





# HPA-2 *Dual Input Headphone Amplifier*

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#### INTRODUCTION

Thank you for your purchase of the Broadcast Tools, Inc., **HPA-2**, **Dual input head-phone amplifier.** We're confident this product will give you many years of dependable service. This manual is intended to give you all the information needed to install and operate the unit.

#### SAFETY INFORMATION

Only qualified personnel should install Broadcast Tools® products. Incorrect or inappropriate use and/or installation could result in a hazardous condition.

Broadcast Tools, Inc., is unable to support NON-Broadcast Tools software, hardware or NON-Broadcast Tools computer/hardware/software problems. If you experience these problems, please research your hardware/software instruction manuals or contact the manufacturers technical support department.

#### WHO TO CONTACT FOR HELP

If you have any questions regarding your product or you need assistance, please contact your distributor from whom you purchased this equipment.

If you would like more information about Broadcast Tools® products, you may reach us at:

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Broadcast Tools® Products, as with any electronic device, can fail without warning. Do not use this product in applications where a life threatening condition could result due to failure.



This manual should be read thoroughly before installation and operation.

#### **WEBSITE:**

Visit our web site for product updates and additional information.



INTRODUCTION

#### PRODUCT DESCRIPTION

The HPA-2 is a dual input headphone amplifier. The HPA-2 is equipped with two independent balanced Hi-Z input channels feeding a hefty stereo amplifier. Each input can be selected with the front panel selector switch. Front panel ?" and 3.5mm T/R/S jacks are provided, along with a front panel level control. The selected input is adjustable with the front panel master level control, while each input is equipped with separate rear panel trimmers. Additional features include; front panel power LED and surge protected internal bi-polar 12-vdc-power supply affording superior headroom and high definition audio. The HPA-2 may be desktop mounted, under counter or with the optional HR-1/MP or HR-1/MP-XLR mounting plates, which may be turret or counter-top mounted.

#### **INSTALLATION**

The HPA-2 is supplied with four number-six screw holes for desktop or under the counter mounting. If custom mounting is required, we offer the optional HR-1/MP mounting plate and the HR-1/MP-XLR with a pre-cut hole to accommodate most female XLR connectors.

**NOTE:** Mechanical drawings for the HPA-2 and mounting plates are available for download from the Broadcast Tools® web site.

**NOTE:** For proper installation, follow the silkscreen labels on the rear panel.

Connections to the HPA-2 are via plug-in euroblock screw terminals. To wire the plug, remove the plug from the header; remove about 1/8" of insulation from each wire. Insert the wire into the desired terminal and then tighten the screw. Be sure no bare wires are exposed. Reinstall the plug.

Connect your source equipment to the Left / Right input - and + terminals on the plug-in euroblock screw terminal for each input. For monaural sources, tie the left and right inputs together, observing correct phasing. NOTE: If the source feeding the HPA-2 is unbalanced, install a jumper between L- or R- terminal and G (ground).

When installation is completed, plug the supplied 12vac wall transformer into the rear panel power plug labeled "12VAC". The front panel "PWR" led should be illuminated.

#### **OPERATION**

The front panel headphone level control should be set to a safe listening level. Only one set of headphones should be used. Select each input and adjust the appropriate rear panel level trimmer to match the differing input levels.

When the input selector switch is in the "OUT" position, input ONE is selected. With the switch in the "IN" position, input TWO is selected.

**NOTE:** 8 ohm and/or monaural headphones should not be used with this products.

#### **WEBSITE:**

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#### **SPECIFICATIONS**

Input Level -15 to +4 dBu. MIL+24dBu, balanced, bridging 10k W.

Frequency Response 20Hz to 20 kHz; +/- .0.25dB

Signal/Noise Ratio >85 dB nominal, weighted 10 to 22Khz.

Distortion 0.005% THD, nominal.

IMD (250/7kHz) 0.005% IMD, nominal.

Headphone Output 24 to 600 W headphones. 200mw nominal.

Operation Control Front panel - Headphone level control. 3.5mm (1/8") and

1/4" stereo headphone jacks.

Rear panel - Stereo input trimmers for each stereo input.

Status Front Panel – Input selected LED indicator.

Interfacing Plug-in euroblock screw terminal.

Power 12 volt AC only. 12vac@500ma transformer supplied.

Mechanical 3.70" x 1.55" x 3.50" (WHD) / Weight: 1.0 lbs

**NOTE:** Mechanical drawings for the HPA-2 mounting plates are available for download from the Broadcast Tools® web site.

#### LIMITED WARRANTY

The term "Buyer" as used in this document refers to and includes both (but only) (a) any person or entity who acquires such an item for the purpose of resale to others (i.e., a dealer or distributor of an item), and (b) the first person or entity who acquires such an item for such person's or entity's own use.

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