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BY PAUL VNUK JR.

Amphion One18 Passive Monitors (and Amp100 Power Amplifier)

An unusual approach to monitor design yields a truly remarkable listening experience

Amphion is a speaker manufacturer based in Finland. The firm has been crafting home hi-fi speakers of all shapes and sizes since its start in 1998. Recently the company has moved into the realm of professional studio monitors, and has just started US distribution. To say that these speakers have made a rapid and indelible impression on many of the popular gear forums with a broad range of engineers would be a colossal understatement. Seeing as this is our issue dedicated to monitors and monitoring, I knew we had to wrangle a set to try.

Currently the Amphion pro audio lineup includes 5 models: The One12, One15, One18, Two15, and Two18. The models with the One designation feature single 4.5", 5.25", or 6.5" aluminum coned low frequency drivers, respectively. Those with the prefix Two have a pair of 5.25" or 6.5" woofers per speaker. Regardless of size, each model uses the same 1" Titanium tweeter and shares the same basic look and internal design. For this review, I was provided with a pair of the One18 monitors.

Breaking out of the modern mold

In the past decade, the prevailing speaker design trend has favored models with composite molded cabinets. Sharp edges have given way to contoured corners and rounded bulbous tops and sides with unique inbuilt waveguides. Also, most modern monitors are active models with power amps on board.

There isn't anything wrong with any of the above trends and there are some stunning monitors out there, but interestingly the Amphion line returns to a standard rectangular box design. Further, Amphion speakers are passive, requiring an external power amp (we were loaned Amphion's own Amp100 for this review). It's almost a return to vintage speaker design principles... or is it?

Black and white simplicity

Visually the Amphions are a beautiful balance of no-frills simplicity and European elegance. The One18 is a 2-way passive monitor, a sealed-cabinet design with a rear-mounted passive radiator. The cabinet is constructed of standard MDF and finished in a



gently textured matte black. The cabinet measures approximately 15" x 7.5" x 12.4" and weighs just shy of 26.5 pounds.

Each tweeter is recessed in a white Corian waveguide that is almost the same diameter as the woofer. Hookup is handled by a pair of rear-mounted screw-style speaker clamps.

Specwise, the One18 has a crossover point of 1600 Hz, an 8 ohm impedance, a sensitivity of 85 dB @ 2.83V/1m, a frequency response of 48 Hz–20 kHz ± 3 dB, and handles 30–150 W of power.

The tweeter, waveguide, and wide open spaces

In a conversation at the recent Winter NAMM Show, I asked company owner Anssi Hyvönen why Amphion went with the design choices they did, such as standard rectangular cabinets. His answer was that "they believe better results are achieved by



focusing on getting the acoustical design right, so that one does not have to try to solve problems in the electrical domain."

To accomplish this, Amphion implemented a few notable design choices. First, an Amphion speaker's tweeter is recessed back into the waveguide to the point where it is perfectly time-aligned to the rear point of the low/mid driver. This ensures that sound from both drivers hits your ears at the same time. As the waveguide also helps keep the dispersion of the tweeter and woofer similar over a wide frequency range, it gives you a very large sweet spot and phenomenal off-axis sound.

Whatever voodoo is happening in the waveguide, these monitors are some of the most sonically consistent that I have ever heard. As I walked around my studio with music playing, the highs and mids stayed tonally similar, with little rolloff or



Amphion One18 Passive Monitors

coloration... even when I was standing on the sides. The bass does drop a tad as you move to the sides or farther back in the room, but it is not drastic.

Amphion speakers are sealed cabinets. There are no bass ports (the holes on most monitors where bass tones and blasts of air come out). Instead Amphion uses a passive radiator to control low-end frequencies and handle air movement. The aluminum radiator looks like a rear-mounted speaker and is located on the back of each cabinet. It is parallel to the front-side woofer and equal in size. The two work in tandem, both dispersing energy and controlling low frequencies.

I asked Anssi why Amphion chose a radiator design over the more common bass port; he told me that in addition to improving resolution in the midrange, it allows for more controlled bass and a better, yet predictable, low end. This, together with the controlled dispersion, allows the One18 to have better consistency regardless of the room it is in.



Powered up

What about power? You can use any good clean power amp like a Bryston, Manley, etc., as long as you stick within the intended power rating. For this review Amphion included one of its own stereo power amps, using power modules selected for the Amphion line after 5 years of evaluating all of the commercially available Class D designs. Data on these amps was not yet available on the website as of press time.

There are three models: I was sent the Amp100 (100 Watts per side), and there are also the larger Amp500 (500 Watts per side) and a choice of individual 100 Watt monoblocks.

A sound that is amazing, yet hard to describe

Before the One18s arrived, I spent time reading the online forums. Interestingly, other than exclamations like "wow, best monitor I have ever heard" or "easy to mix on," I had no idea what to expect. One engineer's "life-like" is another person's "bright", or "rich and full" to one could sound "dark" to another...

Once I got them set up in my room, burned in and ready to go, I found them open, full, honest, clear, rich, subtle, and bold, all at the

same time. In some ways it's easier to describe what the One18 is *not* rather than what it is.

They do not have the modern ultra-bright studio monitor sound. They do not have gobs of extended room-rattling low end, nor do they have scooped, tailored or exaggerated mids. In essence, they sound as if nothing is exaggerated across the sonic spectrum.

It's all about those mids...not that bass, nor treble

The magic of the One18 is its midrange, which is full, even, and detailed. Again according to Anssi, "In the old days it was fine to get things right for your car, radio, or boombox, but nowadays we have mobile phones, laptop speakers, cheap in-ears... the playback environment is way more fragmented. What do all of these have in common, whether a full range hi-fi system or your mobile phone? They all have midrange—and we had to get it right!" Anssi went on to

describe that part of the most critical range of human hearing is between 2000 and 5000 Hz. Amphion put a big focus on the crossover circuit and nailing said midrange.

Sonically, comparing these speakers to other monitors reminds me a bit of comparing a modern condenser and a classic ribbon microphone. Often we associate the extended high mids and top-end clarity of a condenser with realism and honesty. In reality a good neutral ribbon mic is often a more accurate slice of sonic reality overall, but we may initially perceive the ribbon as quite flat. To my ears the One18 is rather like that.

In my studio I use a pair of KRK Expose E8b 8" monitors along with their matching 12sHO subwoofer. The sound is big, clear, detailed, huge, full, punchy... and when cranked, it's downright exhilarating! To the listener they feel like you can sit in the middle of the crystalline sound stage and stand on the low end. At times they almost sound too good.

In comparison, the One18 is more even and solid in the midrange, the top is pleasant and rich rather than bright, and when my sub is off, they have low end you can hear and almost touch, rather than bass that you feel, like on the E8b.

What the One18 does not have in any way is the crisp, modern studio monitor sound. You know the one, where we often have to remind clients that things on the monitors will sound brighter than they actually are? At the end of the day the One18 and the E8b sound almost nothing alike; in fact, the One18 sounds different from almost every other speaker I have reviewed in the past decade.

A true mix tool

Putting the One18 to work in practical use in my room on my mixes, I experienced two important things. First, the One18 retains its fullness at low volumes, and as such they are exceptionally comfortable to mix on for extended periods of time. Second, since they are not as instantly sonically impressive as many modern boxes, they make you work a bit harder to fit things in the mix, and this is good! Better stated, they allow you to work smarter and make more accurate mix decisions that translate easily to other playback devices like car speakers, i-devices, earbuds and more.

For the last month I have been mixing a heavy prog rock quartet (drums, bass, guitar and vocals) with Tool-meets-Dream-Theater tendencies. For some reason, on this project I have been second-guessing things more, especially the kick drum and bass guitar tone and placement. This has resulted in many reference mixes and lots of back and forth tweaking between me and the band. In just two half-day sessions with the One18, I got said mixes closer to done faster—and much more effortlessly—than I have done all month. For me as a working mix engineer, that is the win!

Placing midrange information is a dream on this box. The only two things I had to be conscious of were to not push my high end too much, thinking it had to sit where it does on other monitors, and to check low end occasionally on my subs for additional tweaks before printing the final mix.

Conclusions

These are amazing workhorse monitors that are detailed, full, and pleasant to work on. Anssi told me that the company's new slogan, "Beautifully Honest", came from a customer, who said, "I am done with 'brutally honest'—these are beautifully honest!"

Amphion has a model for every size and room, and they also integrate wonderfully with monitors you already own for side-by-side comparisons. They really do have a sound all their own, and what an awesome sound it is! I'm not sure that I want to mix without them... ➔

Prices: One18, \$1500 each; Amp100 amplifier, \$1300; Amp500 amplifier for larger rooms (not reviewed here), \$1800

More from: Amphion, amphion.fi