



HPA-4X2

4-CHANNEL STEREO REFERENCE

# HEADPHONE AMPLIFIER



POLSEN™

PRODUCT  
MANUAL



4-CHANNEL  
STEREO REFERENCE  
HEADPHONE AMPLIFIER  
HPA-4X2

## THANK YOU FOR CHOOSING POLSEN.

The Polsen HPA-4X2 Stereo Reference Headphone Amplifier is a compact and powerful headphone amplifier that can withstand the rigors of professional use. It is ideal for studio recording, stage monitoring, or any application where multiple headphone connections are needed.

The four ¼-inch TRS stereo headphone outputs each have their own volume control, and each channel has an individual amplifier circuit that offers maximized output levels with low and minimal distortion. Wide frequency response guarantees full-range stereo sound, and there is no loss of signal when all four headphones are connected. The ¼-inch TRS and stereo RCA inputs accommodate a wide variety of input sources. The mini plug cable used with a mini plug adapter lets the HPA-4X2 use a handheld media player or smartphone as an input source, and the mini plug adapters allow monitoring with earbuds.



## Among the benefits you'll enjoy:

- Durable and compact. Easy to use.
- High output level for precise monitoring at high volume
- Low noise circuitry
- ¼-inch TRS and RCA inputs
- Four headphone jacks each with independent volume controls
- Wide frequency response (20 Hz-20 kHz) for full-range stereo sound
- Stereo/mono switch provides options for monitoring playback
- Link feature to daisy chain additional headphone amplifiers.

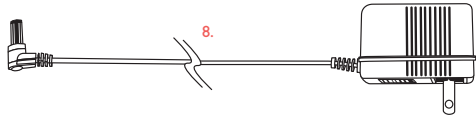
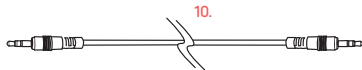
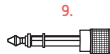
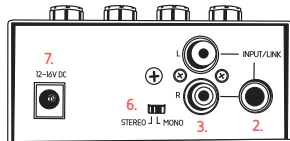
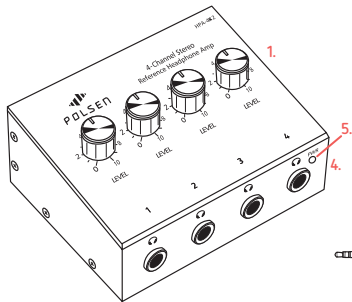
## PRECAUTIONS

- Please read and follow these instructions and keep this manual in a safe place.
- Exposure to high sound levels can cause permanent hearing loss. Avoid listening at high volumes for extended periods of time.
- Use only the correct, recommended voltage.
- Use only the power adapter included with this product.
- Clean this product with only a soft, dry cloth.
- Make sure that this product is intact and that there are no missing parts.
- All photos are for illustrative purposes only.



## OVERVIEW

1. Volume knobs
2. 1/4" TRS stereo input jack
3. RCA inputs
4. 1/4" TRS stereo headphone output jacks
5. Power LED
6. Stereo/mono switch
7. DC 12V power input
8. DC 12V/150mA power supply
9. 1/8" (3.5 mm) stereo mini to 1/4" TRS stereo adapter (4)
10. Stereo mini male to stereo mini male cable



## OPERATING INSTRUCTIONS

### Connecting an input device

Plug the 12V DC power cord into the power supply of the HPA-4X2. The LED will light up.

### For line level output like a mixer or audio amplifier:

*Cable needed: ¼" TRS stereo male to ¼" TRS stereo male cable (not included).*

Connect the output of your mixer or amplifier to the ¼" TRS stereo input jack on the back panel of the HPA-4X2.

### For audio from a computer, stereo, or DVD component:

*Cable needed: 2 RCA male to 2 RCA male audio cable (not included).*

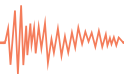
Connect left and right RCA plugs from the output jacks of your component or sound card to the RCA input jacks on the back panel of the HPA-4X2.



## For audio from a media player or smartphone:

*Cable and adapter needed: Stereo mini male to stereo mini male cable (included)  
Stereo mini to ¼" TRS stereo adapter (included)*

Connect the mini plug cable to the output of your device. Attach the ¼" TRS -mini plug adapter to the other mini plug, and insert it into the ¼" input jack on the back panel of the HPA-4X2.



## Monitoring

Plug the 1/4" TRS stereo plug of your headphones into the headphone output jack on the front panel of the HPA-4X2. Adjust the volume of each headphone with the volume knobs.

If your headphones have a 3.5 mm mini plug, use the 1/4" TRS - mini plug adapter to connect to the headphone outputs of the HPA-4X2.

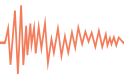
**⚠ Caution:** Do not plug a 1/4" TS mono plug into the headphone outputs. Doing so may permanently damage the HPA-4X2. Use only 1/4" TRS stereo plugs.



## Stereo/Mono switch:

The stereo/mono switch on the rear panel of the HPA-4X2 should be set to the STEREO position for ordinary use. This switch allows you to set the HPA-4X2 for stereo or mono operation.

In recording scenarios when content is recorded on two discreet channels, setting the switch to MONO combines the sound of both channels in your headphones. (Note: keeping the switch in the STEREO position will play each channel separately in either side of your headphones.)





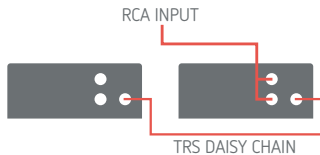
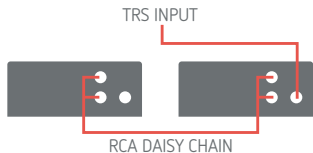
## Using the Link Feature:

The HPA-4X2 circuitry allows daisy chaining headphone amplifiers in case more than four headphone connections are needed. To link the HPA-4X2 to another headphone amplifier do the following:

If using a ¼" stereo TRS for input: Connect the RCA plugs on the back panel of the HPA-4X2 to the input of the daisy-chained headphone amplifier.

If using the RCA jacks for input: Connect the ¼" TRS stereo jack of the HPA-4X2 to the inputs of the daisy-chained headphone amplifier.

**Note:** Depending on what headphone amplifier you are connecting to, you may need a 2 RCA male to ¼" TRS stereo Y-cable or Y-adapter to do this.



## SPECIFICATIONS

**NUMBER OF CHANNELS** 4

**INPUT CONNECTIONS** 1 x ¼" TRS phono master input 1 x L,R RCA

**OUTPUT CONNECTORS** 4 x ¼" TRS phono headphone outputs

**MAXIMUM INPUT LEVEL** +14 dBV

**MAXIMUM OUTPUT LEVEL** 22 dB per channel

**INPUT IMPEDANCE** 1k  $\Omega$  (unbalanced)

**OUTPUT IMPEDANCE** minimum 10  $\Omega$  per channel

**SIGNAL-TO-NOISE RATIO** >98 dB

**TOTAL HARMONIC DISTORTION (THD)** <0.007%

**POWER** 12V DC, 150mA

**WEIGHT** 10.4 oz. (295 g)

**DIMENSIONS** 3" x 3.75" x 1.2" (76 x 95 x 30 mm)



## TROUBLESHOOTING

Problem	Solution
No sound	<p data-bbox="553 288 1316 334">Make sure headphones are completely plugged in.</p> <p data-bbox="553 381 1205 427">Make sure the volume levels are turned up.</p> <p data-bbox="553 474 1333 521">Make sure the amplifier is receiving an input signal.</p>
LED light is not lit	<p data-bbox="553 543 2026 640">Make sure the 12V DC adapter is plugged into the outlet, and the connector is completely inserted into the power supply on the back panel of the HPA-4X2.</p>
Noise or hum	<p data-bbox="553 660 1373 707">The noise might be coming from a faulty input device.</p> <p data-bbox="553 754 1318 800">Check if there's a faulty ground in the signal chain.</p>



## ONE-YEAR LIMITED WARRANTY

This Polsen product is warranted to the original purchaser to be free from defects in materials and workmanship under normal consumer use for a period of one (1) year from the original purchase date or thirty (30) days after replacement, whichever occurs later. The warranty provider's responsibility with respect to this limited warranty shall be limited solely to repair or replacement, at the provider's discretion, of any product that fails during normal use of this product in its intended manner and in its intended environment. Inoperability of the product or part(s) shall be determined by the warranty provider. If the product has been discontinued, the warranty provider reserves the right to replace it with a model of equivalent quality and function.

This warranty does not cover damage or defect caused by misuse, neglect, accident, alteration, abuse, improper installation or maintenance. EXCEPT AS PROVIDED HEREIN, THE WARRANTY PROVIDER MAKES NEITHER ANY EXPRESS WARRANTIES NOR ANY IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. This warranty provides you with specific legal rights, and you may also have additional rights that vary from state to state.

To obtain warranty coverage, contact the Polsen Customer Service Department to obtain a return merchandise authorization ("RMA") number, and return the defective product to Polsen along with the RMA number and proof of purchase. Shipment of the defective product is at the purchaser's own risk and expense.

For more information or to arrange service, visit [www.polsenaudio.com](http://www.polsenaudio.com) or call Customer Service at 212-594-2353.

Product warranty provided by the Gradus Group.

[www.gradusgroup.com](http://www.gradusgroup.com)

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