

## SIGNATURE SERIES TURNTABLES

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

### ANCED ROTOR MOTORS

Most turntable manufacturers should always strive to deliver the lowest cogging and vibration to the critical platter system. Judging from the use, in other brands, of some industrial, very cog-prone motors, and the existence of belt-drive turntables, the importance of feeding as little noise as possible into the platter (and therefore the recording) is unfortunately not understood by many manufacturers. Quick measurements show that large motors, massive belts, and round O-ring belts can result in a one-hundred fold increase in noise added to the audio signal. Some call 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** redesign, resulting in greater background blackness, less grain, more coherent soundfield cues, and a sound that is closer to that of master tapes (the best *reproduced* sound) and real music (the true reference).

### RDAMP ISOLATION SYSTEM

Lack of understanding amongst turntable manufacturers of “mass-spring-damper” theory is one of my gripes and complaints regarding the current turntable field, and is simply another indicator of the lack of true technical expertise of these firms. As a lover of pure physics and its proper application, I am distressed over the false claims and ridiculous assertions put forth by other manufacturers about using multiple levels and stacked materials to eliminate resonance in 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 of various materials in circular shapes, such as cones, can “reflect vibration” or result in less feedback: they can’t and they don’t. The superb fluid-damped 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 evidence unequivocally favors the suspended configuration, unless the turntable has a flawed suspension, an unbalanced platter, or 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 important. With the correctly designed Basis fluid-damped suspension systems, all of the advantages stand out clearly: greater detail presented in a natural manner, truer instrumental tonality, and an increase in musicality and presence. 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 difference. The 2001 you hear more of the record, not the turntable and stand.

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, detail, and frequency response displayed by the Debut. The 2001/2500 Series is nearly as effective through the audio band, tied only to the Debut only at subsonic frequencies. In comparison, systems using rubber bands display unfavorable effects, and suffer a “shorting out” of the isolation path at audio frequencies due to the manner in which they couple the platter to the fluid, which results in an undesirable coupling of the isolated platform and the unisolated support. A spectrogram will confirm the superiority of the Debut suspension to others, and measurements show the advantage clearly. We have now updated the damping configuration, and rebalanced the ratios of damping and spring rates.

Basis Audio **Signature Series** fluid-damped suspensions. We also have implemented an additional procedure to pre-stress the springs and calibrate the suspension for greater balance. These suspension improvements comprise the **Superdamp Isolation System**, now incorporated on all suspended models.

### **D-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 fit of all bearings has now **been improved by a factor of 2** by using a **proprietary Basis Micro-Hone operating procedure**. It is unnecessary to point out the advantage of a smoother bearing, but the number of noisier, rougher-running bearings on the market *does* make one wonder if audio enthusiasts and manufacturers alike *have* forgotten the necessity for a quiet, low-friction bearing on a turntable. Our Basis bearings are the quietest in audio, and this silence is a direct result of 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.