

Doug Schroeder reveals what the German BMW, Italian Ferrari and the Austrian Ayon Audio CD-3 have in common

March 2009



Specifications:

Type:	CD player
Conversion rate:	192kHz/24bit
Transport:	Sony KSS-213Q
Dynamic range:	>110dB
Output level @1kHz/Rms	5.50V
Output impedance:	30Ω (RCA), 210Ω (XLR)
Digital output:	75Ω S/PDIF
Analog output:	RCA (L+R) x1, XLR (L+R) x 1
S/N ratio:	>108dB
Frequency response:	20 ~ 20kHz, +/- 0.2dB
Total harmonic distortion:	0.2dB
Tube complement:	<0.002% @ 1kHz
Tube complement Power Supply:	4 x 6H30
Power consumption:	1 x 6AX5GT
Dimensions (CD player):	50 watts
Dimensions (Power Supply):	18.1W x 12.2D x 3.9H (inch)
Weight:	18.1W x 12.2D x 3.9H (inch)
MSRP:	17.6lb (CD player), 26.5lb (Power Supply)
	\$6,999

U.S. / Canada / Mexico Distributor:

Ayon Audio USA
8390 E. Via De Ventura - F110-194
Scottsdale, Arizona 85258
Tel. 1-888-593-8477 or 1-310-601-7976
52-55-8525-6102 (Mexico)

URL: www.ayonaudiouusa.com
Email: sales@ayonaudiouusa.com

It was after eight in the evening and darkness had fallen. I settled in my chair, tapping into the reserve two hours of brainpower to be applied to the craft of reviewing. There came a sharp knock at the front door. Opening it, I saw a silhouetted figure in the darkness (the blasted front light was out!), "Hi Doug, it's Jeff." *Jeff...the tree man!* I had called him a week prior to grind two tree stumps, and here he was, suggesting that since he was in the neighborhood might he get it done *now*. I was elated; Jeff's a great worker, and I knew that if I was flexible it would be done in short order. I had the great responsibility of handling the flashlight as he worked the heavy equipment. Thirty eight minutes later, I was back at the keyboard, resuming my work, with a gleeful feeling of satisfaction that another job was marked off the "To Do" list.

I love people who do their work well! It is very satisfying to observe a plumber, service agent, teacher – anyone who puts their heart and soul into the task. An individual I admire, a shadow figure whom I have not yet seen, is Gerhard Hirt, the Chief Designer for Ayon Audio. I have heard his "voice" only through the components he has designed, but it is a voice that seems to speak *with eloquence*. Allow me to share with you the message that one particular player, the Ayon Audio CD-3, conveys.

In the spring of 2008, I was pleasantly surprised by Bill Dudleston of Legacy Audio's offer to review his flagship speaker, the [Helix](#). In assessing the needs for attending components with which to review the Helix, I returned to manufacturers and distributors whose products impressed me and I sought their best equipment. I determined to write a "Super-review", a series of reviews which dovetail by overlapping coverage of the system's components. I wanted to work with a source that would be fitting, so immediately I contacted Charlie Harrison of Ayon Audio USA, the U.S. distributor for Ayon. Having enjoyed the Ayon Audio CD-1 previously it was natural to pursue the CD-3 (a two-chassis, top-loading, tube-output design) for the front-end. This review highlights not only the Ayon CD-3, but also discusses the working of it in a specific arrangement which I have put together with an eye toward system synergy with the Helix speakers. Aside from the aforementioned Helix and CD-3, the other members of this Super-review set are the Jeff Rowland Capri preamp and MC-606 multi-channel amp, and a suite of Wire World Silver Eclipse 5 Squared and Silver Electra Power Cables. The reader is strongly encouraged to consider the other components in conjunction with the CD-3 as potential partners.

Ayon Audio strikes me as a company which is on the ascendancy. Gerhard is young at 45, and already producing components to be reckoned with. He had been designing electronic devices for BMW, as well as working with electrical systems for Ferrari prior to setting out on his own. In 1990, he started his own company, offering his first piece, the Ayon 52 SET amp.

Even from the start, Gerhard's designs garnished attention for their musicality. Not long ago I reviewed the [Ayon Spirit](#) integrated, and confirmed that it is an extremely agreeable, economical integrated. Ayon likely would have been able to hold its own by manufacturing amps only, but Gerhard has too much talent to let a large segment of his design skills languish. He wanted to make a CD player, so he entered a cooperative effort with Raysonic.

Many audiophiles in touch with current CD player offerings know that the Ayon CD-1 and Raysonic CD128 players are strikingly similar in appearance, including the remote. There is much misunderstanding and misinformation about the players circulating, such as Ayon being a division of



Raysonic and inappropriately cross-selling to the U.S., or that the two players are made in the same factory. Neither is true. When the CD-1 was first being developed by Gerhard, he chose to partner with Raysonic. The collaborative effort to have Raysonic manufacture the chassis, not internals, began in 2005 and ended in 2006.

Sometimes partnerships are golden, as seems to be the case with Bill Conrad and Lew Johnson, of the ubiquitous Conrad-Johnson. Other times they can be, oh let's say, *problematic*. Bill Dudleston resumed ownership of Legacy Audio after a partnership with the Allen Organ Company. Likewise, Gerhard ended the Raysonic partnership in order to pursue his vision.

Since then the two players, though outwardly similar, have developed independently. It may look as though all that separates the two players is the eerie blue illumination of the Raysonic 128, but the internals are quite different. Gerhard emphatically points out, "The Ayon CD-1 uses a different upsampler, the Crystal Semiconductor, different regulator, different tubes, different output stage..." There are critical design differences, whereas the CD-1 is 24 bit/192 kHz, the Raysonic 128 is 24 bit/92 kHz. This is but just one of the subtle subtractive differences the casual purchaser will not notice.

A consumer should not think that because two units share the same skin they *are* the same. Caveat emptor applies between seemingly identical products.

Understandably Gerhard wants the distinction between Ayon and Raysonic widened, as a similar pattern followed his CD-3, with the Raysonic two-chassis model, the CD228, showing up approximately two years later. He is emphatic, "The new Ayon CD-2 will be released in 2/2009 and there is no relation or collaboration with Raysonic – 100% Ayon Audio, made in Austria." Gerhard seems quite content lately to have Ayon fly solo; the freshly minted CD-2, which I have just received and will be putting through its paces for its own review, marks a drastic departure from previous designs. I wish him a smooth flight.

BOMB PROOF

All Ayon products arrive with the most “bomb-proof” packaging I have encountered in audio. *Triple boxed*, individually packaged chasses for the CD-3 ensure little possibility of damage.



I would be comfortable to ship one of these units in the factory packaging to Tunisia if necessary. A sleight,

no-nonsense manual lays out the functions clearly. As was mentioned in the CD-1 review, the remote is a mistake; the mistake is putting *too much* at the fingertip. I get the feeling Gerhard has to be a techno-dweeb (Hey, it's not so bad! People I know think I'm one. I just tell myself it's a comment born of jealousy!) as he has put nearly every conceivable function on the remote. I have been using the remote for a couple months and still have to take a look at it to forward tracks. Ayon needs to consider giving its customers an *additional*, simple, clean remote with only the critical functions. It will endear the remote-happy user to the player.

I will get the only other quibble about this player out of my system. As a reviewer, I sometimes must accept used units, i.e. show units or previously reviewed pieces. This particular player had been used previously, and obviously not with the utmost tenderness and care, which I am learning means “high degree of potential for anomalies.” In this particular case, the transport was noisy, emitting a clicking noise upon reset of the laser.

I have no problem with manufacturers and distributors wanting to send me show pieces or previously reviewed units. If I were a manufacturer, I would consider it as well. Occasionally there is a glitch, and the reader should know that this was not a pristine, unopened unit. I only mention it as I have committed to sharing with readers my full experience with the components; rarely have I found as attentive a distributor as Charlie Harrison of Ayon Audio USA. He did an exchange for me pronto, and as expected the new transport operated flawlessly.

As a brief physical introduction to the CD-3, it is comprised of twin, horizontal, 8mm black anodized aluminum slabs with smoothly contoured corners. The transport retains the CD-1 top mounted illuminated (in this model red) controls, and flying saucer shaped collar and lid. The smoked Lexan lid is also a carryover from the previous model. In the back, one sees both single-ended and balanced outputs, as well as digital coaxial output. The tube power supply resides under the transport, connected by a seriously thick power umbilical. In an unusual move by Ayon, the umbilical is so short that the units can only be stacked, not set beside each other. However, Ayon does offer a longer umbilical as an option. My guess is that Gerhard has subjectively tested the two options and felt the longer umbilical ever so slightly diminishes the sound, thereby selecting the shorter umbilical as the standard.

If that is indeed the case, I'm not sure such a difference would pass the Law of Efficacy. In other words, I'm not sure that the difference would be immediately noticeable and confer a large advantage.

If a sonic difference does exist, I estimate that one would need a refined audio system in approximately the \$70K range or higher (as a crude measurement of quality) to hear the distinction clearly.



The transport of the CD-3 is the same Sony KSS-213Q used in the CD-1. The Crystal Semiconductor chipset yields 24 bit/192 kHz conversion. A matched quad of 6H30 tubes are used in the class A output stage. The highest quality internal components are utilized in the build, including Mundorf capacitors and hand assembly with silver solder. Ayon is working for a reputation of quality, and this is evident with the CD-3.

The most pedantic aspect of the player is the lack of an automatic reset of the laser assembly when play ceases. Reset is manual; as with the CD-1, the listener must press the stop button two times to get the unit to read "Open" and read the newly inserted disc. Fumbling with the lid, magnetic puck, removing CD and putting in a CD is not quite a Cirque du Soleil act, but employs both hands. I find that I cannot get too annoyed with the fiddling around, as *I never fail to be impressed with the event created by the CD-3*. People wear Rolex watches, which are far from mechanically perfect, because there is something ineffably sublime about them. So it is with the CD-3; there is something sublime about the rightness of its sound.

I have been through a lot of players lately, almost a dozen in the past two years. I have been purposely moving toward a "steep end" reference quality spinner - not just an overachiever, but a player which would slip right into the best of rigs. The CD-3 is a contender. It's *embarrassingly* rich compared to the best economical players. This past year, I have worked with the [Rega Saturn](#), and the [Cambridge Audio Azur 840C](#). Both of these players have large followings, and both have their fans who claim them to be best in class and/or best under several thousand dollars. I share this next thought with the utmost respect, but the CD-3 makes them sound *unrefined*. Yes, unrefined. I know that seems impossible to the many who would defend these players with their honor, but it's the truth. In fact, the CD-3 is quite a bit more refined than its stable mate, the CD-1. The amount of refinement is such that for those in the enviable position of being unconcerned about the expense of the player, I would coach them to pass by the CD-1 and move directly to the CD-3 *without hesitancy*.

As an analogy, when a speaker owner finally moves to a new brand and is awed to hear acoustic vistas opening to him, he is at once gleeful and regretful. Gleeful that he is hearing from a vantage point never before achieved, and regretful that he didn't know, or act, sooner. I am very happy that I did not succumb to the delusion that the mightiest of the sub \$2,500 players was approaching state-of-the-art Redbook sound. They don't, at least not while the CD-3 is around. This is in no way a slight to these

other players, as I greatly admire their performance relative to their price. The CD-3, on the other hand, is a connoisseur's player, fitted for extravagant performance.

Just what makes the Ayon so much better? A major contribution is its tube power supply. The 6H30 output stage is extended and improved over the CD-1. What is so important about these tubes? Gerhard thinks, "...it is perhaps the 'best' signal tube in the world." It is a product of the Russian military, has low impedance, low distortion and very good harmonic behavior. However, it is difficult to drive, and requires a doubling of the power supply, something which is unnecessary with any other signal tube. It is used only in very expensive amps, such as top-of-the-line products from Audio Research and Balanced Audio Technology. The tube has only one manufacturer, and it is in Russia, but there are a few retailers such as Electro Harmonic and Sovtek. I'm seeing a fair bit of Russian tubes in gear I'm working with. If I recall correctly, Pathos in their third iteration of the Classic One tube hybrid integrated, made the switch from Sovtek to EH.



As I said previously, the CD-3 can embarrass even good players. What does a steep end player like the CD-3 sound like? If the Ayon is any gauge, then they sound a lot like high quality SET amps! That should not be surprising as a tube power supply rightly utilized in the service of a CD player should obtain many of the benefits of low powered amps. It hinges on how well the designer can pull it off.

Clarity, clarity, clarity...I could say it another nine times to emphasize. The CD-3 has gobs of clarity (Poor diction, I know, but oh, so emphatic)! I thrill to the lucidity of this player. Just the other night, I once again ran the digital output of the CD-3 to the \$1,590 [Monarchy M24](#) pre/DAC so that I might use that tube DAC with the Ayon acting as transport. The M24 has a bit of a warmer tonality and I like it. But every time I switch back to the CD-3's DAC, it sounds significantly cleaner. I attribute this to the additional cable and component utilized with the outboard DAC. It cannot be avoided; *if you send the digital signal out, it will degrade.*

No combination of transport and DAC or straight-up CD player has bested the svelte CD-3. I have heard previously some highly respected digital sources, including the Linn Akurate and the EMM Labs CDSA, and to my ear the CD-3 belongs in such company. This is a music lover's player, and it can capture the passion in the performance of nearly *any* recording.

I spent a fair bit of time listening to older discs, which often lack the vibrancy and immediacy of newer releases (Heaven forbid I get into music with compression issues!). I like returning to my nostalgia favorites such as Al Stewart, Jackson Brown, and rock groups like E.L.O. (Electric Light Orchestra). These are compromised digital recordings, and on lesser players I have difficulty getting involved with the music. Let me point out some examples of how the CD-3 breathes life into these discs...

As a teen, I listened to E.L.O. over and over. I couldn't get enough of their odd rock orchestration. They open their song "Fire on High" with a hazy, ethereal background which is intruded upon by sound effects and backwards masked voice – strange stuff at the time, which is why it was so fascinating. On even decent players like the Saturn or Azur 840C, the background sounds like someone synthesizing in the studio. Through the CD-3, it sounds more limitless, like background radiation from the expansion of the universe.

The CD-3 animates seemingly “digitally dead” music. Jackson Brown’s piano in the song “Stay” sounds like it’s on the set. It’s so stark and open that one can envision roadies breaking down the stage while he’s playing. He pumps out the words, “Pack it up and Tear it down...” and I sense the force of the words as they hit the microphone. No other player had me relating to “The Pretender” like the CD-3. I almost felt sorry for Brown; the sap builds his house under a freeway - but Brown’s voice is so visceral, so honestly open and uncluttered that you want to root for the guy.

Then there’s Al Stewart, whom I recall hearing the first time as I walked past a dorm room and heard his voice emanating from a stereo, “The fishing boats go out across the evening water, smuggling guns and arms across the Spanish border...” Stuart’s music had a way of instantly placing me in a movie setting. However, the recordings sound tired, and the better the gear the more tired they sound. The tube magic of the CD-3 restores the newness, the freshness of these limp recordings. The track “Song on the Radio” begins with a blaring sax, ala David Sanborn style, but it sounds harsh and removed on most players. With the CD-3, the whole instrument can be heard, not just the note which emanates, and the sax sounds throaty, not thin-lipped.

What this all means in terms of sonics, is that the CD-3 has an uncannily similar set of characteristics to a SET amp (repeating a second time for emphasis)! I recall the clarity and “fragility” of the [Melody Hi Fi P1688 preamplifier & S88 mono blocks](#) – not a physical fragility, but a tender, clean sound. The strength of the Melody gear was their ability to reflect an image cleanly, like a still pool in a cave floor reflecting the ceiling overhead. The CD-3 has the same capacity to reflect a pure image of the information retrieved from the disc. The effect sonically is not unlike the picture quality difference between standard television and HDTV.

I have seen comments over time that the Ayon CD-1 does not sound like a tube player.

There is a misperception in regards to tube equipment, that all such components should generate a sonic “warm fuzzy.” To readers who are seeking that warmth above other sonic considerations, I suggest they look into Van Alstine components and Vandersteen speakers. In other words, they all should have at least a taste of the syrupy, golden toned – and often slightly muddled sounding – presentation. Speaking for myself, I can only take so much of that; I do not care to listen long to equipment which sacrifices definition for tone. *I do not care to sacrifice anything; I want it all!*

Ayon CD players do not turn warm and wooly, even with other tube gear. That is a very good thing, as music which is too plump and relaxed sounding tends to put me to sleep, and it’s hard to enjoy music if I’m missing it! Depending on the player and the cabling, the CD-3 can sound less tube-like than some solid-state players. A Case in point is the Cambridge Audio Azur 840C, with the new top-of-the-line cable from Wire World, the Platinum Eclipse. I was able to get the Azur 840C to sound warmer than the CD-3, but I was never able to get it to surpass the *exactitude and involvement* of the CD-3.

I have not found another player which has bettered the CD-3 in terms of putting me in a state of rapture when listening. When I am finished with a listening session of the CD-3, my spirit feels restored from being in touch with the music. Gerhard has indeed done outstanding work.

The CD-3 in Relation to the Super-review System

A few words about the Super-review and the equipment involved. The CD-3 was paired with some extremely fine gear, which meant any flaw in its complexion would be easily heard. After all, I can hear



some pretty subtle things with 1,000wpc amps and true, full-range actively crossed speakers. A compromised player is going to show signs of roughness around the edges in such circumstances, which is why the CD-3 is all the more impressive.

Again, I mean no disrespect to these players, but the Ayon makes other players sound *flat*. I found it nearly impossible to listen to them long term after the CD-3 experience.

Even running the digital output from the Azur 840C to the Monarchy DAC failed to evoke my emotions as thoroughly as the Ayon. I asked Gerhard about tube rolling, and he was forthright: it's not likely to improve the performance. He stated, "We designed our output stage 'on the limit' which means we matched and selected the 6H30 perfectly to the output stage."

He further admits, "...with tube rolling you can change a bit of the sound characteristic, but you can't really improve the original matched tubes." In my experience with other critically selected tubes in components, I have found that to be true. I tried rolling new tubes into the [Pathos Classic One](#) amps and found that while distinctively different, they were not an absolute improvement; I ended up removing them. I certainly had no impetus to swap out tubes in this instance. I knew that doing so would just as likely mess up the sound as improve it. What that means is there was no glaring error, no gaping hole in the CD-3's performance.

The best part of the CD-3 is that it makes music sound *so effortless!* Vinyl is rich to the ear because the ease with which it sounds like music is made. Even when artists are breaking their collective necks playing, the analogue experience makes it sound like it's easy. Digital players typically can't do that, but the Ayon comes close. It relaxes you the same way that a massage shower head can do something a normal one can't – it's got extra capabilities. Just as all those pulsing little drops of water sooth the skin, so also the more perfectly presented digits caress the ears.

The CD-3 is a superb match for the Helix speakers, the Rowland amp and the Wire World Cables. The CD-3 brings to the Helix the exactitude necessary to feed a world-class speaker with stunning resolution and absolutely faithful signal. It energizes the Rowland class D amplification. In fact, the Rowland MC-606 was not as satisfactory to my ear without the CD-3. The Wire World cabling is awfully difficult to understate as to its importance in capturing the nuances of the CD-3. Together, these components are an approximately \$70K rig, *and in purely aesthetic terms they are worth it.* That's coming from a man who spent the better part of 15 years cobbling together very modest systems. I have a very hard time justifying the expenditure of that kind of money for a two-channel rig. But you may not have as much difficulty defending such an expenditure, and if you go this route, you will have an entire system of exceptional sound for the price of some super-speakers alone.

In addition, the CD-3 was part of another terrific sounding, far more economical rig, which was the best all SS system I have yet to assemble. No, it was not the Super-review system, although it is a reference sound at its price point. It was the smaller set of the [Legacy Focus HD](#) speakers, the same Wire World Silver Eclipse 5 Squared suite (a more economical choice would be the Wire World Equinox 5 Squared cables), the new Cambridge Audio Azur *840W amps*, and the Rowland Capri preamp. I will have much to say about this particular assemblage of gear in the Cambridge review.

By now in my reviews you should notice that I'm giving hints at excellent *entire systems*, as opposed to merely components. I try to call attention to outstanding matches of components, not merely the isolated review piece. If you understand my descriptors of the review piece, and you gravitate toward the sound I'm describing, then you will likely have a much better chance than average of enjoying the accompanying components.

The much anticipated CD-2 has arrived just this week. It has gently bumped aside the CD-3 while it runs in and I get familiarized with it. At [CES 2009](#), a listener in the Ayon Audio room asked Charlie Harrison bluntly, "Which is better?" Charlie hesitated and indicated that they're both outstanding, though distinct. He suggested some may prefer the one to the other.

I'll be looking into that. I usually have a very strong preference for my source equipment, at least for "top source" position. I aim to address the similarities and differences between them in the CD-2 review. For now, know this, Gerhard is doing superb work, and the CD-3 is a winner.