAL LINE  
 : MIC SIGNAL LINE

2) ( ) INDICATES OF RIGHT CHANNEL

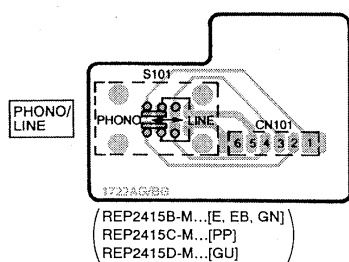
# Printed Circuit Boards

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

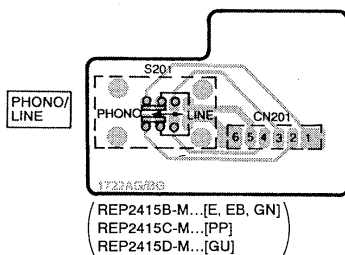
## B INPUT B P.C.B.



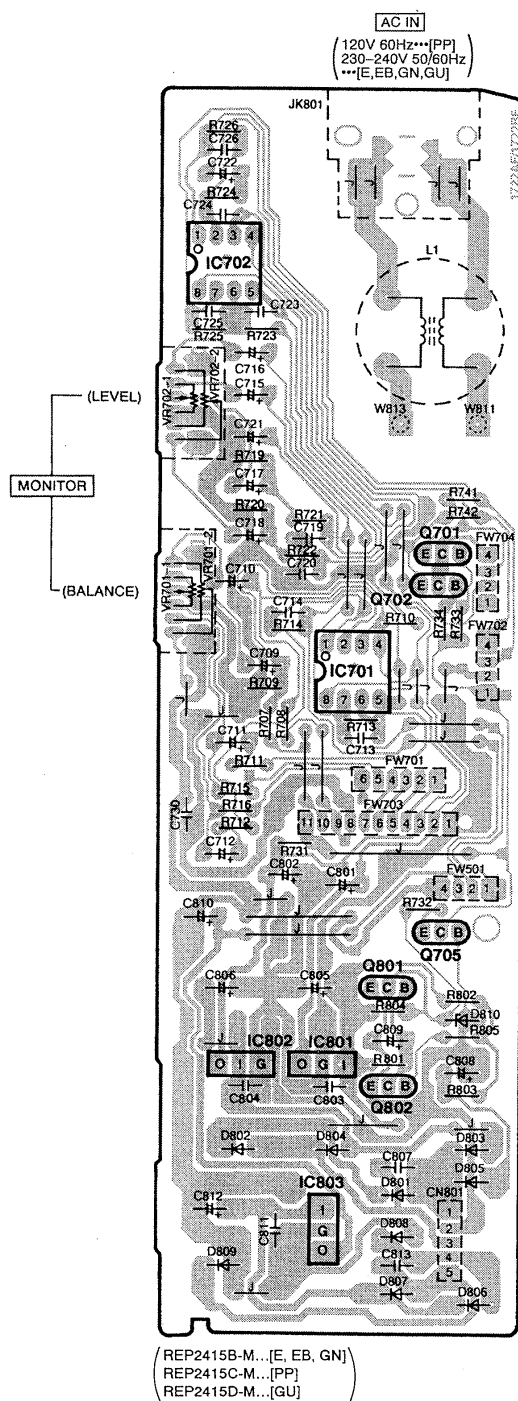
## C INPUT SELECT A SWITCH P.C.B.



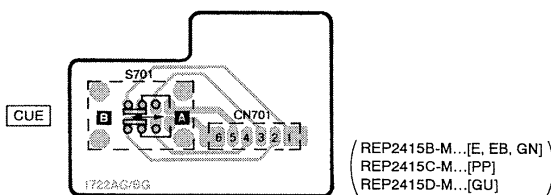
## D INPUT SELECT B SWITCH P.C.B.

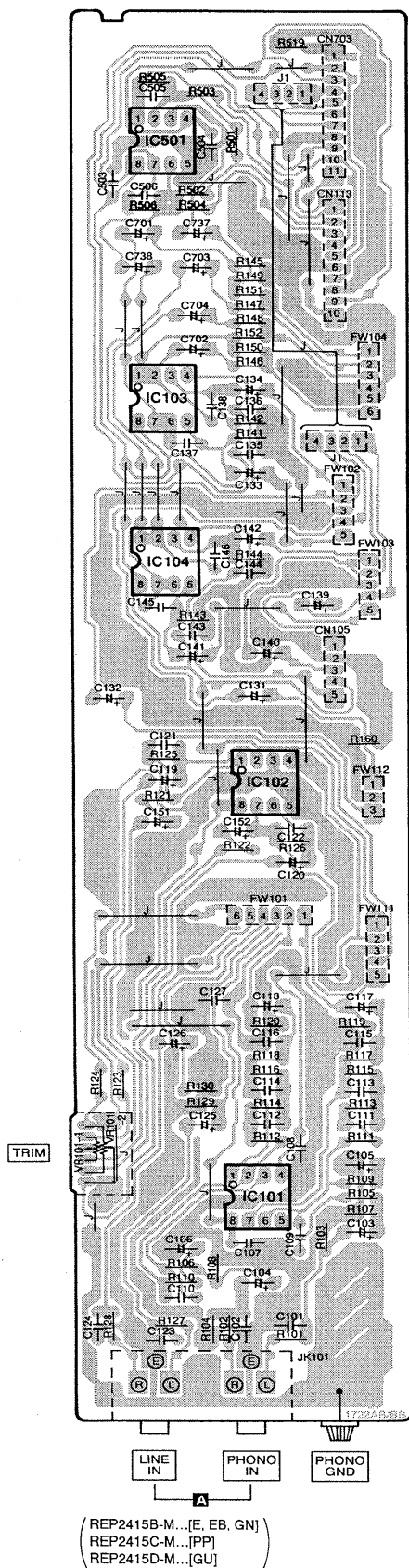
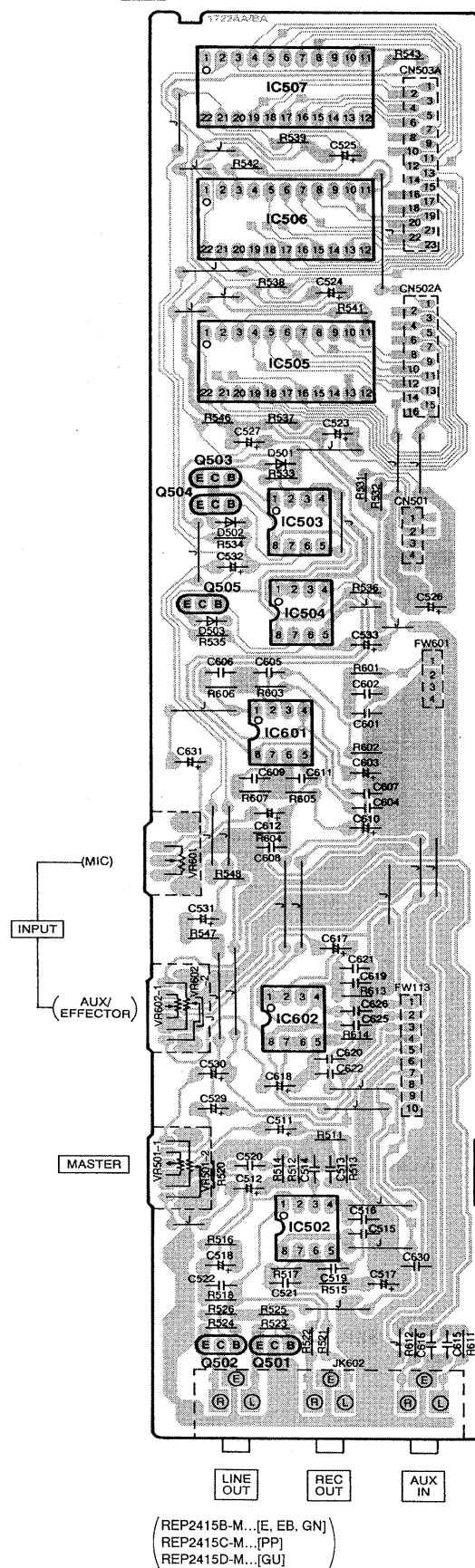


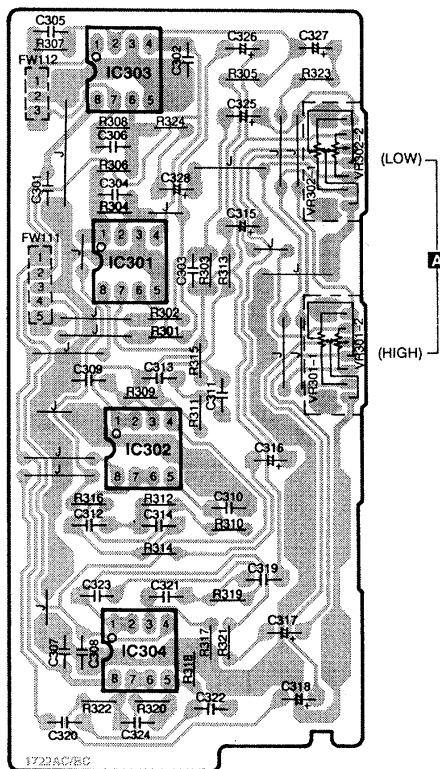
## M MONITOR P.C.B.



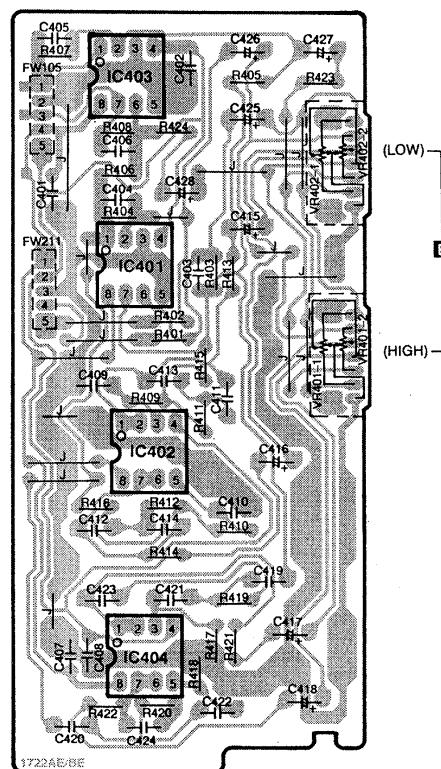
## L CUE SWITCH P.C.B.



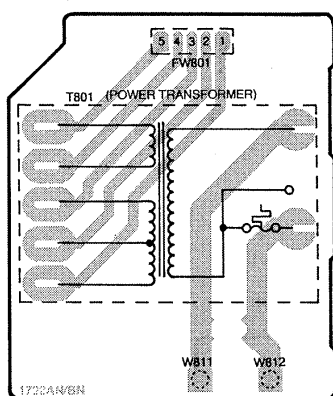
**A** INPUT A P.C.B.**K** OUTPUT P.C.B.

**E** TONE CONTROL A P.C.B.

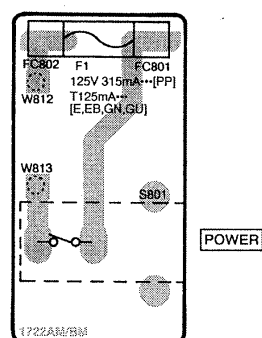
(REP2415B-M...[E, EB, GN]  
 REP2415C-M...[PP]  
 REP2415D-M...[GU])

**F** TONE CONTROL B P.C.B.

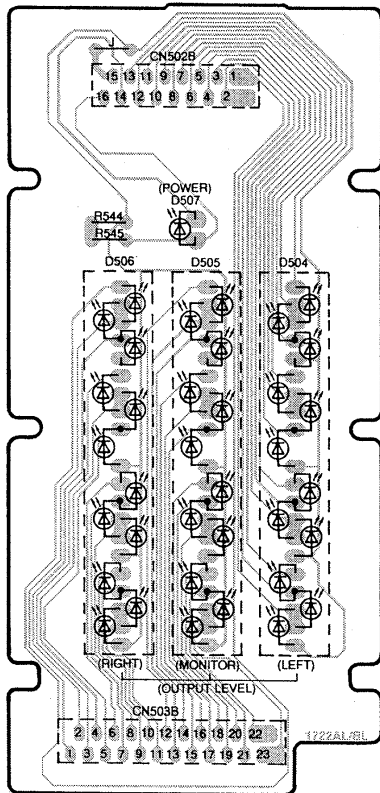
(REP2415B-M...[E, EB, GN]  
 REP2415C-M...[PP]  
 REP2415D-M...[GU])

**O** TRANSFORMER P.C.B.

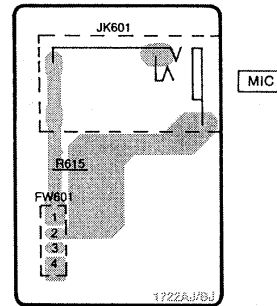
(REP2415B-M...[E, EB, GN]  
 REP2415C-M...[PP]  
 REP2415D-M...[GU])

**P** POWER SWITCH P.C.B.

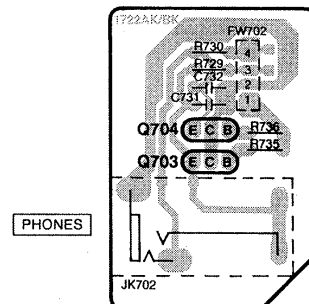
(REP2415B-M...[E, EB, GN]  
 REP2415C-M...[PP]  
 REP2415D-M...[GU])

**N** LED P.C.B.

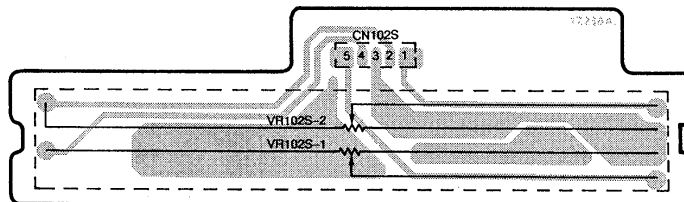
(REP2415B-M...[E, EB, GN])  
 (REP2415C-M...[PP])  
 (REP2415D-M...[GU])

**J** MIC P.C.B.

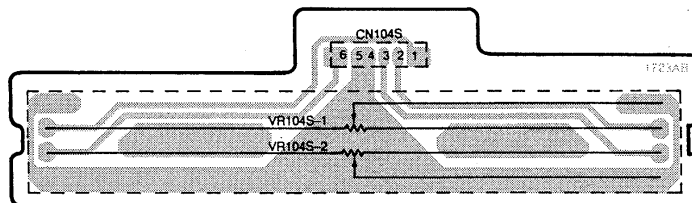
(REP2415B-M...[E, EB, GN])  
 (REP2415C-M...[PP])  
 (REP2415D-M...[GU])

**Q** HEADPHONES P.C.B.

(REP2415B-M...[E, EB, GN])  
 (REP2415C-M...[PP])  
 (REP2415D-M...[GU])

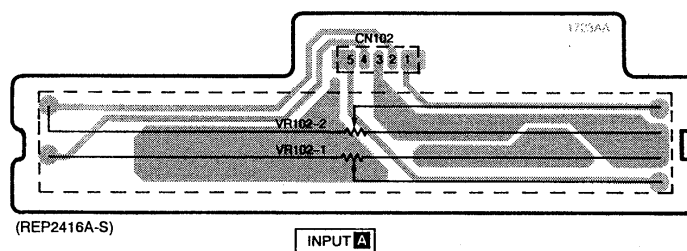
**R** CHANNEL FADER (SPARE) P.C.B.

(REP2416A-S)

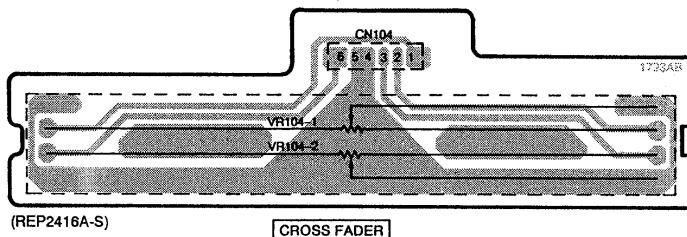
**S** CROSS FADER (SPARE) P.C.B.

(REP2416A-S)

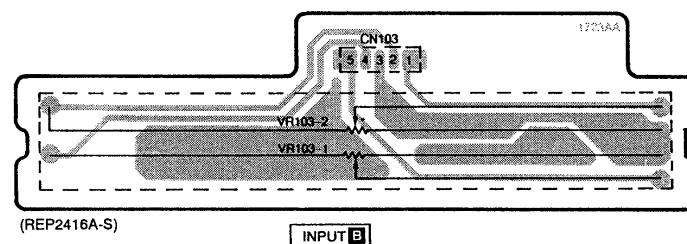
### G CHANNEL FADER A P.C.B.



### H CROSS FADER P.C.B.



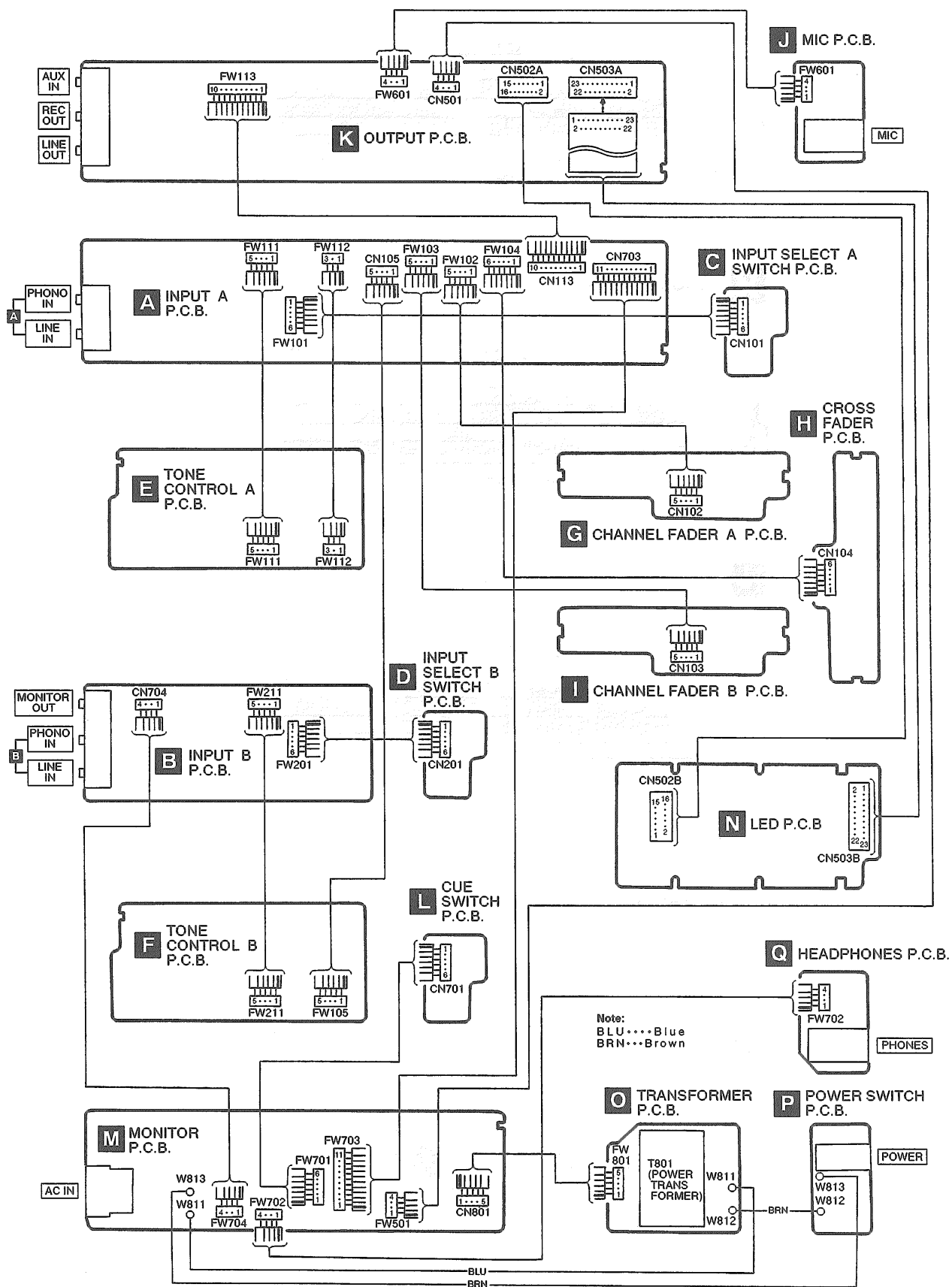
### I CHANNEL FADER B P.C.B.



### ● Terminal guide of IC'S, transistors and diodes

|                                       |                    |                                        |                     |                      |                                             |
|---------------------------------------|--------------------|----------------------------------------|---------------------|----------------------|---------------------------------------------|
| <b>AN6558F</b><br><b>UPC4570C</b><br> | <b>IR2432</b><br>  | <b>M5F7812L</b><br><b>M5F7815L</b><br> | <b>M5F7915L</b><br> | <b>UN4115TA</b><br>  | <b>2SC3327ABTA</b><br><b>2SD2144STA</b><br> |
| <b>RL1N4003N02</b><br>                | <b>MA165TA</b><br> | <b>LN850RPLS</b><br>                   | <b>GL112M9</b><br>  | <b>MA4056MTA</b><br> |                                             |

## ■ Wiring Connection Diagram





## ■ Replacement Parts List

**Notes:** \*Important safety notice:

Components identified by Δ 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 manufacture'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.)

Parts without these indications can be used for all areas.

\*The "(SF)" mark denotes the standard part.

\*&lt;VRD&gt;: indicates parts that are supplied by Video Recorder Division.

| Ref. No.   | Part No.     | Part Name & Description | Remarks | Ref. No.   | Part No.     | Part Name & Description | Remarks           |
|------------|--------------|-------------------------|---------|------------|--------------|-------------------------|-------------------|
|            |              | INTEGRATED CIRCUIT (S)  |         | VR104S     | EVBNK4M20B15 | VR, CROSS FADER         |                   |
|            |              |                         |         |            |              | COIL (S)                |                   |
| IC101      | AN6558F      | IC                      |         |            |              |                         |                   |
| IC102-104  | UPC4570C     | IC                      |         | L1         | SLQZ650MH49  | COIL                    | Δ                 |
| IC201      | AN6558F      | IC                      |         |            |              | TRANSFORMER (S)         |                   |
| IC202      | UPC4570C     | IC                      |         |            |              |                         |                   |
| IC301-304  | UPC4570C     | IC                      |         | T801       | RTP1U4B001-V | POWER TRANSFORMER       | Δ (E, EB, GN, GU) |
| IC401-404  | UPC4570C     | IC                      |         | T801       | RTP1U4C002-V | POWER TRANSFORMER       | Δ (PP)            |
| IC501-504  | UPC4570C     | IC                      |         |            |              |                         |                   |
| IC505-507  | IR2432       | IC                      |         |            |              | FUSE (S)                |                   |
| IC601      | AN6558F      | IC                      |         |            |              |                         |                   |
| IC602      | UPC4570C     | IC                      |         | F1         | XBA2C012TB0S | FUSE                    | Δ (E, EB, GN, GU) |
| IC701, 702 | UPC4570C     | IC                      |         | F1         | XBA1C03NBAU  | FUSE                    | Δ (PP)            |
| IC801      | M5F7815L     | IC                      | Δ       |            |              |                         |                   |
| IC802      | M5F7915L     | IC                      | Δ       |            |              | SWITCH (ES)             |                   |
| IC803      | M5F7812L     | IC                      | Δ       |            |              |                         |                   |
|            |              | TRANSISTOR (S)          |         | S101       | RST2B001-H   | SW                      |                   |
|            |              |                         |         | S201       | RST2B001-H   | SW                      |                   |
| Q501-505   | 2SC3327ABTA  | TRANSISTOR              |         | S701       | RST2B001-H   | SW                      |                   |
| Q701-704   | 2SC3327ABTA  | TRANSISTOR              |         | S801       | ESB8279V     | SW                      | Δ                 |
| Q705       | UN4115       | TRANSISTOR              |         |            |              | CONNECTOR (S)           |                   |
| Q801, 802  | 2SD2144S     | TRANSISTOR              |         |            |              |                         |                   |
|            |              | DIODE (S)               |         | CN101      | RJS6T4ZA     | SOCKET (6P)             |                   |
|            |              |                         |         | CN102, 103 | RJS5T4ZA     | SOCKET (5P)             |                   |
| D501-503   | MA165        | DIODE                   |         | CN104      | RJS6T4ZA     | SOCKET (6P)             |                   |
| D504-506   | GL112M9      | LED                     |         | CN105      | RJS5T7ZA     | SOCKET (5P)             |                   |
| D507       | LN850RPLS    | LED                     |         | CN113      | RJS10T7ZA    | SOCKET (10P)            |                   |
| D801-809   | RL1N4003N02  | DIODE                   | Δ       | CN201      | RJS6T4ZA     | SOCKET (6P)             |                   |
| D810       | MA4056MTA    | DIODE                   | Δ       | CN501      | RJS4T7ZA     | SOCKET (4P)             |                   |
|            |              | VARIABLE RESISTOR (S)   |         | CN701      | RJS6T4ZA     | SOCKET (6P)             |                   |
|            |              |                         |         | CN703      | RJS11T7ZA    | SOCKET (11P)            |                   |
| VR101      | EVJC20F03B24 | VR, TRIM                |         | CN704      | RJS4T7ZA     | SOCKET (4P)             |                   |
| VR102, 103 | EVBNK3M20A15 | VR, CHANNEL FADER       |         | CN801      | RJS5T7ZA     | SOCKET (5P)             |                   |
| VR104      | EVBNK4M20B15 | VR, CROSS FADER         |         | CN502A     | RJS1A6716-Q  | CONNECTOR (16P)         |                   |
| VR201      | EVJC20F03B24 | VR, TRIM                |         | CN503A     | RJS1A6723-Q  | CONNECTOR (23P)         |                   |
| VR301, 302 | EWCCU3FB7G54 | VR, TONE                |         | CN502B     | RJS1A6216-1  | CONNECTOR (16P)         |                   |
| VR401, 402 | EWCCU3FB7G54 | VR, TONE                |         | CN503B     | RJS1A6223-1  | CONNECTOR (23P)         |                   |
| VR501      | EVJC20F03V15 | VR, MASTER              |         | CN102S     | RJS5T4ZA     | SOCKET (5P)             |                   |
| VR601      | EVJ01BF03D54 | VR, MIC LEVEL           |         | CN104S     | RJS6T4ZA     | SOCKET (6P)             |                   |
| VR602      | EVJC20F03D54 | VR, AUX LEVEL           |         |            |              | FUSE HOLDER (S)         |                   |
| VR701      | EVJCACFA7G15 | VR, MONITOR BALANCE     |         |            |              |                         |                   |
| VR702      | EVJC20FA7V15 | VR, MONITOR LEVEL       |         | FC801, 802 | EYF52BC      | FUSE HOLDER             |                   |
| VR102S     | EVBNK3M20A15 | VR, CHANNEL FADER       |         |            |              |                         |                   |

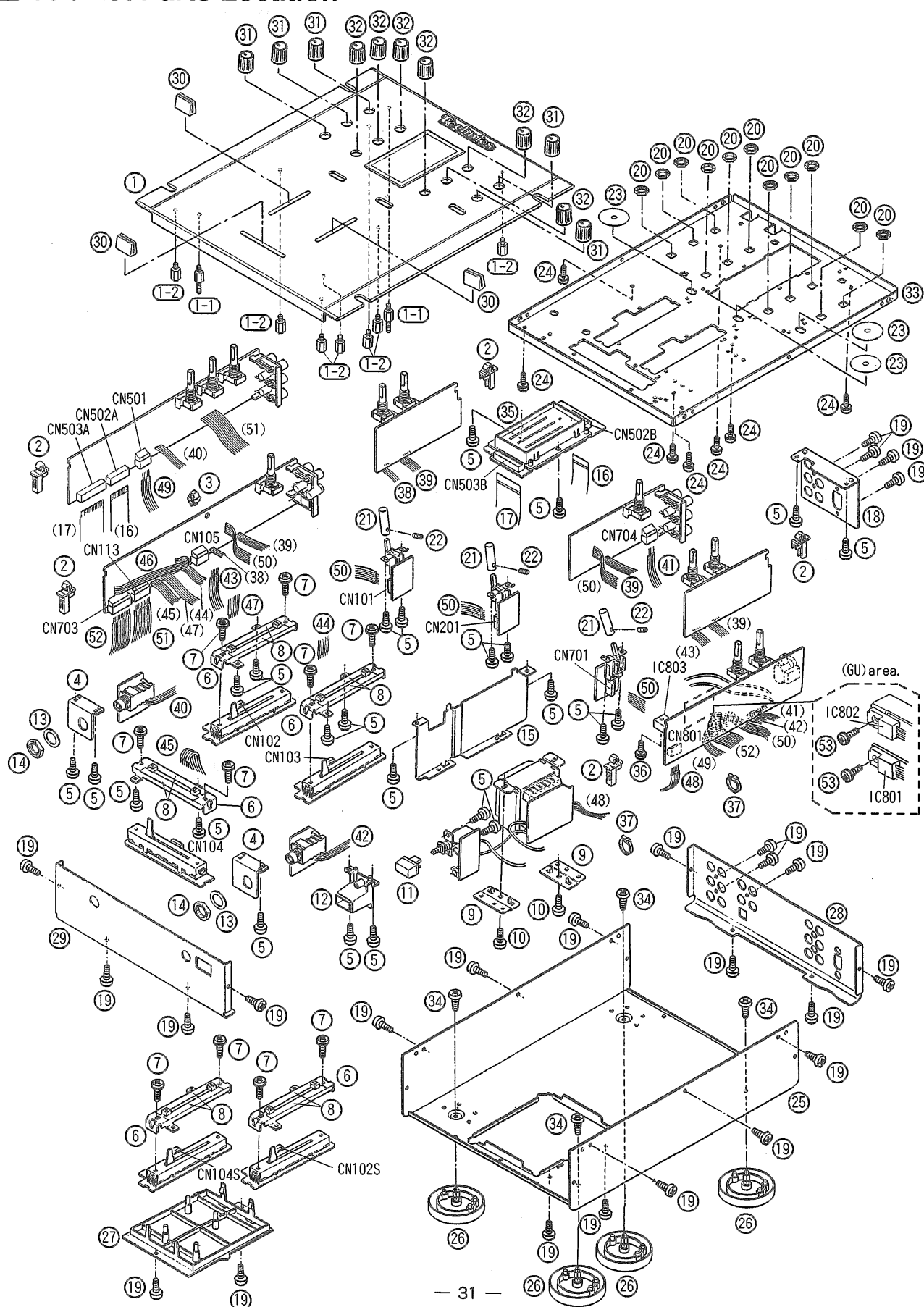
| Ref. No.   | Part No.  | Part Name & Description | Remarks |
|------------|-----------|-------------------------|---------|
|            |           | CABLE HOLDER(S)         |         |
| FW101      | RJS2A1306 | CABLE HOLDER(6P)        |         |
| FW102, 103 | RJS2A1305 | CABLE HOLDER(5P)        |         |
| FW104      | RJS2A1306 | CABLE HOLDER(6P)        |         |
| FW113      | RJS2A1310 | CABLE HOLDER(10P)       |         |
| FW201      | RJS2A1306 | CABLE HOLDER(6P)        |         |
| FW701      | RJS2A1306 | CABLE HOLDER(6P)        |         |
| FW703      | RJS2A1311 | CABLE HOLDER(11P)       |         |
| FW704      | RJS2A1304 | CABLE HOLDER(4P)        |         |
| FW801      | RJS2A1305 | CABLE HOLDER(5P)        |         |

| Ref. No. | Part No.   | Part Name & Description | Remarks           |
|----------|------------|-------------------------|-------------------|
|          |            | JACK(S)                 |                   |
| JK101    | SJF3067-2A | JACK                    |                   |
| JK201    | RJH2602A   | JACK                    |                   |
| JK601    | RJG3TA01   | JACK                    |                   |
| JK602    | RJH2602A   | JACK                    |                   |
| JK702    | RJG3TA01   | JACK                    |                   |
| JK801    | SJS9236    | JACK                    | △ (E, EB, GN, GU) |
| JK801    | SJSD16-1   | JACK                    | △ (PP)            |
|          |            |                         |                   |
|          |            |                         |                   |

| Ref. No. | Part No.    | Part Name & Description | Remarks     |
|----------|-------------|-------------------------|-------------|
|          |             | CABINET AND CHASSIS     |             |
| 1        | RYP0712A-K  | PANEL ASS'Y             |             |
| 1-1      | RMS0562     | SCREW                   |             |
| 1-2      | RMS0564     | BOSS                    |             |
| 2        | RMN0203     | P. C. B. HOLDER         |             |
| 3        | RMN0412     | HOLDER                  |             |
| 4        | RMQ0664     | BRACKET, JACK           |             |
| 5        | XTB3+8J     | SCREW                   |             |
| 6        | RMQ0663     | BRACKET, SLIDE VR       |             |
| 7        | XYN3+C5S    | SCREW                   |             |
| 8        | RMF0246     | HIMELON A               |             |
| 9        | RMN0408     | BRACKET, P. TRANSFORMER |             |
| 10       | XTB4+8J     | SCREW                   |             |
| 11       | RGU0890-K   | BUTTON, POWER           |             |
| 12       | RMR1029-K   | BRACKET, POWER SW       |             |
| 13       | RHW1A001    | SPRING WASHER           |             |
| 14       | XNSS12      | NUT                     |             |
| 15       | RMV0126     | BARRIER                 |             |
| 16       | REZ0947     | FFC (16P)               |             |
| 17       | REZ0952     | FFC (23P)               |             |
| 18       | RMN0407     | BRACKET, JACK           |             |
| 19       | XTBS3+8JFZ1 | SCREW                   |             |
| 20       | XNS9        | NUT                     |             |
| 21       | RGV0195-N   | KNOB, PHONO/LINE/CUE    |             |
| 22       | XXE2C3FT    | SCREW                   |             |
| 23       | RMF0247     | HIMELON B               |             |
| 24       | XYN3+C6S    | SCREW                   |             |
| 25       | RFKJ1200E   | BOTTOM BOARD ASS'Y      | (E, EB, GN) |
| 25       | RFKJ1200GU  | BOTTOM BOARD ASS'Y      | (GU)        |
| 25       | RFKJ1200PP  | BOTTOM BOARD ASS'Y      | (PP)        |
| 26       | RKA0053-A   | FOOT                    |             |

| Ref. No. | Part No.     | Part Name & Description         | Remarks         |
|----------|--------------|---------------------------------|-----------------|
| 27       | RMR1028-K    | BOTTOM COVER                    |                 |
| 28       | RGRO249A-B   | REAR PANEL                      | (E)             |
| 28       | RGRO249A-C   | REAR PANEL                      | (EB)            |
| 28       | RGRO249A-D   | REAR PANEL                      | (GN, GU)        |
| 28       | RGRO249B-A   | REAR PANEL                      | (PP)            |
| 29       | RGQ0197-K    | FRONT COVER                     |                 |
| 30       | RGV0194-K    | KNOB, FADER                     |                 |
| 31       | RGW0258-K    | KNOB, MASTER                    |                 |
| 32       | RGW0257-K    | KNOB, TRIM                      |                 |
| 33       | RMK0341      | CHASSIS                         | (E, EB, GN, GU) |
| 33       | RFKNDJ1200PP | CHASSIS ASS'Y                   | (PP)            |
| 34       | XTB3+6G      | SCREW                           |                 |
| 35       | RFKNHJ1200K  | METER FRAME ASS'Y               |                 |
| 36       | XYN3+C8S     | SCREW                           |                 |
| 37       | SHR328       | BINDER                          |                 |
| 38       | RWJ5703080SS | FLAT CABLE (3P/FW112)           |                 |
| 39       | RWJ5705080SS | FLAT CABLE (5P/FW111, 211)      |                 |
| 40       | RWJ5704180SS | FLAT CABLE (4P/FW601)           |                 |
| 41       | RWJ5704130QQ | FLAT CABLE (4P/FW704)           |                 |
| 42       | RWJ5704230SS | FLAT CABLE (4P/FW702)           |                 |
| 43       | RWJ5705150QS | FLAT CABLE (5P/FW105)           |                 |
| 44       | RWJ5705170QQ | FLAT CABLE (5P/FW103)           |                 |
| 45       | RWJ5706170QQ | FLAT CABLE (6P/FW104)           |                 |
| 46       | RWJ5704100SS | FLAT CABLE (4P/J1)              |                 |
| 47       | RWJ4305130QQ | FLAT CABLE (5P/FW102)           |                 |
| 48       | RWJ5705100QQ | FLAT CABLE (5P/FW801)           |                 |
| 49       | RWJ5704200QS | FLAT CABLE (4P/FW501)           |                 |
| 50       | RWJ5706100QQ | FLAT CABLE (6P/FW101, 201, 701) |                 |
| 51       | RWJ5710220QQ | FLAT CABLE (10P/FW113)          |                 |
| 52       | RWJ5711370QQ | FLAT CABLE (11P/FW703)          |                 |
| 53       | XYN3+C6S     | SCREW                           | (GU)            |
|          |              |                                 |                 |

# Cabinet Parts Location

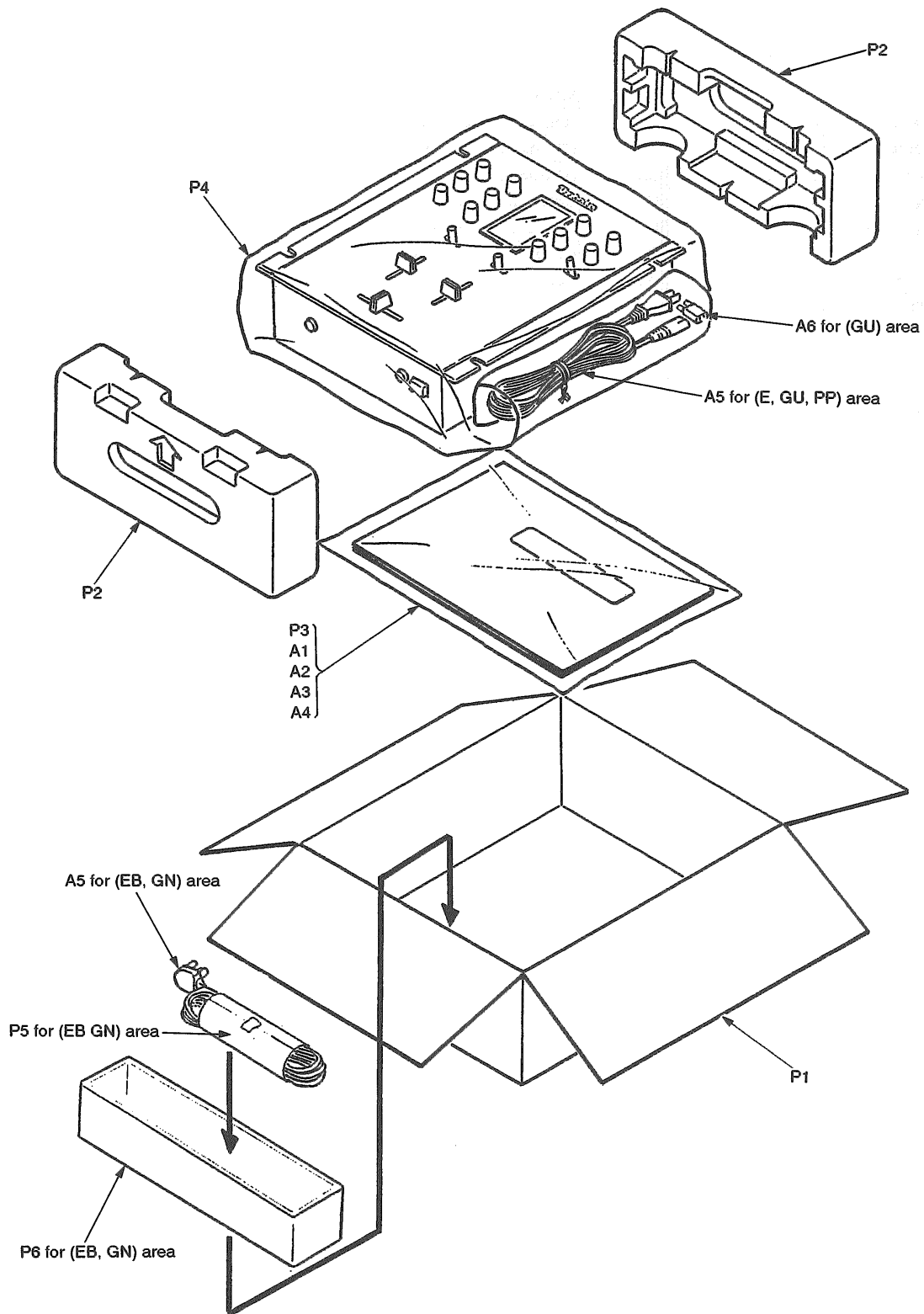


Notes : \* Capacity values are in microfarads (uF) unless specified otherwise, P=Pico-farads (pF) F=Farads (F)  
 \* Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM) , 1M=1,000k (OHM)

| Ref. No.  | Part No.   | Values & Remarks | Ref. No.  | Part No.   | Values & Remarks   | Ref. No.  | Part No.     | Values & Remarks |
|-----------|------------|------------------|-----------|------------|--------------------|-----------|--------------|------------------|
|           |            | RESISTORS        | R419, 420 | ERDS2TJ473 | 1/4W 47K           |           |              | CAPACITORS       |
|           |            |                  | R421, 422 | ERDS2TJ152 | 1/4W 1.5K          |           |              |                  |
|           |            |                  | R423, 424 | ERDS2TJ472 | 1/4W 4.7K          | C101, 102 | ECBT1H181KB5 | 50V 180P         |
| R101, 102 | ERDS2TJ102 | 1/4W 1K          | R501-504  | ERDS2TJ472 | 1/4W 4.7K          | C103, 104 | RCE1HKA3R3BG | 50V 3.3U         |
| R103, 104 | ERDS2TJ224 | 1/4W 220K        | R505, 506 | ERDS2TJ103 | 1/4W 10K           | C105, 106 | ECEA1CKA330B | 16V 33U          |
| R105, 106 | ERDS2TJ101 | 1/4W 100         | R511, 512 | ERDS2TJ563 | 1/4W 56K           | C107, 108 | ECBT1E223ZF  | 25V 0.022U       |
| R107, 108 | ERDS2TJ563 | 1/4W 56K         | R513, 514 | ERDS2TJ471 | 1/4W 470           | C109, 110 | ECBT1H391KB5 | 50V 390P         |
| R109, 110 | ERDS2TJ271 | 1/4W 270         | R515, 516 | ERDS2TJ183 | 1/4W 18K           | C111, 112 | ECQB1H562JF3 | 50V 5600P        |
| R111, 112 | ERDS2TJ680 | 1/4W 68          | R517, 518 | ERDS2TJ563 | 1/4W 56K           | C113, 114 | ECQB1H223JF3 | 50V 0.022U       |
| R113, 114 | ERDS2TJ123 | 1/4W 12K         | R519, 520 | ERDS2TJ100 | 1/4W 10            | C115, 116 | ECBT1C472KR5 | 16V 4700P        |
| R115, 116 | ERDS2TJ184 | 1/4W 180K        | R521, 522 | ERDS2TJ222 | 1/4W 2.2K          | C117, 118 | RCE1CKA100BG | 16V 10U          |
| R117, 118 | ERDS2TJ102 | 1/4W 1K          | R523, 524 | ERDS2TJ561 | 1/4W 560           | C119, 120 | ECEA1HKA010B | 50V 1U           |
| R119, 120 | ERDS2TJ563 | 1/4W 56K         | R525, 526 | ERDS2TJ102 | 1/4W 1K            | C121, 122 | ECBT1H220J5  | 50V 22P          |
| R121-124  | ERDS2TJ103 | 1/4W 10K         | R531, 532 | ERDS2TJ683 | 1/4W 68K           | C123, 124 | ECBT1H181KB5 | 50V 180P         |
| R125, 126 | ERDS2TJ224 | 1/4W 220K        | R533-535  | ERDS2TJ333 | 1/4W 33K           | C125, 126 | RCE1HKA3R3BG | 50V 3.3U         |
| R127, 128 | ERDS2TJ102 | 1/4W 1K          | R536      | ERDS2TJ153 | 1/4W 15K           | C127      | ECBT1E223ZF  | 25V 0.022U       |
| R129, 130 | ERDS2TJ563 | 1/4W 56K         | R537-539  | ERDS2TJ103 | 1/4W 10K           | C131-134  | ECEA1HKA010B | 50V 1U           |
| R141-144  | ERDS2TJ474 | 1/4W 470K        | R541-543  | ERDS2TJ823 | 1/4W 82K           | C135, 136 | ECBT1E223ZF  | 25V 0.022U       |
| R145-152  | ERDS2TJ472 | 1/4W 4.7K        | R544, 545 | ERDS2TJ681 | 1/4W 680           | C137, 138 | ECBT1H101KB5 | 50V 100P         |
| R160      | ERDS2TJ100 | 1/4W 10          | R546      | ERDS2TJ102 | 1/4W 1K            | C139-142  | ECEA1HKA010B | 50V 1U           |
| R201, 202 | ERDS2TJ102 | 1/4W 1K          | R547, 548 | ERDS2TJ333 | 1/4W 33K           | C143, 144 | ECBT1E223ZF  | 25V 0.022U       |
| R203, 204 | ERDS2TJ224 | 1/4W 220K        | R601      | ERDS2TJ471 | 1/4W 470           | C145, 146 | ECBT1H101KB5 | 50V 100P         |
| R205, 206 | ERDS2TJ101 | 1/4W 100         | R602      | ERDS2TJ103 | 1/4W 10K           | C151, 152 | RCE1CKA100BG | 16V 10U          |
| R207, 208 | ERDS2TJ563 | 1/4W 56K         | R603      | ERDS2TJ272 | 1/4W 2.7K          | C201, 202 | ECBT1H181KB5 | 50V 180P         |
| R209, 210 | ERDS2TJ271 | 1/4W 270         | R604      | ERDS2TJ223 | 1/4W 22K           | C203, 204 | RCE1HKA3R3BG | 50V 3.3U         |
| R211, 212 | ERDS2TJ680 | 1/4W 68          | R605      | ERDS2TJ273 | 1/4W 27K           | C205, 206 | ECEA1CKA330B | 16V 33U          |
| R213, 214 | ERDS2TJ123 | 1/4W 12K         | R606, 607 | ERDS2TJ104 | 1/4W 100K          | C207, 208 | ECBT1E223ZF  | 25V 0.022U       |
| R215, 216 | ERDS2TJ184 | 1/4W 180K        | R611, 612 | ERDS2TJ102 | 1/4W 1K            | C209, 210 | ECBT1H391KB5 | 50V 390P         |
| R217, 218 | ERDS2TJ102 | 1/4W 1K          | R613, 614 | ERDS2TJ563 | 1/4W 56K           | C211, 212 | ECQB1H562JF3 | 50V 5600P        |
| R219, 220 | ERDS2TJ563 | 1/4W 56K         | R615      | ERDS2TJ102 | 1/4W 1K            | C213, 214 | ECQB1H223JF3 | 50V 0.022U       |
| R221-224  | ERDS2TJ103 | 1/4W 10K         | R707-712  | ERDS2TJ103 | 1/4W 10K           | C215, 216 | ECBT1C472KR5 | 16V 4700P        |
| R225, 226 | ERDS2TJ224 | 1/4W 220K        | R713, 714 | ERDS2TJ223 | 1/4W 22K           | C217, 218 | RCE1CKA100BG | 16V 10U          |
| R227, 228 | ERDS2TJ102 | 1/4W 1K          | R715, 716 | ERDS2TJ103 | 1/4W 10K           | C219, 220 | ECEA1HKA010B | 50V 1U           |
| R229, 230 | ERDS2TJ563 | 1/4W 56K         | R719, 720 | ERDS2TJ563 | 1/4W 56K           | C221, 222 | ECBT1H220J5  | 50V 22P          |
| R301-308  | ERDS2TJ223 | 1/4W 22K         | R721, 722 | ERDS2TJ471 | 1/4W 470           | C223, 224 | ECBT1H181KB5 | 50V 180P         |
| R309, 310 | ERDS2TJ563 | 1/4W 56K         | R723, 724 | ERDS2TJ562 | 1/4W 5.6K          | C225, 226 | RCE1HKA3R3BG | 50V 3.3U         |
| R311, 312 | ERDS2TJ183 | 1/4W 18K         | R725, 726 | ERDS2TJ563 | 1/4W 56K           | C227      | ECBT1E223ZF  | 25V 0.022U       |
| R313, 314 | ERDS2TJ152 | 1/4W 1.5K        | R729, 730 | ERDS2TJ101 | 1/4W 100           | C251, 252 | RCE1CKA100BG | 16V 10U          |
| R315, 316 | ERDS2TJ563 | 1/4W 56K         | R731      | ERDS2TJ224 | 1/4W 220K          | C301, 302 | ECBT1E223ZF  | 25V 0.022U       |
| R317, 318 | ERDS2TJ104 | 1/4W 100K        | R732      | ERDS2TJ471 | 1/4W 470           | C303-306  | ECBT1H330J5  | 50V 33P          |
| R319, 320 | ERDS2TJ473 | 1/4W 47K         | R733-736  | ERDS2TJ102 | 1/4W 1K            | C307, 308 | ECBT1E223ZF  | 25V 0.022U       |
| R321, 322 | ERDS2TJ152 | 1/4W 1.5K        | R739, 740 | ERDS2TJ471 | 1/4W 470           | C309, 310 | ECQB1H153JF3 | 50V 0.015U       |
| R323, 324 | ERDS2TJ472 | 1/4W 4.7K        | R741, 742 | ERDS2TJ222 | 1/4W 2.2K          | C311, 312 | ECQB1H273JF3 | 50V 0.027U       |
| R401-408  | ERDS2TJ223 | 1/4W 22K         | R801      | ERDS2TJ274 | 1/4W 270K          | C313, 314 | ECQB1H272JF3 | 50V 2700P        |
| R409, 410 | ERDS2TJ563 | 1/4W 56K         | R802      | ERDS2TJ104 | 1/4W 100K          | C315-318  | ECA1CM221B   | 16V 220U         |
| R411, 412 | ERDS2TJ183 | 1/4W 18K         | R803      | ERDS2TJ473 | 1/4W 47K           | C319-322  | ECQB1H152JF3 | 50V 1500P        |
| R413, 414 | ERDS2TJ152 | 1/4W 1.5K        | R804      | ERDS1FJ152 | 1/2W 1.5K $\Delta$ | C323, 324 | ECQB1H682JF3 | 50V 6800P        |
| R415, 416 | ERDS2TJ563 | 1/4W 56K         | R805      | ERDS2TJ103 | 1/4W 10K           | C325, 326 | ECEA1CKA101B | 16V 100U         |
| R417, 418 | ERDS2TJ104 | 1/4W 100K        |           |            |                    | C327, 328 | ECA1CM221B   | 16V 220U         |

| Ref. No.  | Part No.     | Values & Remarks | Ref. No.  | Part No.     | Values & Remarks   |  |  |  |
|-----------|--------------|------------------|-----------|--------------|--------------------|--|--|--|
| C401, 402 | ECBT1E223ZF  | 25V 0.022U       | C737, 738 | RCE1CKA100BG | 16V 10U            |  |  |  |
| C403-406  | ECBT1H330J5  | 50V 33P          | C801, 802 | ECA1EM101B   | 25V 100U           |  |  |  |
| C407, 408 | ECBT1E223ZF  | 25V 0.022U       | C803, 804 | ECBT1E223ZF  | 25V 0.022U         |  |  |  |
| C409, 410 | ECQB1H153JF3 | 50V 0.015U       | C805, 806 | ECA1EM102B   | 25V 1000U $\Delta$ |  |  |  |
| C411, 412 | ECQB1H273JF3 | 50V 0.027U       | C807      | ECKR2H682PE  | 500V 6800P         |  |  |  |
| C413, 414 | ECQB1H272JF3 | 50V 2700P        | C808      | ECEA1HKAR33B | 50V 0.33U          |  |  |  |
| C415-418  | ECA1CM221B   | 16V 220U         | C809      | ECEA0JKA101B | 6.3V 100U          |  |  |  |
| C419-422  | ECQB1H152JF3 | 50V 1500P        | C810      | ECEA1CKA101B | 16V 100U           |  |  |  |
| C423, 424 | ECQB1H682JF3 | 50V 6800P        | C811      | ECBT1E223ZF  | 25V 0.022U         |  |  |  |
| C425, 426 | ECEA1CKA101B | 16V 100U         | C812      | ECA1EM102B   | 25V 1000U $\Delta$ |  |  |  |
| C427, 428 | ECA1CM221B   | 16V 220U         | C813      | ECKR1H103ZF5 | 50V 0.01U          |  |  |  |
| C503, 504 | ECBT1E223ZF  | 25V 0.022U       |           |              |                    |  |  |  |
| C505, 506 | ECBT1H330J5  | 50V 33P          |           |              |                    |  |  |  |
| C511, 512 | RCE1HKA3R3BG | 50V 3.3U         |           |              |                    |  |  |  |
| C513, 514 | ECBT1H101KB5 | 50V 100P         |           |              |                    |  |  |  |
| C515, 516 | ECBT1E223ZF  | 25V 0.022U       |           |              |                    |  |  |  |
| C517, 518 | RCE1CKA100BG | 16V 10U          |           |              |                    |  |  |  |
| C519, 520 | ECBT1H101KB5 | 50V 100P         |           |              |                    |  |  |  |
| C521, 522 | ECBT1H220J5  | 50V 22P          |           |              |                    |  |  |  |
| C523-525  | RCE1HKA3R3BG | 50V 3.3U         |           |              |                    |  |  |  |
| C526      | ECEA1CKA101B | 16V 100U         |           |              |                    |  |  |  |
| C527      | ECEA0JKA101B | 6.3V 100U        |           |              |                    |  |  |  |
| C529-533  | RCE1CKA100BG | 16V 10U          |           |              |                    |  |  |  |
| C601      | ECBT1H181KB5 | 50V 180P         |           |              |                    |  |  |  |
| C602      | ECQV1H154JM3 | 50V 0.15U        |           |              |                    |  |  |  |
| C603      | ECEA1HKA010B | 50V 1U           |           |              |                    |  |  |  |
| C604      | ECBT1E223ZF  | 25V 0.022U       |           |              |                    |  |  |  |
| C605      | ECBT1H101KB5 | 50V 100P         |           |              |                    |  |  |  |
| C606      | ECBT1H100J5  | 50V 10P          |           |              |                    |  |  |  |
| C607      | ECBT1E223ZF  | 25V 0.022U       |           |              |                    |  |  |  |
| C608, 609 | ECBT1H101KB5 | 50V 100P         |           |              |                    |  |  |  |
| C610      | ECEA1HKA010B | 50V 1U           |           |              |                    |  |  |  |
| C611      | ECBT1H100J5  | 50V 10P          |           |              |                    |  |  |  |
| C612      | ECEA1HKA010B | 50V 1U           |           |              |                    |  |  |  |
| C615, 616 | ECBT1H181KB5 | 50V 180P         |           |              |                    |  |  |  |
| C617, 618 | RCE1HKA3R3BG | 50V 3.3U         |           |              |                    |  |  |  |
| C619-622  | ECBT1H101KB5 | 50V 100P         |           |              |                    |  |  |  |
| C625, 626 | ECBT1E223ZF  | 25V 0.022U       |           |              |                    |  |  |  |
| C630      | ECBT1E223ZF  | 25V 0.022U       |           |              |                    |  |  |  |
| C631      | ECEA1HKA010B | 50V 1U           |           |              |                    |  |  |  |
| C701-704  | RCE1CKA100BG | 16V 10U          |           |              |                    |  |  |  |
| C709-712  | RCE1CKA100BG | 16V 10U          |           |              |                    |  |  |  |
| C713, 714 | ECBT1H330J5  | 50V 33P          |           |              |                    |  |  |  |
| C715, 716 | RCE1CKA100BG | 16V 10U          |           |              |                    |  |  |  |
| C717, 718 | RCE1HKA3R3BG | 50V 3.3U         |           |              |                    |  |  |  |
| C719, 720 | ECBT1H101KB5 | 50V 100P         |           |              |                    |  |  |  |
| C721, 722 | RCE1CKA100BG | 16V 10U          |           |              |                    |  |  |  |
| C723, 724 | ECBT1H101KB5 | 50V 100P         |           |              |                    |  |  |  |
| C725, 726 | ECBT1H220JC5 | 50V 22P          |           |              |                    |  |  |  |
| C730      | ECBT1E223ZF  | 25V 0.022U       |           |              |                    |  |  |  |
| C731, 732 | ECBT1H473ZF5 | 50V 0.047U       |           |              |                    |  |  |  |
| C735, 736 | ECBT1H391KB5 | 50V 390P         |           |              |                    |  |  |  |

## ■ PACKAGING



| Ref. No. | Part No.     | Part Name & Description | Remarks           |  |  |  |  |
|----------|--------------|-------------------------|-------------------|--|--|--|--|
|          |              |                         |                   |  |  |  |  |
|          |              | PACKING MATERIAL        |                   |  |  |  |  |
|          |              |                         |                   |  |  |  |  |
| P1       | RPG3172      | PACKING CASE            | (E, GU)           |  |  |  |  |
| P1       | RPG3357      | PACKING CASE            | (EB, GN)          |  |  |  |  |
| P1       | RPG3171      | PACKING CASE            | (PP)              |  |  |  |  |
| P2       | RPN1007      | CUSHION                 |                   |  |  |  |  |
| P3       | XZB25X34C03X | POLYETHYLENE BAG        |                   |  |  |  |  |
| P4       | SPP756       | PROTECTION BAG          |                   |  |  |  |  |
| P5       | RPH0032      | PROTECTION SHEET        | (EB, GN)          |  |  |  |  |
| P6       | RPQ0708      | SPACER                  | (EB, GN)          |  |  |  |  |
|          |              |                         |                   |  |  |  |  |
|          |              | ACCESSORIES             |                   |  |  |  |  |
|          |              |                         |                   |  |  |  |  |
| A1       | RQT3640-E    | INSTRUCTION MANNUAL     | (E) <IA>          |  |  |  |  |
| A1       | RQT3641-D    | INSTRUCTION MANNUAL     | (E) <IB>          |  |  |  |  |
| A1       | RQT3642-B    | INSTRUCTION MANNUAL     | (EB, GN) <IC>     |  |  |  |  |
| A1       | RQT3643-G    | INSTRUCTION MANNUAL     | (GU) <ID>         |  |  |  |  |
| A1       | RQT3639-Y    | INSTRUCTION MANNUAL     | (PP) <IE>         |  |  |  |  |
| A2       | RQCA0512     | SUB MANNUAL A           |                   |  |  |  |  |
| A3       | RQCA0534     | SUB MANNUAL B           |                   |  |  |  |  |
| A4       | RFE0032      | STICKER                 |                   |  |  |  |  |
| A5       | RJA0019-2K   | AC POWER CORD           | △ (SF) (E, GU)    |  |  |  |  |
| A5       | VJA0733      | AC POWER CORD           | △ (SF) (EB) <VRD> |  |  |  |  |
| A5       | RJA0035-K    | AC POWER CORD           | △ (GN)            |  |  |  |  |
| A5       | SJA172       | AC POWER CORD           | △ (SF) (PP)       |  |  |  |  |
| A6       | SJP5213-2    | POWER PLUG ADAPTOR      | △ (GU)            |  |  |  |  |
|          |              |                         |                   |  |  |  |  |
|          |              | SLIDE VOLUME KIT        |                   |  |  |  |  |
|          |              |                         |                   |  |  |  |  |
| K1       | RFKVHJ1200A  | CROSS FADER KIT         |                   |  |  |  |  |
| K2       | RFKVHJ1200B  | CHANNEL FADER KIT       |                   |  |  |  |  |

**Note:** The "<IA>, <IB>, <IC>, <ID>," marks in Remarks indicate language of instruction manual.

|                                        |                                         |
|----------------------------------------|-----------------------------------------|
| <IA>: English, Spanish, Dutch, Swedish | <IB>: German, Italian, French, Russian  |
| <IC>: English                          | <ID>: English, Spanish, Arabic, Chinese |
| <IE>: English, French                  |                                         |