



R-evolution Stealth, the case' story.

What a challenge to retrieve mechanically stored information from a vinyl disc!

After the long mechanical and electrical way the signal has been travelling, it seems to be a miracle that we finally are getting something that our brain identifies as "music" and that this music can have very positive, not to say healing effects on our bodies and souls.

Having said this, we however always felt there may be room for even more.

It all began many decades ago when a child had left the old tube Telefunken radio of his parents for his first turntable and solid-state "hifi" amplifier...

Ivor Tiefenbrun once said that the rotating platter is where it all begins and that its influence on sound quality is major, much more important in fact, than the influence of the cartridge or tone arm. He also seems to have said, that if the first Technics direct drive turntables of the early 1970ies would have been introduced a bit earlier, the Linn LP 12 would have been a direct drive turntable instead of a belt driven design.

Many years after those glorious times, we find ourselves with dozens of heavy platter and string driven turntables that consider themselves to be items of "high end" design.

The heavy platter/string turntables were fashionable turntables in Japan, back in the 1970ies after Onken (Koizumi) and others had introduced them as a "better" alternative to more common palter/string designs with light platters (Thorens, AR, Linn etc.).

To us, 20 Kg platters plus string drive turntables are a profound misunderstanding of what is happening when a cartridge is gliding in the groove of an LP that rotates on top of a platter.

For some mysterious reasons there are Engineers who do believe that a heavy platter (the heavier the better) cannot be slowed down by the cartridge's needle during the reading process of the LP.

This is simply not true and all that may be observed with heavy platters, is that slowing down process becomes slower, but the speeding up process also is getting slower, resulting in striking lack of dynamics and artificial softening of the music being reproduced. This is distortion!

It is our strong belief that there is only two correct ways of driving with turntable platter, namely:

1. The use of very powerful motors and stiff transmission, like in the idler wheel concept
2. Direct drive of the platter and instantaneous compensation

Almost 20 years ago, we have decided to go the second way.

We then decided to use the outstanding Technics motor while totally redoing the steering and power electronics. The initial motor uses up 17 w while our development lead to less than 1 w (for the R-evolution Stealth) while the full torque is being kept the same.

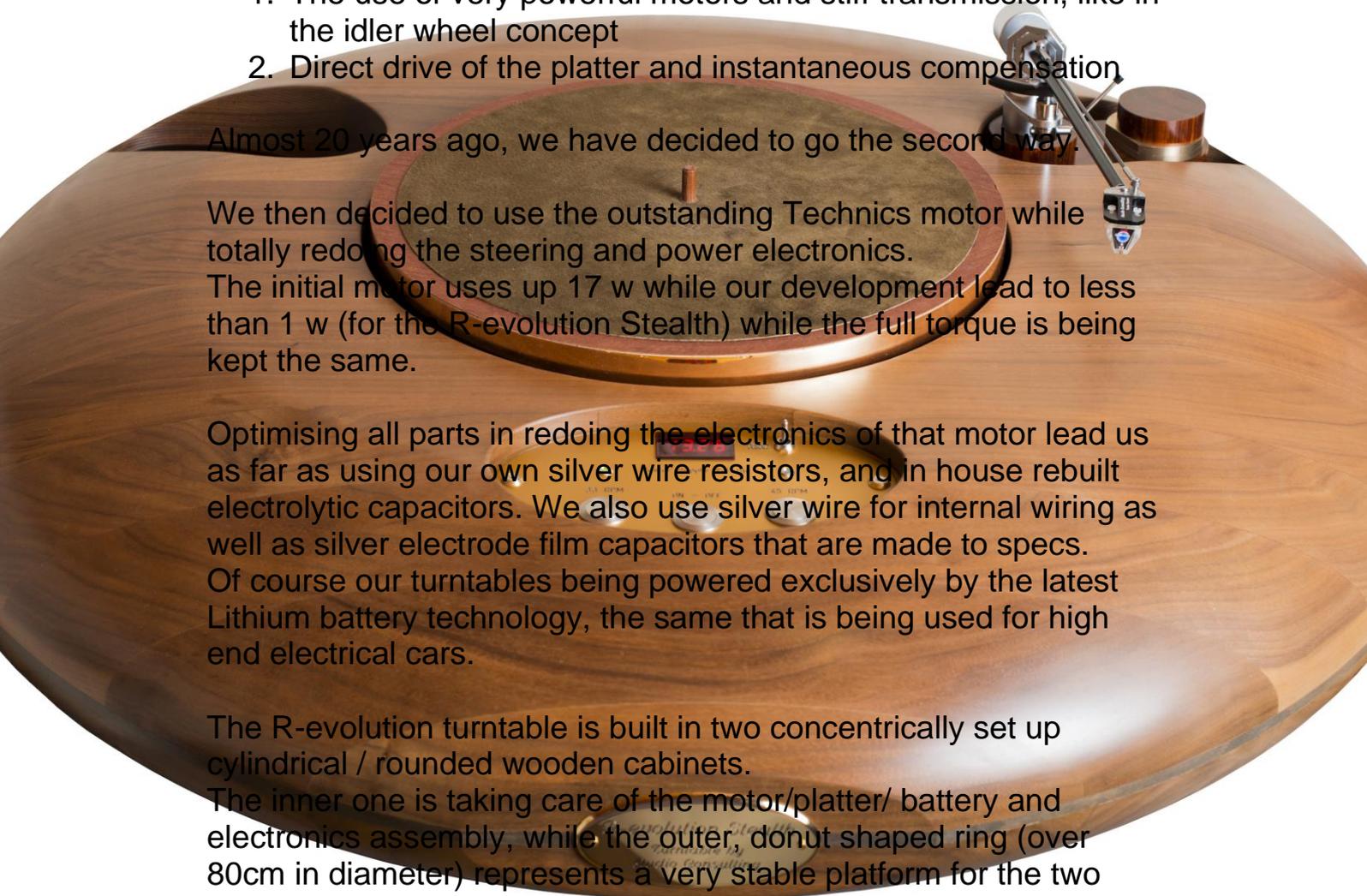
Optimising all parts in redoing the electronics of that motor lead us as far as using our own silver wire resistors, and in house rebuilt electrolytic capacitors. We also use silver wire for internal wiring as well as silver electrode film capacitors that are made to specs. Of course our turntables being powered exclusively by the latest Lithium battery technology, the same that is being used for high end electrical cars.

The R-evolution turntable is built in two concentrically set up cylindrical / rounded wooden cabinets.

The inner one is taking care of the motor/platter/ battery and electronics assembly, while the outer, donut shaped ring (over 80cm in diameter) represents a very stable platform for the two tone arms.

This outer donut ring is being CNC milled out of a 1/3 cubic metre block. The CNC milling lasts for over one day, while in a second phase, several days of hand labour will achieve the degree of finish that allows for high tech painting.

The entire R-evolution Stealth turntable is being installed on top of an Accurion active isolation device, which was originally design for electron microscopes.



What are the sonic results of all these efforts?
What do you expect us to say?

Provided the tone arm – cartridge combinations is not a limiting factor, and provided the rest of the system is made with extreme care for musicality, one can really be surprised of what becomes possible.

There is much, much more information in every single LP than what we had expected initially.

The result is very far from any so called “high end “ sound. The perception of the original musical event becomes reality.

The R-evolution Stealth is more than the few facts that we have stated in the previous text.

We invite you to read our philosophy of work at:

http://www.audio-consulting.ch/?About_Audio_Consulting:Philosophy

It will help you to understand more about the way we are approaching the difficult task which is the production of technical pieces of equipment that should recreate the illusion of live music.

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