

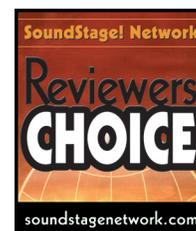
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Product Review

Audio Research CD5 CD Player

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“...a new level of sonic realism that represents the best I’ve heard from the CD medium in my system – rivaling the best, period – all at a mid-level price.”

My Sony D-15 portable CD player recently died, and I can’t find a replacement that comes close to its sturdy metal construction. On a stroll through my local big-box store, I saw aisles that once held CDs taken over by DVDs or different products entirely. Since the original Napster came and went, CD sales have declined sharply, and in 2008 they dropped another 20%. DVD-A and SACD deliver higher resolution, but they never got past niche status. Today’s hot audiophile trend is computer audio. Audio reviewers and industry prognosticators announce that CD is over.

It seems a medium must be declared dead in the press before it can be reborn. Since its obituary over 20 years ago, vinyl may be the most successful boutique product in audiophile history. If CD is done, it still remains the medium of choice for many audiophiles, as high-end companies continue to wring higher fidelity out of the old format. Following the critical success of the CD3 Mk II and Reference CD7 CD players, it would have been easy for Audio Research Corporation (ARC) to rest on its laurels. That did not happen. If Audio Research’s latest products are any indication, the rebirth of Red Book playback and a new golden age for CD players may have already begun.

CD5 rising

In his 2005 review, Marc Mickelson acclaimed the Audio Research CD3 Mk II “the best Audio Research product I’ve heard in my system.” Today, ARC incorporates the strongest aspects of the CD3 Mk II into its successor, the CD5. Like the CD3 models, the CD5 is a top-loader that uses a rigid Phillips die-cast laser transport. The newer Pro2M model found in the CD5 can read standard 16/44.1 Red Book CDs, CD-R/RW discs and the CD layer of hybrid SACDs.

The CD5’s straightforward external layout will be familiar to CD3 and CD7 owners. On its backside are balanced XLR and single-ended RCA analog outputs ready for connection to a line stage or preamp. S/PDIF BNC coaxial or balanced AES/EBU XLR digital outputs allow the CD5 to function as a transport and connect to an external DAC. An RCA-to-BNC adapter is included along with a power cord for the unit’s standard IEC socket. The CD5 measures 19”W x 5 1/4”H x 12 1/4”D, weighs 26 pounds and retails for \$5995 USD.

Review Summary

Sound

“Where I found the CD5 a truly special player was in its capture of the smallest sonic detail coupled with its handling of low-level dynamics.” The CD5 “handled complex orchestral passages without blur or confusion” and preserved “fine detail.” “Leading-edge transients in the treble and midrange had a natural quickness and flow, and, despite my listening for it, the top end never sounded goosed.” “While the CD5 could not turn a poor performance into a better one, or fix a mediocre recording, many CDs I knew as hard or edgy proved thoroughly listenable through the CD5.”

Features

“The CD5 is a top-loader that uses a rigid Phillips die-cast laser transport. The newer Pro2M model found in the CD5 can read standard 16/44.1 Red Book CDs, CD-R/RW discs and the CD layer of hybrid SACDs.” “The CD5’s circuitry is fully balanced... [It] sports the new Burr-Brown PCM1792 balanced-output DAC – the same used in the Reference CD8. Although the PCM1792 chip can handle 24-bit/192kHz playback, the CD5 does not upsample.” “Other enhancements include a new FET direct-coupled analog output stage and a new higher-performance circuit-board material.”

Use

“The CD5 needs a lot of break-in time to reach its full potential” – Audio Research recommends at least 600 hours. “If I wrote this review based on what I heard before, during and slightly after the 600-hour mark, it would read much differently than it does.” “Via balanced connection to the Atma-Sphere MP-1 Mk III, the CD5 played with slightly less noise in my all-balanced system.... In the all-balanced configuration, a faint haze fell away.”

Value

“The performance I heard from the CD5 told me silver discs hold more information than I previously thought – and Audio Research has figured out how to deliver it at an honest price.”

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The CD5's circuitry is fully balanced. It uses the same transformers as the CD3 Mk II, but there are also significant changes. The CD5 sports the new Burr-Brown PCM1792 balanced-output DAC — the same used in the Reference CD8. Although the PCM1792 chip can handle 24-bit/192kHz playback, the CD5 does not upsample.

Other enhancements include a new FET direct-coupled analog output stage and a new higher-performance circuit-board material. Along with its tuned polymer feet, the CD5 further reduces mechanical jitter by incorporating additional damping on the chassis, transport, disc tray and other select parts. Audio Research's Dave Gordon explained the new player's substantive improvement in measured performance over that of the CD3 Mk II: "The signal-to-noise ratio improved by 24dB, channel separation improved by 28dB, and distortion is 75% lower in the CD5." He noted that reduction in electronic jitter is achieved "by re-clocking and highly stable, low-noise power supplies."

Available in black or classic Audio Research silver, the front panel offers standard CD controls and a dimmable digital display that can cycle through various playback states using the supplied remote. The CD5 can be switched between standby and fully on, but there is no on-off switch. Once connected to the wall, this entirely solid-state unit remains powered up. A small optical switch inside the transport bay prevents spin up unless the top sliding door is closed.

I found the CD5's ergonomics straightforward and the unit intuitive to operate. Playing a disc required a magnetic clamp to secure it on the transport spindle. Dave Gordon said the company experimented with dozens of shapes, materials and weights before arriving at a stiff, non-resonant clamp that does not degrade sonics. The lightweight remote enables disc and track repeat along with shuffle play and custom sequence programming.

Review context and break-in

My current digital source is the Ayre C-5xe universal audio player. For this review, I used both the C-5xe and the CD5 with my Atma-Sphere MP-1 Mk III preamp and with the very impressive solid-state Esoteric C-03 line stage. Both accept balanced and single-ended inputs, though only the MP-1 Mk III has a fully balanced circuit. Shunyata Research Antares interconnects were used across all combinations of these components. Both players were connected to a Shunyata V-Ray power conditioner with either a Shunyata Taipan Helix VX or Python Helix Alpha power cord. I have neither a CD player with a digital input nor a standalone DAC, so I did not get to try the CD5 as a transport.

My Audio Physic Avanti Century loudspeakers are each powered by 140W Atma-Sphere MA-1 Mk III mono amplifiers. Sometimes I insert a Speltz autoformer between each amp and speaker to show the amp an 8-ohm load. The amps draw power through a dedicated Shunyata Hydra Model-8 via Taipan Helix power cords. The speaker cables are Shunyata Orion, and the preamp-to-amp interconnects are balanced Shunyata Antares. My dedicated listening room is well treated with acoustic absorbers from RealTraps.

My analog front-end includes a Teres 320 turntable with Verus rim drive and an SME V tonearm carrying a Transfiguration Orpheus moving-coil cartridge. Balanced and single-ended Silver Audio Silver Breeze tonearm cables connect to either the MP-1's native phono section or to an Audio Research PH7 phono stage.

The CD5 needs a lot of break-in time to reach its full potential — and it's worth the wait. In its box you'll find a small piece of paper

(titled "Sonic Info Sheet") that starts out: "Your new Audio Research component will improve sonically for at least 600 hours of run time," and it goes on to give instructions on running in the CD5 using a disc on repeat for four weeks. Audio Research sent me a CD5 straight off the production line — just as you'd buy new from a dealer. Straight from the box, the CD5 impressed with its resolving power — it found more musical bits in the pits than I previously knew were there. I eagerly dug into my CD collection. To borrow an analogy from the vinyl realm: In terms of fine-spun detail, hearing this new player for the first time reminded me of switching from a nice moving-magnet cartridge to a low-output moving-coil. But all was not vinylesque during early break-in. Music through the CD5 took on a cool timbre that lent an analytical cast to trumpets and sopranos, especially in the treble, a couple octaves above middle-C. These had an incisive tint in the higher registers which, coupled with a two-dimensional flatness, told me "It's digital, make no mistake about it."

At the 650-hour mark, I found myself tut-tutting over the CD5 as an almost-great player that just missed the mark. Fortunately, I stuck with the regimen of running it continuously off hours, feeding it a new disc every few days for exposure to a broad range of dynamics and frequencies. Another ten days went by, and I was overdue for serious listening and note taking. What I heard then and going forward is what I describe below.

The most important words from the "Sonic Info Sheet" are "at least 600 hours." If I wrote this review based on what I heard before, during *and* slightly after the 600-hour mark, it would read much differently than it does. If you do an audition, be sure to ask your dealer how much time is on his demo unit, and do not gauge the CD5 until it has run in for at least *800 hours*, and maybe a bit longer. As the "Sonic Info Sheet" foretells, "your patience will be rewarded."

The great CD5 revival

Listening to music through the CD5 brought freshness to the sound of my CD collection. As an old vinyl dog, I compliment Audio Research for reviving my interest in playing CDs in the twilight of the medium. Simply put, the more music I played through the CD5, the more I wanted to listen. This revival found me eagerly spinning discs from the early days of digital — discs I'd otherwise written off as poor production examples. While the CD5 could not turn a poor performance into a better one, or fix a mediocre recording, many CDs I knew as hard or edgy proved thoroughly listenable through the CD5. I'm not quite ready to tell Deutsche Grammaphon that all is forgiven, but I may yet change my mind.

Consider the two-disc *Amadeus* soundtrack (Fantasy 3FCD-4403-2). Released in 1984, it offers great music from Mozart's day, but I've always found the sonics something of a disappointment. Portions of this set can sound thin and dry with a flattened perspective. I tried disc one with the CD5 and listened to the boys choir of Westminster Abbey perform the "Quando Corpus Morietur" from Pergolesi's *Stabat Mater*. Sung in a reflective choral loft close to the ceiling, the young soprano voices were clear, rich, and nicely individuated. Most impressive was the sense of a performance occurring in acoustic space, as I heard sound reflecting and reverberating within the venue. There was none of the peaky top-note forwardness I had come to expect from this recording. Valve registers and pedal action from the accompanying organ were easily heard, and I could even tell the organ's placement relative to the elevated choir.

Next I tried "Caro Mio Ben," an Italian baroque aria from Giuseppe

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Giordani. Here, in a scene cut from *Amadeus*, is a soprano and solo piano, as a young singer (Michele Esposito) gets her big chance to audition before court composer Salieri. I have yet to hear this performance with any two pieces of audio gear that offer identical stage placement of the performers relative to each other. The CD5 placed the vocalist about even with the piano with a fairly wide distance between them. Swap an amp or preamp and the singer may move closer to the piano or in front of it. Who knows what is correct? Through the CD5 both singer and piano stood out in high relief against the backdrop of an otherwise empty stage. Gone was the hard edge of attack I expected from the piano. The ARC player nicely captured the faint quavering nervousness in the girl's voice at the outset of the audition and her growing assurance as her song proceeds.

The CD5 brought new musical insight and renewed enjoyment from old favorites in my CD collection. Playing Kraftwerk's *Electric Café* (Elektra 9 25525-2), the CD5 taught me one way this band pioneered their unique sound through the use of tightly controlled reverb. Sometimes notes are allowed to decay naturally — at least as naturally as they might were they acoustically rather than electronically generated — and with the addition of electronic reverb, that decay can last even longer. The occasional unexpected cut-off of this reverberated decay sliced notes to a knife-edge halt, delightfully disrupting my aural anticipation. The effect is quite clever and the CD5 let me hear precisely. Thanks to the CD5's preservation of fine detail, I heard the song "Telephone Call" sprinkled with all sorts of electronic harmonics I'd not heard before. Karl Bartos' non-synthesized voice was rich in timbre as it emerged from its own resonant space into a three-dimensional soundfield snapping with tonal transients. The man/machine contrast inherent to Kraftwerk's music was never more poignant.

I tried another early CD — the 1983 Deutsche Grammophon recording of Chopin's Piano Concerto No.2 performed by Ivo Pogorelich and the Chicago Symphony under Claudio Abbado (Deutsche Grammophon 410 507-2). Here, the CD5 laid out the orchestra in all dimensions as it captured a full measure of the back- and side-wall reflections that serve as sonic cues to the reality of a mass of musicians performing in a large open space. The ARC player handled complex orchestral passages without blur or confusion. Not only were musicians firmly positioned within the venue, but for the first time from a CD I heard the bloom patterns of strings hovering like a cloud above their sections, just as I hear in live performances from the Madison Symphony at our local Overture Center.

The CD5 presented Pogo's opening notes on the piano with dynamic ferocity and conviction. I could detect how different notes radiated off its sounding board and lid. It was both startling and delightful to hear air rife with the frequencies of a live piano. The initial attack at the keys was without a hard edge, but there was no doubt I heard a percussion instrument played vigorously. Leading-edge transients in the treble and midrange had a natural quickness and flow, and, despite my listening for it, the top end never sounded goosed. The reverberation of piano notes held their richness in decay, without harmonic thinning. Strings played *col legno* — struck with the stick part of the bow — were brisk with proper timbre. The front edge of plucked strings in the lowest registers may have been just a wee bit soft compared to the mids and highs, but gone was the overt coolness I heard during the break-in period, as the CD5's overall tonal character was now largely neutral, showing just a breath of warmth in the bass and with just a hint of cool sweetness at the top end.

Where I found the CD5 a truly special player was in its capture of the smallest sonic detail coupled with its handling of low-level dynamics. This was most evident in the midrange and upper frequencies. The CD5 had the ability to clarify tiny harmonic subtleties, turning them into the presence and vivacity of instruments and performers in real space. It took me another step closer to the perception of a live performance. Most impressively, the CD5 demonstrated that silver discs had the information on them to deliver a fleshed-out dimensionality of individual performers. From the CD5 I felt in the presence of music making that came nearer to what I've heard from analog front-ends. For a delightful example, listen to Kiri Te Kanawa and Lucia Popp perform "The Letter Duet" from Mozart's *Le Nozze di Figaro* with Solti conducting the London Philharmonic (London 417 395-2). The two sopranos did not appear as disembodied point sources coming from a black background — the CD5 presented them as living performers moving together on stage. Even when the singers were in close proximity, one slightly in front of the other, the CD5 preserved small subtleties of vocal weight and emphasis that told me how the voice of each blended to form their intimate harmony.

Via balanced connection to the Atma-Sphere MP-1 Mk III, the CD5 played with slightly less noise in my all-balanced system. I'd previously done a similar comparison between RCA and XLR connection with the fully balanced Ayre C-5xe and heard somewhat similar results from the CD5. In the all-balanced configuration, a faint haze fell away from the CD5's rendition of Telarc's wonderful recording of Vaughan William's *Fantasia on a Theme by Thomas Tallis* by the Atlanta Symphony Orchestra under Robert Spano (Telarc CD-60676). Bass transients became slightly cleaner, and the overall performance was more transparently rendered. Though not as distinct a difference as I'd heard with the C-5xe, the improvement offered with balanced connection was definitely audible from the CD5.

A tale of two players

My Ayre C-5xe (\$5995) proved well suited for a compare-and-contrast session with the CD5. When I bought the C-5xe, SACD and DVD-A were on their way to becoming niche formats. Ayre's marketing director, Steve Silberman, told me that CD was what the C-5xe was all about. The CD5 and C-5xe retail for the identical price and both are entirely solid state. The C-5xe uses the DSD version of the Burr-Brown PCM1792 DAC, while the CD5 uses the PCM version. Both Audio Research and Ayre adopt fully balanced circuitry as a core design principle. As long as a disc had a Red Book layer on it, these two players gave me the opportunity to compare sonics without fretting about format.

First up was Manuel de Falla's *The Three Cornered Hat*, a new digital remaster conceived by Esoteric (TEAC) president Motoaki Ohmachi and brilliantly produced by Esoteric and JVC under the direction of audio writer Okihiko Sugano (Esoteric ESSD 90016). This 1961 performance features L'Orchestre de la Suisse Romande under Ernest Ansermet's confident baton. I did several listening comparisons with this disc over the review period, and each time the sound of the two players was very, very close. Castanets snapped with precision, trumpets were clear, the piccolo chorus trilled without becoming shrill, and bass pizzicatos were rendered with a crisp leading edge. Instruments were clearly in space with nice bloom. Soundstage width was bounded by the speakers, and depth was apparent. There was plenty of heft and punch from timpani. The Ayre C-5xe might have exhibited slightly more harmonic nuance, but differences in timbre were so small I'm reluctant to attribute them

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to more than the vicissitudes of my own ears. I heard the CD5 with a teeny bit more natural piccolo attack and a slightly softer front edge on bowed cellos. These subtleties may well be the sort of thing heard by an audio reviewer in a back-to-back comparison rather than observable while listening for enjoyment.

However, this comparison gets more interesting when you realize that the CD5 played the CD layer and the C-5xe played the SACD layer of the same disc. I don't know whether the sonic similarities are due to the quality of Esoteric's remastering or the resolution of the CD5, or the fact both players use essentially the same DAC. That I heard the two formats as near sonic twins did not seem attributable to differences between sample rates and the number of bits used to represent the audio waveform.

I listened to other dual-layer SACD discs that I knew had excellent sonics and again found similar results. Listening to both players render the Channel Classics Mahler Second Symphony featuring Ivan Fischer and the Budapesters (Channel Classics CCS SA 23506), I was surprised that the CD5 offered more transparency and slightly better dynamic punch in the midrange. I heard trumpets and bells and other upper-octave instruments present a faintly harder attack through the C-5xe on SACD. Overall, differences were minor, as both players unraveled complex dynamic passages with ease. The bottom line: The CD5 sounded as resolving on the CD layer as the C-5xe did on the SACD layer of the same disc. Given SACD's higher sampling rate versus that of standard Red Book, I found the ambience and dimensionality of the CD5 most impressive.

For a conventional CD comparison, consider the soundtrack to the movie *Havana*, composed and produced by Dave Grusin (GRP GRD-2003). Film-wise this was not one of Robert Redford's better efforts, but the rhythmic Latin music is upbeat and syncopated with lots of texture from different percussion instruments. Studio production values are excellent, as Grusin delivers a three-dimensional palette of instruments emerging at different heights and depths from a black background. The performances features Arturo Sandoval and Sal Marguez on trumpets, Grusin on keyboards, Lee Ritenour on guitar, Alex Acuña on drums, and a host of a congas, rattlers, scratchers, and shakers. The DACs in the Ayre C-5xe process Red Book CDs in their native PCM, so format-wise this comparison was on a level playing field.

Again, the CD5 and the C-5xe sounded more similar than different, and I heard no real shortcomings from either. The CD5 presented instruments as slightly larger in proportion to the soundstage, which itself was wider than I heard from the C-5xe. Once again, the ARC player's ability to render fine dynamic detail came through in spades, and it delivered the various instruments with dimensional character and ambient air. The end result was a heightened sense of realism. It was easy to suspend disbelief and imagine real instruments in real space. I heard the crisp but delicate pluck of metal guitar strings and their shiny resonance as Ritenour's fingers slid over them.

Tonally, the CD5 was a hair more neutral than the slightly warmer C-5xe. Both players connected me with the pulse and flow of the music. The Ayre C-5xe gave a more emphatic presentation, though by comparison it showed a teeny bit more grain. Its presentation of instruments was not as large as the CD5's, and their outline focus

seemed crisper though not quite as dimensional. The Ayre player held a slight advantage in the lower registers, with greater leading-edge firmness and slightly richer timbre. High notes from Sandoval's trumpet came through the C-5xe with more golden hue, but the CD5 presented the horn with a vibrant ambience that made me open my eyes and look for it in the soundstage.

Caveat auditor: Even with diminutive adjectives applied, my words here may read more authoritatively than warranted by the small sonic differences I detected between these players. Dynamic shading, rich timbres, and quick transients — each player delivered a slightly different emphasis, yet both gave an honest and resolute presentation and the music its due. Let your ears and your own sonic priorities be your guides. If you place importance on ambience and dimensionality within the musical venue, the CD5 may be the only player you need.

Into the west

If the progress measured for Red Book playback during its second 25 years turns out to parallel the achievements of analog technology in a similar period, then the CD medium may still have a future. Precedent aside, the sooner the ripping of CDs to hard disk finds acceptance, the more likely CD playback takes a different path than history found for vinyl. Nonetheless, Audio Research's steady focus on sonic improvement gets my vote for the viability of the CD player well after the medium's popularity wanes. The ability of the CD5 to evince musicians and vocalists with an acoustic dimensionality and presence certainly reignited my interest in playback possibilities for the digital format.

The performance I heard from the CD5 told me silver discs hold more information than I previously thought — and Audio Research has figured out how to deliver it at an honest price. The CD5's aggregate improvement in materials, damping, and digital-to-analog conversion delivered a new level of sonic realism that represents the best I've heard from the CD medium in my system — rivaling the best, period — all at a mid-level price. Through the CD5 I heard musical ambience that was the equal of SACD and began to approximate what I hear from LP. If, in these early days of computer audio, you need to ask why ARC is still making CD players, you should listen to music through the CD5.

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Company Info

Audio Research CD5 CD Player
Price: \$5995 USD.

Warranty: Three years parts and labor.

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