Acoustic Signature TA-10000 Neo Tonearm

The Best Gets (Much) Better

Jonathan Valin

At $74,198 (for the black 12" version supplied to me), Gunther Frohnhöfer's all-new statement tonearm, the TA-10000 Neo, is far and away the most expensive product of its kind that I've reviewed. By comparison, its superb predecessor, the 9" TA-9000 Neo, which I've used as a reference for the past few years, is currently priced at a mere $32,999—and if you read my 2023 review of the Invictus Neo turntable with the TA-9000 Neo tonearm (and DS Audio Grand Master cartridge), you may recall that I said the combo reproduced any and all types of music with "*peerless* clarity, solidity, density of tone color, image focus, stage width and depth, and dynamic range," and that this unexampled sonic "completeness" facilitated the gestalt shift that allows you to visualize artists and instruments as if they are "there" with you in your listening room.

It is difficult to imagine anything substantially exceeding such a benchmark product—even coming from a forward-looking, science-based company like Acoustic Signature—and yet, on the same turntable (the $229,999 Invictus Neo) with the same cartridge (the DS Audio Grand Master with Grand Master power/equalizer unit), the TA-10000 Neo proved altogether superior to its more affordable older brother, fully justifying (for those of you who play in this exalted league) its considerably higher cost.

How can this be?

Well, if you paid attention to the first sentence of this review, you'll have read that the TA-10000 Neo is an "all-new" product, not a mere update of its superb predecessor. What's different? Everything. As Gunther tells you in the short sidebar interview below, his unique multi-structured and extensively damped aluminum armtube, an engineering marvel that, in the TA-9000 Neo, was built up millimeter by millimeter via a selective-laser-melting process on a 12-million-euro SLM machine, takes eight times longer to fabricate in the far more finely and complexly structured TA-10000's tube. The bespoke ultra-high-tolerance Timken aerospace bearings, are now more highly select and DLC (diamond-like carbon) coated. The more rigid and more friction-free stainless-steel tonearm axis design is entirely new. So is the high-purity-silver internal wiring. Even the supplied external Atlas Equator 1.5m phono cable is all new—and better. What was already the quietest, most liquid, most tape-like-sounding tonearm I've heard (when mounted on the Invictus Neo) has become even quieter, more liquid, more tape-like, and so much more finely detailed against the "blackest" of backgrounds that the difference in resolution of detail (without any loss of the whole that these parts constitute) leaps out at you from the very first cut you play. You will, immediately, hear things that you haven't heard before or heard with such clarity, such as each of the paired bassoons, oboes, clarinets, flutes, and muted trumpets (and, just as importantly, the different intervals separating each pair—minor sixths for the bassoons, minor thirds for the oboes, minor sevenths for the clarinets, fifths for the flutes, and major seconds for the muted trumpets) in the "Game of Pairs" movement of Bartok's Concerto for Orchestra (Reiner, Chicago, RCA).

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The TA-10000 hasn't just been sonically improved over its sibling; it has also been functionally improved—and by just as considerable an amount. You can now set VTA on-the-fly (a first for Acoustic Signature) without any sacrifice in tonearm stability and rigidity; azimuth is now finely adjustable via a gearbox directly behind the headshell; the counterweight is now made of brass and is constructed to allow for ex-

Specs & Pricing

Available sizes: 9" version, 12" version
Length: 347mm (9" version), 416mm (12" version)
Effective length: 239.3mm (9" version), 309.0mm (12" version)
Mounting distance (from center of platter to center of VTA-tower): 212mm (9" version), 287mm (12" version)
Distance from center of platter to vertical arm axis: 222mm (9" version), 295.8mm (12" version)
Effective mass: 14.8g (9" version), 15.2g (12" version)
Tilt angle (depends on cartridge): 23.9° (9" version), 18.1° (12" version)
Overhang: 17.3mm (9" version), 13.2mm (12" version)
Cartridge balance range: 5 to 16g
Mounting: SME style
Armtube: Extensively damped multi-structure aluminum
Signal cable material: High-purity silver wiring (4N)
Phono cable: 1.5m Atlas Equator phono cable
Connectors: 5-pin to RCA or XLR/ground connector
Total weight: 1300g (9" version), 1330g (12" version)
Price: $74,198 (as supplied)

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tra-fine adjustment and ultra-secure clamping; and anti-skating can be adjusted via a calibrated dial that alters tension.

The results are claimed to allow for "perfect tracking," and while some of us (like me) would point to linear-tracking tonearms as "more perfect" trackers, there is no question that the TA-10000 Neo (with DS Audio Grand Master) more finely and completely resolves the details—tonal, spatial, temporal, dynamic, artistic, and engineering-related—engraved in those grooves than any other pivoted tonearm I've reviewed, and does so in utter silence. The arm has no apparent "character" of its own; it simply transmits the character of what it is reproducing—be it the slightly digital cast and enormous musical complexity of *Stop Making Sense* (Sire) or the pure-analog grace and instrumental simplicity of Julie London's incomparable "Cry Me A River"(-Liberty), where the slight echo that was added to Ms. London's smoky contralto from the start (greatly increasing at the finish) has been made clearer than ever before. When you add this depth of sonic neutrality to the completeness with which the TA-10000 resolves detail, you get a presentation (speaker- and source-dependent, of course) of such three-dimensional musicality that that gestalt shift which allows the near-visualization of a performer is facilitated beyond what my previous pivoted reference tonearm, the TA-9000 Neo, was capable of. It is almost like listening to a great tape machine, without the tape hiss.

Coming this close to the sound of a mastertape (or dub of same) is quite an accomplishment. As I've repeatedly noted in reviews, the sound of the mastertape is as close as we can get to the absolute, whether the engineer/producer/artist's aim was to capture a lifelike semblance of acoustic instruments in a real space or an entertaining mix of acoustic and electronic instruments in a studio. The TA-10000 Neo (on the Invictus Neo) makes the absolute sound more consistently available to the ear than any other tonearm I've reviewed or owned. Naturally, it gets my highest recommendation and will assuredly be high in the running for one of this year's Product of the Year Awards.

Gunther Frohnhöfer on the TA-10000 Neo

ALTHOUGH ITS PREDECESSOR the TA-9000 Neo was and is wonderful sounding, sonically and functionally this new arm, the TA-10000 Neo, is substantially better in every respect. Please tell us what all has changed and how these changes have affected the sound.

The TA-10000 is new from scratch. It's the first arm we developed with VTA-on-the-fly. We have not done this in the past because we always felt a tight fit was a better safeguard against micro-vibration than moveable positioning offers. So, we worked on a new design which allows for flexibility in up and down movement without space for micro-movements. The armtube has also been changed, and the azimuth adjustment are now implemented in the headshell.

Sonically, you get more blackness, more speed, and more resolution. Clarity and the level of detail are much better than with the TA-9000 Neo.

The TA-10000 is quite a bit more expensive than the TA-9000. Indeed, it is by far the priciest tonearm I've reviewed. What has made the cost rise so dramatically?

The armtube is a good deal more complicated than the ones we produced before. Here we have more internal structure and much more detailed resolution in structure, resulting in 30% more stability and over 20% more absorbing capacity. But production time is eight times longer because of the fine resolution of the aluminum lasering. The use of highly selected bearings and a new mechanism to give pre-tension to the bearings for less vibration were also implemented. TA-10000 has three times more parts than the TA-9000.

Is the TA-10000 Neo the end of the road for you when it comes to pivoted tonearm design? Or do you foresee even more advances?

Based on what I've observed, the TA-10000 Neo is the end of possible solutions. I currently do not see significant new developments in materials or technology. But as you know, never say never. tas