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Review

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ACOUSTIC SIGNATURE

The DOUBLE X is a turntable manufactured by the German company Acoustic Signature. Tested here with the TA-1000 arm produced by the same company, it is one of the manufacturer's most inexpensive products, although it is not cheap at all. However, it is an entry into high-end and such a "ticket" always costs a lot. For less than 23,000 PLN, we get a great, excellently made, easy to use system to be used for years.

When I tested the ACOUSTIC SIGNATURE Triple X turntable two years ago, it was, if I remember correctly, the only model manufactured by the company having a classic rectangular base. It was unusual, as the company specializes in heavy turntables having optimized shapes. After the Triple X, the company produced two other turntables with bases having shape that had been found in products of other companies – the WOW XL and XXL, and then the cheapest of them – the Primus model.

Acoustic Signature turntables do the same trick every time, also when I know what to expect – they introduce peace and density into music. Although these two qualities are associated with the so-called "analogue", they actually constitute the property of good vinyl; the "analogue" and "vinyl" are two different worlds. It was the same with the Doub le X model. From the first to the last album, the sound was dense, saturated and the tonal balance was set low. There was also a nice panorama and a good insight into the recording. But the **warmth, density and depth were the most important elements of the musical message.**

However, I once again had to stop my quick fingers, trying to reach the laptop keyboard, as if they were living their own life, as it is not a one-dimensional turntable. It is due do the fact th at this description could very likely be used in a test of inexpensive Rega turntables and it would still sound true. What is more, it woul d

Why play such games at all? Is there no single shape optimized with the thought of vibration distribution? There as many answers as there are manufacturers, from the minimalism of Rega in its top model Naiad, to the enormous heavy behemoths manufactured by TechDAS, Transrotor and Acoustic Signature. Independently of what conclusion we draw, we may agree on the issue of the basic role of the base, formulated together by Paul Messenger and Roy Gandy:

The base must support the three main components: the motor, the main bearing and the arm; what is most important is the **physical dependence between the main bearing and the arm** that must maintain almost perfect structural harmony.

Bill Philpot, Paul Messenger, Roy Gandy, *A Vibration Measuring Machine*, Essex 2016, p. 201

The structural harmony is achieved by companies in different ways, depending on other choices, for example on whether the motor is integrated with the base or not, or whether the arm ba se projects beyond the outline of the housing or not, etc.

| The Double X

The Double X turntable belongs to a group of constructions that we may call "classic", i.e. having **a full housing also integrated with the motor and the electronics that controls it.** The Triple X was a large model in which it was possible to install 9, 10 and 12"-long arms, while the new model is only designed for 9-inch arms. However, it looks almost the same and it is equally attractive – I would say that is even nicer than the "XXX". It is, in my opinion, **one of the prettiest turntables manufactured by the company.**

Base | The base has a rectangular shape and it is not high. It has a similar construction to the one used in the Triple X, i.e. it has the form of a 64 mm-high sandwich composed of the following layers: **MDF, steel and aluminium.** Therefore, although it is pretty small, it is also quite heavy – it weighs 24 kg. It is covered with hi gh-gloss varnish with almost black varnish visible under the top layer on the sides and beautiful natural veneer on the top. The base stands on three removable aluminium feet.

Platter | The platter is a classic example of what the company thinks of mechanics. It weighs 10 kg, is 50 mm high and made of balanced aluminium that is damped from the bottom. In order to give it more inertia and additionally dampen openings that are drilled in it (we are talking about 0.01 mm tolerance!), so-called **"Silencers" have been placed in it. These are brass cylinders** placed close to the edge of the platter, designed to dampen the platter and increase its mass. There are eight of them in the Double X, similarly to the more expensive Storm Mk2 model. One can order a gold-plated version of the Silencers, but the price of the turntable then increases by as much as 2,720 PLN.

As we can read in the company materials, the Silencers minimize vibrations in the region of 15 kHz by as much as 80 dB and the impulse speed decreases with them from 200 ms for a non-damped aluminium platter to 20 ms for a platter with eight Silencers (more HERE). The inserts look great, as their tops are high-gloss polished. We can see them through openings cut out in the leather matt.

reflect reality. Rega manufactures ingenious turntables, out of which those designed for the people who are at the beginning of their way to "vinyl enlightenment" sound warm, dense and nice.

However, the Double X is something more – perhaps even not "something else", but "more", indeed. This is due to a few factors. First of all, **it is a high-resolution turntable.** However, when it comes to detail and also the resulting selectivity, they are not very impressive. It is because the sound of the turntable is based o n density, which gets combined with precise detail at a much, muc h higher position in the price range – not only when it comes to Acoustic Signature product prices, but generally. And resolution gives us something that is much more important than detail – differentiation.

So, the German turntable beautifully shows differences in recording and pressing, and between album issues. When we listen to Hans Theessink from the album *Jedermann Remixed*, we instantly feel and know that an attempt has been made to obtain low and strong bass, so characteristic for the studio which is responsible for cutting the vinyl – Pauler Acoustics, housing the Stockfish record label. It is dense sound in which bass and the midrange are the most important – one can hear it with every system and it is always very impressive. The vocal is in the foreground, clear and strong, extremely rich.

When we play Clare Teal's *A Tribute to Ella Fitzgerald* released by Chasing The Dragon record label, we hear something completely different, even though both albums are fully analogue. It is because *A Tribute to...* was recorded in the "Direct Cut" technology, i.e. without the tape medium, at one go. This is more distanced sound and, at first sight, it is less dynamic.

It is actually different, as it is a volcano of energy and the musical message is extremely atmospheric. However, as the foreground is at a distance, we have to listen carefully and turn the volume up for something to strike suddenly. The Double X shows that, but not instantly, slightly highlighting close Theessink's vocal on the former album and delicately moving back Teal's vocal on the latter.

It does it, as this is the reality, while "directness" and tang ibility are impressions, subjective elements. The turntable is very hon est in what it does, as **it does not cover everything with warmth and does not apply a common denominator.** I had no doubt that one *could* call the sound "warm" – everyone can do that and he or she will be absolutely right. However, it will only be one side of the equation.

The other side is high dynamics. Thanks to it, it was possible to hear the instant character of sound attack very clearly on the "Direct Cut" album and it was also responsible for the speed an d attack on Frank Sinatra's *Fly Me To The Moon* album. It all still happens in the envelope of density and warmth. It is because of the turntable qualities – it is quick, warm, dynamic and dense. It will demonstrate that recordings cut using a digital file, like the abovementioned Sinatra's album, are less natural and more noisy. However, things will not be bad – after listening to the albums a few times, we will simply think that, perhaps, **it is worth spending some more cash and buying a fully analogue version…**

The company has developed both their own platter and main bearing construction. The latter is called the Tidorfolon and we can find its different versions in all Acoustic Signature products. **The Tidorfolon is an alloy of vanadium, Teflon and titanium.** It is relatively soft, but at the same time incredibly resistant to scratching. It has been used to make the bed, with a ball integrated into a hardened steel axle moving on it. The bearings are made of sintered bronze which is a self-lubricating material, so it doe s not require servicing. These elements cooperate with one another so well that 15 minutes are enough, after fitting, for the components to operate without failures, with ideal precision and without a break for ten years.

Motor | The Double X is an integrated turntable, which means that **the motor is fixed to the base.** Here it is decoupled from the platter and the arm. What we get with it is electronic control with rotational speed control – this is the company's Alpha circuit. The motor is turned on using a button on the top panel, while another button is used to change rotational speed. The electronics includes a motor operation tracking circuit – a diode next to the selected speed blinks until the required rotational speed is achieved.

The tested turntable has an asynchronous motor (DC) which does not deliver high torque and the platter is quite heavy, so achi eving the set rotational speed takes several seconds. Quite unexpectedly, the LED which corresponds to the speed of 45 rpm is placed first and is green, while the one corresponding to the speed of 33 1/3 rpm is red and second. As it is almost always the opposite, one will be likely to make mistakes at the beginning.

Arm | This is another company turntable that I will be listening to with the Acoustic Signature 9"-long TA-1000 arm. It is an arm with a gimbal and miniature bearings manufactured by the German company SKF. **The arm is made of carbon fiber** (but not of plait) and is extremely durable. It owes the durability to its specific construction – it is a pipe in a pipe. They are separated from each other throughout using three spacers. Thanks to such a construction, it is rigid and lightweight.

The arm offers all classic adjustments, including VTA and the azimuth. The latter is adjusted precisely. We place three screw s right next to the bearings, at the place where the arm is fixed to an aluminium element and turn the arm within the +/- 5º range. When it comes to VTA adjustment, it is very easy: we remove the scre w placed in the clamping mechanism inside of which the arm column moves and move it up or down. Having found the appropriate height, we place the screw back in the clamp. The disadvantage is that it is impossible to conduct this operation "on the fly", only with a lifted arm, and it is difficult to make precise adjustments due to a lack of a scale.

The TA-1000 comes with the 1877 Phono interconnect connected from the bottom. As the DIN connector is angled, it is not very easy to connect it. Alongside the arm, we also get an instrumen t manufactured by the company that we use to calibrate the cartridge and set an appropriate arm distance. Thanks to it, th e calibration of the cartridge is simple and repeatable.

THE WAY WE LISTENED

The Double X turntable was tested with the Miyajima Laboratory Makade cartridge and the RCM Audio Sensor Prelude IC phono stage. It was placed on the top shelf of the Finite Elemente Pa gode Edition table and powered from a separate socket.

ACOUSTIC SIGNATURE in „High Fidelity"

- Sound

Recordings used for the test (a selec- tion)

- Alan Parsons, *The Time Machine*, CNR Music/Music On Vinyl MOVLP1010, „Limited Edition | No. 0060", 2 x 180 g LP (1999/2014)
- Clare Teal with The Syd Lawrence Orchestra, *A Tribute to Ella Fitzgerald*, Chasing The Dragon VALDC003, „A

The differences between the Double X and more expensive models produced by the company lie in the smaller scale of the tested turntable, crackling noises more strongly associated with music and less well-defined low bass. These are elements that cannot be improved either by cartridge selection or using a record clamp. A clamp will slightly limit medium bass and improve focus on the listening axis, but it will also decrease saturation. A brighte r cartridge will highlight sound attack, but it will also make it less sustainable. That is why I would use balanced, perhaps even war m cartridges and I would use a clamp carefully.

Conclusions

It is no coincidence that in this test I focused on albums whos e most important element is the vocal. It is because the Double X shows vocals in an amazing way, **differentiating, swinging and highlighting strong saturation of the midrange.** It has quite low bass, although its midrange is not as well-defined as in more expensive turntables produced by the company. The treble is sweet and a little warm – but this is what the turntable sounds like. It has wonderful dynamics and also nicely plays old rock and classical music.

You need to listen to Portishead, Alan Parsons from his new albums or Depeche Mode yourself, in order to judge whether the advantages that I am talking about are enough not to worry about the curbed and tempered cymbals, the drum beat attack and a clear electric bass line. It is because the Double X is a human creation and, as such, it has some advantages and disadvantages recorded in its DNA. If you listen to the kind of music that I wrote abo ut in the test, **it will be an ideal companion for long evening sessions,** inducing us to buy original album issues and analogue remasters, as it will give them a truly magical quality. ■

Technical specifications (according to the manufacturer)

Double X
Motor: DC, with rotational speed control
Bearing: TIDORFOLON
Base: 65 mm, MDF + steel + aluminium
Platter: 50 mm, aluminium
Rotational speed: 33 1/3, 45 rpm
Power supply: 100 V – 260 V AC
Dimensions: 440 x 354 x 155 mm
Weight: 24 kg

TA-1000
Total length: 9" | 252 mm
Mounting distance: 222 mm
Effective length: 237 mm
Effective mass: 9.3 g

Galeria Gallery

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