

# DENON

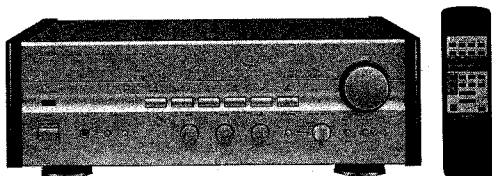
Hi-Fi Integrated Stereo Amplifier

## SERVICE MANUAL

# MODEL PMA-1315R

# MODEL PMA-1315RG

### INTEGRATED STEREO AMPLIFIER



The photograph shows the PMA-1315RG with side wood boards. (Multi-Voltage Model only)

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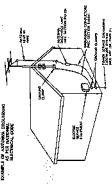
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## NIPPON COLUMBIA CO., LTD.

## SAFETY INSTRUCTIONS

- Read instructions - All the safety and operating instructions should be read before the appliance is operated.
- Read instructions - The safety and operating instructions should be retained for future reference.
- Read Warnings - All warnings on the appliance and in the operating instructions should be adhered to.
- Follow instructions - All operating and use instructions should be followed.
- Water and Moisture - The appliance should not be used near water. Do not use the appliance in a wet washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, and this is used.
- Cable and Straps - The appliance should be used only as directed. Do not use the appliance in any manner that is recommended by the manufacturer.
- Appliance and cart combination - The appliance and cart combination should not be used with a double stop, excessive vibration, or on uneven surfaces may cause the appliance and cart combination to overturn.
- Wall or Ceiling Mounting - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
- Use of the appliance - The appliance should be used only as directed. Do not use the appliance in any manner that is recommended by the manufacturer.
- Heat - The appliance should be avoided away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers).
- Over-current - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
- Grounding or Polarization - Precautions should be taken to avoid the use of a polarization insert if an appliance is not certified.
- Power Cord Protection - Power supply cords should be protected by using a cord protector or should be protected by being run under a rug or pinched by items placed under or against them, paying particular attention to cords at plugs, contact receptacles, and the point where they exit from the appliance.
- Cleaning - The appliance should be cleaned only as recommended by the manufacturer.
- Power Lines - An outdoor antenna should be located away from power lines.
- Outdoor Antenna Grounding - If an outside antenna is connected to this unit, be sure the antenna is grounded and that the connection is made to a ground against voltage surges and built-up static charges. For more information on proper grounding, see ANS/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure. Grounding of the mast and supporting structure of antenna-discharge unit, connection to the antenna discharge unit, and connection to the antenna discharge unit, should be made to a common grounding electrode. See Figure A.
- Noise Period - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
- Object and Liquid Entry - Care should be taken to prevent objects or liquid from being spilled into the enclosure through openings.
- Damage Requiring Service - The appliance should be serviced by qualified service personnel when:
  - The power-supply cord or the plug has been damaged; or
  - Objects have fallen, or liquid has been spilled into the appliance; or
  - The appliance has been exposed to rain; or
  - The appliance does not operate properly, or exhibits a marked change in performance; or
  - The appliance has been dropped, or the enclosure damaged.
- Service - The user should not attempt to service the appliance. All other servicing should be referred to qualified service personnel.

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- Grounding or Polarization - Precautions should be taken to avoid the use of a polarization insert if an appliance is not certified.



**CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER OR BACK. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.**

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

**WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.**

• FOR U.S.A. & CANADA MODEL ONLY

## CAUTION

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS APPLIANCE WITH A PLUG THAT DOES NOT FIT THE OUTLET. USE ONLY THE PLUG PROVIDED WITH THIS APPLIANCE. OTHER OUTLET UNLESS THE BRAND'S MODEL RECEIPT OR LABEL INDICATES OTHERWISE. THIS APPLIANCE IS DESIGNED TO PREVENT SHOCK EXPOSURE.

• POUR LE MODELE CANADIEN UNIFORMEMENT

## ATTENTION

POUR PREVENIR LES CHOC ELECTRIQUES, NE PAS UTILISER CE TYPE DE BOITIER AVEC UN AUTRE TYPE DE BOITIER. UTILISER SEULEMENT LE BOITIER FOURNI AVEC CE BOITIER. NE PAS UTILISER D'AUTRE BOITIER SAUF SI LE REÇU DE LA MARQUE OU L'ETIQUETTE INDICATrice LE PERMET. CE BOITIER EST CONÇU POUR PREVENIR L'EXPOSITION AU CHOC ELECTRIQUE.

• NUR FÜR EUROPÄISCHE MODELLE

## Merkmale/Wichtig

Das KEINER Elektrische Geräte  
Sollte nicht mit einem anderen  
Typen verwendet werden.

Bitte ein Merkmal/Wichtig, das die in dieser Bedienungsanleitung beschriebenen Geräte, den Technischen Vorschriften für Typ und Fernwartungsanforderungen nach der Abnahme/Wartung, über 1000 Stunden über den Hersteller oder den Hersteller des Produkts, wenn es ist, nicht verwendet.

NOTE ON USE/ANWISUNG ZUM GEBRAUCH/OBSERVATIONS RELATIVES A L'UTILISATION
NOTE SULUSO/NOTAS SOBRE EL USO/AI VOREANS TE GEBRUIKEN/OBSERVERA
OBSERVAÇÕES QUANTO AO USO

Grid of 12 panels with illustrations and text in multiple languages (English, Spanish, French, German, Italian, Dutch, Portuguese, Russian, Chinese, Japanese, Korean, Arabic) providing safety instructions for the power supply.

- 1. Maneggio sempre attento ed incoraggiato di affermazione POWER in...
2. Zwart en wit...
3. Het apparaat moet altijd op een vlakke, stevige ondergrond worden geplaatst...

PRECAUCION:
1. Siempre manipule el aparato con cuidado...
2. Siempre manipule el aparato con cuidado...

CAUTION:
1. Always handle the power supply with care...
2. Always handle the power supply with care...

ATTENTION:
1. Toujours manipuler l'alimentation avec précaution...
2. Toujours manipuler l'alimentation avec précaution...

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1. Toujours manipuler l'alimentation avec précaution...
2. Toujours manipuler l'alimentation avec précaution...

PRECAUTIONS FOR INSTALLATION
1. The power supply should be installed in a clean, dry, well-ventilated area...

BEZWAARSCHRIJFINGEN BIJ DE INSTALLATIE
1. Het apparaat moet worden geïnstalleerd in een schone, droge, goed geventileerde ruimte...

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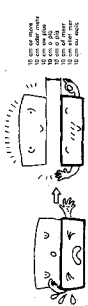
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1. Het apparaat moet worden geïnstalleerd in een schone, droge, goed geventileerde ruimte...

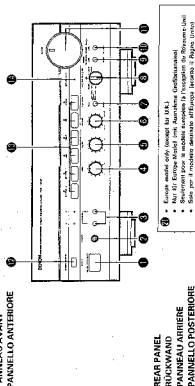
PRECAUTIONS FOR INSTALLATION
1. The power supply should be installed in a clean, dry, well-ventilated area...

BEZWAARSCHRIJFINGEN BIJ DE INSTALLATIE
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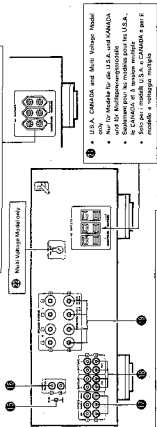
PRECAUTIONS FOR INSTALLATION
1. The power supply should be installed in a clean, dry, well-ventilated area...



FRONT PANEL  
FRONTPLATTE  
PANNEAU AVANT  
PANNELLO ANTERIORE



REAR PANEL  
RÜCKWAND  
PANNEAU ARRIERE  
PANNELLO POSTERIORE



**LINE VOLTAGE Voltage select switch** . . . . . For  
Multi-voltage model only. Use with the VOL  
TAGE SELECTOR KNOB in the rear panel only.

- Always use the correct voltage selector knob with the correct voltage.
- If the voltage selector switch does not turn smoothly, it may be damaged.
- Do not touch the selector switch.

Fig. 1  
Abb. 1

CONNECTIONS  
ANSCHLÜSSE  
CONNEXIONS  
CONNESSIONI

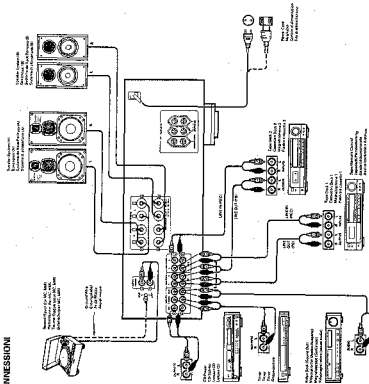


Fig. 2  
Abb. 2

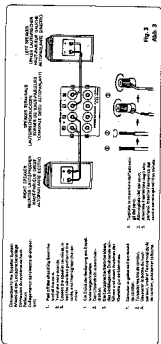


Fig. 3  
Abb. 3

①	CD	CD, TUNER, AUX	DAY/TAPE 1, DAY/TAPE 2	⑤	SPEAKERS
②	PHONE	Phone line terminals	TAPE FB + TAPE REC	⑥	Speaker Assembly
③	REC	REC, TAPE, REW, PAUSE, STOP, EJECT	REC, TAPE, REW, PAUSE, STOP, EJECT	⑦	Antenna
④	FM/AM	FM/AM selector	FM/AM selector	⑧	Antenna
⑤	FM/AM	FM/AM selector	FM/AM selector	⑨	Antenna
⑥	FM/AM	FM/AM selector	FM/AM selector	⑩	Antenna
⑦	FM/AM	FM/AM selector	FM/AM selector	⑪	Antenna
⑧	FM/AM	FM/AM selector	FM/AM selector	⑫	Antenna
⑨	FM/AM	FM/AM selector	FM/AM selector	⑬	Antenna
⑩	FM/AM	FM/AM selector	FM/AM selector	⑭	Antenna
⑪	FM/AM	FM/AM selector	FM/AM selector	⑮	Antenna
⑫	FM/AM	FM/AM selector	FM/AM selector	⑯	Antenna
⑬	FM/AM	FM/AM selector	FM/AM selector	⑰	Antenna
⑭	FM/AM	FM/AM selector	FM/AM selector	⑱	Antenna
⑮	FM/AM	FM/AM selector	FM/AM selector	⑲	Antenna
⑯	FM/AM	FM/AM selector	FM/AM selector	⑳	Antenna
⑰	FM/AM	FM/AM selector	FM/AM selector	㉑	Antenna
⑱	FM/AM	FM/AM selector	FM/AM selector	㉒	Antenna
㉑	FM/AM	FM/AM selector	FM/AM selector	㉓	Antenna

## DESIGNATIONS AND FUNCTIONS OF PANEL CONTROLS

- 1 POWER (Power Switch)**  
When the power switch is turned ON (= 1), the MUTER/STANDBY LED **1** will be turned ON, power is supplied to the unit. It takes a few seconds after the power is turned on for the unit to warm up. This is due to the start-up timing circuit that stabilizes noise during the start-up operation.
- 2 PHONES (Headphone Jack)**  
This jack is used for plug-in headphones.
- 3 SPEAKERS (Speaker Selection Switch)**  
This switch is used to select the speaker system. The speaker systems A and speaker system B are selected when the LED points to the speaker system A or speaker system B. When A is selected, the LED points to the speaker system A and speaker system B. When B is selected, the LED points to the speaker system B and speaker system A.
- 4 BASS (Bass Control)**  
This knob is used to control the bass quality of the sound. When the knob is set at the center position, the frequency response is flat. When the knob is turned clockwise, the bass is emphasized as the knob is moved off center to the right (7). And, when the knob is turned counter-clockwise, the bass is reduced as the knob is moved to the left (5). The effect of the other controls is reduced.
- 5 TREBLE (Treble Control)**  
This knob is used to control the treble quality of the sound. When the knob is set at the center position, the frequency response is flat. When the knob is turned clockwise, the treble is emphasized as the knob is moved off center to the right (7). And, when the knob is turned counter-clockwise, the treble is reduced as the knob is moved to the left (5). The effect of the other controls is reduced.
- 6 BALANCE (Balance Control)**  
This knob is used to adjust the balance between the left and right channels. When the knob is set at the center position, the volume of the amplifier is equal on both sides. If there is a difference in the left and right channel output voltages for the same input signal, this knob is used to adjust the volume on the right side to the same level as the left side. When the knob is turned clockwise, the volume on the left side is low, and when the knob is turned counter-clockwise, the volume on the right side is low.
- 7 LOUDNESS (LOUDNESS Switch)**  
When the volume is low, it is difficult for the human ear to clearly distinguish notes in the low and high frequency region. When this switch is turned ON, the frequency response is emphasized in the low and high frequency region. When this switch is turned OFF, the frequency response is flat. Press the button when the volume is low when listening to music at a low volume. The low frequency notes will be emphasized to produce a better sound.
- 8 REC OUT SELECTOR (Rec Out Select Switch)**  
Use this switch to select the recording component.  
  - PHONO: Used to recording from the turntable.
  - CD: Used to recording from the CD player.
  - TUNER: Used to recording from the tuner.

## 14

## MUTE/STANDBY LED

The MUTE/STANDBY LED is lit when the power is turned on and when muting is turned on from the remote control unit, and remains lit (without flashing) when the power is on.

## 15

## AC OUTLETS, Rear Panel Side

AC outlets are provided for connecting amplifier component units, such as tuner, tuner deck, etc.

## 16

## PLAYBACK WITH MARK INDEX

1. Press the Title block.
2. Press the F1 (MARK) button. The cursor moves to the first mark.
3. Press the F2 (INDEX) button. The cursor moves to the first mark.
4. Press the F3 (PLAY) button. The cursor moves to the first mark.

## 17

## RECORDING WITH TAKE REEK

1. Set the REC/OUT SELECTOR to the program source you wish to record.
2. Press the REC/OUT SELECTOR button. The cursor moves to the first mark.
3. Press the F1 (MARK) button. The cursor moves to the first mark.
4. Press the F2 (INDEX) button. The cursor moves to the first mark.
5. Press the F3 (PLAY) button. The cursor moves to the first mark.

## 18

## MUTING THE RECORDING

These indicators begin recording one playlist to disk. A muting indicator is shown on the screen. The muting indicator and playback cannot be used to muting recording. When recording is being made using DAT/TAPE L, muting DAT/TAPE L recording is possible. Muting recording using the PHONO MONITOR and muting a check of the recording condition.

## 19

## SETTING OF EACH knob

1. Turn the volume control knob counter-clockwise to "0".
2. Set SOURCE DIRECT and LOUDNESS to "OFF I & II".
3. Check the direction of pin cord connection.

## 20

## PLAYBACK OF CD PLAYER

1. Set the REC/OUT SELECTOR switch to "PHONO".
2. Turn the volume and tone controls to yield an appropriate volume and sound quality.

## 21

## PACKBACK OF CD PLAYER

1. Set the REC/OUT SELECTOR switch to "CD".
2. Turn the volume and tone controls to yield an appropriate volume and sound quality.

## RECEPTION OF RADIO PROGRAMS

1. Operate the tuner to receive a radio program.
2. Turn the volume and tone controls to yield an appropriate volume and sound quality.

## CONNECTING OF AUDIO EQUIPMENTS TO AUX TERMINALS

1. Connect the audio equipment to the AUX terminals.
2. Turn the volume and tone controls to yield an appropriate volume and sound quality.

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1. Turn the volume control knob counter-clockwise to "0".
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3. Check the direction of pin cord connection.

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## PACKBACK OF CD PLAYER

1. Set the REC/OUT SELECTOR switch to "CD".
2. Turn the volume and tone controls to yield an appropriate volume and sound quality.

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The MUTE/STANDBY LED is lit when the power is turned on and when muting is turned on from the remote control unit, and remains lit (without flashing) when the power is on.

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## AC OUTLETS, Rear Panel Side

AC outlets are provided for connecting amplifier component units, such as tuner, tuner deck, etc.

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These indicators begin recording one playlist to disk. A muting indicator is shown on the screen. The muting indicator and playback cannot be used to muting recording. When recording is being made using DAT/TAPE L, muting DAT/TAPE L recording is possible. Muting recording using the PHONO MONITOR and muting a check of the recording condition.

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## PACKBACK OF CD PLAYER

1. Set the REC/OUT SELECTOR switch to "CD".
2. Turn the volume and tone controls to yield an appropriate volume and sound quality.

## REMOTE CONTROL OPERATION

The accessory Remote Control Unit is used to control the amplifier from a convenient location.

- 1) Inserting the Dry Cell Batteries  
1. Remove the battery cover on the Remote Control Unit.



2. Insert two dry cell batteries as shown in the diagram on the battery supply unit.



3. Replace the battery cover.



### Notes on Battery Usage

- The RC-176 uses the new NiP (AA) Dry Cell batteries.
- The batteries will need to be recharged approximately once a year. To recharge, insert them into the Recharge Control Unit in usual upright position.
- If, in less than a year, from the date new batteries were inserted, the batteries are exhausted, you must recharge them from a nearby position. It is time to replace the batteries.
- Insert the batteries properly, following the polarity diagram.
- Do not connect the positive (+) terminal to the negative (-) terminal. This will cause the battery to overheat, leak, and possibly explode.
- Do not mix old batteries with new ones.
- Do not jump or operate poles of the batteries, as sparks then occur. Be sure to disconnect the positive (+) terminal from the battery compartment wiring thoroughly with a dry cloth. Then insert new batteries.

## Remote Control Unit RC-176 supplied with the PMA-1315R

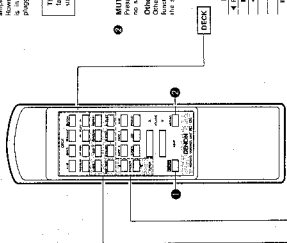
### 1 POWER button

This button can be used to turn on and off the power of the amplifier. However, the power for the amplifier turned on will off if it is in the power standby mode and the power cord is plugged in.

This function will not function if there is a power failure, if the power cord is not plugged in, or when using an audio car.

### 2 MUTING button

Pressing this switch will mute the output condition of the amplifier in response to the operation of other buttons. Other buttons are exclusively for the PMA-1315R, and function in the same way as the corresponding buttons on the A.M.P.



### DECK

- ▶ P.F.F. PLAY button
- ▶ REWIND REWIND button
- ▶ STOP STOP button
- ▶ F.F. F.F. button
- ▶ PAUSE PAUSE button
- ▶ EJECT EJECT button
- ▶ AIR WICKER AIR SELECT button

### TUNER

PRESET buttons: Buttons used to move up or down among the preset station numbers.

- ▶ PLAY button
- ▶ STOP button
- ▶ REWIND button
- ▶ F.F. button
- ▶ PAUSE button
- ▶ EJECT button
- ▶ AIR WICKER button
- ▶ REPEAT button
- ▶ MUTE button
- ▶ DIMMER button

The RC-176 Remote Control Unit can control CD players and cassette decks manufactured by DENON.

- Note that operations may not be possible for some models.
- If you have any questions concerning any specific component, the groups are AMP, CD, DECK and TUNER, we are conveniently separated into groups, each group controlling any specific component. The groups are AMP, CD, DECK and TUNER.
- For details on operating other components, refer to the operating instructions for the CD player and/or cassette deck.

### CAUTION:

- If the power is turned off with the Remote Control Unit, the set is switched to the power standby state. If you are absent for a long time, use the MAIN POWER OFF button to switch the set to the power standby mode.
- Do not use the BATTERY LED light when in the power standby mode.
- You may experience erratic operation of the Remote Control Unit if it is operated in a location with a strong electromagnetic field from the Amplifier. However, this is not a malfunction, and it may show signs of a low battery level. Turn off the amplifier and replace the batteries.

- Operate the Remote Control Unit while pointing it towards the amplifier on the Amplifier's display on the AMPLIFIER.
- The Remote Control Unit can be used as a remote control to adjust the volume of the amplifier. The volume will increase as the transmission or if the Remote Control Unit is not directed straight at the amplifier.

- Do not press the operating buttons on the Amplifier and the Remote Control Unit at the same time. This will cause malfunction.
- Operation of the Remote Control Unit will become less accurate if you use the Remote Control Unit with the amplifier in the same time. This will cause malfunction.
- In case you operate a VCR, TV or other components by remote control, do not operate buttons on two different remote control units at the same time. This will cause malfunction.

### Besides being able to operate the PMA-1315R amplifier with this Remote Control Unit, you can also operate a DENON cassette deck and CD player from this handy full-features Remote Control Unit.

#### Remote control function

Full-features Remote Control Unit operates all major functions of the Amplifier, such as function switching, volume control. But that's not all! This same control can also control the major functions of a DENON CD player and cassette deck and hence when combined with the PMA-1315R to create a remarkably ergonomic and versatile DENON system with all the quality sound reproduction that the award-achieving Denon sounds.

### 12 Directions for use



12 Directions for use

**ESPANOL**  
 Por favor verifique sus participaciones de que los siguientes artículos se encuentren en los cuadros correspondientes:  
 (1) Manual de instrucciones ..... 1  
 (2) Unidad de control remoto (RC-179) ..... 1  
 (3) Panel del RPT (PA) ..... 2

**ESPERANTO**  
 Kontrolite de la volando sukcesive ki ĉiuj kondiĉoj de la sekvanta estas plenumi:  
 (1) Manlibro de instrukcioj ..... 1  
 (2) Unita de kontrolo de funkciado (RC-179) ..... 1  
 (3) Panelo de RPT (PA) ..... 2

**FRANCOIS**  
 Vérifiez attentivement, en examinant successivement, l'état de vos participations pour vous assurer que les articles suivants se trouvent dans les cadres correspondants:  
 (1) Manuel d'instructions ..... 1  
 (2) Appareil de commande à distance (RC-179) ..... 1  
 (3) Tableau de commande (RPT-PA) ..... 2

**PORTUGUES**  
 Confirme-se de que as participações pelas coisas indicadas se encontram nos quadros correspondentes:  
 (1) Manual de instruções ..... 1  
 (2) Unidade de controlo remoto (RC-179) ..... 1  
 (3) Painel do RPT (PA) ..... 2

**ENGLISH**  
 Please check to make sure the following items are included with the product:  
 (1) Owner's Instruction Manual ..... 1  
 (2) Remote Control Unit (RC-179) ..... 1  
 (3) Remote RPT (PA) ..... 2

**DEUTSCH**  
 Bitte überprüfen Sie, ob die folgenden Teile vollständig in der Verpackung enthalten sind:  
 (1) Fernbedienung (RC-179) ..... 1  
 (2) Bedienplan RPT (PA) ..... 2

**FRANCAIS**  
 Vérifiez soigneusement que les articles suivants sont bien joints à l'appareil principal dans le carton:  
 (1) Mode d'emploi ..... 1  
 (2) Télécommande (RC-179) ..... 1  
 (3) Plan RPT (PA) ..... 2

**ITALIANO**  
 Controllate che il pacco contenga il telecomando insieme con:  
 (1) Il manuale delle istruzioni ..... 1  
 (2) Il telecomando (RC-179) ..... 1  
 (3) Il telecomando RPT (PA) ..... 2

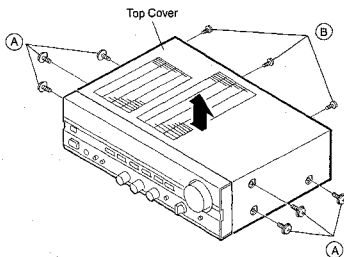
Product Name	Description	Country of Origin	Product Details
<b>FRONTAL DRIVE</b>	The front drive assembly of the vehicle.	USA	Part No. 12345
<b>REAR DRIVE</b>	The rear drive assembly of the vehicle.	USA	Part No. 54321
<b>STEERING ASSEMBLY</b>	The steering mechanism of the vehicle.	USA	Part No. 98765
<b>WHEEL ASSEMBLY</b>	The wheel and tire assembly of the vehicle.	USA	Part No. 11111
<b>CHASSIS</b>	The main frame of the vehicle.	USA	Part No. 22222
<b>ENGINE</b>	The internal combustion engine of the vehicle.	USA	Part No. 33333
<b>TRANSMISSION</b>	The transmission assembly of the vehicle.	USA	Part No. 44444
<b>DRIVE SHAFT</b>	The drive shaft of the vehicle.	USA	Part No. 55555
<b>AXLES</b>	The front and rear axles of the vehicle.	USA	Part No. 66666
<b>SPINDLES</b>	The front and rear spindles of the vehicle.	USA	Part No. 77777
<b>SHOCKS</b>	The front and rear shock absorbers of the vehicle.	USA	Part No. 88888
<b>STRUTS</b>	The front and rear struts of the vehicle.	USA	Part No. 99999
<b>COIL SPRINGS</b>	The front and rear coil springs of the vehicle.	USA	Part No. 10101

Notes:  
 \* Specifications are subject to change without notice for purposes of improvement.  
 \* Dimensions are in inches and the corresponding millimeter value is for reference only.  
 \* All specifications are subject to change without notice.

## REMOVAL OF EACH SECTION

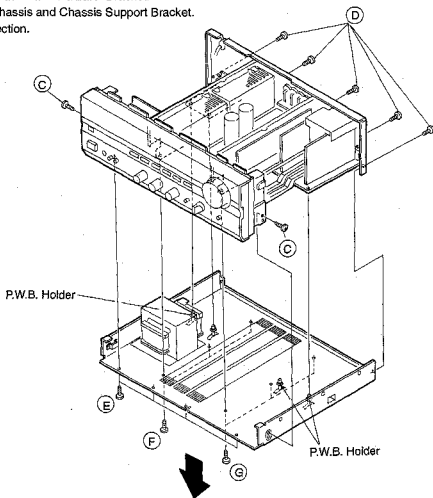
### 1. Top Cover

- (1) Remove 6 screws (A), and 3 screws (B).
- (2) Pull up Top Cover in arrow direction.



### 2. Main Chassis

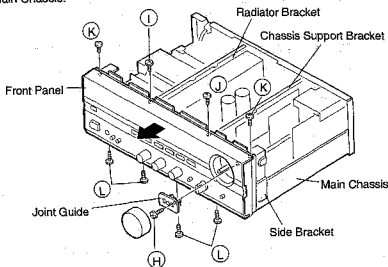
- (1) Remove 4 P.W.B. Holder from P.W. Board.
- (2) Remove 2 screws (C) fixing Main Chassis and Side Bracket.
- (3) Remove 5 screws (D) fixing Main Chassis and Rear Panel.
- (4) Remove 4 screws (E) fixing Main Chassis and Front Panel.
- (5) Remove 3 screws (F) fixing Main Chassis and Radiator Bracket.
- (6) Remove 3 screws (G) fixing Main Chassis and Chassis Support Bracket.
- (7) Pull down Main Chassis in arrow direction.





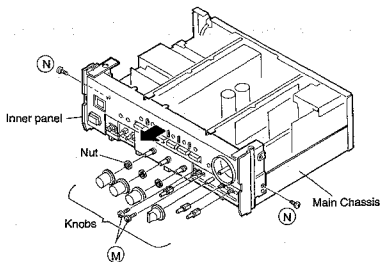
### 3. Front Panel

- (1) Detach Control Knob, remove 1 screw (H) and detach Joint Guide.
- (2) Remove 1 screw (I) fixing Front Panel and Radiator Bracket.
- (3) Remove 1 screw (J) fixing Front Panel and Chassis Support Bracket.
- (4) Remove 2 screws (K) fixing Front Panel and Side Bracket.
- (5) Remove 4 screws (L) fixing Front Panel and Main Chassis.
- (6) Detach Front Panel in arrow direction.



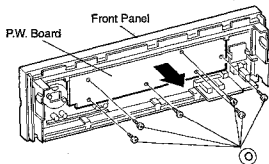
### 4. Inner Panel

- (1) Detach 7 Knobs, remove 2 screws (M) and 3 nuts.
- (2) Remove 2 screws (N) fixing Side Bracket and Main Chassis.
- (3) Detach Inner Panel in arrow direction.



### 5. P.W. Board attached to Inner Panel

- (1) Remove 6 screws (O) fixing P.W. Board.
- (2) Take out P.W. Board in arrow direction.



## FUNCTION OF NEW CIRCUIT

### 1. CHARACTERISTIC OF THIS CIRCUIT

The junction temperature of power amplifier output transistor always varies by an ambient temperature and music signal. Occurrence of junction temperature varying causes in change of bias current, unstable function, thus pure music signal playback is unable to do.

To maintain fixed bias current and to make pure music signal playback possible is the purpose of this circuit. This circuit holds stable bias current condition within a few seconds after turning on the power.

### 2. BLOCK DIAGRAM OF BIAS CONTROL CIRCUIT FUNCTION

As explained in Fig. 1, detects a voltage across the emitter resistors (RE) of TR1, TR2. Converts the detected voltage and comparing with the reference voltage to make the bias current value in stable state. Actually, these functions are performed by 1 chip IC.

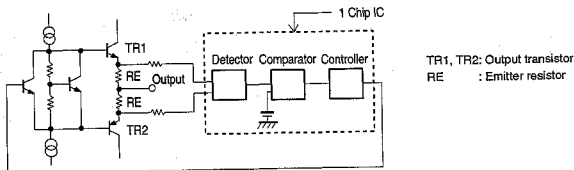


Fig. 1

### 3. POWER SUPPLY FOR ACTUATING CONTROL CIRCUIT

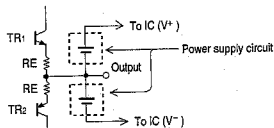
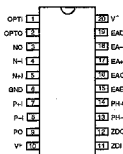
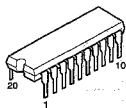


Fig. 2

The circuit (IC) controlling bias current actuates by floating.

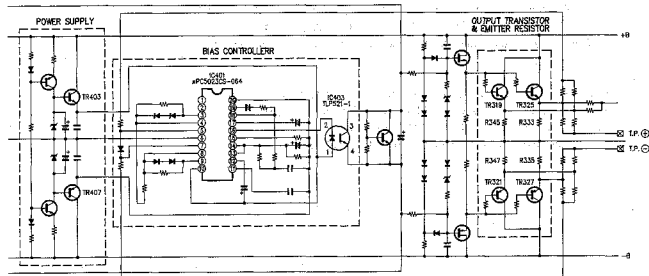
Accordingly, the power supply is also needed to be floated.

In this circuit, as indicated in Fig. 2, output is common to provide +, - power system and supplies to IC.

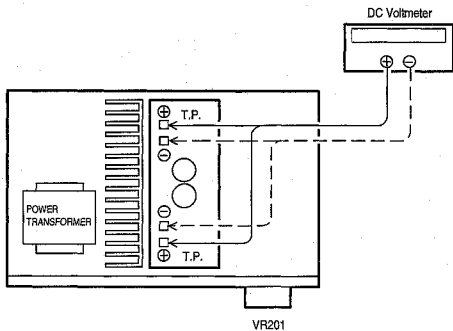
4. IC DESCRIPTION ( $\mu$ PC5023CS-064)

Pin. No.	Name	Contents	Pin. No.	Name	Contents
1	OPTI	NCP	11	ZDI	Control signal stabilizer input
2	OPTO		12	ZDO	Control signal stabilizer output
3	N-	Comparator output	13	PH-1	Peak hold input
4	N+	Comparator input (-)	14	PH-0	Peak hold output
5	N+I	Comparator input (+)	15	EACO	Controller gain setting
6	GND	Floating common	16	EAO	Control signal output
7	P+I	Comparator input (+)	17	EA+1	Reference voltage
8	P-1	Comparator input (-)	18	EA-1	Comparator gain setting
9	PO	Comparator output	19	EAO	Comparator output
10	V+	+ Power supply	20	V-	- Power supply

## 5. CIRCUIT IN THE CONCRETE



## METHOD OF ADJUSTMENTS



### IDLING CURRENT

#### ● Setup

1. Lay the unit at an ordinary position away from a direct current from a cooler or fan. Do the adjustment at a temperature between 15°C (59°F) and 30°C (86°F).

2. Set controls as follows.

POWER SWITCH → OFF (■)

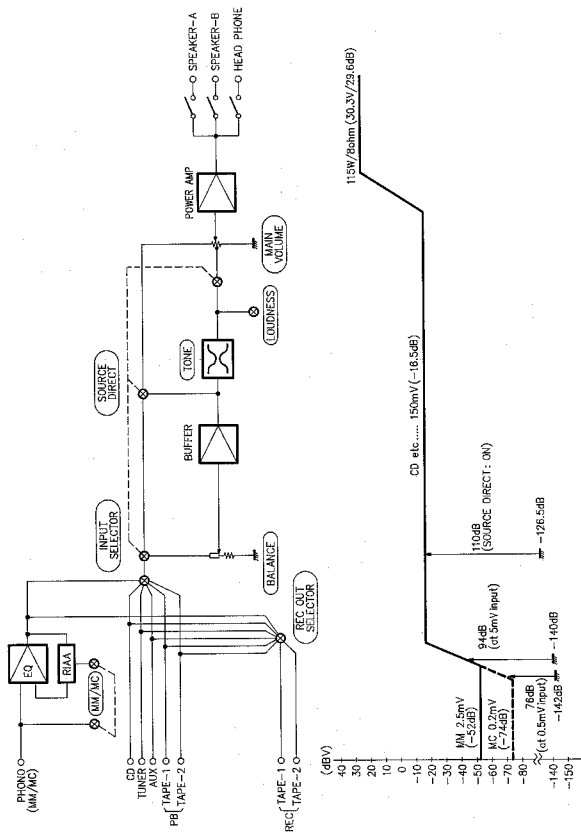
VOLUME CONTROL → fully counterclockwise. (⤴) min. (Main volume (VR201)  
(VR202, 203 and 204 are center position.)

SPEAKER Terminals → open: do not connect the speakers, dummy load etc.

#### ● Confirm

1. Remove Top cover. And then connect DC Voltmeter to Test points of Main Unit.
2. Connect Power cord to AC Outlet, and turn POWER Switch "on" (■).
3. 10 seconds after check to see DC Voltmeter reading is  $17 \pm 2\text{mV}$ .
4. 2 minutes after re-check DC Voltmeter for  $17 \pm 2\text{mV}$  reading.

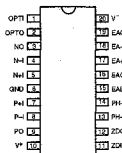
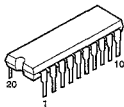
## BLOCK AND LEVEL DIAGRAM



## SEMICONDUCTORS

## ● IC's

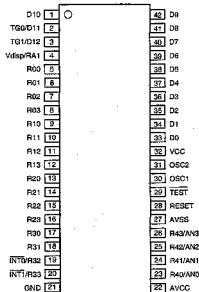
μPC5023CS-064 (IC401,402)



Pin. No.	Name	Contents
1	OPTI	NCP
2	OPTO	
3	NO	Comparator output
4	N-I	Comparator input (-)
5	N+I	Comparator input (+)
6	GND	Floating common
7	P-I	Comparator input (+)
8	P-I	Comparator input (-)
9	PO	Comparator output
10	V+	+ Power supply

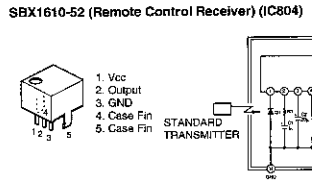
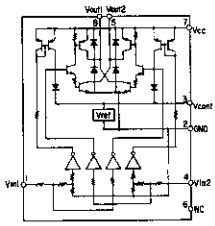
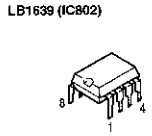
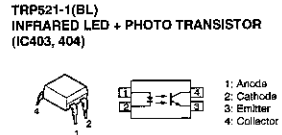
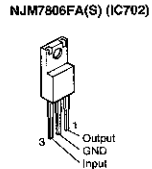
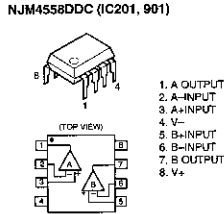
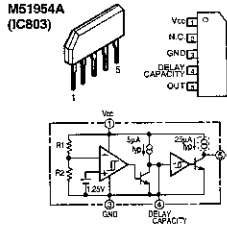
Pin. No.	Name	Contents
11	ZDI	Control signal stabiliser input
12	ZDO	Control signal stabiliser output
13	PH-I	Peak hold input
14	PHO	Peak hold output
15	EAE0	Controller gain setting
16	EACO	Control signal output
17	EA+f	Reference voltage
18	EA-1	Comparator gain setting
19	EAO	Comparator output
20	V-	- Power supply

## HD404304A13P (IC801)



## HD404304P Terminal Function

Pin No.	Name	IO	Contents	Active
1	ON	O	VOLUME LED Indication	H
2	R3/D11	O	NCP	
3	TG1/D12	O	Power Control (REMOTE Power ON/OFF)	L
4	Vdpp/RAT	I	NCP	
5	R00	O	NCP	
6	R01	O	Muting Control (Power On/Off) Function Drift/Muting	L
7	R02	O	SP-A Control	H
8	R03	O	SP-A Control	H
9	R10	O		H
10	R11	O	Key scan enable	H
11	R12	O		H
12	R13	O	NCP	
13	R20	I		
14	R21	I	Key scan receive	
15	R22	I		
16	R23	I		
17	R00	O	Volume Control "UP" ← "H"	H
18	R01	O	Volume Control "DOWN" ← "L"	H
19	INT/R32	I	Power Breakdown Protect Inhibit	
20	INT/R33	I	Remote control signal decoding input	
21	AVSS	O	NCP	
22	AVCC	I	AVcc (Vcc)	
23	R43/AN3	NCP		
24	R43/AN2	I	NCP	
25	R43/AN1	I	NCP	
26	R40/AN0	I	Cooperation port by user's game	
27	AVSS	O	AVss (GND)	
28	RESET	I	MS105AL External	
29	TEST	I	Vcc	
30	OSC1	I	Center Pin Oscillator AN10 to AN11	
31	OSC2	I	Center Pin Oscillator (AN12 External)	
32	Vcc	I	Vcc	
33	DD	O	SOURCE CURRENT Current	H
34	D1	O	NCP	
35	D2	O	TAMP2 Control	H
36	D3	O	TAMP1 Control	H
37	D4	O	NCP	
38	D5	O	AUX Control	H
39	D6	O	FLUENT Control	H
40	D7	O	NCP	
41	D8	O	CD Control	H
42	D9	O	PHONO Control	H



- IC1 : CX20105A Chip
- D1 : PIN Photo Diode Chip
- C1, C2, C4 : Aluminum Electrolytic Capacitor
- C3 : SL Characteristic ±5%
- R1 : Gain Adjuster
- R2 : fo Adjuster ±1% USE
- R3,4 : ±5%

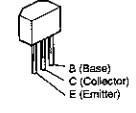
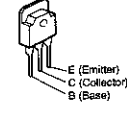
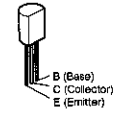
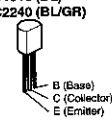
**TRANSISTORS**

- 2SA970 (BL), (BL/GR)
- 2SA988 (E/F)
- 2SC1841 (E/F)
- 2SC1815 (BL)
- 2SC2240 (BL/GR)

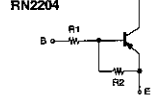
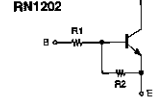
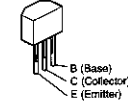
- 2SA1145 (O/Y/Y)
- 2SC2705 (O/Y/Y)

- 2SA1491 LB4 (O/Y/P/Y/Y/Z)
- 2SC3855 LB4 (O/Y/P/Y/Y/Z)

- 2SA1048 (GR)
- 2SC2458 (BL)



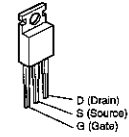
**RN1202NPN RN2204 PNP**



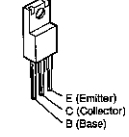
R1	R2
RN1202	10kohm 10kohm

R1	R2
RN2204	47kohm 47kohm

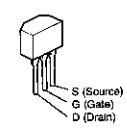
- 2SJ78
- 2SK215



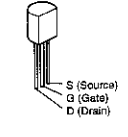
- 2SD1913 (R/S)
- 2SB1274 (R/S)



- 2SK184C (GRY/RL)

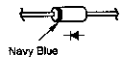


- 2SK369 (BL/Y/GR)-C



**DIODES (including LED)**

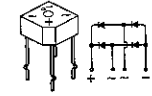
- 1S2076A
- 1SS270A



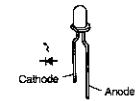
- HZS4B-2
- HZS5C-1
- HZS27-1
- HZS18-1



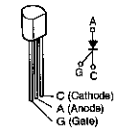
- S4VB20 (D701, 702)



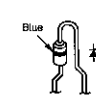
- SEL-1810A (Orange)
- SEL-1210S (Red)



- Thyristor SFOR1A42 (SC601)



- 1SR35-200A

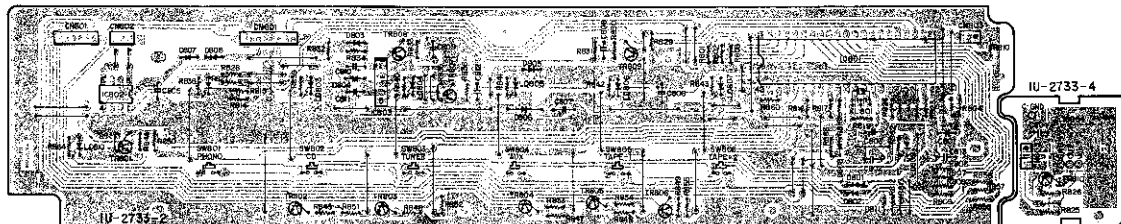


PRINTED WIRING BOARD (Pattern Side)

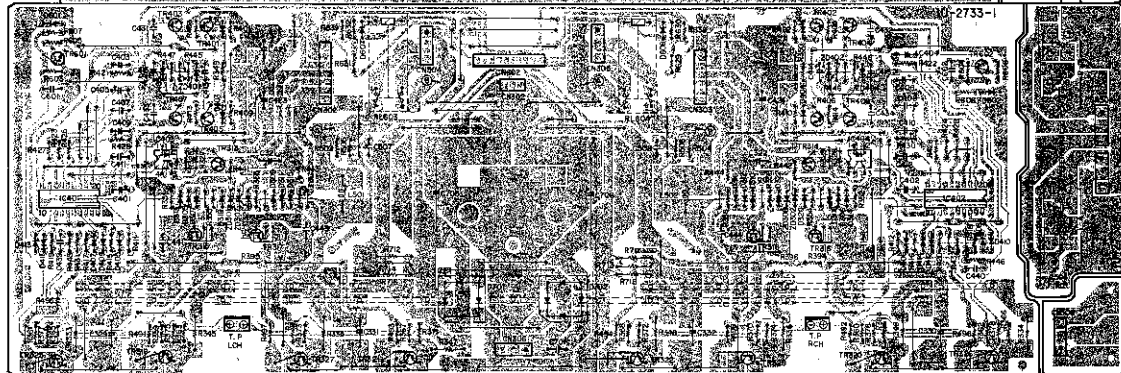
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1U-2733A P.AMP UNIT ASS'Y

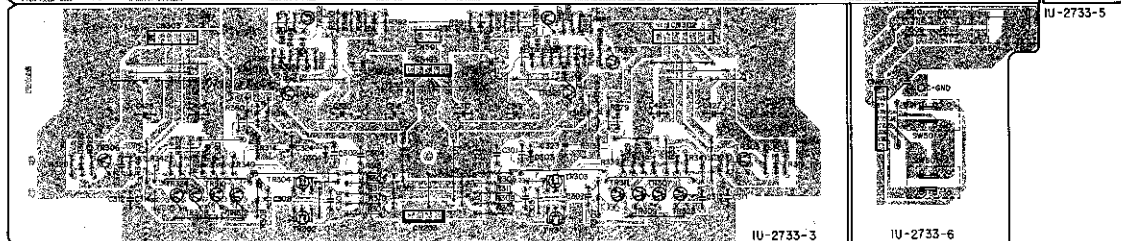
A



B



C



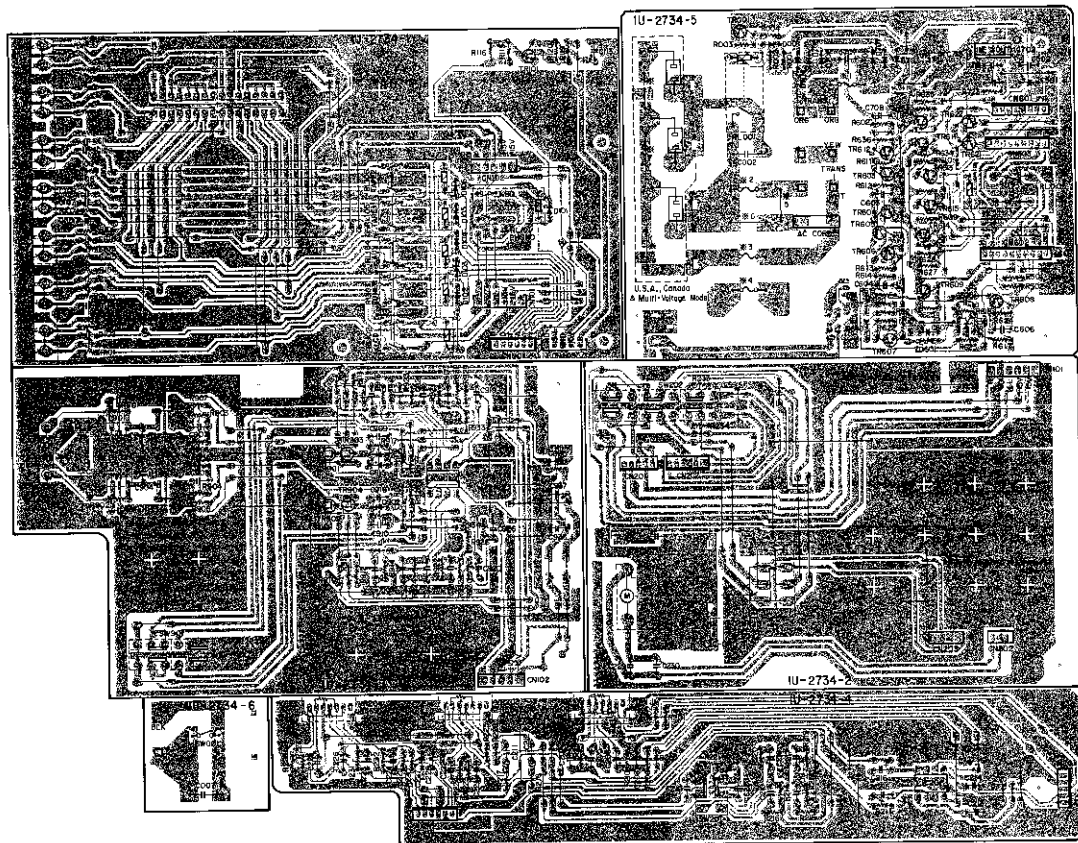
D

E



1 2 3 4 5 6 7 8

## 1U-2734A INPUT UNIT ASS'Y



1U-2734: Europe, U.K. & Australia Model  
 1U-2777: U.S.A., Canada & Multi Voltage Model

	Europe Model	Other Model
L901, 902	150uH	—
C905, 908	47p	—
R901, 902	820ohm	Jumper

\*1 - \*7

	Europe Model	U.K. & Australia Model	U.S.A. & Canada Model	Multi-Voltage Model
*1	F701 T1A	F701 T1A	F701 1A/125V	F701 T1A
*2	F001 T4A	F001 T4A	F002 8A/125V	F001 T10A
*3	F002 T1A	—	Jumper	Jumper
*4	—	—	F001 10A/125V	F003 T4A
*5	—	—	Jumper	—
*6	Jumper	Jumper	—	Jumper
*7	—	—	Jumper	Jumper

A

B

C

D

E

### PRINTED WIRING BOARD PARTS LIST

1U-2733A/B P. AMP UNIT ASS'Y (For Europe Black / Gold)

**NOTE FOR PARTS LIST**

- Part indicated with the mark \* is not always in stock and possibly to take a long period of time for supplying, or in some case supplying of part may be refused.
- When ordering of part, clearly indicate "1" and "1" to avoid mis-supplying.
- Ordering part without stating its part number can not be supplied.
- Part indicated with the mark "\*" is not illustrated in the exploded view.
- Not including Carbon Film ±5%, 1/4W Type in the FW Board parts list. (Refer to the Schematic Diagram for those parts.)

**WARNING:**  
Parts marked with this symbol have critical characteristics. Use ONLY replacement parts recommended by the manufacturer.

**Resistors**

Ex: 

RN	14K	2E	182	G	FR
Type	Shape and performance	Power	Resistance value	Allowable error	Others
RV	Carbon	2W	11000	F ±1%	F: Fabrication type
RC	Conduction	1/4W	11000	G ±5%	M: Low noise type
RK	Metal oxide film	1/4W	11000	H ±5%	N: Burn-in type
RL	Wiring	1/4W	11000	J ±5%	P: Bulk-mounting type
RM	Metal film	1/2W	11000	K ±5%	R: Film-resistor
RN	Metal inorganic	1/2W	11000	M ±10%	F: Lead wire forming
		1/2W	11000		

\* Resistance  
 $\frac{1}{2} \frac{R}{2} = 1900\text{ ohm} \pm 1\%$   
 Indicates number of zeros after effective number.  
 Units: ohm

\* Resistance  
 $\frac{1}{2} \frac{R}{2} = 1.2\text{ ohm}$   
 Indicates number of zeros after effective number.  
 Units: ohm

\* Resistance  
 $\frac{2}{2} \frac{R}{2} = 1\text{ k}\Omega$   
 Indicates number of zeros after effective number.  
 Units:  $\mu\Omega$

\* Resistance  
 $\frac{2}{2} \frac{R}{2} = 1\text{ M}\Omega$   
 Indicates number of zeros after effective number.  
 Units:  $\mu\Omega$

\* Resistance  
 $\frac{2}{2} \frac{R}{2} = 100\text{ k}\Omega$   
 Indicates number of zeros after effective number.  
 Units:  $\mu\Omega$

\* Resistance  
 $\frac{2}{2} \frac{R}{2} = 10\text{ k}\Omega$   
 Indicates number of zeros after effective number.  
 Units:  $\mu\Omega$

\* Resistance  
 $\frac{2}{2} \frac{R}{2} = 1\text{ k}\Omega$   
 Indicates number of zeros after effective number.  
 Units:  $\mu\Omega$

**Capacitors**

Ex: 

CE	04W	1H	2R2	M	BP
Type	Shape and performance	Capacity	Dielectric strength	Allowable error	Others
CA	Aluminum foil electrolytic	1A	10V	F ±5%	HP: Non-polar type
CB	Aluminum solid electrolytic	1C	10V	F ±1%	HP: For bypass use with discharge
CC	Tantalum electrolytic	1H	10V	F ±1%	HP: For bypass use with discharge
CD	Ceramic	1V	10V	K ±5%	HP: For bypass use with discharge
CE	Organic	1H	10V	Z ±5%	U: Ultra-cap
CF	Oil	3A	100V	Z ±5%	U: Ultra-cap
CG	Mica	3C	100V	Z ±5%	U: Ultra-cap
CH	Non-leakage	3C	100V	Z ±5%	U: Ultra-cap
CI	Metalized	3E	250V	Z ±5%	U: Ultra-cap
		3E	250V	Z ±5%	U: Ultra-cap

\* Capacity (electrolytic only)  
 $\frac{2}{2} \frac{2}{2} = 2200\mu\text{F}$   
 Indicates number of zeros after effective number.  
 Units:  $\mu\text{F}$

\* Capacity (electrolytic only)  
 $\frac{2}{2} \frac{2}{2} = 2.2\mu\text{F}$   
 Indicates number of zeros after effective number.  
 Units:  $\mu\text{F}$

\* Capacity (electrolytic only)  
 $\frac{2}{2} \frac{2}{2} = 22\mu\text{F}$   
 Indicates number of zeros after effective number.  
 Units:  $\mu\text{F}$

\* Capacity (electrolytic only)  
 $\frac{2}{2} \frac{2}{2} = 220\mu\text{F}$   
 Indicates number of zeros after effective number.  
 Units:  $\mu\text{F}$

\* Capacity (electrolytic only)  
 $\frac{2}{2} \frac{2}{2} = 22\text{ nF}$   
 Indicates number of zeros after effective number.  
 Units:  $\mu\text{F}$

\* Capacity (electrolytic only)  
 $\frac{2}{2} \frac{2}{2} = 2.2\text{ nF}$   
 Indicates number of zeros after effective number.  
 Units:  $\mu\text{F}$

\* Capacity (electrolytic only)  
 $\frac{2}{2} \frac{2}{2} = 220\text{ nF}$   
 Indicates number of zeros after effective number.  
 Units:  $\mu\text{F}$

\* Capacity (electrolytic only)  
 $\frac{2}{2} \frac{2}{2} = 22\text{ nF}$   
 Indicates number of zeros after effective number.  
 Units:  $\mu\text{F}$

\* Capacity (electrolytic only)  
 $\frac{2}{2} \frac{2}{2} = 2200\text{ nF}$   
 Indicates number of zeros after effective number.  
 Units:  $\mu\text{F}$

\* Capacity (electrolytic only)  
 $\frac{2}{2} \frac{2}{2} = 220\text{ nF}$   
 Indicates number of zeros after effective number.  
 Units:  $\mu\text{F}$

**SEMICONDUCTORS GROUP**

Ref. No.	Parts No.	Parts Name	Remarks
K401.402	283 2500 01	IC µP 5502S-C-284	Bus Controller
K403.404	282 2874 00	IC TL751 -15L	Power Coupler
K501	282 1879 03	IC HD46452AMP	Hi-com
X202	255 6178 02	IC S15193	Master Driver
K303	283 2828 00	IC MS1884L	Reset
K654	489 1192 08	IC 58X110-3E	Remote Sensor
TR011-304	275 0065 03	FET 29K184(2)GR(L)	
TR023-208	275 0381 00	Transistor 2SC2768(DP)F	
TR027-204	271 0 68 00	Transistor 2SC1145(O)2P	
TR638-112	273 0 97 82	Transistor 2SC2342(O,G)R3	
TR913-314	273 0 98 18	Transistor 2SC1131(R)	
TR1513-316	275 0088 01	FET 25K216	
TR311-216	275 0234 02	FET 25K78	
TR923-326	271 0 68 00	Transistor 2SA1145(O)2P	
TR929	27 01 56 12	Transistor 2SD113-3(P)S	
TR930	27 02 09 10	Transistor 2SB1974(S)	
TR931	27 10 54 19	Resistor 23A3(O)BL	
TR932-320	27 01 87 32	Transistor 2SC10416(G)R	
TR401.422	271 0264 41	Transistor 2SA330(B)L	
TR408.404	27 02 61 95	Transistor 2SC2251(S)R	
TR409.406	27 03 18 32	Transistor 2SC2240(S)GR	
TR407.408	27 10 18 80	Transistor 2SA1146(O)Y	
TR601.602	27 02 25 93	Transistor 2SC3411(F)F	
TR601.606	27 02 02 33	Transistor 2C1341(S)F	
TR607	27 10 11 86	Transistor 2SA1144(O)R	
TR628.608	27 03 17 36	Transistor 2SC4358(L)	
TR610	283 0202 89	Transistor 74N2224	Built in Resistor
D001-316	276 2432 933	Diode 1S3270A	
D519-322	276 2432 033	Diode 1S3270A	
D382	276 2653 933	Diode 1S395-300A	
D401-414	276 2432 033	Diode 1S5270A	
D657.502	276 2432 033	Diode 1S5270A	
D607.608	276 2432 033	Diode 1S5270A	
D011-302	276 0438 922	Diode 5Y1025	Body
D011-805	278 0432 903	Diode 1S5270A	
D836	276 2649 916	Diode 1S59376A	
D837.628	276 0432 030	Diode 1S5270A	
ZD001-202	279 0460 104	Zener Diode HZ55-1	5 V
ZD307.308	279 0460 104	Zener Diode HZ55-1	5 V
ZD309.310	278 0478 309	Zener Diode HZ59-1	18 V
ZD311-312	279 0468 766	Zener Diode HZ55-1	5 V
ZD401-404	279 0343 934	Zener Diode MTZ13.8A	3.8 V
LD802-807	393 9464 368	LED SEL1131S	Function
LD808-810	393 9469 318	LED SEL1910A	Switcher

**RESISTORS GROUP (Not included Carbon Film ±5%, 1/4 W Type. Refer to the Schematic Diagram for those parts.)**

Ref. No.	Parts No.	Parts Name	Remarks
R001-302	245 2116 955	Metal Film 100ohm 1/4 W	RM14K2E104G
R053-304	245 2060 000	Metal Film 400ohm 1/4 W	RM14K2E410
R055-306	245 2090 930	Metal Film 8.2kohm 1/4 W	RM14K2E822G
R077-308	245 2062 950	Metal Film 220ohm 1/4 W	RM14K2E221G
R099-312	245 2069 082	Metal Film 4.7kohm 1/4 W	RM14K2E472G
R101-316	245 2089 080	Metal Film 3.3kohm 1/4 W	RM14K2E332G
R137-318	245 2048 906	Metal Film 150ohm 1/4 W	RM14K2E151G
R139-322	241 2317 900	Film Resistor 100 ohm 1/4 W	FR14K2E100A
R211-324	245 2043 983	Film Resistor 500 ohm 1/4 W	FR14K2E500A
P352-326	241 2227 938	Carbon Film 560ohm 1/4 W	RM14K2E561A
R077-318	245 2048 906	Metal Film 150ohm 1/4 W	RM14K2E151G

**CAPACITORS GROUP**

Ref. No.	Parts No.	Parts Name	Remarks
CA229-200	281 6818 994	Aluminum electrolytic capacitor	2200µF 50V
CA230-202	281 6827 621	Carbon Film capacitor	100k 1/4W
CA231-204	281 6829 922	Aluminum electrolytic capacitor	100µF 50V
CA232-206	281 6838 911	Aluminum electrolytic capacitor	470µF 50V
CA233-208	281 6848 922	Aluminum electrolytic capacitor	10µF 50V
CA234-210	281 6858 922	Aluminum electrolytic capacitor	100µF 50V
CA235-212	281 6868 922	Aluminum electrolytic capacitor	10µF 50V
CA236-214	281 6878 922	Aluminum electrolytic capacitor	100µF 50V
CA237-216	281 6888 922	Aluminum electrolytic capacitor	10µF 50V
CA238-218	281 6898 922	Aluminum electrolytic capacitor	100µF 50V
CA239-220	281 6908 922	Aluminum electrolytic capacitor	10µF 50V
CA240-222	281 6918 922	Aluminum electrolytic capacitor	100µF 50V
CA241-224	281 6928 922	Aluminum electrolytic capacitor	10µF 50V
CA242-226	281 6938 922	Aluminum electrolytic capacitor	100µF 50V
CA243-228	281 6948 922	Aluminum electrolytic capacitor	10µF 50V
CA244-230	281 6958 922	Aluminum electrolytic capacitor	100µF 50V
CA245-232	281 6968 922	Aluminum electrolytic capacitor	10µF 50V
CA246-234	281 6978 922	Aluminum electrolytic capacitor	100µF 50V
CA247-236	281 6988 922	Aluminum electrolytic capacitor	10µF 50V
CA248-238	281 6998 922	Aluminum electrolytic capacitor	100µF 50V
CA249-240	281 7008 922	Aluminum electrolytic capacitor	10µF 50V
CA250-242	281 7018 922	Aluminum electrolytic capacitor	100µF 50V
CA251-244	281 7028 922	Aluminum electrolytic capacitor	10µF 50V
CA252-246	281 7038 922	Aluminum electrolytic capacitor	100µF 50V
CA253-248	281 7048 922	Aluminum electrolytic capacitor	10µF 50V
CA254-250	281 7058 922	Aluminum electrolytic capacitor	100µF 50V
CA255-252	281 7068 922	Aluminum electrolytic capacitor	10µF 50V
CA256-254	281 7078 922	Aluminum electrolytic capacitor	100µF 50V
CA257-256	281 7088 922	Aluminum electrolytic capacitor	10µF 50V
CA258-258	281 7098 922	Aluminum electrolytic capacitor	100µF 50V
CA259-260	281 7108 922	Aluminum electrolytic capacitor	10µF 50V
CA260-262	281 7118 922	Aluminum electrolytic capacitor	100µF 50V
CA261-264	281 7128 922	Aluminum electrolytic capacitor	10µF 50V
CA262-266	281 7138 922	Aluminum electrolytic capacitor	100µF 50V
CA263-268	281 7148 922	Aluminum electrolytic capacitor	10µF 50V
CA264-270	281 7158 922	Aluminum electrolytic capacitor	100µF 50V
CA265-272	281 7168 922	Aluminum electrolytic capacitor	10µF 50V
CA266-274	281 7178 922	Aluminum electrolytic capacitor	100µF 50V
CA267-276	281 7188 922	Aluminum electrolytic capacitor	10µF 50V
CA268-278	281 7198 922	Aluminum electrolytic capacitor	100µF 50V
CA269-280	281 7208 922	Aluminum electrolytic capacitor	10µF 50V
CA270-282	281 7218 922	Aluminum electrolytic capacitor	100µF 50V
CA271-284	281 7228 922	Aluminum electrolytic capacitor	10µF 50V
CA272-286	281 7238 922	Aluminum electrolytic capacitor	100µF 50V
CA273-288	281 7248 922	Aluminum electrolytic capacitor	10µF 50V
CA274-290	281 7258 922	Aluminum electrolytic capacitor	100µF 50V
CA275-292	281 7268 922	Aluminum electrolytic capacitor	10µF 50V
CA276-294	281 7278 922	Aluminum electrolytic capacitor	100µF 50V
CA277-296	281 7288 922	Aluminum electrolytic capacitor	10µF 50V
CA278-298	281 7298 922	Aluminum electrolytic capacitor	100µF 50V
CA279-300	281 7308 922	Aluminum electrolytic capacitor	10µF 50V
CA280-302	281 7318 922	Aluminum electrolytic capacitor	100µF 50V
CA281-304	281 7328 922	Aluminum electrolytic capacitor	10µF 50V
CA282-306	281 7338 922	Aluminum electrolytic capacitor	100µF 50V
CA283-308	281 7348 922	Aluminum electrolytic capacitor	10µF 50V
CA284-310	281 7358 922	Aluminum electrolytic capacitor	100µF 50V
CA285-312	281 7368 922	Aluminum electrolytic capacitor	10µF 50V
CA286-314	281 7378 922	Aluminum electrolytic capacitor	100µF 50V
CA287-316	281 7388 922	Aluminum electrolytic capacitor	10µF 50V
CA288-318	281 7398 922	Aluminum electrolytic capacitor	100µF 50V
CA289-320	281 7408 922	Aluminum electrolytic capacitor	10µF 50V
CA290-322	281 7418 922	Aluminum electrolytic capacitor	100µF 50V
CA291-324	281 7428 922	Aluminum electrolytic capacitor	10µF 50V
CA292-326	281 7438 922	Aluminum electrolytic capacitor	100µF 50V
CA293-328	281 7448 922	Aluminum electrolytic capacitor	10µF 50V
CA294-330	281 7458 922	Aluminum electrolytic capacitor	100µF 50V
CA295-332	281 7468 922	Aluminum electrolytic capacitor	10µF 50V
CA296-334	281 7478 922	Aluminum electrolytic capacitor	100µF 50V
CA297-336	281 7488 922	Aluminum electrolytic capacitor	10µF 50V
CA298-338	281 7498 922	Aluminum electrolytic capacitor	100µF 50V
CA299-340	281 7508 922	Aluminum electrolytic capacitor	10µF 50V
CA300-342	281 7518 922	Aluminum electrolytic capacitor	100µF 50V
CA301-344	281 7528 922	Aluminum electrolytic capacitor	10µF 50V
CA302-346	281 7538 922	Aluminum electrolytic capacitor	100µF 50V
CA303-348	281 7548 922	Aluminum electrolytic capacitor	10µF 50V
CA304-350	281 7558 922	Aluminum electrolytic capacitor	100µF 50V
CA305-352	281 7568 922	Aluminum electrolytic capacitor	10µF 50V
CA306-354	281 7578 922	Aluminum electrolytic capacitor	1

**1U-2733C for Multi-Voltage Model PARTS LIST**  
 (Same as 1U-2733A/B for Europe Black except the following)

Ref. No.	Parts No.	Parts Name	Remarks	Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
C509,510	253 1181 904	Ceramic Cap. 0.01 $\mu$ F/50 V	CK45F1H103Z	JAS01	204 8341 004	Head Phone Jack	Change	1
C521	253 1181 917	Ceramic Cap. 0.022 $\mu$ F/50 V	CK45F1H223Z	205 0777 006	8P Terminal (S-GND)	Change	1	
C601,502	255 4199 973	Mylar Film 0.01 $\mu$ F/50 V	CQ92M1H103J(WRZ)					
C701	258 1042 903	Metalized 0.1 $\mu$ F/50 V	CF93A2E104K					
C801	254 4213 837	Electrolytic 100 $\mu$ F/6.3 V	CE04WJ101M(SRA)					
C802	253 1181 917	Ceramic Cap. 0.022 $\mu$ F/50 V	CK45F1H223Z					
C803	254 4213 937	Electrolytic 100 $\mu$ F/6.3 V	CE04WJ101M(SRA)					
C804	253 1181 917	Ceramic Cap. 0.022 $\mu$ F/50 V	CK45F1H223Z					
C805,806	254 4213 937	Electrolytic 100 $\mu$ F/6.3 V	CE04WJ101M(SRA)					
C807	259 0007 003	Backup Cap. 8200 $\mu$ F/5.5 V	SB CAP--822--					
C808	253 1181 917	Ceramic Cap. 0.022 $\mu$ F/50 V	CK45F1H223Z					
C809	254 4196 873	Electrolytic 4.7 $\mu$ F/50 V	CE04W1H4R7M(SRA)					
C810	254 4196 944	Electrolytic 1 $\mu$ F/50 V	CE04W1H010M(SRA)					
C811	254 4196 928	Electrolytic 0.33 $\mu$ F/50 V	CE04W1HR33M(SRA)					
C812	256 1034 982	Metalized 0.12 $\mu$ F/50 V	CF93A1H124J					
C813	253 1181 917	Ceramic Cap. 0.022 $\mu$ F/50 V	CK45F1H223Z					

**1U-2733D for U.S.A & Canada Models PARTS LIST**  
 (Same as 1U-2733A/B for Europe Black except the following)

OTHER GROUP				Q'ty
	—	(P,W,Board)		(1)
L501,502	235 0098 004	Inductor 1 $\mu$ H		2
SW501	212 1128 005	2 P Push Switch	SP Switch	1
SW801-806	212 5604 910	Tact Switch		6
RL603,804	241 9003 005	Relay		2
	205 0733 004	8 P Terminal(S-GND)		1
JAS01	204 8354 004	Headphone Jack	Black model	1
JAS01	204 8355 003	Headphone Jack	Gold model	1
XL801	389 0191 903	Ceramic Resonator	CST4.00MGW	1
	417 0043 100	Radiator	for TR315-318	4
	473 7500 015	Tapping Screw (S)3x8		4
	412 2160 031	Common Plate		1
	412 2160 044	Common Plate		2
	412 2160 060	Common Plate		1
	203 0525 057	1 P Contact Assy	L=110 Black	1
	203 0528 015	1 P Contact Assy	L=130 Black	1
	203 0601 008	1 P SIN Cord Assy	L=130 Red	1
	203 0601 011	1 P SIN Cord Assy	L=130 White	1
CN103	203 8414 006	5 P EH-SDN Conn. Cord		1
CN203	203 8484 009	4 P EH-SDN Conn. Cord		1
CN301	205 0298 032	3 P EH Conn. Base		1
CN301	205 0234 031	3 P EH SID Conn. Base		1
CN302	205 0233 074	7 P EH Conn. Base		1
CN302	205 0234 073	7 P EH SID Conn. Base		1
CN303	205 0233 081	6 P EH Conn. Base		1
CN303	205 0234 060	6 P Conn. Base		1
CN304	203 5023 021	3 P SDN-SDN Conn. Cord		1
CN305	203 5023 019	3 P SDN-SDN Conn. Cord		1
CN306	203 5023 005	3 P SDN-SDN Conn. Cord		1
CN601	205 0955 088	8 P KR Conn. Base (L)		1
CN602	205 0375 000	10 P KR Conn. Base (KR-PH)		1
CN603	205 0343 050	9 P KR Conn. Base (KR-PH)		1
CN602	205 0355 033	3 P KR Conn. Base (L)		1
CN601	205 0355 062	6 P KR Conn. Base (L)		1
CN603	203 4766 017	3 P DA-DA Conn. Cord		1
T.P.	205 0190 036	3 P NH Conn. Base		2

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
	205 0777 006	8P Terminal (S-GND)	Change	1

## 1U-2734A/B INPUT UNIT ASS'Y

Ref. No.	Parts No.	Parts Name	Remarks	Ref. No.	Parts No.	Parts Name	Remarks
<b>SEMICONDUCTORS GROUP</b>							
IC001	263 0030 004	IC NJM4558DD	Regulator +5 V	C225,228	254 4260 908	Electrolytic 0.47 $\mu$ F/50 V	CE04W1HR47M
IC702	263 0793 002	IC NJM7906FA(S)		C227,228	263 4537 624	Ceramic Cap. 33pF/50 V	CC45L1H330J
IC901	265 0030 004	IC NJM4558DD		C229	254 3056 917	Electrolytic 1 $\mu$ F/50 V (5Pin)	CE04D1H010MSP
TR001	273 0317 906	Transistor 2SC2458(BL)		C230	253 1181 904	Ceramic Cap. 0.01 $\mu$ F/50 V	CK45F1H103Z
TR101	274 0151 603	Transistor 2SD2004(P)		C232	255 4199 960	Mylar Film 0.022 $\mu$ F/50 V	CQ62M1H223J(MRZ)
TR603-605	273 0317 906	Transistor 2SC2458(BL)	C233	254 4356 797	Electrolytic 10 $\mu$ F/50 V	CE04W1H100MC(ARS)	
TR606	271 0191 906	Transistor 2SA1841(E/F)	C501	254 4260 948	Electrolytic 1 $\mu$ F/50 V	CE04W1H010M	
TR607	273 0235 923	Transistor 2SC1841(E/F)	C502	253 1181 917	Ceramic Cap. 0.022 $\mu$ F/50 V	CK45F1H23Z	
TR608	271 0191 924	Transistor 2SA698(E/F)	C603	254 4260 945	Electrolytic 330 $\mu$ F/16 V	CE04W0J331M	
TR609	274 0151 903	Transistor 2SD2004(P)	C604,605	254 4254 912	Electrolytic 22 $\mu$ F/16 V	CE04W1C220M	
TR610	273 0235 623	Transistor 2SC1841(E/F)	C606	263 1181 917	Ceramic Cap. 0.022 $\mu$ F/50 V	CK45F1H23Z	
TR611	269 0025 001	Transistor RN1202	C607	254 4263 667	Electrolytic 10 $\mu$ F/100 V	CE04W2A100M	
TR612	273 0317 906	Transistor 2SC2458(BL)	C707	263 1181 917	Ceramic Cap. 0.022 $\mu$ F/50 V	CK45F1H23Z	
TR613-615	273 0235 923	Transistor 2SC1841(E/F)	C708	254 4260 948	Electrolytic 1 $\mu$ F/50 V	CE04W1H010M	
TR621	269 0025 901	Transistor RN1202	C712	254 4269 700	Electrolytic 2200 $\mu$ F/5 V	CE04W12220C	
TR622	269 0026 900	Transistor RN2202	C713	254 4254 909	Electrolytic 10 $\mu$ F/16 V	CE04W1C100M	
TR901-904	275 0038 045	FET 2SK369(BL)(GR)-C	C714	253 1191 904	Ceramic Cap. 0.01 $\mu$ F/50 V	CK45F1H103Z	
D001	276 0432 903	Diode 1S5270A	C801	254 4260 948	Electrolytic 1 $\mu$ F/50 V	CE04W1H010M	
D101-106	276 0432 903	Diode 1S5270A	C802	253 1181 917	Ceramic Cap. 0.022 $\mu$ F/50 V	CK45F1H23Z	
D606	276 0432 903	Diode 1S5270A	C903,904	253 1179 929	Ceramic Cap. 150pF/50 V	CK45B1H151K	
D703-708	276 0553 905	Diode 1SR35-200A	C905,906	253 4537 966	Ceramic Cap. 47pF/50 V	CC45L1H470J	
D801,802	276 0432 903	Diode 1S5270A	C907,908	253 1179 929	Ceramic Cap. 150pF/50 V	CK45B1H151K	
ZD601	276 0468 908	Zener Diode HZ57C-1	C909,910	263 1179 903	Ceramic Cap. 100pF/50 V	CK45B1H101K	
SC601	279 0019 904	Thyristor SF0R11A42	C913,914	255 1251 937	Mylar Film 0.0033 $\mu$ F/50 V	CQ62M1H332J(MRZ)	
<b>RESISTORS GROUP (Not included Carbon Film <math>\pm 5\%</math>, 1/4 W Type. Refer to the Schematic Diagram for those parts.)</b>							
△ R101	244 2071 901	Metal Oxide 10 Ohm 1/4 W (5%)	RS1403A010J (B57C)				
△ R102	244 2043 924	Metal Oxide 50 Ohm 1/4 W (5%)	RS1403A050J (B57C)				
△ R115,116	244 2071 903	Metal Oxide 5 Ohm 1/4 W (5%)	RS1403A005J (B57C)				
△ R119	244 2390 940	Carbon Film 4.7 Ohm 1/4 W (5%)	RD1403A47J (MFR)				
△ R190	244 2432 905	Carbon Film 4.7 Ohm 1/4 W (5%)	RD1403A47J (MFR)				
△ R203	244 2432 905	Carbon Film 4.7 Ohm 1/4 W (5%)	RD1403A47J (MFR)				
△ R222,224	244 2051 903	Metal Oxide 8.2 Ohm 1/4 W (5%)	RS1403A082J (B57C)				
VR201	211 0761 004	Variable Resistor 30 kohm	Main Volume				
VR202	211 0793 103	Variable Resistor 100 kohm	Balance				
VR203	211 0834 012	Variable Resistor 10 kohm	Treble				
VR204	211 0834 009	Variable Resistor 30 kohm	Bass				
<b>CAPACITORS GROUP</b>							
C002,003	253 9003 713	Ceramic Cap. 470pF/50 V	CK45E230A472M6				
C110-111	263 4537 682	Ceramic Cap. 56pF/50 V	CC45L1H560J				
C113	254 4263 987	Electrolytic 10 $\mu$ F/100 V	CE04W2A100M				
C114	263 1181 917	Ceramic Cap. 0.022 $\mu$ F/50 V	CK45F1H23Z				
C115	254 4260 948	Electrolytic 1 $\mu$ F/50 V	CE04W1H010M				
C205,206	254 4260 948	Electrolytic 1 $\mu$ F/50 V	CE04W1H010M				
C207,208	263 4538 907	Ceramic Cap. 66pF/50 V	CC45L1H660J				
C209,210	256 1034 953	Metallized 0.068 $\mu$ F/50 V	CF93A1H683J				
C211,212	256 1034 911	Metallized 0.033 $\mu$ F/50 V	CF93A1H333J				
C213,214	254 4260 948	Electrolytic 1 $\mu$ F/50 V	CE04W1H010M				
C215,216	254 4264 906	Electrolytic 10 $\mu$ F/16 V	CE04W1C100M				
C217,218	254 4260 922	Electrolytic 0.33 $\mu$ F/50 V	CE04W1HR33M				
C219,220	256 1034 911	Metallized 0.033 $\mu$ F/50 V	CF93A1H333J				
C221,222	254 4260 919	Electrolytic 0.22 $\mu$ F/50 V	CE04W1HR22M				
C223,224	254 4260 906	Electrolytic 0.1 $\mu$ F/50 V	CE04W1HR01M				
<b>OTHER GROUP</b>							
---						(P/WBoard)	Q'ty
L901,902	235 9003 002	FTZ Choke Coil					2
△ RL02	214 0127 003	Relay (RY-12W)					1
△ RL05	214 0127 003	Relay (RY-12W)					1
△ RL101-106	214 0127 003	Relay (RY-12W)					6
△ F01	204 9413 027	Fuse 3-AT					1
△ F02	205 9415 022	Fuse 1-AT					1
△ F701	208 9010 028	Fuse 3-AT					1
△ AC001	203 9049 202	3- $\phi$ AC Coupler					1
	202 0040 909	Fuse Clip					6
△ SW001	212 1012 258	Push Switch (TFS)					2
SW101	212 0335 005	Rotary Switch					1
SW201	212 1097 000	1 P Push Switch	Louchose				1
SW202	212 1130 006	1 P Push Switch	S.Direct				1
SW801	212 1041 001	1 P Push Switch	MM-MC				1
	204 9413 030	2 P Pin Jack(S-GND)	Photo				1
	204 8296 006	4 P Pin Jack(S-GND)					1
	204 8278 009	6 P Pin Jack(S-GND)					2
	415 0269 000	Condenser Cover					2

**1U-277C for Multi-Voltage Model PARTS LIST**  
(Same as 1U-2734A/B for Europe Black except the following)

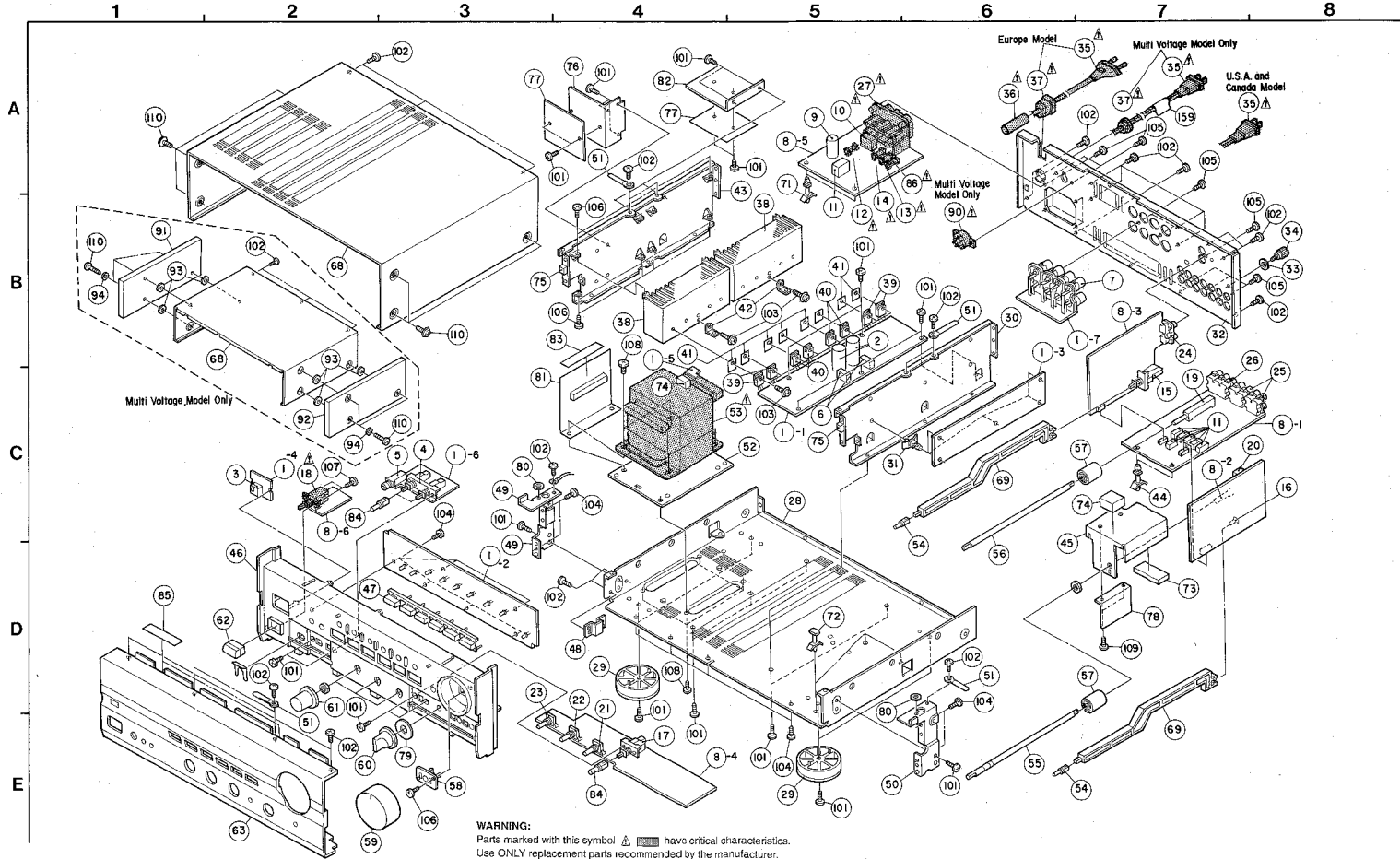
Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
	205 0892 000	2 P Whipping Terminal		1
CN101	205 0666 055	6 P Conn. Base(9130)		1
CN101	205 0667 064	6 P Conn. Base-L(9130)		1
CN102	205 0666 055	5 P Conn. Base(9130)		1
CN102	205 0667 051	5 P Conn. Base-L(9130)		1
CN103	205 0293 056	5 P EH Conn. Base		1
CN201	205 8415 056	5 P Conn. Base (KR-Ph)		2
CN201	203 8415 005	5 P PH-Ph Conn. Cord		1
CN202	204 0455 009	6 P PH-Ph Conn. Cord		1
CN202,201	205 0340 001	6 P Conn. Base (KR-Ph)		3
CN300	205 0294 044	4 P EH SID Base		1
CN301	203 5024 004	3 P EH-EH Conn. Cord		1
CN303	204 0454 009	6 P EH-EH Conn. Cord		1
	204 2893 004	7 P EH-EH Conn. Cord		1
CN301	205 0240 007	5 P Conn. Base (KR-Ph)	L=550	1
CN301	204 2548 007	8 P KR-KR Ribbon		1
CN302	205 0376 000	10 P Conn. Base (KR-Ph)		1
CN302	204 2554 046	10 P KR-KR Ribbon	L=750	1
CN303	205 0340 009	3 P Conn. Base (KR-Ph)		1
CN303	204 2550 053	3 P KR-KR Ribbon	L=400	1
CN302	205 0352 023	3 P KR Conn. Base (L)		1
	203 0418 042	1 P SN Cord Assy	L=70 Black	1
CN302	203 4872 037	3 P KR-KR Ribbon	L=350	1

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
<b>CAPACITORS GROUP</b>				
C605,906	253 4537 966	Ceramic Cap. 47pF160V	Delete	--
<b>OTHER GROUP</b>				
L801,802	235 9003 002	FTZ Choke Coil	Delete	--
△ F101	216 1391 073	Fuse 10A (25-37)	Change	1
△ R101	220 1074 070	Fuse 10A	Change	1
△ F102	230 1615 083	Fuse 5A	Add	1
	513 2095 095	Fuse Label	Add	1
△ AC201	238 3915 050	AC Outlet	Change	1

**1U-277D for U.S.A. & Canada Models PARTS LIST**  
(Same as 1U-2734A/B for Europe Black except the following)

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
<b>CAPACITORS GROUP</b>				
C605,906	253 4537 966	Ceramic Cap. 47pF160V	Delete	--
<b>OTHER GROUP</b>				
L801,802	235 9003 002	FTZ Choke Coil	Delete	--
△ F101	206 1542 043	Fuse 10A	Change	1
△ R101	207 1543 010	Fuse 10A	Change	1
△ F102	230 1615 083	Fuse 5A	Change	1
△ R101	415 0209 000	Condenser Cover	Delete	--
	513 2195 078	Fuse Label	Add	1
	513 1874 083	Fuse Label	Add	1
	513 2195 082	Fuse Label	Add	1
△ AC201	246 3546 043	AC Outlet	Change	1

# EXPLODED VIEW OF CHASSIS AND CABINET



**WARNING:**  
 Parts marked with this symbol  have critical characteristics.  
 Use ONLY replacement parts recommended by the manufacturer.

**PARTS LIST OF EXPLODED VIEW**

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty	Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
1	Note	R Amp Unit Assy		1	46	Note	Inner Panel		1
1-1		R Amp. Unit Assy		1	47	Note	Function Button		1
1-2		J-conn Unit		(1)	48	Note	Slide Bracket		1
1-3		Pis Amp. Unit		(1)	49	412 9402 005	Slide Bracket(L)		1
1-4		Sensor Unit		(1)	50	412 9403 005	Slide Bracket(R)		1
1-5		Wire Unit		(1)	51	445 0048 003	Cord Holder(Lx7)		7
1-6		SP Switch Unit		(1)	52	412 3336 102	Trans Plate		1
1-7		Speaker Unit		(1)	<b>Note</b>	<b>Power Pack</b>			
2	254 6166 004	Chromicon 15000JF57IV	CT08,708	2	43	Note	Knob (Round)		2
3	499 0190 005	Remcon-Sensor SDR1610-52	15054	55	112 8119 025	VR Knob (PWR)		2	
4	212 1128 005	2 P Push Switch	SW501 SP SW	1	56	112 8119 013	VR Knob (JRM-A)		1
5	Note	Headphone Jack		1	57	112 0843 005	VR Knob (JRM-B)		2
6	214 9303 005	Relay	RL603,604	2	58	119 0071 207	Joint Guide		2
7	Note	8 P Terminal(S-GND)		1	59	Note	VR Knob Assy		1
8	Note	Input Unit Assy		1	60	Note	Knob (PWR)		1
8-1		Input Unit		(1)	61	Note	Knob(S) (Round)		3
8-2		Vol. Unit		(1)	62	Note	Power Button Assy		1
8-3		ED. Unit		(1)	83	Note	Front Panel Assy		1
8-4		Tone Unit		(1)	84	445 8004 207	Wire Clampers		17
8-5		Protector Unit		(1)	85				
8-6		Power Switch Unit		(1)	86				
9	254 4253 700	Chromicon 2200JF57V	CT12	1	87				
10	213 192 004	Relay (R-Vol)	RL603	1	88	Note	Top Cover		1
11	214 9127 003	Relay (R-FX)	RL603,101-103	7	89	113 1986 007	Masking Sheet		2
12	212 1130 005	Relay (A-T)		1	<b>Note</b>	<b>Masking Sheet</b>			
13	Note	Encoder		1	71	415 9016 006	P.C.B. Holder	L-15	2
14	Note	Pin Switch		1	72	445 0003 006	Card Spacer	L-19,1	3
15	212 1041 001	1 P Push Switch	SW901 M/M/M/C	1	73	461 9022 021	Rubber Sheet	Put on VR Bracket	2
16	212 1139 006	1 P Push Switch	SW202 S/Direct	1	74	461 9054 018	Rubber Sheet		2
17	212 1197 000	1 P Push Switch	SW201 Loudness	1	75	461 9082 034	Rubber Sheet	Put on Rad.Chass.	2
18	212 0334 005	Relay Switch	SW101 Recut	1	76	414 9145 107	PIT Shield(B)		1
19	211 0781 104	Variable Resistor 20k ohm	VR201 Main Vol	1	77	414 9151 007	PIT Shield(S)		2
20	211 0789 103	Variable Resistor 100k ohm	VR202 Balance	1	78	414 9159 009	Shield Plate		1
21	211 0854 014	Variable Resistor 10k ohm	VR203 Tieble	1	79	124 0022 002	Felt Sheet	Ta=2	1
22	211 0934 009	Variable Resistor 30k ohm	VR204 Bass	1	80	477 0284 057	SP Washer	Ta=5	2
23	204 9413 002	2 P Pin Jack(S-GND)	Photo	1	81	414 9160 001	PIT Shield Plate (A)		1
24	204 9308 005	4 P Pin Jack(S-GND)	Photo	2	82	414 9161 000	PIT Shield Plate (B)		1
25	204 9279 009	6 P Pin Jack(S-GND)	Photo	2	83	122 9030 012	Hinema Sheet	110x107(L)	1
26	204 9279 009	6 P Pin Jack(S-GND)	Photo	2	84	122 9030 012	Knob (Round)		2
27	204 9279 009	6 P Pin Jack(S-GND)	Photo	2	85	122 9030 009	Hinema Sheet	126x126(T)	2
28	411 1284 205	Main Chassis		1	<b>Note</b>	<b>Chassis</b>			
29	104 0194 103	Foot Assy		4					
30	412 9400 005	Chassis Sup. Bracket		1					
31	415 9018 019	P.C.B. Holder		5					
32	Note	Rear Panel		30					
33	477 0091 001	Washer(P-97)		1	101	473 7002 018	Tapping Screw(S)3x8		27
34	255 6071 019	Terminal Assy		1	102	Note	Tapping Screw(S)3x8		27
35	477 0091 001	Washer(P-97)		1	103	473 8207 009	Cup Screw 3x12		14
36	Note	AC Power Cord		1	104	473 7508 017	Tapping Screw(P)3x8 BLK		14
37	415 9300 017	P.W.C. Knob		1	105	Note	Filing Screw		10
38	Note	Case Fan		9	106	473 7500 015	Tapping Screw(P)3x8		9
39	417 0502 007	Power Resistor		2	107	473 7508 004	Tapping Screw(P)3x8 BLK		2
40	273 9413 004	Translator 25C3856L34 (OPVXZ)	TR319,320,325,328	4	108	473 7004 003	Tapping Screw(S)3x8		4
41	271 0263 309	Translator 22A146/LB4 (OPVXD)	TR321,322,327,339	4	109	473 7002 034	Tapping Screw(S)3x8 BLK		2
42	412 9234 007	Insulating Sheet		8	110	Note	3 P Swelling Screw		8
43	412 9235 108	P.W.S. Bracket(A)		2					
44	412 9833 202	Radiator Bracket		1					
45	415 9011 048	P.C.B. Holder	L-21.5	2					
46	412 9401 104	Volume Bracket		1					

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty	Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
152	504 9162 029	Styrene Paper		1	156	Note	Carton Case		1
153	Note	Poly Cover		1	157	Note	Color Label(Gold)		2
154	504 0082 080	Styrene Paper	for AC Cord	1	158	Note	Slide Pad		1
155	Note	Cushion Assy		1	159	Note	Press Label		1

**ADDENDUM PARTS LIST**

Ref. No.	Parts Name & Description	Europe Black	Europe Gold	Part No.			
				U.S.A. Black	Canada Black	M-Voltage Gold	
4	R Amp. Unit Assy (1)	1U-2733 A	1U-2733 B	1U-2733 D	1U-2733 D	1U-2733 C	
5	Headphone Jack (1)	204 8354 004	204 8355 002	204 8354 004	204 8344 004	204 8341 004	
7	8 P Terminal (S-GND) (1)	205 0753 004	205 0753 004	205 0777 008	205 0777 008	205 0777 005	
8	Input Unit Assy (1)	1U-2734 A	1U-2734 A	1U-2777 D	1U-2777 D	1U-2777 C	
12	Fluor. Lamp(F) (1)	505 1011 005	505 1011 005	505 1009 004	505 1009 004	505 1011 003	
13	Fluor. Lamp(F) (1)	505 1011 005	505 1011 005	505 1009 004	505 1009 004	505 1011 003	
14	Fluor. Lamp(F) (1)	505 1011 005	505 1011 005	505 1009 004	505 1009 004	505 1011 003	
14	Fluor. Lamp(F) (1)	505 1011 005	505 1011 005	505 1009 004	505 1009 004	505 1011 003	
14	Fluor. Lamp(F) (1)	505 1011 005	505 1011 005	505 1009 004	505 1009 004	505 1011 003	
14	Fluor. Lamp(F) (1)	505 1011 005	505 1011 005	505 1009 004	505 1009 004	505 1011 003	
32	Rear Panel (1)	105 9243 009	105 9243 006	105 9243 011	105 9243 011	105 9243 024	
35	AC Cord Assy (1)	204 2085 002	204 2085 002	204 2085 002	204 2085 002	204 2085 002	
47	Inner Panel (1)	146 1505 143	146 1505 138	146 1505 172	146 1505 172	146 1505 185	
48	Side Bracket (1)	113 1686 114	113 1686 114	113 1686 122	113 1686 122	113 1686 130	
53	Power Button (1)	112 0744 009	112 0744 009	112 0744 009	112 0744 009	112 0744 009	
54	Knob(Round) (2)	113 1556 004	113 1556 017	113 1356 004	113 1356 004	113 1356 002	
59	VR Knob Assy (1)	112 0744 009	112 0744 011	112 0744 009	112 0744 009	112 0744 009	
60	Knob(P) (1)	112 0841 005	112 0841 018	112 0841 005	112 0841 005	112 0841 047	
61	Knob(S) (Round) (3)	112 0946 000	112 0946 010	112 0946 000	112 0946 000	112 0946 020	
63	Power Button (1)	113 9219 008	113 9219 008	113 9219 003	113 9219 003	113 9219 003	
65	Front Panel Assy (1)	144 9197 201	144 9197 214	144 9197 201	144 9197 201	144 9197 227	
66	Top Cover (1)	102 9046 002	102 9046 015	102 9046 002	102 9046 002	102 9046 028	
70	Masking Sheet (1)	513 1144 005	513 1144 005	---	---	---	
84	Knob (Round) (3)	113 1694 009	113 1694 012	113 1694 009	113 1694 009	113 1694 025	
91	Wood Board (L) (1)	---	---	---	---	---	
92	Wood Board (R) (1)	---	---	---	---	---	
93	Felt Sheet (6)	---	---	---	---	---	
94	S Washer (6)	---	---	---	---	---	

**SCREWS**

Ref. No.	Description	Europe Black	Europe Gold	U.S.A. Black	Canada Black	M-Voltage Gold
102	Tapping Screw (S)3x8 Blk	473 7015 018	473 7015 018	473 7015 018	473 7015 018	473 7015 018
103	Fixing Screw (1)	477 0064 107	477 0064 107	477 0064 107	477 0064 107	477 0064 107
105	3 P Swelling Screw (6)	477 0263 005	477 0263 018	477 0263 005	477 0263 005	477 7007 039

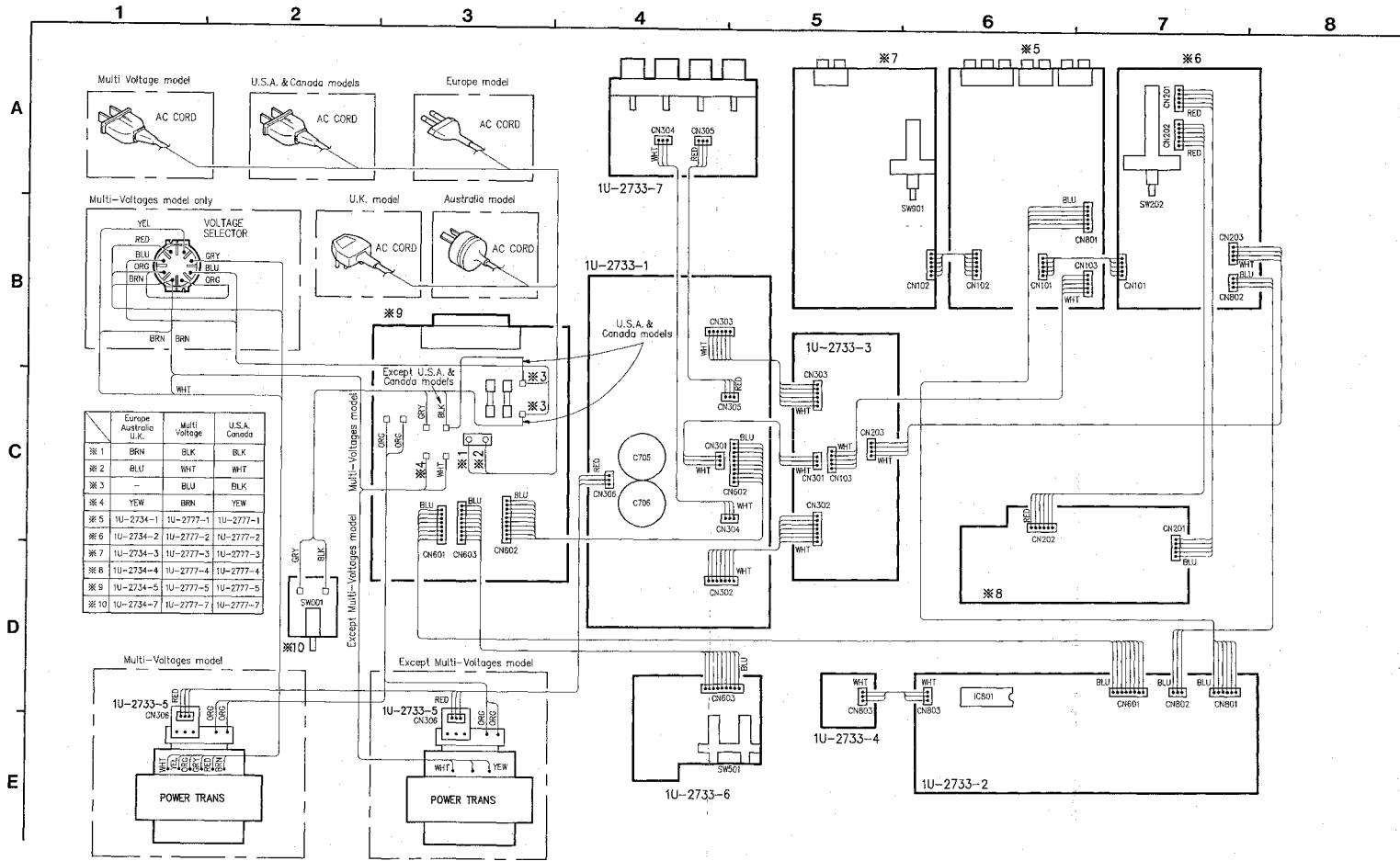
**PACKING & ACCESSORIES (Not included EXPLODED VIEW)**

Ref. No.	Parts Name & Description	GEN 7623	GEN 7625	GEN 7263-01	GEN 7263-01	GEN 7263-02
151-2	Envelope Sub. Assy	511 9375 003	511 9375 003	511 9375 003	511 9375 003	511 9375 007
153	Envelope Poly Cover	505 9102 019	505 9102 019	505 9102 019	505 9102 019	505 9102 019
155	Cushion Assy	503 9261 006	503 9261 006	503 9261 006	503 9261 006	503 1147 102
157	Carton Case	501 9256 002	501 9256 002	501 9256 002	501 9256 002	501 9256 008
158	Color Label(Gold)	(2)	---	---	---	513 9111 001
159	Slide Pad	(2)	---	---	---	504 0160 010
160	Press Label	(2)	---	---	---	515 9330 008

**PACKING & ACCESSORIES (Not included EXPLODED VIEW)**

Ref. No.	Parts Name & Description	Remarks	Q'ty
151	Note	Envelope Sub. Assy	1
151-1	Note	Envelope Poly Cover	(1)
151-2	Note	Envelope	(1)
151-3	Note	Inset Manual	(1)
151-4	Note	Remote Control	(1)
151-4	Note	Batteries	(2)

### WIRING DIAGRAM





# SCHEMATIC DIAGRAM

1

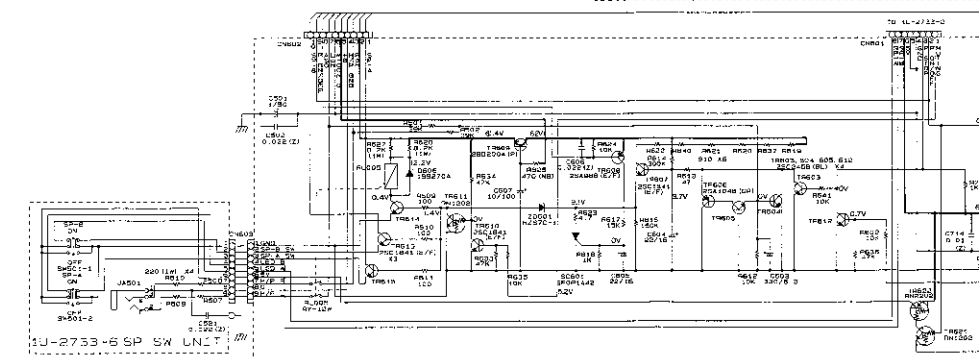
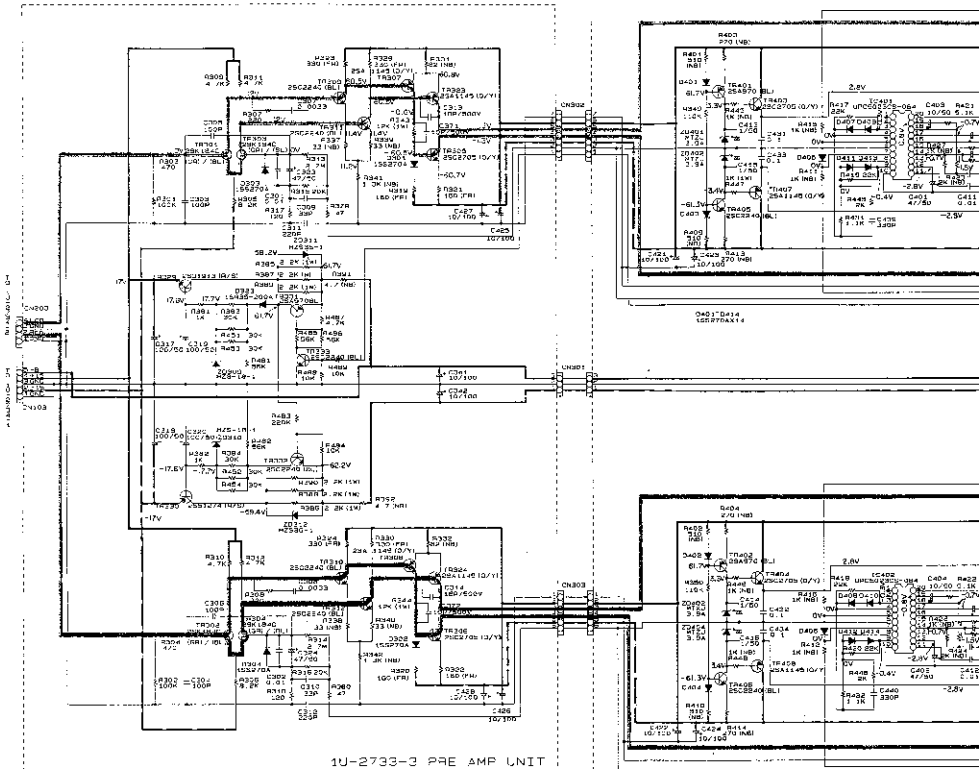
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3

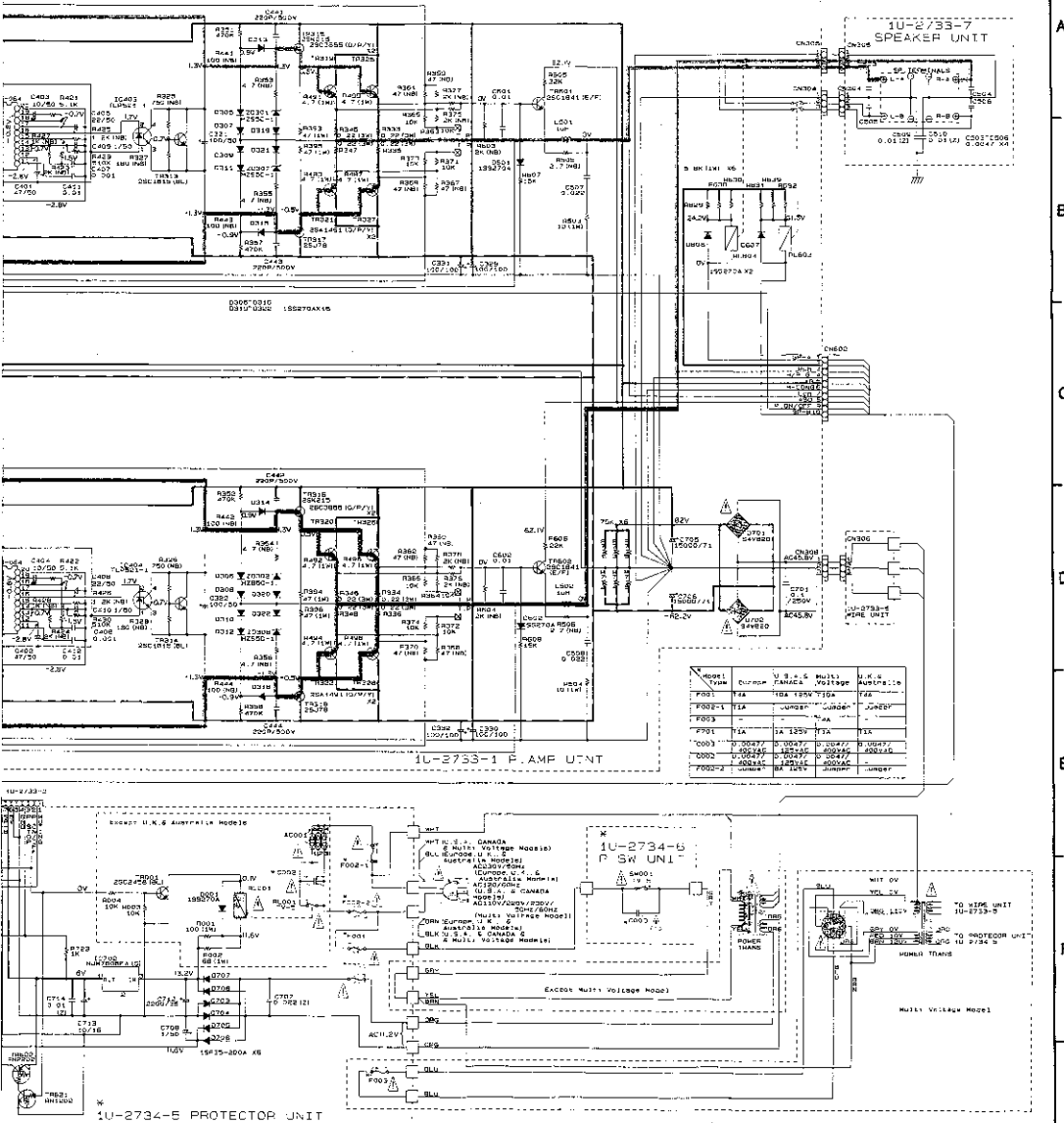
4

5

6



6 7 8 9 10 11



--- +B LINE  
 --- -B LINE  
 --- SIGNAL LINE

MEASURING CONDITIONS:  
 PHONO INPUT  
 SOURCE DIRECT OFF  
 SPEAKER A ON

**WARNING:**  
 Parts marked with this symbol have critical characteristics. Use ONLY replacement parts recommended by the manufacturer.

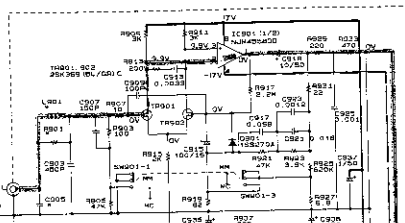
**CAUTION:**  
 Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 mA/min, or if the resistance from chassis to either side of the power cord is less than 240 kohms, the unit is defective.

**WARNING:**  
 DO NOT return the unit to the customer until the problem is located and corrected.

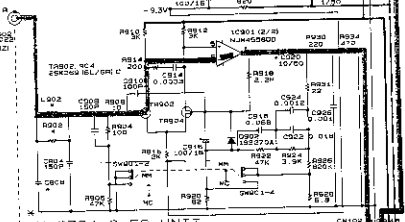
**NOTES**  
 ALL RESISTANCE VALUES IN OHM & 1,000 OHM. Min 1,000,000 OHM  
 ALL CAPACITANCE VALUES IN MICRO FARAD. P. MICRO MICRO FARAD  
 EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT  
 CONDITION  
 CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

A  
B  
C  
D  
E  
F  
G  
H

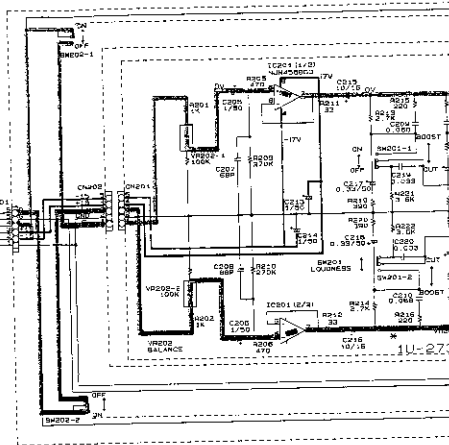
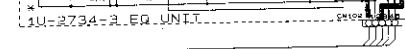
A



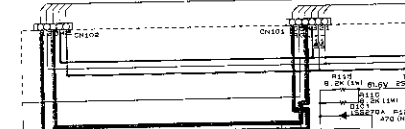
B



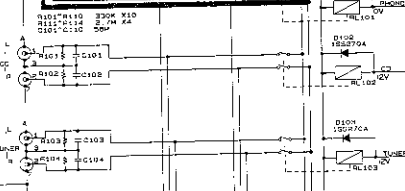
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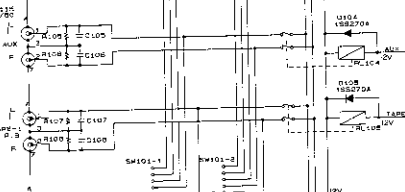
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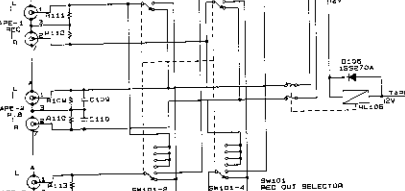
E



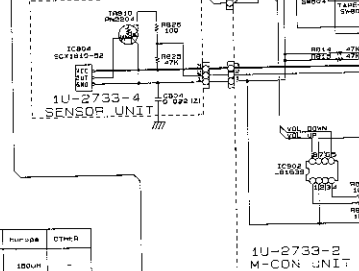
F



G



Part#	QTY	OTHER
L001	100UM	-
R001	R20	JUN98*
C008	47P	-



1U-2733-4 SENSOR UNIT

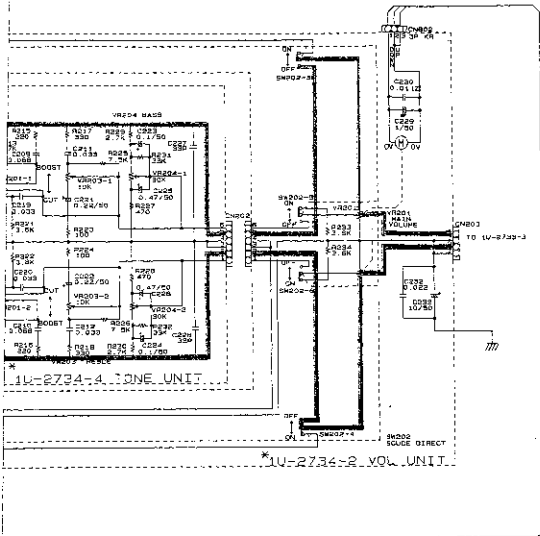
1U-2733-2 M-CON UNIT

**NOTES**  
 ALL RESISTANCE VALUES IN OHM. M=1,000,000 OHM  
 ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD  
 EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT  
 CONDITION.  
 CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR  
 NOTICE

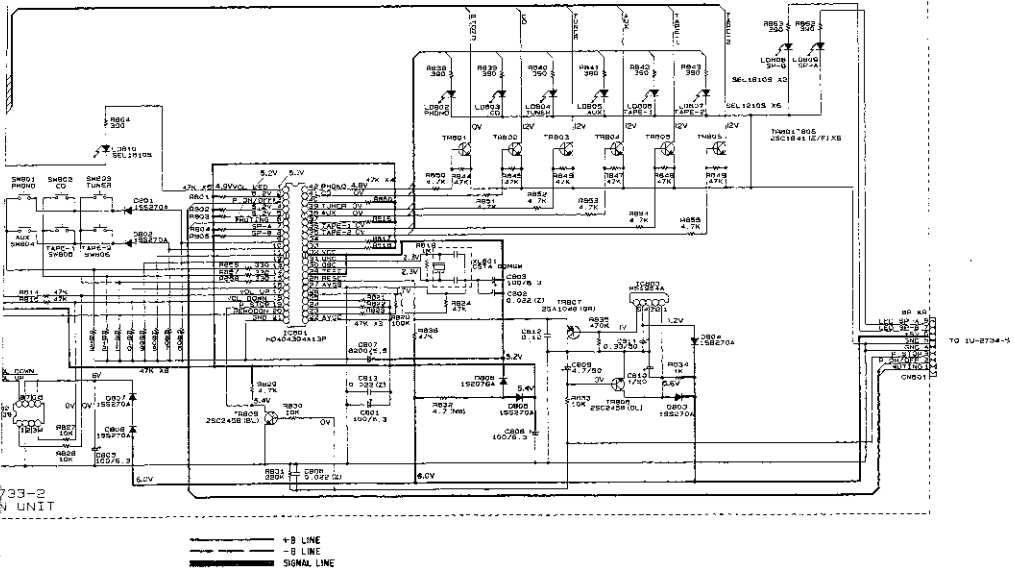
**WARNING:**  
 Parts marked with the symbol have critical characteristics.  
 Use ONLY replacement parts recommended by the manufacturer.

**CAUTION:**  
 Before returning the unit to the customer, make sure you make either (1) a  
 leakage current check or (2) a line to ground resistance check. If the leakage  
 current exceeds 0.5 milliamperes, or if the resistance from chassis to either side  
 of the power cord is less than 240 kohms, the unit is defective.

**WARNING:**  
 DO NOT return the unit to the customer until the problem is located and  
 corrected.



REF ID	QUANTITY	DESCRIPTION
1U-2734-4	1	DNE UNIT
1U-2734-2	1	VOL UNIT
1U-2734-3	1	DNE UNIT
1U-2734-4	1	VOL UNIT
1U-2734-5	1	DNE UNIT
1U-2734-6	1	VOL UNIT



——— +B LINE  
 - - - -B LINE  
 ——— SIGNAL LINE

MEASURING CONDITIONS:  
 PHONO INPUT SOURCE DIRECT / OFF  
 SPEAKER A : ON