

Electrocompaniet AW 300 M

As the Norwegian brand's heavyweight AW 800 M flagship is split in two to reveal the AW 300 M, we ask... are these 'manageable monoblocks' truly a chip off the block?

Review: **Andrew Everard** Lab: **Paul Miller**

While sawing Electrocompaniet's AW 800 M power amplifier [HFN Sep '23] is probably not advisable, doing so would admittedly bring some advantages. Not only would you get even better channel separation from dividing the amp right back to the mains socket – not that the stereo amp is exactly lacking in this respect – the resulting monoblock amps would hopefully be more manageable than the stereo model. It may not be huge, but the 800's 55kg mass puts unpacking and placing it firmly in 'phone a friend' territory.

Well, it's time to stop eyeing that Makita power tool and musing 'What if...', as the £12,100 AW 300 M seen here is, to all intents and purposes, a ready-sliced AW 800 M. The rated output is the same and the dimensions are roughly half that of the stereo amp, while the price per brace is only slightly more than that of the stereo model, given the extra casework and power supply provision involved.

HIDE AND SEEK

But for those of us of a 'Billy no mates' persuasion, these mono amps have another distinct advantage: at 30kg apiece, they're more convenient as a one-person

installation project. Even I was capable of levering each AW 300 M into position by the loudspeaker [see boxout, p63]. Ah yes, positioning... The long but narrow enclosure of the AW 300 M makes it a tempting prospect for 'next to the speaker' locations, where it will present a face to the world that's surprisingly compact, at just 21cm wide and 29cm tall.

Indeed, if you wanted to place the amp out of sight – though I can't see why you would, given the fascia's combination of gloss black and golden detailing – it would be easy enough. Its largest dimension, front to back, is just 49cm, so it may slot in sideways behind some larger speakers. Just bear in mind that although the amp sits on a trio of feet of a non-marking SuperSpike design, you'll need support beneath it on carpeted floors, purely to allow sufficient airflow. On hard wooden floors, you'll be fine.

Having a pair of loudspeakers before the listener seemingly connected only using easy-to-conceal balanced cables – the AW 300 M is XLR-input only – has a definite appeal. Certainly, that would make for a tidier installation than having a large power amp on a floor-level rack between

the speakers or running thick speaker cables around the room.

SPLIT PERSONALITY

Effectively dividing the £19,500 AW 800 M 'Reference Monoblock Power Amplifier' in two to create these smaller units looks to have been a relatively simple task, given that amplifier is actually a stereo design

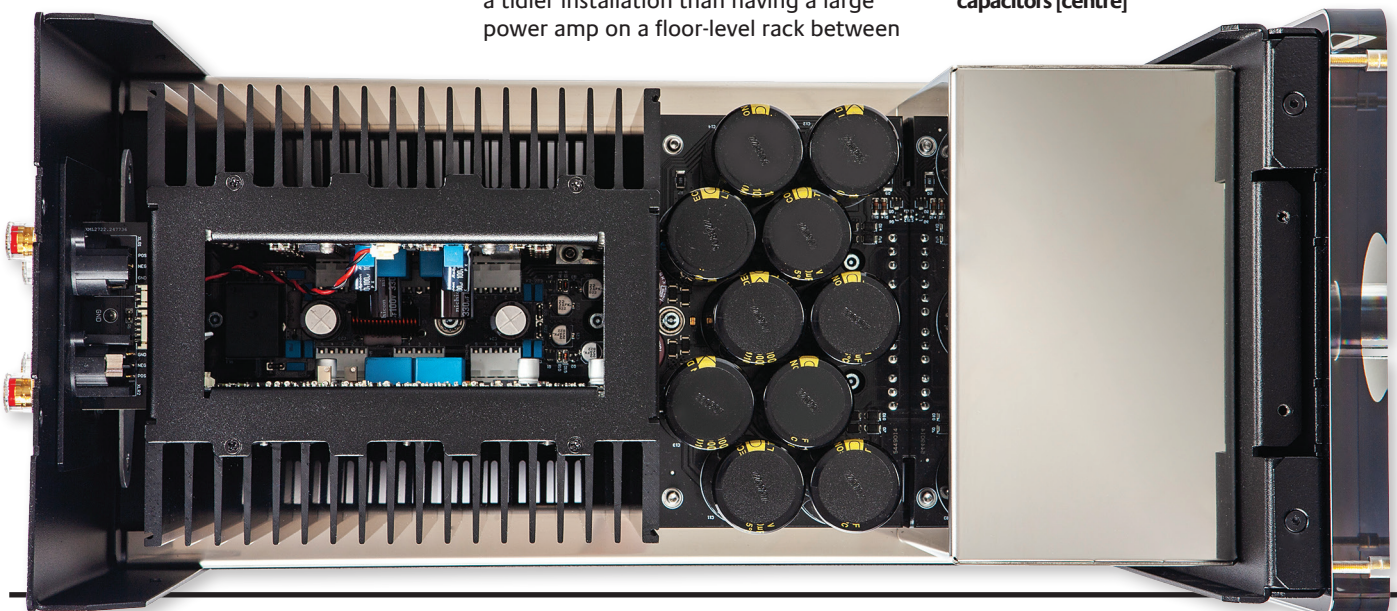
bridgeable into mono, as we noted in our earlier review. That would allow the user to start with a single amp, most probably fed from the company's £3599 EC 4.8 MKII preamp [HFN Sep '23] – which is how

it was reviewed – and then add another to create a much more powerful system.

The AW 300 M offers its own upgrade route, this mono amp having two sets of terminals for those wanting to bi-wire their speakers, together with a 'daisy-chain' XLR output to allow an additional

'Sawing in half Electro's AW 800 M power amp is not advisable...'

BELOW: The AW 300 M employs four pairs of transistors on each side of the heatsink. The PSU has a screened 800VA transformer [right] and 10x10,000µF/100V reservoir capacitors [centre]





LEFT: The AW 300 M's blue logo and power illumination can be defeated and there's an auto standby button tucked away just under the front of the monolithic chassis. The thick acrylic fascia and bright gold finishings are a brand hallmark

monoblock to be added for full bi-amplification. The simplicity of the AW 300 M makes it as fine a visual match for the EC 4.8 MkII – Electrocompaniet's only preamp, with its minimal 'diamond' of buttons for volume and source selection – as it is an electrical one. The power amp has just an on/standby button, the main power switch being to the rear, the colour of this changing from red (for standby) to blue (on) after about 10 seconds, or blinking red if the amp's protection has been triggered.

SENSE AND SENSIBILITY

Electrocompaniet's logo also illuminates blue to show all is well, with a little button

hidden under the front edge of the amp killing the front panel illumination if required. A second button located in the same area toggles a signal-sensing auto standby function, which operates after 30 minutes of no input, and will override 12V trigger connections from the preamplifier if you choose to use them.

The design here is, unsurprisingly, closely related to that of the AW 800 M,

using the company's direct-coupled high open-loop bandwidth topology, here enhanced with an output stage engineered to isolate the input and driver stages from the load, in the quest for the lowest-possible distortion. The power supply uses both DC and RF filtering at its input, while the 800VA transformer is magnetically and electrostatically shielded, its output smoothed by a 100,000µF bank of 100V reservoir capacitors.

The main amplifier section, rated at 300W/8ohm and doubling into 4ohm [see PM's Lab Report, p65], is mounted in its own enclosure, with heatsinks on either side, and the matt black casework is braced with a pair of external bars, running front to back, for greater rigidity.

As with all of Electrocompaniet's products, the AW 300 M is built in-house in south-west Norway, in the highly automated facility of parent company Westcontrol, with quality assured by keeping everything from populating and flow-soldering circuitboards to final checking under one roof.

HEAVY HITTER

If this 'compact' monoblock wasn't so heavy, it would be tempting to trot out the old cliché about it punching above its weight. So perhaps it's better to say that, despite its classic, understated styling, at heart this is definitely an amp with a penchant for partying. Yes, it sounds wonderfully sweet, clean and crisp when playing meticulously recorded jazz – Norwegian jazz, perhaps? Take a bow the Espen Eriksen Trio – but it's just as persuasive when you loosen the reins and let it drive hard, its tight control perfect for even the densest of mixes.

With the aforementioned trio's cover of 'We Don't Need Another Hero', from the *What Took You So Long* album [Rune Grammofon RCD 2129], the AW 300 M is gentle and languid with Eriksen's piano, Lars Tormod Jensen's bass and Andreas Bye's drum, giving the whole track a dreamy feel. But slipping into another gear with the more percussive playing of Neil Cowley on his trio's 'Rooster Was A Witness', from *The Face Of Mount Molehill* album [Naim Label, NAIMCD171], the relentless driving rhythm shows the speed and deftness of the amp. ↻

GO LONG, OR GO SHORT?

Let's talk about cables or, more specifically, given the groans usually greeting debates on this subject, let's talk about cable *lengths*. Different markets around the world have their own tastes when it comes to installing pre/power amplifier combinations, with UK audiophiles typically racking all electronics together, with short interconnect runs between the components and longer speaker cables. Elsewhere the preference is for localised amp/speaker setups fed with long runs from the preamplifier. In practice, the AW 300 M monoblocks make the 'long interconnects/short speaker cables' route even more feasible: placed right next to the speakers, they'd require extremely short speaker wiring. Knock yourself out with that dream speaker cable as you'll not be needing much of it!

Of course, the enabling technology here is the use of balanced cabling from the preamp to the power amp(s), with improved interference rejection than is possible with single-ended connections. Not for nothing do studio and stage installations favour balanced working, although many of these installations use transformer-coupled interconnects rather than the purely electronically balanced output/input of Electrocompaniet's pre and power amps. Here the promise of reduced common-mode noise and suppressed even-order distortions must be weighed against the complexity of the doubled-up circuitry. However, I have obtained good results from 'cooking quality' pro-use balanced cables for hi-fi set-ups. Think less than £50 for a decent pair of balanced interconnects, and suddenly the short speaker cable approach gets very tempting.

ELECTROCOMPANIET AW 300 M



LEFT: Input is balanced only, with a daisy chain output, on XLRs. Two sets of 4mm speaker binding posts are offered per channel. The outputs are not floating so the separate grounding post is connected to the ‘-ve’ speaker terminals

And these amplifiers absolutely do scale and heft, too, thanks to that healthy – to say the least – power output allied to speed and snap. Warm they may be when required, but there’s nothing lush or lazy about the way they play music, as is clear with the recent Pentatone release of Haydn’s *The Creation* [PTC5 187205; DXD download].

From the opening evocation of chaos and the exuberant cry of ‘And there was light!’, the power of the Dresdner Philharmonie and the MDR Leipzig Radio Choir is marshalled to dramatic effect by conductor Marek Janowski, aided here by the wide-open dynamics the Electrocompaniet amps deliver.

TELL ME A STORY

The amplifier’s balance is just as striking with the contributions of the vocal soloists, the timbres of their voices laid bare for inspection without any sense of enforced ‘hi-finess’. Instead, the story unfolds before the listener in thoroughly riveting style and remains enjoyable whether or not you subscribe to Haydn’s religious theme.

On the subject of big and bold, Electrocompaniet’s monoblocks sound magnificent blasting out the (probably deeply unfashionable) Emerson, Lake & Palmer *Welcome Back My Friends...* live set [Essential! Castle ESD CD 359]. The band’s version of ‘Toccatà’, based on Ginastera’s ‘Toccatà Concertata’, sounds even more frenetic than it does on the *Brain Salad Surgery*

album, and the epic ‘Karn Evil 9’, all 36-plus minutes of it, slams hard, underpinned by Carl Palmer’s massive drumkit and Greg Lake’s understated bass. Moreover, this amp pair fully conveys the ability of Keith Emerson’s keyboards to carry the melody while simultaneously delivering what are seemingly the kind of deep notes more usually associated with church organs.

LIVE AND KICKING

This set is about as ‘clean’ a live recording of the period you’ll encounter – the trio always toured many tons of equipment to achieve the crispest and most powerful sound around – and the nimble, extended sound of the Electrocompaniet AW 300 Ms driving full-range speakers brings it all back in sensational style. ⚡

HI-FI NEWS VERDICT

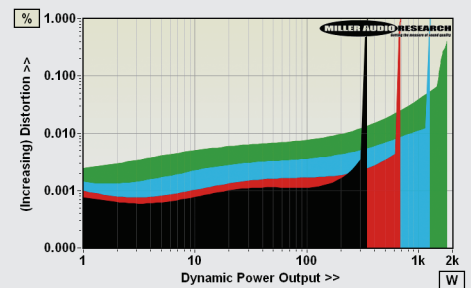
Unsurprisingly, these new monos deliver all the performance of the AW 800 M used in stereo mode, but in a much more convenient form factor. Simplicity and solid engineering pay off in a sound packed with detail, and seemingly limitless power and dynamics, ensuring all genres of music are delivered with conviction and involvement. Add in the robust elegance of the design and build, and this is a fine buy.

Sound Quality: 87%

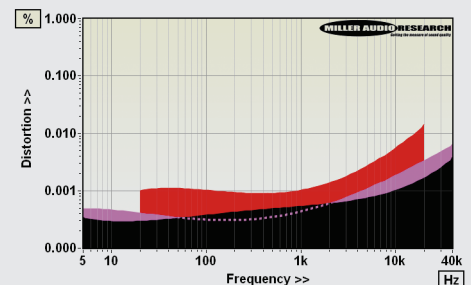


Electrocompaniet’s AW 300 M power amplifier, like its flagship AW 800 M [HFN Sep ’23], is rated at 300W/8ohm per channel. The latter is a (bridgeable) stereo amp while the amplifier under test here is a monoblock and its behaviour, to all intents and purposes, is almost identical to one channel – one power amp module – of the AW 800 M. Differences are slight and probably stem from small variations in the PSU and physical layout. So, while the AW 800 M broadly meets its spec. at 2x320W/8ohm and 2x580W/4ohm with 364W, 714W, 1352W and 1854W available under dynamic conditions into 8, 4, 2 and 1ohm loads, respectively, the AW 300 M delivers a mono 315W/8ohm and 565W/4ohm with a transient 352W, 690W, 1265W and 1825W into 8, 4, 2 and 1ohm loads (all re. 1kHz/10msec/<1% THD). The 1ohm figure is set by Electrocompaniet’s over-current protection [see Graph 1] but the AW 300 M’s 42.7A capability is more than sufficient to wrestle the toughest of speaker loads.

Distortion is a very low 0.00028% at 1W/8ohm and rises gently to 0.00039%/10W, 0.0009%/100W, 0.0017%/200W and 0.089% at the rated 300W (all re. 1kHz) while, versus frequency, the trend is very uniform, rising only gently at HF to 0.0016%/1W, 0.0033%/10W and 0.014%/100W [all re. 20kHz/8ohm – Graph 2]. Gain remains unchanged at a sensible 29.4dB and noise is very low, yielding an impressively wide 95.1dB A-wtd S/N ratio (re. 0dBW). Similarly, the response is flat to ±0.5dB limits from 1Hz-43kHz/8ohm but, again, the brand’s claim for an exceptional >1000 damping factor is slightly optimistic. In practice, the 0.012-0.039ohm output impedance gives closer to >650 at bass frequencies – still good, provided you have thick cables! PM



ABOVE: Dynamic power output versus distortion into 8ohm (black trace), 4ohm (red), 2ohm (blue) and 1ohm (green) speaker loads. Max. current is 42.7A



ABOVE: Distortion versus frequency versus power output (1W/8ohm, black; 10W, pink; 100W, red)

HI-FI NEWS SPECIFICATIONS

Power output (<1% THD, 8/4ohm)	315W / 565W
Dynamic power (<1% THD, 8/4/2/1ohm)	352W/690W/1265W/1825W
Output imp. (20Hz-20kHz/100kHz)	0.012-0.039ohm / 0.34ohm
Freq. response (20Hz-20kHz/100kHz)	+0.0dB to -0.15dB/-1.65dB
Input sensitivity (for 0dBW/300W)	97mV / 1695mV
A-wtd S/N ratio (re. 0dBW/300W)	95.1dB / 119.8dB
Distortion (20Hz-20kHz, 10W/8ohm)	0.00031-0.0033%
Power consumption (Idle/Rated o/p)	101W / 475W (1W standby)
Dimensions (WHD) / Weight	212x292x488mm / 30kg