

HEGEL H160 AMPLIFIER EXCLUSIVE FIRST TEST!



# hi-fi+

ISSN 1465-5950



REPRODUCING THE RECORDED ARTS

JANUARY 2015 • 119

[www.hifiplus.com](http://www.hifiplus.com)

## MU-SO MAGIC!

### HOW NAIM AUDIO REINVENTED MUSIC IN THE HOME



CAMBRIDGE AUDIO  
AEROMAX 6  
LOUDSPEAKERS

ECLIPSE TD-M1 DESKTOP  
SYSTEM

EUROPEAN AUDIO TEAM  
E-FLAT TURNTABLE

OPPO HA-1 HEADPHONE  
AMP/DAC/PREAMP

RUSSELL K RED 100  
LOUDSPEAKERS



WIN!! RHA'S FANTASTIC  
T10I EARPHONES  
WORTH £149.95!

## Naim Audio mu-so network music centre

by Chris Thomas

**B**ack in the 1970's Naim Audio was the outsider; the hair-shirt amplifier manufacturer so beloved of the then nascent 'Flat Earth' school of audio.

Today, despite some fairly considerable changes to both the company and the entire audio world, arguably Naim Audio has stayed truer to its original goals than many of its contemporaries. However, in 2014 Naim announced a couple of left-field products that unseated the mainstream view of the company, held by fans and critics alike. First came *The Statement*: £130,000 worth of pre/power amplification exotica that gave the middle finger to those who had questioned both the direction and the confidence of the company, and who suggested Naim Audio would lose its identity in the wake of its well-publicised hook-up with French loudspeaker brand, Focal. *The Statement* was followed by mu-so, a self-contained network music centre that was the company's first product available both within and without the ardent Naim dealership network.

At first glance, Naim Audio making a wireless music centre might seem as out of

place as Rolex making a Swatch watch. The terminology itself makes it sound stranger than it actually is in reality but, at the press launch earlier in the year, the three products on show did appear incongruous to the traditional view of the company. A couple of fully fitted Bentleys, *The Statement*, and a huddle of the little mu-so machines perhaps show why it's more an expression of the traditional company reaching out to a far wider audience. A press launch for a new Naim power amplifier will draw in members of the audio press and a few hi-fi bloggers at most; the launch of mu-so saw Naim Audio appear on the radar of a wider range of tech magazines and TV programmes like *The Gadget Show*. Unless we want hi-fi to stay an ever-diminishing clique of aging audiophiles, we need more Naim Audios making more products like mu-so. It's as simple as that!

In a way, though, mu-so remains curiously true to Naim's core values of inspiring people to look deeper into exploring the musical and sonic arts. It was those core values that 'minted' so many music lovers who started down the hi-fi rabbit hole in the 1970s and 1980s. And, even in the general melee of that press launch, Paul Stephenson, Naim Audio's Big Cheese (note: Big Cheese, not *grande fromage*), showed me how those same core values exist today in mu-so, by accessing it through the Naim iPad app. You can make no judgements at such a noisy event, but mu-so certainly looked sharp and I could hear that it was clean sounding, had decent bandwidth, and it went loud. Most of all, though, I wanted to get one at home, and a few months later, ►





► I did just that. I am not sure exactly what I was expecting quality-wise, but to say I have been surprised would be an understatement.

Naim's mu-so was larger than I remembered. The case is made from MDF and covered in a beautifully finished brushed steel sleeve. At the rear is a full-width finned aluminium heat-sink while the front is a rather nicely sculptured waveform grille that comes in black although replacements can be obtained in 'Deep Blue,' 'Burnt Orange' (which is nicer than it sounds), and 'Vibrant Red'. Perhaps this range will be extended, but the cost per grille will be £70. The app allows the listener to change the background screen colour to match any of these grille colour schemes, too.

Naim Audio builds mu-so in China of course, and the story as to how Naim sourced the right manufacturer included just about everything from quality, through consistency, even to ethical standards. These important aspects of the construction process are often overlooked in bringing a product to market, but not this time it seems. Despite this, there will still be many demanding a UK built product, but it would be simply impossible to build a machine like mu-so in Salisbury at anywhere near this price without compromises, and that is an inescapable financial reality.

On mu-so's top is the 'control centre'; a large sunken rotating aluminium volume control, illuminated with the switching functions and level indicators, which looks very much like the design fitted to The Statement. I like that Naim decided against a touch screen with volume up and down arrows, because the feel of the control is simply gorgeous. It is, without question, the best feeling dial that Naim has ever employed. It is large, smooth, needs only a light touch, and has no backlash whatsoever. As you adjust the level, an illuminated display atop the control shows you where you are, and the other inputs can be selected via this display, too. One touch, and you just know you are dealing with a quality piece of equipment. Given mu-so is rolling out to chic department

stores and Apple Stores as well as the usual purveyors of fine audio, that touchy-feely aspect of design suddenly becomes all important, and I wouldn't be too surprised if many mu-so sell on that alone. I have to say that, in comparison, the remote handset strikes me as something of an afterthought. It is far too flimsy and rather clunky in action. I doubt you'll use it very often, especially as its functions are replicated in the dedicated app (it requires iOS7 or above, or Android 4.0 and above) that you need to drive mu-so. This app gives you full control over input selection and volume and is loaded with the full range of Internet radio selections, but more on these options later.

Once powered, mu-so reinforces its 'lifestyle' product credentials as it illuminates the Naim logo, and this extends across the width of the solid acrylic base giving it a cool look as if floating above the table. If the illumination is too bright, you can scroll through three levels of intensity, or turn it off altogether.

Set-up is simple and progress is shown by a tiny LED on the side of the case that changes colour as you move through the process. Alongside this is a USB port that can play music from Apple iOS products as well as charging them, or music from a USB memory stick. There is an optical input that will function up to 24-bit/96kHz and a 3.4mm stereo analogue input jack, too. Beneath the unit, adjacent to the mains ►



▶ socket, you will also find an Ethernet port for a physical network connection, keeping visible wiring to a minimum in the process. While a wired connection offers resolution up to 24-bit/192kHz with FLAC, WAV or AIFF files, wireless connection manages only 48kHz with robustness. My advice, as with all such components is that, if it is possible, then hard-wire it. With the increase in the number of things accessing a wireless network these days, always take this option if you can. Once connected, mu-so will see all compatible devices linked to the router.

Throughout my time with mu-so, I tended to use the app through an iPad. This gave me access to all the formats I needed. It can support Apple Airplay, UPnP, Spotify Connect, and even the aptX version of Bluetooth (not currently supported by Apple).

Naim seems to have covered most bases with mu-so and it will play back from just about any phone, tablet, or even NAS drive, and several mu-so can be wirelessly linked for multi-room use, which can also be controlled by the app.

Pop the front grille off and you will see the on-board speakers. There are custom bass, mid, and treble drive units for both channels, each unit driven actively by a 75-watt digital amplifier, giving, Naim claims, a total of 450 watts of output power. The drivers are arranged in a mirror-image configuration, and this installation incorporates a flared and ribbed port too, exiting at the bottom of the cabinet. The amplification, and the way it drives the speaker units, is controlled by a DSP chip capable of 150 million calculations per second, running Naim-written custom code. The incorporation of this was inspired by the Bentley car program, though this chip itself is totally custom. Processing the signal and the 'active configuration' of the speakers was one of the biggest challenges in creating the exceptional sensation of the music being out of the car's body and into the passenger space within, and the experience of the car program has been invaluable in my opinion. Having used a Bentley for an unforgettable week of cruising around enjoying the on-board sounds (*yeah, yeah, no need to rub it in – Ed*), I hear a lot of the same character and musical experience with mu-so, too.

When you think of the amount of work a product like mu-so has to do and consider the limited amount of physical space, it's no wonder that most similar devices sound so small and strained. But the steps that Naim has taken in making the mu-so cabinet from a material often associated with loudspeakers, with such an excellent finish, and going for plenty of usable power have been worth it. It doesn't take long once you sit and listen to mu-so to realise that the whole endeavour has left Naim Audio with a truly class-leading product on its books.

Naim's mu-so has four levels of equalisation that are accessed through the app. A couple of these equalisation settings adjust the tonal balance to reflect mu-so's proximity to a rear wall, but you can switch the Loudness control in or out depending on how low a level you are listening at. It's been a while since I have seen a Loudness option, but as this is DSP driven, at lower levels it gives the low end a very worthwhile lift and fleshes out the sound nicely. You wouldn't want it on as the volume level is increased. Well, I wouldn't anyway. Head-bangers might.

Sitting mu-so on a kitchen work surface works but, at 628 mm wide, it is quite large and I certainly couldn't find that sort of spare workspace in my kitchen. Anywhere you want to take quality music that can accommodate mu-so will be a success but, in my opinion, it is good enough to warrant a more considered installation. I can even envisage it as a complete audio system where space, finances, or an aversion to trailing wires would mitigate against separates. However, try to avoid sitting it atop hollow furniture if possible; although mu-so has some resonance control thanks to its dimple feet, it still generates enough energy through its cabinet to excite any box-like structure and set it off resonating away with the music. Adding three or four custom feet, preferably hard-coupled, like some small hardwood blocks will lessen the booming effect greatly.

Whether playing a NAS box full of music or simply armed with a Spotify Premium account, the possibilities really open up because mu-so does bop along with a sophistication and open friendliness to its sound that none of its rivals, at least none that I have heard, come close to matching. It is punchy and has great presence, and what's more important is that it is so musically together and consistent over all of its inputs. Forget about low colouration and true-to-life accuracy. That is not what mu-so is about at all. This player is about

fun, and good old foot-tappin' involvement. But that's not to say it lacks sophistication or is a one-trick-pony, far from it. Give it a high quality file to play and I guarantee that you will be delighted at its musical coherence and articulation. So many large, expensive systems that play digital files are all about pristine resolution and micro detail. But, can they carry a tune, do they disseminate the music somewhat, and are they rhythmically in-the-groove? To my ears at least, very few of them tick those boxes to the same extent that Naim's systems can, and (perhaps surprisingly) the way mu-so does. It's not a majority view among today's audiophiles, but I feel that desire for higher bit-rate music has a way to go yet and the rather tiring nature of the early CD players is being reprised at times. Naim's mu-so avoids all of these things, and I have to say that whoever sorted the DSP procedures has got things spectacularly right. The way the music manages to stay free of the sort of colourations that you might well expect from this amount of power being confined within such a relatively compact box is a constant surprise and a constant joy.

Those who have heard and commented on mu-so tend to concentrate on the way it deals with high-resolution files from a NAS or other storage device, but I have to say that I am a huge admirer of both its Spotify performance and its approach with Internet radio, one of the most undervalued sources of free music. If you do have the aforementioned Spotify Premium account then mu-so will ►



## TECHNICAL SPECIFICATIONS

**Type:** Single box solid-state network wireless music system

**Inputs:** Bluetooth (aptX), Spotify Connect, UB/IOS, Naim Multiroom UPnP, Airplay

**Digital Inputs:** TOSlink, 24-bit/96kHz Optical

**Analogue Inputs:** 1 x 3.5mm jack (stereo)

**Formats Supported:** ALAC, 24bit/96kHz, MP3/AAC 48kHz, 320kps, Bluetooth SBS, AAC and aptX. 48kHz limit for wireless connection

**Speakers:** Mirror imaged 3-way x 2

**Amplifier Power:** 6x75 watt actively driven

**Dimensions:** 628 x 12 x 25.6mm (HxWxD)

**Weight:** 13kg

**Price:** £895

**Manufacturer:** Naim Audio

**URL:** [www.naimaudio.com](http://www.naimaudio.com)

**Tel:** +44 (0) 1722 426 600

► access the music for you via Spotify Connect and your hand-held device will act merely as a controller while mu-so does the streaming work.

In a world of today's music files, where the bitrate is king, I think Naim has, as usual, also done a superb job where Internet radio is concerned, and I spent a lot of my time surfing the world's radio stations. The Naim app allows you to search by genre and then country if you wish, so being able to explore the world of Jazz and Bluegrass, should you so desire is very easy. When you find a high bitrate broadcast there is no disputing the quality, but it was the lower rate stations that really surprised me with their broadcasts being remarkably listenable through mu-so. I guess what I am saying is that the music you like will always sound better than technically higher quality broadcasts of music that you are indifferent to. One of Naim's favourites, Radio Paradise and indeed Naim Radio itself, can sound enormously impressive through mu-so and it is easy to spend a long time flipping through the stations. I guarantee you that a couple of hours of this and you will hear several albums you will want to get for your own collection, whether that be as a digital download or in hard form like a CD. And of course, the sounds from ripped CDs stored to a NAS box in the system played through mu-so are very, very good, too.

Naim's mu-so is a great device that succeeds on many levels. What it lacks in ultimate sophistication, it more than makes up for in exuberance, immediacy, and the fun of involvement, to say nothing of its very reasonable price. If you want to get more music in your life, then get a mu-so. It's as simple as that. +

