

Ultrasone Headphones

Michael Gissing takes delivery of four new headphones from Germany.

Having spent the first half of my sound career wearing headphones on location, I felt a sense of déjà vu evaluating four pairs from German manufacturer Ultrasone. Headphones, like speakers and microphones, fall into the subjective area for reviewers. So it was with some trepidation that I gathered up some test CDs, my daily-use headphones and my Australian-made Spatial Ones studio speakers.

The four Ultrasone headphones were the HFI 15G, HFI 650 Trackmaster, HFI 650 DVD Edition and the top of the line HFI 2000. All the headphones boasted a technology called S-Logic Natural Surround Sound. This, on investigation of their website, appears to be a technique of exploiting the so-called 'dummy head' effect – using the shape of the ear to give spatial information that help our brains to place objects out of the head and give a sense of dimension. It should be

noted that these headphones are not using DSP processing like the Dolby Headphone technology. A clue to what's actually going on is Ultrasone's description on the website that the headphone speakers are not parallel but angled to deflect first off the outer ear. The effect is that stereo sound has excellent width and 'out of the head' image. The demo CD that came with the headphones had various music and sound effects samples to test this imaging. Being a tad suspicious that they were just chosen to flatter this effect, I headed for my chosen CDs.

These CDs in particular were chosen because they were recorded with real stereo miking. A Nimbus CD of Percy Grainger piano pieces, recorded with an Ambisonic stereo mic, sounded really good on all the headphones. Being both an acoustic recording and very dynamic, it showed that all four models had the same excellent image, although the tonal character of the headphones varied from model to model. Another recording using a Soundfield mic was Australian percussion group Synergy playing a Steve Reich composition. This recording was very familiar as my colleague, Mark Keating, had recorded the CD and it was mixed and mastered at my own studio. Again the headphones impressed. Compared to my trusty Sony MDR 7506 headphones, they were much better both in image and tonal quality. The biggest surprise was that the cheapest of the headphones, the HFI 15G, were tonally very close to my studio speakers, the Spatial Ones. The

two HFI 650 models are fully enclosed headphones and although the stereo image was excellent, they didn't sound as accurate as the HFI 15G. The 15G is an 'open air' design (to coin the old Sennheiser description), with foam ear pads. For me they sounded better than both the 650 models, which were slightly boxy by comparison.

The top of the line HFI 2000 uses a semi-enclosed (circum-aural) design and seemed to sit slightly off the bottom of the ear lobe. They were definitely a hi-fi headphone with a rich (if slightly coloured) sound and for me, a touch bright. At this point it was worth reminding myself that these are not expensive headphones and so the tonal quality, even for the cheapest 15G model, was very impressive. In fact, if I wanted a pair to take on location, which would translate back in the studio, the 15Gs would be well suited.

Fully Enclosed

Because many situations demand a fully enclosed headphone, the 650 models, although subjectively not as tonally pleasing, would be great workhorses. As they are designed to fold up, it is also possible to fold just one ear up and still wear the cans – so, for singers who like to have one ear uncovered, they can comfortably wear the cans this way. The difference between the 650 Trackmaster and the DVD Edition is more than just labelling. Swapping between the models showed quite a marked difference in tonal character.

Playing music seemed to favour the Trackmaster model, so to be fair I put a DVD on and played *Harry Potter – Chamber of Secrets*. The DVD Edition certainly sounded better than the Trackmaster, so I think the designers at Ultrasone might have come up with an EQ character that suits typically over-processed feature film sound tracks. They definitely 'goose' the bottom end which helps, while cutting back some of the harsh mid highs works in the



DVD's favour. In fact, the DVD Edition was the pick of all four models for that particular soundtrack. A nice touch with the DVD Edition was the inclusion of an extension headphone cable, assuming they would be used in front of a nice big television and therefore further back from the amplifier.

Returning to the HFI 2000, I tried a few other commercial CDs – both orchestral and typical multitrack studio recordings. The 2000s seemed at home with all the material, but I suspect that those who listen to orchestral music would find them the most satisfying. Again, the slightly over-bright sound made some of the overproduced studio CDs a bit edgy. Perhaps my bias for flat accurate sound kept steering me back to the HFI 15Gs, which I found the most comfortable and non-fatiguing. The 2000's are very good and no doubt others will think I am getting stuck in my own preferences, as they're very satisfying to listen to and have the best bottom end of all four headphones.

Low Pressure Situation

In the words of Tim Shaw, "but wait there's more..." – the Ultrasones have two more very good features. Firstly they claim to be producing the apparent loudness of the headphones while actually producing 3dB to 4dB less actual sound pressure on the ears. This means less fatigue and greater ear safety for the sound recordist, as you won't need to drive up monitoring volumes to levels that will, over time, do damage. The second feature is the reduced

level of electromagnetic radiation these headphones produce. Ultrasones, after testing many brands of headphone, found that many headphones exceed recommended safe levels of EM radiation and take pride in claiming to have the lowest levels of headphone EM radiation across the range.

Aural Report

These Ultrasones headphones exhibit excellent image and tonal character, and for the modest sum of money required, it's hard not to be tempted by the cans. At \$176 for the HFI 15G through to \$399 for the HFI-650 DVD, they are real value for money. I'd also go on record as saying that the proprietary S-Logic is not a gimmick but a technique with merit. To cap things off, the low electromagnetic radiation specs combined with good hearing safety design features make the Ultrasones a strong contender for those of you who live half your life with cans on.



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Price

• *HFI-15G \$176; HFI-650 TrackMaster \$346; HFI-2000 \$364; HFI-650 DVD \$399*
