STEREO AMPLIFIER
A-Z370

MODEL A-Z370 HAS FOLLOWING VERSIONS:

<table>
<thead>
<tr>
<th>Type</th>
<th>Power requirement</th>
<th>Export destination</th>
</tr>
</thead>
<tbody>
<tr>
<td>HE</td>
<td>AC220V, 240V(switchable) *</td>
<td>European continent</td>
</tr>
<tr>
<td>HB</td>
<td>AC220V, 240V(switchable) *</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>HEWZIW</td>
<td>AC220V, 240V(switchable) *</td>
<td>Germany and Italy</td>
</tr>
<tr>
<td>SD</td>
<td>AC110V, 120V-127V, 220V, 240V(switchable)</td>
<td>Kingdom of Saudi Arabia and general market</td>
</tr>
</tbody>
</table>

*: Change the primary wiring.

- This manual is applicable to the A-Z370/HE, HB and HEWZIW types.
- As to the HB and HEWZIW types, refer to page 37.
- As to the other types, refer to applicable service manuals.
- This product is a component of a system. As to the system composition, refer to the system manual.
- This product does not function properly when independent; to avoid malfunctions, be sure to connect it to the prescribed system component, otherwise damage may result.

CONTENTS

1. SPECIFICATIONS ........................................ 2
2. EXPLODED VIEWS, PACKING AND PARTS LIST .................. 3
3. P.C.B's PARTS LIST ........................................ 7

4. SCHEMATIC DIAGRAMS AND P.C.BOARD CONNECTION DIAGRAMS .................. 11
5. FOR HB AND HEWZIW TYPES .................................... 37
6. PANEL FACILITIES ........................................ 51

PIONEER ELECTRONIC CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan
PIONEER ELECTRONICS SERVICE INC. P.O. Box 1760, Long Beach, California 90801 U.S.A.
PIONEER ELECTRONICS OF CANADA, INC. 505 Cochran Drive, Markham, Ontario L3R 8E3 Canada
PIONEER ELECTRONIC [EUROPE] N.V. Keerbergaan 1, 2740 Beveren, Belgium
PIONEER ELECTRONICS AUSTRALIA PTY. LTD. 178-184 Boundary Road, Braeside, Victoria 3195, Australia TEL: [03] 580-9911
© PIONEER ELECTRONIC CORPORATION 1991
1. SPECIFICATIONS

Continuous Power Output (DIN) ....................... 60 W + 60 W
(1 kHz, T.H.D. 1 %, 8 Ω)
Music power (DIN) ..... 100 W + 100 W (1 kHz, T.H.D. 1 %, 8 Ω)
D/A converter section
  Signal-to-Noise Ratio ......................... More than 96 dB (EIAJ)
  Dynamic range ................................ More than 94 dB (EIAJ)
  Frequency range ................................. 25 Hz to 20 kHz
Total Harmonic Distortion (1 kHz, 30 W, 8 Ω)
  .................................................. No more than 0.06 %**
Input sensitivity
  PHONO (MM) ...................................... 2.5 mV
  VCR ............................................... 150 mV
  LD ................................................. 250 mV
Output level
  DAT, VCR ...................................... 150 mV
  MUTING ........................................ -∞

Power Supply/Miscellaneous
Power requirements ....................... a.c. 240 Volts ~, 50/60 Hz
Power consumption ..................................... 300 W
AC outlets switched (x 1) ................................ 50 W
Dimensions ................................ 360 (W) x 343 (D) x 135.5 (H) mm
Weight (without package) ......................... 8.2 kg

Accessories
Operating instructions .................. 1
Remote control unit ...................... 1
Dry cell batteries "AAA" (IEC R03/UM-4) .............. 1

** Measured By Audio Spectrum Analyzer.
This P.C.B. connection diagram is viewed from the top side.
This P.C.B. connection diagram is viewed from the foil side.
4.3 DISPLAY(AWZ3360) assembly
5. FOR HB AND HEWZII TYPES

NOTES:
- Parts marked by "*" are not always kept in stock. Their delivery time may be longer than usual or they may not be available at all.
- Parts marked by "**" are sometimes supplied. Check with your nearest sales representative for more information.
- Parts marked by "***" are only available for some component parts. Send a request for quotation to your nearest sales representative for more information.
- Parts marked by "****" are not available. Send a request for quotation to your nearest sales representative for more information.

CONTRAST OF MISCELLANEOUS PARTS
The HB310/HB and HEWZII types are the same as the A330/MTI types with the exception of the following sections.

---

AF assembly (A629365)
The AF assembly (A629365) is the same as the AF assembly (A629460) with the exception of the following sections.

- Mark
- Symbol & Description
- Part No.
- Remarks

---

POWER assembly (A629129)
The POWER assembly (A629129) is the same as the POWER assembly (A629136) with the exception of the following sections.

- Mark
- Symbol & Description
- Part No.
- Remarks

---

SP TERMINAL assembly
The SP TERMINAL assembly (HEWZII type) is the same as the SP TERMINAL assembly (HB and HB type) with the exception of the following sections.

- Mark
- Symbol & Description
- Part No.
- Remarks

---

POWER VR assembly
The POWER VR assembly (HEWZII type) is the same as the POWER VR assembly (HB and HB type) with the exception of the following sections.

- Mark
- Symbol & Description
- Part No.
- Remarks

---

HEAD PHONE assembly
The HEAD PHONE assembly (HEWZII type) is the same as the HEAD PHONE assembly (HB and HB type) with the exception of the following sections.

- Mark
- Symbol & Description
- Part No.
- Remarks

---

SUB TRANS assembly
The SUB TRANS assembly (HB type) is the same as the SUB TRANS assembly (HB and HB type) with the exception of the following sections.

- Mark
- Symbol & Description
- Part No.
- Remarks

---

MFC assembly
The MFC assembly (HEWZII type) is the same as the MFC assembly (HB and HB type) with the exception of the following sections.

- Mark
- Symbol & Description
- Part No.
- Remarks
6. PANEL FACILITIES

① POWER STANDBY/ON switch/indicator
This is the switch for electric power. When set to the ON position, power is supplied and the unit becomes operational.

② Remote sensor

③ LSS SET button
Use to operate the Listening Style Selector memory.

④ LSS MODE button
Use to recall the Listening Style Selector.

⑤ DIRECT MODE button
Use this when you want to pass sound quality adjustment circuitry and listen to a CD or DAT in the direct mode.

⑥ MUTING button/indicator
Use when you want to temporarily cut sound during playback. Press again to return to the previous volume level.

⑦ VOLUME control

⑧ PHONES jack
For stereo headphones.

⑨ SURROUND & STEREO WIDE button/indicator
By turning this button on, you can enjoy surround reproduction when rear speakers are used.

⑩ MIC (microphone) jack
This is a standard jack for connecting a microphone.

⑪ MIC LEVEL control
Used for adjusting the volume of microphone.

⑫ BALANCE control
Used for changing the balance between left and right channels. Usually set to the center position.

⑬ SPEAKERS button (A/B OR A + B)/indicator
When the SPEAKER MODE selector switch on the rear panel is set to the A/B (left), use this button to switch between sound from the rear speakers A only, and sound from speakers B only.

⑭ Input selector buttons/indicators

⑮ Speaker control

⑯ VOLUME control

⑰ PHONES jack
For stereo headphones.

⑱ SURROUND & STEREO WIDE button/indicator
By turning this button on, you can enjoy surround reproduction when rear speakers are used.

NOTE:
- When the SPEAKER MODE selector switch on the rear panel is set to the A/B (left), use this button to switch between sound from speakers A only, and sound from speakers B only.
- When the SPEAKER MODE selector switch is set to the A/A + B (right), use this button to switch between sound from speakers A only, and sound from both speakers A and B.

Refer to page 18 No.⑫ concerning SPEAKER MODE selector switch.

<table>
<thead>
<tr>
<th>Rear panel</th>
<th>SPEAKER MODE switch indicator off</th>
<th>SPEAKERS A/B/A + B</th>
</tr>
</thead>
<tbody>
<tr>
<td>A/B</td>
<td>A</td>
<td>A/B</td>
</tr>
<tr>
<td>A/A + B</td>
<td>A</td>
<td>A + B</td>
</tr>
</tbody>
</table>

NOTE:
If speakers A and B are not both connected, there will be no sound when the button is set for A + B.
**REAR PANEL FACILITIES**

1. **Ground terminal (GND)**
   Connect this to the ground terminal on the turntable (except for PL-Z470/PL-Z570).

2. **DIGITAL OUT (SAP) jack**
   Outputs digital signal taken from CD player optical input. A digital audio tape deck’s digital input jack (coaxial cable input) can be connected here. Consult with your dealer to see if it’s possible to connect your digital audio tape deck.

3. **DIGITAL IN jacks**
   A digital audio tape deck’s digital output jack (coaxial cable output) can be connected here. Consult with your dealer to see if it’s possible to connect your digital audio tape deck.

4. **CD player’s OPTICAL OUT jack**
   Connect a CD player’s OPTICAL OUT jack.

5. **SURROUND SPEAKERS jacks**
   Connect the Surround speaker systems. **NOTE:** Connect a speaker system having a nominal impedance of 16 Ω or more.

6. **SPEAKERS terminals and SPEAKER MODE selector switch**
   A: Connect to a first set of speakers
   B: Connect to a second set of speakers
   Set the selector switch to the A/B (left), and use the SPEAKERS button on the front panel to switch between sound from speakers A only, and sound from speakers B only. If you set the selector switch to A/A + B (right), use the SPEAKERS button on the front panel to switch between sound from speakers A only, and sound from both speakers A and B. **NOTE:** Connect a speaker system having a nominal impedance ranging from 8 Ω to 16 Ω.

7. **AC OUTLET (SWITCHED 50 W MAX)**
   Power supplied through this outlet is turned on and off by the amplifier’s POWER switch. Total electrical power consumption of connected equipment should not exceed 50 W. PD-Z570T or PD-Z970M CD player power cord can be connected. **NOTE:** Do not connect appliances with high power consumption such as heaters, iron, or television sets to the AC OUTLET in order to avoid overheating or fire risk. This can cause the amplifier to malfunction.

8. **TURNABLE (DC 12 V OUTPUT) jack**
   This jack supplies power to the turntable. (PL-Z470/PL-Z570)

9. **PHONO input jacks**
   Connect the output cord of the turntable to these jacks.

10. **DAT REC OUT jacks**
    Connect to audio input jacks of the digital audio tape deck.

11. **VCR jacks**
    IN: Connect to audio output jacks of VCR.
    OUT: Connect to audio input jacks of VCR.

12. **LD input jacks**
    Connect to audio output jacks of the LD player.

13. **TUNER jack**
    Connect the tuner cord here.

14. **CD jack**
    Connect the compact disc player (PD-Z570T/PD-Z970M) cord here.

15. **CASSETTE TAPE DECK jack**
    Connect the cassette cord here.

16. **GRAPHIC EQUALIZER jack**
    Connect the graphic equalizer cord here.

17. **Power cord**
    Connect this to the AC wall socket.