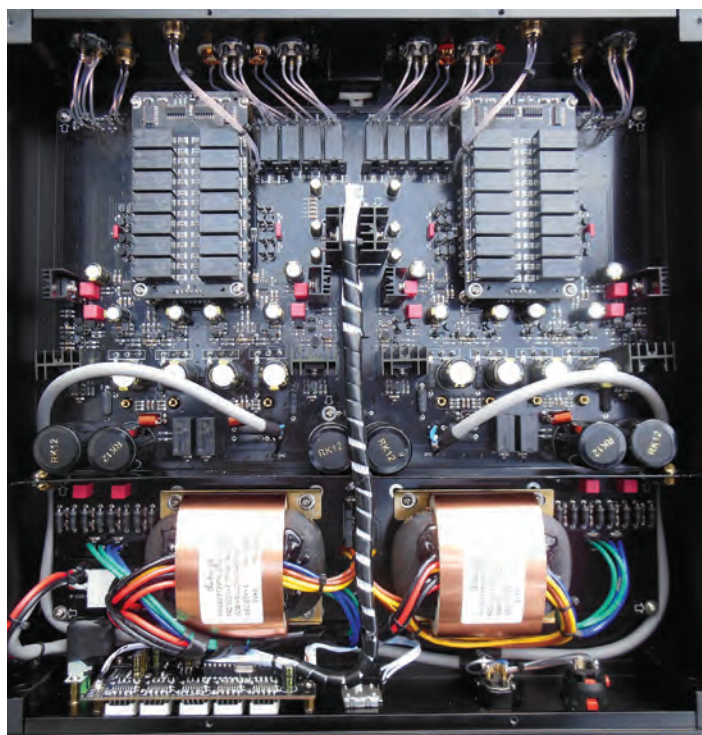


# Audio-GD Master-19

KEVIN FISKE GETS TO GRIPS WITH A CHINESE-MADE HEADPHONE AMPLIFIER WITH THE ABILITY TO RE-SHAPE HIS VIEW ON WHAT CONSTITUTES VALUE FOR MONEY IN THIS FAST-GROWING MARKET SECTOR

**It is impossible to spend more than just 30 seconds listening to Audio-GD's Master-19 combined headphone amplifier and line stage and not feel a sense of uneasy disorientation. No, given unlimited funds it's not the best device of its type in what is becoming an increasingly busy sector, but this Chinese-designed and -manufactured amplifier blows to smithereens any preconceptions we might have had regarding pricing norms and sonic value.**



Audio-GD's Master-19 headphone amplifier isn't alone in appearing to offer remarkable value for money: Am Fang's company Audio Music ploughed a relatively lonely furrow until recently, but now it has been joined by other privately-held Chinese vendors including Denafrips, Holo, Jay's Audio and Hifiman, offering products that pose a direct challenge performance-wise to Western ones.

So what to expect of a headphone amplifier and line stage that costs just over £900? To dismiss Audio-GD's Master-19 because it costs so relatively little would be a real mistake, and one I nearly made myself. I had originally wanted to try the company's flagship Master-9 headphone amplifier since it gets good reviews within the Head-fi community, but European distributor Magna HiFi in the Netherlands told me that

it had been discontinued ahead of a new model being launched later this year. Magna suggested trying the Master-19 instead, framing it as sonically 85-90% of the Master-9, but at half the price.

The Master-19 weighs 7kg, is 36cm wide and deep and 8.5cm high, and has a chassis of black anodised aluminium, meaning that, if nothing else, we get a lot metal for the money. Most of the weight is from the two hefty R-core transformers within, and the component count, component quality and attention to detail in the build is impressive. Audio-GD has made some necessary use of surface-mounted devices, but many components are of the larger hole-through type, of premium Western or Japanese manufacture. Wiring between the functional blocks, including the fully balanced amplification, the 100-step relay-controlled volume control, and the front and rear panels, is point to point, neatly executed.

On the front panel we find a luridly bright blue display indicating volume, input and output settings plus low or high gain. There is an on/off button and three others for mode selection. The volume control spins smoothly, accompanied by the soft clicking of the internal relays. Sockets for 4-pin XLR and 6.35mm TRS headphone jacks sit to the right-hand side. On the back, unusually, we find left and right ACSS inputs for interconnect compatibility with Krell (CAST), and Bakoon and Enleum (SATRI) devices, along with two pairs each of regular balanced and single-ended inputs. One pair each of single-ended, balanced and ACSS outputs is provided.

## Brutal power

This is a full Class A zero-feedback current amplifier design, drawing a constant 45Watts from the mains and outputting what in headphone terms is a brutal amount of power: 16W into the 14 Ohm load of my reference Audeze LCD-5 headphone and 630mW into a 600 Ohm load (both figures balanced). That's more than enough to drive Hifiman's notoriously

current-hungry Susvara headphone, mentioned in KH's overview of headphone amp requirements in this issue, and anything else besides. Audio-GD says its particular implementation of current-gain amplification allows the Master-19's balanced XLR connections to perform almost as well as the ACSS connections, but having no other ACSS devices to hand I was unable to test this claim.

The Master-19 has a sensible output impedance of 1ohm into headphones, a high 130dB signal to noise ratio and THD of <0.003%. The claimed frequency response is 'flat' from 20Hz to 20kHz, with a -3dB point at 0Hz (DC coupled!) and at 200kHz, with a channel balance of <0.05dB. As a line stage the amplifier can output a maximum of 20Volts into balanced connections and 10Volts into single-ended. All the foregoing are manufacturer's claims.

Four groups of unbalanced Class A FET cascode input buffers enable the Master-19 to cope with a wide spread of source impedances: my reference DAC, a Denafrips Terminator Plus, presenting 1250 Ohms at its output, got on well with the Master-19, giving good results both with headphones and a Bryston 4B Cubed power amplifier.

**Sound Quality**

Audio-GD soak tests products for 100 hours before shipping: the review sample was brand new and required around a further 180 hours of power-on before I judged it to have settled.

The overwhelming immediate impression on comparing it to well-regarded references was of a dynamic muscularity across the audio band and a particularly powerful low frequency range. If we believe Audio-GD's frequency response measurements, the '19 provides a lesson in how a measured flat frequency response might not sound that way when we listen to music. Clearly, there are other factors at play, perhaps among them the amount of second and third harmonic distortion engineered by the designer in an attempt to trade literal recorded 'truth' for a warmer and perhaps a more apparently spatial presentation. The alternative headphone amplifiers/ line stages that I had to hand – a Burson Soloist 3X GT and a Benchmark HPA4 – both employ switching power supplies rather than the transformer-based linear power stage used by Audio-GD, and therein may lie one further possible reason for the additional low frequency weight exhibited by the '19.

When working as a line stage the Audio-GD delivered some bass notes in a way that made the sofa and loose ornaments vibrate, whereas the other two amplifiers gave a marginally less physical reading of the same tracks. Are my two references more accurate or is the Audio-GD Master-19 correct? I was so amused by the contrast that I dug out Robin

Trower's 1976 recording on vinyl, *Long Misty Days*: unplayed for years, it is not one of Air Studio's finest efforts, and remembered it for flat dynamics, and James Dewar's bass being recorded so low in the mix that he could easily have been standing, not in the studio, but 200 metres away at the bus stop around the corner on Haverstock Hill. While the Benchmark and the Burson, as well as my Bryston BP-17 Cubed reference pre-amplifier, showed memory had not failed me about the lack of dynamics and balance, the Audio-GD's generous low end applied a measure of pseudo-EQ and dragged Dewar, if not into the booth, at least into the studio reception area.

Playing a wide range of other material from vinyl and CD, through Audeze LCD-5 and Sennheiser HD650 headphones, the '19's bass emphasis was similarly apparent, and with injudicious use of the volume control it was possible to apply skull-massaging levels of slam. It's easy to see how rock and blues fans might fall for the '19 in a big way.

To its credit, the Audio-GD brings a fair level of texture and grip along with this bass drama, as well as some impressive staying power, notably refusing to run out of puff when asked to deal with sustained low-end material, such as the serial infra-sonic events on Yello's *Toy* album. Into 'phones and as a line stage, the '19 gave confident and stable lateral placement of musical events, if with a degree of perceived depth that – in my system – was more limited than that achieved by the Burson and the Bryston alternatives (the latter as a line stage only).

However it is in tonal richness and ballsy dynamic expression that the Audio-GD excels, exhibiting the no-holds-barred immediacy we should expect of a well-executed Class A design with minimal or no feedback. That aforementioned bass emphasis aside, the sonic balance is one that people who regularly refresh their audio memory by attending live acoustic music events will recognise as natural and bordering on credible. This is the kind of flesh-and-blood performance with the energy and immaculate timing that we associate with classy single-ended triode amplification into efficient speakers; an example of silicon crystal amplification that gets close to the best that glass and vacuum can do. Readers who track back over my written thoughts on audio over the last two decades or so will understand that observation as the highest possible compliment.

**Conclusion**

I found the Audio-GD Master-19's user interface to be a bit clunky via the front panel buttons and display. But in every other respect this combined headphone amplifier/ line stage is notably well-engineered, powerful and sonically satisfying.



**Specifications**

<b>Audio-GD Master-19</b>	
Type	Headphone amp/line stage
Price	€969
Analogue Inputs	RCA, XLR, ACSS
Outputs	Four-pin XLR and 6.35mm for headphones; RCA, XLR, ACSS line outputs
Standard Gain	+16 DB (XLR) High Gain : +25DB (XLR)
Rated output power (balanced)	9000mW (40 ohm); 3800mW (100 ohm); 1250mW (300 ohm), 630mW (600 ohm)
Rated output power (unbalanced)	2500mW (40 ohm); 1050mW (100 ohm); 350mW (300 ohm), 175mW (600 ohm)
Dimensions (WxHxD)	36x8.5x36cm
Accessories supplied	Mains cable, remote control
Options	Luxury remote control handset +€55, extra phono outputs in place of ACSS +€15
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