

DATA SHEET



Code 7750

coreOUT-A2

Analog output board

OVERVIEW

coreOUT-A2

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coreOUT-A2 is an extension board for *lab*CORE. Equipped with coreOUT-A2, *lab*CORE 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 broadband output signals such as speech, music, or noise

Impedance measurements

DETAILS

DESCRIPTION

coreOUT-A2 extends *lab*CORE with two high-precision and lownoise 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 *lab*CORE, 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 *lab*CORE 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.

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 *lab*CORE
- 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 *lab*CORE to HEAD acoustics for installation

Typical frequency response



Frequency [Hz]

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 (± 0.1%) 50 Ω (±0.1%) 600 Ω (±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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