

**AC-AUDIO**

User Manual

# **H1004 / H1008**

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High-Power Headphones Distribution Amplifier



[www.ac-audio.com](http://www.ac-audio.com)

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**H1008**



**H1004**

# 1. OVERVIEW

Welcome to purchase the equipment by AC-AUDIO!

With the H series, you have acquired a high-end headphone amplifier. Both H units were developed with the most demanding applications in mind: professional recording, radio and television studios, as well as CD/digital sound production. They were developed as benchmark units for judging mix-down quality as well as distribution amplifiers for flexible playback applications in studio environments.

## **Balanced inputs and outputs**

The equipment features electronically servo-balanced inputs and outputs. The servo function automatically recognizes when unbalanced pins are assigned. It internally modifies the nominal signal level, thus preventing any occurrence of signal level difference between inputs and outputs (6 dB correction).

# 2. BEFORE YOU START

## **1) Utilizing the User Manual**

This user manual has been written in such a way to enable you an overview over the control elements of the unit and offers at the same time detailed information about possible applications. To facilitate quick look-ups, control elements have been described in groups depending on their function. Should you need detailed information about specific topics not covered in this manual, please visit our website at [www.AC-AUDIO.com](http://www.AC-AUDIO.com). For example, additional information about power amps and effects processors is found there.

The following user manual is intended to familiarize you with the unit's control elements, so that you can master all the functions. After having thoroughly read the user manual, store it at a safe place for future reference.

- Be sure to read the Safety Precautions before using the product.
- Refer to the INSTALLATION when installing your product.
- You can easily find any information you are looking for by the CONTENTS.
- Using the SPECIFICATIONS, you can easily find the detailed parameters of the product.
- Please read this manual fully before installing or operating the unit.

### **ATTENTION!**

We would like to bring your attention to the fact that extremely loud sound levels may damage your hearing as well as your headphones. Please lower all OUTPUT LEVEL knobs leftwards before powering up the unit.

## **2) Safety Precautions**

All the safety and operation instructions should be read before the device is operated.

### **Retain Instructions:**

The safety and operating instructions should be retained for future reference.

### **Heed Warnings:**

All warnings on the device and in the operating instructions should be adhered to.

### **Follow instructions:**

All operation and user instructions should be followed.

### **Water and Moisture:**

The device should not be used near water (e.g. near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, near a swimming pool etc.).

### **Ventilation:**

The device should be situated so that its location or position does not interfere with its proper ventilation. For example, the device should not be placed on a bed, sofa, rug, or similar surface that may block the ventilation openings, or used in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.

### **Heat:**

The device should be situated away from heat sources such as radiators, heat registers, stoves, or other devices (including amplifiers) that produce heat.

### **Power Source:**

The device should only be connected to a power supply of the type described in the operating instructions or on the device.

Before plugging the unit into a power socket, please make sure you have selected the correct voltage:

The fuse compartment near the power plug socket contains three triangular markings. Two of these triangles are opposite one another. The voltage indicated adjacent to these markings is the voltage to which your unit has been set up, and can be altered by rotating the fuse compartment by 180°. ATTENTION: This does not apply to export models that were for example manufactured only for use with 120 V!

If you alter the unit's voltage, you must change the fuses accordingly. The correct value of the fuses needed can be found in the chapter "TECHNICAL DATA".

Faulty fuses must be replaced with fuses of appropriate rating without exception! The correct value of the fuses needed can be found in the chapter "TECHNICAL DATA".

Power is delivered via the cable enclosed with the unit. All required safety precautions have been adhered to.

Please make sure that the unit is grounded at all times.

For your own protection, you should never tamper with the grounding of the cable or the unit itself.

**Grounding or Polarization:**

This device must be grounded.

**Power Cords:**

Power cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, sockets, outlets and the point where they exit from the device.

**Cleaning:**

The device should be cleaned only as recommended by the manufacturer.

**Non-use Periods:**

The power cord of the device should be unplugged from the outlet when left unused for a long period of time.

**Debris and Liquid Entry:**

Debris and/or liquids should be kept from entering the enclosure through openings.

**Damage Requiring Service:**

The device should be serviced by qualified service personnel when:

The power cord or the plug has been damaged; or Debris or liquid has entered the device; or the device has been exposed to rain; or the device does not appear to operate normally or exhibits a marked change in performance; or the device has been dropped, or the enclosure damaged.

**Servicing:**

The user should not attempt to service the device beyond that which is described in

the operating instructions. All other servicing should be referred to qualified service personnel.

The equipment was carefully packed at the assembly plant to assure secure transport. Should the condition of the cardboard box suggest that damage may have taken place, please inspect the unit immediately and look for physical indications of damage.

Damaged units should NEVER be sent directly to us. Please inform the dealer from whom you acquired the unit immediately as well as the transportation company from which you took delivery of the unit. Otherwise, all claims for replacement/repair may be rendered invalid.

## **3. INSTALLATION**

This chapter contains descriptions of various controls of your equipment. All controls and connections are discussed in detail. Additionally, useful advice about their possible applications is also given.

### **1) Front panel**

The DIRECT IN socket is used to feed in additional stereo signals. In the case of the equipment, the signal brought in via the DIRECT IN input has the same priority as the MAIN signal.

The MASTER LEVEL control governs the level of the input signal that is fed through the MAIN INPUT connectors on the back or through the DIRECT IN connector.

The equipment features two level controls (MAIN IN 1/MAIN IN 2) so that two separately controllable input signals can be connected. You select which of the two signals is monitored by using the IN 1/IN 2 switches in the respective channel sections.

The 4-digit INPUT LEVEL display informs you about the input level signal and displays it in the range between -30 and 0 dB. When the unit is powered on, the ON LED lights up. You achieve the best input signal quality when its level is at the highest level just before it starts distorting. The clip LED should light up only during the highest signal peaks.

The PHONES OUT connector is connected in parallel to the output connectors located on the rear, presenting an easily accessible additional monitor option for individual channels. This function is particularly helpful when the unit is permanently installed in a rack.

The ST./2-CH. switch is used to alternate whether input signals are audible in stereo (not depressed: ST.) or in mono (depressed: 2-CH.) The HA8000 features a MONO switch instead of a ST./2-CH. switch .

The POWER switch powers the POWERPLAY PRO on. You should always make sure that the POWER switch is in the "Off" position when initially connecting the unit to the mains.

Please take note: Merely switching the unit off does not mean that it is fully disconnected from the mains. When not using the unit for prolonged periods of time, please unplug the unit's power cord from the power outlet.

## **2) Rear panel**

Power is supplied via an IEC connector. The matching cable is provided with the unit.

FUSE COMPARTMENT / VOLTAGE SELECTION. Before connecting the unit to a power outlet, please make sure that the selected voltage matches your local voltage. When replacing fuses, please make sure that you always use fuses of the same type. Some units allow for switching between 230 V und 120 V. Please note: when connecting a unit intended for the European market to a 120 V power outlet, you must also replace the factory fuse with a higher-value fuse.

The DIRECT IN connects various input signals for each amp section, located on the rear. If a signal is fed into this connector, both MAIN IN signals will be muted.

These are the MAIN OUT connectors of the equipment. The respective jacks and XLR connectors are wired in parallel. Via these connectors, you can link as many headphone amps as desired to allow for connection of additional headphones.

The MAIN IN connectors of the equipment come as balanced 1/4" TRS and XLR connectors.

The equipment features only 1/4" TRS connectors for MAIN INPUT 1 and MAIN INPUT 2.



# 4. GETTING STARTED

## 1) Using the MAIN IN connectors

Connect a program source with the MAIN IN connectors located on the rear, and connect your headphones to an amp section of your choice. In the case of the equipment, MAIN IN controls 1 and 2 regulate the input level of two separate input signals. The individual OUTPUT LEVEL controls are used for adjusting the desired channel volume only.

## 2) Connecting multiple headphones

You can connect multiple headphones to an amp simultaneously, provided that the minimal output load impedance of the amp does not fall below 8 Ohms. In the case of the equipment, the minimal output load impedance is 100 Ohms per amp.

When connecting two headphones, individual headphones should not have impedance lower than 16 Ohms; when connecting three headphones, the impedance of individual headphones should not fall below 200 Ohms.

Even though going under the above mentioned minimal impedances does not cause defective operation, you may experience a quality loss audible as lowered performance and distortion.

## 3) Audio connections

Please assure that the unit is installed and operated only by people with an understanding of the unit's functions. During and after the installation always make sure that those handling the unit are themselves properly grounded. Failure to do so may cause undesirable or faulty operation through electrostatic discharge.

## 5. SERVICE

If you want to require service of the equipment, you must take it or post it to an authorized dealer with a description of the fault. When claiming service under warranty, proof of purchase date must be included with the equipment for repair. Please retain the original packing for possible future use, and ensure that the unit is protected suitably during transit. The manufacturer cannot accept responsibility for damage caused during transportation.

The equipment is supported by a limited warranty for a period of one year from the date of purchase. During this period, any faults due to defective materials or workmanship will be repaired free of charge. The warranty excludes damage caused by deliberate or accidental misuse, tampering, operation on the incorrect mains voltage, or without the correct type and value of fuse fitted. It is the user's responsibility to ensure fitness for purpose in any particular application.

The warranty is limited to the original purchase price of the equipment, and excludes any consequential damage or loss.

Please record the following details, and retain proof of purchase:

Serial Number.....  
Region / Country.....  
Date purchased.....  
Dealer.....  
User name.....  
Tel.....  
Address.....