AUDIO FILE

hi-finews OUTSTANDING PRODUCT

Melco N10/2-S38

Computer giant Buffalo's high-end audio brand, Melco, has an updated two-box flagship with enhancements debuted in the limited-edition N10 anniversary edition
Review: **Andrew Everard** Lab: **Paul Miller**

LEFT: There's little to distinguish this mk2 N10 from Melco's first two-box music library except the 'global' on/standby switch is now moved from the PS10 PSU [bottom] to the head unit [top]. The latter still offers simple four-button navigation and a USB port for loading music

There are two distinct Melco families: the conventionally-sized N1 models, 430mm wide, and the half-width, 215mm, N10 series, of which the new N10/2 models, starting from £6999 for the N10/2-H50 and rising to £8999 for the N10/2-S38 flagship we have here, are the latest iteration. Why the two prices? In a word, storage: the N10/2-H50 packs 5TB of conventional HDD, while the -S38 includes 3.84TB of (solid-state) SSD.

As you might expect, given Melco's roots in Japanese computer company Buffalo, the new drives are of a dedicated design, optimised for the kind of 'write once/read many times' working involved in a music library system, and, Melco says, 'hand-picked by the factory to provide exceptional audio performance'. The HDD-equipped N10/2 replaces the original N10 model [*HFN* Jun '19], while the SSD-based player, reviewed here, takes over from the now-discontinued flagship N1Z/2EX.

BELOW: The N10/2 head unit [left] hosts either a 5TB HDD or 3.84TB SSD, supported in a foam 'sandwich'. Regulated, linear 5V/12V PSUs [right] feed its LAN and USB-equipped Marvell Armada 370 SoC/Lattice microprocessor-based server mainboard (inc. 4x4GB DDR RAM)

In addition to those new drives, the N10/2 series receives a new mainboard, originally developed for the company's 45th anniversary limited edition version of the N10. Details of that new board are sketchy, but in common with past Melco designs, the circuitry is built for 'extremely low-noise, high-precision digital music dataflow', and is custom-built, the company famously saying it swerves conventional standard IT components or PC parts.

Either way, this couldn't stop PM popping the hood to take a peek inside the unit [see below], revealing an architecture built around a powerful Marvell Armada CPU with some 16GB of DDR RAM, while the Melco-branded storage is isolated on a compliant suspension to keep external vibration at bay.

As with previous Melco N10s, the N10/2 is a two-box design, with all the player hardware in one enclosure, and a separate power supply box, designated the PS10, containing the substantial toroidal transformer, storage capacitors and regulation, and feeding the 'head unit' with 12V and 5V power via a 5-pin umbilical

'However unlikely, it's a killer main system setup'

cable. As in the past, this cable is relatively short, mandating that the two 'boxes' are either stacked or used side-by-side: the thick aluminium casework is clearly considered sufficient for mutual shielding.

BACKUP YOUR DATA
Much here will be familiar to existing Melco users, from the separate Ethernet ports for connection to your network – for control, loading music and so on – and direct to a network player, without the need for a switch between the two. There are multiple USB ports too – one on the front, two on the rear – accommodating external storage, a CD ripper to copy discs onto the internal storage, and the connection of external drives to function as backup for the N10/2's internal storage. No-one should commit their entire music library to a single drive...

Meanwhile, one of the rear-panel USB ports is configured for direct connection to a USB DAC – this key provision being added to Melco players a few years back. With a USB DAC connected the N10/2 becomes a standalone player solution, capable of

handling music up to 384kHz/32-bit and DSD 512 – provided your DAC can cope with these formats – with no need for a separate network music player. As well as playing music from its own storage and connected devices (either plugged in via USB or elsewhere on the home network), it can also access streaming services including Tidal, Qobuz and vTuner Internet radio via the Melco Music HD app.

Users may also download content direct to its storage with access to the Qobuz and Highresaudio.com online shops, without the need to download purchases to a computer and then transfer them to the player. And, of course, it's also Roon-ready.

PLAYER POTENTIAL
What's more, it's even possible to use the N10/2 as a source for a USB DAC *without* the network connection and control via a third-party UPnP/DLNA app. In the latest version of the company's firmware, Melco libraries can be tasked to play music using the front panel controls and display,

'pushing' digital audio data straight out of its USB port [see boxout, below]. It's a shade laborious compared to the swipe and tap of app control, but it can be done. Alternatively, you can even plug in a little USB Bluetooth 'dongle' and navigate the N10/2 via approved BT remote handsets.

Much of the beauty of the Melco experience is down to the 'behind the scenes' development of the company's Intelligent Music Library suite, which combines MinimServer and SongKong music file management software to give an attractive interface with extensive, logical metadata tagging. All this happens without any user-intervention, making finding and playing music simple and intuitive. Add in the superb quality of the fit and finish of the two enclosures themselves, and a resolutely non-computer-like user-interface, and this is clearly a system designed entirely for listeners, not computer nerds.

So, yes, the Melco concept isn't cheap, especially in this flagship iteration, but there's a strong sense of all the hard work

having been done for the listener in order to provide a seamless, simple means of accessing music.

WITHOUT PREJUDICE
I've mentioned previously where I stand on the use of Melco players as a network source for my Naim ND555/555PS player [*HFN* Apr '19] – excellent but with no clear advantage over connecting my current NAS music library via inexpensive fibre optic converters. So, for the purposes of this test I stuck to using the N10/2 as a source for a selection of USB DACs, from the Matrix Audio X-Sabre 3 [p66] down to the relatively affordable iFi Audio NEO iDSD [*HFN* Mar '21] and the Chord Electronics Mojo 2 [p70], both of which have become mainstays of my desktop setup.

Without prejudging what follows, I have to say that even with the £799 iFi Audio and £450 Chord DACs, the N10/2 sounds spectacular. Yes, the combination of this £8999 player and a £450 pocket-sized DAC, however unlikely it may seem, proves a killer main-system set-up!

Playing the gloriously detailed *Lamento* set by mezzo Marianne Beatte Kielland and baroque ensemble Oslo Circles [Lawo LWC1226; DXD], the Melco/Chord combination delivers a sound dripping with the ambience of the church recording venue. The soloist and period instruments are placed persuasively before the listener – it's a superbly immersive audio experience as remarkable for its mournfully mellifluous tonality as it is for the precision with which the music is revealed. The voice is simply luminous, hanging in space, while the delicate accompaniment fills the soundstage with atmosphere.

Lifting the mood a little with pianist Jan Lisiecki's *Night Music* recital [DG 4862069; 48kHz/24-bit], that precise ➨
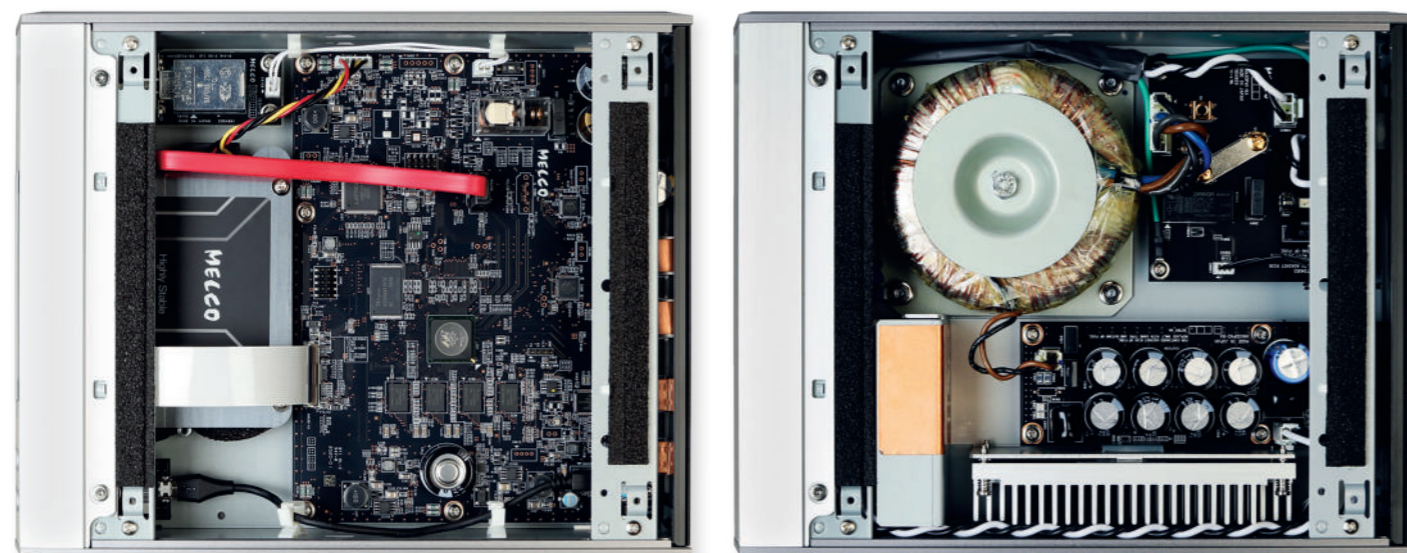
FIRM FAVOURITES

One of the advantages of computer-based audio hardware is that a purchase isn't a dead end: a responsible manufacturer – as Melco clearly is – can keep improving a product with successive firmware updates. For example, having been delighted to find that the N10/2-S38 can act as a standalone player, controlled directly via its front panel to deliver music to a USB DAC, we discovered that even PM's long-serving N1-ZH60 [*HFN* Jun '16] could be made to do the same thing, purely by downloading the latest firmware, currently v4.30. This also opens up the possibility of using it with a third-party Bluetooth remote handset. Other updates include the installation of Twonky for use with external streamers, improvements to the onboard MinimServer and SongKong for Melco's Intelligent Music Library suite, and some file-handling refinements. For example, direct CD ripping to a USB expansion drive, connected to a designated rear USB port, is now supported across the Melco platform. You can even programme the N10/2 to use a connected CD drive as a transport for playback, not just a ripping device. It all shows the benefit of keeping an eye on firmware updates...

NETWORK AUDIO LIBRARY

ABOVE: Melco offers network and direct player Ethernet connections from the player [upper] plus two USB-A ports, one to drive a USB DAC and one to connect an (expansion) USB HDD. The 5-pin XLR carries 5/12V DC from the PSU [lower]

but atmospheric rendition suits perfectly the reading of Mozart's celebrated variations on 'Ah, vous dirai-je, Maman'. The crisp – and appropriately twinkling – playing benefits from the speed and definition, while both the weight of Lisiecki's instrument and way the lower octaves resonate in the lively acoustic are beautifully conveyed.

OCEAN BREEZE
That resolution is just as apparent in the 192kHz/24-bit remaster of Eric Clapton's 1973 *461 Ocean Boulevard* album [Polydor], when the Melco/Chord pairing slams into the opening 'Motherless Children' with all guns blazing before settling back into the lushness of 'Give Me Strength' and the harmonies of 'Let It Grow'. Arguably Clapton's finest solo work, and unmatched almost four decades on, it sounds magnificent start to finish via this unlikely combination, from the deep, funky bass of Carl Radle to Yvonne Elliman's silky vocals.

Melco's two-box N/10 also works supremely well with Matrix Audio's X-Sabre 3 DAC – though Chord's Mojo 2 is uncannily close in performance – when it comes to the big, dramatic stuff, such as the Bergen Philharmonic/Gardner recording of Britten's *Peter Grimes* [Chandos CHAN5250W, 96kHz/24-bit]. Here it crashes out all the fury of the famous 'Storm' interlude without losing track of any of the instrumental textures, and at the same time conveying the uneasy atmosphere of the fishing village

and its outcast, culminating in its bleak, desolate finale.

OUT OF THIS WORLD
This recording is possessed of breathtaking dynamics and tiny nuances in equal measure, and this combination reveals them all. It does the same with the skill of both scoring and recording in (deep breath) *Jeff Wayne's Musical Version Of The War Of The Worlds* [Columbia/Sony 0960005000; DSD64] now knocking on the door of its 45th birthday, but still something of a sonic marvel, especially on SACD.

Even with Wayne's 2000 remixes album, *ULLAdubULLA* [Columbia 4963902000], which cranks up the drama (and the bass!), the N/10 and partner DACs deliver all the weight and detail one could want, creating an absolute riot of samples and thumping rhythms. ⏻

HI-FI NEWS VERDICT

It's a costly way to feed a USB DAC, and the onboard storage capacity may be limiting for those with huge libraries, but the N10/2 goes about its task so convincingly, even wringing remarkable results from very affordable digital ancillaries, that it's hard to argue with the value it brings to 'digital' systems. This, plus its slick interface and clever metadata handling, makes it a sophisticated digital front-end.
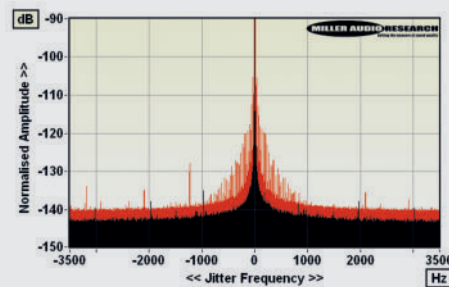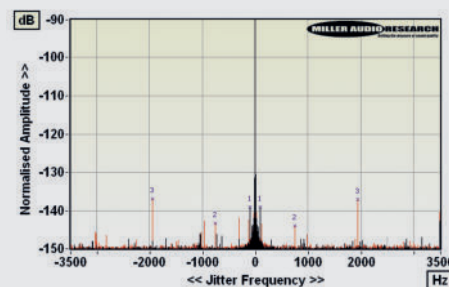
Sound Quality: 88%

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ABOVE: 48kHz/24-bit jitter spectra from iFi Audio's NEO iDSD (via N10/2, black; via PC, red)

ABOVE: 48kHz/24-bit jitter spectra from Chord's Mojo 2 (via N10/2, black; via PC, red, with markers)

HI-FI NEWS SPECIFICATIONS

Digital inputs	1x Ethernet; 2x USB-A
Digital outputs	1x USB 2.0 Type A; 1x Ethernet
Digital jitter (Mytek Brooklyn)	7psec (8psec via PC USB)
Digital jitter (iFi Audio NEO iDSD)	10psec (550psec via PC USB)
Digital jitter (Chord Mojo 2)	10psec (15psec via PC USB)
Power consumption	10W
Dimensions (WHD) / **Weight**	215x61x269 (273)mm / 8.5kg (total)