

Classé Audio Delta CP-700 Preamplifier

December 15, 2008



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About five years ago, I had a memorable, head-turning experience at Sound World, one of the two (yes, *two*) audio retailers in my relatively small city of Appleton, Wisconsin. Walking into the room dedicated to high-end two-channel audio, I was startled to hear something remarkably like live acoustic instruments. With all the gear in the room, it was hard to figure out what I was listening to. The manager at that time, Bruce Jacobs, pointed to a stack of elegant audio components with beautifully curved faceplates and glowing blue touchscreens.

“We just got this in,” he said. “It’s a new line from a Canadian company called Classé.”

What I was listening to was a CD player, preamplifier, and power amp from Classé’s Delta line. For several unforgettable minutes I was enthralled, but felt compelled to tear myself away and listen to the other gear in the room, which was priced closer to what I could then afford. The story continued a few years later, at the 2007 Rocky Mountain Audio Fest, when I again had a chance to listen to a complete Classé system. I had the same experience I’d had before: It just sounded like live music to me. I sat there as long as I could, reveling in the experience.

So when, a few months ago, the opportunity came to review Classé’s Delta CP-700 preamp (\$8000 USD), it felt a bit like destiny. Finally, I could listen at length to one of the Classé components that had captured my attention so long before.

Classé engineering

Classé is located in Lachine, Quebec, which is now a borough of Montreal. Lachine (which translates as “China”) was historically a derisive name applied to the area by critics of an early French explorer who had settled there after venturing westward in a vain attempt to find a Northwest passage to Asia. Although China is where many audio companies now have their products built, Classé’s factory didn’t have to leave town, let alone North America, for its gear to be made in “China.”

David Reich designed and built the first Classé amplifiers in 1980. A few years later, a customer named Mike Viglas, who’d fallen in love with the Classé sound, became chairman of the company, guiding it through 20 years of growth and, eventually, its acquisition in 2001 by the UK’s Bowers & Wilkins, of B&W loudspeaker fame. Then, in August 2004, Classé’s Delta line (the Greek letter *delta* is the symbol for change) was born, with eight products in the initial release. All Delta models are characterized by a heavy, elegantly curved aluminum faceplate, and those with control functions have a blue touchscreen interface that reduces the number of buttons and maximizes adaptability.

About a year after the launch, the Delta line’s high-end preamp, the CP-700, was placed on the market. “We’re quite pleased with the CP-700,” said David Nauber, Classé’s executive vice-president of brand development. “It’s a neutral, natural-sounding preamplifier, and it’s been very well received around the world.”

The CP-700 is fully balanced, with a signal/noise ratio of 100dB, 20Hz-500kHz. “A lot of attention was paid to noise reduction by optimizing such things as parts selection, power routing, and balanced circuitry,” said Nauber. “But when balanced circuits are carefully designed to create better common-mode rejection of noise, it also leads to better dynamic performance.”

The CP-700’s power supply is housed in a completely separate chassis. “This allowed for a greater degree of isolation with less cumbersome shielding,” said Nauber. “There is one transformer with five separate secondary windings for the preamp power supplies (audio circuits and control), and a separate transformer for the sensor and protection circuits.” A number of subtle engineering details in the power-regulation circuitry are designed to

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result in cleaner, more detailed sound. The CP-700's total harmonic distortion (THD) plus noise is rated at an impressive 0.0012%.

Additional insightful engineering is found in the two channels' separate volume controls. “We use what might be called a double cross-balanced approach in the gain stages,” said Nauber. “There are actually six signal paths per channel, with inverting and non-inverting balanced circuits and a single-ended circuit.” The reported result is channel separation greater than 110dB. To further reduce noise, when a source is selected, all other sources are completely disconnected from the audio circuits.

But who guides the engineers?

Despite the impressive engineering feats, some questions still nagged me. How did the sound get so authentic? Who listens to the prototypes to tell the Classé engineers how they're doing? Is there a group of musicians who help them get the sound right?

My suspicions that Classé had a talented group of listeners informing the development of their products proved to be correct, but I was wrong about them being musicians. “I don't necessarily trust musicians more than anyone else,” said Nauber. “Musicians are usually listening to music in their heads, not how it's being reproduced for an audience. We use a very small group of listeners. I get to say 'yes' and 'no' to the sound, and Mike Viglas, and a few people from our parent company, B&W. We also consult with a few trusted allies who are methodical and consistent in how they report what they're hearing.”

Nauber noted that it's easy to miss subtle problems in the sound, and extremely helpful to have people who can identify issues so that they can be solved. “We're also fortunate that our chief designer for the CP-700, Nang Nguyen, is a very good listener himself. He's one of the rare electrical engineers who is extremely good at translating what you're hearing into circuitry or components. Of course, sometimes there are two steps back for every step forward, but that's how the process goes when you're optimizing a circuit.”

Setup and system

Setting up the Delta CP-700 was fairly simple, although the mirror-image hookup options on the rear panel (*i.e.*, similar inputs and outputs for the left and right channels start from the outside and move inward instead of from left to right) led to a bad moment when I thoughtlessly attached my single-ended interconnect to a fixed-volume tape output while my power amplifier was on. The result was a moment of ear-splitting terror when I thought I'd blown my left-channel speaker. A word to those of you over 50: Turn off your amplifier and use your reading glasses, if you need them, when you're sorting out what connects to what.

The rest of the setup process was much less dramatic. The other gear used in this review included a Rega P3-24 turntable with Clearaudio Maestro Wood cartridge and Lehmann Audio Black Cube phono preamp, an Esoteric X-03SE SACD/CD player, a Bent Audio NOH passive-transformer line stage, a Conrad-Johnson Premier 350 power amplifier, my reference Triangle Stratos Australe speakers, Legenburg Apollo speaker cables and Hermes interconnects, ESP Essence Reference power cables, a PS Audio Power Plant Premier power regenerator, and Stillpoints isolation devices.

I let the CP-700 burn in for over 150 hours before listening seriously to it, but never heard much that troubled me even while it was settling in. I found the stylish remote control a hefty but not overwhelming piece of aluminum with easy-to-use controls — a suitable companion for the elegantly designed Delta. Vinyl lovers might also note that the CP-700 can come equipped with an optional phono preamp suitable for both moving-magnet and moving-coil cartridges, although I didn't get to hear this option.

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**“...sit back
and
be convinced...”**

Listening

The time I spent with the Delta CP-700 was some of the most enjoyable I've had with my audio system. I found myself running through old and new reference CDs, listening for familiar passages and comparing them with my memories of how they'd sounded with other gear. Nearly always, I heard aspects of them I didn't remember having heard before, and was particularly aware of sections in which background instruments stood out more clearly. For example, in Gustav Holst's *The Planets*, performed by André Previn and the Royal Philharmonic Orchestra (CD, Telarc CD-80113), there were any number of places where the sense of depth and reality of the orchestra was more vivid than through my reference preamp, the Bent Audio NOH. In the opening minute or so of *Jupiter*, the horns in the background sounded more distinct, standing out appropriately and realistically. Likewise, in the opening section of *Saturn*, the double basses sounded deep and rich, with the most realistic bass harmonics I can remember hearing. By comparison, the Bent passive-transformer line stage did about as good a job of maintaining the instruments' natural timbres as the Classé, but did not individuate the instruments as cleanly from the massed orchestral sound.

The removal of “veils” is a cliché of audio reviewing, but comes close to describing what I heard when switching between preamps. The Delta CP-700 simply did a better job of revealing what was there by presenting it with more detail and more clarity. Instruments were better separated from each other, and individual instruments stood out in a more natural way. The CP-700 didn't perform this particular feat at the highest level I've heard — that would be the Parasound Halo JC 2 preamplifier (\$4000) — but it did so with greater fidelity to the instruments' natural harmonics.

Bass performance was definitely worth listening for — the timbral distinctions between bass instruments were as clear and easy to hear as in a live performance. I'd never heard such a moving and present reproduction of the deep opening notes of *Pines Near a Catacomb*, the second section of Respighi's *Pines of Rome*, in the recording by Jesús López-Cobos and the Cincinnati Symphony (CD, Telarc CD-80505). Here, the CP-700's timbral accuracy and detail truly made a difference. Similarly, at 1:28 into the high-definition excerpt from Rachmaninoff's *Symphonic Dance No. 1* on FIM's *This Is K2 HD Sound!* sampler (CD, FIM K2 HD 078), the piano's bass notes come in dramatically, but most of the other times I've heard this track, those notes have sounded muddy. I'd never heard them sound as clean and realistic as they did through the Delta CP-700.

The higher frequencies in classical performances also sounded spot on, and never grated on my ears. The room sounds of recording venues were there at a satisfying level, though never quite to the remarkable “you are there” level attainable with the Parasound Halo JC 2. But the CP-700's overall lack of distortion made it possible to play music at higher volumes than I usually do, with the result that I felt more enveloped by the music.

In listening to some of my jazz favorites, such as “Nontsakala,” from Hugh Masekela's *Revival* (CD, Chissa HUCD 3093), the advantages of greater timbral accuracy were still evident but less significant. Masekela's flugelhorn sounded more solid and real, but not necessarily more detailed. In this case, the CP-700's lack of distortion and ability to play at higher volumes definitely served the music well, and its clarity relative to my reference preamp made it my preference for nonclassical music as well as for classical for the duration of its visit. In particular, the ability to hear deep into the mix for percussion details, and for quieter instruments such as the guitar, allowed me to explore familiar recordings and discover new revelations.

With its superb noise rejection, the CP-700 was one of the quietest preamps I've heard. Interestingly, this led not only to improved clarity, but improved dynamics as well. Although Classé's David Nauber had claimed that the Delta's dynamics are enhanced by its high-

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Classé Audio

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Price: \$8000 USD.

Warranty: Five years parts and labor.

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quality balanced circuit, I found the CP-700's dynamic performance to be accurate but not excessive. I've often suspected that some preamps jack up the dynamics they're presented with to make them sound more attractive and dramatic, but the CP-700 kept its cool, dishing up music in a way that sounded accurate to the performance and the instruments.

Considerations and conclusion

The Classé Delta CP-700 is the best match for my listening preferences of any preamplifier I've heard. I suspect that it would be hard to find a better preamp for the classical music listener at anything close to the price. With its ability to accurately reproduce the timbres of acoustic instruments, its excellent but not overwhelming level of retrieved musical detail, and its realistic reproduction of dynamic range, the CP-700 is among a very few preamplifiers that are all about conveying the performance of acoustic instruments with as much truthfulness as possible.

For audiophiles who listen mostly to other genres of music, and whose needs for timbral accuracy are somewhat less acute, there is undoubtedly more competition out there. But if your goal is to sit back and be convinced that you're right there in the concert hall listening to the real thing, then you need to audition the Delta CP-700.

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