

# Take Five

**Jon Myles takes a trip with Naim's new ND5 XS 2 streamer – an easy and affordable way to enjoy digital.**

It's fair to say Naim were one of the pioneers of the music streaming revolution. The ground breaking Uniti, for example, combined wireless (and wired) connection with a network attached storage device, CD player and an amplifier.

It proved a massive hit and turned many people onto the benefits of streaming their music collections - as well as giving the Naim brand a timely boost.

But what about those other Naim listeners – or just other listeners – who have a perfectly good CD player and amplifier and

just want to add streaming to their present system without duplicating products?

Enter the ND range of one box, full-size units – and now the new ND range, the first update to the platform in 12 years. Yes, true to the Naim ethos new products only emerge when they are measurably better than what's gone before.

There are three models – the NDX 2, the ND 555 and the ND5 XS 2. The former pair both feature colour screens on the front to display album artwork, plus other features and a natty remote control, coming in at £4999 and £12999 respectively.

The entry level NDS XS 2 priced at £2299 is a

completely different beast, however. It's slimmer than its partners on account of there being no colour screen – and Spartan to the point of anonymity. All you get at the front is the familiar green Naim logo, an unmarked USB-A port for connecting memory devices and a standby button. That's it. Oh and it comes in one colour - the usual Naim black.

There's also no remote control. Instead, everything is controlled by the - admittedly excellent – Naim app that's free for both iOS and Android and available for both mobile devices and tablets. This enables access to all functions such as source select,





volume, playlists, as well as displaying album artwork. It will also let you turn off unused inputs, but in practice I found this made little difference to sound quality.

I've been told Naim dropped the colour screen and remote to get the ND5 XS 2 down to a price that would attract more customers - and I can see the logic in such an approach.

So ND5 XS2 is a pretty basic streamer, one designed to slot into an existing system with the minimum of fuss. Once done it offers DLNA/UPnP for accessing music over a home network, internet radio, access to online music services from the likes of Spotify and Tidal, as well as Bluetooth wireless connection of iPhones and such like, as well as Apple AirPlay. Surprisingly perhaps, it is also Roon Ready, meaning it contains Roon end-point software, rather than just being Roon Tested (certified to work with Roon). That means it can act as a fully functional Roon Ready end-point DAC.

But it's inside the case that things get really interesting. The streaming section of the ND5 XS 2 uses the latest Naim network card - featuring low-noise, high-speed low-voltage differential signalling (LVDS) to route the digital audio signal.

The higher speed is capable of decoding all HD audio formats at up to 32 bits/384 kHz or DSD128. Rather than the source acting as the digital timing master, the new streaming board turns things around and allows Naim's DAC clock to control the flow of audio data.

The data is integer-over-sampled in a SHARC DSP to a 40-bit accuracy before it's fed to the PCM1791A Burr-Brown digital-to-analogue converter.

The circuit boards are also decoupled from the chassis to prevent vibration entering the system, while the unit comes with Naim's floating pin Power Line Lite mains cable.

On the rear, digital inputs include a second USB socket as well as two optical and two coaxial types - one on a single RCA socket and the other using Naim's favoured BNC connection.

Analogue outputs are on both RCAs and the usual Naim DIN (for which a cable is supplied), with a single BNC providing the digital output.

Two stubby aerials handle the wi-fi connection and there's a third for Bluetooth, plus an ethernet socket. Naim recommends using the unit wired but I had no trouble streaming

hi-res files wirelessly from a NAS drive situated some 12 feet away.

As ever with Naim there's an oversized toroidal transformer inside for a linear power supply, a small switch mode power supply taking over when the unit goes into standby mode.

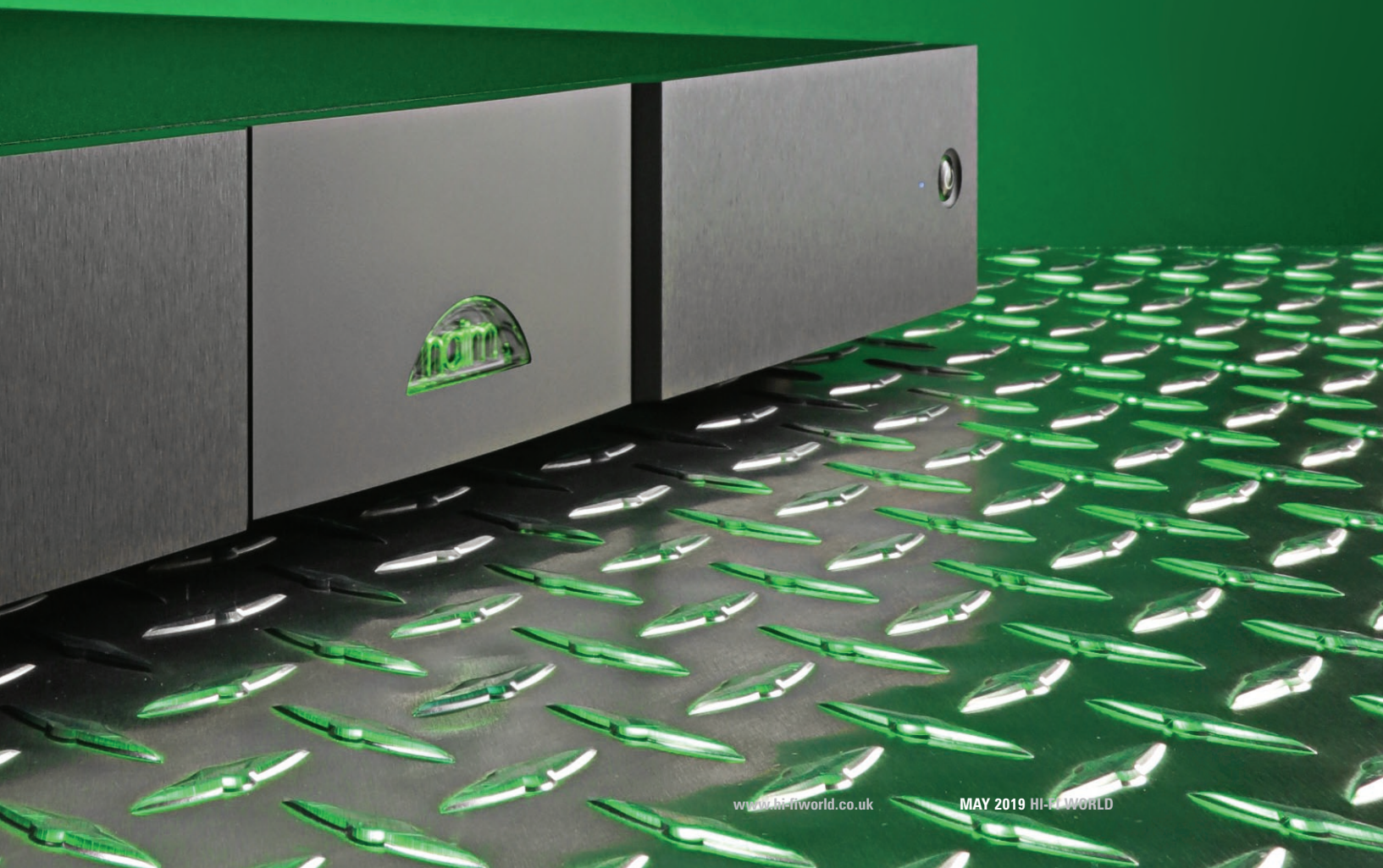
So, although the ND5 XS 2 may look rather prosaic there's plenty of technology packed into its strong metallic chassis. Measurements were 432mm wide, 301mm deep and 70mm high with a quoted weight of 6.6kg, reflecting sturdy build and very large internal power transformer.

## SOUND QUALITY

Naim products have always been known for their muscular and vibrant sound quality - but with a streamer that's more to do with the amplifier used than the streaming device.

The latter's job is to pull the most detail, rhythm and musical nuance out of a track then let the amp do its job.

And to the Naim's credit that's exactly what it does. Playing Sebastian Rochford and Pamela Kurstin's 'Ouch Evil Slow Hop' through a pair of Neat Iota's little Alpha floorstanding loudspeakers with their excellent ribbon tweeters and connected to a revealing Devialet Pro 220 amplifier



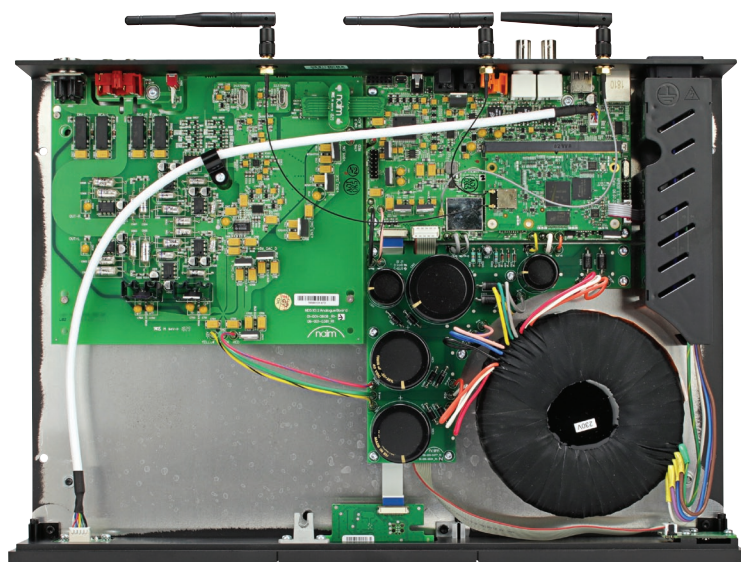


the sense of atmosphere was palpable.

There was even more separation between Rochford's pounding drums and Kurstin's eerie – and sometimes downright alien – Theremin figures. The whole album



*The rear of the ND5 XS 2 has three aerials – two for wi-fi and one for Bluetooth, as well as digital inputs and analogue outputs.*



*Typical Naim neat interior with an oversized toroidal transformer in a linear power supply – no switched-mode here.*

also had more atmosphere, making it sound so much more alive.

Also noticeable was the effortless way the Naim produces rich productions. It's sound flows in an organic way – as evidenced by the hi-res (24/192) rendition of The Eagles' 'Hotel California'. Little percussion embellishments came over crystal clear and the instrumental layers were cleanly separated but hung together as a whole.

It wasn't as though the ND5 XS 2 was getting in the way of the music – just playing it cleanly and as it should sound. So on The Smiths' 'The Queen Is Dead' I could clearly hear the layered guitars within the opening track, while on 'I Know It's Over' Johnny Marr's guitar was sweet and gentle – a perfect counterpoint to the vocals.

This is what the ND5 XS2 streamer does so well. Whatever music I played it refused to muddy or sully the sound – just playing it as it was meant to be.

With Spotify I could hear the drop in sound quality from hi-res but it was still listenable enough to be used as a source. Internet radio also pulled in all the stations I could wish

for and the app made it easy to sort through them in terms of country, genre etc. And the better the bit rate the better the Naim sounded with music.

## CONCLUSION

This may well be the entry level model in the new range but it is still a very impressive beast. It has all the features you could need and, more importantly, sounds superb. If you can do without a screen and remote (and, frankly, who needs a remote when the app is so good) then it ranks as one of the best streamers you can buy at this price – and will also out-perform costlier models.

## MEASURED PERFORMANCE

Frequency response of ND5 XS 2 reached a low 24kHz (-1dB) before rolling down fast, our analysis shows, affecting all sample rates above 48kHz. Naim have curtailed response in line with their design philosophy here, Naim amplifiers traditionally reaching no higher than 20kHz or so before a slow roll-down in the supersonic region.

The optical S/PDIF digital input worked reliably to 176.4kHz with 192kHz difficult to establish, depending on TOSLINK plug fit, whilst electrical reached 192kHz.

Fixed output (no volume control) gave 2.1V maximum (0dB FS) and 0.0006% distortion. At -60dB distortion from a 24bit, -60dB input measured 0.07% – low but not class leading. Our analysis shows mostly noise. Naim use a Burr Brown PCM1791A DAC chip.

Distortion with CD measured 0.22%, as always due to 16bit quantisation noise; CD cannot produce a better result.

The important EIAJ Dynamic Range value with 24bit measured a mediocre 109dB, due mainly to noise our analysis showed; around 115dB is expected nowadays. With both CD and Bluetooth the value was a normal enough 100dB.

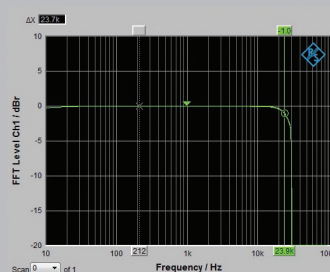
The ND5 XS measured well, but is behind results expected nowadays in terms of dynamic range with hi-res. A

small amount of noise degraded both distortion and dynamic range values. **NK**

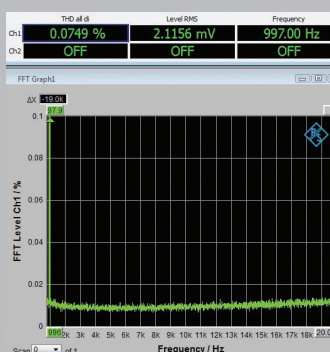
### Frequency response (-1dB)

4Hz-23kHz	
Distortion (0dB)	0.0006%
Distortion (-60dB)	0.07%
Dynamic range (EIAJ)	109dB
Noise	-108dB
Output	2.1V

### FREQUENCY RESPONSE



### DISTORTION



**NAIM ND5 XS 2**  
**£2299**



**OUTSTANDING - amongst the best.**

**VALUE - keenly priced**

### VERDICT

A no-frills look but a thrilling sound. Perfect for those looking to add a streamer to their existing system.

### FOR

- detailed sound
- build quality
- feature set
- Bluetooth

### AGAINST

- no screen
- no remote

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