AUDIOWERKZEUG CoDI-MK3

USB Audio Interface by Roger Schult

Author and photos: Peter Kaminski

AUDIOWERKZEUG is a brand of “roger schult audio lab” from Erftstadt for a special series of audio products in a specific form factor and size. Roger Schult is well known for his analog audio technology, and with this new brand, he now also offers digital audio products. The CoDI-MK3 presented here is the first product in the series. It is a USB audio interface with two analog, balanced outputs. We tested the latest version, the MK3.

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It is not delivered in a plastic bag, but in an environmentally friendly fabric bag. A short USB-A cable is also included in the scope of delivery. It should also be mentioned that a 19" rack system with one height unit is available as an option with the rack4AUDIOWERKZEUG. Up to four AUDIOWERKZEUG modules, including those to be released in the future, can be mounted in this rack in three different positions.

Technical Data

The converter is very compact with a size of 100 x 42 x 100mm and a weight 475 grams. It is powered via the USB interface. A red LED serves as an operating indicator. No drivers need to be installed, as the device operates in Class Compliant Mode. It can be used on computers running Windows XP (i.e., not only 64-bit but also 32-bit operating systems), Mac OS 10.4, and Linux from Kernel 2.6. The CoDI-MK3 needs only 76mA with a load of 600 ohms at the outputs.

The CoDI D/A converter supports sample rates of 32, 44.1 and 48kHz, and conversion is performed in 16bits. An important feature is that the USB interface is galvanically isolated. This is not the case with every A/D converter - and this technical design prevents interference. The two XLR outputs are electronically

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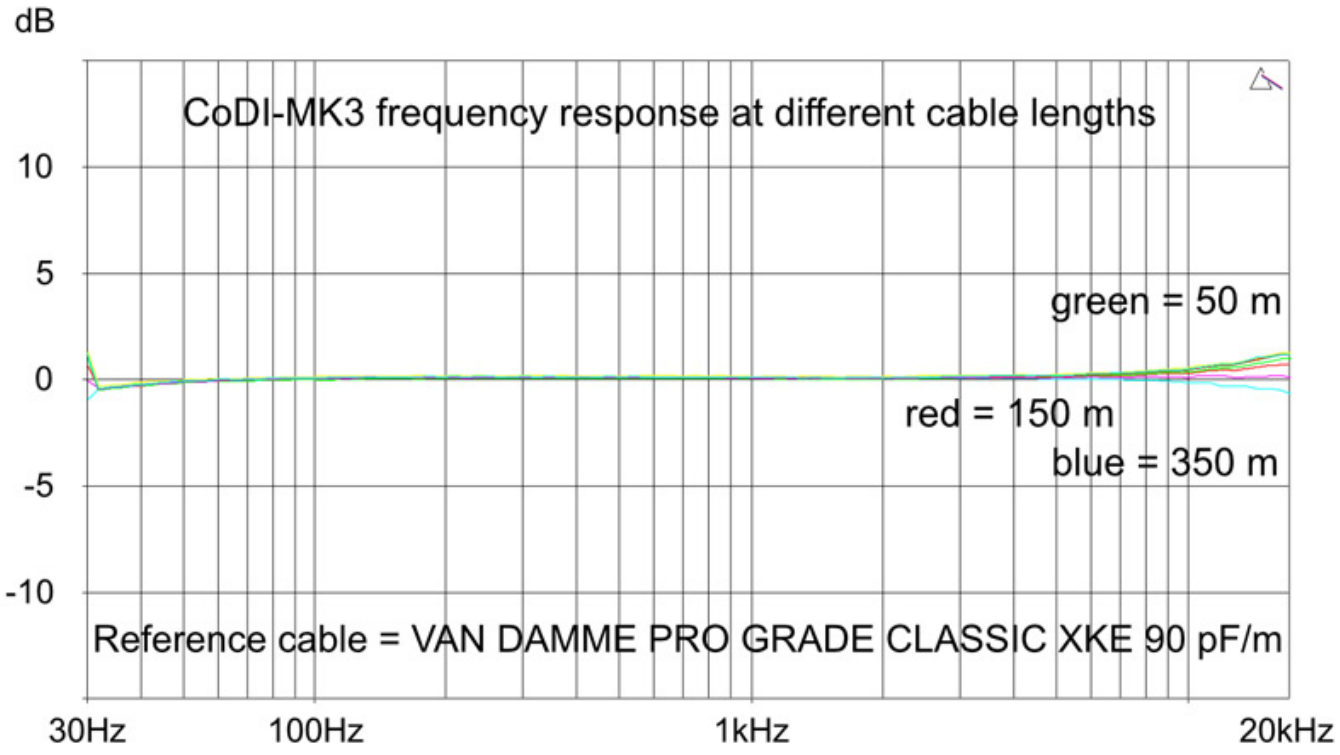
balanced. The output level is +10dBu at 0dB FS on the analog side and the distortion factor at this level is 0.02%. There isn't much else to say about operation, as the interface is plug-and-play.

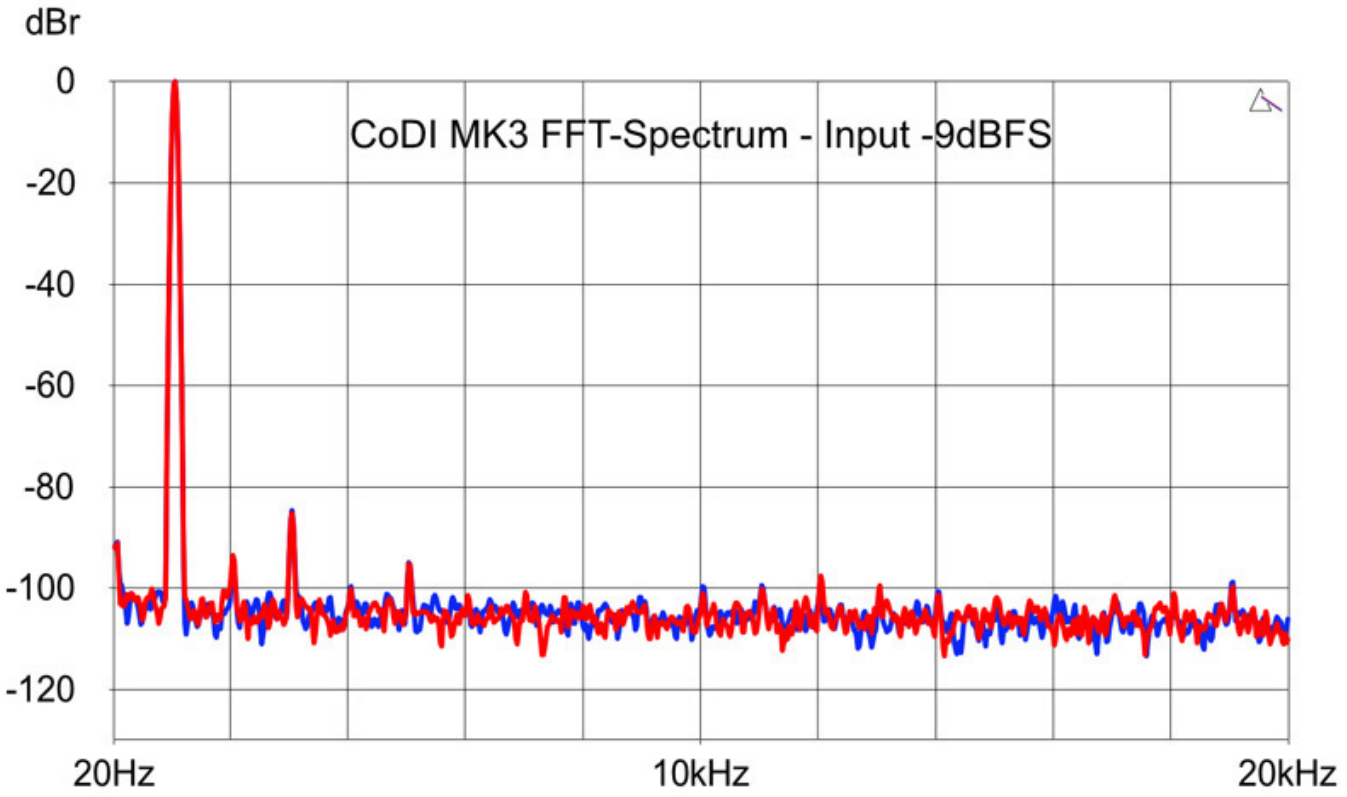
Practical Experience and Measurements

There were no problems when connecting to computers. The connection was always established immediately under various operating systems. Of course, we also tested the sound with various materials and under realistic conditions with a headphone amplifier and long cables. We can attest to the converter's high linearity and, above all, its excellent reproduction of transients.

With a black box like this, there isn't much information to convey. Therefore, measurements for quality assessment are helpful, which we would like to provide here.



The figure above shows the frequency range with different cable lengths. It can be clearly seen that even with longer cable lengths of over 300 meters, the deviations from the 0dB reference at 1kHz are less than 1dB.



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And finally (see figure above), a measurement of the spectrum with a sine wave.

Conclusion

According to the manufacturer, the price of the CoDI-MK3 is 329 euros. It is available from various retailers listed on the manufacturer's website. The price reflects the high-quality workmanship and audio quality.

The converter is particularly suitable for portable use, for example with a laptop, where a high-quality analog signal is required in a professional environment and the quality of the built-in audio interface is insufficient or unreliable. In this context, the galvanic isolation of the USB interface, the very low distortion factor of the USB audio interface and the simple plug-and-play handling are particularly noteworthy.

www.audiowerkzeug.de

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