



Phono preamps that
relies on sound performance
Acoustic Signature
Tango Reference

Text | Thomas Leung

Acoustic Signature was founded in 1996 in Suessen, Germany, but in a short time it has made Hi-Fi world famous with its accurate turntable making. After that, they developed to tone arm, cartridges, phone preamps and even record weight stabilizer, almost all turntable-related products, become the new force of Hi End turntable and accessories production. Their team of 11 people, including engineers and other technical personnel, use advanced CNC machines and CAD systems, constantly study new technology, and adhere to 100% German manufacturing, is to maintain the highest quality products, to ensure the industry's peak.

The heavy material housing is shockproof

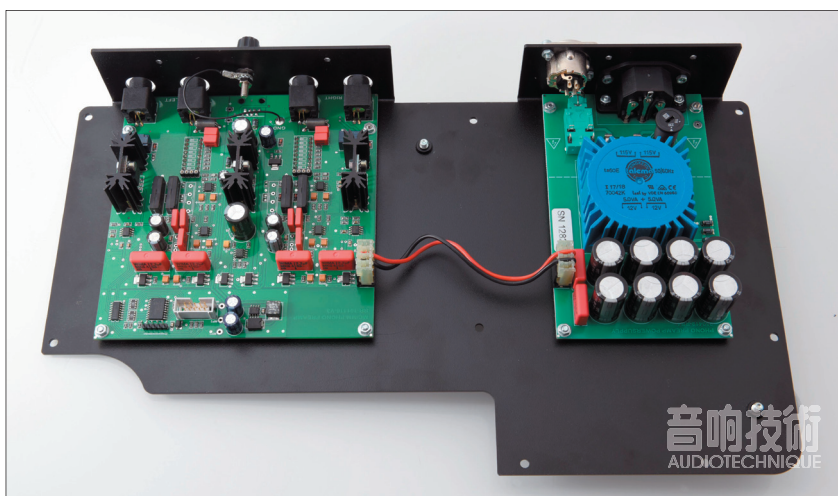
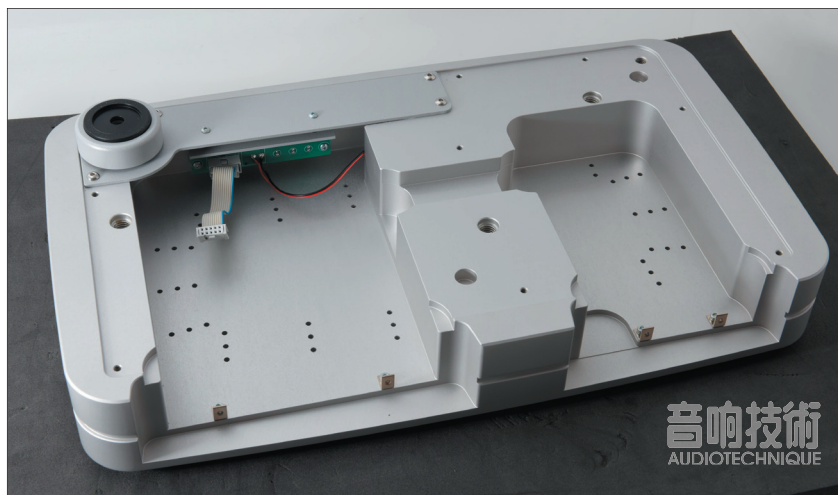
Acoustic Signatures are most notable for their turntables, which range from the luxury Invictus Neo to the more popular Maximus Neo. There are as many as 5 tone arms. You can see that they are fully focused on the industry, no distractions ; phono preamps are certainly not ignored. Tango MK3 is simple, but the Tango Reference is an Acoustic Signature flagship. Tango Reference has been carefully designed at all costs, from chassis to circuit design. Tango Reference is not big in size, but it is very heavy, mainly because the main chassis is made of a whole block of heavy aluminum metal made of CNN machine tool, which eliminates resonance. It is equipped with the bottom plate and part of the backplane of the steel sheet, carrying the circuit board and input and output terminals. All the edges of the case are rounded, without sharp corners, and the top is slightly arched, looking a bit like a shell, which is quite good-looking. The Tango Reference circuit isn't complicated, and the Acoustic Signature's super-thick casing seems a bit out of place, but it shows the Acoustic Signature's emphasis on anti-resonance and anti-interference, and the thick casing can do both.

The power supply is sufficient and fully adjusted

The circuit in the machine is divided into two parts, the power supply is on the right, the main board is on the left, separated by the main chassis, so that the main board is not affected by the power transformer. The transformer looks small, but the current requirement for the amplifier is relatively

small, and the power supply for Tango Reference is actually more than needed.

The amplifier circuit is class A single end, the parts are carefully selected, only RCA input and output, no XLR; So is not suitable for the need to balance the input, output of the friend. Sing and play is suitable for MM and MC. The gain of the MM is 42dB, while the MC has two options (H) and (L), 54dB and



Specification :

- Amplification : 42dB(MM), 54dB(MCH), 66dB(MCL) ■ Channel separation : >92 dB ■ RIAA — accuracy : +/-.0.1dB ■ Signal-to-noise ratio : 89 dB(MM), 74 dB(MC) ■ Dimension (W×D×H) : 424×244×80 mm ■ Weight : 16kg
- China (Hong Kong & Macau) distributor : House of Music Group · 852-37055908

66dB respectively, to match the MC cartridge with high and low output. It is also equipped with two DIP switches for cartridge impedance selection. The impedance of the MM cartridge is fixed at 47k Ω , and the capacitance value can be selected from 0 to 690pF. The MC impedance has a choice of 10 Ω , to 47k Ω .

However, the DIP switch is located at the bottom of the machine, which is a little inconvenient for adjustment. The Acoustic Signature takes the shortest signal path instead of using it. The only way to do this is to let the DIP switch pass through the bottom plate. Fortunately, the general user unless to change the cartridge, once selected, normal is not need to change the impedance value. In addition, Tango Reference is thick, but its body is thin, so it is not too heavy as a whole. It is not too difficult to turn the body and adjust it.

The panel is simple, with only one button for standby and gain selection. Press to power on, then press to change gain successively: MM, MCL, MCH, long press to power off (standby). The back of the machine is relatively simple because it has only one end; A power supply, input, output socket (RCA) and a grounding point, plus a power switch.

The first requirement of my duet is "silence". Because the

biggest problem of the previous singing is that it is easy to hiss, on the one hand disturbing people, on the other hand, many details will be drowned out by these noises. Modern Tango references have solved this problem, and Tango Reference is very quiet. The rest of the concern, is whether because the suppression of hiss, and the high frequency is also weakened.

High pitch beautiful dynamic strong

Klemperer stands for "A Midsummer Night's Dream" and is a record THAT I really like to try out on the LP system because it's so varied; There are lithe (preludes), there are brilliant (wedding marches), there are solos and choral (Ye Spotted Snakes). In the "prelude,"

I paid particular attention to the soft, fast string sounds, reminiscent of the tiny, fluttering wings of an elf. If you don't sing clearly enough, the elf will turn into a nasty little fly. Tango Reference's sharpness is definitely high enough not to be annoying, but rather lovely wing vibrations!

"Wedding March" explosion is also quite calm, the orchestra is very Taiwan type, high density, dynamic, copper pipe burst sound like true degree is very high.

Especially to mention two former diva Heather Harper and Janet Baker singing "Ye Spotted Snakes", the sound stage is



very good stereo sense! The entrance of the choir, in particular, reflects the scale of Abbey Road Studios, the recording venue, and the abundance of sound! Listen to Harper sing "So Good Night..." The high note of the word night is softly sung, clear and perfect, and completely demonstrates her mastery of voice. The lower-level system is still audible, but not so deeply felt.

After listening to these paragraphs, you can rest assured that Tango Reference does not sacrifice high frequency, because you can hear that its air sense is very good, and the high frequency of strings can be fully received. The vinyl looks unremarkable, and it's not being hailed as a blockbuster, but it's a tricky one. Some discs will play well even with ordinary equipment. But this one, with ordinary, it will only be ordinary, even the sound of decline; But Tango Reference takes advantage of it and makes it as high as it should be.

Fever effect is true

I chose two CDS of pop songs, Lowell Lo's <Beyond Imagination Too>; And Eva Cassidy's <Simply Eva>; Lo sings "Kumbaya." The first sound is very good and the guitar sound



is very real. In show, you can hear the singer's positioning, mouth shape and other details. Although Lo himself says he doesn't know what a fever disc is, it's clear that the producers of this LP have a fever Angle. Tango Reference also shows a different Lo, affirming his singing skills.

Eva Cassidy's 45 RPM was undoubtedly more feverish, but the casual fan might not have recognized it as ordinary. I often feel that most of the productions labeled "Fever" are a little contrived, with all the instruments and vocals being flashy, sometimes too much.



Seems to have added monosodium glutamate food, "fish have fish taste, difficult to have chicken taste". In fact, if the food is fresh, normal cooking, will have its due umami taste. <Simply Eva> This one is a natural victory. In "Kathy's Song", the guitar sound was slightly louder, which was the feeling of the scene at that time. I didn't put it down, so it felt more natural and real. The orientation of the whole disc (two) is so natural that people don't want to stop, which is the real fanaticism level. Two discs with different orientations, one in the middle and one in the west, are fully simulated under Tango Reference translation, and also show different fever characteristics.



The piano has obvious timbre differentiation

A recent piano solo on vinyl (the body is transparent, it shouldn't be called vinyl!). Vikingur Olafsson <Mozart & Contemporaries> Listen to the CD version has a very good sound effects listen to the LP is to see the match. It is generally accepted that LP must be better than CD; However, playing piano is hard to say. Pianos are difficult to play well, especially solos, because they have too many overtones to reproduce completely. Because CD is stable, it's easy to play well, at least on the right track. But if the LP system isn't good enough, even if it plays other music better than the CD, the LP doesn't necessarily win. My system wasn't super, but it passed; Now only change Tango Reference to sing, play piano will see the real chapter.



Tango Reference didn't disappoint me. I don't know how many overtones it has. In short, the chord of the strings and the body is more like the truth, and the music is more beautiful. Olafsson plays different timbre on the same piano. For example, "Andante Spiritoso" in Galuppi's first song is crystal clear and dense, but at the same time very smooth and crisp. The last piece, Mozart's "Ave Verum Corpus", is played at a slow speed, showing a solemn and sacred atmosphere, with a soft tone, almost like an organ! Tango Reference shows these two very different timbre, which is very obvious, and you can hear it very clearly without listening very hard.

Conclusion

Tango Reference isn't cheap, but the price isn't prohibitive, and the sound performance is well balanced and well worth the price. Multiple impedance is also selected to make its matching ability quite strong. It is solid but not flashy, keeping the characteristics of German equipment realistic. Although it does not have what to spend artful, its appearance is simple also quite beautiful, and all scheming to sound performance as depend on. Whether it is the voice, the individual instrument or the whole orchestra, it is not only played properly, the speed and air is excellent, but also very balanced, not focused on a specific band. It is available in silver or black. It seems that "black soul" is in fashion these days, but I prefer silver, probably better with my other equipment. 音

