

Naim NDX 2/XPS DR Music Streamer and PSU

by Jason Kennedy

I used to wonder why Naim persevered with DIN connections when the rest of the audio world had given up on them decades ago. They're not particularly nice things and must be a pig to solder, and you can't use them with chunky cables. It's no wonder they went away with only a few diehard adherents such as DNM standing alongside Naim standing up to the RCA/XLR hegemony. But now that I have had the chance to connect a Naim source and amplifier with a DIN to DIN cable I can hear why they have stuck to their guns. I'll come back to this.

The main subject of this review is the middle model in Naim's latest range of ND streamer/DACs; this was launched last year and became the second generation of streamers to take top spot(s) in Naim's source hierarchy. The NDX 2 is the middle model and sits in the company's Classic Series and it comes in casework that's typical of that range except for the presence of a large (five inch) TFT display. This is a purist audiophile streamer and digital to analogue converter, but Naim has given it a broad feature set that enables integration with a wide range of contemporary sources alongside outputs that

mean it can be used with pretty much any amplifier. Features that are not essential to the purist audiophile cause but make the NDX 2 a bit more flexible include the ability to receive Airplay, Chromecast, and Bluetooth signals, built-in access to Spotify and Tidal streaming services on the Naim app, and a slew of digital inputs for most of the likely sources. The only omission is HDMI for connection to an AV source, but most of these have a Toslink optical output for which the Naim has two inputs.

Control is largely achieved with the iOS or Android app but you do get a remote control that's useful for pausing playback without having to wake up a touch screen. ▶



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- ▶ You can also control a connected amplifier or preamplifier with this remote, which saves on coffee table clutter. If you prefer, and many do, the NDX 2 can be controlled with the Roon app, which brings an enriched feature set and the ability to stream Qobuz on top of the native streaming services offered by Naim. It can be connected to a network over Ethernet (preferred for its reliability) or Wi-Fi.

While the streaming engine is the same across all of Naim's network streamers the surrounding architecture varies, as does the all-important power supply. The NDX 2 has an onboard supply, with a transformer that's as big as are found in some of Naim's power amps, so it can be used on its own (unlike the ND 555), but you can also augment it with an XPS DR as was the case for this review, or even a 555 PS should the urge to upgrade prove too strong. Digital to analogue conversion is provided by a Burr-Brown PCM1792A chipset but jobs that are usually done within such chips such as digital filtering and current to voltage conversion are covered by Naim's discrete electronics. 16 times integer oversampling is achieved with a SHARC DSP prior to the DAC, which can deal with signals up to 32-bit/384kHz and DSD128, totally adequate figures unless you have a penchant for obscure audiophile recordings. As yet there is no support for MQA but one suspects that if this were to take off in a big way the software could be updated for the purpose.

As is the case across the streamosphere, Naim has concentrated on keeping noise at bay in its ND streamers. High frequency noise is the enemy of high resolution and contributes largely to the unappealing characteristics of digital audio, so this is the way forward. One example of the approach is that data transfer to the screen is switched off when the image is static, such as cover art, which eliminates one small source of noise. Another angle is that the standby power is supplied by a high efficiency (but relatively noisy) switched mode supply, this is replaced by a linear supply when it's in operation.

This seems like a good idea but if you add an external power supply it's recommended that it is left always on so isn't quite as polar bear friendly.

The XPS DR power supply as the name suggests benefits from the discrete regulator (DR) configuration that was rolled out in Naim's amplifiers a few years back. The aim is to deliver lower noise, low impedance power from the six separately regulated supplies.

I didn't start out using a DIN connection because the NDX 2 was for the most part connected to a Townshend Allegri+ preamp and ATC P2 power amp (no DIN inputs there), but that did not stop the NDX 2 sounding spectacular once it had been given enough time to settle down. Which is a lot more time than is the case with most audio electronics and all part of Naim lore that says 'never switch off'. I also started out using a Super Lumina DIN to RCA cable so was halfway to the brand's preferred connection system. Under these circumstances the sound has a distinct emphasis on percussion if it's in the recording and rhythm instrument lines in general. This lies at the heart of Naim's renowned ability to bring out the timing of the music and the way that the musicians ▶

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▶ lock into the groove together. It's very compelling and sounds realistic at the same time. This struck me with Keith Jarrett's *Eyes of the Heart* [ECM], a live recording that starts out quietly building up the tension with Jack de Johnette's drums before a saxophone soars above the band sounding bright and open. This has a 'reach out and touch it' realism, but seems a bit forward if you are used to the vinyl balance. It is vibrant and intense but sometimes a bit too much that way and, in the end, I switched to my regular Townshend Fractal interconnects with RCA plugs at both ends. This requires you to go into the settings on the app and change the output which is straightforward. What is less obvious is that Naim recommends that all inputs should be turned on for best results, this is the opposite to the previous range and includes Chromecast, which had appeared in an update during the review period so wasn't switched. I didn't do an A/B to see if it helped but the streamer sounded better toward the end of the period, probably because like a cat it was more at home in its surroundings, or whatever it is that makes these things improve over long periods.

The Naim reflects the intrinsic nature of both the recording and the music with everything you choose to play, thus the Hadouk Trio's *Live à FIP* (Mélodie) has a palpable tactility to the low end and fabulous three dimensional scale, while Jimmy Hendrix's 'Wait Until Tomorrow' (*Axis Bold as Love*, Track) is as fast as you like and reflects the remastered late sixties sound to a tee. I doubt the original vinyl had this much bass on it. The NDX 2 is not the most neutrally balanced of streamers, as there does seem to be a bit of extra oomph to the bass, a degree of high frequency roll-off, and a slightly dry feel to the mids, but this balance serves the musical communication side of things extremely well. Image depth isn't up there with the best, but rhythmic cohesion is in the top one per cent; it puts the message well ahead of the medium and that is a laudable goal in my book. Resolution of detail is also very high; it's easy to peel

apart the layers on Nils Frahm's *All Melody* [Erased Tapes] thanks to a sense of clarity that puts you in the hot seat at the mastering engineer's desk. This album has lots of scale and should be auditioned by anyone who thinks it's necessary to put speakers in the ceiling in order to create a sense of height. You need a very good processor indeed to get home cinema to even approach the degree of transparency and effortless scale that can be achieved with good two channel.

Frahm's earlier masterwork *Spaces* [Erased Tapes], a collection of live recordings of varying quality, shows its grittiness and even distortion on some tracks but remains entrancing nonetheless. The slight dryness of the NDX 2's presentation probably emphasises this quality in the recording, but doesn't let it get in the way of the performance. This is not the sort of streamer/DAC that smooths over the cracks; it digs deep into the signal and shows you what's there – and if that isn't particularly slick, then you will hear it. Equally, if there are life and dynamics in the music, they are presented front and centre, there is a slight emphasis on the upper mids that brings out reverb really well and also serves to make more intense ▶



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▶ passages that much more immediate and thrilling. In many respects this Naim has qualities akin to a good turntable, it’s tighter in the bass as digital often is, but the timing is very close to that which can be achieved with vinyl.

Contrasting high-res tracks on 24/192 PCM and DSD128 delivers big differences, the one-bit format sounding more relaxed but also softer and slightly smoothed over. It also makes a good case for DSD128 over DSD64 where there is an upgrade in realism and fine detail resolution. As alluded to earlier the NDX 2 also responds well to connection via Naim’s preferred DIN interface. Naim’s Supernait integrated turned up late in the review proceedings and I fished out the basic Naim DIN connector from the NDX 2 box to see what difference it would make. Initially it sounded coarser and less transparent, but before too long it became obviously apparent that the timing had stepped up significantly. In fact, it was a bit of an epiphany, using a DIN cable between Naim components makes the result so much more cohesive that you just can’t put the thing down. The presentation becomes less refined but more musically deep and incredibly involving especially where rhythms are concerned, yet equally, atmosphere is very well served. Frank Zappa’s *Halloween* [Vaulternative] is a high-res release originally on DVD-A (remember that?) that starts out with just the sound of the New York audience, you can hear exactly why it was included. It maps out the scale and the energy in concrete terms, so when the music starts, the crowd’s enthusiasm is contagious and you can’t help but become fully immersed in the performance. This happens despite the track being an instrumental piece that’s not very well known (‘Ancient Armaments’), I guess Zappa could have played anything and got a rapturous reception from that audience back in 1978.

I also contrasted the NDX 2 with and without the XPS DR power supply, it sounds very good indeed without the supply but the extra control that the XPS DR brings does give everything more power, weight, and authority. Dynamics benefit from this and bass lines have a solidity that brings substance to the whole picture. It’s not essential and I enjoyed the streamer with its onboard supply for some time before adding the XPS DR: however, going back proved to be a less enjoyable experience. I’m told that the 555 PS represents a considerably bigger jump but it costs £2,600 more so you’d want a decent result even in the high-end world of diminishing returns.

The combination tested here gets to the heart of the music in a fashion that is impossible to ignore thanks to the immediacy and detail resolution that goes with it. Naim understands that music like art is more than an aesthetic experience; you can only enjoy the sound for so long, it’s the musical message that makes listening so rewarding. Strangely, Naim is in a pretty select club in this regard, presumably because this has always been their ethos and because their engineers know how to achieve such a difficult to define goal. They have certainly scored with the NDX 2 and XPS DR... back of the net, so to speak. +

TECHNICAL SPECIFICATIONS

NDX 2

Type: Solid-state network streamer, DAC

Analogue Inputs: none

Digital Inputs: Two coaxial S/PDIF (via RCA and BNC jacks), two TOSLink, USB A for stored audio/MP3 player

DAC Resolution/Supported Digital

Formats: FLAC/AIFF/WAV/ALAC/DSD etc. Sampling rate for D/A conversion up to 384kHz/32 bit, DSD128

Music services/Wi-Fi inputs: Spotify

Connect, Tidal, Chromecast, Bluetooth, Airplay, Room

Analogue Outputs: One stereo

unbalanced (via RCA connectors), one stereo unbalanced (via DIN jack)

Digital Outputs: One coaxial S/PDIF

(via BNC jack)

Frequency Response: Not specified

Distortion (THD + Noise): Not specified

Supplied with: Power-Line Lite mains cable, DIN to DIN interconnect

User Interface: 5inch TFT display (on

main unit), Naim application software for iOS, Android

Dimensions (HxWxD): 87 × 432 × 314mm

Weight: 10kg

Price: £4,999

XPS DR

Type: Linear add on power supply

Power outputs: ± 22V, ± 10V, 2 × 15V

Supplied with: Burndy cable.

Dimensions (HxWxD): 87 × 432 × 314mm

Weight: 15.1kg

Price: £3,999

Manufacturer: Naim Audio

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