

# Sonus faber Pryma 01

Few will dispute that Sonus faber's entry into the headphone scene is destined to become a design classic. But does its sound quality match those sumptuous looks?  
 Review & Lab: **Keith Howard**

**I**t had to happen. Sooner or later, Sonus faber – creator of some of the most stylish loudspeakers on the planet – would surely follow in the footsteps of other speaker manufacturers – B&W, KEF, Klipsch, etc – in turning its hand to headphones. The result, the £380 Pryma (designated Pryma 01), is intriguing for being both predictable and delightfully unpredictable, all in one.

What's predictable is that the closed-back, over-ear Pryma is a looker: the sort of headphone product that many will fall in love with the moment they set eyes on it. Plus it is solidly constructed and immaculately finished – as you'd also expect of Sonus faber.

## BUCKLE UP TO FIT

But who could have anticipated the 'belt buckle' mechanism that's used to attach the capsules to the headband? Stylistically it's a work of genius, even if practically it means that headband adjustment proceeds in discrete steps, rather than the normal continuous slide manner, and those steps are a little too widely spaced to ensure optimum fit for every head.

The novel headband is also notable, alas, for being less than vibrationally inert. This is not something that makes itself manifest when putting the Pryma over your ears – its structure doesn't 'ping' obviously as some do – but wearing it for the impedance test (which involves pink noise being replayed over the left capsule only) I could clearly hear sound being carried across towards the inactive right capsule.

Exactly what effect this will have when replaying music is unclear but it's a pity that the headband isn't more effectively damped, despite its microfibre-filled leather covering.

**RIGHT:** This is just one of five colour ways – Carbon Marsala – in which the Pryma is available. Extra headbands are available

Five different colour schemes are available. Pictured is the 'Carbon Marsala' option, at a £30 premium over the standard price, which combines a carbon fibre weave on the back of the capsules with a reddish-brown headband. 'Pure Black' has a black headband and capsule closures, relieved by the brushed aluminium capsule frame and polished stainless steel/copper buckles for the headband while 'Coffee Cream' combines a different hue of brown headband with matching cream-coloured capsule closures.

'Heavy Gold' is for wearers of very high-end Rolex watches, the silver metal elements of the Pure Black option being replaced by a garish gold finish, while 'Rose Gold & Grey' – am I allowed to call this the girly option? – replaces black with dark

grey and has metalwork the colour of pink gin. The five different straps are available as add-ons, so other colour combinations are possible.

Comfort is a key issue with any headphone but particularly one intended for use on the hoof, as the Sonus faber

Pryma clearly is. (It has a short, 1.35m lead with integral microphone and mini-jack termination – no other lead is supplied, nor is a ¼in jack adapter although, as the lead divides and

attaches to each capsule via mini-jack plugs, it's feasible to replace it.)

Here the arresting visual design fails to deliver in practice, at least for my head and ears. I found the head clamping force on the high side and the space within the coffin-shaped earpads too small to accommodate my pinnae without squishing and squashing. Smaller heads and smaller ears will fare better, which will suit female buyers in particular.

## LOOKING FOR ENJOYMENT

Talking of which, I note with amusement that a review of the Pryma in a subjective-only hi-fi magazine was largely seconded to the editor's wife, echoing whispers in my ear during the preparation of this review that this is more a fashion product than a serious audiophile one. It's a tempting line to swallow but one I doubt that Paolo Tezzon – Sonus faber's R&D Manager – would endorse.

I contacted him for more background information and was told that he was 'One-hundred per cent involved in the headphone development' and that 'Our target... was obviously to achieve the best sounding results, first of all, with the Sonus faber loudspeaker "family sound" in our minds. But also we aimed [at] an

*'Its emollient nature is a calm bookending to the working day'*





enjoyable sound in every situation, having in mind... that this product was also aiming [at] simple situations like plugging the headphone straight into a smartphone.'

As part of the R&D process, commercial dummy heads were rejected as they didn't provide 'any useful info' and a proprietary alternative developed instead, comprising 'a human head-sized block of absorbing material, and custom – specially designed – internally mounted miniature condenser microphones.' Two microphones are included but are only used one at a time to measure frequency response.

I've gone into this detail about the design process not only because it gives the lie to the notion that the Pryma is merely a fashion statement, but also because it perhaps explains the distinctive sound quality with which it has been endowed. Even if you never normally look at our lab reports, take a dekho at the Pryma's corrected frequency responses [Graph 2, p77]. The three corrections that I apply – free-field, diffuse-field and Harman

– differ significantly but on one thing they all agree: that the Pryma has a big hole in perceived output above 1kHz, reaching up to 7kHz.

Is this because of the unusual 'artificial head' Sonus faber used? That seems at least feasible. Whatever, from this you'd anticipate that the Pryma lacks the

**LEFT:** Belt buckle headband is a touch of styling genius but makes capsule adjustment discrete rather than continuous – and it audibly transmits vibrations between the capsules

presence band oomph that gives music clarity, crispness and life.

### A QUESTION OF BALANCE

So is this how it sounds? I conducted the listening using my familiar set-up of Teac HA-501 headphone amp [HFN Apr '14], fed analogue signals from a Chord Electronics QuteHD DAC, itself fed S/PDIF from a TC Electronic Impact Twin FireWire audio interface. A second-generation Mac mini running Windows XP and JRiver Media Center v19 played the music.

No, the measurements don't lie: the Pryma is obviously lacking the lower treble energy of a true high fidelity experience. I've seen this described elsewhere as reflecting the characteristic sound of Sonus faber speakers, but I demur: I've never heard one of the Italian marque's speakers with such an obvious hole where the presence band should be.

More accurate and more relevant, I'd say, is to draw comparison with Audeze and Oppo planar magnetic headphones which – while not identical in tonal balance – have similarly plunging corrected outputs above 1kHz. If you like the Audeze/Oppo tonal balance then chances are you'll like the Pryma too... and should probably ignore everything I say below.

I began my structured listening, having first run-in the Pryma on pink noise over a period of four days, with the second movement of Saint-Saens's String Quartet in E minor with the Fine Arts Quartet [44.1kHz/16-bit download; Naxos 8.572454], a piece that might surprise you if your knowledge of the composer is limited to the easier territory of *Carnival* ↻

## WORLD OF McINTOSH

The Fine Sounds Group is the Italian umbrella company that owns a stable of some of audio's most revered brands, namely Audio Research, McIntosh, Sonus faber, Sumiko and Wadia. In November last year it launched World Of McIntosh (WOM) in New York, the first of a network of WOM 'Experience Centers' set in strategic locations around the world. The ambition is to draw the well-heeled into our world of high-end audio via premises which place an emphasis on high quality interior design. But why did Fine Sounds choose to highlight just one of its brands in the name of this enterprise? It's an intriguing question, particularly as the distinction between Fine Sounds and WOM seems to be blurring and – with the Pryma – Sonus faber is somewhat written out of the script. Immediately below the Pryma name on the cover of the owner's manual appears 'WOM', and the address on the outside rear cover is McIntosh Group Inc. The Sonus faber name appears only in the declarations of conformity at the back of the book, and although it's on each capsule this is obscured once the headband is fitted...



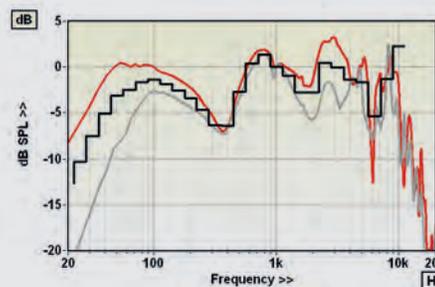
## LAB REPORT

### SONUS FABER PRYMA 01

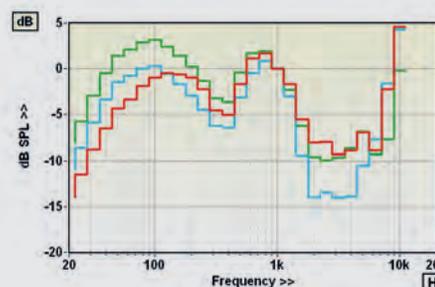
Sonus faber claims a sensitivity of 118dB SPL for 1mW for the Pryma 01, which would be unprecedented if true as it's equivalent to 133dB for 1V into the nominal impedance of 32ohm. Unsurprisingly, the Pryma isn't this sensitive in reality – our measured figure, averaged for the two capsules, was 123.0dB for 1V at 1kHz – but this is an unusually high figure nonetheless, of the order of 6dB more than we typically measure from medium-impedance headphones. There is no issue, then, regarding the Pryma's ability to achieve adequate SPLs from any source device with which it's likely to be used.

The measured impedance actually varied from 29.2ohm to 32.9ohm (re. 20Hz to 20kHz) – a small enough range to limit frequency response variations to 0.25dB via a headphone amp of 10ohm source impedance, or 0.51dB with a 30ohm source. The uncorrected frequency responses of the two capsules – each average from 10 separate measurements between which the headphone is removed from and replaced on the artificial ear – differ significantly at low frequency, suggesting a sealing issue with the left capsule [grey trace, Graph 1 below].

The capsule matching error of  $\pm 7.5$ dB (re. 40Hz-10kHz), is a typical figure for a headphone and represents in significant part the different interaction with left and right artificial pinnae which – like most real pinnae – are not exact mirror images of one another. Assuming the right capsule response is closer to Sonus faber's intention, its salient features are a significant dip at around 360Hz and an almost complete absence of the 2-3kHz peak required to achieve a neutral perceived tonal balance. Unsurprisingly, these two features are also manifest in the corrected responses, the missing 2-3kHz peak meaning that all three corrections – free-field, diffuse-field and Harman [cyan, green and red traces respectively, Graph 2 below] – register a large hole in perceived output above 1kHz. KH



ABOVE: Unequalised responses (L/R, grey/red; average 3rd-octave, black) show a lack of the 2-3kHz output typically required to achieve a natural tonal balance



ABOVE: Third-octave freq. resp. (red = Harman corrected; cyan = FF corrected; green = DF corrected)

### HI-FI NEWS SPECIFICATIONS

Sensitivity (SPL at 1kHz for 1Vrms input)	123.0dB
Impedance modulus min/max (20Hz-20kHz)	29.2ohm @ 20Hz 32.9ohm @ 98Hz
Capsule matching (40Hz-10kHz)	$\pm 7.5$ dB
LF extension (-6dB ref. 200Hz)	27Hz
Distortion 100Hz/1kHz (for 90dB SPL)	0.1% / <0.1%
Weight (inc. cable and 0.25in connector)	358g



**ABOVE: Comfort may be compromised by the moderate head clamping force and, for larger ears, the confined space within the coffin-shaped earpads**

Bass guitar and bass drum were emphasised and the tonal balance warmed overall, but given that this is a period recording with limited transparency the changes might even be welcomed.

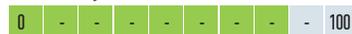
But the Pryma perhaps revealed the justification for its skewed spectral hue when – for the purpose of research rather than enjoyment – I played 'Eisai H Fonh' from Helena Papparizou's *Brisko To Logo Na Zo* [Sony BMG 886973 18932]. It's a highly compressed piece of euro-pop whose chorus sounds distorted on a neutrally balanced headphone, and it was altogether more palatable via the Pryma as a result of the harshness in the lower treble being somewhat suppressed.

A well-heeled, style-conscious commuter listening to overly compressed modern pop on the journey to and from earning a crust? I think we may have identified the Pryma's target buyer... ☹

### HI-FI NEWS VERDICT

Would Gok Wan be seen wearing the Pryma? I imagine he would because it is, undeniably, a fashion icon in the making – one which makes other 'designer' phones look crass or plain dull by comparison. But somewhere in all this style statement stuff someone has to point out that the Pryma's primary task is to reproduce music, and that it has too lacklustre a tonal balance to do this well for true audiophiles.

Sound Quality: 75%



*Of The Animals*. The violin plays a simple opening tune packed with a determined, dauntless energy while the other instruments offer plucked strings in accompaniment. Above all, the effect should be invigorating and energising.

The Pryma editorialised this piece, making it sound seductively warm but a little lazy and lacking its essential drive and restlessness. If you listen to music to pass the time and isolate yourself from your fellow human beings on the morning and evening commute, this emollient nature may be just what you're seeking – a calm bookending to the working day. But it's not a characteristic that gets you close to the soul of music like this, which isn't intended to be easy listening.

### SEEKING A MATCH

You might say that, by contrast, the *Adagio* from Robin Ticciati's acclaimed interpretation of Schumann's Symphony No 2 (Linn Records, 192kHz/24-bit download) is a soothing balm. But it relies for its full effect on a clear exposition of the string harmonies and the distinctive quality of bow hairs stick-slipping across strings. Much of this information is in the presence band, so the Pryma's lack in this area of the spectrum had the inevitable effect of removing much of what is magical about this recording.

'Silent Promise', the title track of Turning Point's second album [Vocalion CDSML 8448], takes me straight back to the 1980s and brief flirtations with jazz-rock. The band's trademark was using Pepi Lemer's voice as another instrument rather than a purveyor of lyrics, and 'Silent Promise' is a good advert for the concept. This piece suited the nature of the Pryma distinctly better than the two classical items.