

# Groove Moves

Brinkmann USA Newsletter Issue # 2 June 2015



## Spyder Inaugural Review and Helmut's Views on Speed Stability

To Our Valued Dealers:

After making its debut last year, the Brinkmann Spyder Turntable is now available for immediate shipment and received an enthusiastic first review from Stereophile's Michael Fremer. We have also issued the 2015 Brinkmann Price List, with the Spyder added. We're pleased to report that prices have remained unchanged. (PDFs of both the Stereophile review and 2015 Price List were sent to our dealers by e-mail. Please contact us if you have not received these.)

In the Stereophile review, Fremer questioned the Spyder's speed accuracy, a finding with which, despite our admiration for both Stereophile and Mr. Fremer, Brinkmann strongly disagrees, and which has raised questions among our dealers and distributors. We would therefore like to provide you with some details about testing methodology and the reasons why Fremer's result didn't correspond to our rigorous and scientific in-house measurements.

The *three* turntable components that have the greatest influence upon speed stability are the bearing, platter and motor.



**Bearing:** All of our turntables utilize the same zero-maintenance oil bearing that has been a hallmark of Brinkmann design for 30 years. This bearing is manufactured with extreme care and ultra-precision tolerances, and has benefitted from more than three decades of continuous use.

**Platter:** In order to maximise speed stability, a platter needs to be perfectly machined, balanced and concentric with the bearing. These qualities have been a hallmark of Brinkmann platter design since our first turntable. Using only the most costly and accurate fabrication processes, our platters have virtually flawless machining, guaranteeing concentricity with the rotational axis of the bearing whilst providing an ideal surface for the drive belt. Balance and mass are optimised for enhanced flywheel effect.

**Motor:** The motor in our belt drive TTs is also a high-precision device which has been optimized by Brinkmann for both accuracy and consistency. This motor has recently been improved by incorporating some of the technologies which we developed for use in our direct drive systems.



All Brinkmann turntables are subjected to thorough testing during the development process. One aspect of this procedure involves speed stability testing with a high-precision EMT Model 424 Wow & Flutter meter. We have been using this tried-and-true measurement system for many years and ALL Brinkmann tables achieve excellent results.

So, what happened with the review?

To find an explanation for the measurement results obtained in the review, we tested all of our turntables with the Dr. Feickert platter speed app that Mr. Fremer used in his review. In this test, the user plays a test LP with a 3150Hz test tone and records the tone by holding the cell phone in front of the loudspeaker. The app compares the recorded tone with a reference tone and shows the deviation. We ran into several problems during the process:

- A wow & flutter meter such as the EMT measures the signal of the line output and is therefore influenced only by the tracking process. By comparison, the Feickert app measures the sound emanating from the loudspeaker and is influenced by noise, speaker distortion, room resonances, movement of the cell phone and other variables which not only compromise accuracy, but will inevitably be variable from one test to the next.
- A test LP needs to be placed upon the turntable with extreme care: every fraction of a millimetre off centre and every warp and wobble in the LP strongly affects the measurement. We achieved very different results by using different LPs and since the EMT meter allows us to

analyse the frequency spectrum of the deviation, ALL measured deviation could be traced back to the tonearm "hopping" over imperfections on the test LP

- We obtained variable results with several test LPs that play the 3150Hz tone for the Dr. Feickert app. None of the several LPs we bought was carefully manufactured enough to allow a reliable measurement of the actual platter speed. The EMT wow & flutter meter still showed good results as our DGG 3kHz test LP is carefully pressed in order to minimize the influence of the LP on the speed measurement.

The measurement process with the app allows too much influence to be a reliable source of information. In short, we believe the speed variations which Mr. Fremer noted are not endemic to the turntable but rather to a test methodology (i.e., the Feickert App) whose design yields inconsistent and inaccurate results.

Again, we thank Stereophile and Mr. Fremer for their complementary review but have serious reservations regarding the measurements yielded by this particular test.

Please feel free to contact Brinkman or our US Marketing Representative, Anthony Chiarella, for additional information or comments. Anthony can be reached by e-mail at [anthony@ssvreps.com](mailto:anthony@ssvreps.com)



---

#### About Brinkmann Audio

Behind Brinkmann Audio the company stands Helmut Brinkmann, the company's Founder and Chief Designer. Helmut's brother was a musician, and Helmut's 35-year journey in audio engineering started in those early years, modifying and fixing the amps and electronics his brother used playing Germany's clubs and discos. Brinkmann Audio began in 1985, and the company represents Helmut's never-ending search for the "perfect illusion" that is truly magical music playback. Brinkmann's designs are not "cost-optimized," aimed instead at pursuing the best performance with the most meticulous precision. Because every single part, large or small, influences a component's sound, even the tiniest screws are examined and only the best-sounding parts are used throughout Brinkmann's products. Brinkmann Audio is based in Germany.

Website: [Brinkmann-Audio.com](http://Brinkmann-Audio.com)

Contact:  
Andrea Brinkmann  
[Info@Brinkmann-Audio.com](mailto:Info@Brinkmann-Audio.com)