# **Cutting Edge**



# Wilson Benesch GMT® One System

## The Golden Mean

## **Michael Fremer**

**hat's with the Roman helmet atop the head**shell? Is it science-based or a tribute to 50s era gladiator movies? Is the Starship Enterprise at the back of the arm on a five-year mission to explore new mu-

sical worlds? Is it doomed to forever orbit planets Hell Freezes Over and Keith Don't Go, or will it boldly go where no audiophile tonearm has gone before?

Why is there a roulette wheel under the platter and does Wilson Benesch supply the chips and dice, or are those expensive extra-cost accessories? Is W-B doing a "steampunk" thing? Or, after spending a fortune on R&D here, is the company simply going baroque?

Ah, but I kid Wilson Benesch as I previously kidded Continuum and OMA about their very serious products (the former for resembling a chrome-façade New Jersey diner, the latter for looking like The Guggenheim with a construction crane on top). One manufacturer found the prod funny, the other not so much.

Wilson Benesch's GMT<sup>®</sup> One turntable and Graviton<sup>®</sup> tonearm (WB calls it the armwand, so that's what we'll use) *appear* to be a combination of fanciful, antique, and sleek; yet the company claims only applied science drives its looks and to prove it, provided me with a telephonebook-sized white paper (have younger readers ever seen a telephone book?).

If I correctly recall, GMT® One prototype parts were on static display as early as Munich High End 2019, including a version of the Graviton® armwand. At the 2022 show, W-B showed but didn't play a production model GMT® One. In other words, they brought one to Munich, set it up, but wouldn't play it. That led more than a few reviewers to facetiously quip they didn't think Wilson Benesch would ever actually play a record on a GMT<sup>®</sup> One at the Munich show. "Facetious" because ex-

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perienced reviewers are well familiar with Wilson Benesch's long turntable-manufacturing history.

The company was founded in 1989 to produce turntables just as vinyl was supposedly on its way out. To help get British government funding for the turntable project at that vinyl-precarious time (and to justify it), Wilson Benesch's grant application includes this rationale: "The collectability and vast quantity of vinyl records worldwide are crucial factors in the enduring popularity of the vinyl format. Vinyl will continue to be valued for its natural warm, organic tones, and distinctive sonic character, which engage listeners in a unique way that sets in apart from other formats." Exactly my thinking in 1989 and today, too. The government bought, and W-B was born.

In 1991 the company introduced the A.C.T. One—the first commercially available single-piece molded-carbon-fiber tonearm. All the carbon fiber seen and used in the audiophile world followed W-B's pioneering efforts—kind of like Krell and blue LEDs.

At a well-attended High End 2023 press event, Wilson Benesch introduced the finished GMT<sup>®</sup> One System, accompanied by a thorough, detailed, eye-popping, jaw-dropping A/V presentation explaining the system's design and execution, after which it *finally* played records using a pair of large, Wilson Benesch floorstanding loudspeakers—ones with a quartet of the business-endout drivers that always look to me like they need athletic supporters. Unfortunately, the sound produced in that demo was, as reviewers often diplomatically put it, "wanting." Familiar records fundamentally sounded "off" and disappointing.

Nonetheless when W-B's Craig Milnes offered a world-exclusive GMT<sup>®</sup> One System review for *The Absolute Sound*, who would say no?

Last Fall Craig, Wilson Benesch's Director of Design and Engineering, and his son Luke, International Sales Director, arrived from the U.K. crates-in-S.U.V., and within a fairly short time considering the system's complexity—had it assembled in my



This system is only superficially related to more "basic" active pneumatic isolation stands like the Sounds of Silence Vibraplane that I once owned.

listening room and ready for play. Its unique looks made a splash, but at 29" wide and 19" deep it's far from the biggest turntable I've had here not that size matters—and unlike some it will fit comfortably into most systems and homes.

### The GMT® One System

The system's foundation is the R1 Rack which dates to 2015- a super-sturdy, highmass, tiered design created specifically for the GMT® One System, with each tier connected by "nodes" possessing different energy-transfer characteristics and manufactured using non-crystalline materials having "negligible energy management properties." W-B says it's the first rack to incorporate high-compression carbon-fiber, oneton-load-capable cross members, using fewer than 130 grams (less than 5 ounces) of carbon.

Its strength, "rigorously tested at Sheffield Hallam University," indicated that the shelf's top tier could accommodate a nearly 2-ton load. W-B claims the R1 Rack creates the shortest and most direct structural link between the ground (in my case, a concrete slab floor under the carpeting) and the GMT<sup>®</sup> One System. In an analog coincidence, another government project involved in creating this rack system's materials is named SSUCHY.

The rack's top tier holds the E.V.A. laminated glass top, the unique Omega Drive system featuring the world's largest diameter, 3-phase synchronous, high-precision, zero-cogging motor-and-bearing system, and the Graviton® armwand—incorporating a number of firsts: the first armwand grown from titanium/ carbon-fiber-Graphene-enhanced damping hybrid; first arm parts to exploit A.I. design techniques; first remote control VTA/SRA system adjustable with greater accuracy than any tonearm ever thanks to a unique piezo device and smartphone-based app, microprocessor-controlled control system; and first arm the rear of which looks like the Starship Enterprise-but more about that later.

All floats, isolated within the top section's base on a Thorlabs (New Jersey, USA) Optical Isolation system usually found under electron microscopes, but designed and adapted specifically for this application. It uses computer-controlled pneumatic actuators to both isolate and self-level the supporting platform, which in this case is the turntable. This system is only superficially related to more "basic" active pneumatic isolation stands like the Sounds of Silence Vibraplane that I once owned. Keeping the Vibraplane level required carefully centering the mass and/or making frequent, minute adjustments to the leveling controls. This is a "no-fiddling" system.

However, because the GMT<sup>®</sup> One's large, heavy motor/platter assembly is offset

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## **Specs & Pricing**

### GMT<sup>®</sup> One Turntable

**Omega Drive System:** Synchronous 15" diameter, 21 coreless-slotless, 3 phase zero-cogging, zero torque ripple, patent applied for direct drive motor.

Alpha Drive: Computer controlled quartz referenced high precision sine waves. 3 super linear class A amplifiers. Computer controlled remote control systems. Computer controlled pneumatic self-levelling control for LeVeL isolation system. **Speed range:** 33.3, 45, and 78pm fully adjustable via dedicated Smart Device WB Control APP in 0.1 increments.

**Wow and flutter:** Not measurable **LeVeL Isolation System:** Fully configurable according to specific requirements of any environment. No requirement for adjustment. Fully autonomous.

**R1 rack:** Provides optimal location of all Alpha Drive & Omega Drive systems. Enables complete concealment of all energy systems. WB Control App on smart device: Provide GUI for complete remote control over all critical aspects of system including VTA (accurate to 1nM) start/stop, speed, and lift/ lower. Router provided with the unit, preconfigured with Wi-Fi connection to the smart device preinstalled with the WB Control App. Does not connect to the internet.

**Compressor:** Medical grade silent running system to deliver energy to LeVeL pneumatic isolation system. **System Weight:** 369.5 kg / 523 lbs.

#### **Graviton®** Armwand

Delivered with cartridge precisely setup / screwed and semi permanently bonded to the carbon fibre headshell. Storage case supplied. Silver./Teflon wire. Effective length: 304.8mm Mounting distance: 291.6mm Offset Angle: 18° Overhang: 13.2mm Effective tonearm mass: 14gm

### **Tessellate Ti-S Cartridge**

Body: U.D. Carbon-fiber hybridcantilever titanium Cantilever: Boron, sapphire, and diamond available. Stylus: micro-ridge diamond (5x80µm) VTA: 20 degrees Coil: Pure iron square Weight: 14 grams Output: 0.35mV@3.54CM/s Internal impedance: 6 ohms Frequency response: 20Hz–20kHz ±1dB Channel separation: <35dB@1kHz Channel balance: <1dB Dynamic compliance: 12µM/mN Recommended load: 100–2000hms Recommended tracking force: 1.8g

**Price:** \$302,000 (\$371,900 as reviewed)

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## **AAUDIO IMPORTS (U.S. Distributor)**

(303) 264-8831 aaudioimports.com

## Associated Equipment (for this review)

Loudpeakers: Wilson Audio Specialties Chronosonic XVX Preamplifier: darTZeel NHB-18NS Power amplifier: darTZeel NHB 468 monoblocks Phono preamplifier: CH Precision

P10 Phono cartridges: Lyra Atlas Lambda

SL, Ortofon MC Diamond,

## Cable and interconnects:

AudioQuest Dragon & TARA Labs The Zero Evolution & Analysis Plus Silver Apex & Stealth Sakra and Indra (interconnects), Esprit Eureka Phono cables, AudioQuest Dragon, Thunder and Dynamic Design Neutron GS Digital (A.C. power cords)

Accessories: AudioQuest Niagara 7000 (line level), Niagara 5000s (amplifiers) CAD Ground Controls; AudioQuest NRG Edison A.C. wall box and receptacles, ASC Tube traps, RPG BAD, Skyline & Abffusor panels, Stillpoints Aperture II room panels, Stillpoints ESS and HRS Signature stands, Thixar and Stillpoints amplifier stands, Audiodharma Cable Cooker, Furutech Record demagnetizer, Orb Disc Flattener, Audiodesksysteme Vinyl Cleaner Pro X, Kirmuss Audio KA-RC-1 and Klaudio KD-CLN-LP200T record cleaning machines, full suite WallyTools

from the platform's center and its center of gravity greatly differs from typical Thorlabs applications, to accommodate the computer-controlled pneumatic actuators W-B had to design a compensatory weight and center-of-gravity distribution system. The result is a 100% reliable, self-leveling platform that operates completely in the background. You won't know it's there or hear the large oilfree pump (which can be in another room), unless you or a friend, knees weakened by the quality of the music they hear, leans on the glass top. Otherwise, and even then, the pump rarely activates. The shelf below holds the Alpha Drive power supply/ controller, which is critical to getting the motor to behave as intended. W-B describes in the white paper a series of failed projects, including one based on a magnetically coupled platter (2008) and a second one attempting a magnetic geared motor (2012) and finally 2019's GMT<sup>®</sup> Consortium that with the help of a  $\pounds$ 326,000 grant, created both the unique optimally torqued Omega Drive motor and the requisite Alpha Drive.

A "world-class team" in-

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cluding a trio of college professors—experts in electro-magnetic structural engineering, dynamic electro-magnetics, coil winding, and precision machining of metals and polymers—created a slotless, synchronous, "circumjacent radial force design," said to eliminate noise and vibrations to produce smooth and precise platter rotation and speed stability with measured ultra-low RMS torque ripple of 0.001342 (N.m). The motor weighs 31 pounds and resembles no other turntable drive.

The Alpha Drive power supply, featuring a trio of "pure, super-linear amplifiers producing three sinusoidal 24-volt RMS, low-current, 120 degree phase-shifted quartz-referenced drive signals" (nothing conceptually unusual here), was developed in parallel with the motor and in conjunction with Wilson Benesch, Sheffield Hallam University, the aforementioned professorial trio, and by the Broomfields, Dr. Carl and Neil of CAAS Audio, whose line of high-performance amplification products are not imported to the United States. The white paper describes the duo as "graduate professionals from the electronics and software disciplines." They also developed the remote phone app. The Omega Drive motor/Alpha Drive power supply system has a patent pending.

It's clear from looking at it that the motor is a unique design featuring an unusually high number (21) of large stator coils (wound by W-B on specially designed coil-winding machinery) arrayed around the platter and mounted onto a high-precision super-rigid structure, creating a rotor with an unusually large 456mm diameter. Rotor size and placement of the neodymium iron boron magnets required finite element modeling and a great deal of R&D, the result being a motor that, once the system achieves synchronicity, requires no feedback or complex speed compensation. According to a supplied image, the magnetic-flux distribution around the coil system is remarkably uniform. The motor/bearing system is an extremely complex assemblage of many parts, all of which are manufactured in-house by Wilson

Benesch, except for the magnets and the sintered tungsten-carbide bearing shaft manufactured locally for W-B.

Evenly spaced high-mass metal cylinders made from austenitic steel placed around the platter's periphery as far as possible from the center of rotation, increase the moment of inertia, which allows lowering the platter mass. This makes achieving the proper balance between torque and mass easier, which Wilson Benesch avers is critical in designing an effective direct-drive platter system.

You'll note the clear acrylic platter. It's among the simplest and least costly components in this six-figure assemblage. W-B makes the case for acrylic over various metals or Delrin or any other material, claiming energy moving through the vinyl produced by the stylus/groove interface "crashes" against materials with a different acoustic impedance but passes without reflection into materials with the same acoustic impedance, after which it gradually dissipates. That's acrylic's advantage, W-B concluded, after manufacturing the easily replaceable top platter from various materials.

Cost or eye appeal was not the object here. W-B says the not particularly high, carefully considered platter mass is critical to avoid unwanted sympathetic resonances within the audio band and to insure optimal system damping. The cone-shaped bearing shaft/ platter interface is called a Morse taper. So no, it's not a roulette wheel. It just kind of looks like one, or in red, like a Devo hat.

Finally, there's the 48pound FrACTal metal chassis, which includes, machined into its two-part clamshell design, pockets containing a collection of 18 different damping materials plus the glass top plate, the goal of which is to eliminate excitation of the metal caused by airborne vibrations. The motor is so quiet W-B avers, it requires no energy control, while the pneumatic suspension system blocks structural born energy.

### If Nature Grew a Tonearm It Might Look Like The Graviton®

That's Wilson Benesch's claim, backed up in part with a photo of a complex lattice-bone bird wing. Buying into that claim, nature went with a 304.8mm effective length unipivot design, using a secure positioning, triple-one-millimeter, ball-bearing interface in which the point sits. Two are of ultra-low friction zirconium (having one made of a different material is a resonance-buster).

A single-piece, molded, tapered carbon-fiber tube incorporating a quadruple helix construction further reinforced by a Graphene epoxy matrix and a Rohacell interior sandwich section forms the arm's basic structure, which is reminiscent of the original A.C.T. Though it uses the same mold as the original, the design has undergone de-



cades of development in collaboration with numerous scientists and engineers, using measurement, materials, and manufacturing techniques unavailable in 1981.

The point of the exercise is to create an armwand that measurably achieves specific stiffness and damping and that reliably and efficiently transfers energy.

Selective laser sintering (SLS) using titanium produces the basics of the metal structure plus the counterweight to which the carbon-fiber tube is visco-elastically-bonded and by which it is further supported. The arm's arch section features a "tessellated," "see-through" section of repeating hexagonal lattices that adds stiffness and damping while reducing mass and helping to maintain the desired low center of gravity to achieve in all planes single-point stability.

The basic concept is to avoid abrupt interfaces that produce vibrational reflections (colorfully put in the white paper as "avoiding an abrupt cliff face"). That's one reason the arm appears to mechanically "flow" and why the carbon-fiber/titanium interface is so lengthy, and the surface area so large. There are no bolts or clamps in that interface, though the two halves of the titanium "brace" bolt together.

Far more is involved in the arm's design concept and execution, but there's not the space to go into complete detail. Here are a few more points: the resonant behavior of various materials and structural concepts helped produce the final arm design, which features in addition to solid sections, portions that are hollow or tessellated, and even some, like the hollow pods at the end of the "Enterprise"-like wing structures, where the powder contained within has been purposely left un-sintered. Of course, the pods' unusual, complex "twisty" shape is also not accidental. All these design choices are based upon measured performance shown in the white paper telephone book, not the whimsy that the final design ended up resembling.

Wilson Benesch adapted an Ecogrip high-precision hydraulic machining-chuck to act as the arm mount/VTA adjustment shaft, locating it directly under the unipivot bearing. The arm shaft can be securely clamped in place like a machine tool or left loose with no sonic or mechanical compromise, so it can be raised or lowered by remote control within 1 nanometer repeatable accuracy via a linear piezo actuator. The arm wire exit is close to directly atop the bearing and terminates in a LIMO or LIMO-type mini-multipin connector that plugs into a socket located directly above the arm within a platform bolted to the rear of the upper rack tier. The arrangement keeps the wire extremely short and attempts to avoid potential azimuth and anti-skating irregularities caused by a wire-arc configuration.

### The Tessellate MC Cartridge

The supplied "Tessellate" cartridge features a complex curvature, tessellated SLS titanium body and top plate and uses a micro-ridge stylus bonded to a sapphire cantilever (W-B offers a choice of boron, sapphire, or Diamond), in the midsection of which is a unidirectional-carbon-fiber damping ring. A pure-iron square coil is on the other end. Output is 0.35mV, recommended tracking force is 1.6–1.9g (1.8g optimum), and I'll skip the other specs other than to report that W-B claims this cartridge body has the highest known specific stiffness ever seen in any cartridge. The handsome mirrored-gold finish is a titanium nitride vapor deposition.

When you order a Tessellate cartridge for this armwand, it comes pre-mounted on the head shell (utilizing the "roman helmet," Wilson Benesch calls a "Fin") and "perfectly aligned" (though the white paper, to my frustration omits which alignment is used) and bolted to the head shell with a thin layer of visco-elastomer adhesive in between. The helmet is there for a purpose as measured and not to honor gladiator movies, though I think Kirk Douglas or Russell Crowe every time I glance at it.

### The GMT<sup>®</sup> Control App

The Android-based app is Wi-Fi controlled via a LAN setup using a small, supplied router. It's not connected to your home's network. W-B supplied a Samsung phone loaded with both the GMT<sup>®</sup> Control App and for the purposes of this review the CH Precision's P10 app, which itself permits a wide variety of setting options.

From the GMT<sup>®</sup> Control App, all while seated (or standing) you can start the platter spinning, cue the arm up and down and adjust VTA/SRA in *micrometers* displayed on the screen as you do it. The app monitors speed as the table begins to spin, and it won't let you lower the arm until the correct speed is achieved, which takes approximately ten seconds. You can also use it to trim speed.

You won't miss this remote-control feature until you have it, and then you don't. To be able to sit yourself down, get comfortable, and *then* lower the stylus onto the record (or raise it when the phone rings) are convenience features you quickly get accustomed to—not to mention VTA/SRA on-the-fly adjustability, while looking at your fly.

As long as you're sitting, the GMT<sup>®</sup> One Turntable's retail price is \$302,000, excluding armwands, cartridges, and rack. It includes the Omega and Alpha Drive system, LeVeL isolation system, Stage One transformer, Piezo VTA, and Smart Remote Control.

The system as reviewed in standard finish costs \$371,900. It consists of the GMT<sup>®</sup> Turntable with the Graviton<sup>®</sup> Ti Armwand, Tessellate Ti-S Sapphire Cartridge, and the R1 Rack. Two other cantilever variants are available: Diamond Ti-D and Boron Ti-B. All feature the titanium body. Those ordering two armwands get a complimentary cartridge: order Diamond, get Sapphire; Order Sapphire, get the Boron. This ensures that customers always have a WB cartridge when the reference cartridge is out for retipping.

### What I Heard

What I heard in Munich so concerned me I wanted to limit variables, so I asked for a second rear-mount platform that bypassed the stepup transformer and a second armwand to mount known cartridges. I wanted to limit the variables in case of sonic disappointment.

Once the system had been set up with the Tessellate cartridge and the first record played, it was clear that the turntable was not the problem. The cartridge was not the problem. There *were* no problems, and using the turn-

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table was easy and pleasurable. Despite being a unipivot, there's zero "arm flop."

Wilson Benesch designed the GMT<sup>®</sup> One as a *system*, and though they were willing to accommodate my reviewer needs, that for the most part turned out to be unnecessary.

The presentation was remarkably expansive, three-dimensional, timbrally neutral, image-solid, utterly effortless from the start—serious steps above anything I've previously experienced playing records (something I do not write capriciously)—and it became dramatically more transparent when I removed the transformer interface and ran the Tessellate cartridge directly into the CH Precision P10. Not a close call at all. Image palpability and attack delicacy were off the charts. Low-level detail-retrieval and microdynamics greatly improved, though even with the transformer they were already amazing. Glad I requested the bypass!

Though I tried a few other familiar cartridges (Ortofon Diamond, Lyra Atlas Lambda SL), and they delivered expected sonics with their personalities further clarified by the turntable/arm combo, I quickly realized that buyers of this turntable will more likely than not buy into the *system* to begin with and perhaps later add a second armwand with a known second stereo or mono cartridge. The system was designed for record players not for turntable tweakers (though you can do that if you wish).

To use another cartridge, just swap out arms. The second one will be set-up and ready to play. A costly swap, but when you're already buying a house-priced turntable, is that really a concern?

### Goldilocks

During Covid I simultaneously had here for review the giant Air Force Zero, which Jacob Heilbrunn owns, and the OMA K3, the prototype of which I ended up buying. These were two top-performing turntables with totally different sonic personalities. The direct-drive OMA was quick, tight, nimble, super-focused, and rhythmically exciting, though timbrally somewhat less than sumptuous. You could say lean. The belt-drive Air Force Zero was the opposite: It took its time lingering over attack, with luxuriously textured events and long, generous sustain. It turned the One sounded "fast" almost eager to get to the next event; the other daringly insistent on slowing time, grand in scale, almost confrontational, and like the "elephant in the room" difficult to ignore. You could say one was ideal for rock and the other for classical, both good for jazz and based on that description I don't have to tell you which was which though I've heard great rock and classical performances on both.

I'd want an "analytical" cartridge to tighten up and absorb some of the Zero's bloom and grandiosity, bordering on sluggishness, and I'd want a lusher cartridge for the OMA K3's dryness. The original Lyra Atlas was not a good K3 fit, but the Lambda is. I replaced the girder-like, precise but somewhat lean Schröder arm with the more bass-insistent SAT CF1-12, which was a better fit for my sonic and musical tastes. In other words, I'd bought a fine performer that I felt I could customize to better reflect my sonic preferences and system needs, and I did.

The GMT<sup>®</sup> One System provides the best of both of those turntables: It is grand in scale and produces sumptuous, I'd say sensuous, instrumental textures and harmonic richness. It lingers like the Zero, but it has the K3's agile timekeeping and nimbleness. Its transient performance is effortless and artifact-free, and its micro-dynamic expressiveness and ability to portray the tiniest of low-level gestures border on the insane. Its imaging and soundstaging consistency, solidity, and three-dimensional layering are

without question sensational and produced the best spatial presentation I've heard from the Wilson Audio Specialties XVX Chronosonic speakers, but to fully describe it really requires a few new words I've yet to come up with.

On good recordings the GMT<sup>®</sup> sets up a solid main event across the stage in "reach out and touch it" fashion in front of the speakers and it then layers behind and to the sides the secondary instruments and accompaniment—all in three dimensions. The D2D Bruckner 7<sup>th</sup> with Haitink conduction the BPO has never sounded this immediate and present, nor have the strings and Wagner horns sounded so convincing.

One of the most impressive aspects of the GMT<sup>®</sup> One's sonic performance is its ability to simultaneously deliver hard and aggressive, and soft and supple. I don't think I've previously experienced this level of sonic mutability, at least not without a cartridge swap.

David Bowie's Hunky Dory (EMI100 Centennial edition) is piano-based and stringdrenched, but it also has some aggressive tracks, including the heavily percussive "Andy Warhol," hard-edged electric guitars on "Queen Bitch," and subtle, reverb-drenched acoustic strums on "The Bewlay Brothers." It's a record I've played (in various editions) for 50+ years. The GMT® One produced from this record the richest, most supple string textures and colors and put them in distinct three-dimensional space as I've never heard them, while delivering the piano (sometimes two) more vividly and percussively correct than I've

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ever heard it sound. Each note's attack, sustain, and decay was an easily followed event. New details emerged from every track.

Following all this warmth on "Andy Warhol," Mick Ronson produces muscular, angry, and somewhat harsh acoustic guitar strums along with snappy hard-edged percussion that sounds like he's beating a marble slab with a leather strap. I expected the hits to sound softened given the earlier supple strings, but instead they were delivered harder and snappier than I've ever heard them, and for the first time I could hear each snap's distinctive character and in a space of its own. Happily, I didn't bet on any of my predictions.

How's this for a segue way? The day Byron Janis died I chose to honor him with the Mercury "Living Presence" 35mm recording of Prokofiev Piano Concerto No. 3/Rachmaninoff Concerto No.1 with Kondrashin conducting the Moscow Philharmonic (SR90300). The hall appears, then the at-times jazz-like performance begins, dazzling in every way but especially the piano's transparency, the pianist's delicate, cascading. note-by-note touch, and the stability of both in three-dimensional space. The complete lack of congestion even during complex passages separates the GMT® One from anything else I've heard (though in its own way the inexpensive Supatrac arm does a very similar thing). The combination of woodwinds, brass, piano, and horns never sounded congested, hardened, or steely. The piano on this record has never sounded as convincing, nor has the orchestra-all set transparently, almost ghost-like against a black background. There are mint copies on Discogs now for around \$30. The times they have changed.

Usually, to get the best results, lights need to go out, and you have to be in the right head space. But as I'm writing this, I'm revisiting the Prokofiev to be sure I wasn't hallucinating, and with the bright lights on mid-afternoon I feel as if the record has disappeared, and the hall and orchestra are in front of me. Okay, it's not Atmos so it doesn't surround, but this is eerie—more convincing than anything in the digital domain has ever produced here and surprising for a Mercury, dead quiet. Better, I know when the performance concludes I can put on *London Calling*, and it will produce a you're in the studio with Bill Price and The Clash experience or I'm in the The Blackhawk with Miles. This is one of those "Yes, I've said these things before but it's not like this" moments. I can't describe this system's colorations or its general timbral personality. It doesn't seem to have one.

#### Quibbles

I have a few: Wilson Benesch went to the trouble and expense of bolting to the back of the turntable a platform that hangs over the arm directly above where the tonearm wire/plug exits as described in the review. It was done for a good reason.

The problem is that the wire is too long, so it's got a kink in it that can affect both azimuth and anti-skating. Consequently, you have to fiddle with it, and even when you think it's perfect it probably isn't, though once I'd adjusted it so that lowering the arm didn't pull it into the grooves, I didn't hear any problems. Still, it's a most imprecise configuration for such a precision machine. The solution seems simple, so I don't know why W-B didn't think of it. All it must do is machine slots into the plexiglass where the bolts hold the platform to the chassis. That way the platform can be raised or lowered to remove the kink, though the VTA/ SRA adjustment might affect this, but the kink is an issue. Perhaps less stiff wire?

Another issue is that since the arm's center of gravity has been designed to be well below the pivot to create stability, raising or lowering the back of the arm will definitely change tracking force. And the final one is that when you raise or lower the rear of the arm to adjust VTA/SRA on an arm with an offset at the headshell, you most definitely also affect azimuth! So. if you sit and listen and then adjust VTA/SRA from your seat, and "dial it in" to where you like it, you are most likely listening to both tracking force and azimuth changes along with VTA/ SRA. There's no way around it.

### Conclusion

Though the GMT® One's design appears fanciful and somewhat "steam punk"like, Wilson Benesch claims, and the evidence it provided indicates, that science guided its looks. The proof is in the listening and based upon that-and I've had more than four months with it- I must conclude that the system, the combination of the Tessellate cartridge and the turntable produced the best sound I've heard from vinyl records of every musical genre.

If you ask me in which direction the sound leans, cool or warm, smooth or etchy, dark or light, whatever descriptor you choose, I'd have no answer, which is interesting because it didn't take long for me to hear in which directions the other two six-digit turntables I've had here leaned—and I don't mean to minimize the contribution of the CH Precision P10.

The good news is that Wilson Benesch plans a line of less costly turntables based on this design.

My air-conditioner maintenance guy-in his twentiescame into my listening room to have me sign the receipt on his iPad. He'd never seen anything like what's here, so I offered to play him his choice. It was Led Zeppelin, so I played him the famous Robert Ludwig Led Zep II pressing but on the Rega Naia through the Ypsilon VPS100 phono preamp. When it was over he was properly dazzled, and as all shook up as he should have been. It's a great table and phono preamp costing in excess of \$70,000.

"Let me play it for you on this," I said, and I played it on the GMT<sup>®</sup> One. Not long after it started, but before it got too loud for me to hear him, he blurted out, "This is so much better! I can't believe it!" And for 20 times the cost it should be, and it is. We are not done digging the goods out of the grooves.

Late breaking news: The day I completed the guts of this review, a leak developed in the ThorLabs air-suspension system somewhere inside the Alpha Drive unit. I could hear the hissing and the pump, which I never heard over the four months, began to cycle. The cure for now was to shut it down and run the table unsuspended, but honestly, in my concrete-floor situation I didn't hear a difference. (I have to thank Audio-Quest for providing a fifteenfoot-long Thunder A.C. cable needed to reach the turntable and CH P10.) tas