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EQUIPMENT REPORT



GamuT D200i Stereo Power Amplifier

A Classic Reimagined

Kirk Midtskog

GamuT Audio, a Danish company, has recently established a U.S. subsidiary for North American distribution, headquartered in Sturtevant, Wisconsin. After what seemed like some fits and starts with a North American presence a while back, this is good news for audio folk on this side of the pond. I happen to be of the view that GamuT power amplifiers, in particular, deserve our attention—especially since they’ve been updated recently.

The first versions of the amplifiers were designed by Ole Lund Kristensen in the early 1980s and were sold mostly in the professional studio market in Denmark. In the early 90s, the amplifiers were more widely sold in the home specialty-audio market under the brand Sirius, whose name was subsequently sold to the American satellite radio company XM/Sirius in 2000. From then on, GamuT has been the brand on the company’s products, which also includes a CD player and preamp (added by the late 1990s), and three speaker lines (launched in 2003). GamuT is now owned by Kvist Industries A/S, a high-end-furniture and speaker-cabinet supplier located in Årre, Denmark. (Please see the accompanying sidebar about my GamuT factory visit.)

My own experience with GamuT power amplifiers goes back to 2006 when I had the pleasure of living with a D200 MkIII stereo amp—the predecessor to the subject of this review—for about a month. Shortly thereafter, I bought a pair of M200 MkIII mono amps, which I still own. What struck me so vividly about both models was their lack of obvious solid-state character

compared to almost all other SS amps priced near their respective levels at that time: \$8500, stereo; \$11,500, mono pair. Up to that point, my experience with SS amps left me thinking that nearly all other similarly-priced SS amplifiers had relatively poor depth and somewhat dry and grainy qualities, and were often not very musically compelling. Solid-state amps which largely mitigated those qualities usually came with much higher prices. As I’d been a confirmed tube-amp guy for 20 years, the GamuT amps were a revelation. Here were reasonably priced solid-state amplifiers with a neutral tonal balance, good image density and soundstage depth, relatively little telltale graininess, and a high “musical interest” factor.

The new D200i stereo (\$12,500) and M250i mono amplifiers (\$23,000, please see the M250i sidebar) look almost the same as the earlier versions, and they retain much of the Kristensen-designed circuit and features of the previous, non-*i* models. The main cosmetic update lies in the center inset of the faceplate. It now has a pale gold, mirror finish (as opposed to anodized aluminum) and the on/off button at the top of the inset is now a more subtle round metal disc instead of the larger, more utilitarian-looking black rocker-switch of the earlier models. I like the new look but prefer the more positive on/off feel of the older switch. On the inside, some of the improvements involve a new layout of the power supply, which now better isolates the A/C mains from the signal-carrying circuitry. The power supply’s maximum current draw has been increased through the use of two bridge rectifiers, one each for the positive-

EQUIPMENT REPORT - GamuT D200i Stereo Power Amplifier

going and negative-going legs. The main circuit board has been adjusted to accommodate the increased power levels and some of the parts values and materials have been optimized for improved performance. Internal hookup wire is now GamuT's own "WormHoles Signature" brand (in critical junctions). The D200i's rated output is 200 watts per channel into eight ohms, 400 into four ohms, and 700 into two ohms. It has both XLR and RCA inputs. All GamuT amplifiers have a four-position input-sensitivity switch inside the case: -0dB, -6dB, -12dB, and -14dB. This useful feature allows users to tailor the amplifier's gain to better match the output level of the partnering preamp. (Dealer assistance is recommended.) I tried a couple of different settings but settled on the factory -6dB setting on all three GamuT models on hand: M200 MkIII, D200i, and M250i.

All GamuT amplifiers have an error-checking startup sequence that goes through several condition checks, lasting a few seconds, before it will allow full operation. My M200s have never failed, malfunctioned, or even blown a fuse in the six years I have used them. Likewise, the D200i and M250i did not present any problems during the review period. The D200i is completely dual-mono internally. That is, all internal parts (except the A/C mains feed) are dedicated to each respective channel, including separate 800VA transformers.

There are two pairs of output binding posts per channel, but there is more to them than the provision for bi-wiring. The inner pair is called "normal" and has an inductor in parallel with a resistor between the output section of the amplifier and its corresponding binding posts. The outer pair is called "direct" and has no added inductor and resistor (Zobel) circuit. The "normal" Z-circuit pair is offered to help handle low-impedance speakers or highly capacitive cable loads. Provided the speaker has two pairs of binding posts (i.e., it is bi-wireable) GamuT recommends connecting the inner/normal pair to the speaker driver's terminal with the trickiest impedance—the bass driver terminals, in the case of a typical dynamic cone type speaker, or the tweeter driver terminals, in the case of an electrostatic speaker. I experimented with both the inner and outer pairs and preferred the outer/direct pair.

Using live acoustic music as a tonal reference, the D200i essentially walks the middle ground. It is neither bright nor dark. It captures the overall tonal balance of a live orchestral performance beautifully. It also conveys a measure of speed and airiness in the upper frequencies as well as richness and full-bodied weight in the lower midrange and bass. Unlike some amplifiers, which can jumble the timing of closely occurring events, the D200i tracks these overlapping cues in ways that are reminiscent of a live concert. Dynamic timings just seem to unfold with unforced ease as they continue their arc from propagation to decay with no obvious smearing. On the whole, then, the D200i captures the gestalt, the overall sound and feeling of a live performance, admirably—insofar as a \$12,500 power amplifier can be expected to do so.

Compared to other similarly priced solid-state amplifiers, the sound of the new D200i can be summarized as continuous, neutral, smooth, and fairly revealing but without etch or stridency. It sounds like it comfortably combines the liquidity and three-dimensionality of a decent tube amp with the even-handedness—throughout its bandwidth—and "quickness" of a

good solid-state amp. For lovers of tube amplifiers, the D200i may offer a viable SS alternative in the form of a fairly powerful, easy-to-use, cool-running, averaged-sized amp which sounds pretty consistent from top to bottom—something that some tube amps have trouble doing. (When I refer to "tube amps," I mean a typical push/pull type using beam output tubes.) For SS users in the market for a more liquid-sounding amp in the \$10,000 to \$14,000 range, the D200i offers very good image depth and solidity as well as a sense of an uninterrupted soundstage from side to side and, especially, from front to back—things that SS amps do not usually do as well as their tubed cousins. It cannot be the amplifier for everyone, though. The D200i has good power reserves, but it is most likely not an optimal match for very difficult speaker loads or for generating high volume levels in very large rooms—unless the speaker is fairly sensitive. Can one find a better sounding SS amp in certain performance areas for \$12,500? Probably, but I would be hard pressed to think of one at the moment that would sound as complete and competent on the whole as the D200i.

What accounts for the GamuT's ability to make its SS power amps sound almost as continuous and 3D-like as tubes while still retaining many SS strengths? GamuT's explanation: The output section uses only one output device per phase, one for the

SPECS & PRICING

Power output: 200Wpc (8 ohms), 400Wpc (4 ohms), 700Wpc (2 ohms)

Inputs: One unbalanced (RCA), one balanced (XLR)

Outputs: Two speaker terminal pairs

Dimensions: 17" x 6.5" x 18.5"

Weight: 68 lbs.

Price: \$12,500

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Analog Source: Basis Debut
V turntable with Vector 4
tonearm, Benz-Micro LP-S
cartridge

Digital Sources: Ayre C-5xeMP
universal disc player, Sony
VAIO VGN-FZ-490 running
JRiver MC 17, Hegel HD2 and
HD20 DACs
Phonostage preamp: Ayre
P-5xe
Linestage preamp: Ayre K-1xe
Integrated amplifier: Hegel
H200

Power amplifiers: GamuT
M-200, GamuT M250i

Speakers: Dynaudio
Confidence C1 Signature,
Aerial 7T

Cables: Shunyata Anaconda
signal cables, AudioQuest
Coffee USB and Hawk Eye S/
PDFI, Shunyata Anaconda and
Cobra ZiTron power cables
A/C Power: Two 20-amp
dedicated lines, Shunyata
Triton power conditioner

Room Treatments:
PrimeAcoustic Z-foam panels
and DIY panels



GamuT M250i Monoblock

The next model up from the D200i is the more powerful M250i monoblock. At 250 watts per channel, it sounds a lot more powerful than the modest 50 watt increase over the D200i stereo amp would suggest. The M250i also has several important improvements to make it perform at a significantly higher level. The jump in price is also considerable: \$23,000 per pair. Double the price to go from 200 watts to 250 watts? All other things being equal and when driving typical speaker loads, this is not an appreciable power increase. Even so, there is much more going on, sonically (and technologically), than a bit more power and two chassis instead of one.

In a nutshell, what you get sonically from the M250i is considerably more of the positive performance characteristics of a D200i and fewer of that amp's forgivable weaknesses. The M250i casts a much larger and more open soundstage as well as exhibiting a lower noise floor. Please keep in mind, the D200i stereo amp does not suffer from undue noise levels at all; my point is merely that the M250i's ability to enlarge the soundstage and reveal more details—as well as sound more relaxed and natural in the upper frequencies—yields significant sonic benefits. The M250i expands the whole presentation and invites you to discern the musical constituents more easily and become more involved. On the intellectual level, you can more readily follow various parts in the mix, hear venue space and reverberation cues, and discern recording quirks. On the emotional level, you can more readily follow the subtle differences in dynamic intensities (which musicians use to impart meaning), more easily forget about system playback, and simply become more immersed in the artistic world conjured by the musicians.

The 250i also promotes a greater sense of physical presence through larger, snappier dynamic swings and more power in the bass. I think that the particular way the 250i uses its output power invests everything with greater solidity and dramatic life. (Its output increases to 480 watts into 4 ohms, 900 into 2, and 1700 [peak] into 1.) Marshaling increased current output behind the watts, separating each channel with its own chassis, and a few other improvements really do seem to work together to elevate the M250i's performance to a higher level.

Some of those improvements include the following: First, the M250i has thick aluminum bars running along the inside length of the sides and across the inside back of the case. These bars hold a MOSFET, or the main driver stage PCB, respectively, on more rigid structures and provide additional cooling. The aluminum bars also conduct heat to sensors in the MOSFET bias controllers so operating bias can be lowered as heat increases. The D200i mounts its MOSFETs directly on two shared cooling fin banks, and the main PCB is mounted to the chassis base without the extra aluminum bar. Second, the M250i has 100,000uF of energy storage capacity; the D200i has 36,000uF (Swedish-made Rifa PEH 169 capacitors in both models). Third, the M250i uses a huge 1250VA toroidal transformer, whereas the D200i uses a 800VA toroid (per channel). Fourth, all hook-up wire inside the M250i is GamuT's WormHoles Signature; the D200i uses this wire only in critical areas.

The GamuT M250i strikes me as a solid contender in its price category. It is revealing, well balanced, dynamically alive, and remarkably expressive of music's natural appeal. It's not inexpensive, but its level of refinement and musical realism is almost addictive. —KM

positive-going phase, and one for the negative-going phase, for a total of two per channel. That's it. No rows of multiple bi-polar transistors. The very robust MOSFET GamuT employs can handle 500 watts and a peak current demand of 300 Amperes and 100A continuously. (MOSFET stands for metal-oxide semiconductor field-effect transistor, even though polysilicon is now used instead of metal.) According to GamuT, using only one output device per phase greatly reduces the vagaries of matching operational variances which exist among the transistors in a typical bi-polar array, sometimes with as many as 48 transistors per channel. Sonic smearing and dynamic discontinuities are, theoretically, much harder to reduce when many output devices are employed. GamuT says its topology results in a purer and more lifelike sound because the signal is not as altered by so many difficult-to-fully-match transistors trying to "sing together." I really did not factor in any such claims when I first auditioned the D200 and M200 in 2006. Obviously, something struck me as very good about the GamuT sound back then. Maybe there *is* something to GamuT's claims of sonic purity directly resulting from its application of single MOSFET technology.

Another way to flesh out more of the D200i's qualities would

be to compare it to the older M200 MkIII in some detail. Right off the bat, the older M200 has more bass clout and a bit more dynamic drive. The two amps have the same power rating (200 watts), but just like the differences between the D200 stereo amp and the M200 monos I had compared some years ago, the mono version also had beefier bass and a wider dynamic range. Not surprisingly then, the older M200 mono amp still sounds more powerful than the present-day D200i stereo version. Do I prefer the current D200i over the older M200? Yes, and here's why. Even though the M200 has the sort of bass and dynamic performance I tend to favor, almost everything else about the D200i is nearly as good or better than the M200. First, the D200i throws a soundstage that is almost as wide as the M200's—pretty nifty for a *stereo* amp, as monos usually cast a larger soundstage, all other things being equal. Second, the D200i's rendering of depth is more fully developed, both individual images and the soundstage envelope itself. Third, the D200i has a more continuous or liquid quality, and this helps promote a sensation of the various musical elements being linked together on a continuum rather than separate, discrete elements. Fourth, the D200i has a closer-to-neutral tonal balance than the M200. The M200 can veer towards

a bit of leanness in the upper midrange, which can show up more prominently with speakers like the neutral-sounding Aerial 7T. Fifth, the D200i has a more coherent portrayal of timing. The M200, by contrast, can sound almost as if it is slightly “forcing” the pace of some of the dynamic elements. Mind you, this could actually aid some systems in need a bit of “dynamic presence” to help things come alive. And finally, the M200 has a more forward listener’s seating perspective, but—almost counterintuitively—the front of its soundstage actually begins farther back than that of the D200i. The D200i, on the other hand, has a more mid-hall listener’s seating perspective, and—here is the neat part—the front of the soundstage seems to be a little less restricted to a particular plane, relative to the speakers. The result of this kind of soundstaging is greater overall depth and a sense that the music is allowed to “breathe” and take up more listening room space, from front to back, in response to a particular recording’s characteristics. Do I still like the M200? Yes, very much. In some ways, it can make some recordings sound more exciting. At the end of the day, though, I find the D200i to simply sound more refined and accurate.

My only very minor reservations about the D200i are that it could deliver an even more spacious soundstage, reveal even more nuanced details, and reduce the slightest wisp of spurious noise in the upper frequencies—things the M250i improves upon. I am really searching for something to criticize, here, and feel a bit petty when I mention them. After all, the D200i is not priced as a “super amp”; nor does it have pretensions of being state of the art. Instead of struggling to find more flaws, I simply enjoyed the D200’s ability to dig into recordings and bring out meaningful musical details. The new Melody Gardot album, *The Absence* [Decca] on either LP or 24/96k download, is rendered so clearly and beautifully by the D200i that various songs stuck in my head for weeks after playing them only a few times. Gardot’s delicate voice and the various instrumental parts were easy to follow, including the clicks on the song “So Long,” to which some people have objected as an assumed recording defect. The clicks follow a syncopated Latin rhythm and are an intended part of the mix. The D200i helped delineate this quite clearly. The ending refrain of the more cabaret-styled “Impossible Love” has some sliding, almost ghost-like wailing by Gardot. Her voice sounds as if it is coming from far off to the extreme right and left in the soundstage. In my setup, Gardot’s voice eerily projects from off to the side of my right ear as the song starts to fade at the end. Sometimes a company’s new model

doesn’t always live up to our expectations of substantial advancement over the older one. Not so in the case of the D200i. GamuT is really on to something with its new approach. The changes may not be many in number, but the updates deliver significant sonic improvements, nevertheless. While not inexpensive, the GamuT D200i is a fantastic-sounding all-around performer with sonic qualities that almost defy handy SS vs. tubes characterizations. If you are looking for an amplifier that combines many strengths associated with both solid-state and tubes, the D200i would be good place to start your quest. I am impressed by the wonderful balance the D200i strikes between its ability to perform well in areas like imaging, dynamics, resolution, and tonal balance, as well as its ability to deliver a truly musically enjoyable experience. After all, if an amp doesn’t allow the music to sail or sing, what’s the point? **tas**

Stillpoints

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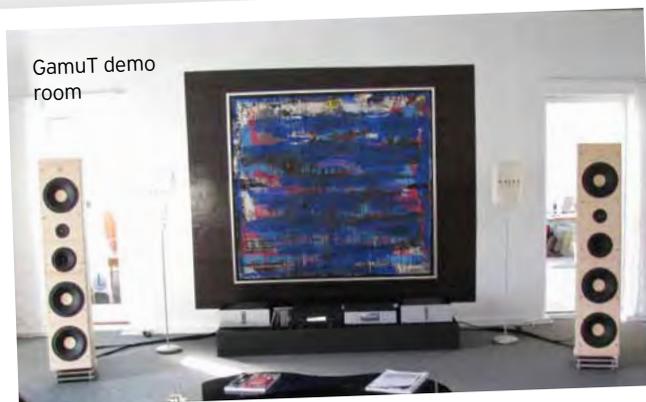
Inside the GamuT Factor

In early October, I traveled to Denmark to spend a few days at the GamuT headquarters in Årre, a small, mostly agricultural town located about 20 miles northeast of the western coastal city of Esbjerg. GamuT occupies part of its parent company's factory space, so a visit to GamuT means a visit to Kvist Industries, a furniture-and-speaker-cabinet-making company. Kvist bought GamuT in 2010 after a two-year cooperative business relationship, which developed through Kvist's role in supplying the cabinets for GamuT's top speaker line, *El Superiores*. Apparently, Kvist also made cabinets for B&W's 800 Diamond Series (and for a few other speaker companies as well) for several years until relatively recently.

Torben Søndergaard, GamuT Sales Manager, was my gracious and affable host and saw to it that I was taken care of well and kept my schedule on track. Carsten Jespersen, a member of Kvist's Advisory Board and former Production Manager, showed me around the speaker cabinet part of the operation, and Benno Meldgaard, Quality Assurance Manager, showed me around on the electronics side. Benno shared with me some of the design features of the D200i and M250i amplifiers and pointed out some of the internal parts as we talked. (I relay most of the details in the D200i review and M250i sidebar.) I also met with GamuT's speaker designer Lars Gollar, a former speaker-driver designer with ScanSpeak for several years before joining GamuT in 2005. He studied psycho-acoustics at university and incorporates much of the knowledge gleaned from his studies into practical applications in GamuT's speaker designs. Gollar apparently also played a role in fine-tuning the sound of the *i* version amplifiers.

On the business side, I had the pleasure of meeting, on separate occasions, both the Director of Production Søren Kvist and CEO Michael Kvist. They each spoke of their commitment to GamuT and the synergy between the two companies. The resources of Kvist Industries being marshaled behind GamuT helps provide additional support for further R&D, not to mention foster more robust distribution and sales in the U.S. and other markets. The Kvist offices and manufacturing facilities were neat and tidy, and workers, at all levels of the operation, seemed to apply great fastidiousness to their work.

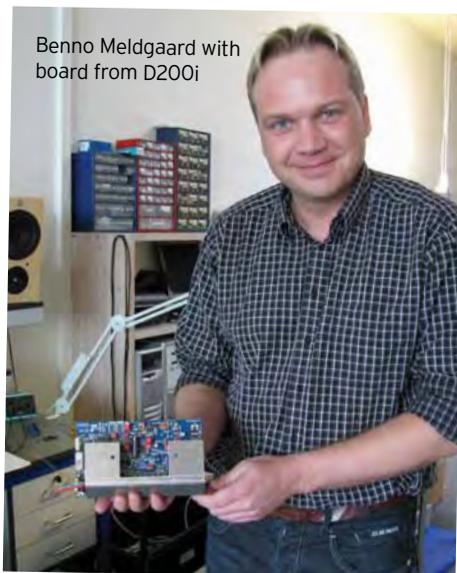
On a side note, I was able to see quite a bit of the Danish countryside from the central and mid-west coast



GamuT demo room



GamuT Factory



Benno Meldgaard with board from D200i

of Jutland and across the midsection of the country to Copenhagen on the east coast. All of Denmark, even rural areas, appeared to be very tidy and well organized. The cities were clean, beautiful, and *gemütlich* (to borrow a German word for "atmosphere of warmth and friendliness"). Denmark seemed to epitomize competence and cooperation, rather like Japan—a country I admire—with a measure of relaxed, Occidental "give and take" thrown in.

After meeting with the people at GamuT and seeing firsthand

how the GamuT/Kvist operations work, I came away with a sense that GamuT is on track to support a sustained presence in North America. Music lovers who favor using high-end gear from a single company, for the sonic (and visual) synergy, have GamuT as another viable choice, along with MBL, Burmester, Naim, Music Culture, BMC, Gato, Electrocompaniet, and Linn (apologies to others I am neglecting). While GamuT has been available in the States nearly continuously since the late 1990s, it has not always had a consistent presence in the last few years. The "new GamuT," with Kvist's backing, should change that. I am looking forward to further developments from GamuT. **KM**