

Musical Fidelity M3x Vinyl

Joining the M3scd CD player/DAC and M3si amplifier, the new M3x Vinyl represents the brand's 'entry-level' MM/MC phono preamp. We lift the lid on a novel design
 Review: **Ken Kessler** Lab: **Paul Miller**

Scratching my head, I remain amazed at the plethora of affordable phono stages now on offer, as if to prophesy that the LP's return has no end in sight. Either that or it's sheer opportunism, but hey, that's all good news for hi-fi users. What these phono preamps do is ensure that LPs are accessible to a wider audience than high-end devices serve, while filling the gap between the costly stuff and those £99 USB-equipped decks which probably chew up more LPs than they actually play. Musical Fidelity's M3x Vinyl, however, begs a different sort of question.

Once newcomers and returnees to LP, who bought integrated amps without phono stages during the past 30 years, ask the key question 'how do I play LPs through my line-level-only system?', they'll also query what they get by looking beyond the sub-£500 phono amps from Thorens, MoFi, Pro-Ject, Rega and others. At £1200, in silver or black, the M3x Vinyl thus faces a challenge, for those aforementioned entry-level phono stages are all far better than merely satisfactory.

SIZE MATTERS

So my justification for the M3x Vinyl may strike you as specious, desperate, illogical or simply stupid. My instant love for it, though based on the sound, was strengthened by its concept and presence. Equally, there are some odd omissions, but then every piece of hi-fi I've ever tried is a curate's egg to a greater or lesser degree.

There is a major conundrum facing those of you who looked first at the photos and wondered, 'Why is this phono stage housed in a 440x97x385mm (whd) box when it would fit into an enclosure the size of a paperback book?' PM's boxout [p73] covers off the technical explanation, but for me it was more about practicality. Was

RIGHT: While the capacious 'M3x' casework would accommodate a CD player or amp, here the 'wide open space' is used to separate the linear PSU with encapsulated transformer [top left] from the MM/MC RIAA eq stage [top right]

I making excuses for MF? No, it emerged that the case size has two real purposes, the first, as PM notes, being the separation of the circuitry from the power supply. The result is one quiet piece of kit.

The other, real-world reason, is that tooling up for a single box to suit a range of matching models – in this case, a CD player/DAC and matching amplifier – saves costs at the manufacturing stage, while creating a uniform look for the series and providing the option to stack M3 units.

There are other factors too. At the risk of perhaps sounding daft, this outsized box 1) means you can use thick interconnects without it being pulled off the shelf (the wee Thorens, MoFi and NAD phono stages need to be held down with weights when deploying unyielding cables); 2) there's no need for toothpicks to select settings; and 3) it's large enough to place under small-footprint turntables if space is an issue.



This surfeit of internal real-estate also begs the question... why-oh-why, at £1200, did Musical Fidelity not include two separate sets of phono inputs? I'm not suggesting for a moment that many audiophiles run two decks or one with two arms, but it's a nice option to have.

FLEXIBLE BENEFITS

Then we get to the real meat of the M3x Vinyl and why it joins the £1000-£1500 shortlist: it is as flexible as the vast majority of users require, and I had no trouble 'tuning it' to two MM and four MC cartridges. The front panel – and I would find it hard to choose between black or the silver – places its six buttons with 17 accompanying blue LEDs, in a row, clustered by role. Left-to-right, they include power on/off located out on its own, then the MM and MC selectors, followed by the third group, which provides six settings



for MM capacitance loading: 50pF, 100pF, 200pF, 300pF, 350pF and 400pF.

Next are two useful buttons, the one labelled 'IEC' inserting a subsonic filter (what used to be called a 'rumble filter' but is now the most recent amendment to the RIAA curve) and which proved useful when I played some slightly warped singles. Next is the +6dB gain booster, which – whether by my choice of cartridges or the capabilities of my system – I didn't need, but I can understand its usefulness, especially for those who want to push the M3x to its limits with a low-output MC.

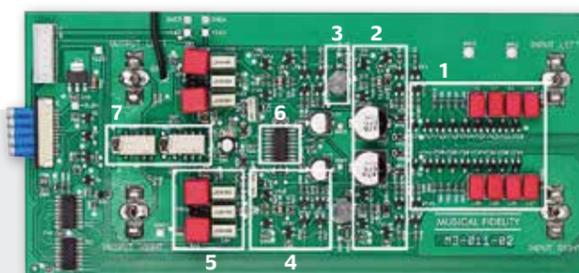
Lastly are the six MC settings of 25, 50, 100, 400, 800ohm and 1kohm. As broad as these may seem to some, and at the risk of inciting ire in those who spend two days setting-up their cartridges, they suited Lyra, Koetsu, Denon and EAT MCs without any issues for either gain or sound quality. This isn't my first go-round with Musical Fidelity phono stages – I still own an X-LPS

[HFN Feb '04] and the original Nu-Vista preamp [HFN Aug '98] – so the brand's traditional usability has been prioritised by the company's new owners.

LIQUID ASSETS

You've already seen my top 20 list of demo LPs [p24], and my remarks about how standard issues are just dandy if audiophile pressings are either not available or cost-prohibitive. And yet... I fell straight into the trap of using a One-Step release for my first burst through the M3x Vinyl. For

whatever lockdown mood inspired me, I couldn't resist listening to Patricia Barber's jazzy, atmospheric *Café Blue* [Impex IMP6035-1], especially for its sense of an intimate space and Mariana Trench bass. In addition to providing a perfect opportunity



SMART STUFF

The 'open-plan' real estate of the M3x Vinyl's chassis provides considerable breathing room to screen and separate the phono stage proper from the companion power supply [see inside picture, p72]. In fact, there's so much fresh air on offer that the elegance of designer Lubor Grigorescu's RIAA network will be lost on all but the most attentive of observers. Even the fact that this PCB [inset picture] is fixed directly to the rear panel RCA phono is testament to the desire to maintain very short and controlled signal paths.

Beginning at the far right of the board (1) are the surface-mount MC input loading resistors and (red) capacitors for the MM stage, all switched by a row of chip transistors. The discrete MC headamp and first gain stage then follows (2) into the first stage of the split passive/active RIAA network. Lubor's use of polystyrene capacitors (3, left channel) is a key feature of the 'voicing' of this phono stage. The second stage (4, right channel), again fully discrete using chip transistors, includes the switchable gain for MM and MC pick-ups. This differential stage is also the active portion of the RIAA network, the correction applied via its feedback loop. The MM/MC gain and subsonic filter (5, right channel) are selected via a DG412 analogue switch (6). The phono stage output, either direct or with IEC subsonic filtering is managed via a pair of relays (7). PM

ABOVE: Solid alloy fascia (in matt black or silver) accommodates touch-switches for MM/MC selection, MM/MC loading, IEC subsonic filtering and a supplementary +6dB gain option

to gauge the effect of the subsonic filter, it revealed a trait I have associated with Musical Fidelity going all the way back to The Preamp [HFN Nov '82 & Jul '13]. It was as if the spirit of designer Tim de Paravicini hovered over the revived MF brand, for this phono stage has a bottom end to rival even my preferred valve designs.

The vocals oozed presence, and the detail was mesmerising. But this LP was proving problematic because it is a perfect example of a recording (or pressing) that is so good, it makes even average systems sound spectacular. But then that's what audiophile discs are all about, right?

Since I was spinning vinyl at 45rpm, I dug out what is rapidly becoming my second-favourite Bob Dylan LP after *Nashville Skyline*: the 45rpm, 2LP edition of *Love And Theft* [Mobile Fidelity MFSL 2-489]. While the appeal of Dylan's voice is always a moot topic, the musicianship is never in question, and the key to the M3x Vinyl's prowess here was the sheer fluidity of the guitar work. The sound of this slithery

accompaniment, if there's a Venn diagram for sonic character, was more liquid than silky, and while that sounds as ludicrous and vinous as a 'chocolate midband', it's the only way I can describe it.

CENTRAL POWERS

While I was tempted to binge on my fave Dobro and pedal steel performances, this phono stage begging to be fed the Dillards and the Burritos, I also needed to hear what it did with vinyl of a quality less than the stellar pressings of Barber and Dylan. So I went all the way to the other extreme, and the box set of The Beatles' singles [Apple 02547 26171]. This 2019 reissue, ↪

PHONO PREAMPLIFIER



ABOVE: Simplicity itself – one set of gold-plated RCA inputs for MM and MC (switched via the fascia, see p73) with RIAA eq'd outputs also on RCA phono sockets

which I didn't need but splashed out for anyway as a Fab Four devotee, contains all of their 45s, and I was reminded of what a pain in the butt singles can be, having to get up every 2m 30s to flip 'em over.

What this flow of singles revealed were two things. The first was that Musical Fidelity could have included a mono button on the M3x Vinyl, which would have enhanced its usefulness for those who listen to much-loved material from the 1950s and early 1960s. The second (I know – in contradiction to the first) was that the unit, despite the lack of said setting, creates a solid, central image, even without switching one's main preamplifier to mono or opting for a mono cartridge.

CRISP 'N' DRY

As hoped for, the singles had charm and sparkle, again attesting to a sonic heritage that goes all the way back to vintage Musical Fidelity designs. The marque has always managed to provide a crisp, if slightly dry treble without inducing any fatigue, and it was this ability, for example, that made the company's A1 integrated amp a smash hit. Still with mono, of a completely different recording regimen, I stayed in the same period but switched to the broadcast performances on the album *Live At The BBC* [Apple 3758940].

This triple LP dispensed countless moments of a revelatory nature, and one could actually detect subtle changes from programme to programme, but the tracks do not run in chronological order, so one should listen with sleeve to hand. When you get to the numbers from 1965, the bottom end enjoys more substance than the earlier tracks, which suggests – and this is a long shot – that respect for The Beatles grew exponentially after 1963 and the BBC responded with a touch more care. Given that far too many

of their performances haven't survived, I doubt it. But I digress.

A surprise standout, as it's from 1963, was 'Honey Don't' on the last side of the triple set. George's twangy guitar playing exhibited superlative clarity, the bass had more weight and the vocals retained The Fabs' youthful character – and, yes, we are talking about the most familiar voices in the history of popular music. As this is entirely a mono experience, though, I was letting down the side so I slipped another stereo title on the turntable.

SPECIAL DELIVERY

Like *Love And Theft*, The Doors' *Morrison Hotel* [anniversary box set; Rhino R2 627602] is an LP that seems to be increasing in stature. Most fans loved it a half-century ago, but it was overshadowed by the band's other works. I knew I was enjoying an especially noteworthy session from the opening of the track 'Roadhouse Blues' – again thanks to a familiar voice. Jim Morrison's singing possesses a graininess, a slight whine, and a deadpan quality, all delivered through the M3x Vinyl, even with the least expensive of the MM cartridges. With the MCs? It sang. ☺

HI-FI NEWS VERDICT

There are too many fine phono stages out there for a clear winner to emerge in any price category. What distinguishes the M3x Vinyl from the rest are a sleek package, comprehensive cartridge matching, excellent build quality and – by virtue of its size and look – a presence that will endear it to those who don't want to fiddle about with tiny DIP switches, or non-standard-sized cases. Satisfaction? Guaranteed.

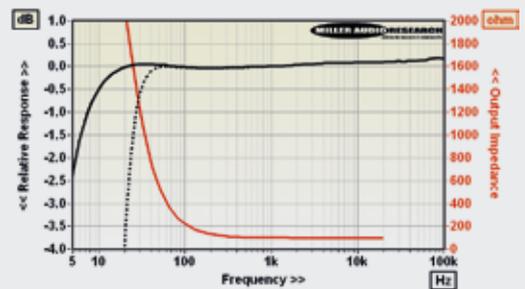
Sound Quality: 86%



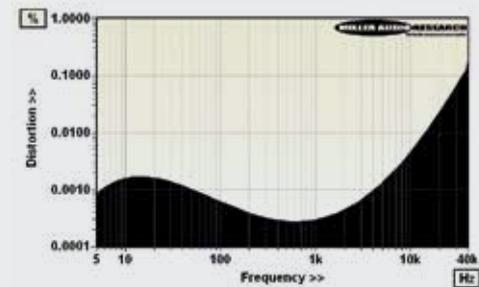
MUSICAL FIDELITY M3X VINYL

Phono stages with multiple gain and/or loading options often trade versatility for ease-of-use, using fiddly DIP switches to select between the various options. Not so here as the MM/MC inputs, the four gain options, cap (MM) and impedance (MC) loading, and IEC subsonic filter are all logic-controlled with the output relay-muted to prevent 'thumps' when switching on-the-fly. In practice, the M3x Vinyl is best suited for MM and high-to-medium output MCs, offering an especially wide 92.9dB A-wtd S/N ratio with the former and a maximum 10.8V single-ended output from either MM or MC input selections. The +6dB gain option is precise, taking the default +40.1dB MM setting to +46.0dB and the +60.0dB MC option to +65.9dB, the latter with a proportional 20dB drop in A-wtd S/N to 73.0dB.

These settings represent a range of input sensitivities of 9.89mV (MM) to 509µV (MC, +6dB) and are engineered with input overload margins of 111mV-5.7mV, respectively, or +21dB. This is equivalent to +27dB using a 'standard' 5mV 1kHz/5cm/sec MM and is sufficient to accommodate the 'hottest' +18dB groove modulation (re. 11.2µm/300Hz) that I use in our pick-up lab tests [see p67]. The active RIAA equalisation [see Graph 1] extends out from 20Hz-100kHz (±0.2dB), rolling away to -2.6dB at a subsonic warp frequency of 5Hz [or -5.0dB/20Hz and -38dB/5Hz with the IEC filter – dashed trace]. The M3x Vinyl's source impedance [red trace, Graph 1] also increases from 97ohm (1kHz) to 2.3kohm (20Hz) as a function of the default low pass filter. The RIAA-eq'd distortion [see Graph 2] is several orders of magnitude lower than required at 0.00028–0.025% (re. 0dBV), allowing the 'colour' of any pick-up to shine through! PM



ABOVE: RIAA-corrected frequency response (black) over an extended 5Hz-100kHz at 0dBV via MM, with IEC filter (dashed) and output impedance (red)



ABOVE: Distortion extended frequency (5Hz-40kHz) via MM input re. 0dBV (1Vrms) output

HI-FI NEWS SPECIFICATIONS

Input loading (MM/MC)	47kohm / 25ohm–1.2kohm
Input sensitivity (re. 0dBV)	9.89mV–509µV
Input overload (re. 1% THD)	111mV/57mV/11.5mV/5.7mV
Max. output (re. 1% THD) / Impedance	10.8V / 97ohm–2.325kohm
A-wtd S/N ratio (MM/MC, re. 0dBV)	92.9dB / 73.0dB
Frequency resp. (20Hz-20kHz/100kHz)	-0.0dB to +0.1dB / +0.17dB
Distortion (20Hz-20kHz, re. 0dBV)	0.00028–0.025%
Power consumption	5W (<1W standby)
Dimensions (WHD) / Weight	440x97x385mm / 6.4kg