



RME ADI-2 DAC

NIGEL JOPSON is forced to re-assess his choice of benchmark D-A conversion

The ADI-2 DAC is a two-channel high-end digital/analogue converter in a 9.5"/1HE housing, at a street price around £724 (ex VAT). Long-time Fireface owners (like myself) will be impressed

with the sleek looks — which don't come at the expense of RME's traditional accessories such as the 66-page printed manual — which lists everything from operation of the 5-band parametric EQ, through recommended cable

lengths to a justification and measurement chart for the digital volume control. There's an IEM output on the front next to the headphone jack, optimised for in-ears like the Campfire Andromeda, which are at least 20dB 'louder' than (already cranking) low impedance cans. Testing with a dB meter jammed on the earpiece, I confirmed at least a -15dB level drop. Plugging one set of cans in, I was impressed when a message: "Faulty cable, short detected, unplug!" flashed up on the IPS display.

The high-resolution IPS panel makes menu operation easier than users of RME's TotalMix software might anticipate, and displays further functions provided by the DSP: peak level meters, a useful 30-band analyser with 'DIGICheck biquad filter technology', and a State Overview screen listing the current states of SPDIF, USB and clock. The analyser is displayed by default with whatever sound source is selected, the meter ballistics are sensible, and there's a 25Hz band which proved it's worth several times. The SPDIF coaxial and optical inputs can be used alternately, with the optical supporting 2 channel ADAT up to 192kHz. Class Compliant USB 2 enables up to 768kHz/DSD256 sample rates for PCM, DXD and DSD. The implementation of DSD is a canny choice, as something of a devotional following has built-up amongst the audiophile hi-fi fraternity, with websites like HDtracks now offering premium DSD downloads.

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Head-to-head testing

Resolution doesn't do 'shootout' tests, but it certainly helps to have an appropriate supply of apples-to-apples comparative gear. In addition to my multi-channel rack, my standard setup includes a 2-channel DAC/headphone amp in about the same price range as the RME. By co-incidence, I also had a highly respected (up-market hi-fi) DAC to hand. Even as audio pros, our temporal auditory memories are short: Class compliant USB connection means it's possible to switch very quickly between output DACs on a Mac.

Putting the 3 similar devices head-to-head was illuminating. My 'benchmark' DAC — which I spent some time auditioning different units to choose — was revealed as completely wanting by the RME! This was most evident in the mid-to-high definition of instruments buried in a mix. For example: I have a track which I mixed with a kalimba part in the bridge, I know it's there, but listening on my KRKs with my benchmark interface I would be tempted to EQ it. On the RME, I heard exactly why I had it at that level when I mixed in a commercial studio. At high frequencies, 'shots' of delay were clearly audible as they decayed on the RME, whilst my benchmark interface (which was not cheap!) lost the final decays in the mix. The hi-fi unit was comparative to the RME at snare-hit frequencies, but couldn't match it

at the high end. The same was true at the extreme low end: for example, with a sine wave-rich bass part which punches into a verse. The RME reveals the dynamic rise of the waveform, answering that eternal question — is this going to pop-out too much when it's played in the club?

The unit we tested, ADI-2 DAC FS, is playback only for analogue; as we went to press, RME announced the ADI-2 Pro FS, which adds two servo-balanced analogue inputs on combo XLR/TRS in a dual mono design, supporting 786kHz sample rates and DSD recording at £1,154 (ex VAT).

Powering requirements for the ADI-2 DAC FS are flexible, tolerating input voltages from 9.5V up to 15V. As the manual says: "The DC input of the ADI-2 DAC also allows for the use of a rechargeable lead-battery or LiPo instead of a power supply, for completely independent mobile operation and ground isolation. A matching connection cable (power jack to terminals 6.3 mm) is available from RME. Special power banks in the range of 10,000mAh and up can be found equipped with a 12 V output." So, a completely portable high-quality setup — for recording as well, with the 'Pro' — will be possible.

Unfortunately, many of the time wasting, ear-doubting, problems that 'production room' in-the-box mixers often experience are a result of inadequate monitoring. Listening carefully

on headphones, desktop speakers and nearfields, I realised that more of these problems are down to the DAC than many of us might imagine! The sound quality of the ADI-2 DAC FS is superb. Even to my 'industry veteran' ears, and even at 44.1kHz 16 bit, the difference was obvious when compared to the other four DACs I had available. This is not just a DAC that's 'worth a try' — if you're looking for a benchmark two-channel with comprehensive monitoring controls — you have to audition this. **T**

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PROS Noticeably better audio quality compared to most DACs. Versatile range of sampling rates. Great front-panel headphone monitoring. Useful spectrum analyser and EQ. Remote with level control, dim and mono buttons.

CONS The DC connector on the rear panel seems a little delicate, the cable needs to be dressed carefully to avoid disconnection.

EXTRAS Recently announced ADI-2 Pro FS adds A-D conversion with two analogue inputs.

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