

# Naim that tune in one

Drawing on existing kit and adding some twists, this could be the most complete Naim product yet says **James Parker**

**A**mong the Naim faithful, every hint of a new product is greeted with endless speculation about what's on the way and the trotting out of well-polished wish lists often encompassing products perfect for the list-maker, but potentially of such niche appeal that they could probably never happen.

Somewhere deep within Naim's HQ, I can't help but think such speculation is often the cause of some amusement as the company seems to be able to wrong foot the guessers every time by announcing something no one saw coming, but which proves an entirely logical addition to its catalogue.

The NAC-N 272 caught them on the hop, but has rapidly established itself as not just a product coveted by those whose immediate reaction was "You've launched what?!", but also the subject of some rapid myth-creation on the part of the more fanatical Naimees. The initial surprise was that the company chose to introduce another streaming preamplifier, when it already has the NAC-N 172 XS. However, soon the online gasps turned into whispered, and then ever-louder suggestions that this was the best-sounding network product in the lineup, good enough to have the flagship NDS looking nervously over its shoulder.

So what is the NAC-N 272? Well, it's a preamplifier with network music player capability that has both digital and analogue inputs plus a choice of fixed or variable-level outputs (so that you can plug it into an existing amplifier as a source component, straight into a power amplifier or as source and control for a pair of active loudspeakers). There's wired or wi-fi networking, a USB input on the front to which you can connect a USB drive or your smartphone or tablet, Bluetooth for wireless hookup of portable devices and Spotify Connect compatibility.

The main option here is an internally fitted DAB/DAB+/FM radio tuner module, if the onboard internet radio provision isn't sufficient, but there is one more typically Naim touch: like the NAC-N 172 XS, and unlike other Naim preamps, the NAC-N 272 has its own internal power supply, built around a hefty toroidal transformer with separate windings for the analogue, DAC, digital processing and control sections. It's also possible to upgrade the NAC-N 272 with the addition of an offboard power supply: Naim's XP5 XS, XPS or 555 PS can be used.

With that done, the mains power switch on the rear of the preamp can be turned off, so the internal transformer is bypassed, thus removing a possible source of vibration and adding a lower

## A fine cornerstone around which to build a streaming audio setup

impedance power supply setup with more regulation. While the effects of these upgrades are outside the scope of this review, I have tried the 272 with both the XPS and 555 PS, and concur with Naim that "the differences in performance are not subtle".

One of the main talking points will either have you thinking "At last!" or "So what?", depending on your point of view. The NAC-N 272 is the first Naim product able to play DSD files (although the capability is being rolled out to the ND5 XS, NDX and NDS network players and the SuperUniti, all of which are built around the same SHARC processor at the heart of this unit). Whatever your view on DSD, the fact is that increasing numbers of digital devices support it, and it's becoming one of those digital boxes seemingly needing

to be ticked: the Naim can do DSD64/2.8MHz, and via USB, electrical digital input or over a network (given UPnP software in your NAS able to serve DSD files to it).

How relevant is DSD? Well, there's a growing number of labels offering content either as downloads or on SACDs, with the classical labels particularly strong in the latter respect, and quite a few enthusiasts with modded 'old model' Sony PlayStation 3 consoles in use as a means of ripping SACDs to files the Naim can play. Yes, some are dismissive of DSD as an irrelevance in the second decade of the 21st century, but the fact remains there are thousands of SACD titles out there, plus that resurgence in the availability of new recordings.

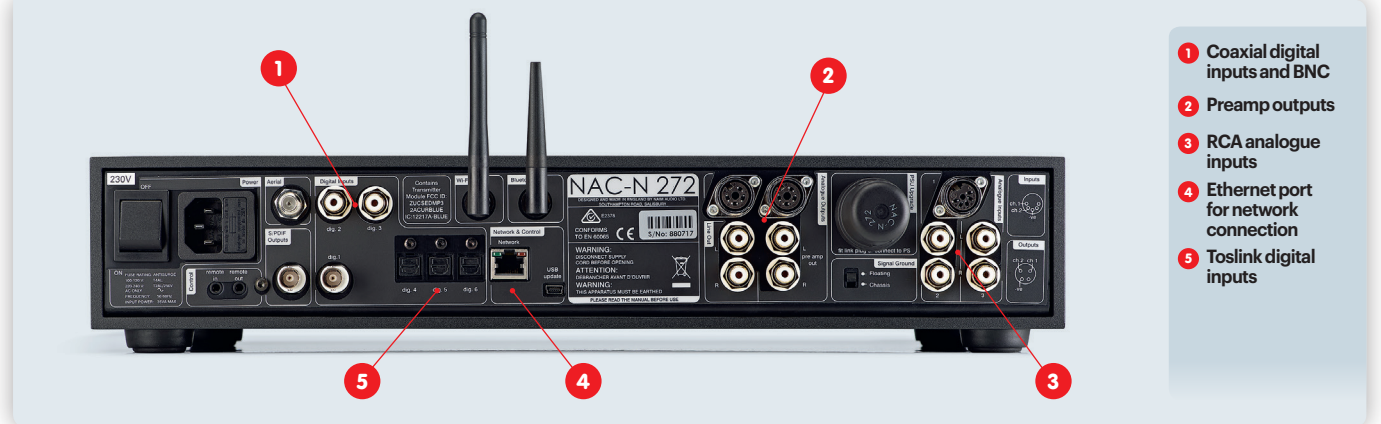
Unlike some offering DSD capability, Naim has opted to do things the proper way: the DSD signal is kept as pure as possible by stripping out the digital header information, leaving only the audio to be optimised for the NAC-N 272's DAC by integer resampling it to 40-bit/705.6kHz, then feeding it to the 24-bit DAC, bypassing the digital filter.

All this is done using Naim-written software, not an off-the-shelf solution, with that SHARC processor also looking after buffering, reclocking and de-jittering of incoming digital signals, as is done in the NDS and

**DETAILS**  
**PRODUCT**  
Naim NAC-N 272  
**ORIGIN**  
UK  
**TYPE**  
Network music player/preamp/DAC  
**WEIGHT**  
12.5kg  
**DIMENSIONS**  
(WxHxD)  
432 x 87 x 314mm  
**FEATURES**  
• Streaming/playback at up to 192kHz/24-bit and DSD64/2.8MHz  
• Analogue volume control  
• Digital inputs: BNC, 2x RCA, 3x Toslink optical  
• Analogue inputs: DIN, 2x RCA  
• Fixed and variable analogue outputs  
**DISTRIBUTOR**  
Naim Audio Ltd  
**TELEPHONE**  
01722 426600  
**WEBSITE**  
naimaudio.com



## CONNECTIONS



- 1 Coaxial digital inputs and BNC
- 2 Preamp outputs
- 3 RCA analogue inputs
- 4 Ethernet port for network connection
- 5 Toslink digital inputs

other Naim network players. As in those players, the digital and analogue sections are isolated and only connected optically to prevent any interference between them, with the main circuit boards floated to avoid mechanical interference, and even the wiring between the rear-panel connections and the internals designed to the same effect.

Finally there's analogue relay switching for the various inputs, completely isolating those that are not in use, and a volume control derived from the one used in Naim's £155,000 Statement amplifier, combining a resistor ladder for optimal signal purity with digital control for convenience. Again optical

isolation is used to avoid interference between the digital and analogue sections, and completing the specification is a high-quality headphone amplifier section, for driving even demanding loads.

The NAC-N 272 comes complete with Naim's simple, but functional, remote control handset, but is best driven using the company's n-Stream app, available for Android and iOS tablets and smartphones.

## Sound quality

As a preamp, it is of course impossible to test the NAC-N 272 in isolation, so Naim has supplied a NAP 250 power amp, which is one of the models (along with the less expensive NAP

200) it sees as typical partners for the new product.

Who's the 272 designed for? Well, Naim suggests it's well suited to users moving up from one of its Uniti products to build a higher end system, while it's also aimed at owners of its earlier preamps who want to add network playback capability to their system while reducing the box count by avoiding the need for a separate player and preamp (not to mention power supply for the pre they may have been using).

Of course, the Naim seems to be all about high-quality recordings in DSD64 and hi-res PCM-based formats, so it seems only fitting to start listening by blasting out some

The design of the N 272 will be familiar to Naim followers





## Q&A

**Jon Green**

Principal Electronics Engineer,  
Naim Audio



**JP:** Was there a benchmark among your all-analogue preamps against which the NAC-N 272 was set?

**JG:** Naim's benchmark has always been about the musical performance and if it communicates. The target for the 272 was no different. Combining a network player and preamp in one box is not easy and we are really pleased with the result.

**How difficult was it to implement the DSD capability?**

The optimisation was the main challenge: code writing and DSP code at this level is science with an element of art – it's the art that makes it interesting. The difference between great code and average code is very significant in the areas of enjoyment and engagement of music.

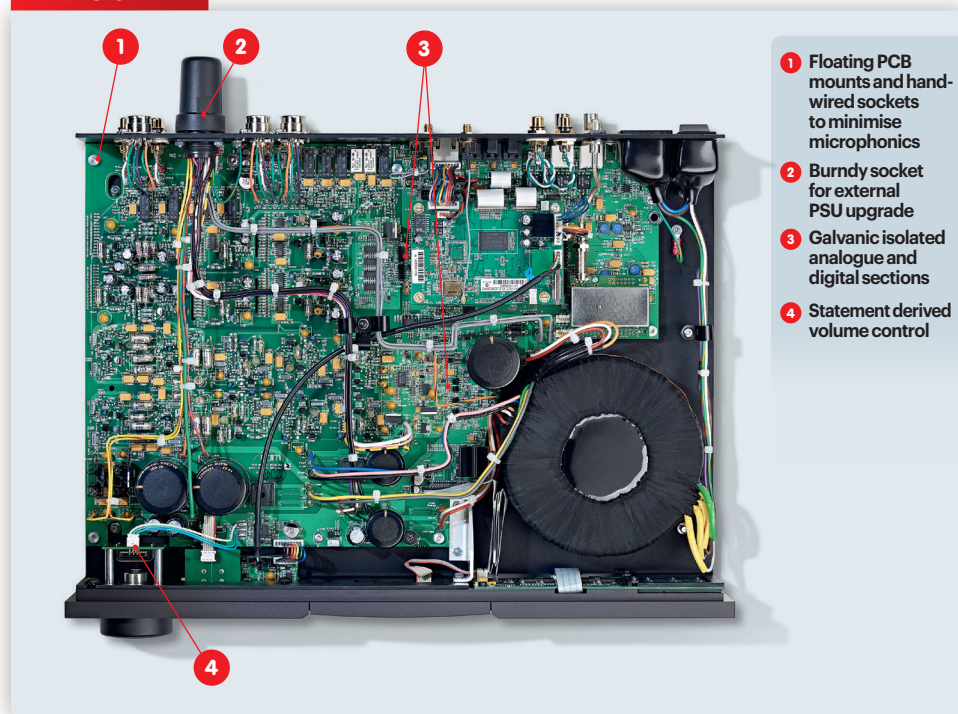
**So, beyond DSD64, where next? DSD128? MQA?**

Never say never! Although we don't see much music, we would like to listen exclusively on DSD128. MQA is interesting – let's see if it becomes a commercial reality.

**The BBC's recent 'moving of the goalposts' with regard to radio streaming caused major problems, how much work has been involved in getting the Naim range back on track with its services?**

'Fixing' the problem is not trivial, as our streamers use embedded systems optimised to run with minimum memory and CPU overhead, which is better for sound quality. It can be a problem in code writing to fit in new, sometimes more complicated, requirements that don't compromise the audio performance. But we're on it...

## IN SIGHT



- 1 Floating PCB mounts and hand-wired sockets to minimise microphonics
- 2 Burndy socket for external PSU upgrade
- 3 Galvanic isolated analogue and digital sections
- 4 Statement derived volume control

KLF at silly volume, making the most of the power of the NAP 250 and the clarity of the preamp.

So with a CD-quality rip of *America: What Time Is Love?*, all nine glorious minutes of it, hammering out of the speakers, it is clear that even when the music is in full-on attack mode, the Naim can allow striking insight into the depths of the mix. And it can do so while maintaining those traditional traits of timing, rhythm and driving musicality, not to mention thundering bass: it's glorious stuff.

Similarly with the (admittedly undemanding) rhythms of Hot Chip's wonderful *Why Make Sense?* set, in a 24-bit/44.1kHz FLAC download, the Naim makes a good job of the sting of percussion and the weight of the bass, while still bringing out good character in the vocals and lead instruments, even if the whole enterprise does tend to wash over the listener in an inoffensive blur (which is down to the music, not the system).

The sound gets even more impressive as some Roxy Music is summoned up from the NAS, in the form of *Dance Away* from a PS3 rip of the SACD of *Manifesto*. Ferry's vocal is kept focused centre stage, but most impressive is the way the Naim makes the most of that tight, clean bassline and the little touches of percussion, really bringing the track to life.

Yes, we've strayed into DSD territory here, and this player/preamp makes a very strong case for the survival/revival of the format: delve back into

the Roxy catalogue to 1972's *For Your Pleasure*, and the shuddering, juddering chug of *The Bogus Man* is revealed in all its menacing glory, while the bonkers synth break of *Editions Of You* is all about early Eno at his finest, the electronics shrieking and parping magnificently.

## Conclusion

So, is the NAC-N 272 a giant killer within the Naim range? Well, it's very good indeed, but I wouldn't go that far, although I'll withhold final judgement until I've heard what some of the pricier network players in the lineup can do when they're all DSD'd up. What is beyond doubt is that on any terms this is a very impressive solution to bringing an older system bang up to date, as well as a fine cornerstone around which to build an all-new streaming audio setup ●



Given what it offers, from its preamp functions to its DSD capability, it's difficult to draw many direct comparisons between the Naim and other products. Yes, the more affordable NAC-N 172 XS goes some way towards doing what it does, but the 272 is in an entirely different league. Perhaps the closest competition comes from the likes of the Marantz NA-11S1 network player. Use it together with the matching PM-14S1 integrated amplifier, and you'd have the basis of a good system for under £1,000 more than the NAC-N 272.

## Hi-Fi Choice

### OUR VERDICT

#### SOUND QUALITY

★★★★★

#### VALUE FOR MONEY

★★★★★

#### BUILD QUALITY

★★★★★

#### FEATURES

★★★★★

#### OVERALL

★★★★★

**LIKE:** Flexibility; belting sound quality; upgradeability

**DISLIKE:** No USB input for computer; limited streaming service support so far

**WE SAY:** An excellent addition to the Naim range: the NAC-N 272 sounds superb