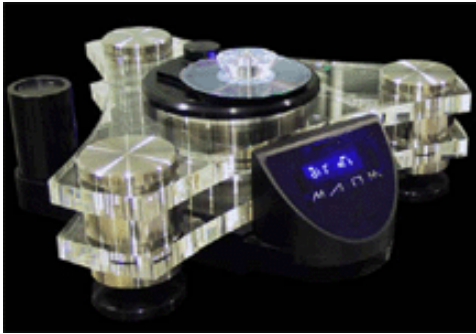


DECEMBER 2005

METRONOME TECHNOLOGIE KALISTA TRANSPORT



Reviewers: Marja Vanderloo & Henk Boot

Sources: CEC TL5100 CD transport with ultra clock; Audio Note DAC-2 Signature, modified, no digital filter

Preamp/integrated: TacT RCS 2.0 room control system; Audio Note Meishu, modified, with AVVT 300B output tubes

Speakers: Avantgarde Acoustic Duo, internally wired with silver; Audio Note AN/Jsp, silver wired

Cables: Audio Note AN/Vx interconnects; Siltech Paris interconnects; Gizmo silver interconnect; Qunex 75 reference interconnect [in for review]; Crystal Cable CrystalConnect Reference interconnect, CrystalDigit S/PDIF RCA/RCA and RCA/BNC, CrystalSpeak Reference, CrystalPower Reference AC-Eur/IEC [in for review]; Gizmo silver LS cable

Power line conditioning: Omtec PowerControllers

Sundry accessories: IAR carbon CD damper; Denson CD demagnetizer; TacT RCS calibrated microphone and software; Exact Audio Copy software; Compaq server w/Windows Server 2003 and XP; wood, brass and aluminum cones and pyramids; Gizmo's Harley Davidson cap; silver Buddha head

Review Component Retail: £15,350; € 20,000



The first question that arose when the opportunity came 'round to review the Metronome Kalista was basic. "Is the world ready for another very expensive CD transport that is restricted to the 16-bit/44.1kHz RedBook standard?" Two answers came to mind. First, the Kalista is a demonstration of what is possible without any technical constraints. It's then packaged in a design that can only be described as jewel-like. In due time, technological developments derived from the Kalista project will find their way into more affordable implementations. Secondly, remember how many audiophiles swapped their vinyl collections for 16-bit/44.1kHz 'perfect sound forever' polycarbonate at a very early stage - arguably too early? It took the shiny disc 20 long years to mature. Only after all these years, there now is an appreciation for the format that, under the most optimal conditions, is finally on par with vinyl.



Among those of us who changed formats and threw out the *outdated* record collection, many dearly regret this move. Those who kept the faith with the black format (for whatever reason) now consider themselves awfully clever and visionary. This segment is presently a'gaga in worldwide shopping sprees at garage sales and second-hand shops, to pull scores at ridiculously low prices. All of this thanks to the CD legacy. To boot, far more makes and types of turntables are available presently than they ever were in the heydays of the black gold. The cyclical pressure from the *industry* to move to yet another and "now improved" high-resolution medium creates a strong sense of *déjà vu*. That sector of the industry would love nothing better than see all CDs and LPs abandoned for the new formats.

No matter, the RedBook format is the most widely spread format extant. It's arguably also the last high-resolution medium before music distribution goes exclusively *streaming* as binary files. Nearly 99.99% of all new recordings are issued as CD. With the latest advances in RedBook-based data retrieval, the competition with the new high resolution proposal is no longer a foregone conclusion. That is, when the mastering and pressing of RedBook discs are flawless. Isn't it telling that only a handful of (so-called) high-end SACD or DVD-A players survive in the market?



The Metronome Kalista is a ne plus ultra expression of what can be achieved with ordinary CD. Metronome is a French company led by Dominique Giner. Leaving his former employer Jadis, Giner started his own company in 1994. In his last years at Jadis, Dominique used his spare time to improve CD players to meet his own standards. In his view and due to mechanical shortcomings, none of the CD transports available at the time were able to properly read a disc. Even the top players of those days -- beginning in the '90s -- were no matches for Giner's notions of perfection. Metronome kicked off actual production with turntables to build the financial base for the next step, the production of a Metronome CD player. Development proved rapid and all CD players and transports issued were of the same basic design that moved the power supply into a separate enclosure. Even the Metronome DACs are two-box designs.

Come May 2001, it was time for Giner to commence on his most daring project - to build the best CD player possible. The final product had to be competitive with the very best of turntables. Kalista became the name for this ambition.



To achieve its goals, the project team aimed high. Tolerances would be extremely tight. Everything mechanical in the Kalista had to fit as never before. CD tweak Giner was ever present. The only problem? How to locate the equipment that could machine the chosen materials to the tolerances envisioned. Giner's fortuitous karma had led him to set up his factory in the Toulouse district, home to the French military and civil aerospace technology. Here machines existed that could work within margins of less than a hundredth of a millimeter. The materials prescribed for Kalista production were expected to handle these tolerances well. The outcome of a series of researches had identified DuPont's Delrin next to Metacrylate, aluminum and stainless steel as the most suitable materials. And thus Kalista took shape from these materials to assure high rigidity, low resonance factors and sharpness of form.

The Kalista to be reviewed arrived in two big boxes, one for the transport, one for the power supply. The scale tipped at 59 kilos or 131 lbs for the combined load. The power supply resides in a simple box measuring 18 x 2.8 x 15 inches. The front is of aluminum and a recess exposes the controls. Behind the front, the 2mm thick enclosure turns black and sits on four Delrin feet. For further isolation, four enclosed Delrin cones become mandatory to use. The back of the power supply provides the AC inlet and a special connector to connect the transport umbilical to the power supply.

The idea behind separating the power supply is based upon cancellation of both electromagnetic and mechanical 'crosstalk'. Every transformer vibrates. That's the law and nobody dares break it. Because Metronome is quite generous in how transformer sizes are applied, the potential for negative interference compounds. The power supply thus houses no less than five transformers. One is for the player's display, one for the motor, one for the servo of the laser pickup, the last two for the final digital stage. Following the AC inlet, a 5-stage filter eliminates power line distortions. To provide even more electrical silence, the flick of a switch kills the frontal display. The company states that all these measures result in driving down electronic jitter as

far as is technologically feasible today.



From the second box we extract the Kalista transport, carefully using gloves to not stain the acrylic with skin oils. We also find a heavy remote control, the transport puck and the custom umbilical. The triangular design of the transport serves two purposes. One is symbolic - the triangle represents balance. The more down-to-earth aspect is leveling - three points are easier than more. All three supports are conical and come to rest in three Delrin dishes that add another vibration attenuation layer to the design.

The transparent metacrylic triangle forms the frame for the machine's core which is milled from a massive block of aluminium and linked via suspension to the outer triangle.

The actual transport is a heavily modified Philips CDM 12 Pro 2. The CD spindle is no longer stock and upgraded. For playback, a strong magnetic puck secures the CD atop this spindle, creating powerful mechanical coupling plus a ground drain for static caused by the spinning disc. Another piece of milled aluminum houses the stop, start, fast forward/back controls. The back of Kalista provides for the umbilical connector and a switch to activate upsampling to 24-bits/96kHz. Either signal can be transmitted from a 75-ohm S/PDIF RCA, an optical AT&T/ST or a balanced 110-ohm AES/EBU connection.

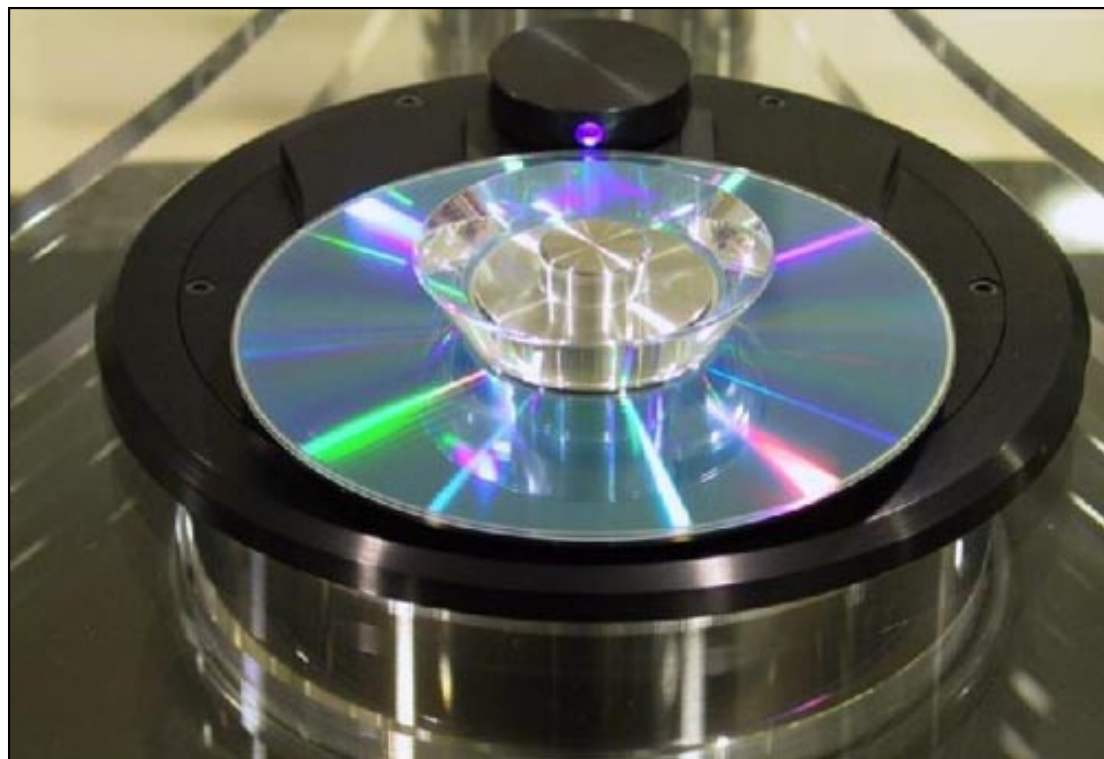


The Kalista transport arrives with a bell-shaped lid such as covers a plate in a fancy restaurant, to protect the naked laser assembly from the environment. When all connections are made, this cover is removed to 'load' the first CD by affixing the puck atop the spindle. Incidentally, the manual warns to never place the puck without a CD. Its magnetic pull is apparent from an inch removed from the axle, testament to the strong mechanical

coupling of disc to transport in use. Once this contact of CD/puck has been made, the disc starts to spin without user prompt. After the player has retrieved the TOC, the display -- if activated -- confirms how many tracks have been found. At this point, the CD has stopped spinning again. Only after the remote command of *play* has been entered does the thing start moving again - and how!

Our first CD to spin was L'ham de Foc's *Cor de Porc*. This group from Valencia integrates authentic string instruments from the Mediterranean and surrounding areas with Catalonian vocals and influences from the Balkans and Middle Ages. Played back over the Kalista, there's a newfound sense of palpability to the music. Instead of a nice virtual display of the music in room, an extra aural dimension gets added or, better yet, *revealed*. No longer is the sound as a whole projected into the room, it is an actual group of individual instruments that have been teleported. Each instrument can be observed from many angles. When you move your head up or down, forwards or backwards, left or right, each instrument possesses real height, depth and width and a firm location. Yet the music as a whole still is present, full of the expected timbres, not clinically dissected into bits and pieces. Below many of its tracks, L'ham de Foc uses a bass drone. With

Kalista at the source, this drone never sounded so detached yet simultaneously so integrated. The vast amount of exotic string instruments came to life without any harshness yet full of vigorous metallic realism.



Ish-Hurwitz is a young Dutch pianist who recorded Liszt's *Annees de Pelegrinage for Turtle records*. It is a simple recording with a minimum of microphones, just a Steinway D 274 in a church. The reproduction of the piano's sound is fascinating. The huge instrument is no longer a mere aural projection between the loudspeakers. The speakers have vanished and someone has rolled in the 274. As long as you keep your eyes closed, the thing is there. Once you open your eyes, it is like waking up from a mental trip and you have to float back down to reality. The piano was an *illusion*. Plus, you couldn't play it anyways even it were really there.

A problem with these unprecedented reproduction capabilities is that many -- far too many -- CDs from the collection become designated as coasters with Kalista serving the bubbly. Recordings where the ego of the producer -- or even worse, the engineer -- have won over musicality... they fall like a brick through a cloud. Instruments change in size as the track progresses, some even move up and down inside the image. Casual listening now becomes the only solution for these albums, with the more involving kind of listening permanently disqualified.

The same goes for mechanically bad pressings. Kalista shows no mercy on those either. Good, unspoiled recordings of large orchestras are feasts, however. Instruments are so easy to follow that it's akin to listening with an aural telescope at hand. You can focus your ears on one particular instrument or zoom out a little to include the whole section without blurring the sound. What particular materials any instrument is made of is clear. Cymbals are made of brass, a reed of a clarinet is, well, made of reed (and later into the recording replaced) and sticky valves on a trumpet make their own sounds.

So the Kalista is a picky player. But she (femininity is a given with this amount of detail) gives so much when treated with respect (again just like a woman). Setup is critical. A little imbalance, a fraction out of plumb and



Kalista will tell you right away. Compromised are transparency and resolution. Also, the remainder of whatever component set Kalista is introduced to must be on par. Neutrality is the quality Kalista likes in her posse. From the rack she puts her feet on to the cables she wants to communicate with to her fellow components, they all need to be neutral.

We experimented with power cables



and interconnects. Differences were easy to spot, final choices patently obvious. Kalista is able to extract so much detail from a CD that any component that filters out some of it becomes instantly detected when swapped out.

How does Kalista compare to the other top-flight RedBook players? From the players we have experiences with like the Linn CD12 (no longer in production) and the Zanden Audio Model 2000P, Kalista is more neutral and without signature - *pas de griffe*.

Metronome has succeeded in developing a RedBook machine that can distill the most and best from the humble CD. As long as the recording, production values

and pressing are of high quality, any hint of the 'CD sound' is absent. With very many CDs now, the difference to vinyl analogs is hard to tell. And just a thought: how many (expensive) vinyl discs have been cut from original digital masters?

Dominique Giner and company have put forth great efforts in the Kalista project. They prove that CD isn't the inferior medium after all and on most occasions can live right next to -- if not easily compete with -- vinyl. In this context, the asking price is more of a long-term yield investment than mere expense; an investment to get more from the enormous amount of music that's available on CD. Music lovers no longer need to be sorry for having prematurely ditched their LP collections way back when. With Kalista on the scene, RedBook lovers enjoy the last laugh!



*Dr. Marja Vanderloo &
Dr. Senk 'Longbeard' Boot*

Manufacturer's [website](#)

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