



**A product of Music First Audio's Jonathan Billington and Longdog Audio's Nick Gorham, Paul Rigby reviews the Music First Audio's Reference Moving Magnet Phono Amplifier.**

# First Things First

In the same way that the integrated amplifier was conceptually divided into a pre-amp and monoblock power amps to minimise noise and improve sound, Music First and Longdog have produced a phono amp consisting of an MM-supporting

phono amp, a separate power supply and, to enable Moving Coil use, the option to buy the already established Music First Moving Coil Cartridge Step-Up unit. Billington adopted a football metaphor to emphasise his view of the final layout, "You want the world's best defence, midfield and

attackers. You won't find one player who is brilliant at all three roles. You perfect each part of the system and the system is the perfect team".

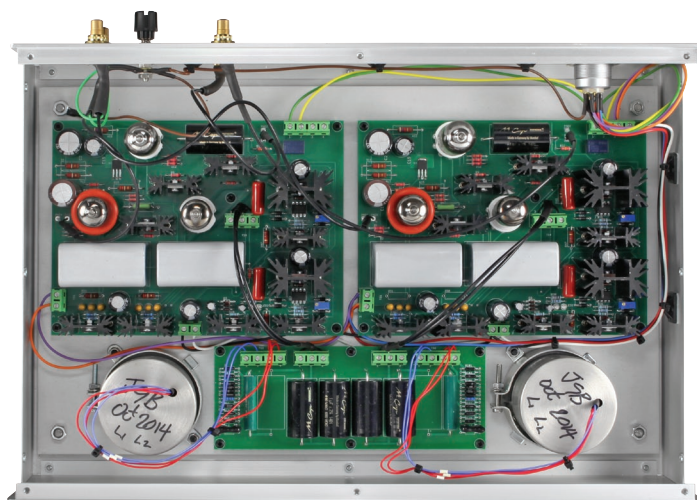
For the new, dual-box phono amp, the Music First and Longdog managers combined a new RIAA module, combining Music First Audio

inductors and new electronics from Longdog. "My part includes two wire-wound inductors, large and small" said Billington. "For the latter, I've used an air core inductor. Many inductors need a ferrite or metal core. I managed to squeeze enough turns of copper wire onto a bobbin to achieve the value needed without the use of a metal core. This has the advantage of leaving the value completely constant independent of frequency, giving a non-coloured output".

A blend of solid state and valves, the dual mono design utilises, for each channel, the d3a pentode, 5687 dual triode and 6072a dual triode valves, "So that, combined with nice resistors (Takman and Charcroft) and top quality capacitors (Mundorf and SCR) and the metalwork company that Music First use to provide non-ferrous casework, gave us the final phono stage" added Gorham.

Controls are simple. A front-mounted power button triggers a thirty-second calibration routine. Around the back are the usual RCA inputs to take an MM signal, a grounding post plus a pair of RCA outputs while an umbilical 16-pin cable connects the power supply to the phono amp. The power supply accepts an IEC power cable.

Initially, I connected the Music



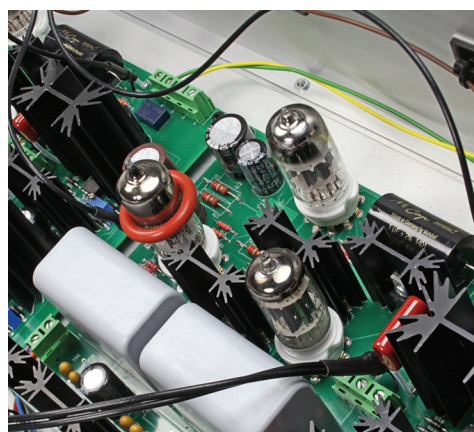
**The new phono amplifier utilises Music First's new RIAA module.**

First Step-Up unit to my reference Icon Audio PS3 valve phono amp, before adding the new, two box, phono amp.

### SOUND QUALITY

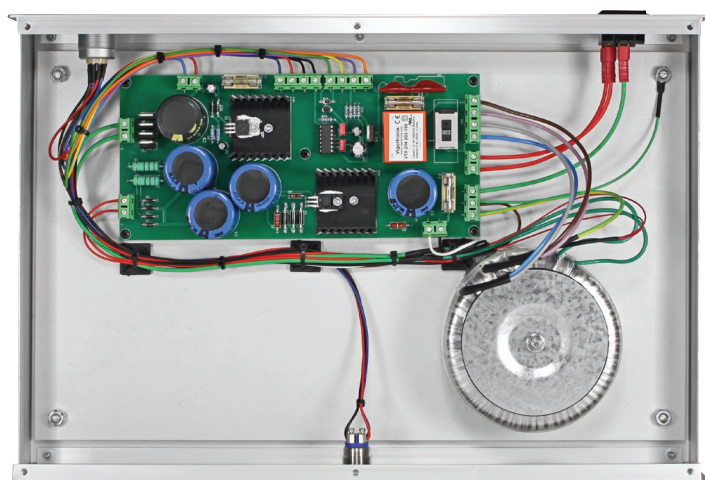
I began by testing the MM side of the new Music First Reference Phono Amp, plugging in an Ortofon 2M Black, the best MM cartridge on the market, and comparing that with the MM stage of my Icon Audio PS3 valve phono amp, spinning the prog rock track, Yes 'Yours Is No Disgrace', from the early seventies.

I was initially impressed by the tremendous gain. In fact, I had



**Featured valves include the d3a pentode, 5687 dual triode and 6072a dual triode.**

"a highly attractive presentation providing both clarity and transparency that frees up a wealth of detail"



**The power supply is linear, not switch-mode, and uses a big toroidal mains transformer and sophisticated regulation.**

to knock my pre-amp down a full ten notches to match the previous volume, such was the jump. Sonically, the vocal harmonies were both clean and emotively fascinating. There was a lot going on in the upper mids. Steve Howe is known for his guitar complexities but the Music First managed to untangle them, laying them bare while percussive rim shots were dry and crisp. Within the broadened and epic soundstage, bass was rather more in your face, hefty and punchy. Notable was the jazz-like drumming of Bill Bruford whose convoluted yet delicate drum style was easily articulated by the Music First.

Despite the impressive Moving Magnet performance, you wouldn't buy this expensive system just to play this rather noisy cartridge technology with its limited dynamic range. So I connected the Music First MC Step-Up (you can use Step-Ups from other manufacturers, though) and replaced the 2M Black with my Benz Glider and played Holst's Planets, via

*The separate power supply, at top, helps to reduce noise.*

Karajan, and 'Saturn - the Bringer of Old Age', an ideal track to highlight dynamic contrasts. Playback removed noise, producing a quieter backdrop to the low key introduction.

Adding the new Reference Phono Amp, though, the performance really began. Introductory cellos found a new portentous threat in the lower registers, giving an impressive bass weight full of potential power, while an early string sweep offered a radiant array of violins.

As the first crescendo built, the Music First enabled the music to describe both a softness in terms of the strings, draped over a fist of steel offered by the brass. A most difficult combination to pull off but performed here with aplomb. It wasn't until we arrived at the second, magnificent, crescendo, that the Music First pulled out all of the stops. Largely free of distortion, the resident upper mid bloom on the muscular brass was gone to reveal the grandeur of the Berliner Philharmoniker in all its might.

**CONCLUSION**

As part of an MC step-up, three box, system, the new Music First Reference Phono Amplifier offers a



highly attractive presentation providing both clarity and transparency that frees up a wealth of detail. It's a top quality specialist combo, if a somewhat expensive one.

**REFERENCE SYSTEM**  
 Avid Acutus/SME IV/Benz Glider  
 Icon PS3 Phono amplifier  
 Aesthetix Calypso pre-amp  
 Quad ESL-57 One Thing modified speakers  
 Tellurium Q cables



*Instead of the usual ferrite or metal cores, the Music First inductors are air cored.*

**MEASURED PERFORMANCE**

Frequency response of the Music First Audio Reference MM phono stage measured flat from 20Hz to 20kHz within 1dB limits, our analysis showing just the very slightest lift at high frequencies attributable to variance in the 75µS time constant. Both channels were identical in their RIAA equalisation. There is some slow roll off in gain below 40Hz and a useful if not large -5dB warp suppression at 5Hz.

Gain was high at x290 (49dB),

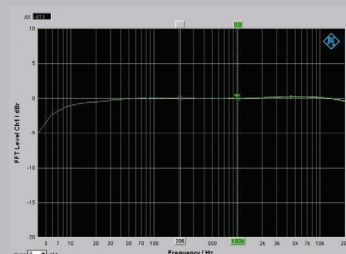
plenty enough to drive most amplifiers. With an Ortofon 2M Red that can deliver 35mV maximum, output from the phono stage will be a massive 10V. With a typical 3mV music output the amp will deliver 1V - enough to fully drive most power amps, so a Music First Audio magnetic preamp set to zero gain will be a good match.

Distortion was very low at around 0.1% second harmonic, our analysis showing distortion at 10mV input. Channel separation was very high at 104dB, an excellent value.

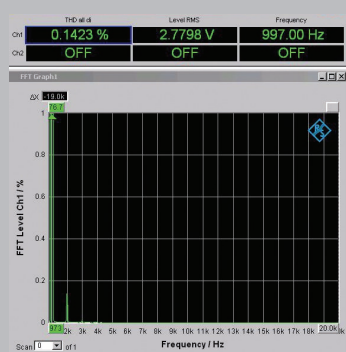
Equivalent input noise (output noise divided by gain) was a relatively low expected 0.2µV, but input noise on MM is always swamped by thermal noise from an MM cartridge, proportional to its DCR. This limits MM dynamic range and is why MCs sound 'deeper' and are preferred for high-quality work.

The Music First Audio Reference MM phono stage measured very well. Excellence here cannot overcome the dynamic range limitation of MMs, but it will make the most of high-quality MMs like Ortofon's 2M Black. This stage is, however, purposed for use with an MC transformer connected as a separate item. NK

**FREQUENCY RESPONSE**



**DISTORTION**



Frequency response	20Hz-32kHz
Separation	104dB
Noise (e.i.n.)	0.2µV
Distortion	0.14%
Gain	x290 (49dB)
Overload	100mV in/28V out

**MUSIC FIRST AUDIO REFERENCE MOVING MAGNET PHONO AMPLIFIER**  
 £9,840



**OUTSTANDING - amongst the best**

**VERDICT**

Providing a new sense of realism to music presentation over all genres, it offers an exciting performance.

**FOR**

- smooth and detailed sound
- clarity
- low distortion

**AGAINST**

- price
- no mono/stereo switch

Music First Audio  
 +44 (0) 1424 858260  
 www.mfaudio.co.uk