

Digital Audio Device (DAD) Interface BZ-5829

Uses

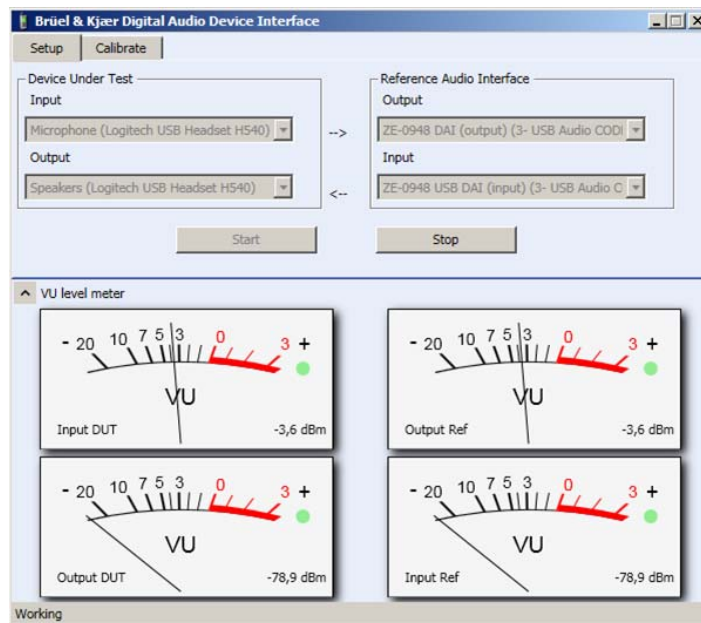
- Audio interface for testing of USB devices, for example, headphones, headsets and loudspeakers

Features

- Analogue input and output using USB Audio Interface ZE-0948
- Monitoring of digital input and output level
- Calibration of input and output paths

Benefits

- Easy to set up and use
- Allows accurate compensation for gain/attenuation of sound card



Description

The DAD Interface allows you to set up and test digital audio devices (such as headphones, speakers or microphones) that you connect to your PC using a USB connection. You can configure an input stream and/or an output stream for testing these devices using PULSE™ LabShop.

Please refer to the flow diagram provided in Fig. 1.

Input Stream

The Input stream refers to the signal path that starts at the input to the Device Under Test (DUT)* and finishes at the input to the Audio Analyzer (for example, a PULSE front end). In between, the signal is routed through the Digital Audio Interface (which comprises DAD Interface BZ-5829 and USB Audio Interface ZE-0948, which is recommended by Brüel & Kjær).

Output Stream

The Output Stream refers to the signal path that starts at the output of the Audio Analyzer and finishes at the output of the DUT. In between, the signal is routed through the Digital Audio Interface (similar to the Input Stream, but in the opposite direction).

Calibration

On the GUI, a separate tab page allows you to check the sensitivity of the DUT and to determine the gain/attenuation of the USB Audio Interface.

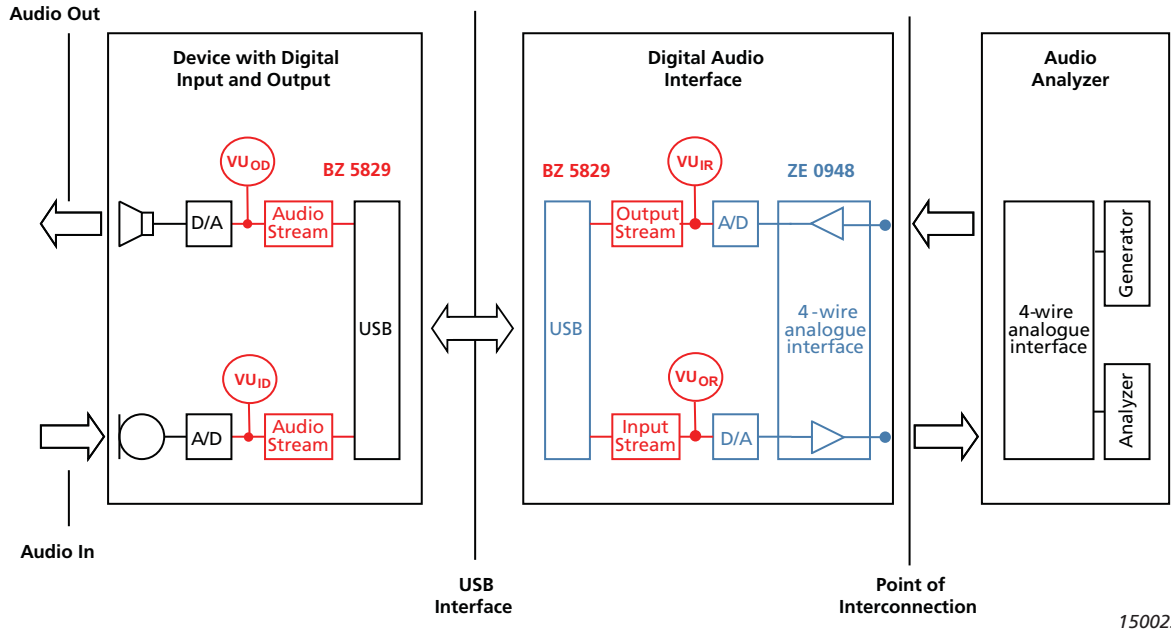
Calibration uses a built-in generator to output a 1025 Hz sinusoidal signal to the USB Audio Interface at a level of 2.2 dBm0. The built-in generator is also used for checking the sensitivity of the DUT – also in this situation a sinusoidal signal of 1025 Hz and a level of 2.2 dBm0 is generated.

VU Level Meter

The four level meters provide “analogue” displays of the input and output of the USB Audio Interface, and the DUT, with small digital readouts in dBm (see main figure and Fig. 1).

* Labelled 'Device with digital input and output' in Fig. 1.

Fig. 1 DAD Interface flow diagram



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Specifications – DAD Interface

SYSTEM TOPOLOGY

- VoIP interface on same PC as PULSE LabShop and PULSE Reflex
- Can be used with a PC that uses Microsoft® Windows® 7

CONTROL OF THE INTERFACE

- Terminate connection between system and device

DELAY

- Max. 500 ms

DROPOUTS

- None

CALIBRATION

- Calibration signal 1025 Hz at 2.2 dBm0

SIGNAL ROUTINGS

- Output calibration: Calibration signal to analogue out
- Input calibration: Analogue in to analogue out
- Test mode: Analogue in to VoIP out and VoIP in to analogue out

Ordering Information

BZ-5829	Interface Simulator for Electroacoustic Testing of Digital Audio Devices	M1-5829-X*	Software Maintenance and Support Agreement for BZ-5829
ZE-0948	USB Audio Interface		

* X = license model either N for node-locked or F for floating

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