



ADA 2.2 Passive Adapter Operation Manual v1.0

Product Description

The Panphonics ADA 2.2 Passive Adapter is designed to be used with Panphonics Audio Elements. It is optimised to drive the reactive load of the electrostatic elements. In addition, the adapter produces the required DC bias voltage.

Technical Description

Panphonics passive adapter transforms the voltage supplied by a conventional audio amplifier to a higher level with ratio 1:10. It also generates the bias voltage needed directly from the audio signal. This eliminates the need for an external voltage supply.

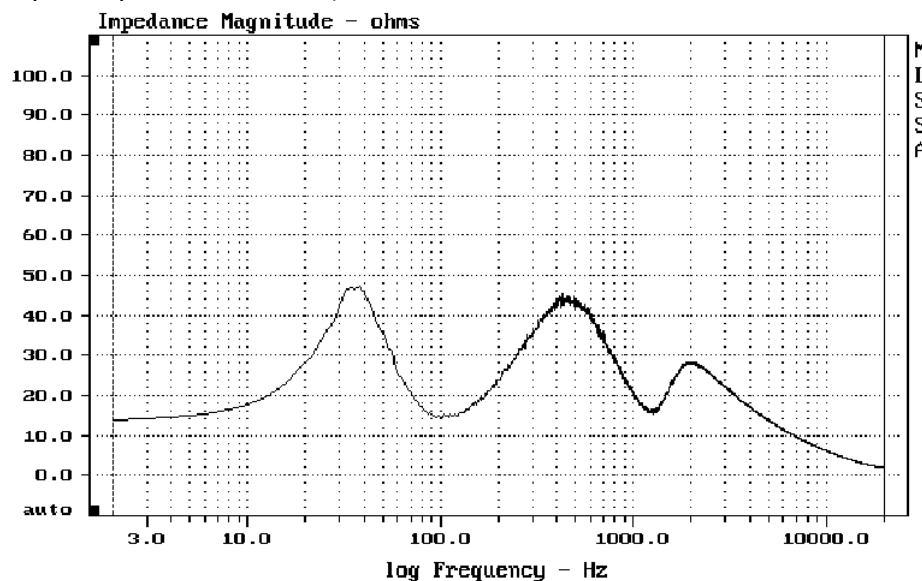
Electrical properties

Maximum input power: 50 W

Input audio voltage: nominal 20 V rms, maximum 50 V p-p

Input connector (audio IN): two speaker push terminals (+ and -)

Input impedance of ADA, measured for version 2.1:



Output frequency range: 100 Hz – 20 kHz (high pass filter at 100 Hz, 12 dB/octave)

Output power: 0 - 40 W depending on the audio signal frequency

Maximum output voltage 500 V p-p

Output connector: 9-pin D sub

pin 3: BIAS voltage -320 V DC, max. 20 mA

pin 6: AUDIO positive AC

pin 9: AUDIO negative AC

Audio output overdrive (clip) indicator led (red)

Physical dimensions

36 x 178 x 122 (length x width x height, mm)

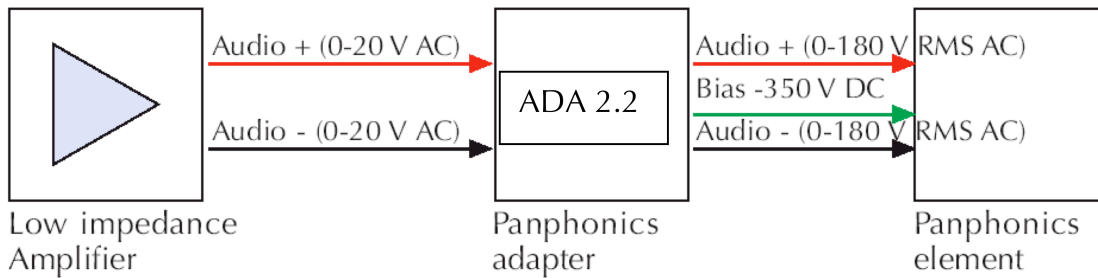
Weight: 975 g

Customs codes

HS-code 850431, CN-code 8504.31.80



Using the ADA Passive Adapter



The adapter is intended for indoor usage only, IP 34.
Usage temperature: 0 - 70 degrees Celsius.
Maximum relative humidity: 70 %.

Input connectors

Input audio cables are connected from your amplifier's loudspeaker output connectors to the two push terminals.

Output connector

The Panphonics Audio Element or Sound Shower loudspeaker unit should be connected to the 9-pin D type connector. Pin 3 has high voltage DC bias, pins 6 and 9 have high voltage AC signal.



IMPORTANT SAFETY INFORMATION

1. The Panphonics ADA 2.2 adapter is designed to be used with supplied power source and Panphonics Audio Elements only.
2. The adapter output and attached loudspeaker elements have high voltage. Every caution must be taken at all times when handling the system. Read all documentation before operating your equipment.
3. Follow all instructions.
4. Do not remove the cover. No user serviceable parts inside.
5. Do not operate the unit on a surface or in an environment which may impede the normal flow of air around the unit.
6. Do not use the unit near high heat producing devices.
7. Do not drive the input with a signal level greater than that required to drive the equipment to full output.
8. Do not spill water or other liquids into or on the unit.
9. **EQUIPMENT SHOULD BE INSTALLED AND SERVICED BY A SKILLED PERSON ONLY.**
10. Always fix the loudspeaker securely so that it cannot fall on anyone.
11. The product label is located on the adapter cover.

For further information or any questions, please contact Panphonics customer service:

Panphonics Oy
+358 9 8193 8560

info@panphonics.fi
www.panphonics.com



TERMS OF WARRANTY

Panphonics Oy warrants to the original purchaser that this Panphonics Oy's product (the "Product") will be free from defects in materials, design or workmanship, on the following terms and conditions:

Panphonics Oy's Audio Elements have been tested at the place of manufacture in accordance with the quality control of Panphonics Oy. Each notice of defects in the Product will be compared to the quality control record of the said Product. This Limited Warranty does not include deviations in audio performance characteristics of the Product if the performance characteristics entered into the quality control record have been correct and the purchaser cannot provide positive proof to the contrary, for example, inadequate transportation procedures. Panphonics Oy's products are sensitive to mechanical and environmental damage.

1) The period of warranty will be twelve (12) months from the date the original purchaser took possession of the Product, or should have taken possession of the Product if the receipt of the Product was delayed due to a cause attributable to the purchaser. In case the original purchaser sells or otherwise assigns the Product to a new owner/user, the period of warranty will continue unaltered until the end of the original period of warranty.

2) During the period of warranty Panphonics Oy or its authorized maintenance service will either repair the defective Product or replace it with a new Product, at Panphonics Oy's option. Panphonics Oy will return the repaired Product or deliver a new Product to the purchaser in working order. All replaced parts and equipment will become the property of Panphonics Oy.

3) This Limited Warranty does include mechanical defects of the Product and significant deviations between technical data and performance characteristics of the Product.

4) The repaired or replaced Product will not be given extended or additional period of warranty.

5) This Limited Warranty does not include defects caused by normal wear and tear. In addition, this Limited Warranty will not be valid if:

i) The defect was due to

- a. The use of the Product either contrary to instructions or otherwise negligently;
- b. The Product being exposed to moisture, steam, extreme temperature or environment, or rapid changes in such, or corrosion or oxidation;
- c. The Product being altered, connected to another product, opened or repaired without authorization or the Product being repaired with spare parts not approved by Panphonics Oy;
- d. The Product being misused or installed incorrectly; or
- e. The Product having been in on an accident or been exposed to the elements or spilled over with food or liquid, or been affected by chemical substances or other events beyond the scope of influence of Panphonics Oy, including but without limitation to labour dispute and every other event Panphonics Oy cannot reasonably be expected to overcome, for example fire or other natural catastrophe, war, rebellion, seizure, monetary exchange control, mandatory legislation, orders of authorities, refusal of export license, scarcity of transportation, general scarcity, restrictions in the use of power, and defects and delays of subcontractor's delivery caused by the above-mentioned causes unless the damage has been direct consequence of a defect in material or design or workmanship;

ii) The purchaser has not informed Panphonics Oy or its authorized maintenance service about the defect within thirty (30) days from the occurrence of the defect during the period of warranty;

iii) The Product has not been returned to Panphonics Oy or its authorized maintenance service within thirty (30) days from the occurrence of the defect during the period of warranty

iv) The serial number of the Product has been transferred, removed or damaged, or any number has been altered or is impossible to read;

v) The defect was caused by the malfunction of an electronic appliance not provided by Panphonics Oy;

vi) The defect was caused as a consequence of the Product being used with an accessory, which was not manufactured, approved or provided by Panphonics Oy, or the Product was connected to such accessory, or the Product was used for other purposes than instructed, or the Product has been connected to such electronic system, which does not operate customarily compared to the normal use of the Product;

vii) The defect was caused as a consequence of an acoustic or electric overloading of the Audio Element.

6) In order to be able to invoke this Limited Warranty, the purchaser must provide either i) readable and unaltered original sales receipt/warranty card, which clearly sets out the name and address of the seller, the date and place of the purchase, the type of the Product and serial number, or alternatively ii) readable and unaltered original sales receipt, which brings out the same information if produced to the seller/supplier of the Product.

7) The purchaser's rights against Panphonics Oy based on defects or defective functions of the Product are limited to this Limited Warranty. This Limited Warranty will supersede all other oral, written, statutory (unless mandatory), contractual and other warranties and liabilities. In no event will Panphonics Oy be liable for unforeseen, incidental, consequential or indirect damages or expenses. Should the purchaser be a company or other legal person, Panphonics Oy will not be liable for direct damages or expenses. Unless contrary to mandatory provisions of law, the purchaser will be finally responsible for product liability.

8) Any amendment or supplement to the terms of this Limited Warranty is binding on Panphonics Oy only if Panphonics Oy has beforehand accepted in writing to the amendment or supplement.

The defective Product must be shipped to Panphonics Oy on the purchaser's expense.

Panphonics Oy
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