## Hifi Plus (UK) 12/2014 EQUIPMENT REVIEW

# Burmester 101 integrated amplifier

by Alan Sircom



he standard audio industry autumn roll-out of shows and factory visits had a strange, unexpected side-effect. It made me understand something fundamental about the Burmester 101 integrated amplifier, and Burmester products in general.

You see, most people think that chrome front panel on Burmester products is there as a spot of bling. It's not; it's there because Burmester thinks very long term. You begin to understand this when staring at the 23rd chromed shower tap in almost as many days; kitchen and bathroom designers use chrome brightwork because it doesn't tarnish even after years of installation in an inherently wet environment. An audio amplifier doesn't spend its days in shower stall humidity, but that thick chrome front panel means the 101 integrated amplifier will look as new in a quarter of a century as it does today.

Burmester is mostly about pre-power amplifiers; the company's best known product (still in production after 34 years) is the 808 preamplifier and its best seller is the 911 power amplifier. However, Burmester has made several integrated designs over the years, and currently produces three models; the 101 is the latest (the first two numbers of the three number product code here denote the original launch date; the 808 being launched in 1980 and the 101 first saw the light of day in 2010), and least expensive in the whole catalogue. Unlike the other integrated designs in the range, the 101 is smaller, slimmer, lighter, and more conventional looking than its stable-mates. In truth,

the conventional looks belie the fact that the 101 is perhaps the most radical design in Burmester's long amplifier history.

The 101 amplifier is a 120W design, and uses Class D power sections, in place of the predominantly Class A topology of other amps in the Burmester range. Class D operation polarises audio enthusiasts, but the 101 takes the Class D concept and runs with it. Instead of using off-the-shelf modules and the standard-issue switch-mode power supply, the 101 features custom-designed filters, and a high-grade linear supply. Both the preamplifier and the high-grade headphone amplifier are DC coupled, thereby limiting the number of capacitors in the signal path.

Also outside the signal path is a protection circuit, designed for overload, overheat, and DC offset protection. As a result, you don't necessarily need to observe good housekeeping and turn the amplifier

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off before swapping speakers. However, I strongly advise you do power down the amplifier between speaker changes, as it ensures the amplifier modules react properly to the new loudspeaker. This is important in order to get the best from the 101, and Class D amps in general. This won't trouble most people in reality, but if you audition the 101 and the demonstrator fails to cycle the power between speaker changes, you probably aren't hearing the amp at its best.

There's two points to note about the 101, the first being very transitory. It takes some time to bed in. The out of the box 101 bears bears little sonic resemblance either to the typical Burmester 'house sound' or to the sound the 101 will eventually achieve after some hours of careful run-in. Its new in box sound is hard, flat, and small sounding, but all of those aspects go away over a weekend of listening, and they don't seem to come back even after a week or so of downtime. I was worried that the inclusion of a 'smooth' button on the front panel meant the 101's basic sound was going to stay as hard as its first hours, but in reality it runs in to sound almost valve-like in day to day operation,

The second point is, like a lot of Burmester equipment, it's designed as a balanced audio circuit that can do single-ended, and not the other way round. It has only two single ended inputs, alongside the three combination XLR/jack sockets rarely seen this side of a pro rig. This is best used with balanced sources and, although the drop in performance between balanced and single-ended is not massive, it is fairly noticeable. It's even noticeable when using pseudo-balanced devices (such as the Primare NP30 tested in this issue), and the sound was more integrated and had more 'zest' when used in fully balanced mode from DAC to speaker terminals. Naturally, it also worked well with Burmester's own (we used the 113 DAC, and this proved an excellent side-kick for the 101).

All the above (power cycled, used balanced, run in for a few days) represent the only concessions under 'appropriate fettling' rules, and in all other aspects the 101 simply works as any good amplifier should; without fuss or bother, and consistently driving the sorts or loudspeaker loads a good integrated amp might see hanging off the end of some speaker wire. As suggested, the 101's basic sound is very Burmester, combining an almost valve-like roundness and effortless dynamics, with a lot of detail. And, as described above, engaging the 'smooth' switch just increases the rounded off sound somewhat, and will tame some of the more excessively 'hot' mixes out there (it can tame some slightly 'spitchy' tweeters, too). It also seems to act as an 'unloudness' filter, making it great for some late-night, low-volume listening.

What the 101 does exceptionally well is rebuild the too-often severed link between 'enjoyable' and 'detailed'. We've all become accustomed to amplifiers (at least, amplifiers that don't cost as much as an S-Class Mercedes) that make a relaxed and enjoyable sound, but do this at the expense of the detail. We've also become used to detailed sounding amps, but all too frequently that analysis costs a listenable sound. The 101 manages to do both; so you listen to Tom Waits *Rain Dogs* album [RCA] and you not only get the insight into the studio and the performance, but you get that sense of Kurt Weill-style

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story telling and musical flow. In many cases, you either get the energy without the musical insight (which makes Waits sound like a carney barker), or you get the musical coherence without the sharp detail (in which case the openness of the mix is lost).

The ace up the 101's sleeve is its sense of grip over the loudspeakers. I played perhaps the least audiophile, well-recorded tracks I own; 'Still D.R.E.' from 2001 by Dr Dre [Interscope]. There's a tendency for less grippy amplifiers to drown in the drone, and lose some snap to the percussion loops. Here, it sounds fresh and gangsta. Word! In a perhaps more appropriate idiom, the sense of grip means instruments like timpani and double bass never get out of hand, even when the music rises to crescendo, as in the last movement of Mahler's Eighth Symphony [Solti and Chicago SO, Decca].

In the manner of classic Apple launches, there's just one more thing; the built-in headphone amplifier. This is something of a star, because it's capable of driving very difficult headphone loads without blinking, and does so with the same rich, warm, effortlessly powerful, and detailed presentation for which the 101 (and, by extension, Burmester) is prized. No, it's not going to dissuade true headphone devotees from a full-thickness, dedicated headphone amplifier and DAC combination, but it suggests much of that devotion might be as more blind faith than blind listening, as the 101 is one of the best headphone sounds you will hear from the traditional audio world.

You need to think about the 101 with the kind of very long term outlook that Burmester works to. Integrated amplifiers don't change that much, but despite this we often change them regularly. It's conceivable that someone might go through two or three integrated amps in a decade, but that's not how the 101 works. It's either a stepping-stone to bigger Burmester pre/power combinations, or it's an end in and of itself. There's no other way here; people who buy Burmester don't commonly 'churn'. This means the 101 will be bought by people who will tend to keep the same product for years and years, and it's possible – likely even – that the 101 will either end up in a second system, or form the backbone of system of the family's next generation audio enthusiast. In other words, this one's a keeper.

The Burmester 101 might just be one of those silently 'disruptive technology' products. Class D operation is going to be an increasingly important element in 21st Century music listening, and Burmester joins the small, but growing number of serious audio brands that are realising the potential of the circuit topology. We need more products like the Burmester 101, for making the right noises to the environmental brigade, and making the right noises for the listener, too! +



#### TECHNICAL SPECIFICATIONS

Inputs: 3x XLR balanced, 2x RCA singleended

Outputs: 1x XLR balanced pre-output,

speaker terminals

Power output: 120W per channel (four

ohms)

Frequency Response: 5Hz-60kHz (-3dB)

Distortion (THD+N): 0.015% Signal/Noise ratio: >74dB Damping factor: >250

Dimensions (HxWxD): 9.2x48.2x35cm

Weight: 12kg Price: £5,088

Manufactured by Burmester URL: www.burmester.de

Tel: +49 30 787 968 0