



Meitner MA1 v2

CHRIS FRANKLAND MAY NEVER HAVE HEARD OF CANADA'S MEITNER BEFORE STARTING THIS REVIEW – BUT AFTER HE LISTENED TO ITS MA1 V2 DAC, THE COMPANY HAS GOT HIS FULL ATTENTION

Are you asking yourself, 'Who on earth is Meitner?' I found myself asking the same question, but it soon became clear that the company is no rookie when it comes to the world of digital signal processing.

Ed Meitner founded EMM Labs in Canada in 2001, producing digital converter systems for studio use, having previously designed analogue mixing desks for Olive Electroynamics in the 1970s. EMM Labs DSD converters are widely used today in the recording industry, and indeed Ed Meitner was one of the original engineers involved in the development of SACD for Sony.

The company also makes a range of other products for the pro market, including SACD players and amplifiers, and the list of studios using EMM equipment is impressive. It includes the likes of Abbey Road, Bernie Grundman Mastering, the Canadian Broadcasting Company, EMI, Linn Records, Mobile Fidelity, Sony Music, Universal Music and Virgin Records – and there are plenty of testimonials from pro users from those companies on EMM's website. Impeccable credentials, indeed.

Ten years after the founding of EMM Labs, in 2011 Meitner Audio was established to produce more affordable products for the domestic audiophile market based on EMM technology. The MA1 DAC was the company's very first audio product; the £8499 v2 model reviewed here is its latest iteration.

Meitner is that it has always designed and manufactured its own systems, circuitboards, power supplies and metalwork in North America and Canada. Its ceramic custom circuit boards can only be made, the company says, at one facility

in Toronto, and all critical parts – the DAC, digital systems, DSP, input systems and power systems – are manufactured in-house.

That includes its unique discrete-component, dual-differential DAC modules. Most companies buy in an off-the-shelf integrated converter, but Meitner believes that doesn't give the degree of control they require. As Shahin Al Rashid, director of sales for Meitner Audio, told me: 'We produce the discrete dual balanced DACs because they are free from differential non-linearities and give us complete control of the digital and analogue data streams, plus they are also true 1bit DSD converters.'

Jitter: significant or meaningless?

Ed Meitner wrote a paper in 1992 that explained the common causes and solutions for jitter – the timing errors created in clock generator circuits – in digital audio systems. In one interview I read, he said that jitter is 'very, very significant, if analysed properly', but admitted that 'as a random term it was meaningless' and that you could have a high jitter figure and the system would still sound good.

This, he said, was why he designed his own test equipment, because without knowing the frequency components of the jitter, we have no idea what we are dealing with. Thinking about how jitter gets generated – and how to get rid of it – is one of Meitner's lifelong obsessions.

In the MA1 v2, MFAST (Meitner Frequency Acquisition System) technology is used, rather than a PLL (Phase Lock Loop) circuit, to lock onto the incoming data stream. MFAST is described as ‘a high-speed asynchronous system that acquires any data stream almost instantaneously and, unlike PLLs that merely attenuate the jitter, strips the jitter out of the system completely.’

Other key features of the MA1 v2 include its MDAT, 8x oversampling up to DSD512, and its own MCLK high-purity master clock module. The new MDAT2 DSP uses real-time transient detection, processing and upconversion of all incoming audio, PCM and DSD, before sending it to the new MDAC.

Two SPDIF digital inputs (RCA) are provided along with one USB, two TOSLINK and one AES/EBU (XLR). It supports sample rates from 44.1kHz up to 192kHz/24-bit, DSD128 and DXD streaming over USB. It also has a USB service port for future updates and what is more, which is music to any user’s or reviewer’s ears, it says that there is nothing to configure, you just plug and play. Analogue outputs are via either RCA unbalanced or XLR balanced.

Simple, but serious

While the MA1 v2 lacks the complexities of many DACs, which often have the option of half a dozen different digital filters (all of which usually sound pretty much the same), its price tag signals that this is a serious product. To evaluate it, I used it with an Audio Note CD4.1x CD player, through the same company’s Meishu Tonmeister integrated amplifier and AN-J LX Hemp speakers. I also pressed into play a Pro-Ject Stream Box Ultra S2 streamer/media player, which also allowed me to try the Meitner with some hi-res DSD sources.

To check out whether it passed muster in terms of performance at the price, I also had the well-respected Chord Electronics Dave DAC to hand, as it sells for exactly the same price.

One of my favourite guitar players is Larry Carlton and it was his CD *Sleepwalk* that found its way into the CD player first: I chose the track ‘Blues Bird’, where rather than his signature Gibson ES335 (he is, after all, known as Mr 335), he plays the beautiful Guild – you’ve guessed it – Blues Bird.

Listening via the Meitner, the sound was excellent, well balanced, detailed on his guitar play and dynamic. Switching to the Dave, the initial impression was that it was very incisive, detailed and dynamic on his guitar, but was it perhaps a little too in-your-face? Was it a bit overdramatic?

I was intrigued at this rather sharply etched difference in balance and so put on ‘Mexico’ by James Taylor. The Meitner was beautifully open and detailed and conveyed the intricacies of the different layers of instrumentation well, whereas the

Dave seemed initially more dynamic, brighter, more upfront. However, I felt the apparent excitement injected was a little excessive; returning to the Meitner I found myself breathing a sigh of relief and revelling in its composure, balance and good manners. Over time, would the brash exuberance of the Dave prove too much?

I reached next for Steely Dan’s classic *Gaucho* and played the superb ‘Hey Nineteen’. Vocals were very nicely handled by the Meitner, guitars well-defined and the bass line tight and tuneful. Percussion and drums were also delicately portrayed. The Dave by comparison seemed to impart a rather harsh, sibilant edge to vocals and was definitely brighter in its balance and more forward in its presentation. Sure, it had good leading-edge detail and note shape, but I was beginning to find that there was a price to pay for this – it could be a bit tiring to listen to. The Meitner was weightier on the bass line and less sibilant on vocals and struck a better balance.

The Meitner and the Dave were chalk and cheese, and if you have a system a little laid back and lacking punch and dynamics, the forwardness and exuberance of the Dave might be what you need. But in a well-balanced system, the Meitner would be my preference – detailed, dynamic, tuneful and coherent, its was and musically compelling, without any nasty edges or distractions.

Rather conveniently, during the course of my listening for this review, I also had to hand an Audio Note DAC3. This sells for around £7,600 and so I thought I would see how it stacked up against the excellent Meitner.

On ‘So Amazing’ from Luther Vandross’s *Give Me The Reason* CD, the Meitner again was musical, detailed and convincing. The AN DAC3 was a little more open on vocals and its sound stage seemed a little more expansive, adding space between instruments and so enhancing their intelligibility. It would probably be wrong to suggest the DAC3 outclassed the Meitner in the way that I felt the Meitner did the Dave, but I think I had a sneaky preference for it.

On George Benson’s wonderful ‘Never Too Far To Fall’ from the *In Your Eyes* CD, the Meitner conveyed his vocals very well and captured the real bounce and rhythmic energy of this track. The Audio Note was a little cleaner on vocals, and helped his guitar and the subtleties in the drum lines stand out from the mix a little better, but the Meitner wasn’t shamed and did a sound job on this great track. It was musical, conveyed the sense of movement well and lacked any serious flaws or unpleasantness.

And so, I have no hesitation in giving the Meitner MA1 v2 an enthusiastic recommendation. At the price, the Meitner and Audio Note DAC3 should both be on your shortlist.



Specifications

Meitner MA1 v2

Price	£8499
Inputs	2x optical, 2x coax, AES/EBU. USB Type B
Sampling rates	Up to 192kHz, plus DSD128 and DXD
Outputs	RCA unbalanced, XLR balanced
Finishes	Silver or black
Dimensions (WxHxD)	43.5x9.2x40cm

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