



## Finnish Truth

### Amphon Argon<sup>3</sup>

JAN-ERIK NORDOEN

At the annual hi-fi show in Montreal it is always a great pleasure to find products that deserve to be better known. Now into their second year at the Montreal show, it was only this year that I “discovered” Amphon speakers, which leads to my first observation on the Argon<sup>3</sup>: they are at the opposite end of the spectrum from speakers that impress at first, but that wear on the listener over time. They lend themselves to gradual discovery and it’s better that way. Amphon speakers stand apart from the rest by a particularly attractive aesthetic in the purest Scandinavian tradition. The good news is that this aesthetic is not limited to appearances; the sound is pure and precise with an outstanding level of musicality.

#### AMPHION

Founded in 1998, Amphon produces sixteen models of speaker in all price ranges up to the flagship model, the Krypton. Design is entrusted to the expert ears of Corrado Faccioni. The Argon<sup>3</sup> is a two-way speaker positioned in the middle of the range, using drivers from SEAS in Norway. An Amphon speaker is instantly recognizable by the large flared waveguide surrounding the tweeter. While this lends

a particularly attractive look to the speaker, it is more than an exercise in style. The waveguide serves to control the dispersion of high frequencies and to enhance integration between the tweeter and the mid-bass driver. Designated by Amphon as “Uniformly Directive Diffusion” (UDD), the result is a tonal balance that changes very little when listening off-axis and a sound that is influenced less by reflections from room surfaces. In other words, you hear more of your music and less of the room, wherever you are in the room.

#### ARGON<sup>3</sup>

The Argon<sup>3</sup> is a fairly tall speaker (15”) that hides its volume well by keeping the depth of the speaker (12”) greater than the width (7.9”). Weight is substantial (just over 24 pounds each) reflecting the solid construction of the enclosure. Knock on a side panel and you’ll get a dull thud that reassures about the enclosure’s ability to damp vibrations from the drivers. The back panel sports a flared vent nicely routed into the wood and a single pair of high quality gold-plated WBT terminals. Foam plugs are provided to block the vents if you need to place the Argon<sup>3</sup>

really close to the front wall, or if you want to attenuate the bass. All sides of the speaker are exceedingly well-finished. A metallic grille covers the midbass driver and is easily removable if you wish to change to another colour or listen without the grilles. I found that the grilles had no detrimental effect on the sound.

The Argon<sup>3</sup> is offered in a choice of three real wood finishes: cherry, birch and American walnut, and a black or white lacquered finish. The review pair in walnut looked simply stunning with the black waveguide and black metallic grille. Sensitivity is specified at 87 dB into 8 ohms and frequency response from 36 to 30 kHz  $\pm$  3 dB. Yes, you read that right: 36 Hz, which is quite a feat for a speaker of this size. Amphion recommends an amplifier from 30 to 200W and, since the impedance of the speaker remains relatively high, tube amps should be able to drive the Argon<sup>3</sup> to satisfactory levels.

### HOW TO MAKE TWO VOICES SING AS ONE

When a designer combines two drivers in an enclosure, he has to isolate them with a crossover network so that each one reproduces only the frequency band where it is most efficient, i.e., where the frequency response is the most linear and distortion the lowest. The transition zone between the drivers is always a challenge to the designer, because both drivers play simultaneously in this zone. It's an art to create a crossover that is completely transparent to the ear, because unfortunately the crossover frequency is usually located in the middle of the frequency range for which the human ear is most sensitive: 2000 to 5000 Hz. This can be heard on many speakers as confusion or hardness, especially in vocals. To overcome this, some designers will shift the crossover frequency to the top of this range, forcing the use of smaller mid-bass drivers, which in turn can lead to problems of congestion in the sound. Other designers, like Corrado Faccioni of Amphion, prefer to go in the opposite direction by setting the crossover frequency below the maximum sensitivity zone of the ear, in this case between 1200 and 1500 Hz. On the Argon 3 the crossover is set at 1600 Hz, thus allowing the use of a larger mid-bass driver, in this case a 6.5-inch aluminium cone. According to Amphion, the natural resonance of this cone material (3000 Hz) is inaudible in this set-up because of the low crossover point and the steepness of the filter slope.

The high frequencies are handled by a one-inch titanium SEAS tweeter, dubbed the «Integrator», the same one

as used in Amphion's flagship speaker, the Krypton. Since the crossover frequency is at 1600 Hz, this allows the tweeter to handle the full frequency range to which the ear is most sensitive, while also improving the imaging capability of the speakers. Another benefit of the 1600 Hz crossover is to relieve the mid-bass driver of the upper part of the mid-range, thus improving reproduction of the all-important medium and the bass. Returning for a moment to the waveguide, in addition to the benefits described above, the depth of the waveguide positions the tweeter back from the facade of the enclosure aligning it in the vertical axis with the acoustic centre of the mid-bass. This alignment positions the two drivers equidistant from the ears, helping to minimise phase differences in arrival times of sound at the ears from the two drivers; another technique to help integrate the mid-bass and high frequencies. Finally, the waveguide also acts to slightly increase the efficiency of the tweeter.

### REDISCOVERING VINYL

The Argons led a rather nomadic existence during the listening sessions, spending time in four different listening



rooms and as many systems. My comments and impressions are essentially the same regardless of the room or listening system. I have a Linn LP12 turntable that I use infrequently, but inspired by our editor-in-chief who is a fan of vinyl, I started by hooking up the Argons to a Naim Nait 5 integrated amplifier, fed by the Linn via the Naim Stageline phono preamp. The first record: *Full Moon Fever* by Tom Petty, not the best recording and a bit compressed I'll admit, but the music is just so good! The first impressions were a wonderful level of transparency across the audible spectrum, followed by a very full yet tight bass, the latter providing a rock-solid foundation for the music. The Argons latched on flawlessly to the rhythm on the track «Face in the Crowd», and during the track «Yer So Bad», I found myself unable to stop singing along. But it was the track «Alright For Now» that made me realize that I was in the presence of a speaker with an exceptional talent for musical communication. Tom Petty's guitar was completely believable as he paid tribute



to his wife who had helped him so much in his life, the love and gratitude to his loved one masterfully rendered. Chills (or the goosebump reaction) are a foolproof indicator of emotional connection with music and here I was treated to multiple waves! I can hear you saying it is the result of the vinyl and not the speakers, but I can assure you that I know this disc thoroughly and the Argons took me further into this music than any other speaker that I have had the opportunity to hear. The Argons restored an urge to dig

through my vinyl collection that I have not experienced for many years. That they are able to produce this effect is a tribute to their substantial musical intelligibility.

### THE CD HAS NOT SAID ITS LAST WORD

After a day of the “subway-work-subway” routine, what could be more comforting than being carried away by the ethereal music of Bliss on their album *They Made History*. Played back through the Naim CDS2 via the Audiolab 8000S integrated amplifier and reproduced by the Argon<sup>3</sup>, I was plunged deeply into the subtle, dramatic, poignant and mesmerizing music of Stefan Aaskoven and Marc-George Anderson. The Argons bring a deliciously calming effect to the music, as if time is somehow slowed down, enhancing the wonderfully hypnotic side of this music. I have noticed this effect a few times with certain high-end components and it is another sign that we are dealing with a product of very high calibre. The music does not become slow, but is presented with a delicious languor that does not detract in any way from the ability to follow the rhythm.

### WHAT IS A WAVEGUIDE?

Amphion speakers are recognizable by their use of a waveguide for the tweeter. A waveguide is a generic term used to describe a device that converts the sound diffusion characteristics of a loudspeaker. The best known example is the exponential horn, used traditionally to control diffusion and increase efficiency. A loudspeaker diaphragm coupled directly to ambient air is a poor impedance match. The horn acts as an impedance matching transformer between the small diaphragm of the speaker and the volume of air that it's trying to move.

If one drops the requirement of maximum efficiency, the designer is free to pursue other approaches in the design of a horn and he can focus more on the aspect of diffusion control. The flare of a horn can be dramatically increased so that it adds very little in terms of efficiency. At this point, the acoustic device is no longer viewed as a horn and becomes a waveguide.

Another essential difference between a horn and a waveguide is that a horn is typically used with a compression driver while a waveguide is usually coupled to a classic speaker membrane such as a dome tweeter without a compression chamber.

The Argon is also a fast speaker, but then this is to be expected, as punctuality is very important in Finland! Listening for example to the cello concertos by CPE Bach, as interpreted by Truls Mørk and Les Violons du Roy reveals liveliness and energy to spare rendered masterfully by the Argon<sup>3</sup>. The articulation and speed of these speakers are simply top notch. I found it impossible to trip them up despite challenging them with dense and high-speed electronic music, for example the “hypercussion” work of Bill Laswell. The bass is taut and well defined, allowing for clear articulation of musical elements often hidden by less intelligible speakers. This clarity is certainly due in good part to a careful choice

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of drivers, but also to the very effective vibration damping of the cabinets. A useful test of this is to listen from behind the speaker at a reasonable volume. For many speakers the sound being re-radiated by vibration from the cabinet walls is all too audible, but not with the Argons.

The waveguide works as advertised to ensure even dispersion of high frequencies around the speakers. When listening outside the horizontal or vertical axes of the speakers, the sound balance does not change, which is a great asset if your living space is open plan and you like to hear your music everywhere. The Amphions free you from the obligation to place yourself exactly at the focal point between the two speakers. Obviously, you can also listen in this way and be rewarded by a sound stage that may surprise you more than once. The ability of these speakers to position sounds beyond their boundaries is indeed surprising, but it's not a trick, just a nice demonstration of the validity of the Amphion approach.

### BRIEFLY

The Argon<sup>3</sup> is a true reflection of values that are important to the Finns. In Finland, dishonesty is the worst of all vices, and the Amphions don't lie. Their neutrality and transparency deliver what is on the disc, unvarnished. These speakers do not sugar-coat bad recordings and they do not favour one style of music at the expense of another. Among their strengths, they have the ability to play at high volumes with ease while retaining correct instrument proportions, and in this respect they can be easily confused with floor-standing speakers of much larger size. The Finns are quiet and raising one's voice is considered rude, and so it is with the Argons ; they can also speak softly yet intelligibly.

In fact their ability to play at low volumes while maintaining the musical message is one of their most attractive aspects. Did I mention that Finnish society is well organized?. Well so is the Argons' rendering of music ; nothing is out of place and musical performance just hangs together perfectly. Finally, the Finns have a great respect for nature and it certainly shows in the care lavished on the wood finish of the review pair!

### ARE THEY FOR ME?

When I evaluate an audio component, I want to be touched, moved or captivated by the music. All the aspects of reproduction that we so like to describe, sound stage, musical timbre, sharpness of attacks, bass quality and so on are one thing, but if ultimately the music does not affect us, we miss the point entirely. It is refreshing to find a manufacturer that designs speakers for one purpose, namely a direct and deep connection with the artist and the music. Many manufacturers promise this, but few deliver it to this level. In addition, the Argons provide this connection even at low listening levels, which is very useful and good news for those of us who want to listen for long periods without disturbing the rest of the household or the neighbours. The Argon<sup>3</sup> combines a high level of resolution and dynamics with a complete absence of overhang that, when coupled with their fluency, articulation, timing and solid bass, just lets the music speak simply and effectively. So, how do these speakers compare to other stand mounts? Well, I'll just say that I bought the review pair. If Finnish values intrigue you, give yourself the opportunity to listen to the Argon 3 before making your final choice, even if you're considering floor-standing speakers.

Amphion Argon<sup>3</sup>: \$ 2,795 (finish black or white)  
 \$ 2,995 (wood finish)  
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