



## EQUIPMENT REVIEW

# The Well Tempered Amadeus GT turntable

By Malcolm Steward

he Amadeus GT truly is a wonderful machine to behold: a record player whose design elegantly combines genuine innovation and extreme pragmatism... and a complete absence of BS. Its designer, William Firebaugh has worked for many years at the cutting edges of technology and engineering but you won't find his turntables littered inappropriately with hitech go-faster stripes, carbon fibre or titanium. The Amadeus is purely and simply, utterly pure and simple. Its wholesomeness and lack of chromium-plated clutter make a refreshing change from others in the high-end vinyl arena where unnecessary and prodigious over-engineering are so often the order of the day.

Take, for instance, the Amadeus' unipivot tone-arm, whose 'bearing' arrangement is constructed using fine thread suspending a golf ball that is partially immersed in high viscosity silicone fluid because Firebaugh's experimentation, which involved no less than around fifty prototypes, demonstrated that this outwardly unsophisticated approach delivered music far more coherently than others. The design does away with the problems inherent in tone-arms that use ball- or needlebearings, which need an – admittedly miniscule – amount of free play in order to operate: free play that is not so tiny when compared to the microscopic deviations in a record groove that the stylus is attempting to trace.

As well as the Amadeus GT under test there is also a non-GT version, which sells for around £500 less. I asked the UK importer what differentiated the two models and he told me, with remarkable forthrightness, that the performance of the two turntables was identical as far as he could discern but that

the GT had a classier-looking finish. Such candour is exceedingly welcome in these times when so many manufacturers are so desperate to sell customers up.

The turntable, as I've already observed, is incredibly simple yet elegant. One could almost describe it as the Heidi Klum version of the Rega Planar. It's not at all blousy or brash: instead it exudes class subtly. The design's cleverness will shine most brightly in the eyes of the turntable aficionado who will be able to appreciate the ingenious lateral thinking behind this device.

One element of the Amadeus that is virtually guaranteed to raise eyebrows is the power supply, which is a wall-wart of the type you'd normally expect to find charging mobile phones. However, this is not powering a regular turntable motor but a compact, proprietary, servo controlled DC design that drives an acrylic platter with sufficient inertia to provide virtually immeasurable wow and flutter though a unique, near friction-free, round-spindle-in-a-square-hole bearing. The belt comes as even more of a surprise being just a length of 0.004-inch diameter polyester filament, which is knotted to make it belt-shaped. The motor pulley has been specifically designed to accommodate this departure from the norm. If you lose or damage the belt just sending an SAE to your dealer will get you a replacement under Well Tempered's Belt-for-Life policy.

The only drawback I found with the power supply, however, was that even having the unit connected to the mains was sufficient to dull and smear the sound of the rest of my system. Both my CD and HD players sounded bloated and lacklustre with the supply plugged into the mains. Thankfully, the offending item can be replaced for little expense: you can pick up a linear multi-voltage 1.2A regulated power supply, such as the one I used, for under £20 that does not degrade the performance of the turntable nor the rest of the system. If you replace this item, though, do make sure that you avoid switched-mode or poorly regulated devices at all costs.

The Well Tempered's dual layer MDF plinth is as equally minimalist as the rest of the design but it nonetheless provided sufficient isolation atop my Quadraspire Sunoko Vent stand from both footfall and airborne vibration. And I was not playing music at the sort of sound pressure levels that neighbours, if I had any, would appreciate.

The Amadeus is not a design that is different from the mainstream purely for the sake of being different. It is far removed from being a cynical marketing ploy and can trace its origins back to a seminal 1977 paper published by Bruel and Kjaer called 'The Audible Effects of Mechanical Resonances in Turntables'. This concluded that a high fidelity tone-arm should have a low effective mass and be mechanically damped to a Q of 0.5 to eliminate the side-band distortion – that is particularly objectionable to human hearing – caused by mechanical instability. As a result of this conclusion, many companies developed light weight arms but ignored the damping issue because of the difficulties involved in implementing it successfully.

Firebaugh's answer is the fibre-suspended, silicone-damped golf-ball pierced by a narrow aluminium tube that itself is damped with a fine sand filling. This construction will not find favour with those who enjoy obsessively tweaking their tone-arm's adjustments. Anti-skating, which is applied through a twist in the bridle suspending the arm cannot be further adjusted in any more conventional fashion. What is more, the company displays equal disregard for cartridge alignment fiddlers: the 10.5-inch effective length arm features a fixed head shell that provides no tracking alignment (or overhang) adjustment and the instructions warn that alignment protractors might well disagree with Well Tempered's settings. "Regardless," says the company, "we stand by our convictions."

Firebaugh states that with this design he set out to achieve a high degree of mechanical stability, and that much is obvious from the moment the stylus of the Dynavector XX-2 moving coil drops into the groove of the first LP I played, an old recording of Vernon Handley conducting the London Philharmonic playing Vaughan Williams' London Symphony. The dynamic contrast is perhaps what impressed most; the awe inspiring weight and solidity behind the orchestral climaxes successfully removing the impression that one was listening to a recording of a piece of music rather than the music itself. The performance, however, was not all about sheer weight and muscle: the Amadeus GT showed itself to be delicate and detailed when appropriate; for example, faithfully rendering the decay of a triangle at the rear of the stage even when more prominent lines were being played in front. All this combined to

build a musically and emotionally persuasive performance of considerable appeal. As one listener noted as the music finished "That makes you feel really proud to be British," a sentiment that certainly would have met with the composer's approval.

The unwavering foundation that this turntable constructs provides a solid platform for LPs that can tend to sound fragile or lightweight on other decks. Played on the Amadeus GT, these exhibited none of the shoutiness or brittle tonality that results in those edge-of-the-seat moments, or that "will it track this groove?" paranoia.. In this respect it had the beating of my beloved Funk Vector LP12/Naim Uni-pivot/Lyra, which sounded a little nervous whenever Alison Stamp's voice soared to the rafters in Allegri's Misereré. On the WT her voice sounded absolutely stable, sweet and secure.

### TECHNICAL SPECIFICATIONS

Well-Tempered Amadeus GT turntable and arm combination 33/45rpm (speed change on pulley) Acrylic platter Zero Tolerance platter bearing Servo-controlled motor, with vibration controlled mounting 0.004" polyester thread belt Fully damped tonearm, with golf-ball suspended in silicone fluid for optimum variable damping Easy azimuth adjustment Fixed headshell Dual layer sandwich construction plinth Isolation base with proprietary feet included External power supply (7v-12v, 100mA minimum)

#### Manufacturer:

Well Tempered Lab
URL: www.welltemperedlab.net

Distributed by Pear Audio

URL; www.pearaudio.com Tel: +44 (0)1665 830862

### EQUIPMENT REVIEW / The Well Tempered Amadeus GT turntable

Alison Stamp's voice soared to the rafters in Allegri's *Misereré*. On the WT her voice sounded absolutely stable, sweet and secure. The deck coped just as well with noisy records, and did not make a meal of any pops or clicks it encountered, dealing with them as quickly and quietly as it could. Here, I reckon, my Funk LP12 exhibited an edge over the WT, seeming to 'distance' record noise from the music: forgive the single quotes but this is a phenomenon best heard rather than clumsily described in print. The Funk seemed somehow to move the noise away from its presentation of the music while the WT subjugated noise but it retained its attachment to the music. Does that make any sense? I did not imagine it would.

None of what I have written thus far should be taken as suggesting that the WT was overly smooth or laid-back in its portrayal: it certainly gave an accurate account of the instruments used by the Academy of Ancient Music under Christopher Hogwood playing Pachelbel's *Canon*. And it gave a truly vivid appraisal of the lusciously rounded, rich timbre of the *trompettes naturelles* playing *Vivaldi's Concerto for 2 Trumpets*. The difference in every facet of their presentation and that of a modern instrument's was clearly portrayed and a delight to savour.

I am convinced, however, that the WT saved its finest performances for choral works: it sounded utterly magnificent playing the Trevor Pinnock recording of Haydn's *Missa in Angustiis* with the English Concert and Choir again using original instruments. It was not in the least perturbed by the dynamic vocal excursions of soprano, Felicity Lott, or contralto, Carolyn Watkinson. Even the massed choral and orchestral, loudspeaker-destroying might of 'O Fortuna' that opens *Carmina Burana* could not provoke the WT to mis-track, even slightly.

At this juncture I feel obliged to note that I am not truly a classical music fan but the Amadeus teetered on the brink of turning me into one. It made me find delight in records that have sat unplayed on my shelves for, quite literally, decades in some instances.

Nonetheless, I retain my passion for the Devil's music and plenty of that invariably found its wicked way onto the WT's platter.

The WT thoroughly voiced its appreciation of George Thorogood and the Destroyer's insistent rhythm, rich guitar tone and the dynamic variety in his playing on 'One Bourbon, One Scotch, One Beer' and particularly his slide playing on 'Kind Hearted Woman'. Apart from painting a vibrant picture of his guitar and vocal stylings and approach, the deck captured the varied emotion and energy of each performance perfectly.

Patti Smith's album *Easter* is nowhere near being an audiophile recording but the Amadeus rendered it with remarkable control, detail and precision. Regardless, tracks like 'Rock'n'Roll Nigger' did not suffer one iota from this veil of composure; they rocked as hard as ever but the added definition and insight allowed me to connect more easily with Smith's poetic lyrics and the dexterity of her approach to compositions such as Springsteen's 'Because the Night'.

One strength of the Amadeus seemed to be the surprises it was able to throw up when you selected albums you had not played for years. Albums that had been confined to a lofty shelf because you imagined they had little to give frequently revealed all manner of depths and delights you perhaps never appreciated on earlier playing. Thankfully those surprises were usually very favourable because the WT seemed adept at digging intensely to find musically relevant information: the only albums with which it had a struggle were 'eighties stadium excess from the likes of Simple Minds. Nothing unpredictable there, so I made sure to give U2's output a wide berth as well!

As well as its facility with classical music the Amadeus proved exceptionally communicative with 'fifties' jazz recreating the vivid playing-live feel of albums such the 1959 Riverside recording of the Thelonious Monk Orchestra in New York. As well as revealing the wealth of instrumental colour and dynamics buried in these discs the WT, more importantly, latched onto the groove that the rhythm section so fluidly established for Monk and the other players to work around. Furthermore it presented this music without any hint of artifice to spoil the illusion that one was in the privileged position of being able to sit and listen to Monk play.

I then moved on to listen to a few Miles Davis LPs. I began with 1955's *Blue Moods* but found that the playing was, quite literally, far too blue for the time of day and quickly switched to *The New Quintet* album where Trane's sax and Philly Joe Jones' brisk drumming quickly elevated my spirits. This recording era and labels such as Verve and Prestige make life simple for any turntable with an inclination to sound good to do so but the WT's capacity to allow the music to connect directly with my moods absolutely astonished me.

Ultimately it behoves me to confess which of the turntables that currently inhabit my music room is, in my opinion, 'the best'; my Funked LP12 or the Amadeus GT. That is a truly difficult question, not unlike asking me to decide whether tea is better than coffee. I would be more than happy to live with either of these fine decks' but if I were ever to become a real devotee of classical music or to increase the amount of jazz in my diet I could easily see the Amadeus winning the title.