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Web: www.marklevinson.com; www.karma-av.co.uk Price: £28,000



# Mark Levinson No52

Five years in the making after its No32, ML's No52 Reference offers unprecedented configurability and lays claim to being one of the finest preamps money can buy Review: **John Bamford** Lab: **Paul Miller** 

It's not every day that Harman International introduces a new Mark Levinson component, especially a flagship product with Reference nomenclature. The previous two-box No32 Reference preamp, dating back to 1998, ceased manufacture some years ago due to discontinuation of some components and, critically, RoHS legislation.

The £28,000 No52 Reference has been years in the making. At last, Levinson's flagship No53 amplifiers, those whopping 500W monoblocks employing 'Interleaved Power Technology' [see *HFN* Jan '11], now have a Reference-status preamplifier with which they may be rightly partnered. The No52 is a two-chassis component designed with meticulous attention to detail both in its topology and in features that offer comprehensive system configurability.

#### TRUE ISOLATION

You might assume from our main photograph that the uppermost chassis houses the preamp section proper, with the lower box a separate power supply. But this is not the case. As with the longlamented No32, the rational of the No52's two-box approach is to isolate the pure analogue audio circuitry from any possible source of pollution. Consequently the dual chassis construction physically separates the power supply and microprocessordriven controls (top unit) from the audio circuitry contained in the larger of the two chassis. The controller/power supply unit connects to the preamp's audio chassis via three umbilical cables sporting multi-pin locking connectors. Two are for DC power, the third cable carrying control data.

Volume control is via a precision ladder resistor network which allows fine gain adjustment in 0.1dB steps. This sits in the No52's audio stage chassis and is shielded in a central chamber, while the rotary encoder that governs it is in the control

RIGHT: Local relay switching in the preamp proper connects to and from line and MM/MC phono amplifier cards (right channel enclosure opened for clarity in this picture) box. A MM/MC phono stage is included too (this was optional in the No32).

The controller chassis contains four universal-input power supplies, one for low-current standby, one each for the two audio channels, and an independent supply driving the front panel, power management and external control triggers, RS232 and Ethernet. The unit generates its own 'secondary' AC power, employing regeneration circuitry and a custom-built toroidal transformer to provide 'clean' DC to control relays and audio circuits.

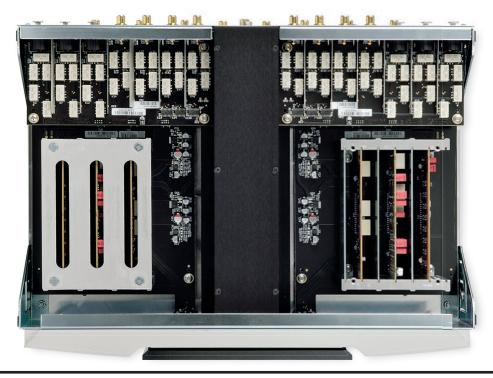
The user interface is simply wonderful – enhanced in this No52 by a new hardware platform developed specifically to add Ethernet capabilities, firmware access, and configuration backup on a USB thumb drive. Not only can inputs be named and individually configured for level and offset, but now there are three user-selectable tapers for the volume control.

The setup menu for the RIAA stage features multiple loading and gain options to allow compatibility with most high and

low-output cartridges. Custom input loads, should one be required, can be configured using internal solder-less connections by your dealer. The setup menu also provides a switchable 20Hz high-pass filter and allows correction for a cartridge's channel imbalance in 0.1dB increments. This is independent of the preamp's global balance control. Mono settings are included for vinyl purists – including L+R and L-R, the latter to assist in accurately aligning cartridge azimuth.

#### **CONFIGURABLE OPTIONS**

All audio input and output sockets reside on the rear panel of the audio chassis in a symmetrical dual mono layout. Being a fully balanced design – including the phono gain stage – single-ended inputs are converted to balanced signals and processed as such throughout. A pertinent example of attention to detail is the manner by which unused inputs are deactivated to prevent interference. In a regime dubbed 'virtually unplugged switching topology', signal and





ground of unselected inputs are physically disconnected from the preamplifier by the relays, while a mid-stream point of the signal path is shunted to isolate inputs from each other and from downstream circuitry. Says ML: 'This results in greater than 120dB isolation between inputs on the same channel and effectively immeasurable

isolation between unselected inputs on separate channels, while also eliminating the influence of differing ground potentials in source components.'

source components.'
All active circuits in
the No52 preamplifier are
on Nelco circuit boards with gold-plated
contacts and pads, and each channel's
PCBs are effectively shielded from one
another in separate compartments.

There are three outputs available: two Main and one Auxiliary, with each available on balanced (XLR) and single-ended (RCA) connectors. Moreover, each output

circuit is independent to avoid the load connected to one output affecting the performance of another. The Aux output is a more flexible adaptation of what we would normally expect from a fixed-level 'record' output, since it can alternatively be configured to track the main outputs. And get this: via the setup menu it can be

configured differently for each input. So you *might* be using the Aux output to drive a subwoofer with some inputs, while with others it could be feeding a secondary system, either at fixed or variable level! Which

inputs are available to be routed to Aux is also configurable – to avoid any chance of feedback in a 'tape-loop' application.

BEWITCHING IN CHARACTER

How to describe the sonic character of a preamplifier designed to sound of nothing at all? What I can say is that the No52

ABOVE: Brushed aluminium black and silver faceplates are accented by red illumination behind the units' glass centre panels. Inputs can be named and configured via a setup menu

transformed the overall performance of my system whatever amplifier I partnered it with, its transparency allowing forensic inspection of fine detail buried in recordings. And with appropriate audiophile-quality recordings it helps serves up an expansive and enveloping soundstage that draws you in to a musical performance in a manner which is dangerously addictive.

Playing host to the No52 was of course a perfect reason to enjoy hearing those top-of-the-line Mark Levinson No53 Reference monoblocks again. My system sounded pretty amazing when the No53s were in residence for a few weeks back in 2011, at that time driven by the singlechassis No326S preamp. The pre/power combo sounded beautifully integrated, I recall, its performance fast, tight, tuneful and with exceptional bass control and intelligibility. But I don't remember it being quite as bewitching as what I was experiencing now. Where I'd found the combo to appear a little 'dry' and matterof-fact at times, with the new No52 driving the No53s the sound was more 'beautiful', brimming with deeply saturated and vibrant tone colours, and always inviting.

The source feeding the No52 was my carefully configured computer audio rig running JRiver Media Center file management and playback software, connected via USB to T+A Elektroakustik's DAC 8 [HFN Oct '12], allowing playback of PCM files up to 192kHz/24-bit resolution. →

# THE LEVINSON LEGACY

Ever since Jazz musician Mark Levinson founded Mark Levinson Audio Systems in 1971 the ML brand has been synonymous with 'luxury', representing the epitome of high-end audio even before the term was coined. Levinson's company was first acquired by Madrigal Audio Labs in the early '80s (after which Levinson formed Cello Film and Music Systems and, subsequently, Red Rose Music in New York), but since the turn of the century it's been owned by Harman International Industries, headquartered in Northridge, Los Angeles. Doyen of Harman's Luxury Audio Group (formerly the High Performance AV 'speciality group'), Mark Levinson today is a sibling of Revel loudspeakers, Lexicon electronics and JBL's high-end Project lines such as its awesome Synthesis systems which often incorporate ML electronics. As ever, the marque created in the 1970s still signifies meticulous design methodology and no-expense-spared engineering.

"Has my system

ever sounded

quite as good as



ABOVE: Three balanced (XLR), four unbalanced (RCA) plus phono inputs are joined by dual pre-outs plus an auxiliary for tri-amp, bi-amp/sub, record and monitoring applications. Ethernet, ML Net, 12V trigger, IR and USB are all for system control

I revisited the 96kHz/24-bit recording of the jazz/rock combo Vantage Point on the DVD-Audio album *Resolution* produced by Mark Waldrep [AIX 80040]. Waldrep's hi-res productions are uncompromisingly explicit, and the immense dynamic capabilities of this Reference ML amplifier combo put me right in the action, the band seemingly transported to the far end of my listening room to perform.

#### THE MAGIC OF MUSIC

The No52 opened the window to the space so that the texture and resonance of each instrument was portrayed with fabulous clarity and precision. All the while the sound was luscious and relaxed: smooth and sweet but without being too creamy and mellow; vivid and ultra-detailed without it appearing antiseptically squeaky-clean and with instruments' transients sharply spotlighted; light-footed while simultaneously meaty and powerful.

As I picked recordings used regularly for assessing a component's character I wondered time after time: 'Has my system ever sounded quite as good as this?' Such is the No52's transparency it was easy to observe the dexterous plucking by guest bassist Alphonso Johnson and his subtle phrasing, where too often the clarity of the bass is masked by the wallops of Simon Phillips' kick drum in the au naturel recording of Vantage Point. Similarly I was enthralled by



the gloriously natural sound of the Hoff Ensemble's *Quiet Winter Night* album [2L 087]. The clarity took my breath away, as did the holographic nature of the sound image.

There's a lot of humanity transferred from a guitarist's fingers to fretboard and strings, a drummer's hands and sticks to heads and cymbals. That's the magic of music. The clarity and precision of the No52's delivery made this startlingly obvious with tracks from *Roadhouses & Automobiles* by Chris Jones [Stockfisch SFR 357 6027 2].

On the infectious 'No Sanctuary Here' the pumping electric bass loaded my listening room to the max on my thrill-factor gauge, while the shimmering tambourine hovering stage left suspended disbelief with its lifelike, sparkling transients. The cheesy voicing of the Hammond was clear despite it being wa-ay back in the track's stereo mix, while the resonance of the African bow harp added delicacy and colour. Regardless of what I played the Mark Levinson No52 kept everything focused and in clear perspective. ©

## HI-FI NEWS VERDICT

In pursuing outright excellence Mark Levinson's development engineers have certainly designed a most glamorous preamplifier. If I could contemplate spending £28k... well, I'd be elbowing my way to the front of the queue for a ML No52 in a heartbeat! Not only does it get out of the way of the music, its flexible configurability and pleasing user interface makes it a delight to operate. In a word: fabulous...

Sound Quality: 88%



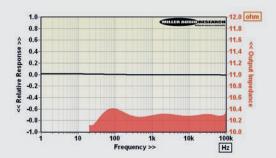
# LAB REPORT

#### **MARK LEVINSON No52**

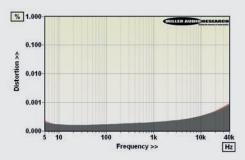
With a combined weight of 27.3kg and with its digital control logic and analogue preamplifier stages separated into two heavily screened enclosures, the No52 from Mark Levinson is arguably the most sophisticated but basic preamp we've tested in HFN for many years. For all its complexity this is, after all, a traditional line/phono preamp devoid of any digital inputs (USB, S/PDIF, networking etc). Overall gain is programmable from OdB (unity) to +6dB, +12dB and +18dB, the +6dB option being tested here (actually +5.97dB for our review sample, balanced in/balanced out). The S/N ratio at this gain setting is impressively wide at 102.5dB (re. 0dBV, A-wtd).

The logic-governed volume control is the most precise I have measured, offering exact 0.1dB increments from position '80' (maximum volume) down to '23' (a total of 570 steps representing a 57.0dB range with a cumulative error of just  $\pm 0.1dB$ ) and then 1.0dB steps from '23' down to '1' (a total of 22 steps offering a 22.4dB range). The miniscule 0.4dB error is also picked-up cumulatively over the final 22dB volume range, with -0.06dB at the -10dB point (-67dB overall), for example. Volume position '0' ('0ff' or 'Mute') cuts the preamp's output to a residual noise of just -100.5dBV (9.4 $\mu$ V, unweighted).

Frequency response is almost perfectly flat from 1Hz-100kHz with a mere +0.02dB shelf below 20Hz and the output impedance is equally uniform at just 10ohm across the audioband [see Graph 1]. Distortion is incredibly low at 0.0007% through bass and midrange (1V-16V output), increasing to a microscopic 0.0003% at 20kHz [see Graph 2]. Readers are invited to view a comprehensive QC Suite test report for Levinson No52 preamplifier by navigating to www. hifinews.co.uk and clicking on the red 'download' button. PM



ABOVE: Extended frequency response (1Hz-100kHz, black) versus output impedance (20Hz-100kHz, red)



ABOVE: Distortion versus extended frequency from 5Hz-40kHz at 0dBV (left, black; right, red)

## **HI-FI NEWS SPECIFICATIONS**

Maximum output (<1% THD, 47kohm)	>16Vrms (Balanced)
Maximum input level (<1% THD)	>10Vrms (Balanced)
Output impedance (20Hz–20kHz)	10.1-10.3ohm (Balanced)
Frequency response (20Hz-100kHz)	+0.02dB to -0.01dB
Input sensitivity	500mV (+6dB gain setting)
A-wtd S/N ratio (re. OdBV)	102.5dB
Distortion (20Hz-20kHz re. 0dBV)	0.00007-0.0003%
Power consumption	31W (1W standby)
Dimensions (WHD) / Weight	438x219x330mm / 27.3kg