

AURALiC TAURUS MkII headphone amplifier/ preamplifier

by Chris Martens



My first exposure to AURALiC came at the 2013 Munich High-End show where the Hong Kong-based high-end audio firm used its components to power both a pair of exotic YG Acoustics Sonja 1.2 loudspeakers and multiple sets of Audeze LCD3 planar magnetic headphones. In my view, both the YG speakers and the Audeze ‘phones sounded exceptionally good with AURALiC equipment behind them, which led me to place the firm near the top of my “must audition” list, starting with this review of the firm’s TAURUS MkII balanced-output headphone amplifier/preamplifier (£1,499).

Let me begin by supplying some company history. AURALiC was co-founded in 2008 by President and CEO Xuanqian Wang and his business partner Yuan Wang. Xuanqian Wang’s background includes formal training as both an electrical and audio recording engineer, plus talents developed over the years as an accomplished pianist. Yuan Wang, in turn, has a background in sociology and management science. The

common denominator is that both founders share a deep, abiding love of music and a passion for sound quality. Propitiously, the two met at a musical event, the 2008 Festival of Waldbühne Berlin, and decided to launch AURALiC not long thereafter.

What attracted me to AURALiC equipment was its sound quality, first and foremost, though I was also drawn by the components’ elegant industrial design and self-evident, German camera-like build quality. Sonically and visually, a certain graciousness and refinement sets AURALiC components apart. In practice, I have found AURALiC equipment tends to sound highly resolving and detailed, yet consistently keeps its focus on the broader musical whole. There is, too, an element of naturalism at work in AURALiC gear—one which makes the equipment simultaneously easy to listen to, yet also invigorating to hear. As you might imagine, this finely judged mix of sonic virtues perfect suits the TAURUS MkII role as a powerplant meant for use with the finest top-tier headphones presently available.

The TAURUS MkII is a fully balanced solid-state headphone amplifier/preamplifier that provides switch selectable single-ended and balanced analogue inputs, preamp outputs, and headphone outputs. At the heart of the TAURUS MkII is found a critically important, signature AURALiC design element: namely a set of the firm’s proprietary ORFEO Class-A output modules. According to AURALiC, the ORFEO modules use “a mass of small

▶ signal components with (the) best (possible) linear characteristics,” which are packed in thermal compound and mounted within shielded containers. The ORFEO modules are said to achieve “impressive performance with open loop distortion less than 0.001%.”

Interestingly, Xuanqian Wang says the ORFEO modules were “inspired by (the) Neve 8078 analog console’s circuit design,” and that they share “the same warm and natural sound (of the) Neve 8078.” It is refreshing to find a relatively young designer who appreciates and has been influenced by the brilliant work done by the British recording console designer Rupert Neve (Neve’s consoles are prized for their transparency and innate musicality).

Another highlight of the TAURUS MkII is its low noise input buffer, which offers very high input impedance (100k Ohms single-ended, or 200k Ohms balanced) and yields an exceptionally low 0.8 μ V of noise. The TAURUS MkII offers real-time switching between two output modes: STD mode, which is intended primarily for applications where single-ended outputs are desired, or BAL mode, which is intended specifically and exclusively for balanced output operation. Power output is generous, ranging from 250mW @ 600 Ohms (BAL MODE) on up to 4500mW @ 120 Ohms (STD MODE). The TAURUS MkII is suitable for use with headphones with rated impedance of 32 – 600 Ohms.

Like all AURALiC components, the TAURUS MkII uses several passive noise suppression technologies to achieve backgrounds as quiet as the proverbial tomb. These technologies include a chassis material called AFN402 (“an alloy of iron with (a) certain portion of nickel, silicon, and other rare metals”), which offers three to ten times greater resistance to EMI at audio frequencies and above than conventional chassis materials do. To further combat EMI and mechanical resonance AURALiC developed a multi-layer, electro-mechanical damping material called Alire, which is applied to the interior surfaces of all AURALiC components. The firm says its Alire Resonance Dampers, “could exempt the products from both electromagnetic interference and vibration interference,” thus providing the purest input signals possible. In short, AURALiC takes noise control very seriously, with benefits you can readily hear.

For my listening tests I used three superb but admittedly challenging-to-drive top-tier headphones: namely, the Abyss AB-1266, the Audeze LCD-3, and the HIFIMAN HE-6. These revealing, planar magnetic designs are relatively power hungry, with the HE-6 having the lowest (83dB) sensitivity of the group. Right out of the gate, the TAURUS MkII proved it had more than enough output capability to produce a robust, articulate, and authoritative sound with all three of these ‘phones. Granted, one must turn up the volume control a good bit in order to achieve satisfying levels with the HIFIMAN ‘phones, but that is to be expected.



AURALiC advises that the TAURUS MkII needs roughly 100 hours of run-in time before it will sound its best, which advice turns out to be spot on. Straight from box, the amp sounded lively, crisp, and well defined, but also perhaps a bit too “splashy” and tightly wound for its own good. As the hours built up, however, the edgier aspects of the TAURUS MkII’s sound soon melted away, even as focus, transparency, and bass power and articulation increased dramatically. The end result was an amp whose sound became more transparent and resolving, but also more natural, hearty, and robust-sounding than had at first been the case. One important point to bear in mind ▶

► is that, in order to deliver this appealing sound, the TAURUS MkII needs a good hour of warm-up time before it will sound its best (I'm told the reason for this is that the ORFEO modules take a while to come up to temperature and then to reach thermal equilibrium).

With many components, a reviewer's first impulse might be to characterize the product by discussing its overall tonal balance, but frankly the TAURUS MkII so neutral in its presentation (once fully warmed up) that about all one can say is, "It's accurate and uncoloured—period." The only comment I might offer with respect to tonal balance is that the AURALiC's bass is exceptionally good, in terms of both precise pitch definition and extension, which means the TAURUS MkII offers some of the best bass reproduction you'll hear from any headphone amplifier, regardless of price. The bass is so good, in fact, that it's easy to become preoccupied with it, but if you listen more closely you'll soon discover the TAURUS MkII offers pretty great sound across the entire audio spectrum.

A piece that nicely shows both the TAURUS' evenness of overall tonal balance and remarkable bass prowess is the third (Landscape: Lento) movement of the Vaughn Williams Symphony No. 7, 'Sinfonia Antartica' (Bakels/Bournemouth, Naxos). The movement is meant to capture the eerie, forbidding, and frigid majesty of Antarctica by weaving orchestral passages around and through dark, brooding pipe organ passages. The various orchestral voices are each given their due, with none taking precedent over the others (except by the composer's design), while the pipe organ presents descending and

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at times quite powerful phrases that suggest, among other things, the plunging temperatures at hand. As organ pedal notes go lower and lower, the TAURUS MkII tracks every step along the way, maintaining beautiful pitch control—even on notes so low that they seem to fall on the line betwixt pitches that are heard vs. those that are felt in a tactile way. What is more, the TAURUS does a beautiful job of capturing low-level textural variations and modulations in volume in those low notes, letting you hear and feel the low-frequency “shudder” of columns of air in those organ pipes. This consistent ability to differentiate and delineate musical lines—and to do so precisely and explicitly—is very much one of the core attributes in the AURALiC's bag of tricks.

What also caught my attention about the TAURUS MkII were its dynamic capabilities, which I found eye opening. Compared to many headphone amplifiers, even some very good ones, the TAURUS MkII conveys the impression of substantially expanding or “opening up” the dynamic range of your favourite records (almost as if the MkII has magically removed an imaginary audio compressor from the signal path). As a result, the energy level and expressiveness of many recordings seems to increase, while dynamic shadings become more explicit and intelligible. The benefit, of course, is that listeners enjoy a heightened sense of connection with the performers and with the music itself. ►



▶ Oddly enough, the AURALiC's superior dynamic capabilities make themselves felt in places you wouldn't necessarily expect—in quiet passages, for example, and not just in large-scale, dynamically bombastic pieces. For instance, it was revelatory to listen to violinist Hilary Hahn's performance in the first movement of the lovely Meyer Violin Concerto [Sony] — a piece that thrives on delicacy and subtlety more than on explosive, Paganini-style violin pyrotechnics. As Hahn plays, the AURALiC deftly renders the sound of her bowing changes (letting you hear just how masterfully they are executed), while also showing how Hahn uses the gentlest of variations in bowing pressure to modulate the intensity of individual notes. In a sense, the dynamics of the TAURUS MkII give you a “zoomed in” perspective on the music, allowing you hear exactly where and how great artists are practicing the finer points of their craft.

Finally, I was favourably impressed with the richness and density of musical information the TAURUS MkII was able to convey. In areas where other headphone amplifiers offer a rough sketch of certain low-level harmonic or reverberant details, the AURALiC renders them with exquisite and confident precision and clarity. If you are a listener who enjoys savouring every last usable drop of musical information in your favourite records, then I suspect you will find the TAURUS MkII both rewarding and enlightening.

To appreciate what I mean, it can be helpful to put on a record known to be rich in musical information, just to see what sonic treasures the TAURUS MkII might bring to light. For me, one such piece was the third (Adagio) movement of Bartók's Music for Strings, Percussion, and Celesta, as captured in the classic Reiner/Chicago Symphony recording [RCA Living Stereo, SACD]. Here, the AURALiC let me hear the complex and angular ways in which Bartók combined the various tone colours and shadings from his chosen orchestral palette. The TAURUS MkII vividly reproduced the intersections of incisive plunging or ascending string themes, the round and almost otherworldly tonality of the celesta, and the intense, piquant sound of multiple percussion instruments adding commentary and spice. The TAURUS MkII was utterly unflustered by complex, overlapping musical lines, meaning that it captured the fundamentals and harmonics of the individual instruments with the greatest of ease, making each of them sound rich, whole, and complete unto itself. What is more the AURALiC showed how each of the instrumental voices interacted with the acoustics of the recording venue, thus conveying an even greater sense of realism.

If I sound impressed by AURALiC's TAURUS MkII, that's because I am. Even so, critical and astute audiophiles will inevitably ask, “Yes, but is it the best you've heard?” Let me answer that question by saying that it is certainly among the best I've heard, with others in that elite group including Cavalli Audio's Liquid Glass and Liquid Gold headphone amplifiers. Significantly, though, the AURALiC is the only one of these three to carry a price tag comfortably below £2,000 (whereas the Liquid Glass and Liquid Gold are priced, respectively, between two and three times higher than the AURALiC amp).

Considering the sound and build quality on offer, I think AURALiC's TAURUS MkII not only represents an impressive sonic and technical achievement, but also qualifies (dare I say it?) as a bit of a bargain. Enthusiastically recommended. +

TECHNICAL SPECIFICATIONS

Type: Fully balanced, solid state headphone amplifier/preamplifier
Inputs: one stereo single-ended (via RCA jacks), one stereo balanced (via dual 3-pin XLR jacks)

Outputs: two stereo headphone output jacks (one via 6.35mm TRS-type headphone jack, one via 4-pin XLR headphone jack with AKG K1000-compatible pin-outs), one stereo single-ended preamp output (via RCA jacks), one stereo balanced output (via dual 3-pin XLR jacks, PIN2:HOT)

Frequency response: 20Hz – 20kHz, ± 0.1 dB; 3Hz – 300kHz, ± 3dB

THD+N: <0.002%, 20Hz – 20kHz at rated output

Dynamic Range: >130dB, 20Hz – 20kHz, A-weighted

Crosstalk: <-80dB at 1kHz

Power Output:

- 32 Ohms: 4500mW (STD), 1200 mW (BAL)
- 120 Ohms: 1200mW (STD), 4500mW (BAL)
- 300 Ohms: 500mW (STD), 2000mW (BAL)
- 600 Ohms: 250mW (STD), 1000mW (BAL)

Price: £1,499

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