Hi-Fi Choice
RECOMMENDED

Silver server

Melco's music library isn't just a way to organise digital audio, it promises superior streaming, too. *David Vivian* is impressed

Digital feng shui. Not a universal term, I'll accept, but for this review I think it's apt. The urge to neaten and sonically optimise separate digital strands for enhanced aural wellbeing isn't new, but the occasions when you just have to stand back and be amazed are more recent.

My digital audio life has been a bit of a mess, populated with CD transports, DACs, streamers, laptops, NAS drives and what have you that could be teamed up in various ways with varying outcomes. I don't mind that, though a fairly constant irritation, whatever the front end, is the subtle but unmistakable drop in sound quality when streaming at certain times of the day. Possibly the usual fluctuations you get due to myriad environmental factors, but I suspect there's more going on than that.

Conveniently, my nagging unease coincides with the launch of Melco's latest digital media renderer and music library, the N50-S38 EX. Apart from being a kind of virtual cable tie and optimiser for all things digital, I am assured by Melco it will give my streaming experience superior sonics with newfound consistency.

We'll return to that. But here's the new N50. Melco's description points to its full-width (436mm) design and the benefits of solid-state SSD storage, 3.84TB worth, hence the

model designation. It inhabits the middle ground in Melco's range between the entry-level N100 (*HFC* 444) and the flagship N1Z EX and N10 (*HFC* 488). Built on the same chassis as the outgoing N1A – making it the only full-width model in Melco's current line-up – streaming is served by its USB output, requiring only an external DAC to get up and running.

The N50 is also the only Melco to have a solid-state drive (SSD) as standard, though there is an SSD-equipped version of the N1Z EX

The overall clarity is striking, especially with fine details from dark backgrounds

available to special order. The take, here, is that Melco is challenging the notion that Hard Disc Drives (HDD) have the edge when it comes to sound quality. The company suggests that, while that may once have been the case, it has stood down IT-relevant elements such as speed of access and wear-levelling software that are unnecessary in a music server and degrade the sound, principally because of the higher noise floor.

Moreover, the drive is protected from vibration by what it calls a 'rigid, layered cradle'. In case you're

wondering if the N50 is just an N1A with SSD rather than HDD, Melco points to a host of internal upgrades, including a new PCB, dynamic power supply with 25 percent more output and an IEC mains inlet with true electrical ground to define the source component as ground point. The unit's rear panel is a little different, too, with a conspicuous Neutrik housing for the all-important, performance-critical USB 3.0 output to the DAC. UPnP network players are accommodated by a dedicated Ethernet port labelled 'Player Port', which isolates the player from the home network to optimise performance.

The scrolling OLED display is crisp, bright and clear and very easy to navigate, especially when using Melco's D100 optical CD transport to play or import CDs. A typical rip takes seven to eight minutes. The library can also be stocked via USB memory sticks or HDD drives. The N50 is a certified Roon End Point but, not having Roon, I use Melco's dedicated control app which, if a little sluggish and occasionally needing a double prompt, is intuitive and generally robust. With Minimserver 2 and SongKong onboard, sorting a music library for easy browsing and access with the right meta data should be a breeze. I'm using the N50 with a Chord Hugo TT2 DAC (*HFC* 468), which means the app gives me automatic access to Tidal, Qobuz and Internet radio. Also, if you're a Hi-Res Audio or Qobuz subscriber, any purchases are automatically downloaded to the N50. Nice touch.

And it's when streaming that the Melco approach is perhaps most valuable. I spoke to the company's General Manager in the UK, Dan Raggett, about levelling up the stream to avoid quality tips and he offered the following explanation: "The

architecture in the Melco is designed to handle audio data correctly, not quickly like an IT device such as a laptop. Having two Ethernet sockets means audio data can be fed directly to a streamer to reduce network and wi-fi interference, or fed directly to a USB DAC via the dedicated Neutrik USB DAC port.

"As you know, steaming services are all held on big servers with many people requesting the same file at the same time. The Melco will rebuild this packet data if it needs to so that the streamer or DAC can concentrate on what they are good at, meaning less processing power is asked of these devices. It all stems from Melco being under the same company umbrella as Buffalo Technology. As a result, we have great engineering knowledge that what is good for IT is generally not good for audio."

Sound quality

As I suggested earlier, digital feng shui. Not only does the N50 tidy and streamline how you interact with your system, it also shuts down inconsistencies that can lead to the streaming blues at busy times.

To a large extent, ultimate sound quality is still determined by your DAC, amplification and speakers, but the N50 is an immaculate source for everything downstream to get stuck into. The uptick in overall clarity is striking, especially in matters of fine detail emerging from a notably darker background. Sound is exceptionally clean, precise and articulate without being in any way etched or drained of colour or texture. On the contrary, the Tidal stream of Dr. John and Aeron Neville belting out *End Of The Line* from Dr. John's final album sounds properly physical, full-throated and gravelly – well, Dr. John anyway. Compared with playing the same track straight from my laptop into the Chord Hugo TT2 there's a greater sense of space, drive, dynamic subtlety and

HOW IT COMPARES

As arguably the first brand to execute the notion of a NAS for audiophiles, Melco has pretty much carved a niche for itself and offers models to suit most pockets, right up to the £9k SSD version of the N10/2-S38. If you have deep enough pockets, this takes the excellent performance of the N50 to the next level. At the other end of the range, the humble N100 server is by no means a sonic slouch, either. Looking further afield, the Roon Nucleus+ (*HFC* 439), Auralic Aries G2.1 (*HFC* 469) and higher-end options from the likes of Grimm Audio and Innuos are definitely worth checking out.

performance. The presentation has greater power and authority, almost as if a more expensive amplifier and speakers have been drafted in.

Soundstaging is more believable and specific. The absurdly thrilling live three-way acoustic guitar death match between Al Di Meola, John McLaughlin and Paco de Lucia on *Mediterranean Sundance/Rio Ancho* from *Friday Night In San Francisco* has a great sense of venue acoustic and audience placement while the dizzying speed and attack of the playing and the beautifully resolved harmonic richness of the guitars are nothing short of sensational.

Conclusion

There's a rightness to how the N50 goes about its business that's as addictive as it is rewarding. A force field against streaming server stress

and the promise of music delivered with an ultra-low noise floor – be it streamed, plucked from the SSD library or played on CD – it's hard to think of anything else that gets close to covering the whole nine yards ●

Connectivity includes three USB 3.0 ports for back up, expansion and DAC connectivity

Hi-Fi Choice

OUR VERDICT

SOUND QUALITY ★★★★★	**LIKE:** Raises digital's game across the board; design; usability
VALUE FOR MONEY ★★★★☆	**DISLIKE:** Control app isn't the slickest
BUILD QUALITY ★★★★½	**WE SAY:** A taste of high-end Melco in a smart, single box
FEATURES ★★★★★	
OVERALL ★★★★★	