

hardware review

Melco N5: music service with a smile

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Melco N5-H50 music server

When Melco launched the N5 in May I was excited to see a more affordable variation on the N1 flagship that appeared in March. But then it occurred to me that Melco's product numbering system is like Canon cameras, the lower the number the better the product. As an <u>N10</u> owner I realised that here was a server that in all likelihoods is better than the one that blew me away to the extent that I had to have it. Such is life for the audio aficionado, there's always something better lurking in the future that is going to be better and in this case a similar price.

I see now that I reviewed the N10 almost exactly two years ago in its 45^{th} Anniversary livery but bought the more conventionally finished version. At the time it cost exactly the asking price here, today you can get the N10/2 for slightly less if you opt for the spinning disc storage, solid state memory is over £2,000 extra. The new N5 provides a respectable 5TB of selected HDD on a Melco HS3 mounting in a full width chassis that has the latest generation mainboard and a low noise linear power supply inside. The N10 is intrinsically more expensive due to its two box construction and those boxes are quite fancy.

This saving means that Melco can afford to put better bits in the N5 and retain the price, plus the work that went into developing N1 can be trickled down by omitting luxuries like a clock input and machined branding. You don't get quite such fancy casework nor the SSD storage but the fundamentals are all the same, including an SFP port for optical network connection and high quality ethernet sockets for the more conventional approach to hook up. The Melco N5 has a high quality, low jitter clock from NDK and 'industrial grade' USB ports by Amphenol. There are two of these, one marked USB 2.0 and intended for connection to a DAC (albeit not marked as such) and a USB 3.0 alternative for back-ups where speed is required. Melco are of the opinion that as audio streams don't need to be read or transmitted at high speeds it is better not to involve the high frequencies involved in doing so. This means that metadata management is slower but sound quality benefits.

There are two 'industrial grade' RJ45 sockets on the back of the N5, one for network connection the other providing a direct output for a streamer. This eliminates the need for a

switch near the audio system but as decent quality switches are a useful way of reducing noise it's a good idea to have one that's dedicated to routing audio signals. The SFP optical alternative is theoretically a lower noise network connection but requires a switch that has the same connection, Melco's S100 and S10 models both have this feature.

The chassis is built around a stainless steel base plate and has an aluminium facia with chunky end caps largely there for aesthetic appeal. One features a USB port which can be used for playback from a USB drive or optical drive, in other words with a peripheral DVD drive you can play CDs via the N5, this can also be done via the USB 3.0 port on the back. Note that disc playback only works when using the Melco N5 as a streamer outputting through its USB port to a DAC.

As with all Melcos it is possible to run the N5 without a PC, you can do a lot from the front panel display using the four buttons, or you can access the same controls with a web browser on your tablet or phone. You can't access playback controls this way, for that you need the Melco app or a UPnP alternative such as Lumin, alternatively the N5 can be run with Roon and has a setting within the menu to make this happen. Activities like backing up can be done via



the front panel too, the Melco will format an attached drive to suit its purposes and put your music collection onto it. However if it's a big collection be prepared for a long wait.

Melco N5 sound

Having used the N10 for two years I have got used to the things that a really good music server can do, which makes appreciating what a very similar one does a bit less straightforward. Or it would have done if the N5 hadn't proved to be better in several key respects than that already excellent device. I'll start with the similarities which are that the N5 is an incredibly low noise device that makes most servers sound crude by comparison. With digital storage, the key to getting great results via a streamer in particular is that it delivers the data in as clean and coherent a form as possible, and here Melco's know-how comes to the fore. The lengths they go to keep noise and vibration to a minimum pay off with dynamic range that most servers, and all CD players, can only dream about. You can hear this in huge dynamic range and the fact that regardless of playback level the sound never becomes harsh or grainy.

It's worth bearing in mind that the server is like the turntable in an analogue system, its performance is the limiting factor. If the server cannot deliver all the details, all the characteristics of a recording in a completely coherent form there's a limit to what the streamer or DAC can do to improve matters.



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It makes a difference whether you use an external streamer or take the USB output from the N5 straight into a DAC. With the N10 there is always a worthwhile improvement in timing and dynamics when using a streamer rather than taking the more direct route, which effectively uses the streamer onboard the Melco. The N10 on its own is very relaxed and effortless which works with some systems and music but can seem a bit too laid back with more upbeat contemporary sounds. It works for acoustic pieces better than electronic but as a rule I have used the N10 with a streamer. The Melco N5 however is in a different league when used this way, its onboard streamer is better than most standalone types so the result you get when connecting to a good DAC via USB is very strong indeed, so much so that I did most of my listening this way.

The Kham Meslien solo double bass album *Fantômes... Futurs* has been on heavy rotation of late, and the N5 delivered it with superb dynamics and timing, producing a vivid three dimensional image that inspired higher volume levels than usual. The lovely sound of thick, loose strings on the track Kar kar kar is both deep and elastic, the server producing all the nuances of Meslien's playing with total ease. With Keith Jarrett's Sister Fortune (*Treasure Island*) the sound is open and replete with detail, you feel as if this was the sound that the engineer might have enjoyed when the original analogue recording was made 50 years ago. This really made it clear that the Melco N5 has an extremely low noise floor, you don't get such a relaxed and distinctly analogue sound if there is anything masking the quietest notes or blurring the leading edges.

Contrasting these two servers via a Lumin U2 mini streamer and iFi Pro iDSD Signature DAC also made a strong case for the N5, here it sounded calmer and more relaxed, the vocal in one piece being less forward and the overall effect one of greater fluency and musical beauty. When I contrasted the N10 with my previous server two years ago the difference was greater, so the fact that the N5 can show it a clean and open pair of heels is an indication that this is a very fine device. I was surprised that timing was stronger with the N5 even via a streamer, the fact that the Lumin is re-clocking the signal might be expected to ameliorate differences when the server is connected via the network but it proves that the source is still king. Its display also scrolls the name of the track being played, you can switch this off and doing so would probably make it sound slightly better but it's nice to have the option.

Contrast

I contrasted the two Melcos via an Auralic Aries G1 as well and here the N5 delivered extra bass weight which gave The Man I Love (Herbie Hancock/Joni Mitchell) more swing, it also tracks micro dynamics superbly, something that you can hear in the late Wayne Shorter's beautiful saxophone playing. I love how sophisticated and articulate the N5 sounds with a recording of this calibre, it makes the music more easy to appreciate and engages the senses in a powerful fashion.

I now have a dilemma, do I upgrade to the N5 and live without the Lumin streamer that was purchased earlier in the year or keep with that and the N10, it's a pretty strong pairing but removing a box from the system is always appealing. The Melco N5 has the advantage of standing on the shoulders of the giant that is the Melco N10 while enjoying the benefits of everything that went into the N1. But there's always that flagship waiting in the wings...



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