



Code 7750

coreOUT-A2

Analog Output Board

OVERVIEW

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Analog Input Board

coreOUT-A2 is an extension board for *labCORE*. Equipped with coreOUT-A2, *labCORE* becomes a high-performance audio analyzer. It provides two high-precision and low-noise analog output channels. Each output has an XLR and a BNC connection and provides either a balanced or an unbalanced signal.

Flexible settings for output level and impedance enable coreOUT-A2 to transmit and process every analog audio signal at the highest quality.

labCORE provides slots for two coreOUT-A2 boards.

KEY FEATURES

Two high-precision and low-noise analog outputs

XLR or BNC socket for each output

BNC transmits unbalanced signal or floating signal

Output gain between -10 dB and +18 dB

Adjustable output impedance

D/A conversion and signal post-conditioning on one board for highest possible signal quality

APPLICATIONS

High-performance audio analyzing of various broad-band output signals such as speech, music, or noise

Impedance measurements

DETAILS

DESCRIPTION

coreOUT-A2 extends *labCORE* with two high-precision and low-noise analog outputs. With a typical residual THD+N of -114 dB, it is ideal for high-performance audio analyzing. The light and compact design of *labCORE*, as well as its versatility, and quiet operation underline the benefit of *coreOUT-A2*.

Each output has two connections, a male XLR and a female BNC socket. Besides the unbalanced output signal, it is also possible to set the BNC output signal as floating balanced. LEDs on the front panel of *labCORE* indicate the currently active socket and its output level.

The output level range is adjustable to four different levels between -10 dB and +18 dB to optimize the operation range for arbitrary measurement scenarios. The output impedance is also adjustable to the measurement scenario, offering 10 Ω , 50 Ω , or 600 Ω . An on-board D/A converter transforms the signal to the analog domain, which is processed by a discrete on-board circuitry before it is directed to the desired output connection. *coreOUT-A2* is applicable for impedance measurements of connected devices. *labCORE* has two slots at the front panel for *coreOUT-A2* boards.

OPTIONS

Alternative to *coreBUS* if *labCORE* shall be extended only with the *coreOUT-A2* extension board:

- › *coreBUS* One (7711)
 - » *labCORE* I/O bus mainboard, supporting only one extension board

GENERAL REQUIREMENTS

Hardware

labCORE (Code 7700)

- › Modular multi-channel hardware platform

coreBUS (Code 7710)

- › *labCORE* I/O bus mainboard

Software

One of the following software applications

ACQUA (Code 6810)

- › Advanced Communication Quality Analysis
Software, full license version

RC-labCORE (Code 6984)

- › Remote configuration software for *labCORE*

VoCAS (Code 7970)

- › Voice Control Analysis System

SCOPE OF DELIVERY

coreOUT-A2(Code 7750)

- › Analog output board

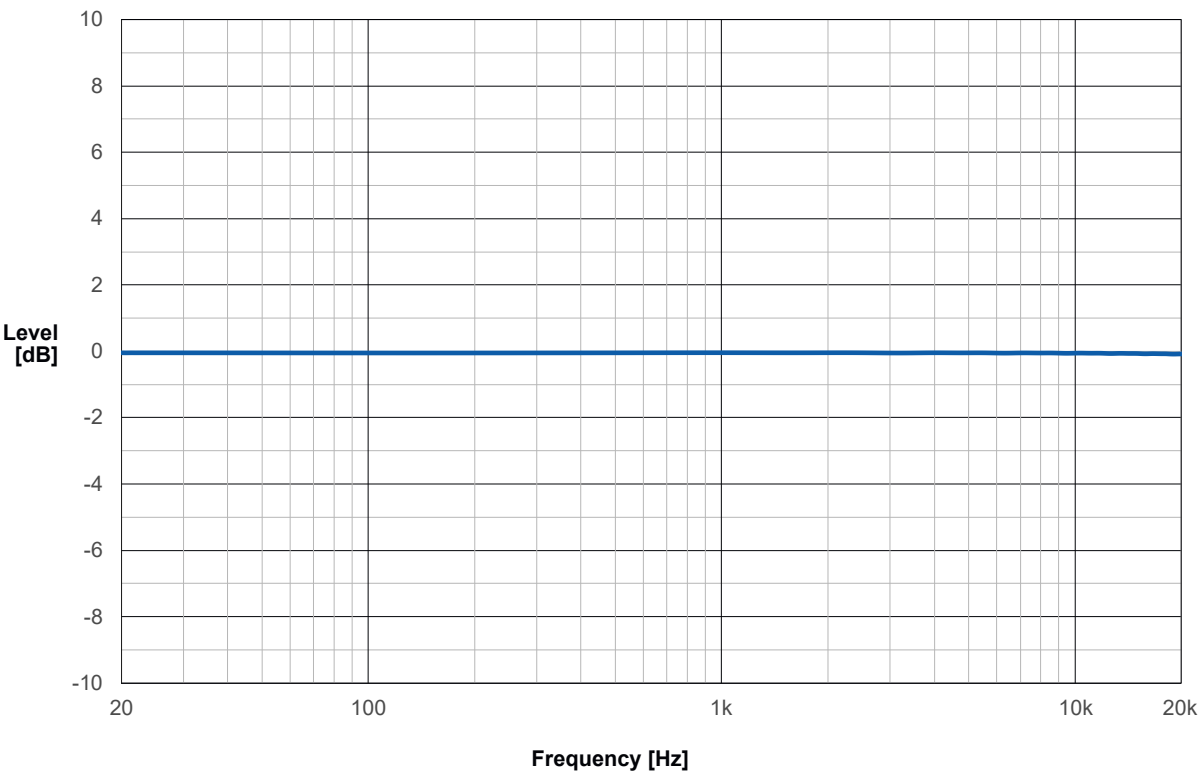
Initial equipping

- › *coreOUT-A2* is installed to *labCORE* during production

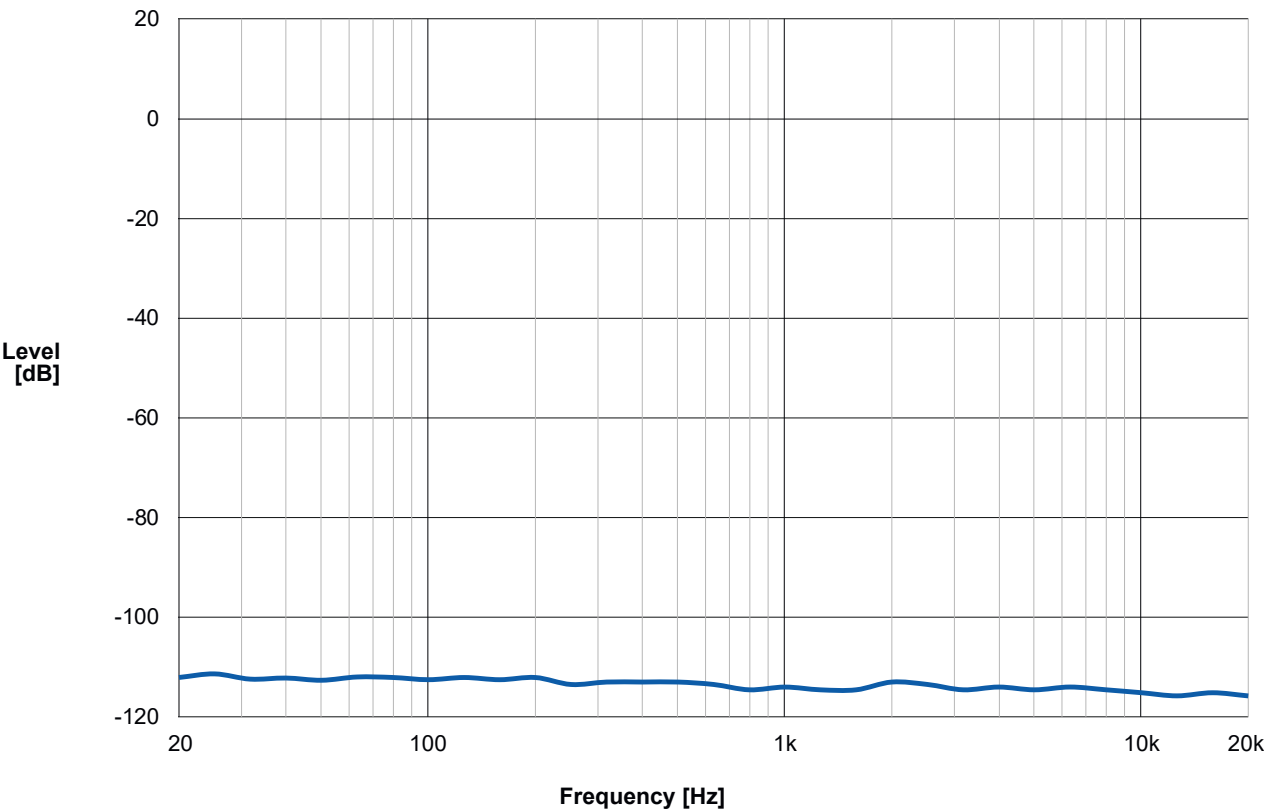
Retrofitting

- › Send in *labCORE* to HEAD acoustics for installation

Typical frequency response



Typical total harmonic distortion plus noise (THD+N)



TECHNICAL DATA

Channels	2
Connection	› BNC (unbalanced or floating) XLR (balanced)
Output range	-14.5 V–14.5 V
Output impedance	› 10 Ω ($\pm 0.1\%$) › 50 Ω ($\pm 0.1\%$) › 600 Ω ($\pm 0.1\%$)
Output range settings	-10 dBV, 0 dBV, +10 dBV, +18dBV)
Level accuracy	± 0.1 dB (1 kHz)
Flatness	› ± 0.02 dB (48 kHz sampling, 20 Hz–20000 Hz) › ± 0.10 dB (96 kHz sampling, 20 Hz–40000 Hz) › ± 0.18 dB (192 kHz sampling, 20 Hz–80000 Hz)
S/N	> 118 dB (1.0 V _{RMS} , 20 Hz–20000 Hz)
THD + N	< -114 dB (1.0 V _{RMS} , 1kHz)
Crosstalk	< -130 dB
Digital resolution	32 Bit
Sampling rates	48 kHz, 96 kHz, 192 kHz
Typical power consumption	5.5 W



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