

daudio



DAC with volume control  
and source selection

User manual 29 September 2013

# daudio

## **Introduction**

The daudio DAC with Volume Control is designed to fulfil the wishes of customers who want the ultimate in detail and transparency from their daudio speaker. It contains a non oversampling digital / analogue conversion (DAC) which reproduces the music in its purest form without any form of signal processing and filtering. When listening it immediately will be noticed that nothing artificial is added to the signal, it sounds 'analogue', spacious and at the same time also very detailed. The DAC has an S/PDIF input which can be switched between optical and coaxial so that two digital sources can be connected. This could include the streaming audio from your music collection on hard disk, the digital output of your CD player or digital audio signal from your TV tuner.

This daudio unit also provides two analogue inputs to which the analogue outputs of your CD player, tuner or other analogue sources such as a phono preamp can be connected.

The volume control consists of a network of very low-noise precision resistors which are connected by a number of relays, controlled by a simple remote. The sliding contacts of the old volume controls are avoided (e.g. cracking potentiometers after several years). The daudio DAC volume control obtains even higher transparency than expensive step controllers. This way distortion artefacts, as generated by the widely used semiconductor ICs for volume control, are of no concern at all.

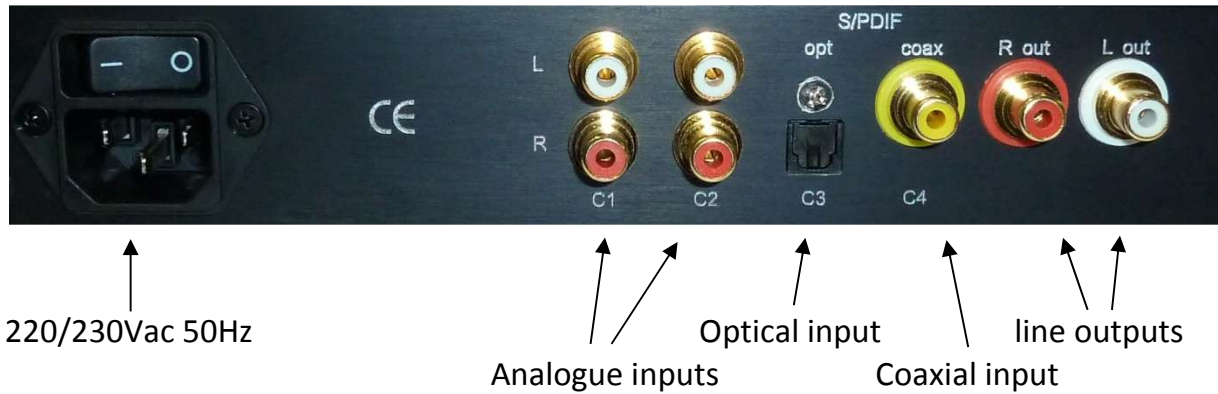
The only requirement to ensure optimal performance is to connect this unit to a high quality amplifier with good quality audio cables, preferably not more than 0.75 meters. This is because the volume control is a passive network without distortion generating active amplifier components.

## **Electrical safety**

On the inside of the housing of electronic equipment, high AC and DC voltages exist. The case should therefore not be opened. daudio accepts no responsibility for injury or damage caused by opening the housing or by connecting to a power supply voltage other than 220/230Vac 50Hz.

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## Connection and operation



Warning: Connect the daudio DAC with volume control completely before plugging the power cord into the socket!

### *Analogue inputs*

Connect the analogue outputs of your CD player, tuner or other analogue sources such as a phono preamp to the analogue inputs of the daudio unit to be able to use the volume control.

### *Optical input*

Apply a TOSLINK cable to use the optical input. This input can be used with sampling frequencies up to 96kHz.

### *Coaxial digital input*

Apply an RCA digital audio cable with a specific impedance of 75 ohms to use the coaxial input. This input accepts signals up to 192kHz.

### *Line outputs*

Connect the left and right line outputs to the respective inputs of your amp / preamp, preferably with a good quality audio cable of up to 0.75 meters maximum.

### *Remote control*

The daudio DAC with volume control comes with a OneForAll remote URC-6210, set to code 15322 for correct operation. Operation is very easy, with the power button the volume control is put on and off, with the buttons channel + and channel - you can successively select input channels C1 to C4 and the buttons volume + and volume - are used to set the volume higher and lower.

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## Technical specifications

### *General*

Inputs: 4 x stereo, 2 x analogue (C1 and C2) and 2x digital (C3 and C4)

Outputs: 1 x analogue stereo

Connectors: gold plated Neutrik © cinch

Output impedance: 11kOhm

Input impedance analogue inputs: > 44kOhm (value depending on volume)

Power supply: 220/230Vac 50Hz

Dimensions h x b x d: 50 x 236 x 290mm

### *Digital Analogue Conversion (DAC)*

Operating principal: non oversampling DAC, 4 DAC's per channel

Inputs: 1 x optical (C3), 1 x coaxial (C4)

Output level: 2 Vrms at full modulation

Slewing rate: 35V/μs

Frequency range: 1Hz 0dB to half sampling frequency -3dB (maximum 65kHz)

Distortion: 0,04% THD

Noise: -120dB / 16 bits and -125dB / 24 bits

Sampling frequency: optical 96kHz and coaxial 192kHz (maximum)

### *Volume control*

64 steps of 1dB

Channel imbalance: < 0,15dB

### *Remote control*

OneForAll URC-6210

daudio

van Keppelmarke 73

8016 GJ Zwolle