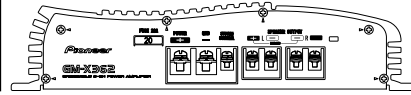


# Service Manual

GM-X362/XH/UC



ORDER NO.  
**CRT2785**

BRIDGEABLE POWER AMPLIFIER

# GM-X362

XH/UC, XH/EW, XH/ES

# GM-X262

XH/UC

## CONTENTS

|  |    |  |    |
|--|----|--|----|
| 1. SAFETY INFORMATION .....            | 2  | 6. ADJUSTMENT .....                    | 16 |
| 2. EXPLODED VIEWS AND PARTS LIST ..... | 4  | 7. GENERAL INFORMATION .....           | 17 |
| 3. SCHEMATIC DIAGRAM .....             | 8  | 7.1 DISASSEMBLY .....                  | 17 |
| 4. PCB CONNECTION DIAGRAM .....        | 10 | 8. OPERATIONS AND SPECIFICATIONS ..... | 18 |
| 5. ELECTRICAL PARTS LIST .....         | 14 |  |    |



For details, refer to "Important symbols for good services".

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## [ Important symbols for good services ]

In this manual, the symbols shown-below indicate that adjustments, settings or cleaning should be made securely. When you find the procedures bearing any of the symbols, be sure to fulfill them:

### 1. Product safety



You should conform to the regulations governing the product (safety, radio and noise, and other regulations), and should keep the safety during servicing by following the safety instructions described in this manual.

### 2. Adjustments



To keep the original performances of the product, optimum adjustments or specification confirmation is indispensable. In accordance with the procedures or instructions described in this manual, adjustments should be performed.

### 3. Cleaning



For optical pickups, tape-deck heads, lenses and mirrors used in projection monitors, and other parts requiring cleaning, proper cleaning should be performed to restore their performances.

### 4. Shipping mode and shipping screws



To protect the product from damages or failures that may be caused during transit, the shipping mode should be set or the shipping screws should be installed before shipping out in accordance with this manual, if necessary.

### 5. Lubricants, glues, and replacement parts



Appropriately applying grease or glue can maintain the product performances. But improper lubrication or applying glue may lead to failures or troubles in the product. By following the instructions in this manual, be sure to apply the prescribed grease or glue to proper portions by the appropriate amount. For replacement parts or tools, the prescribed ones should be used.

## 1. SAFETY INFORMATION

### ● GM-X362/XH/UC, GM-X262/XH/UC

#### **CAUTION**

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

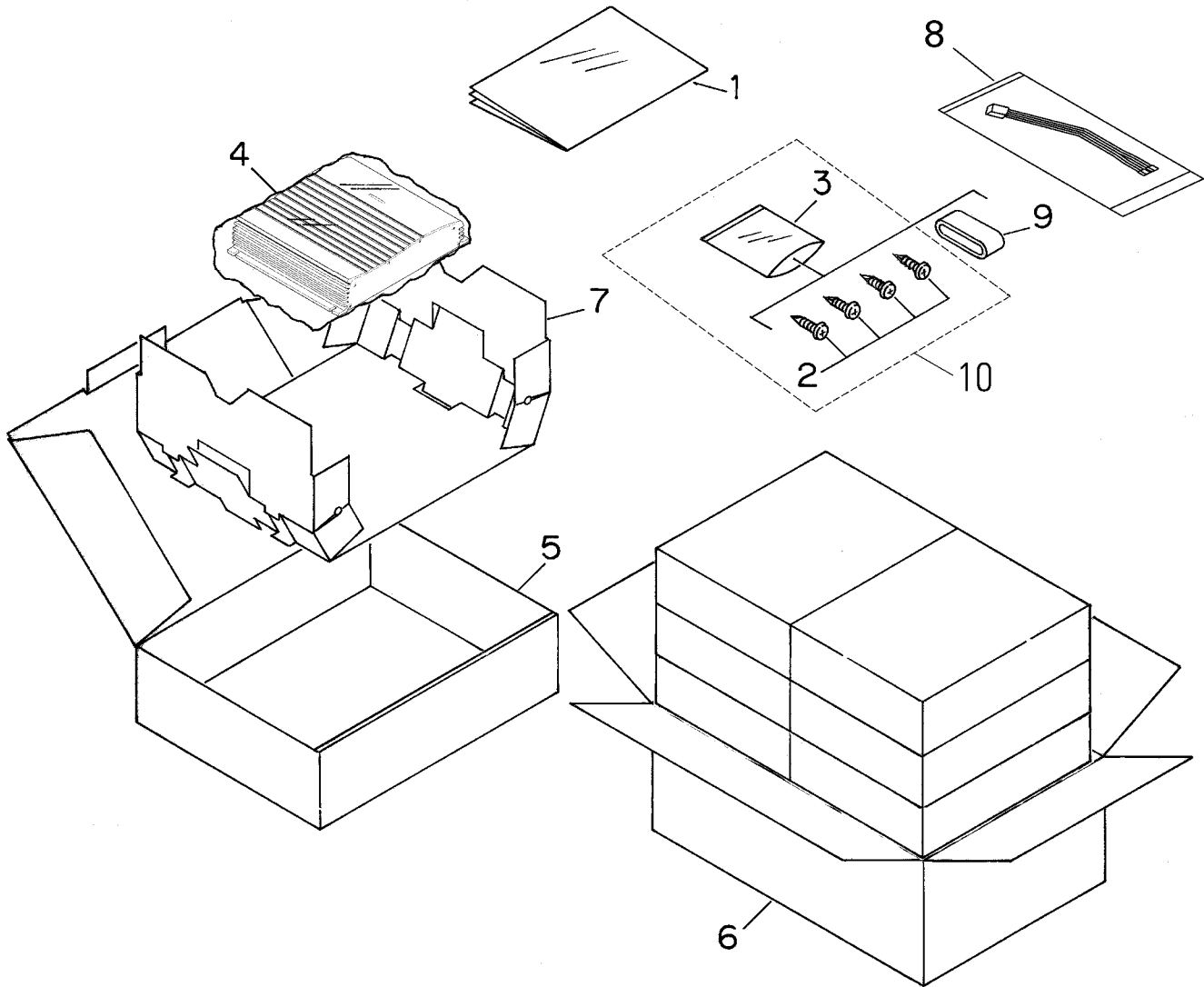
#### **WARNING**

This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.  
Health & Safety Code Section 25249.6 - Proposition 65



## 2. EXPLODED VIEWS AND PARTS LIST

### 2.1 PACKING



**NOTE:**

- Parts marked by "\*" are generally unavailable because they are not in our Master Spare Parts List.
- Screws adjacent to ∇ mark on the product are used for disassembly.
- For the applying amount of lubricants or glue, follow the instructions in this manual.  
( In the case of no amount instructions, apply as you think it appropriate.)

**(1) PACKING SECTION PARTS LIST**

| Mark No. | Description       | Part No.              | Mark No. | Description      | Part No.              |
|----------|-------------------|-----------------------|----------|------------------|-----------------------|
| 1-1      | Owner's Manual    | See Contrast table(2) | 3        | Polyethylene Bag | HZE0002               |
| 1-2      | Owner's Manual    | See Contrast table(2) | 4        | Polyethylene Bag | HZE0003               |
| *        | 1-3 Card          | See Contrast table(2) | 5        | Carton           | See Contrast table(2) |
| *        | 1-4 Warranty Card | See Contrast table(2) | 6        | Contain Box      | See Contrast table(2) |
|          | 2 Screw           | BYC40P180FZK          | 7        | Protector        | HZH0003               |
|          |                   |                       | 8        | Cord Assy        | HZD0001               |
|          |                   |                       | 9        | Cover            | HZN0011               |
|          |                   |                       | 10       | Screw Assy       | HZE0001               |

**(2) CONTRAST TABLE**

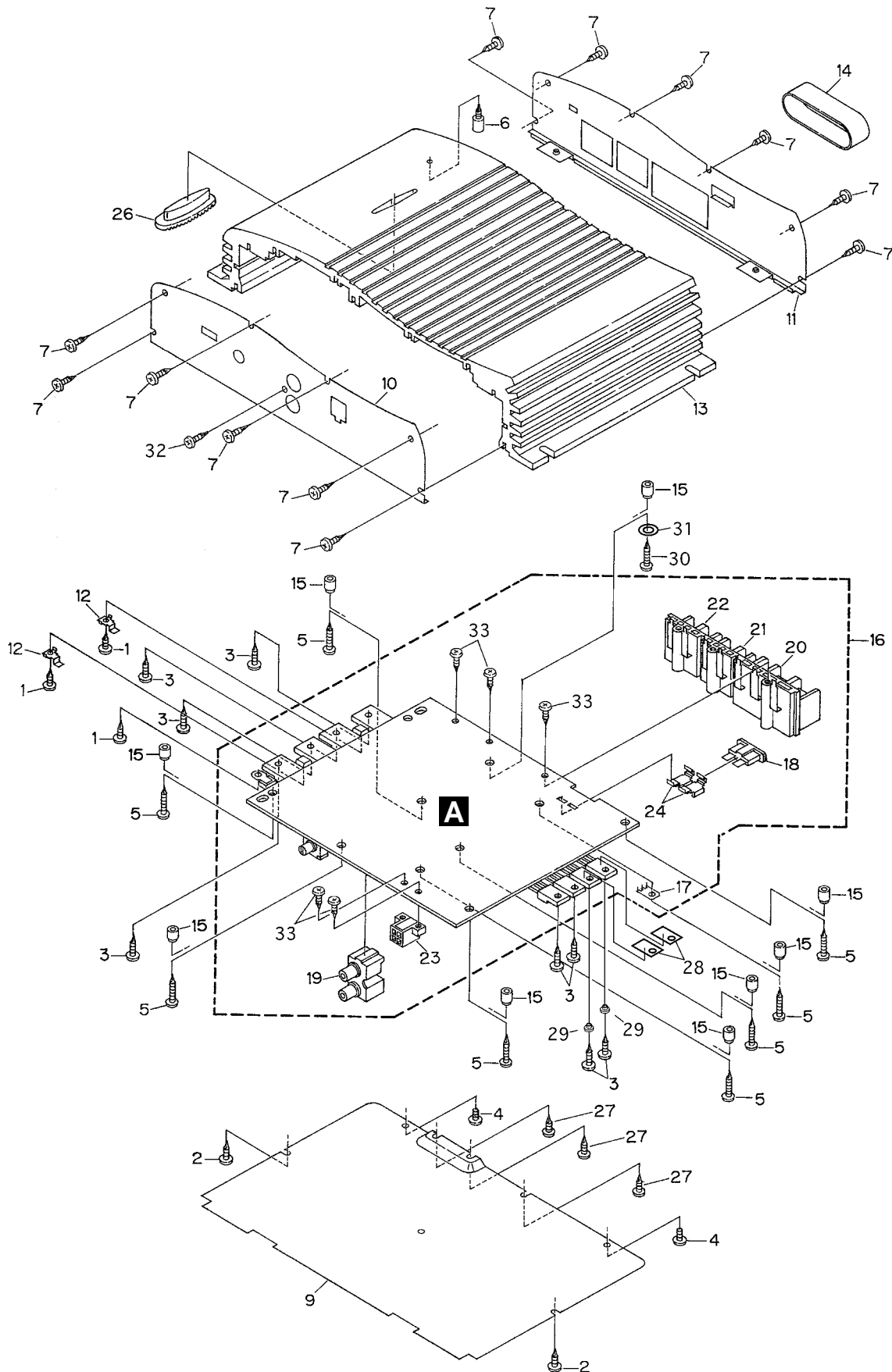
**GM-X362/XH/UC, GM-X262/XH/UC, GM-X362/XH/EW, and GM-X362/XH/ES are constructed the same except for the following:**

| Mark No. | Description       | Part No.      |               |               |               |
|----------|-------------------|---------------|---------------|---------------|---------------|
|          |                   | GM-X362/XH/UC | GM-X262/XH/UC | GM-X362/XH/EW | GM-X362/XH/ES |
| 1-1      | Owner's Manual    | HZR0001       | HZR0001       | HZR0002       | HZR0003       |
| 1-2      | Owner's Manual    | Not used      | Not used      | Not used      | HZR0004       |
| *        | 1-3 Card          | HZR0006       | HZR0006       | Not used      | Not used      |
| *        | 1-4 Warranty Card | Not used      | Not used      | HZR0007       | Not used      |
|          | 5 Carton          | HZH0001       | HZH0004       | HZH0001       | HZH0001       |
|          | 6 Contain Box     | HZH0002       | HZH0005       | HZH0002       | HZH0002       |

**● Owner's Manual**

| Model                          | Part No. | Language  |
|--------------------------------|----------|---|
| GM-X362/XH/UC<br>GM-X262/XH/UC | HZR0001  | English, French                                     |
| GM-X362/XH/EW                  | HZR0002  | English, Spanish, German,<br>French, Italian, Dutch |
| GM-X362/XH/ES                  | HZR0003  | English, Spanish                                    |
|                                | HZR0004  | Portuguese(B), Arabic                               |

2.2 EXTERIOR



**(1) EXTERIOR SECTION PARTS LIST**

| Mark No. | Description     | Part No.              | Mark No. | Description             | Part No.     |
|----------|-----------------|-----------------------|----------|-------------------------|--------------|
| 1        | Screw           | BBZ30P050FMC          | 21       | Terminal(CN905)         | HZK0004      |
| 2        | Screw           | BBZ30P060FZK          | 22       | Terminal(CN906)         | HZK0004      |
| 3        | Screw           | BBZ30P080FMC          | 23       | Connector(CN904)        | HZK0005      |
| 4        | Screw           | BSZ30P050FZK          | 24       | Holder                  | HZN0009      |
| 5        | Screw(M3x12)    | HZB0001               | 25       | .....                   |              |
| 6        | Screw(M3x5)     | HZB0002               | 26       | Lighting Conductor Unit | HZX0001      |
| 7        | Screw(M3x8)     | HZB0003               | 27       | Screw                   | PPZ30P120FZK |
| 8        | .....           |                       | 28       | Sheet                   | HZN0016      |
| 9        | Case            | HZN0007               | 29       | Spacer                  | HZN0017      |
| 10       | Panel           | See Contrast table(2) | 30       | Screw                   | PBA30P120FMC |
| 11       | Panel           | See Contrast table(2) | 31       | Washer                  | WH30FZN      |
| 12       | Holder          | HZN0008               | 32       | Screw                   | PPZ30P100FZK |
| 13       | Heat Sink       | See Contrast table(2) | 33       | Screw                   | BBZ30P100FMC |
| 14       | Cover           | HZN0011               |          |                         |              |
| 15       | Spacer          | HZN0012               |          |                         |              |
| 16       | Amp Unit        | See Contrast table(2) |          |                         |              |
| 17       | Terminal(CN903) | HZK0001               |          |                         |              |
| 18       | Fuse(20A)       | HZE0005               |          |                         |              |
| 19       | Pin Jack(CN801) | HZK0002               |          |                         |              |
| 20       | Terminal(CN901) | HZK0003               |          |                         |              |

**(2) CONTRAST TABLE**

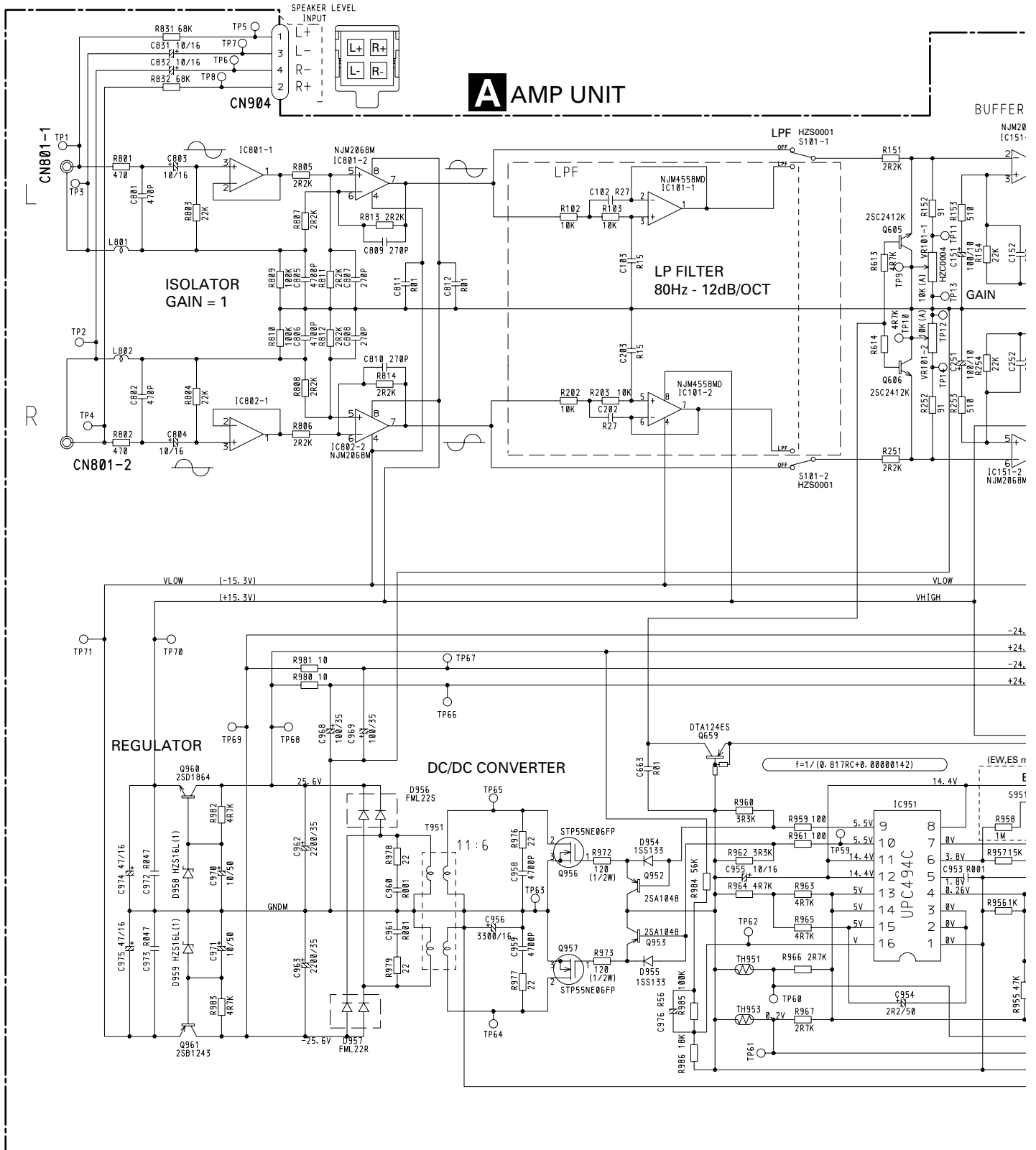
**GM-X362/XH/UC, GM-X262/XH/UC, GM-X362/XH/EW, and GM-X362/XH/ES are constructed the same except for the following:**

| Mark No. | Description | Part No.      |               |               |               |
|----------|-------------|---------------|---------------|---------------|---------------|
|          |             | GM-X362/XH/UC | GM-X262/XH/UC | GM-X362/XH/EW | GM-X362/XH/ES |
| 10       | Panel       | HZN0001       | HZN0002       | HZN0001       | HZN0001       |
| 11       | Panel       | HZN0003       | HZN0004       | HZN0003       | HZN0003       |
| 13       | Heat Sink   | HZN0005       | HZN0006       | HZN0005       | HZN0005       |
| 16       | Amp Unit    | HZW0001       | HZW0004       | HZW0002       | HZW0003       |

# 3. SCHEMATIC DIAGRAM

## 3.1 AMP UNIT

Note: When ordering service parts, be sure to refer to "EXPLODED VIEWS AND PARTS LIST" or "ELECTRICAL PARTS LIST".



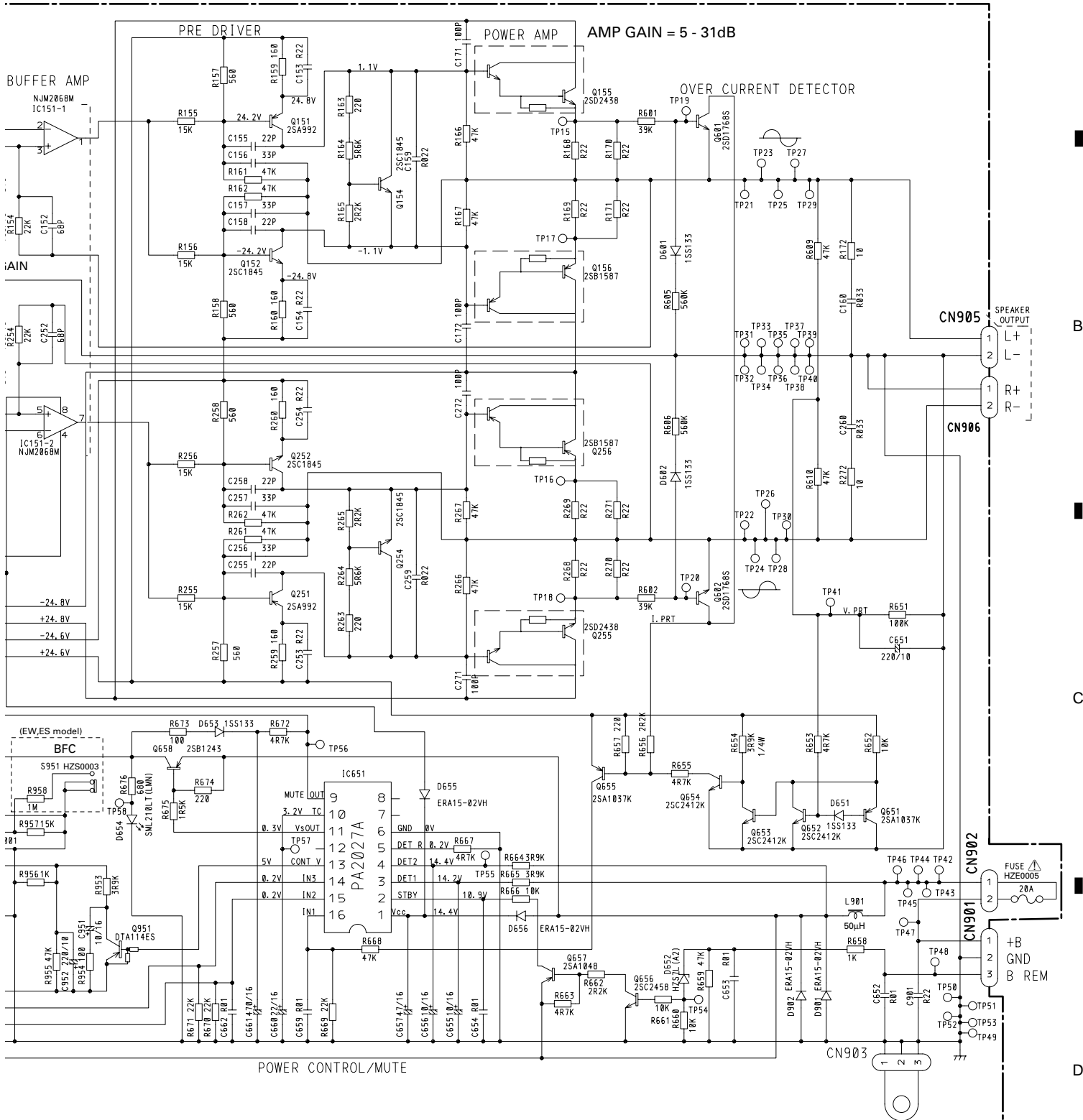
NOTE :

- Symbol indicates a resistor.  
No differentiation is made between chip resistors and discrete resistors.
- |— Symbol indicates a capacitor.  
No differentiation is made between chip capacitors and discrete capacitors.

Decimal points for resistor and capacitor fixed values are expressed as :  
 2.2 → 2R2  
 0.022 → R022







The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.



# 4. PCB CONNECTION DIAGRAM

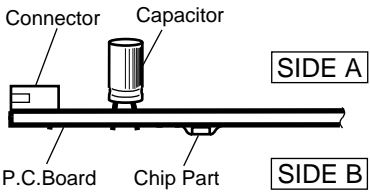
## 4.1 AMP UNIT



### NOTE FOR PCB DIAGRAMS

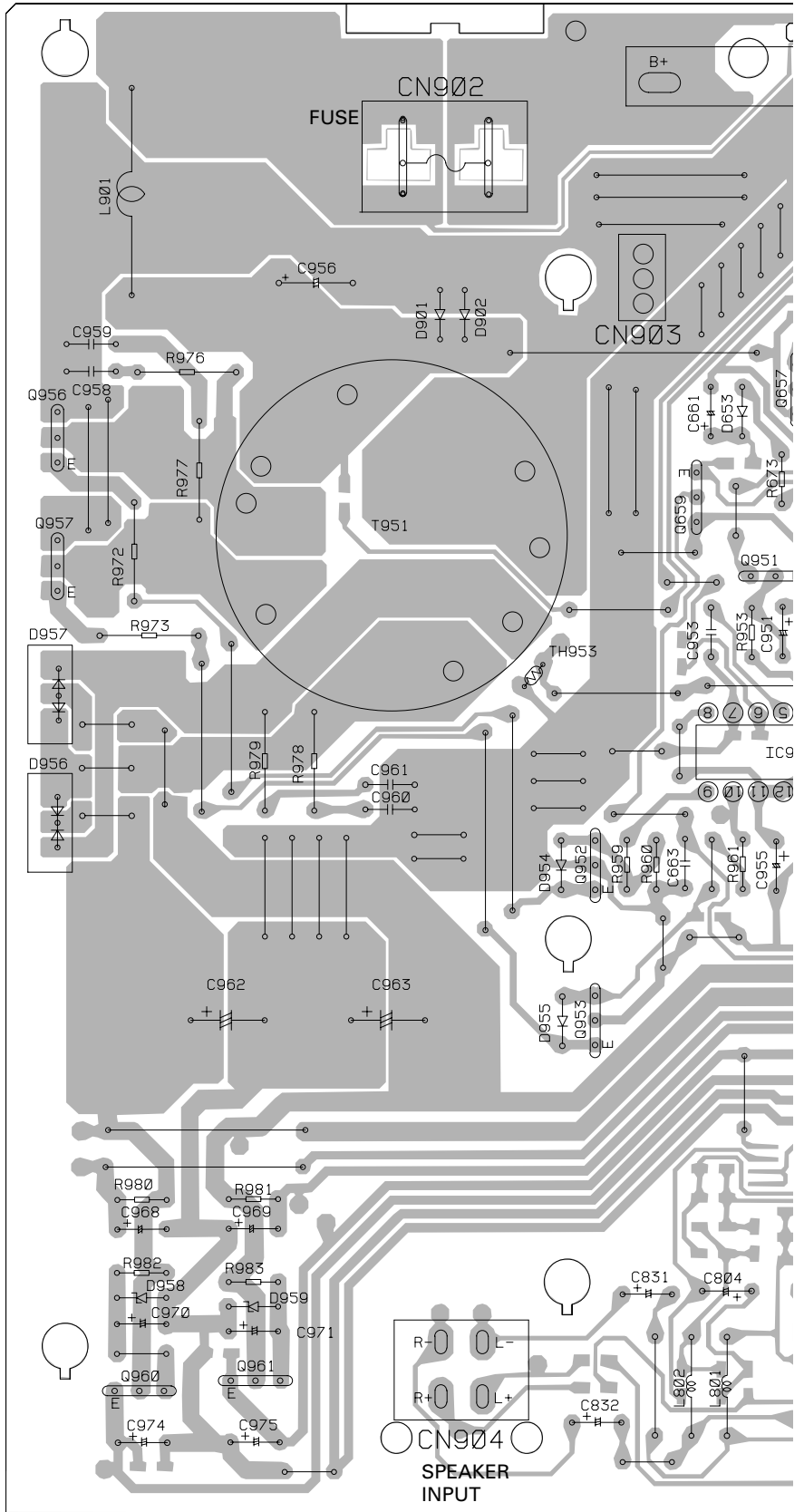
1. The parts mounted on this PCB include all necessary parts for several destination. For further information for respective destinations, be sure to check with the schematic diagram.

### 2. Viewpoint of PCB diagrams



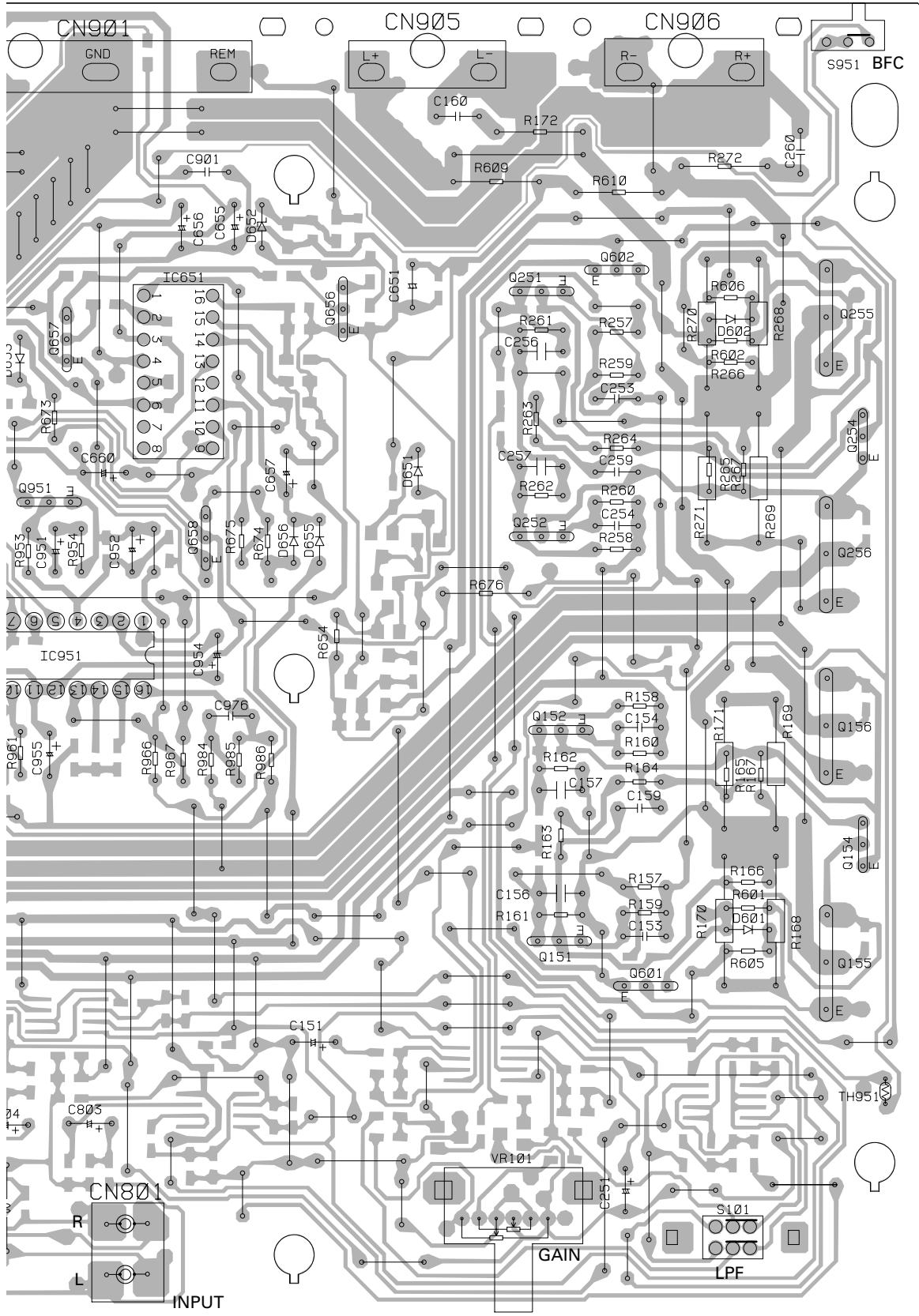
IC, Q ADJ

- Q602
- Q251
- Q255
- Q656
- Q657
- Q956
- Q254
- Q957
- Q659
- Q951
- Q252
- Q658
- Q256
- IC951
- Q152
- Q156
- Q952
- Q154
- Q953
- Q151
- Q601
- Q155
- Q961
- Q960



SIDE A

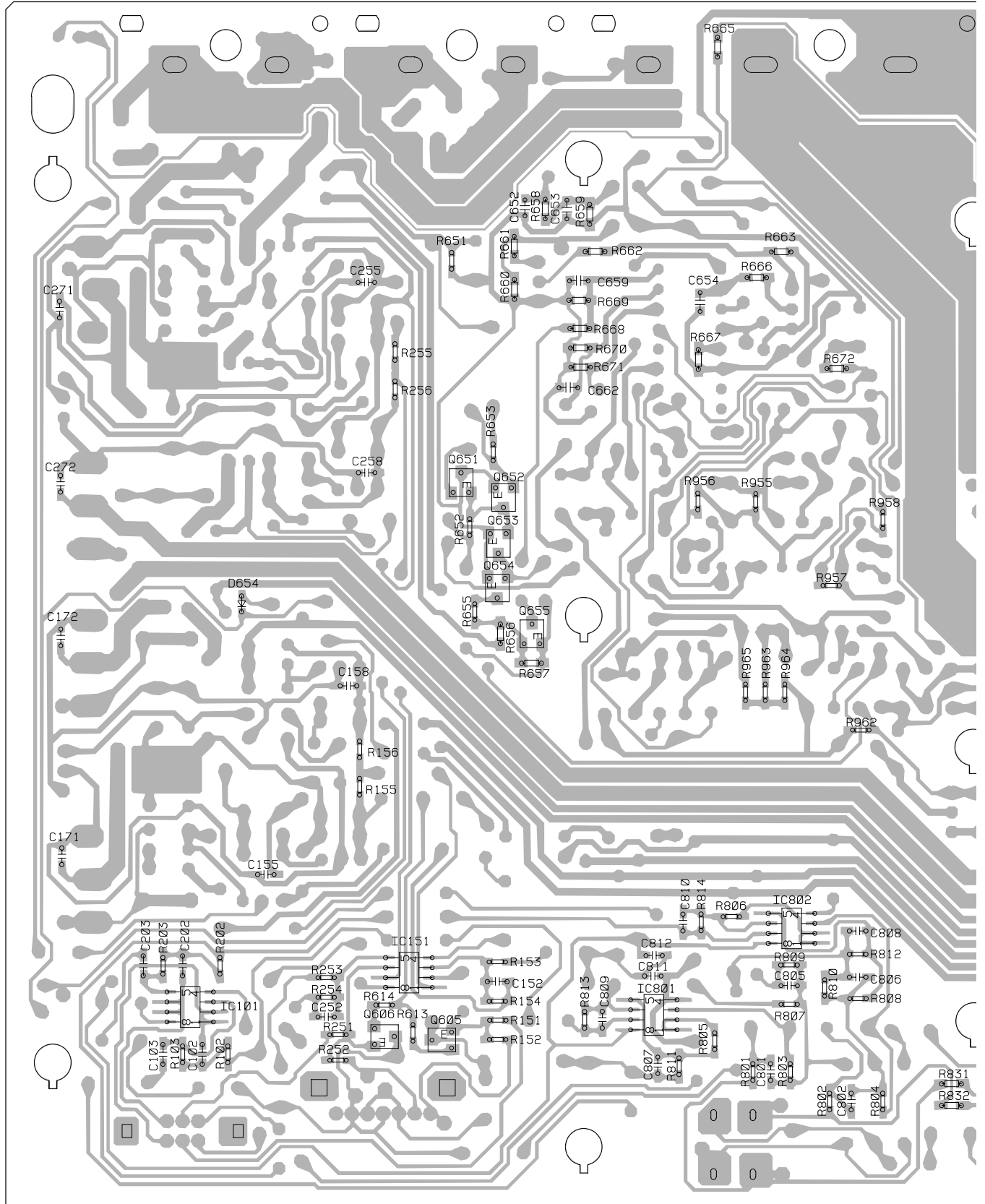
SPEAKER OUTPUT



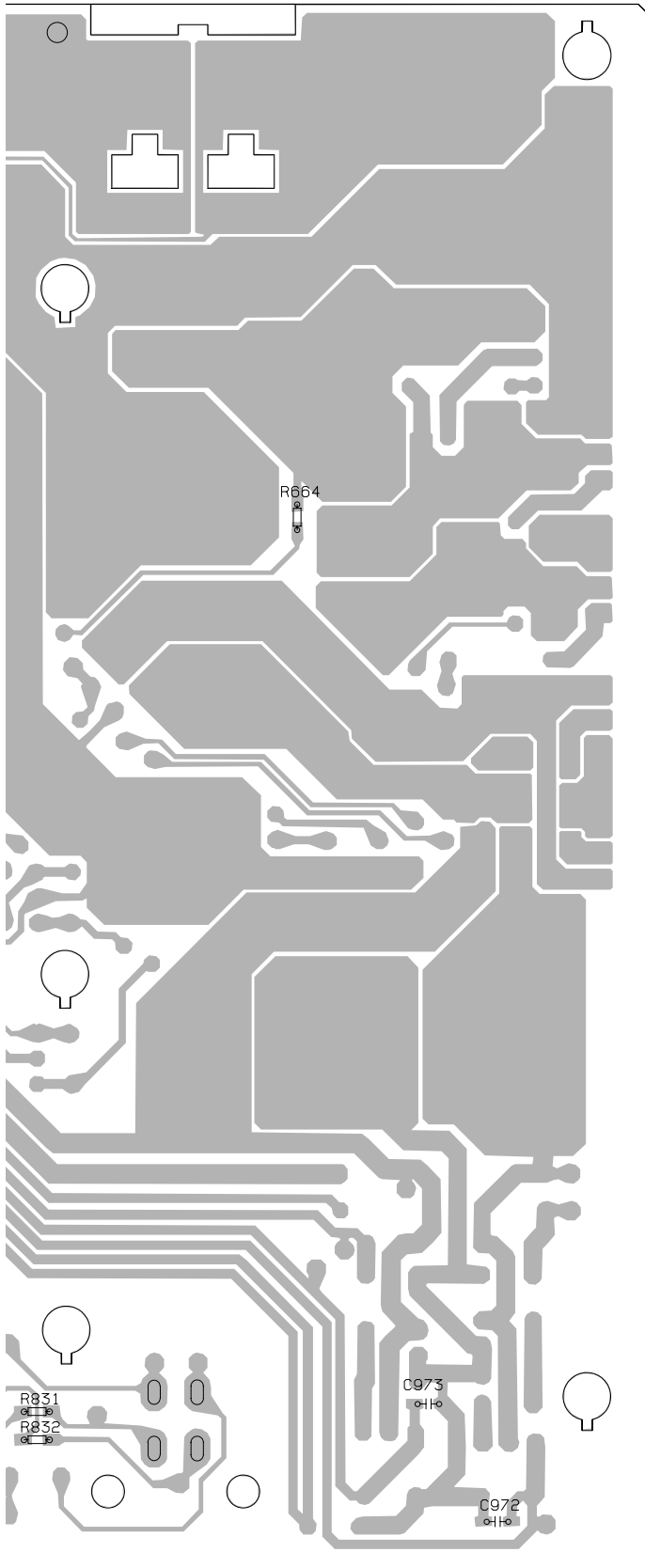
A  
B  
C  
D



**A** AMP UNIT



SIDE B



IC. Q

Q651  
Q652

Q653

Q654

Q655

IC802

IC151

IC801  
IC101  
Q606  
Q605

R664

R831

R832

C973

C972

A

B

C

D

## 5. ELECTRICAL PARTS LIST

## NOTE:

- Parts whose parts numbers are omitted are subject to being not supplied.
- The part numbers shown below indicate chip components.

Chip Resistor

RS1/OSOOOJ,RS1/OOSOOOJ

Chip Capacitor (except for CQS.....)

CKS....., CCS....., CSZS.....

| ====Circuit Symbol and No.==== | Part No.                             | ====Circuit Symbol and No.==== | Part Name                  | Part No.           |
|--------------------------------|--------------------------------------|--------------------------------|----------------------------|--------------------|
| <b>A</b>                       | Unit Number : HZW0001(GM-X362/XH/UC) | D 902                          | Diode                      | ERA15-02VH         |
|                                | Unit Number : HZW0002(GM-X362/XH/EW) | D 954                          | Diode                      | 1SS133             |
|                                | Unit Number : HZW0003(GM-X362/XH/ES) | D 955                          | Diode                      | 1SS133             |
|                                | Unit Number : HZW0004(GM-X262/XH/UC) | D 956                          | Diode                      | FML22S             |
|                                | Unit Name : Amp Unit                 | D 957                          | Diode                      | FML22R             |
| <b>MISCELLANEOUS</b>           |                                      |                                |                            |                    |
| IC 101                         | IC                                   | D 958                          | Diode                      | HZS16L(1)          |
| IC 151                         | IC                                   | D 959                          | Diode                      | HZS16L(1)          |
| IC 651                         | IC                                   | L 801                          | Inductor                   | HZT0001            |
| IC 801                         | IC                                   | L 802                          | Inductor                   | HZT0001            |
| IC 802                         | IC                                   | L 901                          | Choke Coil 50μH            | HZT0002            |
| IC 951                         | IC                                   | T 951                          | Transformer                | HZT0003            |
| Q 151                          | Transistor                           | TH 951                         | Thermistor                 | HZC0005            |
| Q 152                          | Transistor                           | TH 953                         | Thermistor                 | HZC0006            |
| Q 154                          | Transistor                           | S 101                          | Switch(LPF SELECT)         | HZS0001            |
| Q 155                          | Transistor                           | S 951                          | Switch(BFC)(EW,ES model)   | HZS0003            |
| Q 156                          | Transistor                           | VR 101                         | Volume 10kΩ(A)<br>Fuse 20A | HZC0004<br>HZE0005 |
| Q 251                          | Transistor                           | <b>RESISTORS</b>               |                            |                    |
| Q 252                          | Transistor                           | R 102                          |                            | RS1/10S103J        |
| Q 254                          | Transistor                           | R 103                          |                            | RS1/10S103J        |
| Q 255                          | Transistor                           | R 151                          |                            | RS1/10S222J        |
| Q 256                          | Transistor                           | R 152                          |                            | RS1/10S910J        |
| Q 601                          | Transistor                           | R 153                          |                            | RS1/10S511J        |
| Q 602                          | Transistor                           | R 154                          |                            | RS1/10S223J        |
| Q 605                          | Transistor                           | R 155                          |                            | RS1/10S153J        |
| Q 606                          | Transistor                           | R 156                          |                            | RS1/10S153J        |
| Q 651                          | Transistor                           | R 157                          |                            | RD1/4PU561J        |
| Q 652                          | Transistor                           | R 158                          |                            | RD1/4PU561J        |
| Q 653                          | Transistor                           | R 159                          |                            | RD1/4PU161J        |
| Q 654                          | Transistor                           | R 160                          |                            | RD1/4PU161J        |
| Q 655                          | Transistor                           | R 161                          |                            | RD1/4PU473J        |
| Q 656                          | Transistor                           | R 162                          |                            | RD1/4PU473J        |
| Q 657                          | Transistor                           | R 163                          |                            | RD1/4PU221J        |
| Q 658                          | Transistor                           | R 164                          |                            | RD1/4PU562J        |
| Q 659                          | Transistor                           | R 165                          |                            | RD1/4PU222J        |
| Q 951                          | Transistor                           | R 166                          |                            | RD1/4PU473J        |
| Q 952                          | Transistor                           | R 167                          |                            | RD1/4PU473J        |
| Q 953                          | Transistor                           | R 168                          | 0.22Ω                      | HZC0003            |
| Q 956                          | FET                                  | R 169                          | 0.22Ω                      | HZC0003            |
| Q 957                          | FET                                  | R 170                          | 0.22Ω                      | HZC0003            |
| Q 960                          | Transistor                           | R 171                          | 0.22Ω                      | HZC0003            |
| Q 961                          | Transistor                           | R 172                          |                            | RD1/2PM100J        |
| D 601                          | Diode                                | R 202                          |                            | RS1/10S103J        |
| D 602                          | Diode                                | R 203                          |                            | RS1/10S103J        |
| D 651                          | Diode                                | R 251                          |                            | RS1/10S222J        |
| D 652                          | Diode                                | R 252                          |                            | RS1/10S910J        |
| D 653                          | Diode                                | R 253                          |                            | RS1/10S511J        |
| D 654                          | LED                                  | R 254                          |                            | RS1/10S223J        |
| D 655                          | Diode                                | R 255                          |                            | RS1/10S153J        |
| D 656                          | Diode                                | R 256                          |                            | RS1/10S153J        |
| D 901                          | Diode                                | R 257                          |                            | RD1/4PU561J        |
|                                |                                      | R 258                          |                            | RD1/4PU561J        |
|                                |                                      | R 259                          |                            | RD1/4PU161J        |

| ====Circuit Symbol and No.====Part Name | Part No.      | ====Circuit Symbol and No.====Part Name | Part No.     |
|---|---------------|---|--------------|
| R 260                                   | RD1/4PU161J   | R 955                                   | RS1/10S473J  |
| R 261                                   | RD1/4PU473J   | R 956                                   | RS1/10S102J  |
| R 262                                   | RD1/4PU473J   | R 957                                   | RS1/10S153J  |
| R 263                                   | RD1/4PU221J   | R 958 (EW,ES model)                     | RS1/10S105J  |
| R 264                                   | RD1/4PU562J   | R 959                                   | RD1/4PU101J  |
| R 265                                   | RD1/4PU222J   | R 960                                   | RD1/4PU332J  |
| R 266                                   | RD1/4PU473J   | R 961                                   | RD1/4PU101J  |
| R 267                                   | RD1/4PU473J   | R 962                                   | RS1/10S332J  |
| R 268 0.22Ω                             | HZC0003       | R 963                                   | RS1/10S472J  |
| R 269 0.22Ω                             | HZC0003       | R 964                                   | RS1/10S472J  |
| R 270 0.22Ω                             | HZC0003       | R 965                                   | RS1/10S472J  |
| R 271 0.22Ω                             | HZC0003       | R 966                                   | RD1/4PU272J  |
| R 272                                   | RD1/2PM100J   | R 967                                   | RD1/4PU272J  |
| R 601                                   | RD1/4PU393J   | R 972                                   | RD1/2PM121J  |
| R 602                                   | RD1/4PU393J   | R 973                                   | RD1/2PM121J  |
| R 605                                   | RD1/4PU564J   | R 976                                   | RD1/2PM220J  |
| R 606                                   | RD1/4PU564J   | R 977                                   | RD1/2PM220J  |
| R 609                                   | RD1/2PM473J   | R 978                                   | RD1/2PM220J  |
| R 610                                   | RD1/2PM473J   | R 979                                   | RD1/2PM220J  |
| R 613                                   | RS1/10S472J   | R 980                                   | RD1/4PU100J  |
| R 614                                   | RS1/10S472J   | R 981                                   | RD1/4PU472J  |
| R 651                                   | RS1/10S104J   | R 982                                   | RD1/4PU472J  |
| R 652                                   | RS1/10S103J   | R 983                                   | RD1/4PU472J  |
| R 653                                   | RS1/10S472J   | R 984                                   | RD1/4PU563J  |
| R 654                                   | RD1/4PU392J   | R 985                                   | RD1/4PU104J  |
| R 655                                   | RS1/10S472J   | R 986                                   | RD1/4PU183J  |
| R 656                                   | RS1/10S222J   | CAPACITORS                              |              |
| R 657                                   | RS1/10S221J   | C 102                                   | CKSQYB274K16 |
| R 658                                   | RS1/10S102J   | C 103                                   | CKSQYB154K16 |
| R 659                                   | RS1/10S473J   | C 151                                   | CEAS101M10   |
| R 660                                   | RS1/10S103J   | C 152                                   | CCSOSL680J50 |
| R 661                                   | RS1/10S103J   | C 153                                   | CFTNA224J50  |
| R 662                                   | RS1/10S222J   | C 154                                   | CFTNA224J50  |
| R 663                                   | RS1/10S472J   | C 155                                   | CCSQCH220J50 |
| R 664                                   | RS1/10S392J   | C 156                                   | CCCCH330J100 |
| R 665                                   | RS1/10S392J   | C 157                                   | CCCCH330J100 |
| R 666                                   | RS1/10S103J   | C 158                                   | CCSQCH220J50 |
| R 667                                   | RS1/10S472J   | C 159                                   | CFTLA223J50  |
| R 668                                   | RS1/10S473J   | C 160                                   | CFTLA333J50  |
| R 669                                   | RS1/10S223J   | C 171                                   | CCSQCH101J50 |
| R 670                                   | RS1/10S223J   | C 172                                   | CCSQCH101J50 |
| R 671                                   | RS1/10S223J   | C 202                                   | CKSQYB274K16 |
| R 672                                   | RS1/10S472J   | C 203                                   | CKSQYB154K16 |
| R 673                                   | RD1/4PU101J   | C 251                                   | CEAS101M10   |
| R 674                                   | RD1/4PU221J   | C 252                                   | CCSOSL680J50 |
| R 675                                   | RD1/4PU152J   | C 253                                   | CFTNA224J50  |
| R 676                                   | RD1/2PM681J   | C 254                                   | CFTNA224J50  |
| R 801                                   | RS1/10S471J   | C 255                                   | CCSQCH220J50 |
| R 802                                   | RS1/10S471J   | C 256                                   | CCCCH330J100 |
| R 803                                   | RS1/10S223J   | C 257                                   | CCCCH330J100 |
| R 804                                   | RS1/10S223J   | C 258                                   | CCSQCH220J50 |
| R 805                                   | RN1/10SE2201D | C 259                                   | CFTLA223J50  |
| R 806                                   | RN1/10SE2201D | C 260                                   | CFTLA333J50  |
| R 807                                   | RN1/10SE2201D | C 271                                   | CCSQCH101J50 |
| R 808                                   | RN1/10SE2201D | C 272                                   | CCSQCH101J50 |
| R 809                                   | RS1/10S104J   | C 651                                   | HZC0001      |
| R 810                                   | RS1/10S104J   | C 652                                   | CKSQYB103K50 |
| R 811                                   | RN1/10SE2201D | C 653                                   | CKSQYB103K50 |
| R 812                                   | RN1/10SE2201D | C 654                                   | CKSQYB103K50 |
| R 813                                   | RN1/10SE2201D | C 655                                   | CEAS100M16   |
| R 814                                   | RN1/10SE2201D | C 656                                   | CEAS100M16   |
| R 831                                   | RS1/10S683J   | C 657                                   | CEAS470M16   |
| R 832                                   | RS1/10S683J   | C 659                                   | CKSQYB103K50 |
| R 953                                   | RD1/4PU392J   | C 660                                   | CEAS220M16   |
| R 954                                   | RD1/4PU101J   | C 661                                   | HZC0002      |
|   |               | C 662                                   | CKSQYB103K50 |
|   |               | C 663                                   | CQMA103J50   |

| ====Circuit Symbol and No.====Part Name | Part No.     | ====Circuit Symbol and No.====Part Name | Part No.     |
|---|--------------|---|--------------|
| C 801                                   | CKSQYB471K50 | C 956                                   | 3300μF/16V   |
| C 802                                   | CKSQYB471K50 | C 958                                   |              |
| C 803                                   | CEAS100M16   | C 959                                   |              |
| C 804                                   | CEAS100M16   | C 960                                   |              |
| C 805                                   | CKSQYB472K50 | C 961                                   |              |
| C 806                                   | CKSQYB472K50 | C 962                                   | 2200μF/35V   |
| C 807                                   | CCSQCH271J50 | C 963                                   | 2200μF/35V   |
| C 808                                   | CCSQCH271J50 | C 968                                   |              |
| C 809                                   | CCSQCH271J50 | C 969                                   |              |
| C 810                                   | CCSQCH271J50 | C 970                                   |              |
| C 811                                   | CKSQYB103K50 | C 971                                   |              |
| C 812                                   | CKSQYB103K50 | C 972                                   |              |
| C 831                                   | CEAS100M16   | C 973                                   |              |
| C 832                                   | CEAS100M16   | C 974                                   |              |
| C 901                                   | CFTNA224J50  | C 975                                   |              |
| C 951                                   | CEAS100M16   | C 976                                   |              |
| C 952                                   | CEAS221M10   |   |              |
| C 953                                   | CQMA102J50   |   |              |
| C 954                                   | CEAS2R2M50   |   |              |
| C 955                                   | CEAS100M16   |   |              |
|   |              |   | HZC0008      |
|   |              |   | CQMA472J50   |
|   |              |   | CQMA472J50   |
|   |              |   | CQMA102J50   |
|   |              |   | CQMA102J50   |
|   |              |   | HZC0007      |
|   |              |   | HZC0007      |
|   |              |   | CEAS101M35   |
|   |              |   | CEAS101M35   |
|   |              |   | CEAS100M50   |
|   |              |   | CKSQYB473K50 |
|   |              |   | CKSQYB473K50 |
|   |              |   | CEAS470M16   |
|   |              |   | CEAS470M16   |
|   |              |   | CFTNA564J50  |

## 6. ADJUSTMENT

There is no information to be shown in this chapter.



## 7. GENERAL INFORMATION

### 7.1 DISASSEMBLY

#### ● Removing the Case and the Panel (Fig.1)

- ➔ 1 Remove the three screws.
- ➔ 2 Remove the two screws.
- ➔ 3 Remove the two screws and then remove the Case.
- ➔ 4 Remove the six screws and then remove the Panel.

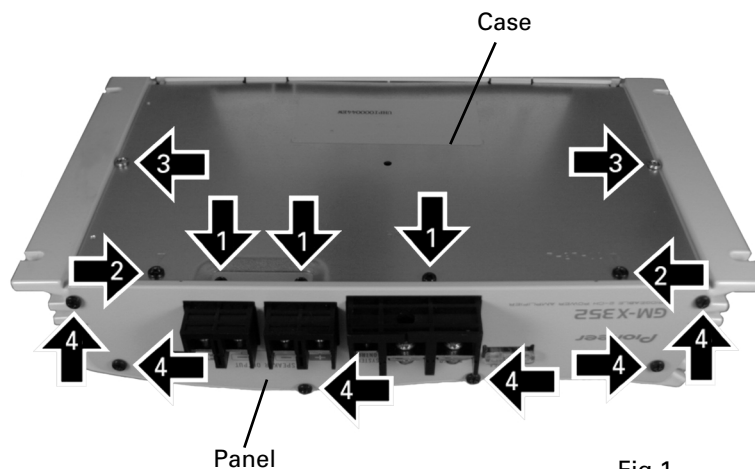


Fig.1

#### ● Removing the Amp Unit (Fig.2)

- ➔ 1 Remove the eleven screws.
- ➔ 2 Remove the screw.
- ➔ 3 Remove the nine screws and then remove the Amp Unit.

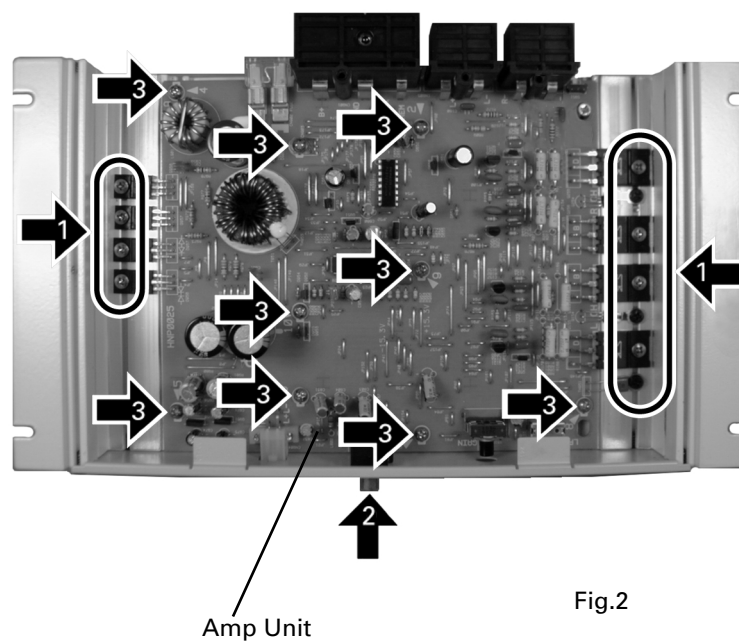
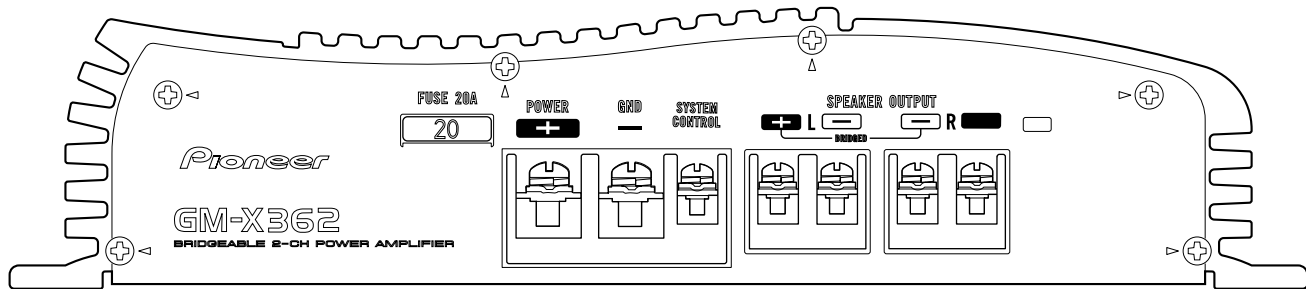
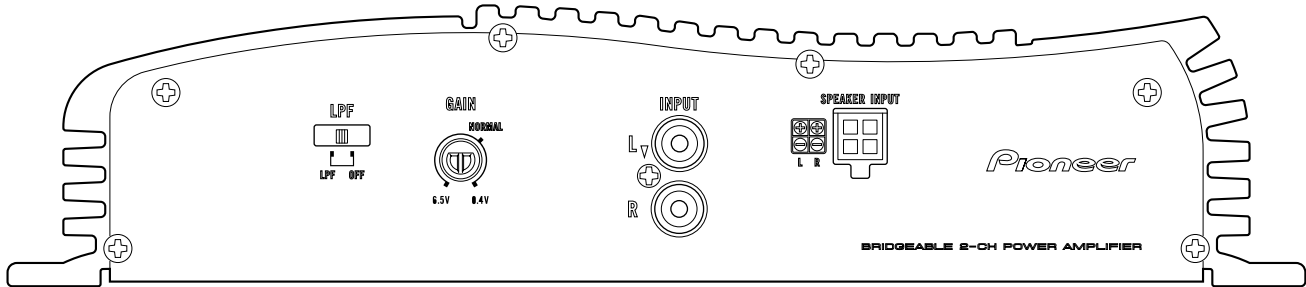


Fig.2

## 8. OPERATIONS AND SPECIFICATIONS

### 8.1 OPERATIONS

● GM-X362/XH/EW



### Gain Control

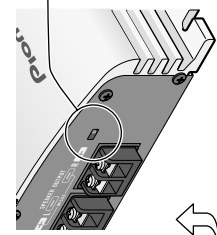
If the sound level is too low, even when the volume of the car stereo used along with this power amplifier is turned up, turn gain control on the front of the power amplifier clockwise. If the sound distorts when the volume is turned up, turn the gain control counter-clockwise.

- When using with an RCA equipped car stereo (standard output of 500 mV), set to the NORMAL position. When using with an RCA equipped Pioneer car stereo with max. output of 4 V or more, adjust level to match the car stereo output level.

- If you hear too much noise when using the speaker input terminals, turn the gain control counter-clockwise.

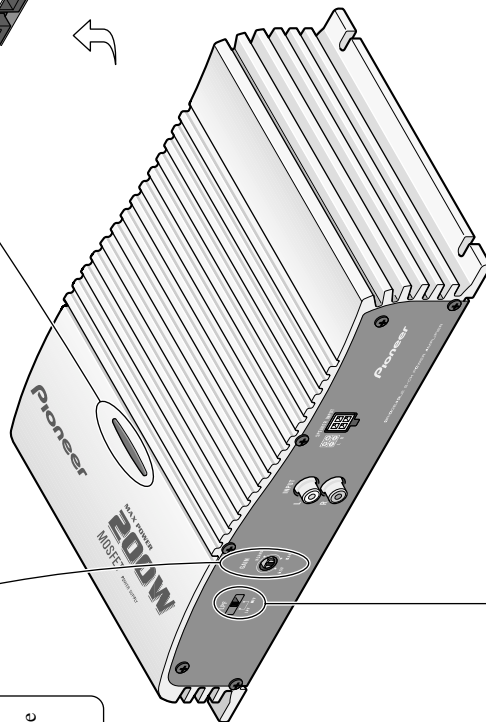
### Power Indicator

The power indicator lights when the power is switched on.



### BFC (Beat Frequency Control) Switch

If you hear a beat while listening to an MW/LW broadcast with your car stereo, change the BFC switch using a small standard tip screwdriver.

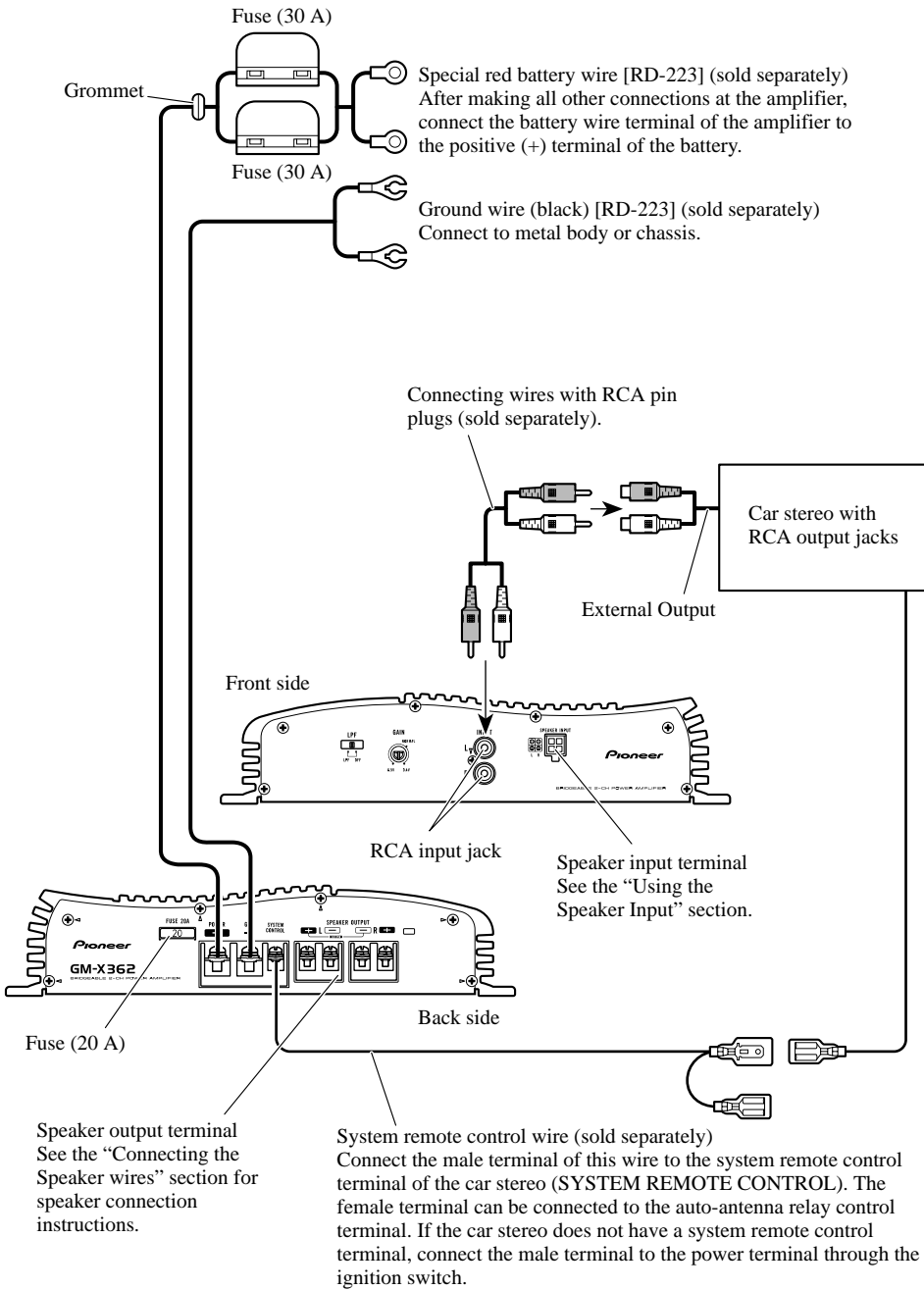


### LPF (Low-Pass Filter) Select Switch

Set the LPF select switch as follows according to the type of speaker that is connected to the speaker output connector and the car stereo system:

| LPF Select Switch | Audio frequency range to be output | Speaker Type | Remarks              |
|-------------------|------------------------------------|--------------|----------------------|
| LPF (left)        | Very Low Frequency range           | Subwoofer    | Connect a subwoofer. |
| OFF (right)       | Full range                         | Full range   |                      |

**Connection Diagram**



## 8.2 SPECIFICATIONS

### ● GM-X362/XH/UC

|                                     |  |
|-------------------------------------|--|
| Power source .....                  | 14.4 V DC (10.8 — 15.1 V allowable)  |
| Grounding system .....              | Negative type  |
| Current consumption .....           | 11.3 A (at continuous power, 4 $\Omega$ )  |
| Average current drawn* .....        | 3.8 A (4 $\Omega$ for two channels)<br>5.9 A (4 $\Omega$ for one channel)  |
| Fuse .....                          | 20 A   |
| Dimensions .....                    | 279 (W) $\times$ 61 (H) $\times$ 157 (D) mm<br>[11 (W) $\times$ 2-3/8 (H) $\times$ 6-1/8 (D) in]   |
| Weight .....                        | 2.6 kg (5.7 lbs) (Leads for wiring not included)   |
| Maximum power output .....          | 80 W $\times$ 2 / 200 W $\times$ 1   |
| Continuous power output .....       | 40 W $\times$ 2 (at 14.4 V, 4 $\Omega$ , 20 — 20,000 Hz, 0.08% THD)<br>100 W $\times$ 1 (at 14.4 V, 4 $\Omega$ , 20 — 20,000 Hz, 0.8% THD)<br>50 W $\times$ 2 (at 14.4 V, 2 $\Omega$ , 20 — 20,000 Hz, 0.8% THD) |
| Load impedance .....                | 4 $\Omega$ (2 — 8 $\Omega$ allowable)<br>(Bridge connection: 4 — 8 $\Omega$ allowable)   |
| Frequency response .....            | 10 — 50,000 Hz (+0 dB, -1 dB)  |
| Signal-to-noise ratio .....         | 100 dB (IHF-A network)   |
| Distortion .....                    | 0.008% (10 W, 1 kHz)   |
| Separation .....                    | 60 dB (1 kHz)  |
| Low pass filter .....               | Cut off frequency: 80 Hz<br>Cut off slope: -12 dB/oct  |
| Maximum input level/impedance ..... | RCA: 6.5 V/22 k $\Omega$ (0.4 — 6.5 V)<br>Speaker: 26 V/40 k $\Omega$ (1.6 — 26 V)   |

#### Note:

- Specifications and the design are subject to possible modification without notice due to improvements.

#### \*Average current drawn

- The average current drawn is nearly the maximum current drawn by this unit when an audio signal is input. Use this value when working out total current drawn by multiple power amplifiers.

### ● GM-X262/XH/UC

|                                     |  |
|-------------------------------------|--|
| Power source .....                  | 14.4 V DC (10.8 — 15.1 V allowable)  |
| Grounding system .....              | Negative type  |
| Current consumption .....           | 11.3 A (at continuous power, 4 $\Omega$ )  |
| Average current drawn* .....        | 3.8 A (4 $\Omega$ for two channels)<br>5.9 A (4 $\Omega$ for one channel)  |
| Fuse .....                          | 20 A   |
| Dimensions .....                    | 279 (W) $\times$ 61 (H) $\times$ 157 (D) mm<br>[11 (W) $\times$ 2-3/8 (H) $\times$ 6-1/8 (D) in]   |
| Weight .....                        | 2.6 kg (5.7 lbs) (Leads for wiring not included)   |
| Maximum power output .....          | 80 W $\times$ 2 / 200 W $\times$ 1   |
| Continuous power output .....       | 40 W $\times$ 2 (at 14.4 V, 4 $\Omega$ , 20 — 20,000 Hz, 0.08% THD)<br>100 W $\times$ 1 (at 14.4 V, 4 $\Omega$ , 20 — 20,000 Hz, 0.8% THD)<br>50 W $\times$ 2 (at 14.4 V, 2 $\Omega$ , 20 — 20,000 Hz, 0.8% THD) |
| Load impedance .....                | 4 $\Omega$ (2 — 8 $\Omega$ allowable)<br>(Bridge connection: 4 — 8 $\Omega$ allowable)   |
| Frequency response .....            | 10 — 50,000 Hz (+0 dB, -1 dB)  |
| Signal-to-noise ratio .....         | 100 dB (IHF-A network)   |
| Distortion .....                    | 0.008% (10 W, 1 kHz)   |
| Separation .....                    | 60 dB (1 kHz)  |
| Low pass filter .....               | Cut off frequency: 80 Hz<br>Cut off slope: -12 dB/oct  |
| Maximum input level/impedance ..... | RCA: 6.5 V/22 k $\Omega$ (0.4 — 6.5 V)<br>Speaker: 26 V/40 k $\Omega$ (1.6 — 26 V)   |

#### Note:

- Specifications and the design are subject to possible modification without notice due to improvements.

#### \*Average current drawn

- The average current drawn is nearly the maximum current drawn by this unit when an audio signal is input. Use this value when working out total current drawn by multiple power amplifiers.

## ● GM-X362/XH/EW

|                                     |  |
|-------------------------------------|--|
| Power source .....                  | 14.4 V DC (10.8 — 15.1 V allowable)                                |
| Grounding system .....              | Negative type  |
| Current consumption .....           | 11.3 A (at continuous power, 4 Ω)                                  |
| Average current drawn* .....        | 3.8 A (4 Ω for two channels)<br>5.9 A (4 Ω for one channel)        |
| Fuse .....                          | 20 A   |
| Dimensions .....                    | 279 (W) × 61 (H) × 157 (D) mm                                      |
| Weight .....                        | 2.6 kg (Leads for wiring not included)                             |
| Maximum power output .....          | 80 W × 2 / 200 W × 1   |
| Continuous power output .....       | 60 W × 2 / 150 W × 1 (DIN45324, +B=14.4 V)                         |
| Load impedance .....                | 4 Ω (2 — 8 Ω allowable)<br>(Bridge connection: 4 — 8 Ω allowable)  |
| Frequency response .....            | 10 — 50,000 Hz (+0 dB, -1 dB)                                      |
| Signal-to-noise ratio .....         | 100 dB (IEC-A network)   |
| Distortion .....                    | 0.008 % (10 W, 1 kHz)  |
| Separation .....                    | 60 dB (1 kHz)  |
| Low pass filter .....               | Cut off frequency: 80 Hz<br>Cut off slope: -12 dB/oct              |
| Maximum input level/impedance ..... | RCA: 6.5 V/22 kΩ (0.4 — 6.5 V)<br>Speaker: 26 V/40 kΩ (1.6 — 26 V) |

### Note:

- Specifications and the design are subject to possible modification without notice due to improvements.

### \*Average current drawn

- The average current drawn is nearly the maximum current drawn by this unit when an audio signal is input. Use this value when working out total current drawn by multiple power amplifiers.

## ● GM-X362/XH/ES

|                                     |   |
|-------------------------------------|---|
| Power source .....                  | 14.4 V DC (10.8 — 15.1 V allowable)   |
| Grounding system .....              | Negative type   |
| Current consumption .....           | 11.3 A (at continuous power, 4 Ω)   |
| Average current drawn* .....        | 3.8 A (4 Ω for two channels)<br>5.9 A (4 Ω for one channel)   |
| Fuse .....                          | 20 A  |
| Dimensions .....                    | 279 (W) × 61 (H) × 157 (D) mm   |
| Weight .....                        | 2.6 kg (Leads for wiring not included)  |
| Maximum power output .....          | 80 W × 2 / 200 W × 1  |
| Continuous power output .....       | 40 W × 2 (at 14.4 V, 4 Ω, 20 — 20,000 Hz, 0.08% THD)<br>100 W × 1 (at 14.4 V, 4 Ω, 20 — 20,000 Hz, 0.8% THD)<br>50 W × 2 (at 14.4 V, 2 Ω, 20 — 20,000 Hz, 0.8% THD) |
| Load impedance .....                | 4 Ω (2 — 8 Ω allowable)<br>(Bridge connection: 4 — 8 Ω allowable)   |
| Frequency response .....            | 10 — 50,000 Hz (+0 dB, -1 dB)   |
| Signal-to-noise ratio .....         | 100 dB (IEC-A network)  |
| Distortion .....                    | 0.008% (10 W, 1 kHz)  |
| Separation .....                    | 60 dB (1 kHz)   |
| Low pass filter .....               | Cut off frequency: 80 Hz<br>Cut off slope: -12 dB/oct   |
| Maximum input level/impedance ..... | RCA: 6.5 V/22 kΩ (0.4 — 6.5 V)<br>Speaker: 26 V/40 kΩ (1.6 — 26 V)  |

### Note:

- Specifications and the design are subject to possible modification without notice due to improvements.

### \*Average current drawn

- The average current drawn is nearly the maximum current drawn by this unit when an audio signal is input. Use this value when working out total current drawn by multiple power amplifiers.