

Connect the AC adapter with the amplifier BEFORE plugging the AC adapter into an outlet to avoid spark generation!



# User and Installation Guide

## microFIDELITY<sub>TM</sub>

**Digital-to-Analog Converter/Amplifier** 

Model 250



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### **Unpacking:** Check that this package contains:

- one digital-analog converter/amplifier Model 250
- one large AC adapter (wallwart)

Thank you for purchasing this high-quality digital-to-analog converter with integrated audio power amplifier. This product contains advanced audio amplification technology which provides the audio quality of analog amplifiers at a superior signal-to-noise ratio and low audio distortion while at the same time offering extremely small size and high power efficiency.

The built-in optical audio receiver and digital-to-analog converter accepts linear uncompressed digital audio and supports all common sampling rates. This amplifier **DOES NOT** decode Dolby Digital nor other compressed audio formats. Therefore, be sure to set the digital audio output of your source to the linear PCM audio setting.

Connect the AC adapter with the amplifier BEFORE plugging the AC adapter into an outlet to avoid spark generation!

Connect power to the amplifier BEFORE connecting the speakers to the amplifier to avoid switch-on plop.



Listening to your speakers at high volume over extended periods of time can damage your hearing. Adjust the amplifier volume control to avoid excessive volume.



## **Preparing Your Audio Source**

This amplifier **DOES NOT** decode compressed audio formats such as Dolby Digital. Therefore, make sure to set your audio source to deliver uncompressed linear audio (also known as PCM or LPCM).

To do so, go to the audio interface settings menu of your source and select "PCM" or "LPCM".

If your source offers a setting for changing the sampling rate of the audio interface, set it to a sampling rate of less than 192 kHz for best reliability.

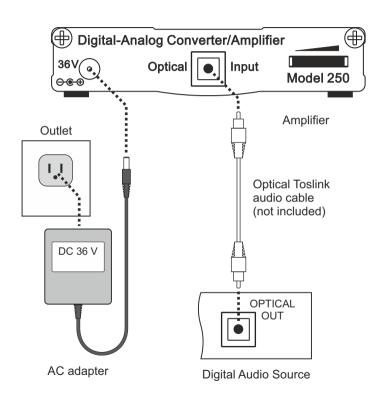
## **Setting Up The Amplifier**

In order to connect the amplifier to an optical audio source such as a TV, you need a digital optical audio cable. This cable is also called Toslink audio cable.

Connect the Toslink audio cable with the optical audio output of your source and the optical audio input of the amplifier. Make sure that both ends of the cable are firmly plugged in.

Next, connect the DC barrel of the wallwart with the DC power input of the amplifier. **Make sure the wallwart is not yet connected to mains power at this stage.** After the wallwart is firmly connected with the amplifier, plug the wallwart into a nearby power outlet.







## **Connecting Your Speakers**

Turn the amplifier volume to a fairly low setting. Next, connect your speakers with the amplifier via regular speaker cables. To connect the speaker cables to the amplifier, carefully press the spring-loaded clamps on the rear of the amplifier. Then insert each speaker cable and release the speaker clamp.

Pay attention to the polarity (color coding) of the speaker cable when making the connection to ensure that both speakers are in phase.

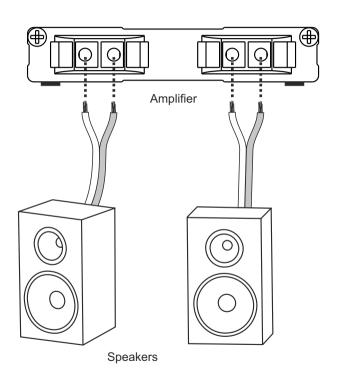


Make sure that the amplifier is powered up before connecting your speakers to avoid a plopping noise during startup of the amplifier which can potentially damage your speakers!

## **Setting The Speaker Volume**

To achieve the best dynamic range, turn the audio volume of your source to maximum and then set the desired speaker volume by using the amplifier volume control.







## **Technical Specifications**

Output power: 2 x 40 W (rms)

**Supported digital audio formats:** Linear PCM (uncompressed) - SPDIF

Supported sampling rates: 32 kHz - 192 kHz

Supported digital word width: 16 to 24 Bits

Dynamic range / signal-to-noise ratio: 112 dBA

Frequency response: 1 Hz - 20 kHz @ SR > 32 kHz

Total harmonic distortion (THD+N): 0.04 % @ 20 W, 1 kHz

Power efficiency: 93 %

Channel separation: 77 dB

Idle power consumption: < 3 W

**Dimensions:** 3-9/16 " (W) x 3-7/16 " (D) x 3/4 " (H)

91 mm (W) x 83 mm (D) x 21 mm (H)





# READ THESE SAFETY INSTRUCTIONS CAREFULLY AND HEED ALL WARNINGS IN THIS MANUAL.

#### POWER SOURCE

To avoid product malfunction, and to protect against electric shock, fire or personal injury, please observe the following:

- This product has been designed to work with 120-volt AC current using the supplied AC adapters. Connection to a line voltage other than that or use of non-compatible AC adapters may create a safety and fire hazard and may damage the product.
- Do not run power cords under carpets or place heavy objects on them.
- Damaged or deformed power cords are hazardous and should be replaced immediately by a qualified service technician.

#### LOCATION

- · Do not use this product outdoors or in cars.
- Do not place the amplifier in closed spaces, cover it, or otherwise block air ventilation.
- Do not place this product in direct sunlight, or near heat sources.
- Keep this product away from strong magnetic objects.

#### VOLUME CONTROL

- Do not turn up the volume while listening to a portion with very low level input or no audio signal to avoid damage to your speakers during a peak level audio portion.
- Turn the amplifier volume control to minimum prior to connecting or disconnecting the amplifier and prior to switching audio sources as this may cause loud clicks which can damage your speakers.



#### CARE

- Do not place any object containing water or other liquids on this product.
- Do not open the cabinet. Touching parts inside the cabinet could result in electric shock and damage to the product.

#### NON-USE PERIODS

 When the product is not being used for a long period of time, unplug the product.

#### **CLEANING**

- Unplug the product before cleaning.
- When the system gets dirty, wipe it with a clean, soft cloth. If necessary, wipe it with a soft cloth, slightly dampened with soapy water. Wipe dry immediately with a dry cloth.
- Never use benzene, aerosol cleaners, thinner, alcohol or any volatile cleaning agent.
- Do not use abrasive cleaners, as they may damage the finish.

#### **SERVICE**

- Do not open the cabinet of any components. Opening the cabinets may present a shock hazard, and any modification to this product will void your warranty.
- Do not attempt to service the unit yourself.
- Please refer any service to an authorized Amphony service center.

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# **Limited warranty**

#### WHAT YOUR WARRANTY COVERS

This warranty extends only to the original user of the equipment ("you", "your") and is limited to the purchase price of each part. Amphony and its affiliated companies ("we", "our", "us") warrant this Amplifier against defects in materials or workmanship as follows.

**LABOR:** For a period of ninety (90) days from the original date of purchase, if we determine that the equipment is defective subject to the limitations of this warranty, we will replace it at no charge for labor. We warrant any such work done against defects in materials or workmanship for the remaining portion of the original warranty period.

**PARTS:** For a period of one (1) year from the original date of purchase, we will supply, at no charge, new or rebuilt replacement parts in exchange for parts we determine are defective subject to the limitations of this warranty. We warrant any such replacement parts against defects in materials or workmanship for the remaining portion of the original warranty period. **Note:** "Parts" means items included in this package. It does *not* include other parts purchased separately.

#### WHAT YOUR WARRANTY DOES NOT COVER

This warranty *does not cover* consumer instruction, physical setup or adjustment of any consumer electronic equipment, or signal transmission problems.

This warranty *does not cover* cosmetic damage, damage due to the affixing of any attachment not provided with the product, loss of parts, connecting the product to any but the specified receptacles, lightning, electrical surges, fire, flood, or other acts of God, accident, misuse, abuse, repair or alteration by other than authorized service personnel, negligence, commercial or institutional use, or improper or neglected maintenance.

This warranty *does not cover* equipment sold AS IS or WITH ALL FAULTS, equipment removal or reinstallation, shipping damage if the equipment was not packed and shipped in the manner we prescribe, nor equipment purchased, serviced, or operated outside the contiguous United States of America.

#### **LEGAL LIMITATIONS**

REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS YOUR EXCLUSIVE REMEDY. WE SHALL NOT BE HELD LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESSED OR IMPLIED WARRANTY ON THIS EQUIPMENT, NOR FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF, OR INABILITY TO USE, THIS EQUIPMENT, UNDER NO CIRCUMSTANCES SHALL OUR LIABILITY, IF ANY, EXCEED THE PURCHASE PRICE PAID FOR THIS EQUIPMENT, EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW. EXCEPT AS PROVIDED HEREIN. WE MAKE NO WARRANTIES. EXPRESS OR IMPLIED. INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICUL AR PURPOSE. WE RESERVE THE RIGHT TO REFUSE TO HONOR THIS WARRANTY IF WE DETERMINE ANY OF THE ABOVE EXCEPTIONS TO HAVE CAUSED THIS EQUIPMENT NOT TO HAVE PERFORMED PROPERLY. THIS WARRANTY SHALL BE VOID IF ANY FACTORY-APPLIED IDENTIFICATION MARK. INCLUDING BUT NOT LIMITED TO SERIAL NUMBERS AND WARRANTY LABELS, HAS BEEN ALTERED OR REMOVED. THIS WARRANTY SHALL ALSO BE VOID IF THE TRANSMITTER OR AMPLIFIER HAVE BEEN OPENED BY AN UNAUTHORIZED PERSON.

This warranty gives you specific legal rights which may vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, or allow limitations on the duration of an implied warranty, so those limitations may not apply to you.