# HIFICRITIC

## AUDIO REVIEW MAGAZINE

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#### HIGH END 2016

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#### dCS ROSSINI PLAYER + CLOCK

Chris Binns assesses dCS's Rossini CD player/DAC and its associated Master Clock

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#### **ROGUE AUDIO SPHINX V2**

Paul Messenger auditions an affordable hybrid integrated amplifier that combines valves with digital amp modules

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XTZ Tune 4
NVA The Second Statement
Exposure 3010 S2
Rogue Audio Sphinx V2
Glasshouse Passive #1
Vincent SV-700
Hattor Ultimate Passive
Little British Monitor
Roksan Caspian RPP
dCS Rossini Player+Clock
Glasshouse TVC
MFA Classic 632 Phono Amp
Rothwell Headspace

Lounge Audio Copla Lounge Audio LCR MkIII

MFA Classic Step Up

**MFA 632** 





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s we rush headlong into the future, let us not forget that hi-fi has been around for most of our lifetimes, and that most of what the music business considers as progress has been about improving access and convenience rather than quality, through such initiatives as the widespread popularity of MP3-encoded files.

I'm currently feeling somewhat exasperated, as my computer, iPad and smartphone have decided to stop communicating with my Naim *UnitiServe*, and I've not the slightest idea why. I've tried restarting various bits and pieces, so far without success, and the control Apps simply refuse to make the connection.

This may well be because I have no real enthusiasm for wrestling with computers, but suspicion inevitably falls on the 'software updates' that seem to have become an inevitable and regular part of life these days. Nobody seems interested in explaining why software engineers don't get it right in the first place, but I suspect that one reason behind the continual 'updating' is simply that it's possible to do so. By their very nature, home computers and their ilk are foxy little devices that are well able to change their spots almost on a whim.

Fortunately I still have access to my music via plenty of 'oldfashioned' CDs and vinyl – and indeed the numerous tracks that are stored on my laptop. But you'll probably have to wait until the next issue to find out about access to my server.

#### Towards the Future?

In the meantime it may well be high time I got into streaming. It's something I've not really bothered with to date, largely because I've spent more than fifty years collecting enough discs (vinyl and compact) to keep my CD and vinyl players busy for years. (Indeed, simply because I've already got plenty of material, my disc collecting seems to have tailed off somewhat in recent years.)

However, I've recently been staying for a few days with my younger brother in Sweden, who streams his music via a Spotify subscription. While this may not particularly appeal to my hi-fi sensibilities, I have started to appreciate the easy access to all manner of tracks that it brings. And although I've always regarded my music collection as reasonably comprehensive, it does inevitably have some gaps (usually around the time that progeny are arriving), so a streaming service does therefore have some advantages (especially since contact with my server has temporarily been lost).

I should have got streaming up and running by the next issue too, so will be able to report on any of the practical difficulties this computer phobic encounters along the way. As a parting shot, however, it seems to me that the advantages of streaming may well depend on the size of one's music collection, which is likely to be a function of one's age.

Paul Messenger Editor

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# Focal Sopra No2

#### MARTIN COLLOMS ASSESSES A STYLISH NEW FLOORSTANDER

"First impressions were of a svelte and well mannered sound, with a natural tonal balance that remained stable across a wide range of loudness — a quality that's not as common as one might wish"

ooking over the recent *Sopra* series of loudspeaker designs from noted French manufacturer Focal, one can identify several design and technology elements derived from the more costly and luxurious *Utopia* series, in this case especially the *Scala V2* (reviewed during 2013 in *HIFICRITIC Vol7 No2*). At 2.2m high, the sub-£10,000 *Sopra No2* is almost as tall as that £25,000 *Scala V2*, and is also attractively slender thanks to the use of twin 180mm (7in) bass drivers instead of the solitary 280mm (11in) unit found in the *Scala V2*.

Superficially it would therefore seem that *Sopra No2* has a good measure of *Utopia* technology, but at a much more competitive (under £10,000) price point. The *Sopra* series also includes a *Sopra No1* stand-mount, which is configured as a two-way with a 165mm (6.5in) bass/mid driver, along with all the technology benefits, and a recently introduced *Sopra No3* which has a pair of larger 210mm (8.25in) bass drivers, which could well take on the *Scala V2* itself.

Our review sample was finished in a mirror-gloss white, looking really handsome in my contemporary room setting: tall and slim, with echoes of the more costly Utopia models. This may seen right away in this curved enclosure, which has a subtly down-tilted top section, carrying the midrange driver, and arranged so its output is more precisely focused towards the listener. Where the back of Utopia enclosures used to have a fissure between the midrange section and the lower enclosure, here this is filled by an attractive perforated stainless steel mesh insert, visually maintaining the enclosure line. On the front a solid section joins the upper and lower enclosures, and does in fact provide the foundation for one of Focal's famous 25mm inverted dome beryllium tweeters, here fitted with a neatly perforated protection grille secured by two tiny socket head bolts. (Some enthusiasts may well prefer to dispense with these, as I did, though the sound quality change is really quite small.) The quoted crossover frequencies are 250Hz and 2.2kHz, leaving nearly a decade to the midrange driver.

The void formed between the upper and lower sections is used to advantage. It's configured as a damped transmission line forming an extended acoustic back-loading for the tweeter. The top surface here is plate glass, with a well protected printed silver Focal logo on its underside. The substantial footplates

are also made of heavy duty glass. Hefty and well designed floor mounting hardware has knurled wheel locking and captive spikes, for precision levelling and floor interfacing; hard polymer caps are supplied for ceramic and polished floors. Separate clip-on fabric-covered injection-moulded grilles are provided for the bass and midrange sections.

Each speaker weighs 55kg (121lb), representing a two man lift, and the overall dimensions are 220x38.5x54cms (HxWxD). Amplifier connection is made to single-wired heavy duty gold-plated binding posts, which also accommodate 4mm sockets. Focal rates the speaker for amplifiers of 40-300W/ch output, and the lacquer finishes come in Black, Carrara White, Imperial Red, and Electric Orange; walnut veneer is the more traditional alternative.

#### **Sound Quality**

The review samples had been well run in and settled down quite quickly on arrival. Positioning was not too critical and established locations in my room were effective in providing a neutral and extended response. I have also experienced a pair of *Sopra No2s* playing to larger audiences, both at the Bristol Show and also for amplifier demonstrations at Naim Audio's HQ: their ability to play really loud and clean could no longer be in question. The bass seems correctly tailored for a normal room, and is extended to lower frequencies without significant excess or overhang, reflecting a thoroughly modern roommatched design.

First impressions were of a svelte and well mannered sound, with a natural tonal balance that remained stable across a wide range of loudness - a quality that's not as common as one might wish. Dynamics were impressive and it does not shout at peak levels, which are some of the hallmarks of low distortion. The bass seemed to have even better definition than we'd found in the Scala V2 Utopia. Sopra No2 is more upbeat with clearer tune playing and sounds mighty impressive, albeit with less absolute weight and power. Piano can be a troublesome instrument for many designs, but Sopra No2 showed only mild coloration here, and proved capable of exciting and involving musical performances, both for solo and concerto piano works. Jan Garbarek's soaring alto sax solos can also be a trial for many loudspeakers but Sopra No2 sailed

MARTIN COLLOMS

through with flying colours, confirming its fluidly integrated mid-treble register.

Taken overall, coloration was held to moderate levels and was never intrusive. Stereo focus was very good and large scale soundstages were created, with appropriate height, width and depth. The treble was very smooth and clean except with the more raggedly Aphexed pop vocal tracks which could excite a hint of 'sizz' in the high treble. This loudspeaker proved a solid all rounder and showed no particular preference for a specific music genre, or indeed sources which included LP. Above all it remained easy on the ears, facilitating extended replay sessions with low fatigue.

#### **Conclusions**

This elegant and unusually configured tower speaker had a big heart, playing beyond the expectations of its size and specification. While not as sensitive as claimed, it can play very loudly when required (up to 108dBA in-room), and has very good power handling, fortunately combined with low distortion and moderate coloration. It is essentially neutral and easy on the ears, delivering large, deep and well focused soundstages with good ambience and transparency. It is quite upbeat and has extended, powerful and even-sounding bass. Highly Recommended, it reached significantly beyond its class, almost to Audio Excellence territory.

#### Lab Report

The sensitivity claim is a rather optimistic 91dB/W (80hm), and we measured some 3dB less, albeit a still a reasonable 88dB/W. However, the impedance does not provide much support here, since we rated it at 40hms in view of a minimum of 2.60hms at 100Hz, and a worst case reactive load combination at 73 Hz of 4.20hms with a phase angle of 56 degrees. We therefore recommend 40hm rated amplifiers of good load driving ability.

On axis the reference response is smooth from 150Hz to 1.5kHz reading ±1.5dB, and with fine bass-to-midrange integration. A characteristic treble peak of arguable audibility measures +10dB at 24kHz (and +7dB at 20kHz), which could well be audible for younger ears as a slight 'tizz'. A 3dB dip at around 2-3kHz is present on all response traces, as if it was designed in, and this deepens to -15dB below the main axis, so this speaker is notably unsuitable for a floor seated listener! Incidentally, that mild dip has been associated with a perception of increased image depth.

Confirming the tight and stable axial image focus, the pair match was excellent – better than  $\pm 0.5 dB$  from 300Hz to 20kHz (the limit of this measurement). Above the main axis the frequency response is a fairly good  $\pm 5 dB$ , 48 Hz-20 kHz, and for the near ideal 15 degrees lateral off-axis trace, it delivered a wide and smooth  $\pm 2.5 dB$  40 Hz-26 kHz. The 30 and 45 degrees lateral off-axis results are also good, though the upper midrange does dip rather, to -10 dB by 2 kHz at 60 degrees. This means that the side-wall reflection component might sound a little dulled when heard in the room acoustic.

It was interesting to correlate this data with the overall measured output using multiple mike locations integrated over the listening room space. This measurement shows that some 'character' is present for the frequency response, with a mildly emphasised mid-bass, a smooth midrange, and then a mild shelf cut in the treble output beyond 1.5kHz before the usual rolloff above 10kHz (due to the finite size of the tweeter). The previously noted axial dip at 2kHz is actually quite well suppressed on this measurement, so it may only show up in the relative nearfield.

The bass is unusual in having a 'step up' in the response between 40Hz and 80Hz that results from the use of secondary acoustic anti-resonators within





#### **Technical Story**

Focal wished to improve its loudspeaker technology in this new series, perhaps having lived for too long on the excitement generated by its beryllium tweeter. While not its most costly range, the new *Sopra* series has some important technical developments that should improve sound quality, giving more neutral timbres, better dynamic range, tighter cleaner bass and better clarity. One area of focus was distortion reduction, including the strategic placement of

Faraday eddy current shorting rings in the magnet systems, plus new surround and suspension designs for the W-cone (glass fibre skins on a Rohacell core) composite bass drivers.

The midrange driver's 160mm composite W-cone also has the Faraday rings, while the cone suspension benefits from a tuned damper – a subtle ring contour added to the surround-support which addresses a secondary resonance. The main bass reflex tuning also benefits from some internal Helmholtz anti-

resonators to smooth and taper the low frequency extension. And finally the tweeter gets a substantial horn-profile back-loading, which improves both the dynamics and the dynamic range, while supplying more transparency.

The well built enclosure has curved sides with substantial internal bracing and as a result the coloration signature is very good, while there are also improvements in crossover topology and components, together with a shift to single wired inputs, augmented by better quality terminations.

#### The Review System

Constellation Inspiration 1.0, Townshend Allegri control units; Constellation Centaur monoblocks and Inspiration Stereo, Naim NAP300DR power amplifiers; Naim SuperLine, Linn LP12/Keel/ Radikal with Naim Aro arm, Lyra Delos Cartridge; Naim UnitiServe network server and S/PDIF, Naim NDS Streamer-DAC-555 PS(DR) sources; Wilson Audio Sabrina, Magico S-5, Focal Sopra No2, Quad ESL63, BBC LS3/5a speakers; Naim FRAIM racks; Transparent MM2 and Naim NAC A5 speaker cables, Naim Super Lumina, Transparent MM2 and Van Den Hul Carbon TFU interconnect cables.

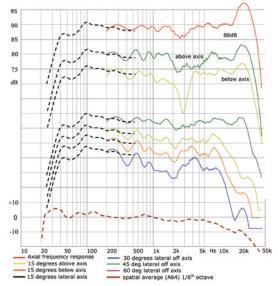
the bass enclosure, the better to blend the output for a typical room loading. Certainly I measured ±4dB, 26-100Hz for the in-room response, which is pretty good considering the price and size, in both uniformity and bass extension

For a 1W sinewave at 88-89dB, and at frequencies above 250Hz, harmonic distortion was very good, typically 0.1% for both second and more particularly third: this would seem to agree with the observation that it sounded promisingly sweet on audition. At lower frequencies 0.3% distortion was typical (and normal), rising to a very reasonable 1-3% in the 25-75Hz range. Peak bass power output came in at 38Hz, where it survived a massive and windowshaking 100W sinewave at about 108dB spl. Treble distortion was also very good, reading 0.03% third and 0.12% second harmonic, and this continued to improve as the input level was reduced. All of which would seem to confirm the hard work that Focal has done to lower distortions. The payoff is better clarity and lower fatigue.

The 'waterfall' display of energy decay with frequency and time showed that the early, transient-related output is well integrated and fast decaying, but the impulse leaves quite a complex decay field thereafter, hinting at some upper midrange colourations from some more subtle buried

Taken overall, these are a fine set of test results. Incidentally, the grilles had only a small audible effect, with just ±1dB measured errors in the range 3-14kHz, and with little change in average output. Many owners will prefer to leave them in place and enjoy their distinctive appearance.

Focal Sopra 2: Frequency Responses

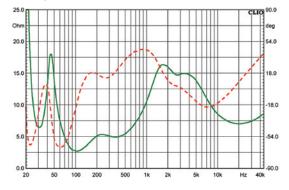


**Test Results** 

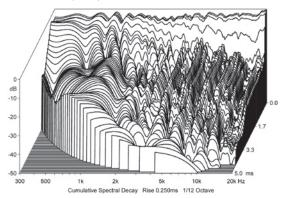
HIFICRITIC Loudspeaker laboratory measured test results:

Αριίι 2010		
Make		Focal
Country		manufactured in France
Model		Sopra No2:
	movir	ng-coil, floorstander, bass reflex
Finishes	Blac	k, white, red or orange lacquer;
		walnut veneer
Size (HxWxD)		220x35.8x54cm
Weight		55kg (121lb)
Туре		3 way: 2x180mm frame bass,
	16.	5mm midrange, 25mm tweeter
Sensitivity for 2.83V		88dB @1m (2.83V)
Amplifier loading		2.5ohm minimum,
		4ohm rated; average loading
Frequency response	axial	40Hz to 17kHz +/- 3dB
		(listener axis) (good tolerance)
1 , 1		
		e graphs and in-room response
Bass extension		36Hz -6dB, (30Hz -6dB in-room)
Max loudness, in-roo	m	106dBA for a stereo pair
Power rating (max, min)		200W, 50W
Placement (recommended)		) In free space,
on thumbwheel adjustable floor coupled spikes		
Price (UK)		£9,599/pair

Focal Sopra 2 Frequency Response: Impedance and Phase (dashed



Focal Sopra 2: Waterfall Display of Energy Decay with Time and Frequency



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# Subjective Sounds

## HIFICRITIC

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Martin Colloms, Publisher

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hree issues ago (*HIFICRITIC Vol9 No3*) I wrote about a very practical, sensible and inexpensive *irDAC* from Arcam. At a typical price of £425, it naturally made no attempt to set the sort of high standards one might encounter from brands like dCS or MSB. But it proved most effective at doing the very basic job of extending the analogue inputs of my system pre-amplifier into the digital domain, with full remote control over input selection too – a vital feature in my view.

Not long after that review had gone to press, however, I received an e-mail about a new *MkII* version. The differences seem quite minor, but are the reason for covering the new version here. For examples, the replacement does include a price rise to £495, which is still quite inexpensive in my opinion, but also seems to have addressed a couple of irritations that snuck up on me after I'd already written the original review.

Although I was happy enough with the original, a couple of minor niggles that emerged included a tendency to 'click' when changing either sources or TV channels. This was only mildly irritating, but the DAC also showed an occasional tendency to 'crash' (as all computers seem wont to do), which was certainly rather more exasperating. The good news is that the 'click' seems to have completely disappeared from the latest version, and (after a couple of weeks) it hasn't yet crashed (he says, carefully touching wood).

I normally use one of the two optical (Toslink S/PDIF) inputs for the TV, a USB type II input for my laptop (which only started working after I restarted it and went to a sub-menu), and one of the two electrical S/PDIFs for the Naim *UnitiServe* (when it's working, which it isn't right now – see *Editorial*). That leaves three inputs that are currently unused – one optical, one electrical, and one other. On the original *irDAC* this 'other' was labelled '*iPod*' on the handset, and appeared to add an extra USB type I on the unit, but the new *irDAC-II* has replaced that input with a Bluetooth capability, which is why a stubby little aerial now attaches to a screw terminal on the back. Another difference between the old and the new models is that the 'digital out' socket has been replaced by a pair of variable analogue outputs (which I naturally ignored).

The new handset is the same intelligently small and light plastic affair as its predecessor, though it actually has three fewer buttons, eliminating an unnecessary on/off and others labelled 'AES' and 'filter', neither of which I used previously (or indeed knew what they did!)

Since CD now seems to be in decline, I reckon I'll stick with vinyl as my prime source. Although the arrival of downloads, servers and streaming might have made digital stuff more musically interesting, it has also become much more complicated too, as computers, networks and the internet have effectively taken over from the much more straightforward (and reliable) CD player. This might be no problem for those who enjoy interacting with computers and computer technology, but digital audio seems better avoided by people like yrs trly that consider them useful but also a pain in the proverbial.

I'm perfectly happy for others to follow a digital audio future, but I myself will continue to regard it as a secondary source: certainly worth having, but hardly meriting the sort of expenditure I'll happily lavish on the analogue gear. Simply as a remote-controllable switch-box for digital sources, Arcam's £495 *irDAC-II* is clearly exceptional value for money, so the no-frills Best Buy rating of its predecessor definitely deserves to continue.