

Existence Euphoric

PAUL MESSENGER CHECKS OUT A FINNISH SPEAKER WITH A DELIGHTFUL LOOKING MULTI-WOOD ENCLOSURE AND A SOLITARY TAIWANESE DRIVE UNIT

The world of single-full-range drive unit loudspeakers is invariably a frustrating one – even a gifted engineer like Ted Jordan has only got part of the way towards Nirvana after spending a lifetime trying to crack the problems. The gains are there to be had, but they’re invariably accompanied by some significant downsides too. The simple fact that the whole of the full bandwidth sound comes from just one source with no need for any sort of crossover network is an obvious plus, except that this has negative implications at both the top end and the bottom end of the audible sound spectrum, both sectors where the full-range driver tends to start running out of steam.

More seriously, the diaphragm needs to be large enough to deliver bass frequencies with adequate loudness and sensitivity, but that in turn means that it will tend to ‘focus’ high frequencies (those with smaller wavelengths than the diameter of the driver’s diaphragm) in a ‘straight ahead’ direction, ie towards the listening zone. This is unavoidable, yet also undesirable, as the ideal seems to be to maintain consistent distribution with frequency.

Although single, full-range driver speaker systems are inherently simple and something of a specialist sector, they also demonstrate remarkably large variations between models. From vintage Voigt corner horns to Japanese Feastrex field-coil designs, the Polish Bodnar *Sandglass Fantasy* (*HIFICRITIC Vol6 No4*) stood out as providing excellent value for money (albeit in a bulky and rather less than attractive package). (Distributor Fidelity Art is now handling a somewhat similar *Aion* instead, from the Hungarian brand Sonido which made the drive unit featured in the Bodnar. Hopefully I’ll get to try an *Aion* quite soon, though nothing has been scheduled at the time of writing.)

Augmented variations on the theme include the Soundkaos *Wave 40* (*HIFICRITIC Vol8 No4*), which has a ribbon tweeter and an equalisation network, and sounds rather delicious. Other Soundkaos models could well come my way soon. And the horn-loaded Voxativ *Pi* model (*Vol7 No2*) now has a matching dipole subwoofer that made its debut at this year’s Munich show.

Possibly the largest operator on the single full-range driver scene is the Japanese Eclipse brand. Its various *TD* (time domain) models (eg *Vol5 No1*) use alloy ‘dinosaur egg’ enclosures and hefty integral metal stands. Eclipse has just announced some new subwoofers and I’m currently in negotiations.

Euphoric

However, the Finnish Existence brand couldn’t make a much more dramatic contrast. The *Euphoric*, which is the subject of this review, is nothing short of a celebration of the joys of wood and joinery, not to mention an acknowledgement that Finland is substantially well covered in forests. The second model up a six-strong ladder of increasingly large models, this 30litre stand-mount is not exactly



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fashionable, or cheap at £3,000 (plus £750 for the stands), but it is an exceptionally attractive confection, as the woodwork involved is both exquisite and also very different from the norm, bringing together a cocktail of various woods of different grain structures and colours. The whole thing feels exceptionally solidly built and surprisingly weighty, suggesting relatively thick enclosure panels.

Fashion and price seem largely irrelevant when a speaker is as beautiful as this, and the attractiveness of the speaker is also echoed in a matching stand that clearly uses similar techniques to mix and match different woods. A large top plate in polished steel comes with little (and non-standard) corner spikes. These had unfortunately been left out of the packing originally, but were quickly despatched and delivered. The feet consist of spikes located within integral flat discs for use on polished wooden floors, which seems an eminently sensible arrangement. (These may be replaced by standard spikes for use on carpeted floors.)

Furthermore, it also works rather well. (And although it's not perfect, in my experience that's true of every speaker system based on a single full-range drive unit.) The Euphoric uses a 5in (125mm) driver sourced from Taiwanese operation Tang Band (TB), which uses a neodymium magnet and an underhung voice coil. The free-air resonance is around 45Hz and a quite distinctive phase plug protrudes from the centre of a bamboo-based paper cone diaphragm. Crucially, it seems to suffer rather less than most from the presence forwardness that invariably appears to be associated with single driver systems.

That forwardness is still visible when measured under in-room far-field averaged conditions, but it's significantly less obvious here than is often the case. Associated with – and to a certain extent emphasising – that mild prominence (1-2dB at 1.7-2.2kHz) is a loss of output above 4kHz, amounting to a -6dB dip at around 8kHz. Output does recover somewhat thereafter, but some lack of treble openness and transparency is unavoidable, if not in practice particularly subjectively significant.

Arguably more serious is its bass unevenness, due to a significant lack of output through the broad upper bass region (60-230Hz), alongside a little excess around our 50Hz room mode. (The port here is tuned to 40Hz, below which output falls quite sharply.) However, the Euphoric's main strength lies through the broad midband, as it stays within ± 3 dB from 240Hz right up to 5kHz, which is rather impressive, especially as it's accompanied by a decent sensitivity that registers around 91dB on our measurements (somewhat higher than the specified 89dB), alongside an easy 8ohm load.

Sound Quality

While bass end is certainly a bit wayward, the broad midband is very good indeed, from both a sound quality and a measurement perspective. This is of course crucial because the broad midband is by far the most important part of any loudspeaker's frequency response, especially when the speaker in question has the total single-source coherence that is both the inevitable consequence and the powerful benefit of using a full range drive unit.

The Euphoric is certainly at its best when reproducing speech and solo singing voices, which it delivers with fine dynamic expression, excellent coherence and superior articulation. Speech in particular sounded very realistic and communicative, and this was very welcome to one who often listens to *Radio 4*.

Acoustic instruments such as a strummed or picked guitar can also be very beguiling, and relatively small scale recordings were really where this speaker's major strength is found. It can handle more complex material, for sure, and orchestral material worked very well indeed.

However, it is rather less happy when asked to deal with the heavier rock or dance material, partly because it does lack some bass extension and power – it does have just a solitary 125mm driver after all – and partly because what bass it does have is not all that smooth or even. It works pretty well when dealing with less critical material, but when the bass guitar or synthesiser takes the lead role – as it can, with anything from The Grateful Dead to The Chemical Brothers – the unevenness and lack of weight becomes more obvious.

At the other end of the audio band, the treble proper might sound a trifle 'shut in', but it is only a trifle as it stays fully coherent and remains quite transparent with a fair measure of airiness. There's also a mild degree of presence forwardness, which does mean that it sounds rather different from the typical two-way, as the latter awkwardly places its crossover around the same frequency. Image depth is therefore slightly constrained, but again only mildly.

Conclusions

This is certainly one of the better loudspeakers to use a single full-range drive unit, largely because it's mostly well balanced and neutral though an extended midband. As usual some limitations are heard towards the bass and treble extremes, and it's not the cheapest speaker around. But the midband is so impressive, as is its lovely all-wood presentation, that Recommendation is clearly appropriate.



Manufacturer's Specification

Manufacturer	Existence
Model	Euphoric
Type	Mid-size (c30 litres) stand-mount loudspeaker
Driver	5in bamboo paper cone, neodymium magnets
Sensitivity	89dB/W/1m
Impedance	8ohms
Size (WxHxD)	28x49.5x38cm
Price	£3,000 (plus £750 stands)