

Machine Tool

This record player makes the hearts of mechanical engineers, precision mechanics and analogue freaks smile. Here's a little story about unpacking, setting up, listening and marvelling.



The fact that machine tools produce machine tools is, in industrial terms, the most common thing in the world. Yet in record player manufacturing, we need to be a little more precise with the terminology. Because experience tells us that there are a lot of products out there which fulfil their purpose, but are far from those standards that apply in current mechanical engineering.

Okay, admittedly, there are not only worlds in between as to tolerances and fits, but also with regard to the financial investment. A wooden slab with a tiny synchronous motor and a 500 gram sheet metal platter is, to put it in a casual, yet not malicious way, something complete-

ly different than sending 40-kilo aluminium blanks through CNC production until you have a 30-kilo drive that gives you the impression of coming from precision engineering.

This brings us right to Acoustic Signature and the Hurricane Neo, along with two tonearms from the same company. Understatedly advertised as an „entry“ into the twin-motor turntable class by Acoustic Signature, here we have a super solid mass concept of tank-like build quality with an internal double belt drive and mounting options for three tonearms.

Heavy turntables with „short“, powerful belt drives are trendy. Perhaps they are kind of the sonic overlap between ada-

manently regulated direct drives with light platters on the one hand and mass concepts with long drive belts running around a heavy platter and relatively weak motors. With the Hurricane Neo, we see an unusual solution that also has the advantage that the drives are encapsulated and thus insensitive to dirt and UV light, both of which can ruin belts in the long run. But more on that later on.

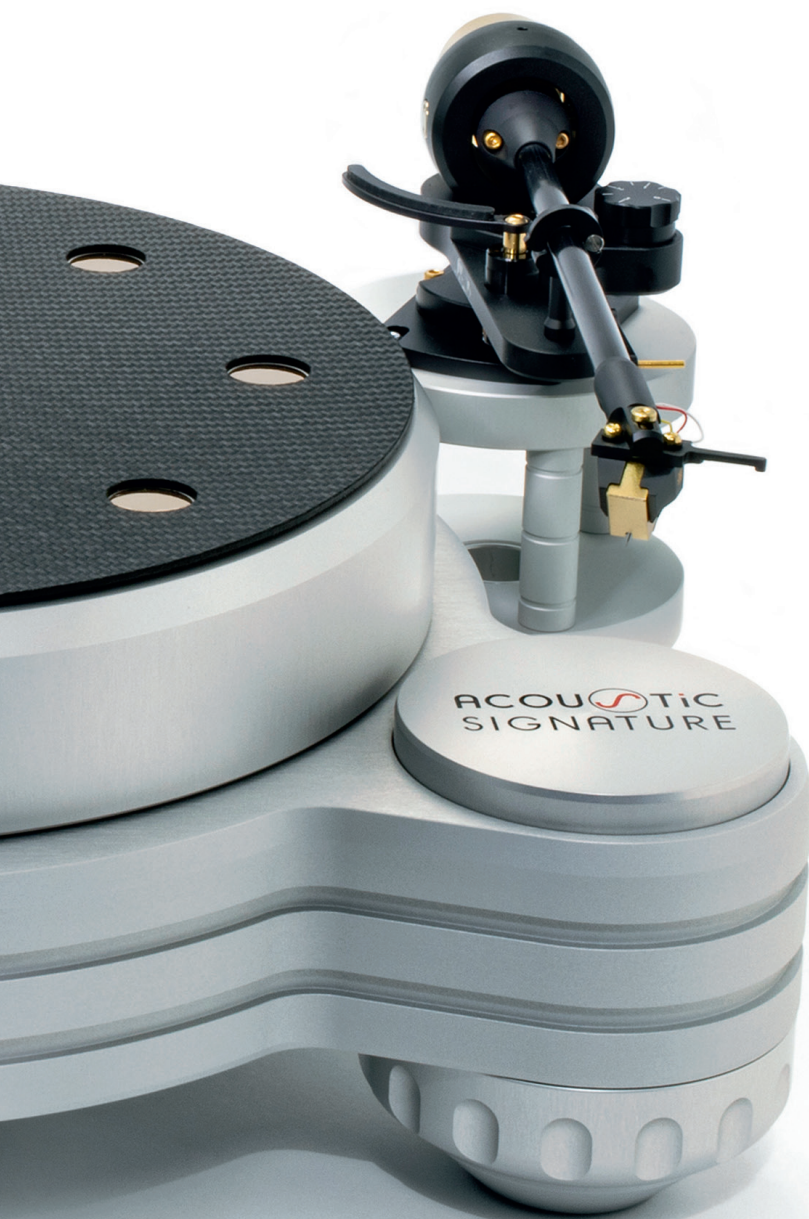
Complete Package

In addition to its premium packaging, Acoustic Signature includes in the Hurricane Neo's scope of delivery a high-quality toolkit, templates, detailed, well written instruction manuals and even white cloth gloves. Definitely exemplary, if you ask me. What else is contained in the boxes, i.e. the actual turntable plus the two TA-2000 Neo tonearms in both 9-inch and 12-inch versions, offers a build quality appropriate to the price and a bunch of good ideas. Even the seasoned reviewer feels a bit like beamed into a different, better world. When e.g., owing to the solid templates, the assembly of the two

The highly sophisticated Hurricane Neo offers smart, practical allround carefree solutions.

tonearms and our cartridges we used for this test turns into a child's play, or when the centre screw for the cartridge mounting allows the geometric adjustment in just a few minutes. Not to mention the huge height adjustment wheels on the three gel-dampened „feet“: fine threads, rock-solid and, above all, easy to grip. Anyone who already got their fingers bruised or even had to lift the whole turntable on other occasions, can only state that the Hurricane is a well designed, super practical top-notch piece of gear.

Back to the drive: two AC motors with Acoustic Signature's ingenious „AVC“ power supply are housed in the heavy chassis, short belts drive a sub-platter that





The drives (pictured left) including the sub-platter are stashed under a cover plate. The chassis offers mounting space for three tonearms for which super solid, adjustable bases are provided. For the listening check we mounted a Hana Umami (see review in this issue) and the MoFi UltraGold (stereoplay 10/22).

is supported by a special maintenance-free bearing system. The old problem of very heavy platters causing in the long run a harmfully high surface pressure on the bearing base via bearing balls, has thus been successfully overcome, so the makers say. The entire drive assembly rests encapsulated under a cover plate above which a massive 11-kilogram platter „hovers“ in a short distance into which eight „silencer cones“ are embedded, i.e. pressed-in brass cylinders to dampen stonedeaf the anodised platter which used to be hardly prone to vibrations already before.

To make the synchronous drive motors, each of which has two coils and 24 poles, run with less vibrations, an elaborate power supply unit is used in which pole jolting is reduced by electronic tricks including real-time monitoring. Acoustic Signature calls the permanent correction of the voltage supply of both motors

„Automatic Vibration Control“. In view of this effort, it is almost pointless to mention that the two opposing drives won't cause any unilateral bearing pressure in the bronze bushings of the platter bearing.

Tonarms: wonderfully crafted

The mechanical miracle of the TA-2000 Neo is not one iota behind the manufacturing quality of the turntable. A straight dual-layer carbon tube with a fixed headshell with centre screw offers plenty of room for adjustment (VTA and azimuth

are adjustable), the gimbal is equipped with precision ball bearings, the anti-skating device is conveniently set via a small rotary wheel, the tonearm axle is made of stainless steel and the internal wiring uses copper cables from Mogami.

Again, a toolkit is included, only the brass counterweight requires a tonearm scale. Unlike some other tonearm manufacturers, Acoustic Signature not only includes a tonearm cable, but also tangible technical data including the effective mass which is 9.6 grams for the 9-inch



The supplied templates of rock-solid design greatly facilitate the mounting of tonearms and pickup cartridges.



The control panel can be positioned as desired, but will also fit under the chassis. LEDs indicate the end of the platter's short run-up phase.



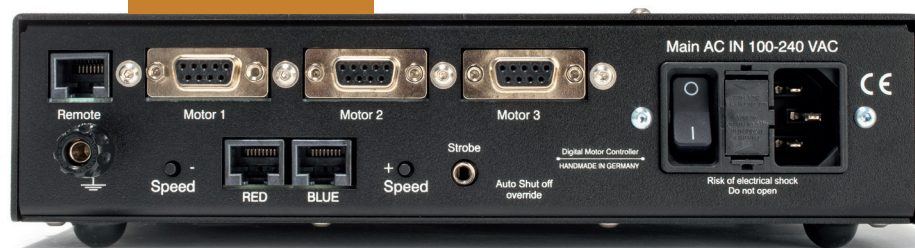
model and 12.6 grams for the 12-inch version. The question of whether the 12-incher sounds less distorted soon became academic in view of an overwhelmingly clean spatial representation with concrete-solid definition. Like a rock in the surf, the turntable meticulously worked out the characteristics of the pickups as if dissected under a magnifying glass, accompanied by a low bass fundament to die for and superbly detailed highs. Providing „merely“ the analytical basis for the other teammates is something that only absolute top-level drives in the analogue nirvana can do, where costs don't matter and the last millimetres of skills are everything. The fact that this is right where

the Hurricane Neo belongs needs no extensive sound descriptions - you can hear it after two minutes.

Bottom line: Incontestably „not“ sounding super turntable, independent of price class without the slightest of compromises or doubts, furthermore perfectly realised in every respect with no exception, combined with a lavish scope of delivery and a 15-year warranty. No more questions, Your Honour. **Roland Kraft**



Two pushbuttons on the power supply allow to finely adjust the turntable platter speed.



Acoustic Signature Hurricane Neo + TA-2000 Neo

12,000 EUR

Distribution: AS Distribution GmbH

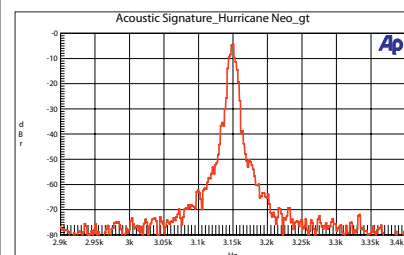
Phone: +49 (0)7162 / 20 79 70

www.acoustic-signature.de

Dimensions (W x H x D): 45 x 18 x 46 cm

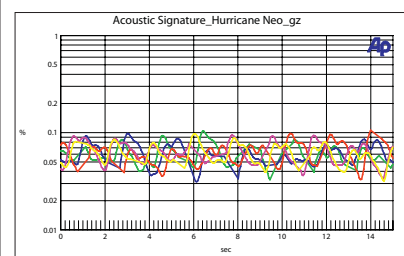
(17.7 x 7.1 x 18.1 in.) Weight: 30 kg (66.2 lbs)

Measurement diagrams



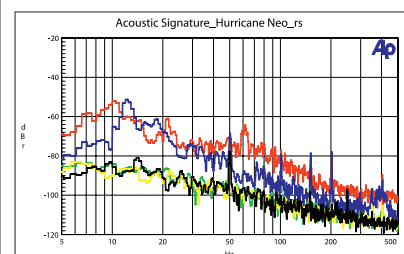
Wow & flutter tonal spectrum

No abnormalities, exact adherence to absolute rotation speed, no motor hum



Wow & flutter vs. time

Basically good synchronisation, but fluctuations due to rotation noticeable



Rumble spectrum

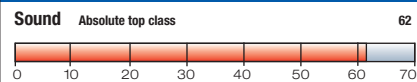
With measuring coupler (blue) small mains hum components at 50, 100, 150 and 200 Hz, generally clean

Measured values

Wow & flutter, 2-sigma weighted	±0.09%
Nominal rotation speed	+0%
Rumble S/N ratio, weighted record/coupler	73/76 dB
Tonearm weight class	intermediate
Power consumption (standby/operation)	0.4/9 W

Measured values	Field test	Value
9	9	10

stereoplay test verdict



Overall score	90 points
Price/performance	high-end