

SIGNATURE SERIES TURNTABLES

The “**Signature Series**” represents the largest group of upgrades that Basis Audio has ever implemented in our turntable line. Improvements include our latest **Balanced Rotor Motors**, **Superdamp Isolation System** changes, and **Micro-Hone** bearing finishing procedure. The **Balanced Rotor Motors** reduce motor vibration significantly. The **Superdamp Isolation** further stabilizes the 2000 series suspended models, and further distance the Debut suspension, already the most effective isolation system on any turntable, from any other turntable’s suspension. Our **Micro-Hone** bearing and bushing matching results in greater background “blackness” than ever before. Additionally, many other smaller refinements have been made since our last model designations.

BALANCED ROTOR MOTORS

Belt-drive turntable manufacturers should always strive to deliver the lowest cogging and vibration to the critical platter and record system. Judging from the use, in other brands, of some industrial, very cog-prone motors, and the existence of multiple-motor turntables, the importance of feeding as little noise as possible into the platter (and therefore the record and stylus) is unfortunately not understood by many manufacturers. Quick measurements show that large motors, multiple motors, and round O-ring belts can result in a one-hundred fold increase in noise added to the audio signal. Some may mistake this for “detail”, “air”, or “increased attack”. In reality, this is moving away from the sound on the record, using the turntable to act as a tone control rather than the desired neutral playback device. The Basis **Balanced Rotor Motor** reduces this noise, resulting in greater background blackness, less grain, more coherent soundfield cues, and a sound that is more like that of master tapes (the best *reproduced* sound) and real music (the true reference).

SUPERDAMP ISOLATION SYSTEM

The lack of understanding amongst turntable manufacturers of “mass-spring-damper” theory is one of my greatest disappointments regarding the current turntable field, and is simply another indicator of the lack of true technical expertise at most of these firms. As a lover of pure physics and its proper application, I am distressed over the false claims and ridiculous theories put forth by other manufacturers about using multiple levels and stacked materials to eliminate resonance and to “decouple” the turntable. There is room for debate concerning the many aspects of product design as they apply to turntables. These **do not** include whether isolation is good or not, and whether multiple layers various materials cut into particular shapes, such as cones, can “reflect vibration” or result in less feedback: they can’t and they don’t. The superiority of a well suspended turntable is clearly evident in taking quick, easy measurements, and when listening to real instruments in a concert hall, then listening to a properly suspended turntable with its suspension disabled, then enabled. The result unequivocally favors the suspended configuration, unless the turntable has a flawed suspension, an unbalanced platter, or a platter with excessive runout. Unfortunately, many of these defects do exist on some very expensive turntables. However, it is wrong to conclude that suspensions are not important. The correct conclusion would be that these are terribly flawed products. With the correctly designed Basis fluid-damped suspension systems, all of the advantages stand out clearly: lower grain, greater detail presented in a natural manner, truer instrumental tonality, and an increase in musicality and effortlessness. This is no surprise: measurements show that the difference between the **2001 Signature** with its fluid damped suspension and any competitor’s similarly sized unsuspended turntable is greater than 50 decibels, a huge margin. With the 2001 you hear more of the record, not the turntable and stand.

The bottom line: great isolation is always desirable. Unfortunately, great isolation is all too uncommon.

The original **Basis Debut suspension system is still the best in the business.** No other turntable boasts the isolation, at all audio frequencies, displayed by the Debut. The 2001/2500 Series is nearly as effective

through the audio band, taking a back seat to the Debut only at subsonic frequencies. In comparison, systems using rubber bands display unfavorable hysteresis effects, and suffer a “shorting out” of the isolation path at audio frequencies due to the manner in which they use silicone fluid, which results in an undesirable coupling of the isolated platform and the unisolated support. A simple stethoscope will confirm the superiority of the Debut suspension to others, and measurements show the advantage even more clearly. We have now updated the damping configuration, and rebalanced the ratios of damping and spring rates in all of the **Basis Audio Signature Series** fluid-damped suspensions. We also have implemented an additional procedure to further pre-stress the springs and calibrate the suspension for greater balance. These suspension improvements comprise our Superdamp Isolation System, now incorporated on all suspended models.

MICRO-HONE BEARING FINISHING

The fit of Basis Audio oil-well bearings is of such high precision that the exact clearance is held to a precision of one **ten-thousandth** of an inch. (One ten-thousandth of an inch is .0001 inch, **40 times thinner** than a piece of paper!) The precision of the fit of all bearings has now **been improved by a factor of 2** by using a **proprietary Basis Micro-Hone operation**. It *should be* unnecessary to point out the advantage of a smoother bearing, but the number of noisier, rougher-running inverted bearings on the market *does* make one wonder if audio enthusiasts and manufacturers alike *have* forgotten the necessity of using a quiet, low-friction bearing on a turntable. Our Basis bearings are the quietest in audio, and this silence is now extended down to the 2001 and 2000 turntables. The result is greater speed stability, improved micro-dynamics, a greater sense of effortlessness, and tonality more true to the instruments.