



ATC CDA2 Mk2 CD player-preamplifier

Ken Micallef | Dec 6, 2018



In the early 1990s, the Compact Disc was all the rage, and vinyl records were being executed en masse. Thirty years later, and oh, how our tables have turned. Mint first pressings of tenor saxophonist Hank Mobley's 1957 album *Hank Mobley* (Blue Note BLP 1568), which once could be had for \$40, now bring upward of \$8000. Each. Vinyl continues to enjoy a global resurgence of popularity, while CD sales have plummeted to all-time lows.

What happened? Apparently, yesterday's pops and ticks are today's "warmth," Record Store Day exclusives, and skyrocketing vinyl values. All things old . . .

If, in audio as in life, history repeats itself, will we one day miss the "clarity, convenience, and low-end extension" of the "Red Book" CD? Is the story of the impending "CD revival" about to go global?

In the US, Tidal offers admirable streaming quality, and Qobuz promises to follow suit. Spotify, not so much. But if I'm going to play a digital medium, I'd rather spin the *fully* lossless CD, and on a well-equipped, solidly built CD player. Perhaps this is part of the thinking behind the latest iteration of ATC's flagship CD player-preamplifier, the CDA2 Mk2 (\$4249).

Beginning in 1974, the Acoustic Transducer Company supplied drivers and loudspeakers to the British professional audio market, and pioneered the soft-dome midrange driver and active speakers. In 1996 they launched their first audiophile amplification products, the SCA2 preamplifier and SPA2-150 power amplifier. Today, ATC's passive and active loudspeakers are popular throughout the UK and the US.

Design

The CDA2's "Mk2" designation refers to multiple upgrades to the original player, introduced in 2010. The beating heart of the revised CDA2 is twofold: a Chinese-made, Teac 5020A-AT CD transport claimed to deliver faster play and seek times and lower noise than the previous, Philips transport, and Asahi Kasei Microdevices' 32-bit AK4490EQ DAC chip. Also new: a USB input that can natively play high-resolution PCM files; a dedicated headphone amplifier; a 3.5mm analog input for connecting a smartphone, media player, or tablet (no streaming here); and a stronger power supply. The CDA2's fully balanced preamplifier and class-A output stages also received upgrades.



"The input and output gain stages in the CDA2-2 are operational amplifiers built around discrete components," according to ATC's Richard Newman, Transducer and R&D Engineer. "There are six common gain blocks, two for left and right input buffering, and four to provide a 'true' differential output for the left and right channels. The output stages are configured as unitygain complementary compound (Sziklai) pairs, biased in class-A. Optimizations were made to the above gain stages to further reduce distortion and noise. Also, the maximum output of the CDA2-2 is now 9V RMS, with a capability of driving high capacitive loads."

The original CDA2 had only optical and digital inputs; the Mk2 adds an Amanero Combo 384 USB receiver module that provides an array of digital functionality. The Amanero can handle "sample rates from 44.1kHz to 384kHz, with word lengths to 32 bits," Newman wrote. "The Amanero module will also decode DSD sources at 2.822 MHz (single rate, DSD64), 5.644 MHz (double rate, DSD128), and 11.288 MHz (quad rate, DSD256)."

The CDA2 Mk2's first-rate construction—each CDA2 Mk2 is wholly assembled by a single ATC employee—includes the hand-soldering of "surface mount components on the legs of specific chips." This care is reflected in the player's bomb-proof appearance.

Early thinking regarding stored digital files *vs* real-time disc playback gave the former format the edge—supposedly, it eliminated jitter. "The AKM DAC has a high inherent tolerance to jitter," Newman wrote. "To aid its performance, we have added many regulators around the DAC, paying particular attention to the 'All-important reference line,' which sets a reference level (voltage). Over and above that, we have tried to ensure that through signal delays, ground problems, interference, and noise are kept to a minimum."

Why did ATC forgo both streaming capability and a phono stage in the CDA2 Mk2?

"To incorporate a streaming feature on the CDA2 Mk2 would have involved major software development," Newman replied. "ATC's strengths are not currently in software design but instead in high-quality audio electronic circuitry and loudspeaker transducer and system design. Clearly, with the increased popularity of vinyl, we can now look back at when we started

development on the CDA2 Mk2, a phono stage would have been a welcome addition."

Under British Steel

The CDA2 Mk2 measures 17.5" wide by 3.5" high by 13" deep, and its wraparound case, rear panel, and chassis are made of steel; its brushed-silver front panel is a 13mm-thick aluminum extrusion. Constrained-layer damping was used to control resonances. The ATC's front plate, with its raised and rounded double stripes at each end, looks like a large military epaulet stood on edge. When the review sample arrived, the heft of the two-layer box presented by my understanding UPS delivery person surprised me; nonetheless, an unpacked Mk2 looks heavier than its 15.4 lb.

The CDA2 Mk2's front panel is laid out simply and logically. From left to right: the CD tray, below which are five metal buttons for Play, Stop, Previous, Next, and Open/Close. To the right of the tray is a column of five tiny indicator LEDs; from the top down, CD, Aux 1, Aux 2, S/PDIF, and USB. To the right of this column is a small digital display, and below that are two buttons, for Mute/Function and Standby. At far right is a motorized Alps Blue volume control. By the way, the bolts securing the CDA2 Mk2's front panel look so like the pushbuttons that I often pressed a bolt, then stood there waiting for something to happen. It never did.

Most of the front panel's controls are duplicated on ATC's small SCA R2 remote-control handset, which also lets you fast-forward or -reverse through tracks, dim the display, repeat one track or the entire disc, and put the CDA2 Mk2 in standby mode. Unlike Art Dudley, I greatly enjoy having a remote, and the ATC R2, while made of plastic and of relatively low build quality, performed perfectly. However, the remote has no Function or Open/Close button of its own; to close the disc tray, you must reach under the extended tray to press the Open/Close button. Awkward (footnote 1).

The CDA2 Mk2's rear panel is similarly minimalist. From left to right are: a small Power button; a fuse bay; an IEC power inlet (power cord included); a ¼" headphone jack powered by a discrete headphone amplifier capable of driving input impedances from 600 to 30 ohms; one pair each of balanced (XLR) and unbalanced (RCA) outputs; three analog inputs (one 3.5mm mini jack, two pairs RCA jacks); and coaxial, optical, and USB inputs. Above the

headphone jack, and below the label "Stereo CD Preamplifier," is ATC's 1970s-styled logo.

Setup

I'd say 15 lb is more or less the perfect weight for a CD preamplifier: not so light as to make you distrust its build quality, not so heavy as to split your ribs when you move the thing around. The CDA2 Mk2 slid easily into each of my hi-fi racks. In both rigs, I placed it on an IKEA Aptitlig bamboo board, atop four rubber-and-cork pucks sitting on an MDF shelf.

Footnote 1: Following publication of this review, ATC clarified that the CD drawer *can* be opened and closed with a long press-and-hold of the remote's "Stop" button. However, this was not mentioned in the manual.— **Ed.**

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To test the ATC's CD-playing abilities, I used a pair of Auditorium 23 XLR-to-RCA interconnects from the CDA2 Mk2's balanced outputs into my Shindo Laboratory Allegro preamplifier's single-ended inputs. (I started the auditioning with single-ended Dimarzio interconnects, which have screwdown RCA plugs. Unfortunately, these became frozen on the CDA2 Mk2's RCA jacks and when I unplugged the cables I dislodged the collars from the player's RCA jacks.) When I evaluated the ATC as a CD player and preamplifier, a pair of Shindo XLR-to-RCA interconnects joined the ATC's balanced outputs to the Mytek Brooklyn and Shindo Haut Brion power amplifiers' single-ended inputs.

All about the CDs

If you've read my previous reviews, you know I'm all about vinyl. But the CDA2 Mk2 demanded that I dive deep into my collection of CDs, many of which were pressed during my 30 years as a jazz, pop, and electronic

music critic. Nowadays, while electronic and popular music arrives as e-mailed files, jazz publicists still send CDs—a smart move, as I'm more likely to play things I can touch, smell, and generally handle.

Words that habitually popped up in my listening notes for the CDA2 Mk2: *rich, dense, transparent, truthful, powerful, subtle, revealing.* One CD with which I heard *all* of these qualities was *Love Is Here to Stay*: Diana Krall and Tony Bennett's romp through the George Gershwin songbook (CD, Verve 002870302). While most of Krall's music is well recorded, the sound of the piano trio backing her and Bennett is a revelation.

The music is performed with relish and recorded with immaculate care—Krall's and Bennett's voices are laid bare, and it's a wondrous thing, even if, undoubtedly, some studio enhancement was involved: Krall's voice is whisper-lush and intimate, while old Tony's sounds rather small. Through the CDA2 Mk2, every glide and syllable of Krall's dark, husky voice was a joy, and Peter Washington's double bass and Kenny Washington's drums sounded huge and transparent. Bill Charlap's piano wasn't as effervescent as the other instruments and the voices, but it's a testament to the CDA2 Mk2's powers of resolution that it presented all this nuance and subtlety with consistent clarity and naturalness. It tempered utter faithfulness to the recorded event with a dash of romance.

With the Krall-Bennett CD standing as the ultimate in fidelity, other reference CDs fell in line as either less well recorded or with a different sonic goal in mind. Even with a recording of lower quality, the ATC imbued the music with a trace of richness that I found enjoyable. There was nothing threadbare or etched or bright or thin in the ATC's sound, only adherence to the recording with a dab of soul and lushness. That last quality sometimes added plumpness to bass notes, yet the CDA2 Mk2 consistently resolved the details of a CD's production and its ambient details—the space around the notes.



One thing that at first bothered me was the ATC's seeming reproduction of modern jazz CDs as mono productions, with aural images clustered toward the center of the soundstage. But as soon as I played a well-loved CD, such as the 2009 re-mastering of the Beatles' *Magical Mystery Tour* (CD, Parlophone 4 58221 0), its wide if not terribly deep stereo spread snapped into immediate, panoramic focus. (Does modern jazz involve lazy, monocentric production techniques?) I played a wide swath of CDs—the ATC presented each as a character study of a unique sonic personality telling a singular story. The CDA2 Mk2 was unfailingly transparent to the source, warts and all.

Air's *Talkie Walkie* (CD, Astralwerks ASW 18270) resounded from my <u>DeVore Fidelity Orangutan O/93</u>s as never before. The French electronic duo's stacked synths and honeyed voices are always compelling, but through the CDA2 Mk2 *Talkie Walkie* was a complex orchestral vision with the density of Stokowski's *Fantasia* soundtrack. Bass tones were fleshy and Technicolor vivid, voices mysterious and hypnotically layered (especially in "Run"); the music was intensely immersive. Where before I'd heard simple layers of synths, now I heard a midnight forest humming with a thousand breathing insects and animals. The Mk2 created a nearly hallucinogenic experience.

Brad Mehldau's *Seymour Reads the Constitution!* (CD, Nonesuch 79344-8) sounded small and veiled, his piano lacking color and scale. Two CDs from Lisbon's Clean Feed label, The Heat Death's *The Glenn Miller Sessions* (CD, CF460CD) and Igor Lumpert & Innertextures' *Eleven* (CD, CF462CD), followed suit, though their avant explorations had a livelier overall sound than the pale-sounding Mehldau.

It's commonly believed that a good recording of an acoustic piano will reveal your system's tonal fidelity, and its ability to render clean macro- and

microdynamics and spatial cues. The CDA2 Mk2 burned brightly with the second volume of Christoph Ullrich's traversal of Mozart's piano sonatas, K.310, 331, 540, and 570 (CD, EigenArt 10360), revealing fast transients and a chilled-sunlight-pouring-through-my-brain transparency I've heard with no other CD player. The leading edges of piano notes had a brilliant, burnished quality that lent this music great vitality, with excellent spatial and tonal virtues.

My jazz discovery this time out was singer Judy Niemack's *New York Stories* (CD, Sunnyside SSC 1515), recorded in Copenhagen with the Danish Radio Big Band, Jim McNeely conducting his own arrangements of standards and not-so standards. The recording's personality is to the fore and life-size, each instrument well realized, and with a touch of treble filigree creating a lustrous glow. As with the Krall-Bennett disc, but on a larger scale, I could hear the studio walls, the distance between the singer and her mike, the truth of the recorded event warmed by a touch of aural splendor.

Meet the Files

Allied to my MacBook laptop and Western Digital hard drive via a Mytek USB cable, the ATC CDA2 Mk2's internal DAC made quick work of AIFF files. Scrolling through thousands of files I'd forgotten about, the ATC's DAC sounded smooth, tonally convincing, clean, and reasonably dynamic. Going from physical CD to ripped files is like switching vinyl out for digital, but with the edges polished and dynamics truncated. The sound was very good overall, including from DSD files, but it lacked the visceral grip of CDs through the ATC's transport. I didn't stay here long.

Out with the Shindo, In with the ATC

When I swapped out my Shindo Allegro preamplifier for ATC's internal preamp running direct into the power amp, things got only better. While music now sounded slightly more forward, it also grew in scale, resolution, and weight—especially bass weight, which turned boomy with some CDs. Now, with the Krall-Bennett CD, I could hear piano hammers striking piano strings. Tony Bennett's voice was more detailed, the sense of its fleshiness more vivid; his and Krall's voices were better balanced with each other. Ullrich's disc of Mozart sonatas also revealed the unique sound of hammers on strings, and weight and tonality also improved, creating a

massive soundstage and a more forward sound. All in all, I was surprised at how different the ATC's internal preamplifier sounded from my Shindo Allegro preamps. Warmth remained, as did the ATC's luminous translation of digital material, while resolution—and, to a larger degree, weight and soundstage height—improved by considerable margins.

Conclusions

You could easily spend \$2000 apiece on a CD player and preamplifier and not get the construction quality, ease of use, and fantastic sound of ATC's CDA2 Mk2 CD preamplifier. I was shocked when the ATC went head-to-head with my more expensive Shindo preamp and bettered it in some regards, and it worked very well with my tubed power amplifier. With ATC's CDA2 Mk2 offering pleasing tonality, resolution, and dynamics, a versatile feature set, and rock-solid build, all for a decent price, it's impossible not to crown it with the highest recommendation. It can provide a fine starting point for a solid high-end system.

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